



# NEC YEARBOK 2024



# NEC YEARBOK 2024

To meet the growing aspirations of the people, it is important that the North Eastern Council introspects and assesses the extent to which it has been able to achieve its objectives. Perhaps there is a need to reorient and upgrade the North Eastern Council. You may like to consider developing NEC as a state-of-the-art resource centre for North Eastern states with the necessary resources, knowledge and skills. The resource centre may enable the states and the implementing agencies to properly plan and execute projects, promote research and innovation and provide strategic policy vision for the region. The NEC may look into developing a specialized domain expertise either by itself or through an agency model to assist states and central ministries in their development planning as also problem-solving needs. This will enable the imbibing of good governance and best practices in the region. The NEC should also consider focusing on issues in emerging areas of livelihood entrepreneurship, venture funds, start-up and skill development. All this will help in generating jobs.

Shri Narendra Modi Hon'ble Prime Minister of India



# गृह मंत्री एवं सहकारिता मंत्री भारत सरकार

# संदेश



यह अत्यंत हर्ष का विषय है कि पूर्वोत्तर परिषद द्वारा '**एनईसी इयर बुक** 2024' का प्रकाशन किया जा रहा है।

राज्यों के आपसी व केंद्र के साथ बेहतर समन्वय और सहयोग को बढ़ावा देने के उद्देश्य से स्थापित क्षेत्रीय परिषदों ने राज्यों के समन्वित विकास को प्रभावी गति दी है। पूर्वोत्तर भारत के सामाजिक व आर्थिक विकास योजनाओं के लिए कार्य करने वाली 'पूर्वोत्तर परिषद', क्षेत्र की आर्थिक और सामाजिक विकास के रास्ते में आने वाली बुनियादी बाधाओं को दूर कर नए आर्थिक प्रयासों को गति देने में महत्वपूर्ण भूमिका निभा रही है।

आँकड़ें व सांख्यिकी किसी क्षेत्र के विकास दर को दिखाने के सबसे विश्वस्त माध्यम होते हैं। 'एनईसी इयर बुक 2024' सरकार की योजनाओं व जनकल्याण के लिए किये गए कार्यों के पारदर्शी आँकड़ें प्रदर्शित कर सरकार व जनता के बीच विश्वास के संबंध को मजबूत बनाने में सहायक सिद्ध होंगे। भारत के यशस्वी प्रधानमंत्री श्री नरेंद्र मोदी जी के नेतृत्व में केंद्र सरकार द्वारा किए गए प्रयासों की ज़मीनी उपलब्धियों के बाद पूर्वोत्तर में शांति एवं रिश्वरता स्थापित हुई है एवं देश की मुख्यधारा एवं केंद्र सरकार से दूरी का भाव ख़तम हुआ है।

में 'पूर्वोत्तर परिषद' के कार्यों की सराहना करते हुए 'एनईसी ईयर बुक-२०२४' के सफल प्रकाशन की कामना करता हूँ।

श्री के. मोसेस चालाई, भा. प्र. से., सचिव, उत्तर पूर्वी परिषद, भारत सरकार

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G. Kishan Reddy
Minister of Development of
North Eastern Region,
Culture and Tourism
Government of India

#### **FOREWORD**



I am delighted that the "NEC Year Book 2024" has been published. The Year book presents a comprehensive picture of the North East Region of India and focuses on data and information of the North East. It includes government schemes, data on the economic structures and information on social indicators and is based on a compilation of facts and figures from Government and other reliable sources.

The Ministry of Development of North East Region is committed to strengthen the pace of growth in the North East and has been consistently pursuing its efforts towards this end through various measures and projects under the schemes formulated for development of socio-economic infrastructure in the North Eastern Region.

The statistics available in the Year book give reliable data for systematic follow-up and progress reviews. I am sure that the information available in the Year book will become an important tool and indispensable reference for policy planners, academicians, research scholars and analysts.

(G. Kishan Reddy)

**New Delhi** 

Date: 22 December 2023

बी.एल. वर्मा राज्य मंत्री सहकारिता एवं उत्तर पूर्वी क्षेत्र विकास भारत सरकार



वशुधेव कुतुम्बकम् ONE EARTH · ONE FAMILY · ONE FUTURE





Cooperation and Development of North Eastern Region Government of India



मैं बहुत प्रसन्नता और गर्व के साथ एनईसी ईयरबुक 2024 के सभी पाठकों को हार्दिक बधाई देता हूं। यह ईयरबुक प्रमुख डेटा और जानकारी पर विस्तृत ध्यान केंद्रित करते हुए पूर्वोत्तर भारत का सिंहावलोकन प्रदान करती है। इसकी सामग्री में विषयों की एक विस्तृत शृंखला शामिल है, जिसमें सरकारी स्कीमों, आर्थिक संरचनाओं और सामाजिक संकेतकों संबंधी विवरण सिंमिलत हैं।

इस ईयरबुक को सावधानीपूर्वक संकलित किया गया है और इसमें सरकार और अन्य विश्वसनीय माध्यमों से प्राप्त तथ्यों और आंकड़ों का खजाना समाहित है। मुझे विश्वास है कि यह प्रकाशन एक मूल्यवान संसाधन सिद्ध होगा, जो पूर्वोत्तर के विकास परिदृश्य के संबंध में अंतर्दृष्टि प्रदान करेगा, जिससे क्षेत्र की प्रगति और क्षमता का ज्ञान होगा।

मैं उन सभी लोगों की सराहना करता हूं जिन्होंने इस ईयरबुक को साकार करने में योगदान दिया है और मैं पाठकों को पूर्वोत्तर क्षेत्र के विविध पहलुओं की व्यापक समझ के लिए इसकी विषयवस्तु का अवलोकन करने के लिए प्रोत्साहित करता हूं।

बी. एल. वर्मा)

CHANCHAL KUMAR SECRETARY









भारत सरकार उत्तर पूर्वी क्षेत्र विकास मंत्रालय विज्ञान भवन एनेक्सी मौलाना आजाद रोड़, नई दिल्ली-110011

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New Delhi, 22<sup>nd</sup> December, 2023

#### **FOREWORD**



I am glad to introduce the "NEC Year Book 2024," a testament to our ongoing commitment to comprehensively showcase the North East Region of India. This publication stands as a valuable repository of information, carefully curated to provide a detailed overview of the region.

This handbook provides a wide range of data on diverse sectors of the economy of the North Eastern Region such as demography, GSDP, plans & finances, agriculture & allied, transport & communication, tea & rubber, tourism, handicrafts and handloom, power & energy, industry & mining, employment, education, health, forest & environment, banking & insurance etc. based on a compilation of facts and figures sourced from both government agencies and other reliable sources.

In the dynamic landscape of the North East, this Year Book serves as a crucial reference tool for economists, policy makers, researchers and the public at large, facilitating a deeper understanding of the region's multifaceted development. Beyond being a reflection of the present, it serves as a guide for future endeavors, contributing to informed decision-making. May its contents serve as an invaluable resource for those seeking to explore and understand the diverse facets of the North East Region.

(Chanchal Kumar)

\*\*\*\*\*\*\*\*

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#### **FOREWORD**



I am indeed delighted to note that the publication of the first of the series NEC Yearbook 2024 is happening. It has been common desire in North Eastern Region for some time to have sets of authentic information and data of the region in one place. NEC yearbook is an endeavor towards the same. The Yearbook provides valuable window of information about the NE Region as well as the MDoNER and the NEC. It covers different schemes of Government of India, including those of the MDoNER and the NEC. It also contains important statistics regarding economic and social development parameters of the NE Region. The accelerated Development Initiatives driven by both Central Government and State Governments in the North East have transited from 'Look East policy' to 'Act East Policy', leading to all round visible development in the North East Region. Through this Yearbook, there will be an increased awareness about the progress made in the different sectors in recent past.

We hope that the people of the North East Region will find the Year Book handy and perhaps the most comprehensive source of statistics published in the North East, all in one place.

I convey my appreciation to Ministry of DoNER, Team NEC and Team NEDFi for their untiring efforts made in bringing out successfully the NEC Yearbook 2024. I firmly believe that future editions will even be better.

[K. Moses Chalai]

Secretary, North Eastern Council, Shillong

#### Ministry of Development of North Eastern Region

The Ministry of Development of North Eastern Region is the only Ministry with a territorial jurisdiction; and it functions to coordinate the developmental efforts in the North Eastern (NE) Region of India. It was constituted, first as a Department in 2001 and then as a Ministry in 2004, basically for better coordination between the State Governments of North Eastern Region and the Central Ministries and Departments of Government of India. The Ministry aims to give a focused attention to address the special needs of the NE Region. It coordinates with various Ministries and Departments that are primarily concerned with the developmental activities in this region. However, respective Ministries and Departments remain responsible for the implementation of schemes and programmes in their respective fields.

The Ministry has been implementing various schemes for the development of the North East Region; viz. the North East Special Infrastructure Development Scheme (NESIDS), Schemes of North Eastern Council (NEC), Non Lapsable Central Pool of Resources (NLCPR), North East Road Sector Development Scheme (NERSDS) and Special Development Packages. In October 2022, the Union Cabinet approved the Prime Minister's Development Initiative for North East Region (PM-DevINE) Scheme, with total outlay of Rs. 6,600 crore for remaining 15th Finance Commission Period from 2022-23 to 2025-26. The schematic budget of Ministry of DoNER is limited and it is essentially intended for gap-filling schemes and projects. In addition to the above, the Ministry also coordinates with other stakeholders, who can be from non-government sector or multilateral sector, to work for the development of NE Region.

# **MDoNER Officials**



Shri Chanchal Kumar Secretary



Smt. Sukriti Likhi Additional Secretary & Financial Adviser



Shri Devajit Khound Senior Economic Adviser



Shri Harpreet Singh Joint Secretary



Shri Angshuman Dey Joint Secretary



Shri Shantanu Joint Secretary



Smt. Anuradha S. Chagti Joint Secretary & CVO



Dr. Suchita Gupta Statistical Adviser



Shri Vivek Gupta Senior Technical Director



Shri Umesh Kumar Director



Shri Abhijit Bakshi Director



Shri Purushottam Verma Director

#### North Eastern Council

The North Eastern Council (NEC) was constituted in 1971 by an Act of Parliament. The constitution of the Council has marked the beginning of a new chapter of concerted and planned endeavour for the rapid development of the North Eastern Region. Over the years, NEC has played a significant role in ushering development into the region at a time when most states were in their formative stages. Roads and air connectivity were supported, foundation for important regional institutions were established, and various socio-economic infrastructures were created across the length and breadth of the NE Region, making a difference in the lives of people and thereby earning a lot of goodwill in the local community.

Presently, NEC is looking to continue its efforts, especially in terms of gap-filling in areas which have escaped the attention of various development agencies, and creating convergence at different levels. NEC is also looking at building capacities, sharing best practices and introducing cutting edge technologies among the NE states.

### **NEC Officials**



Shri K. Moses Chalai, IAS **Secretary** 



Shri Som Kamai, IPoS **Planning Adviser** 



Shri Gaigongdin Panmei, IRS **Financial Adviser** 



Smti Sherry Lalthangzo, IES Economic Adviser (E&M) & CVO



Shri L.S. Gangte, IRS **Director (Administration)** 



Shri M. Iboyaima Meitei Adviser (Horticulture)



Smti R. Lalrodingi Director (Tourism and Industries)



Shri M. Kalita **Superintending Engineer (Civil)** 



Shri B.T.S. Dong **Deputy Financial Adviser** 



Smti Laysang Angmu Lama, IES Joint Director & I/c Director (Planning)



Shri N.G. Yirmayai, IES Joint Director & I/c Director (E&M)



Shri Ajay Parashar **Director of Information** and Public Relations



**Shri Tanung Jamoh** Director (Science and Technology)



Shri R. Polendro Sana **Executive Engineer (Civil)** 



Smti I.J. Kharshiing **Executive Engineer (Power)** 



Dr. Sanabam Sujen Singh **Extension Officer (Seismology)** 



Shri Ningthoujam Ajit Singh Research Officer (Planning)

## **Key Officials of MDoNER Organizations**



**PVSLN Murty** CMD, NEDFi



Brigadier Rajiv Kumar Singh (Retd) MD, NEHHDC



MD, NERAMAC



M.C OMI NINGSHEN, IRS MD, NECBDC



Kayio Kayina Th.,IRS MD, NERCORMS

# The NEC Yearbook 2024

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## 1. Introduction about the North Eastern Region of India



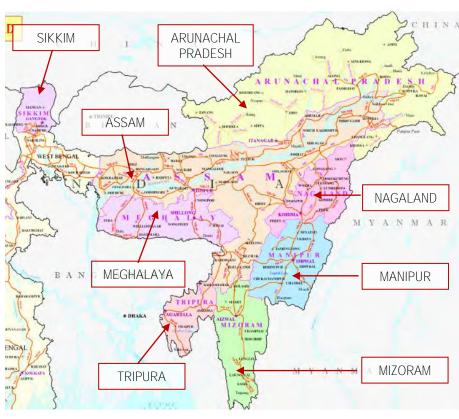
The North Eastern (NE) Region of India includes eight states of the Union, viz. Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura. It is the easternmost part of the country, located between the longitudes 88.01°E and 97.41°E and the latitudes 21.94°N and 29.47°N. The region exhibits a diversity of terrain, climate, peoples, languages, and cultures. The NE states of India have a wide range of flora and fauna, including many that are that are endemic to the region. They straddle two global biodiversity hotspots, i.e. the Indo-Burma and the Himalayas, which is an international recognition of the region's faunal and floral riches, as well as of the considerable challenges facing the efforts of stakeholders for the preservation of such biodiversity.

Occupying about 8% of India's area, the NE Region has less than 4% of the nation's population. During the British rule of India, the colonialists were largely content with confining their administrative and economic activities to the plain areas, where tea could be grown for export to their 'home country'. People living in the mountains and hills, which constitute around 70% of the region, were mostly left to their own devices. External shocks, such as the emergence of Japanese soldiers on the doorsteps of Manipur in 1942 and the Chinese aggression in the erstwhile North Eastern Frontier Agency in 1962, led to endeavours to overcome the remoteness of the region.

During the past few decades, the NE states have been receiving special attention from the policy-makers and administrators at the helm of affairs in India. A significant achievement has been the gradual removal of the physical and psychological barriers of distance and remoteness that had beset the region in the past. In addition, the developmental journey of these states has resulted in the emergence of an educated and articulate generation of North-easterners, who have made a mark for themselves in various spheres of life. However, as most areas had been woefully neglected in the past, the NE Region still needs special efforts in order that its indices of socio-economic development attain the all-India levels.



### The North Eastern Region at a Glance



Map-1.1: States of the North Eastern Region of India

The lines marking the international border are approximate. These have been indicated in the above map for depiction purposes only.

Table-1.1: Vital Statistics of the NE States of India

			Census of India 2011		
State	Area (km²)	Population	Density (per km²)	Sex Ratio (Females per 1000 males)	Literacy Rate (%)
Arunachal Pradesh	83,743	13,83,727	17	938	65
Assam	78,438	3,12,05,576	397	958	72
Manipur	22,327	28,55,794	128	992	77
Meghalaya	22,429	29,66,889	132	989	74
Mizoram	21,081	10,97,206	52	976	91
Nagaland	16,579	19,78,502	119	931	80
Sikkim	7,096	6,10,577	86	890	81
Tripura	10,486	36,73,917	350	960	87
NE Region	2,62,179	4,57,72,188	175	960	75

Source: Census of India, 2011

The NE states of India have less than 4% of the country's population, living in about 8% of the nation's area. Arunachal Pradesh is the largest-sized state of the region. Over 70% of the area of the NE Region is estimated to be mountainous or hilly.

Assam has 68% of the total population of the NE Region, while the next most populous state Tripura has 8%. The average density of population is 175 persons per sq. km. Leaving side Assam and Tripura; the density of the other states is 63 persons per sq. km. Mizoram, Nagaland and Meghalaya are predominantly tribal, as over 85% of the population of these states belong to various communities that have been listed as Scheduled Tribes.

The literacy rates are comparatively high in many of the NE states, and the region itself has a higher literacy rate that of India as a whole. But, there is a limited reach of higher education in some of the NE states. Further, the rate of unemployment is inferred to be higher in the region than the national average.





Date of Formation	Capital	Population (2011)
21 <sup>st</sup> January 1972 (as Union Territory)	ITANAGAR	13.84 lakh
20 <sup>th</sup> February 1987 (as State)		
Seats: Lok Sabha	Seats: Rajya Sabha	Seats: Legislative Assembly
2	1	60



Additional Details at https://www.advancingnortheast.in/state\_about\_us/arunachal-pradesh/
[Information sources have been listed after these Infographics of the NE States]





Date of Formation	Capital	Population (2011)
1921 as 'Governor's Province' of British India	DISPUR	3.12 crore
Seats: Lok Sabha	Seats: Rajya Sabha	Seats: Legislative Assembly
14	7	126



Additional Details at https://www.advancingnortheast.in/state\_about\_us/assam/
[Information sources have been listed after these Infographics of the NE States]





Date of Formation	Capital	Population (2011)
21 <sup>st</sup> January 1972 (as State)	IMPHAL	28.56 lakh
Seats: Lok Sabha	Seats: Rajya Sabha	Seats: Legislative Assembly
	•••	

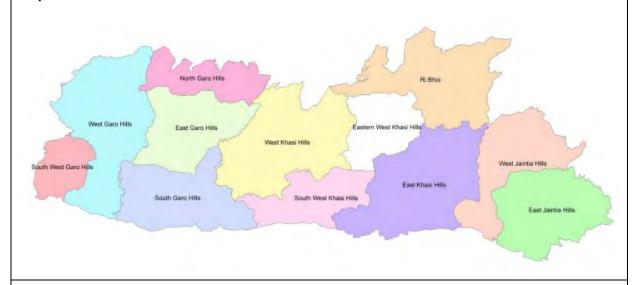


Additional Details at https://www.advancingnortheast.in/state\_about\_us/manipur/ [Information sources have been listed after these Infographics of the NE States]





Date of Formation	Capital	Population (2011)
2 <sup>nd</sup> April 1970 (as Autonomous State)	SHILLONG	29.67 lakh
21 <sup>st</sup> January 1972 (as full- fledged State)		
Seats: Lok Sabha	Seats: Rajya Sabha	Seats: Legislative Assembly
2	1	60



Additional Details at https://www.advancingnortheast.in/state\_about\_us/meghalaya/
[Information sources have been listed after these Infographics of the NE States]





<b>Date of Formation</b>	Capital	Population (2011)
21 <sup>st</sup> January 1972 (as Union Territory)	AIZAWL	10.97 lakh
20 <sup>th</sup> February 1987 (as State)		
Seats: Lok Sabha	Seats: Rajya Sabha	Seats: Legislative Assembly
1	1	40



Additional Details at https://www.advancingnortheast.in/state\_about\_us/mizoram/
[Information sources have been listed after these Infographics of the NE States]





Date of Formation	Capital	Population (2011)	
1 <sup>st</sup> December 1963 (as State)	December 1963 (as State) KOHIMA 19.79 lakh		
	Seats: Rajya Sabha	Seats: Legislative Assembly	
Seats: Lok Sabha	Seats: Rajya Sabha	Seats: Legislative Assembly	



Additional Details at https://www.advancingnortheast.in/state\_about\_us/nagaland/
[Information sources have been listed after these Infographics of the NE States]





Date of Formation	Capital	Population (2011)
16 <sup>th</sup> May 1975 (as State)	GANGTOK	6.11 lakh
Seats: Lok Sabha	Seats: Rajya Sabha	Seats: Legislative Assembly



Additional Details at https://www.advancingnortheast.in/state\_about\_us/sikkim/
[Information sources have been listed after these Infographics of the NE States]





Date of Formation	Capital	Population (2011)
1 <sup>st</sup> November 1956 (as Union Territory)	AGARTALA	36.74 lakh
21 <sup>st</sup> January 1972 (as State)		
Seats: Lok Sabha	Seats: Rajya Sabha	Seats: Legislative Assembly
2	1	32



Additional Details at https://www.advancingnortheast.in/state\_about\_us/tripura/ [Information sources have been listed after these Infographics of the NE States]

#### The NEC Yearbook 2024



Information Sources for Infographics of the NE States (at the previous pages)

Dates of Formation of the States of North Eastern Region

Arunachal Pradesh

In January 1972, the North East Frontier Agency was created as a Union Territory and was renamed as Arunachal Pradesh. On 20th February 1987 it became the 24th state of Indian Union.

Manipur

On 15th October 1949, the administration was taken over by the Government of India under a merger agreement. Later it attained full a full-fledged statehood on 21st January 1972.

Meghalaya

Meghalaya was carved out of Assam on 2nd April 1970. It became a full-fledged state on 21st January 1972.

Mizoram

Since 21st January 1972, it was a Union Territory. Later, by the Constitution's 53rd Amendment and the state of Mizoram Act, July 1986, it became a state on 20th February 1987.

Nagaland

It includes former Naga Hills district of Assam and former Tuensang Frontier Division of NEFA. It attained statehood on 1st December 1963.

Sikkim

By the 36th Constitution Amendment Act, 1974 it got associated with Indian Union. By 38th Amendment Act, 1975, it became the 22nd state of Indian Union.

Tripura

On 1st November 1957, Tripura was declared as a Union Territory. On 21st January 1972, this territory attained the status of a full-fledged state.'

[Source: From National Atlas and Thematic Mapping Organization, Department of Science and Technology (in its Chapter on 'Administrative' from the 'Socio-Economic Atlas of India' (as Chapter-1) published in 2001, which is available at the following link: https://geoportal.natmo.gov.in/sites/default/files/ADMINISTRATIVE 0.pdf)]

Additional Sources on Dates of Formation

Arunachal Pradesh: The dates of its formation as Union Territory and State are available at https://appsc.gov.in/Index/history (website of Arunachal Pradesh Public Service Commission as a part of its write up on the 'Commission's History')

Assam: 'At the end of the First Burmese war in 1826, the whole of Assam gradually came under the British rule. In 1874, Assam was detached from the administrative control of Bengal and was made into a separate Chief Commissionership. As a consequent of the partition of Bengal in 1905, Assam was tagged with Eastern Bengal to form the province of Eastern Bengal and Assam under a Lieutenant Governor. In 1912, the Chief Commissionership of Assam was revived and in 1921, Assam became a Governor's province'. (Source: 'Our History', Department of Archives, Government of Assam)

Meghalaya: The dates of its formation as Autonomous State and full-fledged State have been given at the 'Official Portal of the Government of Meghalaya', which is available at the link: https://meghalaya.gov.in/about

Sikkim: The date of its formation has been inferred from the article 'The 48th State Day of Sikkim, to commemorate the formation of Sikkim as the 22nd State of India Union,' brought out by the Information & Public Relations Department of Government of Sikkim, which is available at https://sikkim.gov.in/media/press-release/press-info?name=The+48th+ State+Day+of+Sikkim%2C+to+commemorate+the+formation+of+Sikkim+as+the+22nd+State+of+India+Union%2C+was+cel ebrated+in+a+function+at+Chintan+Bhawan

Tripura: 'On January 26, 1950 Tripura was accorded the status of a 'C' category state and on November 1, 1956, it was recognized as a Union Territory. With the sustained efforts and struggle of the people of Tripura, it gained full statehood on January 21, 1972, as per the North-East Reorganisation Act, 1971'. (as per 'Tripura State Portal', the Official Portal of the Government of Tripura – available at the link: https://tripura.gov.in/historical-background)

Continued...



Population of States

From 'Basic Population Figures of India and States, 2011' at website of Office of Registrar General & Census Commissioner India, Ministry of Home Affairs (https://censusindia.gov.in/census.website/data/population-finder)

Seats in the Parliament & State Legislatures

Seats in Lok Sabha

From 'State / UT wise Seats in the Lok Sabha' made available at the following link of the Ministry of External Affairs, Government of India: https://www.mea.gov.in/Uploads/PublicationDocs/19167\_State\_wise\_seats\_in\_Lok\_Sabha\_18-03-2009.pdf. It shows the State-wise break –up of seats and reserved seats for Scheduled Castes and Scheduled Tribes before and after the Delimitation in 2008.

Seats in Rajya Sabha / Lok Sabha

From the 'Terms of the Houses', brought out by the Election Commission of India (at https://eci.gov.in/elections/term-of-houses/)

Seats in Legislative Assemblies

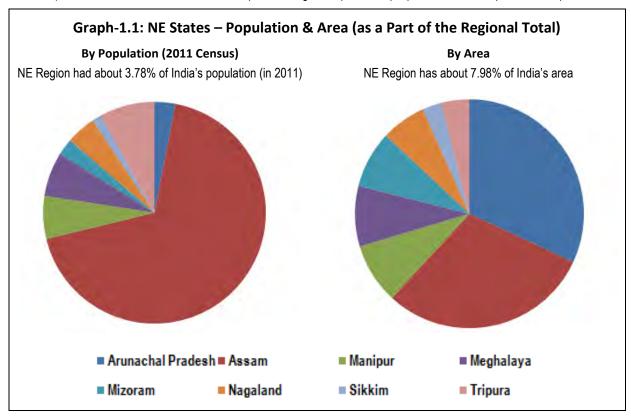
From the 'Terms of the Houses', brought out by the Election Commission of India (at https://eci.gov.in/elections/term-of-houses/)

Maps

All except the ones listed below have been sourced from 'Explore North East States' in website of 'Advancing North East', which is available at 'https://www.advancingnortheast.in/about/'

1. Map of Meghalaya: From 'Map of Meghalaya' available at the Official Web Portal of the Government of Meghalaya (at the link: https://www.meghalaya.gov.in/maps)

Map of Sikkim: From 'State of Sikkim' at https://sikkim.gov.in/uploads/DeptUploads/Sikkim\_Map\_20230117.pdf





#### 1.1. Brief Introduction to the States of the North Eastern Region

#### **Arunachal Pradesh**

Popularly known as the 'land of the dawn-lit-mountains', Arunachal Pradesh is the first state of India to greet the morning sun. It is situated in the north-eastern corner of the North Eastern Region, adjoining countries like Bhutan, China and Myanmar. While it is the largest state of this region by area, most of its land consists of thinly populated and well-forested mountainous terrain that forms a part of the Eastern Himalayas. In addition, the eastern districts of the state are located on the Mishimi Hills bordering China and the Patkai range, which separates India from Myanmar and runs southwards towards Nagaland. Arunachal Pradesh also has the eastern-most fringes of the Brahmaputra Valley, which mostly covers the neighbouring Assam state.

Arunachal Pradesh extends from the foothill areas adjoining Assam towards the Himalayan peaks in the north. Consequently, the state has a large range of agro-climatic conditions, besides being well-endowed with a wide array of flora and fauna. Its misty hills, sparkling rivers, and gurgling waterfalls add to the beauty of this charming state, which is populated by several tribes having their own cultures, traditions, and languages. These are being increasingly showcased successfully through the joint efforts of the concerned stakeholders, both governmental and non-governmental.

#### **Assam**

Assam is located on the two major river valleys of the North Eastern Region, i.e. the Brahmaputra Valley and the Barak Valley. The Karbi Plateau and the hills of Dima Hasao separate these valleys. The mighty Brahmaputra, which is India's biggest river by annual discharge, is intricately woven into the local identities. The state serves as a corridor to the different states of the region, as it shares a boundary with all of them, except Sikkim. Its largest city, Guwahati, is often referred to as the 'Gateway to the NE Region'. In addition, Assam has borders with Bangladesh and Bhutan. Being mostly well-inhabited, the state has the largest population and economy of the region.

Well known even during the British rule of India for its tea, oil and timber, Assam is a beautiful and diverse state with an incredible range of cultures and landscapes. Its wildlife, tea gardens, monuments, religious shrines and other tourist destinations continue to attract an increasingly larger number of tourists from across India, as well as from other nations. The vast improvement of connectivity between the state and the other parts of India have helped in promoting tourism in the state, as well as a better understanding of its peoples and their cultures and traditions.

#### Manipur

The centre of Manipur is formed by the Imphal Valley, which is a small-sized valley surrounded on all sides by hills that comprise over 90% of the state's area. These hills form a part of an unbroken range stretching southwards from Nagaland to Mizoram and Myanmar, besides abutting neighbouring Assam to the west. Located on the eastern flank of the North Eastern Region, the state adjoins Myanmar with which it has a readily accessible border crossing. This makes Manipur as India's main 'Gateway to South-East Asia'.



Manipur is well-endowed with natural resources as well as human talents that can propel the state to fully realise its developmental potential. Its pristine beauty and diversity of landscapes, people, cultures, and traditions make it 'a land of gems', both literally and figuratively. An unforgettable example is the Loktak Lake at the heart of the Imphal Valley. A boat-ride here can offer a unique aquatic experience along with long-lasting impressions about the state's beauty and the traditional way of life of its lakeside inhabitants.

#### Meghalaya

Meghalaya translates as 'the abode of clouds', a befitting name for a state that includes Cherrapunjee, which officially reverted to its original name of Sohra in 2007. This place has long enjoyed a global reputation as the 'rainiest place in the world', despite periodic reports about higher rainfall at other locations. After the re-organization of the north-eastern areas of India; Meghalaya inherited Shillong, which had been developed as the capital of the then Assam province of British India, a role which this city now plays for the state of Meghalaya. The city is a regional hub of education and tourism, besides hosting many offices of the Government of India, including the Secretariat of the North Eastern Council.

The hills and plateaus of Meghalaya rise steeply from the plains of neighbouring Bangladesh located to the south. These ranges descend to the Brahmaputra Valley of Assam located to the north of the state. Apart from supporting significant agricultural, horticultural and mining activities, the local landscape offers a large variety places worth visiting. These include innumerable waterfalls, crystal clear rivers, charming hamlets, biosphere reserves, mysterious and internationally famous caves, and stunning view-points spread across the state. Tourists from all corners of India, as well as from other countries, have been carrying fond memories after their visit to Meghalaya.

#### **Mizoram**

Mizoram, 'the Land of the Mizo people', is the southern-most state of the NE Region. It is situated inbetween Bangladesh and Myanmar. In its northern part, the state also adjoins other Indian states like Assam, Manipur, and Tripura. Mizoram is hilly, being traversed by a series of parallel ranges running roughly in a north-south manner. These are separated by deep and narrow valleys, along which several sizeable rivers flow. Many of these rivers run northward to the plains of the Barak valley in Assam, while others enter Bangladesh and Myanmar before debouching into the Bay of Bengal.

Large tracts of Mizoram are covered by bamboo and cane, apart from lush forests. It is the most urbanized state of the region, and the interiors have relatively low populations. Mizoram is noted for having the second-highest literacy rate among the states of India as per the Census of India 2011. A relatively less-visited state of the region, its natural charms and the disciplined nature of its people can impress the first time traveller.

#### Nagaland

Nagaland is a state located on the eastern hills of the NE Region, bordering Myanmar to the east. The states of Arunachal Pradesh, Assam and Manipur adjoin it on the other sides. Apart from a



narrow fringe to the west, Nagaland is entirely hilly and thinly populated outside the district and sub-divisional towns. Nagaland has been settled by a variety of tribal groups, who have developed a 'Naga' identity over the past decades. These tribes still retain their distinct cultures, traditions, and languages, while embracing the wider global trends and fashions, including the use of English for official and educational purposes.

As a part of the development journey of Nagaland, its remoteness has been reduced gradually over the past decades, while the mystique of its people and their ways of life still holds a wide appeal in the outer world. The 'Hornbill Festival', which is annually held in the first part of December every year, has been highlighting the food, music, folklore, and dances of Nagaland. Over the decades, this festival has built-up a wide base of adherents within and outside the state, including in several countries outside India.

#### **Sikkim**

Mount Kanchenjunga, the third highest point on the globe, is located on the India-Nepal border. Its Indian side fall within the state of Sikkim. This is a small sized and entirely mountainous state, with its southern areas being relatively more populated. It is bordered by Bhutan, China and Nepal on three sides, while West Bengal is situated to the south. Sikkim is not contiguous to any of the other states of the North Eastern Region. The state enjoys the highest per-capita income in the region, which along with many of its other socio-economic indices indicates the success of Sikkim's developmental endeavours. One notable feature of the state is its image of peace and tranquillity, which is supplemented by the friendly nature of its inhabitants.

The terrain of Sikkim had limited its connectivity in the past, but several routes have been developed in the recent decades. These have greatly reduced the isolation of the state and promoted it as a preferred destination across the globe. In fact, some years ago, the well-known travel magazine 'Lonely Planet' had declared Sikkim as the top-most destination amongst the 'Top 10 Regions' in its 'Best in Travel 2014'. The state's promotion of responsible community-based tourism and organic farming has been praised widely, both across the country and outside India.

#### **Tripura**

Tripura is a North Eastern state of India that projects into Bangladesh, which surrounds it on three sides. The state also shares borders with Assam and Mizoram. Locally referred to as 'Twipra' by sections of the population, the state has a diverse population of non-tribal people and various tribal groups. Its western areas are well populated, but large parts consist of forested and thinly populated rolling terrain. The state has the second largest population and economy in the region, after Assam.

In the past, the state had been beset with disrupted roads, especially during the rainy months. However, recent efforts have strengthened its road and rail connectivity with other parts of the country. In addition, efforts are underway to promote connectivity with other parts of India through Bangladesh using the railways and ports of the latter country. A remarkable development in the state has been the successful and large-scale plantation of rubber trees in the recent past, which have started yielding sizeable incomes to the growers, most of whom are tribal households.



#### 1.2. Physiography

The major physiographic features of the North Eastern Region include the mountainous areas of the Eastern Himalayas, the plains of the Brahmaputra and the Barak, the eastern hills (Patkai, Naga Hills, Manipur Hills and Mizoram) belonging to the unbroken Assam-Arakan ranges, and the central hills and plateaus of Meghalaya, and Assam's central districts of Karbi Anglong and Dima Hasao. The state-wise physiographic details have been summarized below.

#### **Arunachal Pradesh**

Arunachal Pradesh has four physiographic regions: (a) the Greater Himalayas, with snow-capped mountains rising up to 5,500 m above the mean sea level (MSL) with some peaks soaring above 6,500 m; (b) the Lower Himalayan range, rising up to 3,500 m; (c) the sub-Himalayan belt, including foothills classified as 'Siwalik Hills', with elevations up to 1,500 m; and (d) the plains near eastern Assam. Most of the state is covered by mountains and hills, which along with escarpments and ridges cover 70% of the state. Rocky and dissected areas constitute 20% of its area. Valley regions or cultivable slopes cover about 4% of the area. There are some plain areas in a few eastern districts that are contiguous to Assam. One notable feature is the Mishimi Hills in the north eastern corner of the state. These are a spur of the Himalayas, and they contain some peaks above 5,000 m in height.

#### **Assam**

Assam has four major physiographic regions; viz. the Brahmaputra Valley, the Barak Valley, the Karbi plateau, and the hills of Dima Hasao. The Brahmaputra Valley is a continuation of the great Indo-Gangetic plain, and it is bounded by mountains and hills on three sides. These include the sub-Himalayan foothills on the north, the Meghalaya plateau and the Karbi plateau on the south and the Patkai and Naga Hills to the east and south-east. The Barak valley, in the southern part of the state, is an alluvial flat land. It is similarly bounded by hills on all sides except to the west. It has a few low ridges descending from the Mizo Hills and running northwards till the River Barak. The areas in central Assam comprise of the plateau of Karbi Anglong, which is an extension of the Meghalaya plateau, and the hilly areas of Dima Hasao district, which includes the picturesque Barail range.

#### Manipur

Manipur is mostly hilly in nature, with a centrally located plain area called the Imphal Valley. This valley accounts for about 9% of the state's area, and it is marked by some isolated hillocks. The valley is surrounded by hills on all sides, with these consisting mainly of ranges running in a north-south manner. The hills on the western side of the valley have elevations ranging from 800 m to 1,100 m above the MSL, while those on the eastern side are having higher elevations of 1,800-3,000 m. One distinguishing feature of the state's physiography is the Loktak Lake, which forms about 1% of the state's area. It is located within the Imphal Valley.

#### Meghalaya

Meghalaya can be broadly divided into three zones; viz. the central plateau region, sub-montane region and a border region stretching southward that drops abruptly from the central plateau to the



plains of Bangladesh. The central plateau has an elevation of 900–2,000 m above the MSL, while the sub-montane areas are below 900 m in height. The plateau region stands as a watershed between the Surma valley of Bangladesh in the south and the Brahmaputra valley in the north.

#### Mizoram

The terrain of the Mizoram is reported to be young and immature. It shows prominent relief features with steep slopes, and is still undergoing denudation due to various factors. The state's predominant feature is a series of sharply rising ridges that run in a north-south direction. These ridges are separated by swiftly flowing rivers. The Mizo hills include ranges on the western side and those on the eastern side, with the former having wider valleys. These hills can be divided into three sub-zones depending upon the intensity of the slopes: viz. steep hill slopes; moderate hills slopes, and gently sloping uplands. The elevations are usually between 150 m and 900 m, while some of the peaks of Mizoram rise up to 1,500 m above the mean sea level.

#### **Nagaland**

Nagaland is largely a hilly state, with its hill ranges generally running from the north-eastern part of the state towards the south. These are separated by narrow valleys. The state's topography includes foothills located near the Assam border, which are about 100 m or lower in altitude. These gradually rise up to the mid-ranges having varying degree of slopes, with elevations of 1,000 m or more. Towards the interior, there exist higher hills and mountainous areas. Some of the peaks of the state ascend up to considerable heights, including the Saramati (3,826 m) and the Japfu (3,048 m).

#### Sikkim

The dominant feature of the state's physiography is Mount Kanchenjunga, the third highest peak of the world (with a height of 8,586 m). The state is entirely mountainous, with its landscape being marked by features like summits and ridges, zones of glacial drifts and perpetual snow escarpments, cliffs and precipitous slopes. Some areas have moderately steep slopes and narrow valleys. The main ranges run in a north-south direction, with these having subsidiary interlacing spurs that are aligned roughly in an east-west manner.

#### **Tripura**

Despite being a small-sized state, Tripura has a wide variety of physiographic zones. A series of low hill ranges running in a north-south direction are the major feature of the state's physiography. There are many rounded hillocks, locally called as 'tillas', as well as small hills which account for a large part of the state's area. In addition, these tillas and hillocks are separated by small lowlands. Near the western parts of the state, there are some plain areas adjoining the Bangladesh border.

[Adapted from the details at 'Degraded and Wastelands of India: Status and Spatial Distribution', Indian Council of Agricultural Research, 2010 which had been accessed from the website of ICAR-National Bureau of Soil Survey & Land Use Planning.]



Map-1.2.1: Physiographic Map of the NE Region and Nearby Areas



#### **Index of some Physiographic Features**

	, , ,
1	Mount Kanchenjunga
	(3 <sup>rd</sup> highest place in the world)
2	Arunachal Himalayas (part of Eastern Himalayas)
3	Mishimi Hills
4	Patkai Hills
5	Naga Hills
6	Manipur Hills
7	Imphal Valley & Loktak Lake
8	Mizo Hills
9	Barak Valley
10	Cherrapunjee / Sohra
	(rainiest place on the world)
11	Meghalaya Plateau
12	Brahmaputra Valley
13	Karbi Anglong Plateau
	(extension of Meghalaya Plateau)
14	Barail Hills of Dima Hasao
15	Assam Arakan Range
	(A chain of continuous hill ranges on the eastern flank
	of NE Region, which include the Patkai Hills of
	Arunachal Pradesh, Naga Hills, Manipur Hills, and Mizo Hills apart from the Arakan Yoma in the western
	flank of Myanmar)
16	Tripura Ridges & Hills

The lines marking the international border are approximate. These have been indicated in the adjacent map for depiction purposes only.



# 1.3. Climate

Climate is usually defined as the 'average weather', or more rigorously, as the 'statistical description in terms of the mean and variability of relevant quantities over a period of time ranging from months to thousands of years'. A period of three decades is widely used, as per norms of the World Meteorological Organization (WMO). The local climate gets influenced by several factors, especially temperature and precipitation. The former varies according to the latitude and altitude of the location, as well as the influence of diurnal and seasonal variations. Precipitation consists of rainfall, except at high latitudes where snowfall constitutes another source. The other factors influencing climate include the prevailing winds, ocean currents, maritime and continental situations.

The North Eastern Region is located between the latitudes 21.94°N and 29.47°N. This indicates that some parts of the region lie below the Tropic of Cancer (23.4362°N), while others are located above this latitude. Accordingly, the states of Northeast India have a subtropical or tropical climate at the lower altitudes. The plain areas of the region are located at below 200 m (above mean sea level), except the Imphal valley that is at a height of around 800-1,000 m.

The special characteristic of tropical climates is that they essentially do not experience temperatures (below 18°C) that are too low for plant growth. In such areas rainfall decides the vegetation types. 'Sub-tropical' is a term that refers to areas located next to the tropical zone, which straddles the equator till the latitudes 23°26′10.3" on either side. The sub-tropical areas are technically part of the temperate zone, which are located beyond the tropical zone till the latitudes 35° (as usually accepted). The sub-tropical climate is marked by hot summers and cool winters. The above climates, i.e. tropical and sub-tropical, characterize areas of the NE Region lying at lower elevations.

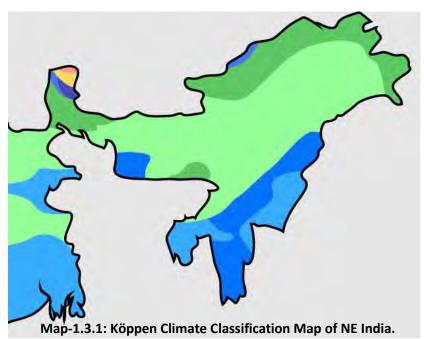
About 70% of the NE Region is hilly or mountainous. The foothill areas have warmer and rainier climates as compared to the interiors, which are at greater heights, and therefore have colder and drier climates. In the hilly or mountainous states of the region, the prevailing climate can vary from sub-tropical to temperate depending upon the altitude of the location and other pertinent factors. Such changes can occur at short distances in mountainous states like Arunachal Pradesh and Sikkim, where the climate can range from sub-tropical to alpine.

The NE states have some of the heaviest rainfall in the world. Most of the rainfall in these states occurs during the southwest monsoon months, which extend from June to September every year. Considerable rainfall also occurs in the pre-monsoon period (March-May) and post-monsoon months (after September). The cool (or cold) season is much drier. One fact highlighted by Indian Meteorological Department based on its studies of annual rainfall covering the period from 1981 to 2010, is that rainfall in some NE states has been showing a falling trend. This has been established for NE states like Arunachal Pradesh, Meghalaya and Nagaland.

The map at the next page gives the climate classification of the NE states as per the 'Köppen climate classification' system. This system has been described later-on as a part of this discussion. The table given after the next page summarizes the prevalence of different climate types in the above states, according to the Köppen Classification. In addition, the climatic conditions in the different states have been individually discussed thereafter in brief.

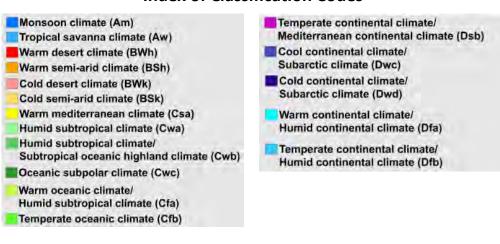


# Köppen Climate Classification Map of NE Region



	N GROUPS		sonal Precipitation		Third Letter (Used with			
(Firs	t Letter: Capital)		<b>-Group</b> (Second	'B',	'B', 'C' and 'D' Groups)			
		Lett	er)					
Α	Tropical	f	No dry season	а	Hot summer			
В	Arid	S	Dry summer	b	Warm summer			
С	Temperate	w	Dry winter	С	Cold summer			
D	Continental	m	Monsoon (*)	d	Very cold winter (**)			
Е	Polar	(*) t	used with 'A' only	(**) Only for 'D'				

## **Index of Classification Codes**



#### Humid Sub-tropical Climate ('Cwa')

In the Köppen-Geiger climate classification, Humid Sub-tropical climate is indicated by 'Cwa', where 'C' stands for 'temperate' viz. sub-tropical (as opposed to tropical); 'w' indicates 'dry winter' and 'a' denotes 'hot summer'. This indicates a climate which is a **monsoon-influenced humid sub tropical** climate. Such a climate is marked by the following characteristics:

- Coldest month averaging above 0°C,
- At least one month's average temperature above 22°C,
- At least four months averaging above 10 °C; and
- At least ten times as much rain in the wettest month of summer as in the driest month of winter (alternative definition is 70% or more of average annual precipitation is received in the warmest six months)

Similarly, the other climatic areas (e.g. Monsoon climate ('Am') and Tropical Savannah climate ('Aw') will exhibit their characteristics, which distinguish such areas from the others.



Table-1.3.1: Climate Types in the NE States (As per Köppen Classification System)

Climate Type	Occurrence (per Map)	Description
Am	Assam (Parts of Barak Valley) Manipur (Western Belt) Meghalaya (Garo Hills) Mizoram Nagaland	Tropical Monsoon Climate
Aw	Manipur (Eastern Areas) Mizoram (Fringe Areas) Tripura (Almost entire state)	Tropical Savannah Climate
Cwa	Arunachal Pradesh (Foothills) Assam (almost entire state) Manipur (Foothills) Meghalaya (Foothills)	Humid Sub-tropical Climate
Cwb	Arunachal Pradesh (Mid Hills) Meghalaya (Plateau) Sikkim (Lower Altitudes)	Sub-tropical Highland climate
BWk	Fringes of North Sikkim	Cold Desert Climate
BSk	Parts of North Sikkim	Cold Semi-arid Climate
Dwc	Arunachal Pradesh (Northern Fringes) Parts of North Sikkim	Cool Continental
Dwd	Higher Altitudes in Sikkim	Cold Continental

Source: As interpreted from the map at the previous page

# The Köppen Classification System

Under the Köppen classification system, climate zones across the globe have been classified based on local vegetation. This was on account of the observations of some scientists in the 19<sup>th</sup> century that vegetation and climate appeared to be closely related. The vegetation growing in a region is dependent on the local temperature and precipitation, which are also two key parameters of its climate. The Köppen climate classification system has been considerably enhanced and modified after it was first published.

The above system divides the world into five climatic zones based on criteria, usually temperature, which allows for different vegetation growth. While most of the zones are organized based on the temperature of a region, Zone B focuses on the aridity of a region (based on precipitation). The zones are as follows: Zone A: tropical or equatorial zone; Zone B: arid or dry zone; Zone C: warm/mild temperate zone; Zone D: continental zone and Zone E: polar zone.

In addition, each zone is subdivided based on temperature or precipitation. For example, Zone A has three subdivisions: Zone Af has no dry season, Zone Am has a short dry season, and Zone Aw has a winter dry season. Zone B is divided into categories related to regions such as hot arid deserts (Zone BWh); cold arid deserts (Zone BWk); hot arid steppes (Zone BSh); and cold arid steppes (Zone BSk).

Further, climate zones C and D have been categorised based on the following factors: (a) period when the dry season occur in the zones (summer or winter), and (b) the temperatures of hottest month in summer or coldest month in winter. Zone E is separated into tundra regions (Zone ET) or frost (snow and ice) regions (Zone EF).



The above classification system is still used by scientists, with modifications. For example, some revisions to the system include a sixth region, known as Zone H. This denotes a highland climate located in mountainous areas.

Table-1.3.2: Description of Köppen Climate Symbols and Defining Criteria

1st	2 <sup>nd</sup>	3rd	Description	Criteria
Α			Tropical	T (cold) ≥ 18°C
	f		- Rainforest	P (dry) ≥ 60 mm
	m		- Monsoon	Not (Af) & P (dry) ≥ 100-MAP/25 (in mm)
	W		- Savannah	Not (Af) & P (dry) < 100-MAP/25 (in mm)
В			Arid	MAP < 10 x P (threshold)
	W		- Desert	MAP < 5 x P (threshold)
	S		- Steppe	$MAP \ge 5 \times P \text{ (threshold)}$
		h	- Hot	MAT ≥ 18°C
		k	- Cold	MAT < 18°C
С			Temperate	T (hot) > 10°C; 0°C < T (cold) < 18°C
	S		- Dry summer	P (s-dry) < 40 mm; P (s-dry) < P (w-wet) /3
	W		- Dry winter	P (w-dry) < P (s-wet) /10
	f		- Without dry season	Not (Cs) or (Cw)
		а	- Hot summer	T (hot) ≥ 22°C
		b	- Warm summer	Not (a) and T (mon 10) $\geq 4^{\circ}$ C
		С	- Cold summer	Not (a or b) and $1^{\circ}C \leq T \pmod{10} < 4^{\circ}C$
D			Cold	T (hot) $\geq$ 10°C and T (cold) $\leq$ 0°C
	S		- Dry summer	P (s-dry) < 40 mm; P (s-dry) < P (w-wet) /3
	W		- Dry winter	P (w-dry) < P (s-wet) /10
	f		- Without dry season	Not (Ds) or (Dw)
		а	- Hot summer	T (hot) ≥ 22°C
		b	- Warm summer	Not (a) and T (mon 10) $\geq$ 4°C
		С	- Cold summer	Not (a or b or d)
		d	- Very cold winter	Not (a or b) and T (cold) ≤ -38°C
E			Polar	T (hot) < 10°C
	Т		- Tundra	T (hot) > 0°C
	F		- Frost	$T (hot) \le 0$ °C

## Where:

MAP	Mean Annual Precipitation
MAT	Mean Annual Temperature
T (hot)	Temperature of the Hottest Month
T (cold)	Temperature of the Coldest Month
T (mon 10)	Number of Months where Temperature is above 10°C
P (dry)	Precipitation of the Driest Month
P (s-dry)	Precipitation of the Driest Month in Summer
P (w-dry)	Precipitation of the Driest Month in Winter
P (s-wet)	Precipitation of the Wettest Month in Summer
P (w-wet)	Precipitation of the Wettest Month in Winter
P (threshold)	As follows:
	If 70% of MAP in winter, then P (threshold) = 2 x MAT
	If 70% of MAP in summer, then P (threshold) = 2 x MAT + 28
	Otherwise, P (threshold) = 2 x MAT + 14
Summer	Warmer six month period of ONDJFM and AMJJAS
Winter	Colder six month period of ONDJFM and AMJJAS

Source: Peel et al (2007), 'Updated world map of the Köppen-Geiger climate classification', Hydrology and Earth System Sciences Discussions (www.hydrol-earth-syst-sci-discuss.net/4/439/2007/)



#### **Climates of the North Eastern States**

#### **Arunachal Pradesh**

The climate of the sub-Himalayan belt of Arunachal Pradesh is humid and per-humid subtropical, marked by high levels of rainfall and humidity. The average annual rainfall varies in the different districts of the state, from 1,492 mm (in Upper Subansiri district) to 4,442 mm (in the Lower Dibang Valley). About 64% of such rainfall occurs during the monsoon period from June to September.

The minimum temperature is below 0°C in winter months in the higher reaches (that ascend to nearly 7,100 m), and temperatures can rise to 35°C during summer months in the plain areas in the eastern districts. In such plains, the mean annual air temperature is 23.8°C, while it is 16.2°C in hilly regions of the state.

#### Assam

Assam's climate is neither too cold in winter nor too hot in summer. In general, it is of subtropical type, influenced by the monsoons. The state receives high precipitation during June to September (nearly two-thirds of the average annual rainfall). Smaller amounts of rainfall are received during the pre-monsoon period (April and May) and the post-monsoon period (after September). Rainfall is scanty in winter months from November to February. The average annual rainfall is 2,135 mm, and average annual temperature is about 24°C.

There are variations of rainfall across the districts, since some of the districts like Kamrup Metropolitan (1,643 mm), Nagaon (1,469 mm), and Karbi Anglong (1,356 mm) receive less than half of the rainfall that occurs in other districts such as Kokrajhar (3,401 mm) and Karimganj (3,462 mm).

# Manipur

The hilly terrain of the state is characterized by heavy precipitation that occurs across the year. The eastern hill ranges and the central plain (of Imphal valley) are relatively cooler than western hills. The average temperature of the eastern hills is about 20°C, and the summer temperature is around 29°C here, which drops to 0–12°C in the winter season. In the western hills, the mean annual temperature exceeds 22°C, and summer temperature ranges from 35 to 40°C. The average annual precipitation varies from 1,200 to 1,350 mm in the drier eastern hills; while the western ranges receive from 2,000 to 2,650 mm of rainfall on an average. The Imphal Valley is surrounded by hills on all sides. Consequently, it has low temperatures during the winter.

## Meghalaya

The climate of Meghalaya is per-humid as the average rainfall ranges between 2,000 and 4,000 mm, with the state's average annual rainfall being 3,784 mm. It has some of the rainiest places in the world. Over 70% of the annual rainfall takes place during the monsoon months of June to September. There are district level variations; as the Ri Bhoi district located on the northern face of the Meghalaya plateau receives just 2,119 mm, while the East Khasi Hills (which includes Cherrapunjee / Sohra) has an annual rainfall of 6,019 mm, which is almost three times higher.



The mean summer temperature of the state is 26°C, while the mean winter temperature is just 9°C. At places, it drops below the freezing point in the winter. The mean annual soil temperature at higher elevations is between 15°C and 22°C, while at lower elevations, it exceeds 22°C.

#### Mizoram

Mizoram has a humid tropical climate, which is marked in most places by warm summers and cool winters (that are not very cold). The mean winter temperature varies between 21° and 27°C, while the mean annual temperature is 20°C. The difference between mean summer and mean winter temperature exceeds 5°C.

The average annual rainfall in the state is 2,483 mm as it lies under the direct influence of monsoon blowing in from the nearby Bay of Bengal. About 67% of the annual rainfall takes place during the monsoon months (June-September). Most of the districts appear to have similar levels of rainfall, as the driest Champhai district receives almost 80% of the rainfall of Kolasib, which is the wettest of the state's districts.

# Nagaland

Like the other hill states of the region, the climate of places in Nagaland mainly depends upon their altitude. At locations situated at elevations of 1,000–1,200 m, the climate is hot to warm subtropical. On the other hand, in areas with elevations of 1,200 m and above, the climate is warm subtemperate. The temperature varies from 0°C in winter to 40°C in summer and average annual air temperature ranges from 18° to 20°C and 23° to 25°C, based on the elevation of the location.

The state has comparatively lower rainfall than the other NE states, and its average annual rainfall is 1,664.6 mm. Over 67% of the state's rainfall takes place during the monsoon period (June-September). As in many other NE states, there are district level variations of rainfall. Kiphire (next to Myanmar) receives 869 mm in a year (on an average), which is just 45% of the annual rainfall of 1,915 mm in Mokokchung district on the western side of the state, adjoining Assam.

#### Sikkim

The climate of locations in Sikkim varies from sub-tropical to alpine depending upon the elevation of the place. The mean annual rainfall is 2,548 mm in the state, with nearly 64% falling in the monsoon months from June to September. July is the wettest month in the state with an average rainfall of 476 mm (about 19% of the annual rainfall). The variation of rainfall amongst the districts is not very marked in Sikkim, as the rainfall of the driest East Sikkim being about 75% of the wettest South Sikkim district.

The average annual temperature is 27°C. The average temperature is very cool in the north as compared to the south, and it reaches 0°C in winter.

#### **Tripura**

Tripura has a tropical climate, with most of the inhabited locations in the state being usually situated at low heights. The average mean annual temperature varies from 20.1° to 24.6°C and the mean



winter temperature is 16°C, while the summer temperature is 28.2°C. The average rainfall is about 2,400 mm, with over 60% of it falling in the months from June to September.

Winters are usually moderately cold in the state, even though low temperatures (2°C-3°C) have been recorded on a few occasions. The prevailing temperatures increase from March onward, leading to thunderstorms in the pre-monsoon period. The monsoon period commences from the first week of June, when moist cloud-bearing winds start blowing from the Bay of Bengal. This is a warm (31°C-32°C) and humid period that brings the bulk of the state's rainfall. In the post-monsoon period, which starts from mid-October, the temperatures start falling, reaching 26°C (average maximum) and 11°C (average minimum) by December.

#### Sources:

- 1. 'Degraded and Wastelands of India: Status and Spatial Distribution', Indian Council of Agricultural Research, 2010 which had been accessed from the website of ICAR-National Bureau of Soil Survey & Land Use Planning
- 2. Observed Rainfall Variability & Change Studies carried out by the Indian Meteorology Department (IMD) for the following states based on data from 1998 to 2018: Arunachal Pradesh, Assam, Meghalaya, Mizoram, Nagaland, and Sikkim.
  - Summary of state-wise data is available at https://internal.imd.gov.in/press\_release/20200330\_pr\_778.pdf
    State-wise Reports are at: https://imdpune.gov.in/Reports/rainfall%20variability%20page/raintrend%20new.html
- 3. **'Climate of Tripura', a write**-up prepared by the Agartala Meteorological Centre of the Indian Meteorology Department (IMD) based on data from 1981-2010 (https://agartala.imd.gov.in/Tripura-Climatology/)

The table at next page gives the important temperature and rainfall parameters recorded at the various observatories of the Indian Meteorological Department (IMD) located in the NE Region. The table has been brought out by IMD based on the average of data collected by these observatories over a period of 30 years, from 1991 to 2020.

NOTE: Four observatories (all located in Assam) have been not included in the following table as these have not reported any temperature related data.



Cherrapunjee (officially known as Sohra) in Meghalaya is reputedly one of the rainiest places in the world



Table-1.3.3: Temperature & Rainfall Data from IMD Observatories located in the NE States

(Temperatures in °C / Rainfall in mm / Rainy Days in Numbers)

Index	Location of	State	Height above	Average Annua	I Value in °C of	Average over 19	991-2020 (in °C)	Average Annual	Average
No.	Observatory		Mean Seal	Daily Maximum	Daily Minimum	Highest Annual	Lowest Annual	Rainfall (mm)	Number of
			Level (m)	Temperatures	Temperatures	Temperatures	Temperatures		Rainy Days
42724	Agartala	Tripura	16	30.8	20.4	37.1	6.8	2,108.0	92.5
42727	Aizawl	Mizoram	950	26.6	16.9	33.8	7.8	2,100.5	111.5
42512	Barapani	Meghalaya	893	26.2	14.0	33.2	0.1	2,173.1	121.0
42414	Chaparmukh	Assam	66	30.0	14.9	37.4	5.9	1,590.4	76.7
42515	Cherrapunjee (Sohra)	Meghalaya	1,313	21.8	13.7	28.9	3.0	11,175.8	153.5
42529	Deomali	Arunachal Pradesh	130	29.8	15.7	38.5	3.3	2,344.5	113.0
42299	Gangtok	Sikkim	1,756	18.8	12.6	26.3	2.9	3,574.0	164.3
42410	Guwahati	Assam	54	30.0	19.7	37.8	7.7	1,695.3	90.0
42623	Imphal	Manipur	781	27.7	15.5	34.2	1.7	1,381.0	93.8
42308	Itanagar	Arunachal Pradesh	203	29.4	18.4	37.3	7.4	3,146.2	127.2
42423	Jorhat	Assam	88	29.1	19.1	36.8	6.7	1,921.7	104.2
42618	Kailashahar	Tripura	29	30.8	20.1	37.0	8.4	2,662.0	114.7
42527	Kohima	Nagaland	1,406	22.8	11.9	30.2	2.7	1,727.6	116.1
42726	Lengpui	Mizoram	429	29.6	17.7	36.3	6.1	2,290.9	111.3
42413	Mazbat	Assam	120	29.7	19.3	36.7	7.1	2,116.5	92.9
42314	Mohanbari	Assam	111	28.5	18.8	37.1	6.6	2,518.3	123.2
42309	North Lakhimpur	Assam	102	29.2	18.3	37.7	5.6	3,205.3	130.7
42220	Pasighat	Arunachal Pradesh	157	27.6	19.6	36.5	9.6	4,165.1	126.7
42408	Rangia	Assam	60	28.4	20.9	37.1	11.3	1,751.1	83.5
42516	Shillong	Meghalaya	1,598	21.2	12.9	28.3	2.0	2,099.9	111.3
42619	Silchar	Assam	20	30.5	20.5	38.2	8.8	3,039.7	128.4
42217	Tadong	Sikkim	1,322	23.5	14.4	31.1	4.7	3,116.5	151.1
42409	Tangla	Assam	65	27.5	19.4	36.1	9.3	1,825.0	87.4
42415	Tezpur	Assam	79	29.3	19.7	36.8	8.8	1,749.0	96.1

Source: 'Climatological Tables of Observatories in India 1991-2020', issued by the Indian Meteorological Department (2022)

- 1. Temperature is recorded at 830 hours IST (0300 UTC) and 1730 hours IST (1200 UTC) every day, and the daily maximum and minimum temperatures are noted. The average annual value of these parameters is derived separately for the daily maximum and minimum temperatures, based on average of the monthly values of all observations from 1991-2020.
- 2. The average over 1991-2020 of highest / lowest temperatures is an average of the highest /lowest temperature of each of the years (where records are available).
- 3. 'Rainy day' is where daily rainfall is at least 2.5 mm during the past 24 hours ending at 0300 UTC.



Table-1.3.4: Annual Rainfall in the Meteorological Sub-Divisions covering the NE States

(In millimetres)

Meteorological Sub-Division	2016	2017	2018	2019	2020	2021
Arunachal Pradesh	2706.9	2745.3	2032.5	2433.3	1972.0	2083.8
Assam & Meghalaya	2266.9	2711.7	1903.1	2306.3	2152.9	1974.5
Nagaland Manipur Mizoram & Tripura	1956.4	2805.4	2119.9	1639.3	975.6	1340.2
Sub Himalayan West Bengal & Sikkim	2624.8	2684.9	2355.3	2472.7	2691.1	2616.7

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Indian Meteorological Department [Table No. 100, Page No. 278]

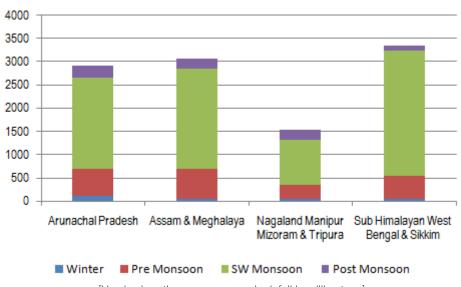
## Notes

- 1. Sikkim is within a Meteorological Sub-Division that includes the Sub Himalayan West Bengal, which consists of the districts of Darjeeling, Alipur Duar, Cooch Bihar, Jalpaiguri, Kalimpong, North Dinajpur and South Dinajpur of West Bengal.
- 2. Rainfall for Arunachal Pradesh for the years 2016 and 2017 has been obtained from 'Rainfall Statistics of India' for these years brought out by IMD.
- 3. Figures cover the annual rainfall for the indicated year from January to December in millimetres.
- 4. In 2020, the data furnished from the source document in the above table refers to the South West Monsoon period only. The data for the entire calendar year is given below as made available by another source document. The figures in the following table refer to the rainfall for the given period in millimetres.

Meteorological Sub-Division	Winter	Pre Monsoon	SW Monsoon	Post Monsoon	Annual
Arunachal Pradesh	98.2	599.9	1972.0	247.2	2992.9
Assam & Meghalaya	35.0	663.7	2152.9	215.1	3082.8
Nagaland Manipur Mizoram & Tripura	44.1	303.8	975.6	217.9	1541.4
Sub Himalayan West Bengal & Sikkim	48.9	499.5	2691.1	114.2	3353.6

Source: 'Rainfall Statistics of India 2020', Indian Meteorological Department

**Graph-1.3.1: Average Annual Rainfall in the NE States** 



[Y-axis gives the average annual rainfall in millimetres.]



Table-1.3.5: Annual Average Rainfall in the NE States

(In millimetres)

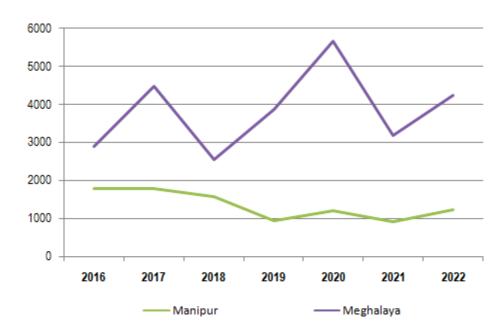
State	2016	2017	2018	2019	2020	2021	2022
Arunachal Pradesh	2706.9	2745.3	2032.5	2433.3	2992.9	2083.8	2810.6
Assam	2140.5	2398.3	1807.1	2084.7	2372.9	1622.5	2375.7
Manipur	1777.4	1780.0	1580.2	928.6	1196.9	913.6	1225.2
Meghalaya	2891.5	4472.4	2540.0	3844.4	5649.1	3171.9	4216.1
Mizoram	2233.5	3865.8	2552.6	2178.5	1665.2	1653.1	1833.3
Nagaland	1364.9	1722.0	1581.3	1593.0	1372.7	1153.1	1456.0
Sikkim	2756.6	2873.7	3105.2	2740.0	3350.1	3043.3	3300.7
Tripura	2381.9	3326.8	2191.4	2252.8	2169.1	1761.1	1772.8
Average – NE Region	2339.5	2759.2	2018.6	2249.0	2649.2	1858.8	2473.2

Source: 'Rainfall Statistics of India' brought out by the Indian Meteorological Department for the above years (2016-2022)

Notes

1. Figures cover the annual rainfall for the indicated year from January to December in millimetres.

Graph-1.3.2: Variation of Average Annual Rainfall from 2016 to 2022 in the wettest and driest states of the NE Region



There is a wide variation in the average annual rainfalls of different NE states.

The above graph shows the time-series data for Meghalaya, the NE state with the highest average annual rainfall (shown in indigo), and the same for Manipur, which has been the driest NE state in the recent years (in green).

[Y-axis gives the average annual rainfall in millimetres.]



Table-1.3.6: Rainfall Distribution in the Meteorological Sub-Divisions covering the NE States

(Rainfall in mm / Departures in %)

Meteorological Sub-	ANNUAL 2022 (Jan-Dec)			F	ANNUAL 2021 (Jan-Dec)			SW MONSOON SEASON 2020				A	ANNUAL 2019 (Jan-Dec)			
Division	Actual	Normal	Departure %	Category	Actual	Normal	Departure %	Category	Actual	Normal	Departure %	Category	Actual	Normal	Departure %	Category
Arunachal Pradesh	2810.6	2807.0	0	Ν	2083.8	2913.6	-28	D	1972.0	1726.6	14	Ν	2433.3	2913.6	-16	Ν
Assam & Meghalaya	2752.3	2577.0	7	Ν	1974.5	2604.7	-24	D	2152.9	1773.7	21	Е	2306.3	2604.7	-11	Ν
Nagaland Manipur Mizoram & Tripura	1564.6	2009.7	-22	D	1340.2	2168.5	-38	D	975.6	1426.7	-32	D	1639.3	2168.5	-24	D
Sub Himalayan West Bengal & Sikkim	2746.1	2539.8	8	Ν	2616.7	2639.0	-1	N	2691.1	1970.8	37	E	2472.7	2639.0	-6	N

Source: Annual Reports of Indian Meteorological Department (IMD) from 2019-20 to 2022-23

- 1. Actual rainfall is the amount of accumulated rainfall in millimetres received over the concerned Meteorological Sub-Division for the period (calendar year for the above years, except for 2020, where the data covers the South West Monsoon period only). Rainfall data for the calendar year 2020 is given at the previous page.
  - [Daily rainfall is recorded at 08.30 hours every day throughout the country. The daily rainfall at an observatory is the total rainfall for the preceding 24 hours ending at 08.30 hours of the date of the measurement. The monthly rainfall is the sum of all the daily rainfall recorded during that month. The monthly "Actual rainfall" of a sub-division is the mean of monthly rainfall of all the stations in that sub-division for which rainfall data are available for that month. The sum of actual monthly rainfall for the 12 months is the "actual annual" rainfall of the sub-division for that year.]
- 2. Normal rainfall is based on the long period average computed by using time series data of rainfall available at the rainfall recording stations located within the concerned Meteorological Sub-Division. These can vary depending upon the availability of data from the various recording stations used for their computations. In June 2022, the new normal rainfall was computed by using the long-period average (LPA) based on the period from 1971 to 2020. It replaced the previous normal rainfall, which was based on the LPA covering the period 1961-2010.
  - [The 'monthly normal' rainfall of a station was calculated using all the available data during the period 1941-1990. This period was from 1901 to 1970 in 'The Statistical Abstract, India 2004'. The monthly "normal rainfall" of the sub-division is the mean of monthly normal rainfall of the corresponding stations and "annual normal rainfall" is the sum of the monthly normal rainfall for all the 12 months.]
- 3. Departure in % = (Actual Rainfall Normal Rainfall) / Normal rainfall x 100%
- 4. Category: E= Excess / N= Normal / D = Deficit
  - These are categories to describe the realized rainfall averaged over the temporal scale (usually the calendar year in the above cases) as compared with the normal rainfall. When the realized rainfall is more than the normal rainfall by 20% to 59%, the realized rainfall is categorized as 'excess' (E). If realized rainfall is within -19% to +19% of the normal rainfall, it is categorized as 'normal' (N). In case, realized rainfall is within -20% to -59% of the normal rainfall, it is categorized as 'deficit' (D). [Realised rainfall that is +60% or more as compared with the normal rainfall is categorised as 'large excess'. Rainfall that is -60% or less as compared with the normal rainfall is categorised as 'large deficit'.]



Table-1.3.7: Rainfall Distribution in the NE States

(Rainfall in mm / Departures in %)

	P	ANNUAL 2022 (Jan-Dec)				ANNUAL 2021 (Jan-Dec)				ANNUAL 2020 (Jan-Dec)				ANNUAL 2019 (Jan-Dec)			
State	Actual	Normal	Departure %	Category													
Arunachal Pradesh	2810.6	2807.0	0.1	N	2083.8	2913.6	-28.5	D	2992.9	2913.6	2.7	N	2433.3	2913.6	-16.5	N	
Assam	2375.7	2220.7	7.0	N	1622.5	2239.4	-27.5	D	2372.9	2239.4	6.0	N	2084.7	2239.4	-6.9	N	
Manipur	1225.2	1623.0	-24.5	D	913.6	2032.9	-55.1	D	1196.9	2032.9	-41.1	D	928.6	2032.9	-54.3	D	
Meghalaya	4216.1	3751.5	12.4	N	3171.9	3979.3	-20.3	D	5649.1	3979.3	42.0	E	3844.4	3979.3	-3.4	N	
Mizoram	1833.3	2465.0	-25.6	D	1653.1	2530.0	-34.7	D	1665.2	2530.0	-34.2	D	2178.5	2530.0	-13.9	N	
Nagaland	1456.0	1557.1	-6.5	N	1153.1	1720.7	-33.0	D	1372.7	1720.7	-20.2	D	1593.0	1720.7	-7.4	N	
Sikkim	3300.7	2570.1	28.4	Е	3043.3	2540.3	19.8	Е	3350.1	2540.3	31.9	E	2740.0	2540.3	7.9	N	
Tripura	1772.8	2289.4	-22.6	D	1761.1	2392.8	-26.4	D	2169.1	2392.8	-9.3	N	2252.8	2392.8	-5.9	N	

Source: 'Rainfall Statistics of India' for the above years (2019-2022) published by the Indian Meteorological Department (IMD) / Normal Rainfall has been derived from 'Reply to Starred Question No.\* 165 (to be answered on 3<sup>rd</sup> August 2021) in the Rajya Sabha as per data furnished by the Ministry of Earth Sciences, Government of India

- 1. Actual rainfall is the amount of accumulated rainfall in millimetres received over the concerned Meteorological Sub-Division for the period (calendar year for the above years.

  [Daily rainfall is recorded at 08.30 hours every day throughout the country. The daily rainfall at an observatory is the total rainfall for the preceding 24 hours ending at 08.30 hours of the date of the measurement. The monthly rainfall is the sum of all the daily rainfall recorded during that month. The monthly "Actual rainfall" of a state is the mean of monthly rainfall of all the stations in that state for which rainfall data are available for that month. The sum of actual monthly rainfall for the 12 months is the "actual annual" rainfall of the sub-division for that year.]
- 2. Normal rainfall is based on the long period average computed by using time series data of rainfall available at the rainfall recording stations located within the concerned state. These can vary depending upon the availability of data from the various recording stations used for their computations. In June 2022, the new normal rainfall was computed by using the long-period average (LPA) based on the period from 1971 to 2020. It replaced the previous normal rainfall, which was based on the LPA covering the period 1961-2010.
- 3. Departure in % = (Actual Rainfall Normal Rainfall) / Normal rainfall x 100%
- 4. Category: E= Excess / N= Normal / D = Deficit
  - These are categories to describe the realized rainfall averaged over the temporal scale (usually the calendar year in the above cases) as compared with the normal rainfall. When the realized rainfall is more than the normal rainfall by 20% to 59%, the realized rainfall is categorized as 'excess' (E). If realized rainfall is within -19% to +19% of the normal rainfall, it is categorized as 'normal' (N). In case, realized rainfall is within -20% to -59% of the normal rainfall, it is categorized as 'deficit' (D). [Realised rainfall that is +60% or more as compared with the normal rainfall is categorised as 'large excess'. Rainfall that is -60% or less as compared with the normal rainfall is categorised as 'large deficit'.]



## 1.4. Soil Conditions

The soils of the North Eastern states have mainly developed in-situ over different geological areas, except in the valleys and foothill areas of the region where the nature of soil is alluvial or colluvial (loose and unconsolidated depositions at foothills). The soils of these states exhibit remarkable variability due to factors like parent materials, surface relief, climate, rainfall and natural vegetation. Soil depth is an important factor for agriculture as it defines the root space and the volume of soil from where the plants fulfil their water and nutrient demands. The depth of soil can vary widely in the region, especially in the hilly areas, due to physiographic features, slope of the land etc.

The major soils problems of the region are soil degradation, soil acidity and soil erosion due to rainfall, landslides, floods, and water logging etc., apart from the shortening cycles of traditional shifting (jhum) cultivation in the hill states and haphazard human activities.

**Soil Taxonomy:** Soils are classified into orders, sub-orders, great groups and sub-groups — based on 'soil taxonomy', a system of soil classification developed by the United States Department of Agriculture (USDA). This system is based on measurable and observable soil properties and was designed to facilitate detailed soil survey. Although it is not the only system for classifying soils, soil taxonomy is widely used worldwide.

At the highest level of classification, Soil Taxonomy places soils into one of 12 categories known as 'orders'. Each of these orders represents a grouping of soils with distinct characteristics and ecological significance. Each order is based on one or two dominant physical, chemical, or biological properties that differentiate it clearly from the other orders. In turn, 'orders' are classified into 'sub-orders', 'great groups' and 'groups'.

Table-1.4.1: Soil Taxonomy of the NE States

State		Taxonomical Numb	ers present in State	
	Order	Sub-Order	Great Groups	Sub Groups
Arunachal Pradesh	4	10	16	31
Assam	4	9	15	26
Manipur	4	8	13	29
Meghalaya	4	8	14	25
Mizoram	4	7	11	13
Nagaland	4	7	10	14
Sikkim	3	7	12	26
Tripura	5	7	9	19

Source: 'Degraded and Wastelands of India: Status and Spatial Distribution', Indian Council of Agricultural Research, 2010 accessed from the website of ICAR-National Bureau of Soil Survey & Land Use Planning

(https://nbsslup.icar.gov.in/wp-content/uploads/2022/Books/Publication\_Degraded-and-Wastelands.pdf)

The following pages briefly describe the soil conditions of the NE states in terms of the above classification system of USDA. In addition, the coverage includes tabulations covering the extent of acidic soils and the soil losses due to water erosion in the above states.



Table-1.4.2: Extent of Soils of Prevalent Orders in the NE States

(As a % of geographical area)

State	ALFISOLS	ENTISOLS	INSEPTISOLS	MOLLISOLS	ULTISOLS	HISTOSOLS	MISC. SOIL TYPES
Arunachal Pradesh	0.3	35.6	37.3	0.0	14.2	0.0	12.6
Assam	11.3	33.6	41.4	0.0	5.6	0.0	8.1
Manipur	0.2	23.1	38.4	0.0	36.4	0.0	1.9
Meghalaya	3.6	10.7	45.7	0.0	40.0	0.0	0.0
Mizoram	2.6	21.5	37.3	38.6	0.0	0.0	0.0
Nagaland	2.9	7.3	66.0	0.0	24.0	0.0	0.0
Sikkim	0.0	42.0	43.0	15.0	0.0	0.0	0.0
Tripura	4.5	8.1	80.6	0.0	6.6	0.2	0.0
NE Region	4.4	28.0	43.0	3.5	14.5	0.0	6.6

Source: 'Degraded and Wastelands of India: Status and Spatial Distribution', Indian Council of Agricultural Research, 2010 accessed from the website of ICAR-National Bureau of Soil Survey & Land Use Planning

(https://nbsslup.icar.gov.in/wp-content/uploads/2022/Books/Publication Degraded-and-Wastelands.pdf)

#### Notes

- 1. The National Bureau of Soil Survey and Land Use Planning (NBSS & LUP) with its Regional Centres at Jorhat and Calcutta surveyed the soils of the states of this region based on three tier approach (land form analysis, field survey, and laboratory investigation).
- 2. Accordingly, the following soil orders are found to be present in the NE states:

ALFISOLS: These are soils with a B horizon in which clay has accumulated that do not have a significant depletion of base. They have good levels of plant nutrients and are generally very productive without large additions of lime and fertilizer. These are similar to Ultisols but are less intensively weathered and less acidic. They tend to be more inherently fertile than Ultisols and are located in similar climatic regions, typically under forest vegetation.

ENTISOLS: These are recent soils lacking B horizon development. Commonly found on floodplains or areas of retreating glaciers and landslides; these soils are marked by absence of any paedogenic horizons, due to inert parent material. These soils occur in areas of recently deposited sediments, often in places where deposition is faster than the rate of soil development.

INSEPTISOLS: These include a wide variety of soils, which form quickly through alteration of parent material. These have a minimal horizon development and have no accumulation of clays, iron oxide, aluminium oxide or organic matter. They occur over a wide range of parent materials and climatic conditions, and thus have a wide range of characteristics.

MOLLISOLS: These are soils of grassland ecosystems; they are characterized by a thick, dark surface horizon. These are highly fertile, and are rich in chemical 'bases' such as calcium and magnesium.

ULTISOLS: These are soils that have formed in humid areas and they are intensely weathered. They typically contain a subsoil horizon that has an appreciable amount of trans-located clay, and are relatively acidic. Most nutrients are held in the upper centimetres. These soils are generally of low fertility although they can become productive with additions of fertilizer and lime.

HISTOSOLS: These soils are dominantly composed of organic material in their upper portion. These mainly contain soils commonly called bogs, moors, peat lands, muskegs, fens, or peats and mucks. These soils form when organic matter, such as leaves, mosses, or grasses, decomposes more slowly than it accumulates due to a decrease in microbial decay rates..

MISCELLANEOUS LAND includes remaining soils, including un-surveyed areas.

3. From the above table and the geographical areas of the NE states, it is inferred that the overall distribution of most common soil orders in the NE Region is as follows: Inseptisols: 43%, Entisols: 28%, and Ultisols: 14.5%. The remaining areas have the following soils: Miscellaneous Soils: 6.6%, Alfisols: 4.4%, Mollisols: 3.5%, and a negligible percentage under Histosols.



Table-1.4.3: Extent of Acidic Soil in the NE States

(In '000 hectares / %)

State		Area in '00	0 Hectares		% of Area
	Total Geographical Area	Exclusively Acidic Soils	Acidic Soils under Water Erosion	Acidic Soils under Open Forest	under Acidic Soils
Arunachal Pradesh	8374.3	300	501	968	21
Assam	7843.8	411	1319	265	25
Manipur	2232.7	115	86	1396	72
Meghalaya	2242.9	52	175	796	46
Mizoram	2108.1	150	0	1013	55
Nagaland	1657.9	17	45	1454	91
Sikkim	709.6	2	43	13	8
Tripura	1048.6	101	83	525	68
Total – NE Region	26217.9	1148	2252	6430	37
Total – India	328726.3	5080	5720	7130	5

Source: 'Degraded and Wastelands of India: Status and Spatial Distribution', Indian Council of Agricultural Research, 2010 accessed from the website of ICAR-National Bureau of Soil Survey & Land Use Planning [Table No.-10, under Columns 3, 4 & 5] (https://nbsslup.icar.gov.in/wp-content/uploads/2022/Books/Publication\_Degraded-and-Wastelands.pdf)

- 1. Acidic soils include: strongly acidic soils (with pH < 4.5) and moderately acidic soils (with pH between 4.5 and 5.5).
- 2. Soil acidity is one of the most important factors affecting the productivity of crops. The NE Region, which occupies about 8% of India's geographical area, has 55% of its acidic soils.
- **3.** These soils develop in humid and per-humid areas due to excessive leaching of cations with high rainfall, resulting in lowering of pH and loss of soil fertility. These can be reclaimed by addition of chemical amendments like lime.



Tea thrives in the acidic soil of Assam



Table-1.4.4: Soil Losses Due to Water Erosion in the NE States

(In sq. km. / %)

State	Total Area	Moderate	e Losses		ly Severe ses	Severe	Losses	Very Seve	ere Losses		y Severe ses	Total Affected	As a % of State's
	(km²)	Area (km²)	Area (%)	Area (km²)	Area (%)	Area (km²)	Area (%)	Area (km²)	Area (%)	Area (km²)	Area (%)	Area (km²)	Total Area
Arunachal Pradesh	83,743	4,271	5	4,539	5	19,805	24	22,870	27	9,354	11	60,839	73
Assam	78,438	3,592	5	14,182	18	11,632	15	22,198	28	0	0	51,604	66
Manipur	22,327	3,405	15	2,552	11	5,941	27	0	0	0	0	11,898	53
Meghalaya	22,429	3,315	15	2,290	10	5,888	26	3,109	14	2,871	13	17,472	78
Mizoram	21,081	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nagaland	16,579	678	4	630	4	2,646	16	4,722	28	5,793	35	14,468	87
Sikkim	7,096	64	1	84	1	555	8	776	11	1,137	16	2,616	37
Tripura	10,486	745	7	734	7	682	7	902	9	965	9	4,027	38
Total - NE Region (#)	262,179	16,070	7	25,011	10	47,149	20	54,577	23	20,120	8	162,924	68
Total – India (*)	3222922	365,118	11	209,998	7	322,760	10	232,401	7	129,633	4	1,259,910	39

<sup>(#)</sup> excluding Mizoram for soil loss data

(\*) excluding Andaman & Nicobar Islands, Goa and Mizoram

Source: 'Degraded and Wastelands of India: Status and Spatial Distribution', Indian Council of Agricultural Research, 2010 accessed from the website of ICAR-National Bureau of Soil Survey & Land Use Planning [Table No.-10 under Columns]

(https://nbsslup.icar.gov.in/wp-content/uploads/2022/Books/Publication\_Degraded-and-Wastelands.pdf)

- 1. Mizoram had not been covered in the above study, apart from Andaman & Nicobar Islands and Goa elsewhere in India.
- 2. Losses have been classified as follows:

Type of Loss	Moderate Losses	Moderately Severe Losses	Severe Losses	Very Severe Losses	Extremely Severe Losses
Soil Loss (MT / Hectare / Year)	10-15	15-20	20-40	40-80	Over 80



## 1.5. Land Use

The Land Use Classification follows a nine-fold classification as recommended by a Technical Committee on Coordination of Agricultural Statistics, set up in 1949 by the then Ministry of Food & Agriculture, Government of India. The classification is primarily based on whether a particular area is cultivated, grazed or forested. The purpose is to show the actual use according to its actual use. Once the actual land use pattern is known, it is possible to explore the alternatives for an effective sustainable use, protect agriculture land from depletion and assist the Government in framing land use policy towards better conservation while pursuing sustainable development goals.

From the point of view of collection of area statistics, the states in the country are divided into three broad categories. The first category covers States and UTs which have been cadastrally surveyed. Here, the area and land use statistics are built up as a part of the land records maintained by the revenue agencies. These states are called 'Land Record States' or temporarily settled states. This system is followed in 18 major states of India, including Assam (excluding the hilly districts). These States and UTs account for about 86% of reporting area of the country for land area statistics.

The second category includes those states, where land had been 'permanently settled' during the British rule. Here, periodic land surveys and settlements are not being undertaken. Area statistics for crop production are based on large-scale sample surveys. The NE states like Arunachal Pradesh, Nagaland, Sikkim and Tripura are now being covered by such surveys. These states of India (including the above NE states) cover 9% of the reporting area of the country. In the third category of states (like Manipur, Meghalaya, and Mizoram; apart from the hilly districts of Assam), the area statistics states are based on impressionistic approach. These states and areas (including Goa and some UTs elsewhere in India) account for 5% of the reporting area of the nation.

## The Nine-Fold Classification includes the following categories of land-uses.

- 1. Reporting Area stands for the area for which data on land use classification of area are available. In areas where land utilization figures are based on land records, reporting area is the area according to village papers, i.e. the papers prepared by the village accountants. In some cases, the village papers may not be maintained in respect of the entire area of the State. For example, village papers are not prepared for the forest areas but the magnitude of such area is known. Also, there are tracts in many States for which no village paper exists. In such cases, ad-hoc estimates of classification of area are derived to complete the coverage.
- 2. Forests: This includes all lands classed as forest under any legal enactment dealing with forests or administered as forests, whether state-owned or private, and whether wooded or maintained as potential forest land. The area of crops raised in the forest and grazing lands or areas open for grazing within the forests should remain included under the forest area.
- 3. Land Not Available for Agriculture: Includes the following:
  - Area under Non-agricultural Uses: This includes all lands occupied by buildings, roads and railways or under water, e.g. rivers and canals and other lands put to uses other than agriculture.
  - Barren and Un-culturable Land: includes all barren and un-culturable land like mountains, deserts, etc. Land
    which cannot be brought under cultivation except at an exorbitant cost should be classed as un-culturable whether
    such land is in isolated blocks or within cultivated holdings.



Other Uncultivated Land (excluding Fallow Land): consists of the following (Sl. Nos. 4, 5 & 6):

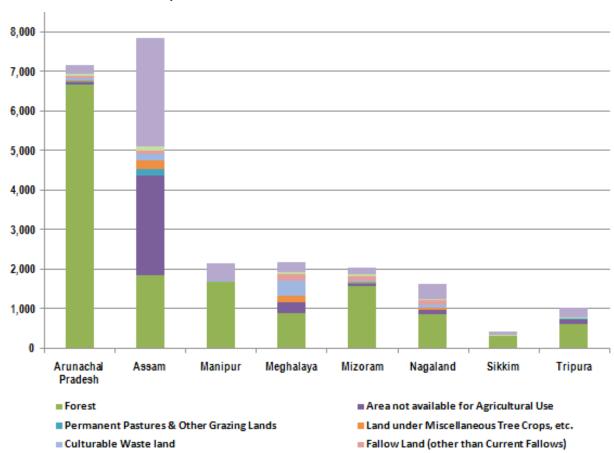
- 4. Permanent Pastures and other Grazing Lands: includes all grazing lands whether they are permanent pastures and meadows or not. Village common grazing land is included under this head.
- 5. Land under Miscellaneous Tree Crops, etc.: This includes all cultivable land which is not included in 'Net area sown', but is put to some agricultural uses. Lands under Casuarina trees, thatching grasses, bamboo bushes and other groves for fuel, etc. which are not included under 'Orchards' should be classed under this category.
- 6. Culturable Waste Land: This includes lands available for cultivation, whether not taken up for cultivation once but not cultivated during the current year and the last five years or more in succession for one reason or other. Such lands may be either fallow or covered with shrubs and jungles, which are not put to any use. They may be assessed or un-assessed and may lie in isolated blocks or within cultivated holdings. Land once cultivated but not cultivated for five years in succession should also be included in this category at the end of 5th year.

Fallow Lands: Include the following (SI, Nos. 7 & 8):

■ Current Fallows

- 7. Fallow Lands other than Current Fallows: This includes all lands, which were taken up for cultivation but are temporarily out of cultivation for a period of not less than one year and not more than five years.
- 8. Current Fallows: This represents cropped area, which are kept fallow during the current year. For example, if any seeding area is not cropped against the same year it may be treated as current fallow.
- 9. Net area Sown: This represents the total area sown with crops and orchards. Area, which is sown more than once in the same year, is counted only once.

The land use classification of the NE states is given in the following page. The following depicts the same graphically. [Y-axis gives area in '000s of hectares.]



■ Net Sown Area

**Graph-1.5.1: Land Use Classification of the NE States** 



Table-1.5.1: Land Use Classification of the North Eastern States

				A	All figures are Are	ea in '000 hectares	i			
	Total	Reporting	Forest	Area not	Permanent	Land under	Culturable	Fallow Land	Current	Net Sown
State	Geographical	Area for Land		available for	Pastures &	Miscellaneous	Waste land	(other than	Fallows	Area
	Area	Use Statistics		Agricultural	Other Grazing	Tree Crops,		Current		
				Use	Lands	etc. (*)		Fallows)		
Arunachal	8,374	7,172	6,669	62	18	34	61	61	33	234
Pradesh										
Assam	7,844	7,844	1,853	2,515	172	222	160	92	108	2,723
Manipur	2,233	2,161	1,685	27	1	6	1	0	0	441
Meghalaya	2,243	2,196	910	275	0	165	381	153	57	255
Mizoram	2,108	2,039	1,585	75	11	41	7	127	47	145
Nagaland	1,658	1,653	863	112	0	73	62	111	49	384
Sikkim	710	442	334	10	0	4	4	5	7	77
Tripura	1,049	1,049	629	148	1	10	3	1	1	256
Total – NER	26,218	24,556	14,528	3,224	203	555	679	550	302	4,515
Total - India	328,726	307,787	72,011	44,512	10,376	3,154	12,219	11,633	14,531	139,351

Source: 'Agricultural Statistics at a Glance 2018', Directorate of Economics & Statistics, DAC&FW, Government of India

- 1. Areas below 500 hectares have been ignored.
- 2. The above figures pertain to the Year 2018-19. All figures have been rounded off.
- 3. The figures related to area under forest are taken from latest 'State of Forest Report' of the Forest Survey of India, as available at the time of the preparation of the above table.
- 4. The other categories of land use, net irrigated area, gross irrigated area, net area sown and area under crops as the case may be, are taken from latest Agriculture Census or are estimated based on latest available year data received from the States.



#### **Wastelands in NE States**

India constitutes 17.71% of the world's population, but has just 2.4 % of the geographical area. The ever-increasing population of the country has resulted in gradual decrease in per capita availability of land, besides affecting swathes adversely, making these underproductive or unproductive. This is needed for devising strategies for reclaiming wastelands for productive use. Accordingly, since 1986, the assessment of India's wastelands is being carried out at regular intervals by National Remote Sensing Centre (NRSC) of ISRO, Department of Space in association with the Department of Land Resources of the Ministry of Rural Development. The output from these wasteland mapping exercises has provided vital information for reclamation and afforestation policies and schemes to bring such areas under productive use.

Most of the categories of wastelands found in India are also present in the NE states. The region has 16 of the 23 categories found in the country, including a few categories having negligible or low areas in the region. The table below summarizes the extent of wastelands in the NE Region.

Table-1.5.2: Extent of Wastelands in the NE States

	Total Geographical Area (km²)	Total Wastelands in km <sup>2</sup> (2019 Atlas)	Wasteland as part of Total Geographical Area in (%)
Arunachal Pradesh	83,743	13,906.16	16.61
Assam	78,438	9,003.08	11.48
Manipur	22,327	5,651.89	25.31
Meghalaya	22,429	4,135.77	18.44
Mizoram	21,081	4,300.66	20.4
Nagaland	16,579	5,064.17	30.55
Sikkim	7,096	3,294.79	46.43
Tripura	10,486	920.52	8.78
NE Region	262,179	46,277.04	17.65

Source: 'Wasteland Atlas of India 2019', prepared by the Department of Land Resources in collaboration with the National Remote Sensing Centre (NRSC), Department of Space



Alpine Scrubland is found in Arunachal Pradesh

The following table gives the area under different types of wastelands, as per the Wasteland Atlas of India 2019. The notes to this table furnish additional details about the nature of such wastelands.



Table-1.5.3: Classification of Wastelands in the North Eastern States

		Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	NE Region
(A)	Total Geographical Area	83743.00	78438.00	22327.00	22429.00	21081.00	16579.00	7096.00	10486.00	262179.00
(B)	Total Wastelands (2019 Atlas)	13906.16	9003.08	5651.89	4135.77	4300.66	5064.17	3294.79	920.52	46277.04
С	Wasteland to Area as (%)	16.61	11.48	25.31	18.44	20.40	30.55	46.43	8.78	17.65
(D)	Categories of Wastelands									
1	Gullied & Ravine Land (Medium)	0.00	0.00	1.29	0.00	0.00	0.00	0.00	0.48	1.77
2	Gullied & Ravine Land (Deep)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Dense Scrub	633.53	2092.81	1211.12	509.98	1586.84	1315.87	0.00	204.80	7554.95
4	Open Scrub	1818.25	1993.34	3145.10	2612.19	466.88	2077.72	16.30	214.51	12344.29
5	Water-logged / Marshy Land (Permanent)	1.28	175.86	7.53	0.00	0.00	0.00	0.00	1.82	186.49
6	Water-logged / Marshy Land (Seasonal)	0.00	573.67	0.00	0.01	0.00	0.00	0.00	6.18	579.86
7	Land affected by salinity / alkalinity (Medium)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Land affected by salinity / alkalinity (Strong)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	Jhum Land - Current	509.11	52.60	499.98	237.87	691.55	979.33	0.00	30.62	3001.06
10	Jhum Land - Abandoned	1204.22	82.09	298.65	422.68	1011.39	681.21	0.00	64.20	3764.44
11	Degraded Forest - Scrub Dominant	16.80	1761.25	486.00	64.61	544.00	0.01	92.09	371.56	3336.32
12	Degraded Forest - Farm Dominant	14.94	2116.06	0.21	0.00	0.00	1.59	0.00	16.11	2148.91
13	Degraded Pastures	253.52	21.35	0.37	0.00	0.00	0.00	3.10	0.00	278.34
14	Plantations on Degraded Lands	0.00	0.00	0.00	0.15	0.00	0.00	0.00	6.15	6.30
15	Sands - River	0.00	42.02	0.00	0.00	0.00	0.00	0.00	3.68	45.70
16	Sands - Coastal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	Sands - Desert	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	Sand Dunes > 40 m	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	Sand Dunes 15-40 m	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	Mining Wastelands	0.00	86.32	0.00	54.49	0.00	4.92	0.00	0.00	145.73
21	Industrial Wastelands	0.00	5.71	0.00	0.00	0.00	0.00	0.00	0.42	6.13
22	Barren & Rocky Land	124.24	0.00	1.63	233.78	0.00	3.53	1116.92	0.00	1480.10
23	Snow & Glacier	9330.26	0.00	0.00	0.00	0.00	0.00	2066.38	0.00	11396.64

Source: 'Wasteland Atlas of India 2019', prepared by the Department of Land Resources in collaboration with the National Remote Sensing Centre (NRSC), Department of Space Available at https://doir.gov.in/en/documents/wasteland-atlas-of-india



Notes: The following gives the description of the various types of wastelands referred to at the above table. The data is based on the 5th cycle of wasteland mapping (in the year 2015-16).

(A)	Gullied and Ravine Land	Gully is a narrow channel when surface water flow increases in response to clearing and excessive use of land. Other factors that play a role in gully initiation are the type of landscape, geology, rainfall, soil texture, hill-slope length and seasonal climatic extremes. The intricate network of gullies is referred to as ravines. Two categories of ravines viz., medium ravines and deep ravines could be delineated based on their depth
1	Gullied & Ravine Land (Medium)	These are the ravines with a depth of gullies ranging between 2.5 and 5 meters. Generally, these are seen confined to the head region of the stream close to agricultural land.
2	Gullied & Ravine Land (Deep)	The depth of ravines is more than 5 meters. Deep ravines, generally, occur along the higher order stream areas that are close to the main river.
(B)	Scrubland	This is the land, which is generally prone to deterioration due to erosion. Such lands generally occupy topographically high locations, excluding hilly/mountainous terrain. Based on the presence of vegetation cover, two sub-classes could be delineated i.e., land with dense scrub and land with open scrub.
3	Dense Scrub	These areas have shallow and skeletal soils, at times chemically degraded, extremes of slopes, severely eroded and are subjected to excessive aridity with scrubs dominating the landscape. They have a tendency for intermixing with croplands.
4	Open Scrub	This category is same as mentioned in the earlier category except that it has sparse vegetative cover or is devoid of scrub and has a thin soil covers.
(C)	Water-logged / Marshy Land	Waterlogged land is that low lying land where the water is at/or near the surface and the water stands for most part of the year. Depending on duration of water-logging, two sub-classes viz., permanently waterlogged and seasonally waterlogged areas could be delineated.
5	Water-logged / Marshy Land (Permanent)	Permanently waterlogged areas are those where the water-logging conditions prevail during most part of the year. These areas are mostly located in low-lying areas, with impervious substratum along the canals/ river banks, coastal inlands, etc.
6	Water-logged / Marshy Land (Seasonal)	Seasonally waterlogged areas are those where the water-logging condition prevails usually during the monsoon period. These lands are mostly located in plain areas associated with the drainage congestion. Use of multi-season satellite data enables delineation of this category.
(D)	Land affected by salinity / alkalinity	Land affected by salinity/alkalinity has excess soluble salts (saline) or high exchangeable sodium. Salinity is caused due to capillary movement of water, during extreme weather conditions leaving salt encrustation on the surface. Alkali soils have exchangeable sodium percentage (ESP) values of 15 or more, which is generally considered as the limit between normal and alkali soils. The predominant salts in alkali soils are carbonates and bicarbonates of sodium.  Considering the degree of salinity and or alkalinity, the following two sub- classes viz., moderately saline / alkali and strongly saline / alkali areas could be delineated



7	Land affected by salinity / alkalinity (Medium)	These are the areas located in the fluvial plains with the degree of salinity (ECe) ranging from 8 to 30 (dS/m), pH between 9.0 – 9.8 and the Exchangeable Sodium Percentage (ESP) values ranging between 15 and 40.
8	Land affected by salinity / alkalinity (Strong)	These are the salt-affected lands with ECe values greater than 30 dS/m, pH values more than 9.8 and ESP values of >40.5)
(D)	Jhum Land (Shifting Cultivation)	Shifting cultivation is a traditional practice of growing crops on forested/ vegetated hill-slope by the slash and burn method.
9	Jhum Land - Current	The areas that are used for cultivation by the slash and burn practices and are clearly perceptible on the satellite image in pre-burnt /post-burnt conditions.
10	Jhum Land - Abandoned	those areas that were earlier under shifting cultivation but subsequently left idle for more than one year but less than 5 years, thereby giving a scope for the regeneration of secondary vegetation such as bamboo or grasses. This category has a tendency to get mixed with forests.
(E)	Degraded Forests	Two sub-classes have been delineated viz., scrub dominated degraded forest land and agriculture land inside notified forest area
11	Degraded Forest - Scrub Dominant	Land, as notified under the Forest Act and those lands with various types of forest cover with less than 20 % of vegetative cover, are classified as degraded forest. These lands are generally confined to the fringe areas of notified forest.
12	Degraded Forest - Farm Dominant	This category refers to land that have been notified under the Forest Act, in which agriculture is being practiced, (excluding for the denotified forest areas).
13	Degraded Pastures & Grazing Land	These are the lands in non-forest areas that are either under permanent pastures or meadows, which have degraded due to lack of proper soil and water conservation and drainage development measures
14	Plantations on Degraded Lands	These are the degraded lands that have been brought under plantation crops after reclamation, and are located outside the notified forest areas
(F)	Sand (coastal / desert / riverine)	This category refers to land with accumulation of sand, in coastal, riverine or inland areas. Generally, these lands vary in size, occur in various shapes with contiguous to linear pattern. These lands are mostly found in deserts, riverbeds and along the shores.
15	Sands - River	Riverine sands are those that are accumulated in the flood plain of the river as sheets, or sand bars. It also includes inland sand which was accumulated along the abandoned river courses or by reworking of sand deposits by wind action leading to long stretches of sand dunes or sand cover areas noticed in Indo-Gangetic alluvial plains
16	Sands - Coastal	Coastal sands are the sands that are accumulated as a strip along the seacoast due to action of seawater. These are not being used for any purpose like recreation.
17	Sands - Desert	These are those confined to arid environment where the rainfall is scanty. These lands are characterized by accumulation of sand in the form of varying size of sand dunes and height that have developed as a result of transportation of soil through aeolian processes.



		The following two categories of desert sands could be mapped based on their vertical approximate heights.
18	Sand Dunes > 40 m	Semi-stabilized to stabilized dunes with >40 m height
19	Sand Dunes 15-40 m	Semi-stabilized to stabilized moderately high dunes with heights ranging between 15 and 40 m
(G)	Others	
20	Mining Wastelands	Mine dumps are those lands where waste debris is accumulated after extraction of minerals. Included in this category is the mine / quarry areas subject to removal of different earth material (both surface and sub-surface) by manual and mechanized operations. Large scale quarrying and mechanical operations result in creation of mine dumps. It includes surface rocks and stone quarries, sand and gravel pits, soil excavation for brick kilns, etc
21	Industrial Wastelands	These are areas of stockpile of storage dump of industrial raw material or slag/effluents or waste material or quarried/mixed debris from earth's surface.
22	Barren & Rocky Land	These are rock exposures of varying lithology often barren and devoid of soil and vegetative cover. They occur amidst hill-forests as openings or as isolated exposures on plateau and plains. Barren rocky areas occur on steep isolated hillocks/hill slopes, crests, plateau and eroded plains associated with barren and exposed rocky/stony wastes, lateritic out-crops, mining and quarrying sites. The category also includes steep sloping areas devoid of vegetation cover that were classified separately in the earlier exercise
23	Snow & Glacier	These lands are under perpetual snow cover and are confined to the Himalayan region. The mountain peaks and slopes and high relief areas are the places where snow/glacial areas occurs



## 1.6. River Basins & Water Resources

Water is indispensable for human life, as well as for the socio-economic development of countries. The uses of water cover different needs, such as agricultural, industrial, household, institutional and other requirements. The water cycle is driven by climatic and other factors that are global in nature. These can lead to variations in precipitation and evaporation, which in turn determine the run-off patterns and water availability over space and time. On the other hand, the availability of water can be augmented by natural and artificial storages.

The freshwater lakes and rivers of the world contain just 0.3% of its water resources, with some of the rest being locked up in the polar areas as ice-sheets, at high altitudes as glaciers and snow, and within the earth as groundwater resources. In addition, soil moisture accounts for about three times of the freshwater found in rivers and various inland water bodies. It may be noted that freshwater accounts for only 2.5% of the world's water, in all the above forms. The balance is present as saline water in the seas and oceans.

Water resources have two facets - dynamic and static. Dynamic water resources, which are measured as flows, are more relevant for most development needs. Static water bodies, such as lakes, reservoirs, wetlands etc., are important for some activities like fisheries, hydro-power generation, recreation and tourism etc.

In India, the inland water resources are classified as: rivers and canals; reservoirs; tanks, lakes & ponds; lakes and derelict water bodies; and brackish water. The different types of water bodies (excluding rivers and canals) cover an area of about 9.09 million hectares (MHa). Among these water bodies, 'reservoirs' have maximum area (4.03 MHa) followed by 'tanks and ponds' (2.55 MHa). Amongst the NE states, Assam has considerable areas under such water bodies.

Further, India is blessed with many rivers with varying catchment areas and water resources potential. The estimate of area of rivers and canals in the country is not available. It is reported that their total length in the country is more than 2.5 Lakh km.

The water resources potential of the country, which occurs as natural run-off in the rivers, is about 1,999 Billion Cubic Metres (BCM) as per the estimates of Central Water Commission (CWC), taking both surface and ground water into account. The estimated utilizable water resources of the country are 1,126 BCM per year; out of which, the share of surface water and ground water is 690 and 436 BCM per year respectively.

The following pages give the water resources of the NE Region in different tables that cover the extent of its river basins and its inland water resources like reservoirs, tanks and ponds and other water bodies; apart from aspects like the area under different types of wetlands, groundwater resources of the NE states, and the assessed power potential of theses states based on various existing (and under construction) hydro-electric projects and surveyed sites.



Table-1.6.1: River Basins located in the NE States

River Basin	Catchment Area (Sq. Km)	Available Water Resources Potential (BCM)	Utilizable Surface Water Resources (BCM)
Brahmaputra	193,252	527.28	24.0
Barak & Others	47,440	86.67	NA
Minor Rivers Draining into Myanmar & Bangladesh	31,382	31.17	NA
Total - India	3,271,953	1999.20	690.32

Source: 'Water & Related Statistics 2021', brought out by the Central Water Commission (CWC), Ministry of Jal Shakti based on data from its BP-I Directorate

#### Notes

- 1. BCM: Billion Cubic Metres / NA: Not Available
- 'Brahmaputra' and 'Barak & Others' are constituents of the Ganga-Brahmaputra-Meghna Basin.
- 3. The catchment area of the Brahmaputra River includes areas located in some of the northern districts of West Bengal. Catchment areas have been taken from the 'Reassessment of Water Availability in India using Space Inputs, June 2019', which had been carried out by CWC.
- 4. The 'Total India' for 'Catchment Area' gives the sum of the catchment areas of the listed river basins. The total geographical area of India is 3,287,263 square kilometres.
- 'Available Water Resources Potential' is based on 'Reassessment of Water Availability in India using Space Inputs, June 2019' by CWC
- 6. 'Utilizable Surface Water Resources' has been furnished based on the 'Report of the Standing Sub-Committee for assessment of availability and requirement of water for diverse uses in the country, August 2000'.
- 7. As per the 'Water & Related Statistics 2021', brought out by the Central Water Commission (CWC), Ministry of Jal Shakti: 'The estimate of area of rivers and canals in the country is not available. However, their total length is more than 2.5 lakh km'. The length of rivers in the states of the NE Region has been furnished at the next table, based on information furnished by the State Governments.
- 8. Additional details including maps about the above river basins are available at publications brought out by India Water Resource Systems (WRIS), which cover each basin separately in depth. These can be accessed at https://indiawris.gov.in/wiki/doku.php?id=wris\_publications.

[The above is a collaborative effort of the Central Water Commission (CWC), Ministry of Water Resources, River Development and Ganga Rejuvenation (now Ministry of Jal Shakti) and the Indian Space Research Organization (ISRO), Department of Space. This project was funded by the Central Water Commission.]

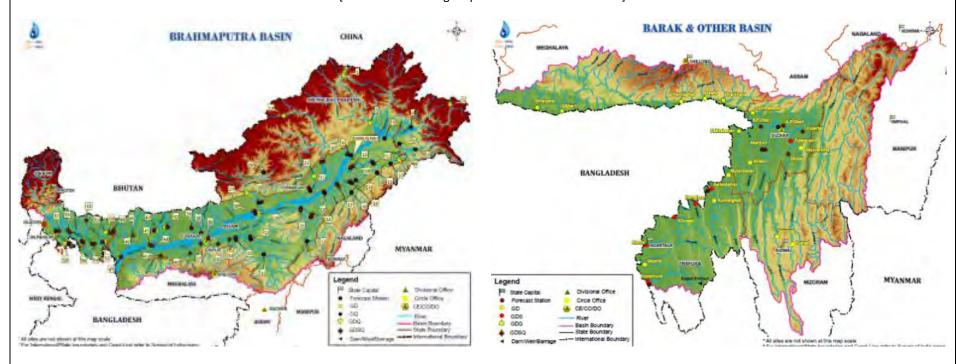
The maps at the following page give the extent of the Brahmaputra and Barak River Basins within the land boundaries of India.







[Note: The following maps are not to the same scale]



Map-1.6.1: Brahmaputra River Basin in India

**Source: India WRIS** 

https://indiawris.gov.in/wiki/doku.php?id=brahmaputra

Map-1.6.2: Barak River Basin in India

**Source: India WRIS** 

https://indiawris.gov.in/wiki/doku.php?id=barak\_and\_others



Table-1.6.2: Inland Water Resources in the NE States

State	Rivers &	Small Re	eservoirs	Medium & Lai	rge Reservoirs	Tanks &	Brackish	Beels, Oxbow	
	Canals (Length in km)	Number	Area (Hectare)	Number	Area (Hectare)	Ponds (Hectare)	Water (Hectare)	lakes / Derelict Water bodies (Hectare)	Any Other (Hectare)
Arunachal Pradesh	11,157	4	226	0	0	2,297	0	3,277	5,950
Assam	10,607	0	0	2	1,863	85,068	0	0	404,517
Manipur	1,647	5	960	1	1,182	1,748	0	29,161	0
Meghalaya	4,383	7	717	0	0	4,320	0	268	67
Mizoram	1,750	3	10	2	8,000	5,506	0	10	0
Nagaland	1,600	0	0	1	2,258	3,524	0	1,110	0
Sikkim	1,600	3	850	0	0	1,579	0	0	0
Tripura	1,080	0	0	1	3,049	29,369	0	100	1,754
Total – NE Region	33,824	22	2,763	7	16,352	133,411	0	33,926	412,288

Source: 'EnviStats; Volume-I Environmental Statistics 2023', National Statistical Office, Ministry of Statistics & Programme Implementation, Government of India based on data from the Ministry of Fisheries, Animal Husbandry & Dairying

#### Notes

- 1. Inland Water resources of the country are classified as rivers and canals; reservoirs; tanks & ponds; beels, oxbow lakes, derelict water; and brackish water.
- 2. Water bodies other than rivers and canals cover an area of 8.6 million hectares. Reservoirs have maximum area (2.8 million hectares.) followed by Tanks and ponds (2.4 million hectares.). The total length of rivers and canals in India is 280,751 km.
- 3. Data pertains to the position in the year 2021 as per the source document. The above data has been furnished under 'Statement-1.07 in the above source.
- 4. State-wise live storage capacities (in terms of billion cubic metres) have been summarized below.

State	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region
Billion Cubic Metre	0.000	0.012	0.532	0.479	0.000	1.220	0.007	0.312	2.562

Source: 'Water & Related Statistics 2021', brought out by the Central Water Commission (CWC), Ministry of Jal Shakti based on data from its Water Management Directorate

Above figures had been furnished to the CWC on 1.12.2017

Total live storage capacity of India was reported to be 257.812 BCM as per the above table.



Table-1.6.3: Area under Different Types of Wetlands in the NE States

(In Hectares)

State				Area	a under Different	Types of We	etland (in Hed	tares)				Total
	Lake	Oxbow	High	Riverine	Waterlogged	River /	Reservoir	Tank /	Water-	Salt Pan	Aquaculture	Wetland
		Lake /	Altitude	Wetland	(Natural)	Stream	/ Barrage	Pond	logged	(Inland)	pond	Area (in
		Cut-off	Wetland						(Man-		(Inland)	Hectares)
		Meander							made)			
Arunachal Pradesh	116	291	11,294	0	289	138,863	116	20	0	0	115	151,104
Assam	57,316	15,471	0	3,905	51,965	705,210	2,939	1,462	380	0	10,430	849,078
Manipur	42,660	56	0	0	2,365	16,828	1,878	114	0	0	3,507	67,408
Meghalaya	1,307	150	0	1,163	303	26,387	1,559	133	0	0	0	31,002
Mizoram	168	0	0	0	710	12,542	6,016	38	0	0	2	19,476
Nagaland	15	11	0	0	66	19,052	1,544	357	0	0	73	21,118
Sikkim	15	0	2,991	0	0	3,963	80	0	0	0	0	7,049
Tripura	1,103	389	0	0	2,433	6,833	7,247	408	0	0	25	18,438
Total - NE Region	102,700	16,368	14,285	5,068	58,131	929,678	21,379	2,532	380	0	14,152	1,164,673

Source: 'EnviStats; Volume-I Environmental Statistics 2023', National Statistical Office, Ministry of Statistics & Programme Implementation, Government of India

- 1. The above gives the status of wetlands in 2017-18 as per satellite based observations summarized at Statement- 1.04 (a) 'State-wise wetland distribution (type-wise) in India' furnished in the above source.
- 2. The source document furnishes the state-wise areas of other types of wetlands prevalent in the coastal eco-systems, which are not found in the land-locked states of the NE Region. These include wetland types like lagoon, creek, sand / beach, inter-tidal mud-flat, salt marsh, mangrove, coral reef, salt pan (coastal), and aquaculture pond (coastal). These have not been mentioned in the above table.



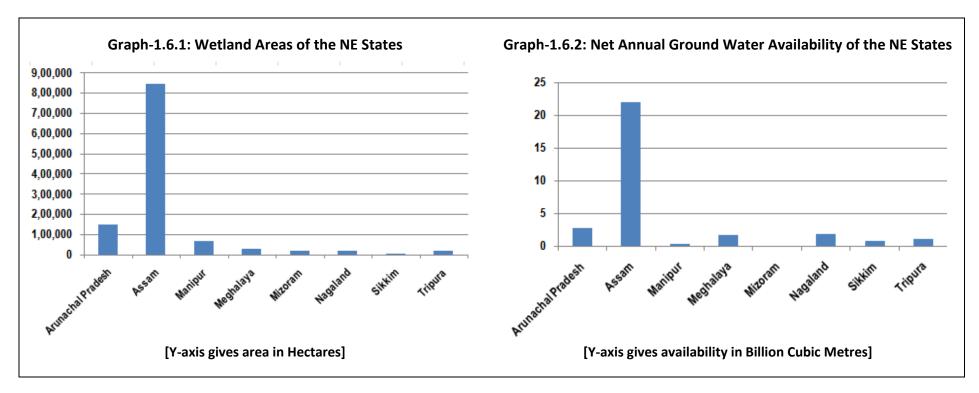






Table-1.6.4: Ground Water Resources in the NE States

(In Billion cubic metres per year)

	Annual Rep	olenishable G	Fround Water	Resources				,	Annual Grou	nd Water Dr	aft	Projected		
	Monsoor	n Season	Non-monsoon Season			Natural	Not Americal				1	Demand	Ground	Stage of
State	Recharge from Rainfall	Recharge from Other Sources	Recharge from Rainfall	Recharge from Other Sources		Discharge during Non- monsoon Season	Net Annual Ground Water Availability	Irrigation	Industrial Uses	Domestic Uses	Total	for Domestic & Industrial Uses till 2025	\Mator	Ground Water Devt. (%)
1	2	3	4	5	6 (2+3+4+5)	7	8 (6-7)	9	10	11	12 (9+10+11)	13	14 (12-13)	15 (12/8 x 100%)
Arunachal Pradesh	2.01	0.07	1.11	0.002	3.19	0.27	2.92	0.003	0.0002	0.01	0.01	0.01	2.90	0.36
Assam	17.92	0.96	7.64	0.53	27.05	5.09	21.97	1.97	0.01	0.60	2.58	0.66	19.33	11.73
Manipur	0.40	0.001	0.11	0.002	0.51	0.05	0.46	0.003	0.0002	0.02	0.02	0.02	0.44	5.12
Meghalaya	1.66	0.01	0.36	0.01	2.04	0.22	1.82	0.03	0.0003	0.05	0.05	0.06	1.73	4.22
Mizoram	0.19	0.00	0.03	0.00	0.22	0.02	0.20	0.00	0.00	0.01	0.01	0.01	0.19	3.81
Nagaland	1.08	0.76	0.27	0.06	2.17	0.22	1.95	0.002	0.00003	0.02	0.02	0.02	1.93	1.04
Sikkim	0.96	0.00	0.00	0.00	0.96	0.10	0.86	0.00	0.002	0.01	0.01	0.01	0.85	0.86
Tripura	0.85	0.06	0.34	0.22	1.47	0.22	1.24	0.02	0.0002	0.08	0.10	0.09	1.14	7.94
Total – NE Region	25.07	1.86	9.86	0.82	37.61	6.19	31.42	2.03	0.01	0.80	2.80	0.88	28.51	8.91

Source: 'EnviStats; Volume-I Environmental Statistics 2023', National Statistical Office, Ministry of Statistics & Programme Implementation, Government of India based on 'Dynamic Ground Water Resources of India, 2020' brought out by Central Ground Water Board

- 1. Ground water is 'water within the earth that supplies wells and springs; water in the zone of saturation where all openings in rocks and soil are filled, the upper surface of which forms the water table'.
- 2. The above figures have been rounded off. Hence, some of the totals or percentages may not appear to tally.
- 3. The above table gives the status of ground water resources for the year 2020.
- 4. Annual ground water draft refers to the utilization of the ground water resources. The stage of ground water development reflects the total annual use of ground resources as a percentage of the net annual ground water availability.



# Table-1.6.5: Hydro-electric Projects & Sites in the NE States (Capacity above 25 MW)

(In Numbers / Mega Watts)

State	Hydro-electric Potential		I. Projects in Operation		II-A. Projects under Active Construction		II-B. Projects where Construction is held- up		III. Projects Allotted by States for Development									
									III-A. DPR Prepared			III-B. DPR under Preparation						
									Concurred by CEA but Construction yet to start		Returned to Project Authority		S&I under Progress		S&I held up / yet to be taken up		IV. Balance Capacity	
	Nos.	MW	Nos.	MW	Nos.	MW	Nos.	MW	Nos.	MW	Nos.	MW	Nos.	MW	Nos.	MW	Nos.	MW
Arunachal Pradesh	109	50,394	3	1115	2	4880	0	0	14	13798	13	5323	6	15632	2	1945	68	9866
Assam	8	643	3	350	1	120	0	0	0	0	1	60	0	0	0	0	3	143
Manipur	9	615	1	105	0	0	0	0	0	0	0	0	0	0	0	0	8	510
Meghalaya	22	2,026	5	322	0	0	0	0	1	85	0	0	2	270	2	620	12	1156
Mizoram	11	1,927	1	60	0	0	0	0	0	0	0	0	0	0	0	0	10	1867
Nagaland	4	325	1	75	0	0	0	0	1	186	0	0	0	0	0	0	2	64
Sikkim	34	6,051	8	2282	2	620	3	417	1	520	0	0	0	0	0	0	18	2146
Tripura	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total – NE Region	197	61,981	22	4309	5	5620	3	417	17	14589	14	5383	8	15902	6	2657	121	15752

Source: 'State Profile on Hydro Development, July 2023', Central Electricity Authority, Ministry of Power, Government of India (https://cea.nic.in/hpi-report/?lang=en)

- 1. Hydro-electric Potential is based on the Re-assessment Study (2017-23). It indicates the 'exploitable Large Hydro Power Potential from Hydroelectric Projects'. Such projects have a capacity of above 25 MW. This is based on Re-assessment Study of 2017-23.
- 2. Hydro-electric Potential is based on the following types of projects: Storage projects; Run-of-River projects with Pondage; and Multi-Purpose Projects. Project numbers refer to projects (both in operation and under active construction) and sites for projects (both allotted by states and project sites where balance capacity has been assessed). Pumped storage projects have not been included.
- 3. S&I: Survey & investigation
- 4. **'Balance Capacity is different from arithmetic calculation from the potential accessed due to change in capacity of the Projects**, addition/deletion of the projects and merger of **two projects into one etc.'**, as stated by the source document.
- 5. Tripura has no identified large-scale hydro-electric power potential.



# 1.7. Natural Vegetation & Flora

Vegetation is a general term that encompasses the assemblage of all plants, as well as the ground cover provided by them. Natural vegetation is a sub-set of vegetation; and it refers to the 'plant community, which has grown naturally without human aid and has been left undisturbed by humans for a long time'. Flora refers to the taxonomic composition of all native plants of a particular region. This section will initially cover the natural vegetation of the North East Region, before proceeding to a discussion on the flora of the region.

## **Natural Vegetation of the NE Region**

As noted previously, the NE Region has a range of landforms, climates (including temperatures and rainfall patterns) and soil conditions. This has led to the evolution of considerable variations in the natural vegetation covering undisturbed areas of the region. Forests form the dominant type of natural vegetation, which can include grasslands, scrub, swamps, rocky outcrops, and other treeless vegetation. In the NE Region, there are various types of forests which have been briefly discussed in the following paragraphs. An important point of note is that the divergence of natural vegetation in the region has led to the profuseness of flora and fauna found in the different states located here.

#### 1. Tropical Evergreen Forests

The tropical wet evergreen forests of the region are dominated by trees of the Dipterocarpaceae family. These forests are dense and show a structure of four to five strata like the emergent layer (which grows above the canopy), the canopy of various trees, the understory, and the undergrowth at the bottom. These are found with areas of the region having a higher rainfall (about 2,000-3,000 mm per annum). They are marked by the abundant presence of climbers, occurrences of palms and canes; abundance of epiphytes, and ground cover of evergreen shrubs.

The 'Assam Valley tropical wet evergreen forest' type is found in Arunachal Pradesh (at elevations up to 900 m), Assam and Nagaland. The 'Cachar tropical evergreen forest' occurs in Assam within the Barak valley districts and adjacent Dima Hasao district, as well as in nearby areas of Meghalaya. Further, there are 'Kayea forests' in Arunachal Pradesh and Assam, apart from a small area under 'Mesua forests' in Assam. The tropical evergreen forests of the region (including all the above-mentioned types) extend over an area of almost 6,000 sq. km as per the latest forest cover assessment of 2021.

## 2. Tropical Semi-Evergreen Forests

The tropical wet evergreen forests of the NE Region adjoin its tropical wet evergreen forests and form a transition zone between the evergreen forests and moist deciduous forests. In this type of forests, the canopy is deciduous and sheds its leaves during the dry season. Such forests are found in areas having an annual rainfall of 1,500-2,000 mm.



The tropical semi-evergreen forests include: (a) the Assam alluvial plains semi-evergreen forests, which are found mostly in Arunachal Pradesh (near the alluvial plains), apart from Assam and Meghalaya; (b) the Eastern sub-montane semi-evergreen forests, occurring in Arunachal Pradesh; (c) the Sub-Himalayan light alluvial semi-evergreen forests covering Arunachal Pradesh, and smaller areas in Assam; (d) the Eastern alluvial secondary semi-evergreen forests that are mainly found in Arunachal Pradesh and Nagaland, apart from smaller occurrence in Assam; and (e) Cachar semi-evergreen forests occurring in the Barak Valley of Assam, and adjoining areas like parts of Manipur and Mizoram.

Taken together, these tropical semi-evergreen forests extend over an area of more than 39,000 sq. km in the different NE states. They form over one-fifth of the mapped area of the region under forest cover, scrub and grassland outside forest cover. Nearly 55% of the tropical semi-evergreen forests consist of the 'Cachar semi-evergreen forests'.

Other Vegetation in the Tropical Semi-Evergreen Belt: These include (a) the secondary moist bamboo brakes found mostly in Mizoram, apart from lesser occurrences in the other NE states, except Sikkim; (b) Pioneer Euphorbiaceous scrub that is mostly found in Manipur, apart from occurrences in Assam and Mizoram and a small area in Tripura; and (c) small area under Syzygium parkland in Assam. Such vegetation extends for nearly 13,000 sq. km, forming over 7% of the mapped area of the region under forest cover, scrub and grassland outside forest cover. Nearly 90% of this area is under secondary moist bamboo brakes.

# 3. Tropical Moist Deciduous Forests

The tropical moist deciduous forests are found in areas having an annual rainfall of 1,000-1,500 mm and marked by a dry season extending to about 3-4 months. The deciduous trees shed their leaves during the dry season. After the first spells of pre-monsoon rainfall, they sprout a new flush of leaves.

The tropical moist deciduous forests of the NE Region include: (a) a small area under Eastern Himalaya sal in Sikkim; (b) the Khasi hill sal covering parts of Meghalaya and some pockets of Assam; (c) East Himalayan upper bhabar sal found in Assam and Tripura; (d) the areas under 'Kamrup sal forests' in Assam; (e) the relatively extensive presence of the East Himalayan moist mixed deciduous forests that are found in Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura, as well as smaller areas in Sikkim; (f) the Northern secondary moist mixed deciduous forests occurring in Assam; (g) the Low alluvial savannah woodlands covering a small area in Assam; and (g) the forests under Terminalia-Duabanga in Arunachal Pradesh.

Together, the above types of tropical moist deciduous forests cover an area of more than 36,000 sq. km, of which over 88% consists of the East Himalayan moist mixed deciduous forests. These forests account for about one-fifth of the mapped area of the NE Region under forest cover, scrub and grassland outside forest cover.



# 4. Sub-Tropical Broadleaved Hill Forests

The sub-tropical broadleaved hill forests are a category of montane sub-tropical forests found in different states of India in the lower altitudes of hills and mountains. These forests typically occur at elevations ranging from 1,000 m to 2,000 m above mean sea level.

The above group of forest types includes: (a) the East Himalayan sub-tropical wet hill forest found relatively extensively in Arunachal Pradesh and Manipur, as well as in small areas in Mizoram; (b) the Khasi sub-tropical wet hill forest, mostly occurring in Meghalaya and Nagaland, apart from lower occurrence in Arunachal Pradesh and Manipur; and (d) a small area in Assam under Assam sub-tropical hill savannah woodland.

Taken together; the above types of forests account for around one-sixth of the total mapped area of the region under forest cover, scrub and grassland outside forest cover. They cover a combined area of over 30,000 sq. km as per the latest assessment of forests in India carried out in 2021.

#### 5. Montane Wet Temperate Forests

The montane wet temperate forests are characteristic of the Eastern Himalayas, where they occur in belts that are 1,800 m to 3,000 m in altitude. The following are the types of such forests found in the region: (a) the East Himalayan wet temperate forests occurring in Arunachal Pradesh; apart from lesser areas under (b) the Buk oak forest in Manipur and Sikkim, and (c) the Naga Hills wet temperate forests native to the higher hills in Manipur and Nagaland.

The extent of montane wet temperate forests in the NE Region is nearly 20,000 sq. km, which forms almost 11% of the mapped area in the region under forest cover, scrub and grasslands outside forest cover. Nearly 85% of the total area under montane wet temperate forests consists of the East Himalayan wet temperate forests that are found in Arunachal Pradesh.

#### 6. Sub-Alpine Forests

East Himalayan sub-alpine birch and fir forests cover almost 9,000 sq. km of area in Arunachal Pradesh and Sikkim, accounting for about 4.8% of the mapped area of the region under forest cover, scrub and grasslands outside forest cover. These forests are located in belts with altitudes ranging from 3,000 m till the snowline, provided that the annual precipitation here is below 600 mm.

#### 7. Other Types of Forests

The types of forests listed at above [Sl. No. (1) - Sl. No. (6)] cover an area of nearly 153,000 sq. km in the NE Region. In addition, there are other types of forests occurring in the region, which account for about 15% of the mapped area in this region under forest cover, scrub and grassland outside forest. These include the following:

(a) Small pockets of 'Swamp forests; found in Assam that are very small in area;



- (b) Small areas in Assam having natural occurrences or plantations of khair (*Senegalia catechu*) and sishoo (*Dalbergia sissoo*) which belong to the group 'Tropical Dry Deciduous Forests' and usually grow in sub-Himalayan tracts;
- (c) 'Assam sub-tropical pine forests', which cover nearly 3,500 sq. km in all the NE states (excluding Sikkim and Tripura ) at altitudes ranging from 1,000 m to 1,800 m and account for just less than 2% of the mapped areas', with the Khasi pine being a widely known tree belonging to this forest type;
- (d) Areas in Arunachal Pradesh under 'East Himalayan dry temperate coniferous forests' belonging to the "Himalayan Dry Temperate Forests' group that grow in the inner Himalayas in areas that are 1,700-3,000 m in altitude and have annual precipitation of below 1000 mm (often received as winter snow fall);
- (e) 'Moist Alpine scrub' areas of birch and rhododendron scrub thickets in Arunachal Pradesh and Sikkim (growing at 3,300m to 4,600m), along with dwarf rhododendron scrub and dwarf juniper scrub found in Sikkim;
- (f) 'Dry Alpine Scrub' found in small pockets in Sikkim at altitudes of 3,000m 4,600 m; and
- (g) Grasslands outside forest cover, of which the most extensive belong to the type 'Alpine pastures' that cover nearly 3% of the mapped area (under forest cover, scrub and grasslands outside forest cover) in the region.

# 8. Plantations / Tree Outside Forest

Plantations and Trees Outside Forest cover almost 10,000 sq. km in all the NE states, with this representing more than 5% of the mapped area in the region under forest cover, scrub and grasslands outside forest cover. Assam and Tripura have more than 83% of the areas covered by Plantations and Trees Outside Forest.

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The table at overleaf gives the extent of the various forest types found in the NE states, as determined by the India State of Forest Report 2021.

It reports the areas in these states under various types of forests, including bamboo brakes, swamp forests, scrub, grasslands, and pastures. The 'Champion & Seth' classification system has been used in the table. This is a classification of forest types in India, which is based on species composition, topography, soil factors, climate, altitude, and other factors.

The picture obtained from the above table gives a fair idea of the natural vegetation covering most parts of the NE Region.



Table-1.7.1: Forest Types found in the NE States

(Area in square kilometres)

	Forest Type	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region
1B/C1	Assam Valley tropical wet evergreen forest	1,505.61	1,006.79	0.00	0.00	0.00	82.82	0.00	0.00	2,595.22
1B/C2a	Kayea Forest	745.68	216.12	0.00	0.00	0.00	0.00	0.00	0.00	961.80
1B/C2b	Mesua forest	0.00	5.53	0.00	0.00	0.00	0.00	0.00	0.00	5.53
1B/C3	Cachar tropical evergreen forest	0.00	886.92	0.00	1,515.18	0.00	0.00	0.00	0.00	2,402.10
1B/2S1	Pioneer Euphorbiaceous scrub	103.86	0.00	0.00	485.43	0.00	639.37	0.00	0.00	1,228.66
2B/C1a	Assam alluvial plains semi-evergreen forest	3,961.00	453.68	0.00	129.03	0.00	0.00	0.00	0.00	4,543.71
2B/C1b	Eastern sub-montane semi-evergreen forest	2,330.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2,330.86
2B/C1/1S1	Sub-Himalayan light alluvial semi-evergreen forest	4,077.78	356.00	0.00	0.00	0.00	0.00	0.00	0.00	4,433.78
2B/C1/1S2	Syzygium parkland	0.00	19.43	0.00	0.00	0.00	0.00	0.00	0.00	19.43
2B/C1/2S1	Pioneer Euphorbiaceous scrub	0.00	84.52	1,263.20	0.00	74.10	0.00	0.00	1.15	1,422.97
2B/C1/ 2S2	Eastern alluvial secondary semi-evergreen forest	3,777.01	348.87	0.00	0.00	0.00	2,353.38	0.00	0.00	6,479.26
2B/C2	Cachar semi-evergreen forest	0.00	10,719.16	2,852.67	0.00	5,580.26	0.00	0.00	2,126.56	21,278.65
2/2S1	Secondary moist bamboo brakes	1,133.65	857.76	1,324.51	375.66	6,600.03	546.69	0.00	590.44	11,428.74
3C/C1a(i)	Eastern Himalayan sal	0.00	0.00	0.00	0.00	0.00	0.00	69.47	0.00	69.47
3C/C1a(ii)	Khasi hill sal	0.00	40.39	0.00	1,176.82	0.00	0.00	0.00	0.00	1,217.21
3C/C1b(i)	East Himalayan upper bhabar sal	0.00	670.56	0.00	0.00	0.00	0.00	0.00	196.75	867.31
3C/C2d (iv)	App. Kamrup sal	0.00	759.57	0.00	0.00	0.00	0.00	0.00	0.00	759.57
3C/C3b	East Himalayan moist mixed deciduous forest	0.00	5,095.46	4,413.95	8,692.38	5,648.50	5,030.79	194.86	3,052.68	32,128.62
3C/C3/2S1	Northern secondary moist mixed deciduous forest	0.00	505.65	0.00	0.00	0.00	0.00	0.00	0.00	505.65
3C/1S1	Low alluvial savannah woodland	0.00	13.69	0.00	0.00	0.00	0.00	0.00	0.00	13.69
3C/C3/ 2S2	Secondary Euphorbiaceous scrub	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
3/1S2b	Terminalia-Duabanga	854.57	2.83	0.00	0.00	0.00	0.00	0.00	0.00	857.40
4C/FS3	Creeper swamp forest	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.09
4D/SS1	Eastern seasonal swamp forest	0.00	0.88	0.00	0.00	0.00	0.00	0.00	0.00	0.88
5/1S2	Khair-sissu forest	0.00	24.19	0.00	0.00	0.00	0.00	0.00	0.00	24.19
8B/C1	East Himalayan sub-tropical wet hill forest	15,667.69	0.00	6,199.75	0.00	7.94	0.00	905.73	0.00	22,781.11

# The NEC Yearbook 2024



	Forest Type	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region
8B/C2	Khasi sub-tropical wet hill forest	1,253.62	0.00	423.94	3,593.38	0.00	2,148.80	0.00	0.00	7,419.74
8B/DS1	Assam sub-tropical hill savannah woodland	0.00	9.79	0.00	0.00	0.00	0.00	0.00	0.00	9.79
9/C2	Assam sub-tropical pine forest	718.82	119.72	632.86	1,169.30	92.75	735.33	0.00	0.00	3,468.78
11B/C1	East Himalayan wet temperate forest	16,531.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16,531.13
11B/C1b	Buk oak forest	0.00	0.00	530.44	0.00	0.00	0.00	874.93	0.00	1,405.37
11B/C2	Naga hills wet temperate forest	0.00	0.00	243.92	0.00	0.00	1,446.16	0.00	0.00	1,690.08
12/C1f	Low-level blue pine forest	211.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	211.82
12/C3a	East Himalayan mixed coniferous forest	4,333.74	0.00	0.00	0.00	0.00	0.00	224.16	0.00	4,557.90
12DS1	Montane bamboo brakes	66.17	0.00	13.49	0.00	0.00	9.16	7.04	0.00	95.86
13/C6	East Himalayan dry temperate coniferous forest	540.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	540.45
14/C2	East Himalayan sub-alpine birch / fir forest	7,810.33	0.00	0.00	0.00	0.00	0.00	912.14	0.00	8,722.47
15/C1	Birch / Rhododendron scrub forest	159.22	0.00	0.00	0.00	0.00	0.00	128.19	0.00	287.41
15/E1	Dwarf Rhododendron scrub	0.00	0.00	0.00	0.00	0.00	0.00	11.44	0.00	11.44
15/E2	Dwarf juniper scrub	0.00	0.00	0.00	0.00	0.00	0.00	187.94	0.00	187.94
16/C1	Dry alpine scrub	481.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	481.74
	Sub-Total	66,264.56	22,197.60	17,898.73	17,137.18	18,003.58	12,992.50	3,515.90	5,967.58	163,977.63
	TOF / Plantation	652.68	6,302.34	129.64	581.44	2.83	129.39	133.24	1,786.80	9,718.36
	Total (Forest Cover & Scrub)	66,917.24	28,499.94	18,028.37	17,718.62	18,006.41	13,121.89	3,649.14	7,754.38	173,695.99
	Grassland forest types (outside forest cover)									
4D/2S1	Syzygium parkland	0.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.65
4D/2S2	Eastern wet alluvial grassland	0.00	153.18	135.48	0.00	0.00	0.00	0.00	0.00	288.66
9/C2/DS1	Assam sub-tropical pine savannah	36.07	0.00	60.15	719.70	_	26.17	0.00	0.00	842.09
12/DS3	Himalayan temperate pastures	375.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	375.10
15/C3	Alpine pastures	5,446.34	0.00	0.00	0.00	0.00	0.00	136.28	0.00	5,582.62
	Sub-total	5,857.51	153.83	195.63	719.70	0.00	26.17	136.28	0.00	7,089.12
	Grand Total	72,774.75	28,653.77	18,224.00	18,438.32	18,006.41	13,148.06	3,785.42	7,754.38	180,785.11

Source: India State of Forest Report 2021

NOTE: The above table gives the area under different forest types as per the Champion & Seth classification (1968), according to the Atlas Forest Types of India 2020..



# Flora of the North Eastern Region

The North Eastern Region is remarkable for its diversity of vegetation and flora. The NE Region has about 8% of India's geographical area. It has a disproportionately high share of India's diversity of flora. For example, the region is reported to have 57% of India's orchids, as well as the recorded occurrence of over 40% of the total number of bamboo and cane species found in India. Further, the region has over 9,500 varieties of rice, 15 varieties of maize, 14 varieties of banana and 17 varieties of citrus. In all, the region has over 8,000 taxa of flowering plants, of which 2,526 are reported to be endemic.

Biogeographically, the NE Region represents a highly transitional zone, where large-scale commingling of the Asiatic and Indian Peninsular floras has occurred. Further, it is characterized by highly humid tropical climate and variety of landforms and soils that help in promoting such diversity of flora. The Botanical Survey of India (BSI) has been compiling and consolidating information on plant discoveries in the NE Region and updating the estimated taxa in every group, for which it has three Regional Centres at Shillong, Itanagar and Gangtok.

The following discussion covers the taxonomic status of various plants discovered in the region. This has been done separately for Assam and the other NE states (viz. Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura).

### **Assam**

Assam has about 22.68% of the Indian flora, including over one-quarter of the taxa of gymnosperms found in India, and over one-fifth of the taxa of angiosperms occurring across the country. This has been reported by a detailed study on the state's plant diversity, which had been carried out by the Assam Science, Technology and Environment Council (ASTEC). The above assignment was carried out by a thorough analysis of all published data and works submitted by doctoral students, supplemented by field visits as deemed necessary. The work was completed in 2014, after having been initially conceived in 2009.

As per the above detailed study on Assam's plant diversity, the state has 3,845 taxa of flowering plants (dicotyledons, monocotyledons and gymnosperms) under 1,394 genera and 236 families. The following table summarises the position of the flowering plants as reported by this study.

Table-1.7.2: Flora of Assam (Flowering Plants)

Category	Family	Genera	Taxa
Angiosperms			
<ul> <li>Dicotyledons</li> </ul>	189	1,012	2,752
<ul> <li>Monocotyledons</li> </ul>	40	308	1,080
Gymnosperms	7	14	22
TOTAL	236	1,394	3,854

Source: 'Plant Diversity of Assam' (2014) published by Assam Science, Technology and Environment Council

Out of the above biodiversity of angiosperms and gymnosperms found in Assam, about 47% were herbs, 22% shrubs, 20% trees and small trees, 8% climbers and lianas and 3% under-shrubs. Further,



the above study has reported that 167 taxa are endemic to the state (dicotyledons - 95, monocotyledons - 71, and gymnosperms - 1). In addition, the study reports that 316 of the taxa are threatened (critical, endangered or vulnerable), including 301 taxa of orchids.

As regards the taxa of dominance, Orchidaceae (orchids) is the most dominant family with 328 taxa. The distribution of major families is tabulated below. It may be noted that these dominant families form over 31% of the genera and taxa that constitutes the flora of Assam, considering flower plants.

Table-1.7.3: Major Families of Flora in Assam (Flowering Plants)

Family →	ORCHIDACEAE	POAECEAE	PAPILIONACEAE	RUBIACEAE	EUPHORBIACEAE	ASTERACEAE
No. of Genera	96	108	51	57	48	74
No. of Taxa	328	295	198	141	139	129

**Source**: 'Plant Diversity of Assam' (2014) published by Assam Science, Technology and Environment Council

As per the ENVIS Assam Centre, which is being hosted by ASTEC, the state's flora also includes:

- More than 25% of India's ferns and over one-third of the nation's fern-allies (excluding ferns) where the state has 315 taxa of ferns and 40 taxa of fern-allies;
- Nearly 25% of the nation's taxa of orchids;
- 42 taxa of bamboos and 14 taxa of canes; and
- 952 plants species which have uses in medical practices in some form or other.

[Source: https://asmenvis.nic.in/Database/PlantDiversity\_833.aspx?format=Print]

### **Other NE States**

Compared with Assam, the other NE states have a wider range of floral taxa. However, most areas of these states are remote and quite difficult to access; and consequently have not yet been explored fully. It has been assessed that these hill states hold considerable potential for new plant discoveries in the coming decades.

The North Eastern states have a high occurrence of flowering plants, with over 8,000 such plants being discovered here, out of the 15,000 flowering plants present in India. The numbers of these plants (including angiosperms of dicotyledonous and monocotyledonous taxa and gymnosperms) in the NE state has been tabulated below.

Table-1.7.4: Flora of NE States (Flowering Plants) – Other than Assam

State	Arunachal Pradesh	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
No. of Taxa	5,000	2,500	2,250	2,200	2,250	4,500	1,600

**Source**: WWF-India (2006) 'Biodiversity Significance of North East India' (2006) available at the following link: https://trpenvis.nic.in/test/doc\_files/BiodiversitySignificanceNEIndia\_WWF.pdf

#### Notes:

- 1. The above numbers are approximate.
- 2. The numbers include flowering plants only.

As per the above table, Arunachal Pradesh and Sikkim (located in the Himalayan zone) have the highest presence of floral taxa. However, much of the above diversity has been affected by biotic



and abiotic factors. It has been estimated that about 800 endangered taxa (out of 1,500 in India) are present in North East India.

The diversity of non-flowering plants in the NE Region is expected to be even higher. Based on work done so far, it has been estimated that half of the non-flowering plants found in the nation are occurring in this region. For example, Arunachal Pradesh has more than 654 taxa of ferns and fernallies under 94 genera belonging to 32 families. However, the details in of non-flowering plants found in the NE States are not readily accessible.

In addition, a large number of medicinal plants are found in the North East region, which has been used for treatment purposes. These include: 200 plant species from Arunachal Pradesh, 526 from Nagaland, 194 from Tripura, and 834 from Meghalaya.



Foxtail Orchid (Kopou Phul) - The State Flower of Assam



Sikkim has a wide range of flora



Table-1.7.5: Flora of the NE States

	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
Algae	N.A.	N.A.	121 spp.	N.A.	N.A.	N.A.	N.A.	N.A.
Fungi	N.A.	N.A.	50 spp.	N.A.	200 spp.	N.A.	N.A.	N.A.
Lichens	827 spp.	443 spp.	441 spp.	349 spp.	214 spp.	325 spp.	596 spp.	31 spp.
Bryophytes	217 spp.	143 spp.	110 spp.	294 spp.	14 spp.	40 spp.	362 spp.	1 spp.
Pteridophytes	NA	315 spp.	300 spp.	30 families 146 genera 484 spp.	35 families 66 genera 211 spp.	32 families 93 genera 397 spp.	N.A.	18 families 38 genera 70 spp.
Gymnosperms	18 genera 33 spp.	4 genera 7 spp.	20 spp.	10 families 19 genera 29 spp.	4 families 6 genera 6 spp.	5 families 6 genera 9 spp.	16 spp.	6 families 8 genera 13 spp.
Angiosperms	8500 spp.	1111 genera 3010 spp.	203 families 1052 genera 2376 spp.	216 families 1449 genera 4243 spp.	176 families 905 genera 2141 spp.	186 families 963 genera 2431 spp.	4500 spp.	168 families 816 genera 1463 spp.

Source: Letter No. BSI/ERC/Tech./23-24/1424 dated 13.10.23 from the Eastern Regional Centre of the Botanical Survey of India



Fiddlehead Fern (a Pteridophyte) is found in Manipur



Red Vanda, an orchid, is the state flower of Mizoram



### **1.8.** Fauna

The Animal Kingdom includes complex multi-celled organisms that do not produce their own food. It (i.e. the Animal Kingdom) is divided into several phyllums (or 'phylla'), of which chordata, arthropoda (especially insecta) and mollusca are prominent. Chordata include animals that develop a notochord, a cartilaginous skeletal rod that supports the body in the embryo and can often become a spine. Arthropoda include invertebrate animals with an exoskeleton and segmented bodies such as insects, crustaceans, and arachnids. This is the largest phylum by species count. Mollusca form the second largest phylum by species count, and the largest marine phylum. These include invertebrates with soft un-segmented bodies.

The Eastern Himalaya in the NE Region is a part of the transition zone between the Indian, Indo-Malayan, and Indo-Chinese bio-geographical regions. This coupled with the variations of regional physiography, climate, and forest cover has resulted in the proliferation of a variety of habitats that harbour a diversity of fauna with a high incidence of endemic species in the region.

As per the State Fauna Series (SFS) Reports published by the Zoological Survey of India (ZSI), the different states of the region have a large number of genera and species, the count of which has been tabulated after the following discussion. The details of the local fauna of various NE states have been briefly summarized below. (SFS Report for Assam has not been uploaded in the website.)

### **Arunachal Pradesh**

Arunachal Pradesh forms a complex hill system of Siwalik and Himalayan origin, with a variety of altitudes, climates and vegetative cover. The Eastern Himalayas and hills the state are under vast stretches of tropical evergreen, semi-evergreen and other sub-tropical and deciduous forests. These form the abode for a very large number of species and populations of species. ZSI has observed that the diversity is lower in higher stretches and highest in the areas adjacent to Myanmar, Assam and Nagaland i.e. in the erstwhile Tirap and East Siang districts.

The present account of animals, especially of non-vertebrate species, is a partial indicator, since much of the state has yet to be fully explored for its faunal riches. As compiled till date, the state hosts 143 species of fishes under 61 genera, 39 amphibian species belonging to 11 genera, and 78 species of reptiles under 46 genera, apart from a large number of mammal species. Further, the state has 964 species and subspecies of birds. In addition, Arunachal Pradesh has a large number of inveterate species, including a variety of insects. When it is fully explored, the diversity of the state is likely to go beyond the present day estimates of its animal species.

# Manipur

The faunal resources of Manipur have been explored by scientists and naturalists in the past decades. Such efforts have helped in the compilation of a database of the states faunal status by the ZSI. As per its report of Nagaland in the 'State Fauna Series', there are '2,601 species belonging to various categories in 1,261 genera, 368 families, of which 5 are new to science, 509 species are new records to the state and 28 are new records to the country'. As per the above compilation, insect



species are most numerous with 1,220 species, followed by birds with 586 species, fishes 141 species, and molluscs 127 species. One noteworthy fact is that Manipur has the largest number of classes, classes, orders, families, genera and species for the phylum Arthropoda within India.

### Meghalaya

The fauna of Meghalaya shows a rich diversity on account of the wide variations of the underlying factors determining such faunal variety. The 'State Fauna Series' of ZSI on Meghalaya records a total of 5,538 species out of total of 81,000 species known across India. Of these, there are 3,624 species of insects, which form almost two-thirds of the species by numbers. In some groups, viz. Mammalia, more than 35% of total Indian species are found in the state. Similarly, nearly 50% of the bird species found in India have been sighted in the state.

#### Mizoram

The ZSI has undertaken a detailed study of the fauna of Mizoram, before which reliable information regarding its faunal diversity was quite scanty. The 'State Fauna Series' report covering Mizoram contains details about 1,468 species found by the study. These belong to 891 genera under 295 families. This number includes 520 insect species, which form over 35% of the total number of species in the state. Birds are the next abundant group, with 370 species being found by the above ZSI study.

# Nagaland

Nagaland has a wide range of faunal species of vertebrate and non-vertebrate genera. The ZSI has compiled the inventory of animals in the state, with many of the species being newly found. This state, like others in the region, requires additional exploration of its undiscovered faunal riches.

Out of the 397 species of mammals distributed in India, 92 species and subspecies are reported from the 'Fauna of Nagaland' by Zoological Survey of India. The list of avian species includes 428 species, under 205 genera. As per the ZSI compilation, there are 10 amphibian species under 5 genera and 4 families, with the species diversity requiring further exploration. The fish fauna of Nagaland includes some of the rare species. As per ZSI, fish fauna includes 108 species under 57 genera, 20 families and 7 orders, of these 40 species were recorded for the first time from Nagaland. In addition, there is a limited range of non-vertebrates as given at the next table.

#### Sikkim

The mountainous state of Sikkim has a wide range of fauna in view of its varied climates and altitudes. Many species are endemic to the state. One aspect is that the fauna of the state share commonalities with those of the neighbouring Darjeeling district of West Bengal. There are 92 mammalian species, with a preponderance of Palaearctic species at the upper reaches of the state. There are reportedly over 422 avian species and sub species, 21 amphibian species and 31 reptile species, apart from 64 species of fish in Sikkim. Further, there is a wide variety of non-vertebrate species found in different areas of the state



### **Tripura**

Due to its unique bio-geographical position and tropical humid climate marked by good rainfall, Tripura has been always inhabited by rich variety of wildlife. An analysis of the fauna of Tripura had been carried out by ZSI, which reported it in their 'State Fauna Series' publication on the state. This report states that there are 1,708 species of animals in 1042 genera, including 474 species under 301 genera belonging to vertebrate fauna. The largest number of species includes insects with 536 species and birds with 259 species.

[The above has been adapted from information available for the NE states (except Assam) in the reports brought out by the Zoological Survey of India (ZSI) under its 'State Fauna Series'.

These reports are available at the following link: https://faunaofindia.nic.in/php/sfs\_books\_list.php]

### **Fauna of Assam**

Assam is located in the bio-diverse NE Region of India, which is at the meeting zone of three bio-geographical regions, viz. the Indian, Indo-Malayan, and Indo-Chinese regions. With variegated physiography, climate and soil conditions, the state hosts a wide variety of faunal species, some of them being world-famous like the One-horned Indian Rhinoceros (the state's symbol), the Royal Bengal Tiger and the Indian Elephant - to name a few of such species. The state hosts a wide variety of birds, including many seasonal visitors attracted by its wetlands and other places. It has a large range of fishes, reptiles and amphibians. Many of the state's species are endangered, and quite a few have drawn widespread support for their conservation.

The Assam Science Technology and Environment Council (ASTEC) has published the 'Vertebrates of Assam – A Checklist with IUCN status'. The book includes a comprehensive checklist of five major classes of vertebrate species and subspecies found in Assam. It gives the following numbers of vertebrates found in Assam, with the check-list having been prepared based on extensive secondary study and field work. Similar data on the invertebrate species of the state are not readily available.

Table-1.8.1: Vertebrate Species found in Assam

Category	Mammalia	Aves	Reptilia	Amphibia	Fishes
Species in Assam (Nos.)	192	841	128	67	232

Source: ASTEC (2016), 'Vertebrates of Assam – A Checklist with IUCN Status'

# **Tabulation of the Number of Species in the other NE States**

Over the decades, the Zoological Survey of India has been undertaking field surveys and explorations to study the faunal diversity of the states of the NE Region. It has published its findings in the form of multiple volumes under the 'State Fauna Series' covering various states of the country, which have been made available in the public domain. The following table has been constructed on the basis of data available in the above works.

It may be noted that the reports covering the fauna of Assam have not been made available. Hence, the following table does not include the above state.



Table-1.8.2: Faunal Diversity in the NE States (Other than Assam)

(In numbers)

Categories	_	achal desh	Mar	nipur	Megh	nalaya	Mizo	oram	Naga	aland	Sik	kim	Trip	oura
	Genera	Species	Genera	Species	Genera	Species	Genera	Species	Genera	Species	Genera	Species	Genera	Species
Sub-phyllum: Vertebrata														
Mammalia	58	105	55	69	83	139	61	84	61	92	63	92	33	44
Aves	NS	473	261	586	232	540	205	370	205	428	296	422	180	292
Reptilia	46	78	6	9	51	94	47	71	NS	62	23	31	33	38
Amphibia	11	39	7	14	11	33	8	13	5	10	12	21	8	17
Pisces	61	143	64	141	74	152	49	89	57	108	43	64	132	205
Sub-Total: Vertebrata	176	838	393	819	451	958	370	627	328	700	437	630	386	596
Sub-phyllum: Invertebrata														
Bryozoa	NA	NA	NA	NA	3	5	NA	NA	NA	NA	2	4	2	4
Arthropoda	398	784	769	1,366	1,805	3,901	249	377	331	713	1,730	3,922	416	642
Annelida	1	7	NA	NA	25	49	NA	NA	NA	NA	17	26	25	28
Mollusca	NA	NA	45	127	67	223	40	65	16	21	36	89	29	48
Nematoda	6	8	NS	34	49	77	63	88	10	14	76	103	64	87
Acanthocephala	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4	8	9	17
Rotifera	NA	NA	NA	NA	30	111	NA	NA	NA	NA	NA	NA	15	29
Platyhelminthes	NA	NA	NA	NA	56	83	NA	NA	NA	NA	NA	NA	29	36
Medusae	NA	NA	NA	NA	2	2	NA	NA	NA	NA	NA	NA	NA	NA
Porifera	NA	NA	NA	NA	1	1	NA	NA	NA	NA	NA	NA	31	119
Protozoa	39	72	54	86	56	128	NA	NA	NS	59	43	80	46	102
Sub-Total: Invertebrata	444	871	868	1,613	2,094	4,580	352	530	357	807	1,908	4,232	666	1,112
Total (NE Hill States)	620	1,709	1,261	2,432	2,545	5,538	722	1,157	685	1,507	2,345	4,862	1,052	1,708

 $\textbf{Source: Complied on the basis of `State Fauna Series' available in the website of the Zoological Survey of India (https://faunaofindia.nic.in/php/sfs_books_list.php)}$ 

# NOTES:

- 1. The above table has been constructed on the basis of the reports of 'State Fauna Series' made available in the website of the Zoological Survey of India. These numbers are on the basis of the reports submitted by ZSI scientists. These may have increased over the years in view of additional focus upon surveying the region's fauna.
- 2. The 'State Fauna Series' Report for Assam is not available in the above website (in September 2023). Assam data has been separately furnished for other sources.
- 3. In some instances, the number of species found in a state has been reported without mentioning the corresponding number of genera. These have been marked as 'NS' (i.e. 'not specified' in the sources). Further, the number of species includes sub-species in case of some states.
- 4. 'NA' means 'not reported' in the source documents of ZSI. This includes most of the invertebrates in the NE states, which have to be explored in the future.



It may be noted that some other studies have indicated the following species count for some classes of vertebrata in the NE states. The following include data about species numbers in Assam, but have some missing data for Sikkim. The larger picture illustrated by these numbers can supplement the table prepared on the basis of ZSI state-wise reports.

Table-1.8.3: Species Count of some Vertebrata Classes in the NE States

Class				Numbers	of Species				
	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region
Mammals	166	161	113	169	116	119	154	74	267
Aves	645	689	523	366	243	451	NA	139	788
Amphibia	46	48	17	49	19	22	NA	16	83
Pisces	271	311	325	231	202	210	194	199	422

Sources: As follows

Mammals Rahman Talukdar et al, (2021) 'Mammals of northeastern India: an updated checklist', Journal of Threatened

Taxa, 13 (4), 18059-18098

[https://threatenedtaxa.org/index.php/JoTT/article/view/6010/7458]

Aves Saikia et al (2000), 'Diversity of Bird fauna in North East India', Journal of Assam Science Society, Vol. 41, No. 4,

December 2000, pp 37-396

[https://indiabiodiversity.org/biodiv/content/documents/document-d547b841-5455-434e-8fdc-

04bb29376cc6/312.PDF]

Amphibia Sen (2004), 'Further Notes on State-wise Distribution of the Amphibian Fauna of North East India', Rec. Zool.

Survey. India: 102 (Part 3-4): 105-112

[https://faunaofindia.nic.in/PDFVolumes/records/102/03-04/0105-0112.pdf]

Pisces Goswami et al. (2012) 'Fish diversity of North East India, inclusive of the Himalayan and Indo Burma biodiversity

hotspots zones: A checklist on their taxonomic status, economic importance, geographical distribution, present status and prevailing threats', International Journal of Biodiversity and Conservation Vol. 4(15), pp. 592-613

[https://academicjournals.org/article/article1380036327\_Goswami%20et%20al.pdf]

# NOTE

The Assam Science Technology and Environment Council (ASTEC) has published the book titled 'Vertebrates of Assam – A Checklist with IUCN status'. The book includes the number of species of different vertebrates in Assam based on an extensive study of secondary sources, including the SRS reports of ZSI. The above book has mentioned the following as the number of avian species in the NE states in its introduction.

Table-1.8.3 (A): Species Count of Aves in the NE States

Category	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
Aves	738	841	586	540	500	492	612	341

Source: ASTEC (2016), 'Vertebrates of Assam – A Checklist with IUCN Status', based on different works, including works by ZSI and by the noted naturalist and ornithologist Dr. A U Choudhury on birds in some of the above states.



# **Protected Area Network in India**

India is one of the 17 mega diverse countries of the world. With only 2.4% of the world's land area, 16.7% of the world's human population and 18% of the global livestock, the country contributes about 8% of the known global biodiversity. However, this puts enormous demands on the nation's natural resources. India is home to world's largest wild tigers population and it has an unique collection of globally important and endangered species like the Asiatic lion, Asian Elephant, One-horned Rhinoceros, Gangetic River Dolphin, Snow Leopard, Kashmir Stag, Dugong, Gharial, Great Indian Bustard, Lion Tailed Macaque etc.

# **Protected Area Network in India**

The National Board for Wildlife (NBWL) is chaired by the Prime Minister of India. It provides the policy framework for wildlife conservation in the country. The National Wildlife Action Plan (2002-2016) was adopted in 2002. It emphasised people's participation and their support for wildlife conservation. India's conservation planning is based on the philosophy of identifying and protecting representative wild habitats across all the ecosystems. The Indian Constitution now places the subject of 'forests and wildlife' in the Concurrent list. The Govt. of India guides the policies and planning for wildlife conservation, while the State Forest Departments are vested with the responsibility of implementation of such national policies and plans.

There are four categories of Protected Areas in India, viz. National Parks, Sanctuaries, Conservation Reserves and Community Reserves. A network of 998 Protected Areas (PAs) has been established, extending over 173,629.52 sq. km. (5.28% of total geographic area), comprising 106 National Parks, 567 Wildlife Sanctuaries, 105 Conservation Reserves and 220 Community Reserves. In addition, 54 Tiger Reserves and 33 Elephant Reserves have been designated for species specific management of tiger and elephant habitats. Further, there are 40 World Heritage Sites (with 7 being Natural World Heritage Sites, 32 being Cultural World Heritage Sites and one being a Mixed World Heritage Site.)

The State-wise details of Protected Areas in the NE Region have been given at the following pages, along with the year of notification and area.

**Sanctuary** is an area which is of adequate ecological, faunal, floral, geo-morphological, natural or zoological significance. The Sanctuary is declared for the purpose of protecting, propagating or developing wildlife or its environment. Certain rights of people living inside the Sanctuary could be permitted. Further, during the settlement of claims, before finally notifying the Sanctuary, the Collector may, in consultation with the Chief Wildlife Warden, allow the continuation of any right of any person in or over any land within the limits of the Sanctuary.

National Park is an area having adequate ecological, faunal, floral, geo-morphological, natural or zoological significance. The National Park is declared for the purpose of protecting, propagating or developing wildlife or its environment, like that of a Sanctuary. The difference between a Sanctuary and a National Park mainly lies in the vesting of rights of people living inside. Unlike a Sanctuary, where certain rights can be allowed, in a National Park, no rights are allowed. No grazing of any livestock shall also be permitted inside a National Park; while in a Sanctuary, the Chief Wildlife Warden may regulate, control or prohibit it. In addition, while any removal or exploitation of wildlife or forest produce from a Sanctuary requires the recommendation of the State Board for Wildlife, removal etc., from a National Park requires recommendation of the National Board for Wildlife (However, as per orders of Hon'ble Supreme Court dated 9th May 2002 in Writ Petition (Civil) No. 337 of 1995, such removal/ exploitation from a Sanctuary also requires recommendation of the Standing Committee of National Board for Wildlife).



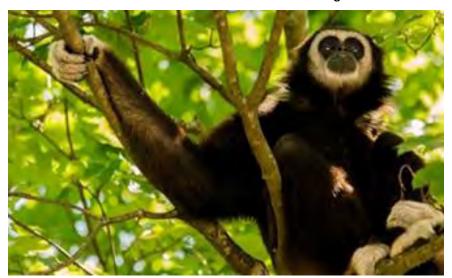
**Conservation Reserves** can be declared by the State Governments in any area owned by the Government, particularly the areas adjacent to National Parks and Sanctuaries and those areas which link one Protected Area with another. Such declaration should be made after having consultations with the local communities. Conservation Reserves are declared for the purpose of protecting landscapes, seascapes, flora and fauna and their habitat. The rights of people living inside a Conservation Reserve are not affected.

**Community Reserves** can be declared by the State Government in any private or community land, not comprised within a National Park, Sanctuary or a Conservation Reserve, where an individual or a community has volunteered to conserve wildlife and its habitat. Community Reserves are declared for the purpose of protecting fauna, flora and traditional or cultural conservation values and practices. As in the case of a Conservation Reserve, the rights of people living inside a Community Reserve are not affected.

[Source: https://www.ndrdgh.gov.in/NDR/pdf/Protected%20Area%20Network.pdf; with updated data]



The Greater One Horned Rhinoceros is emblematic of the Kaziranga National Park in Assam



The Namdapha National Park in Arunachal Pradesh harbours the northernmost lowland evergreen forests in the world at 27°N latitude along with a wide range of flora and fauna



Table-1.8.4: Protected Area Network in the NE States (National Parks & Wild Life Sanctuaries)

State	State's	ľ	National Parks	S	Wil	dlife Sanctuar	ies
	Area (sq. km)	Number	Area (sq. km)	As % of <b>State's</b> Area	Number	Area (sq. km)	As % of <b>State's</b> Area
Arunachal Pradesh	83,743	2	2,290.80	2.74	13	7,614.56	9.09
Assam	78,438	7	2,664.58	3.40	17	1,728.95	2.20
Manipur	22,327	2	140.00	0.63	7	708.14	3.17
Meghalaya	22,429	2	267.48	1.19	4	94.11	0.42
Mizoram	21,081	2	150.00	0.71	9	1,359.75	6.45
Nagaland	16,579	1	202.02	1.22	4	43.91	0.26
Sikkim	7,096	1	1,784.00	25.14	7	399.10	5.62
Tripura	10,486	2	36.71	0.35	4	603.64	5.76
Total - NE Region	262,179	19	7,535.59	2.87	65	12,552.16	4.79
Total - India	3,287,263	106	44,402.95	1.35	567	122,564.86	3.73

Source: Wildlife Institute of India, Ministry of Environment, Forest & Climate Change. Government of India

[Links: as given at below

National Parks data at: https://wii.gov.in/nwdc\_national\_parks/ Wildlife Sanctuaries data at: https://wii.gov.in/wildlife\_sanctuaries

#### Notes

- 1. The above data base pertains to the position as in January 2023.
- 2. As per the above-mentioned website link for National Parks:

'There are 106 existing national parks in India covering an area of 44,402.95 km², which is 1.35% of the geographical area of the country (National Wildlife Database, Jan. 2023). In addition to the above; 75 National Parks covering an area of 16,608 km² are proposed in the Protected Area Network Report'.

Further, as per the above-mentioned website link for Wildlife Sanctuaries:

'There are 567 existing wildlife sanctuaries in India covering an area of 122,564.86 km², which is 3.73% of the geographical area of the country (National Wildlife Database, Jan. 2023). Another 218 sanctuaries are proposed in the Protected Area Network Report covering an area of 16,829 km²'.



**Phawngpui National Park of Mizoram** 



Table-1.8.5: Protected Area Network in the NE States (Conservation Reserves & Community Reserves)

State	State's	Cons	servation Rese	erves	Com	nmunity Reser	ves
	Area (sq. km)	Number	Area (sq. km)	As % of <b>State's</b> Area	Number	Area (sq. km)	As % of <b>State's</b> Area
Arunachal Pradesh	83,743	0	0.00	0.000	9	131.60	0.157
Assam	78,438	0	0.00	0.000	0	0.00	0.000
Manipur	22,327	0	0.00	0.000	11	112.60	0.504
Meghalaya	22,429	0	0.00	0.000	74	141.69	0.632
Mizoram	21,081	0	0.00	0.000	0	0.00	0.000
Nagaland	16,579	0	0.00	0.000	114	851.78	5.138
Sikkim	7,096	1	0.06	0.001	0	0.00	0.000
Tripura	10,486	1	12.93	0.123	0	0.00	0.000
Total - NE Region	262,179	2	12.99	0.005	208	1,237.67	0.472
Total - India	3,287,263	105	5206.55	0.160	220	1,455.16	0.043

Source: Wildlife Institute of India, Ministry of Environment, Forest & Climate Change. Government of India

[Links: as given at below

Conservation Reserves data at: https://wii.gov.in/nwdc\_conservation\_reserves Community Reserves data at: https://wii.gov.in/nwdc\_community\_reserves

### Notes

1. The above data base pertains to the position as in January 2023.

2. As per the above-mentioned website link for Conservation Reserves:

'There are 105 existing Conservation Reserves in India covering an area of 5206.55 km², which is 0.16% of the geographical area of the country (National Wildlife Database, Jan. 2023)'.

Further, as per the above-mentioned website link for Community Reserves:

'There are 220 existing Community Reserves in India covering an area of 1455.16 km², which is 0.04% of the geographical area of the country (National Wildlife Database, Jan. 2023)'.



Conservation Reserves & Community Reserves have found wide acceptance in Nagaland



Table-1.8.6: Project Tiger Reserves in the NE States

Name of the Tiger	State	Year of	Year of		Area (sq. km)	
Reserve		Inclusion	Notification	Core /	Buffer /	Total Area
		under	/ Re-	Critical	Peripheral	
		Project	notification	Tiger		
		Tiger	(*)	Habitat		
Kamlang Tiger Reserve	Arunachal	2016-17	2015	671.00	112.00	783.00
	Pradesh					
Namdhapa Tiger Reserve	-Do-	1982-83	1987	1,807.82	245.00	2,052.82
Pakke Tiger Reserve	-Do-	1999-00	2012	683.45	515.00	1,198.45
Kaziranga Tiger Reserve	Assam	2008-09	2007	625.58	548.00	1,173.58
Manas Tiger Reserve	-Do-	1973-74	2008	526.22	2,310.88	2,837.10
Nameri Tiger Reserve	-Do-	1999-00	2000	320.00	144.00	464.00
Orang Tiger Reserve	-Do-	2016	2016	79.28	413.18	492.46
Dampa Tiger Reserve	Mizoram	1994-95	2007	500.00	488.00	988.00

<sup>(\*)</sup> Under Section 38 V of Wildlife Protection Act

Source: EIACP Programme Centre "Wildlife & Protected Areas Management – hosted by Wildlife Institute of India (based on information from the National Tiger Conservation Authority, New Delhi)

Link: https://wiienvis.nic.in/Database/trd\_8222.aspx

- 1. The above data reflects the status as in August 2023.
- 2. Project Tiger was launched by the Government of India in the year 1973 to save the endangered species of tiger in the country.



Project Tiger has boosted the numbers of this large cat in the country, including in the North Eastern Region



Table-1.8.7: Biosphere Reserves in the NE States

Name of Biosphere Reserve	State	Bio-geographic Zone	Area in sq. km	Date of Declaration	Inclusion in UNESCO's World network of Biosphere Reserve
Nokrek	Meghalaya	Burma Monsoon Forest (Meghalaya Hills)	820.00 [Core: 47.48 / Buffer: 227.92 / Transition: 544.60]	1 <sup>st</sup> September 1988	2009
Manas	Assam	Indo-Malayan Realm	2837.00 [Core: 391 / Buffer: 2446]	14 <sup>th</sup> March 1989	
Dibru-Saikhowa	Assam	Indian & Malayan Sub- region (Brahmaputra Valley)	765.00 [Core: 340 / Buffer: 425 ]	28 <sup>th</sup> July 1997	
Dehang Debang	Arunachal Pradesh	Indo-Malayan Realm (Eastern Himalayas)	5,111.50 [Core: 4094.80 / Buffer: 1016.70]	2 <sup>nd</sup> September 1998	
Khangchendzonga	Sikkim	Sikkim Trans-Himalaya (Central Himalayas)	2,931.12 [Core: 1819.34 / Buffer: 835.92 ]	7 <sup>th</sup> February 2000	2018

Source: 'EnviStats; Volume-I Environmental Statistics 2023', National Statistical Office, Ministry of Statistics & Programme Implementation, Government of India based on information from Ministry of Environment, Forests & Climate Change

Website: https://wiienvis.nic.in/Database/br\_8225.aspx

- 1. Biosphere reserves are sites established by countries and recognized under UNESCO's Man and the Biosphere (MAB) Programme to promote sustainable development based on local community efforts and sound science.
- 2. The programme of Biosphere Reserve was initiated by UNESCO in 1971. The purpose of the formation of the biosphere reserve is to conserve in situ all forms of life, along with its support system, in its totality, so that it could serve as a referral system for monitoring and evaluating changes in natural ecosystems.
- 3. The first biosphere reserve of the world was established in 1979, since then the network of biosphere reserves has increased across the world.





Table-1.8.8: Project Elephant Reserves in the NE States

Name of Elephant Reserve	State	Date of Notification	Total Area (sq. km)
Kameng Elephant Reserve	Arunachal Pradesh	19 <sup>th</sup> June 2002	1,892
South Arunachal Elephant Reserve	-Do-	29 <sup>th</sup> February 2008	1,957.50
Sonitpur Elephant Reserve	Assam	6 <sup>th</sup> March 2003	1,420
Dihing-Patkai Elephant Reserve	-Do-	17 <sup>th</sup> April 2003	937
Kaziranga-Karbi Anglong Elephant Reserve	-Do-	17 <sup>th</sup> April 2003	3,270
Dhansiri-Lungding Elephant Reserve	-Do-	19 <sup>th</sup> April 2003	2,740
Chirang-Ripu Elephant Reserve	-Do-	7 <sup>th</sup> March 2003	2,600
Garo Hills Elephant Reserve	Meghalaya	31st October 2001	3,500
Intanki Elephant Reserve	Nagaland	28 <sup>th</sup> February 2005	202
Singphan Elephant Reserve	-Do-	16 <sup>th</sup> August 2018	23.57

Source: EIACP Programme Centre "Wildlife & Protected Areas Management – hosted by Wildlife Institute of India (based on information from the Ministry of Environment, Forest & Climate Change)

Link: https://wiienvis.nic.in/Database/eri 8226.aspx

- 1. The above data reflects the status as in November 2022.
- 2. The Indian elephant *Elephas maximus* occurs in the central and southern Western Ghats, North-east India, eastern India and northern India and in some parts of southern peninsular India. It is found in 16 of the 28 states in the country.
- 3. The Indian elephant is included in Schedule I of the Indian Wildlife (Protection) Act, 1972 and in Appendix I of the Convention on International Trade in Endangered Species of Flora and Fauna (CITES).
- 4. Project Elephant was launched by the Government of India in the year 1992 as a Centrally Sponsored Scheme with following objectives: (a) to protect elephants, their habitat & corr1idors; (b) to address issues of man-animal conflict; and (c) welfare of captive elephants.
- 5. The Ministry of Environment, Forest and Climate Change provides the financial and technical support to major elephant range states in the country through Project Elephant.





Table-1.8.9: Ramsar Wetland Sites in the NE States

Name of Wetland Site	State	Date of Notification	Total Area (sq. km)
Deepor Beel	Assam	19 <sup>th</sup> February 2002	40.00
Loktak Lake	Manipur	23 <sup>rd</sup> March 1990	266.00
Pala Wetland	Mizoram	31st August 2021	18.50
Rudrasagar Lake	Tripura	8th November 2005	2.40

Source: EIACP Programme Centre "Wildlife & Protected Areas Management – hosted by Wildlife Institute of India (based on information from the Ministry of environment, Forest & Climate Change)

Link: https://wiienvis.nic.in/Database/ramsar\_wetland\_sites\_8224.aspx

- 1. The above data reflects the status as in November 2022.
- 2. The Ramsar Convention is an international treaty for the conservation and sustainable utilization of wetlands, recognizing the fundamental ecological functions of wetlands and their economic, cultural, scientific, and recreational value.
- 3. Additional information about the above sites is available at: https://www.ramsar.org/country-profile/india



The Loktak Lake in Manipur (at above) is a Ramsar Wetland Site as is Deepor Beel in Assam (at below)





Table-1.8.10: World Heritage Sites in the NE States

Name of World Heritage Site	State	Year of Notification	Total Area (sq. km)
Natural World Heritage Sites			
Kaziranga National Park	Assam	1985	429.96
Manas Wild Life Sanctuary	Assam	1985	391.00
Mixed World Heritage Sites			
Khangchendzonga National Park	Sikkim	2016	Not available

Source: EIACP Programme Centre "Wildlife & Protected Areas Management – hosted by Wildlife Institute of India (based on information from *the UNESCO* World Heritage Convention)

Link: https://wiienvis.nic.in/Database/whs\_pas\_8227.aspx

- 1. The above data reflects the status as in December 2022.
- 2. A UNESCO World Heritage Site is a place that is listed by the United Nations Educational, Scientific and Cultural Organization as of special cultural or physical significance.
- 3. Additional information about the above sites is available at: http://whc.unesco.org/en/statesparties/in-title=World



Khangchendzonga National Park in Sikkim



**Manas National Park in Assam** 



# 1.9. Demographic & Social Indicators of the States of NE Region

## **Demographic Indicators**

Demography is defined as the 'statistical study of populations, especially of human populations'. Such study uses various sources like census data, sample surveys, and statistical models to analyze the size, structure and trends of populations. In India, the Office of the Registrar General and Census Commissioner of India, which functions under the Ministry of Home Affairs, Government of India, is assigned with the responsibility of arranging, conducting and analysing the results of the demographic surveys of India such as (a) the Census of India; (b) the annual demographic surveys under the Sample Registration System; and (c) the Civil Registration System. The demographic analysis of the States and Union Territories of India, including the states located in the NE Region, is based on the above sources.

The decadal **Census of India** is one of the largest administrative and statistical exercises undertaken in the world. The first Pan India Census was undertaken in 1872 in a non-synchronous manner, while the first synchronous decennial Population Census was conducted in 1881. The exercise has been carried out thereafter every decade despite World Wars, famines, natural calamities, elections etc. However, the Census of 2021 had to be postponed due to the impact of the global pandemic (COVID-19).

The **Sample Registration System** (SRS) is a large-scale demographic survey for providing reliable annual estimates of birth rate, death rate and other fertility & mortality indicators at the national and sub-national levels. It is a large-scale demographic survey conducted every year by Office of the Registrar General, India in all States and Union Territories. The results of the above surveys are furnished in the 'SRS Bulletin', which gives the estimates of Birth Rate, Death Rate, Natural Growth Rate and Infant Mortality Rate (IMR) for the States and Union Territories on a year-wise basis.

The **Civil Registration System** (CRS) is based on the continuous, permanent, compulsory recording of the occurrence and characteristics of vital events, like births, deaths and still births. In India the registration of births and deaths is carried out under provisions of the Registration of Birth and Death (RBD) Act, 1969. The Registrar General, India is entrusted with the responsibilities of coordinating and unifying the activities of the Chief Registrar of Births and Deaths. The Chief Registrar of Births and Deaths in each State and Union Territory is the implementing authority.

The following pages give the major demographic indicators for the states of the NE Region, such as state-wise population, rural population, urban population, decadal growth of population, sex ratio, and literacy rate. This has been done covering all the censuses since 1951 till 2011, which can be used to assess the demographic trends of these states. In addition, the following have been covered from the SRS: Estimated Birth Rate, Death Rate, Natural Growth and Infant Mortality Rate, Estimated Death Rate by Sex and Residence (Rural / Urban), Number of Registered Births, and Sex Ratio at Birth.

**Population Projections:** In addition, a Technical Group was constituted by the National Commission on Population (NCP) to prepare the population projections for the period 2017-2036 with the mandate of reviewing the methodology of population projections adopted in the past and to



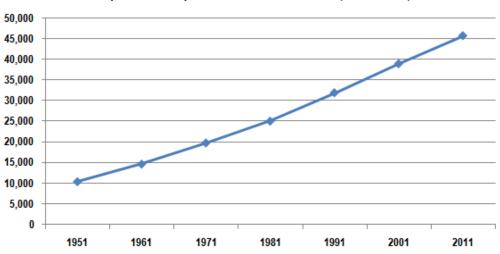
prepare fresh projections. The Report of the above Technical Group has been referenced in order to obtain the projected total populations of the NE states from 2011 till 2023.

**Multi-dimensional Poverty:** The NITI Aayog has been working on the theme of multi-dimensional poverty. This captures overlapping deprivations in health, education, and living standards. It complements income poverty measurements because it measures and compares deprivations directly. The 'India National Multi-Dimensional Poverty Index — Progress Review 2023' published by NITI Aayog captures the changes in multidimensional poverty between the survey periods of NFHS-4 (2015-16) and NFHS-5 (2019-21). This chapter gives the MPI for the states of the NE Region.

**Social Indicators**; The main social indicators of the NE states have been furnished at Chapter-5. These include education, health and family welfare, water supply and sanitation, and employment.



Ensuring the proper education and health of the younger generation can yield a demographic dividend for the North Eastern Region of India



Graph-1.9.1: Population of the NE States (1951-2011)

Y-axis gives the Population of all the NE States in Thousands



Table-1.9.1: Total Population of the NE States (1951-2011)

(In Thousands)

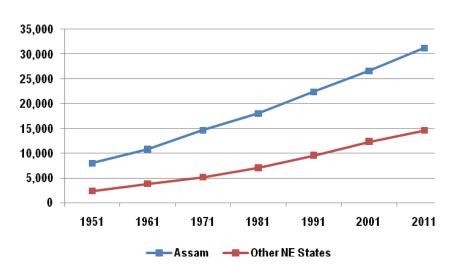
State	1951	1961	1971	1981	1991	2001	2011
Arunachal Pradesh	NA	337	468	632	865	1,098	1,384
Assam	8,029	10,837	14,625	18,041	22,414	26,656	31,206
Manipur	578	780	1,073	1,421	1,837	2,294	2,856
Meghalaya	606	769	1,012	1,336	1,775	2,319	2,967
Mizoram	196	266	332	494	690	889	1,097
Nagaland	213	369	516	775	1,210	1,990	1,979
Sikkim	138	162	210	316	406	541	611
Tripura	639	1142	1,556	2,053	2,757	3,199	3,674
Total - NE Region	10,399	14,662	19,792	25,068	31,954	38,986	45,774
Total - India	361,088	439,235	548,160	683,329	846,421	1,028,737	1,210,855

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from Censuses of India released by the Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India

- 1. In the areas now forming the state of Arunachal Pradesh, the census was conducted for the first time in 1961. The population for 1951 has been marked as 'NA' (meaning Not Available). 'Total-NE Region' for 1951 excludes the population in areas now forming Arunachal Pradesh for that year.
- 2. The 1981 Census could not be held in Assam. Its total population for 1981 has been worked out by an interpolation method.
- 3. India and Manipur figures for 2011 include the estimated populations of three sub-divisions *viz.*, Mao Maram, Paomata and Purul of the Senapati district of Manipur as census result of 2001 in these three sub-divisions were cancelled due to technical and administrative reasons.
- 4. The populations of states that were formed from the composite Assam state, like Nagaland in 1963, and Meghalaya in 1972, have been obtained from the populations of areas forming these states before their constitution. Arunachal Pradesh (which was previously a directly administered agency) and Mizoram were initially constituted as Union Territories in 1972, before being conferred statehood in 1987.
- 5. Sikkim joined India in 1975. This state was included in the North Eastern Council in 2002. Its population has been included in the row marked 'Total-NE Region' from 1951 onward to give a comparative estimate of the growth of population in areas now forming the NE Region. This is despite the prior administrative status of Sikkim. The data for the population in Sikkim have been taken from the above-mentioned source document.
- 6. In view of the comments at above, the figures in the row marked 'Total-NE Region' are to be interpreted as 'the population of the areas now forming a part of the NE Region, irrespective of their prior administrative position'. This row includes the population of Sikkim in all the above years.

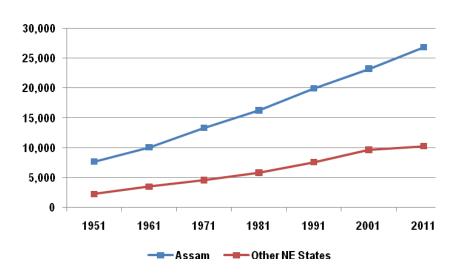


**Graph-1.9.2: Population of Assam and Other NE States (1951-2011)** 



Y-axis gives the Population in Thousands

Graph-1.9.3: Rural Population of Assam and Other NE States (1951-2011)



Y-axis gives the Population in Thousands

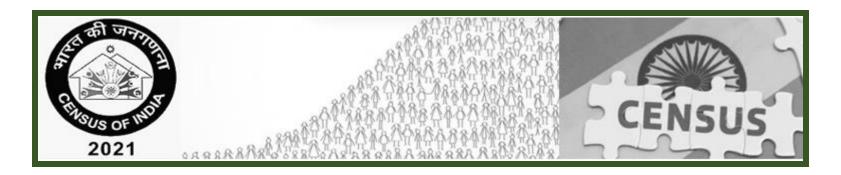




Table-1.9.2: Rural Population of the NE States (1951-2011)

(In Thousands)

State	1951	1961	1971	1981	1991	2001	2011
Arunachal Pradesh	NA	337	450	590	754	870	1066
Assam	7,684	10,056	13,336	16,259	19,927	23,216	26,807
Manipur	575	712	931	1,045	1,332	1,718	1,736
Meghalaya	547	652	865	1,094	1,445	1,865	2,371
Mizoram	189	252	295	372	372	448	525
Nagaland	209	350	465	655	1,001	1,647	1,408
Sikkim	135	155	190	265	369	481	457
Tripura	596	1,039	1,394	1,827	2,335	2,653	2,712
Total - NE Region	9,935	13,553	17,926	22,107	27,535	32,898	37,082
Total - India	298,644	360,298	439,046	523,867	628,856	742,618	833,463

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from Censuses of India released by the Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India

- 1. Rural population is population residing in areas not forming the part of any urban area (including Census Towns) at the time of the Census.
- 2. In the areas now forming the state of Arunachal Pradesh, the census was conducted for the first time in 1961. The population for 1951 has been marked as 'NA' (meaning 'Not Available'). 'Total-NE Region' for 1951 excludes the rural population in areas now forming Arunachal Pradesh for that year.
- 3. The 1981 Census could not be held in Assam. Its rural population for 1981 has been worked out by an interpolation method.
- 4. India and Manipur figures for 2011 include the estimated populations of three sub-divisions *viz.*, Mao Maram, Paomata and Purul of the Senapati district of Manipur as census result of 2001 in these three sub-divisions were cancelled due to technical and administrative reasons.
- 5. The rural populations of states that were formed from the composite Assam state (like Nagaland in 1963, and Meghalaya in 1972) have been obtained from the rural populations of areas forming these states before their constitution. Arunachal Pradesh (which was previously a directly administered agency) and Mizoram were initially constituted as Union Territories in 1972, before both were conferred statehood in 1987.
- 6. Sikkim joined India in 1975. This state was included in the North Eastern Council in 2002. Its rural population has been included in the row marked 'Total-NE Region' from 1951 onward to give a comparative estimate of the growth of rural population in areas now forming the NE Region. This is despite the prior administrative status of Sikkim. The data for the rural population in Sikkim have been taken from the above-mentioned source document.
- 7. In view of the comments at above, the figures in the row marked 'Total-NE Region' are to be interpreted as 'rural population of the areas now forming a part of the NE Region, irrespective of their prior administrative position'. This row includes the rural population of Sikkim in all the above years..



Table-1.9.3: Urban Population of the NE States (1951-2011)

(In Thousands)

State	1951	1961	1971	1981	1991	2001	2011
Arunachal Pradesh	NA	NA	17	41	111	228	317
Assam	345	781	1,289	1,782	2,488	3,439	4,399
Manipur	3	68	141	375	506	576	834
Meghalaya	59	117	147	241	330	454	595
Mizoram	7	14	38	122	318	441	572
Nagaland	4	19	51	120	208	343	571
Sikkim	3	7	20	51	37	60	154
Tripura	43	103	162	226	422	546	961
Total - NE Region	464	1,109	1,865	2,958	4,420	6,087	8,403
Total - India	62,444	78,937	109,114	159,463	217,566	286,120	377,106

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from Censuses of India released by the Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India

- 1. Urban population is population residing in areas forming the part of any urban area (including Census Towns) at the time of the Census.
- 2. In the areas now forming the state of Arunachal Pradesh, the census was conducted for the first time in 1961. Its urban population for 1951 and 1961 has been marked as 'NA' (meaning 'Not Available'). 'Total-NE Region' for 1951 excludes the urban population in areas now forming Arunachal Pradesh for the above years.
- 3. The 1981 Census could not be held in Assam. Its urban population for 1981 has been worked out by an interpolation method.
- 4. India and Manipur figures for 2011 include the estimated populations of three sub-divisions *viz.*, Mao Maram, Paomata and Purul of the Senapati district of Manipur as census result of 2001 in these three sub-divisions were cancelled due to technical and administrative reasons.
- 5. The urban populations of states that were formed from the composite Assam state (like Nagaland in 1963, and Meghalaya in 1972) have been obtained from the urban populations of areas forming these states before their constitution. Arunachal Pradesh (which was previously a directly administered agency) and Mizoram were initially constituted as Union Territories in 1972, before both were conferred statehood in 1987.
- 6. Sikkim joined India in 1975. This state was included in the North Eastern Council in 2002. Its urban population has been included in the row marked 'Total-NE Region' from 1951 onward to give a comparative estimate of the growth of urban population in areas now forming the NE Region. The data for the urban population in Sikkim have been taken from the above-mentioned source document.
- 7. In view of the comments at above, the figures in the row marked 'Total-NE Region' are to be interpreted as 'urban population of the areas now forming a part of the NE Region, irrespective of their prior administrative position'. This row includes the urban population of Sikkim in all the above years.



Table-1.9.4: Decadal Growth Rate of Population in the NE States (1951-2011)

(As a Percentage)

State	1951-61	1961-71	1971-81	1981-91	1991-2001	2001-11
Arunachal Pradesh	NA	38.91	35.15	36.83	27.00	26.03
Assam	34.98	34.95	23.36	24.24	18.92	17.07
Manipur	35.04	37.53	32.46	29.29	24.86	24.50
Meghalaya	27.03	31.50	32.04	32.86	30.65	29.95
Mizoram	35.61	24.93	48.55	39.70	28.82	23.48
Nagaland	73.20	39.88	50.05	56.08	64.53	-0.58
Sikkim	17.76	29.38	50.77	28.47	33.06	12.89
Tripura	78.71	36.28	31.92	34.30	16.03	14.84
Growth Rate - NE Region	40.99	34.99	26.66	27.47	22.01	17.41
Growth Rate - India	21.51	24.80	24.66	23.87	21.54	17.70

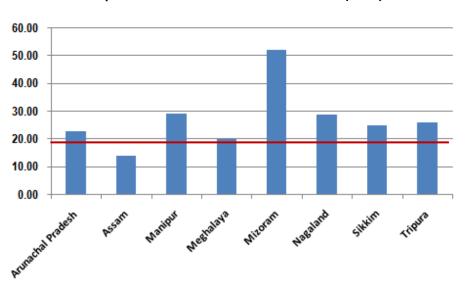
Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from Censuses of India released by the Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India

- 1. In the areas now forming the state of Arunachal Pradesh, the census was conducted for the first time in 1961. Hence, the decadal growth rate of population for the period 1951-61 has been marked as 'NA' (meaning 'Not Available'). The computation of the decadal growth rate of population for areas now forming the NE Region (i.e. Rate-NE Region') for the period 1951-61 excludes the growth of population in areas now forming Arunachal Pradesh.
- 2. The 1981 Census could not be held in Assam. Its decadal growth rate of population for the periods 1971-1981 and 1981-91 have been computed from the population of 1981 worked out by an interpolation method.
- 3. India and Manipur figures for 2011 include the estimated populations of three sub-divisions *viz.*, Mao Maram, Paomata and Purul of the Senapati district of Manipur as census result of 2001 in these three sub-divisions were cancelled due to technical and administrative reasons.
- 4. The decadal growth rate of population for the states that were formed from the composite Assam state (like Nagaland in 1963, and Meghalaya in 1972) have been obtained from the populations of areas forming these states before their constitution. Arunachal Pradesh (which was previously a directly administered agency) and Mizoram were initially constituted as Union Territories in 1972, before both were conferred statehood in 1987.
- 5. Sikkim joined India in 1975. This state was included in the North Eastern Council in 2002. Its figures for the decadal growth rate of population have been included in the row marked 'Total-NE Region' from 1951-61 onward to give a comparative estimate of the growth rate of population during various decades in areas now forming the NE Region. The data for the decadal growth rate of population in Sikkim have been taken from the above-mentioned source document.
- 6. In view of the comments at above, the figures in the row marked 'Growth Rate-NE Region' are to be interpreted as 'growth rate of population of the areas now forming a part of the NE Region, irrespective of their prior administrative position'. These rates have been derived from the data furnished at Table-1.9.1.

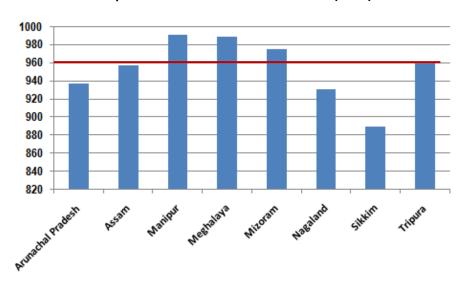




**Graph-1.9.4: Urbanization in the NE States (2011)** 



Graph-1.9.5: Sex Ratio of the NE States (2011)



Y-axis gives the Urban Population of the State as a Percentage of Total Population

Y-axis gives the Sex Ratio of the State

NOTE: Red line indicates the average for the NE Region in the above graphs



Table-1.9.5: Sex-Ratio of the NE States (1951-2011)

(Females per Thousand Males)

State	1951	1961	1971	1981	1991	2001	2011
Arunachal Pradesh	NA	894	861	862	859	893	938
Assam	868	869	896	910	923	935	958
Manipur	1,036	1,015	980	971	958	978	992
Meghalaya	949	937	942	954	955	972	989
Mizoram	1,041	1,009	946	919	921	935	976
Nagaland	999	933	871	863	886	900	931
Sikkim	907	904	863	835	878	875	890
Tripura	904	932	943	946	945	948	960
Sex Ratio - NE Region	890	889	905	915	925	937	960
Sex Ratio - India	946	941	930	934	927	933	943

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from Censuses of India released by the Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India

- In the areas now forming the state of Arunachal Pradesh, the census was conducted for the first time in 1961. The sexratio for 1951 has been marked as 'NA' (meaning 'Not Available'). 'Sex Ratio-NE Region' for 1951 excludes the male & female population figures of areas now forming Arunachal Pradesh for that year, while deriving the sex ratio for the region.
- 2. The 1981 Census could not be held in Assam. Its sex ratio for 1981 has been worked out by an interpolation method.
- 3. India and Manipur figures for 2011 include the estimated populations of three sub-divisions *viz.*, Mao Maram, Paomata and Purul of the Senapati district of Manipur as census result of 2001 in these three sub-divisions were cancelled due to technical and administrative reasons.
- 4. The sex ratio of states that were formed from the composite Assam state (like Nagaland in 1963, and Meghalaya in 1972) have been obtained from the populations of males and females of areas forming these states before their constitution. Arunachal Pradesh (which was previously a directly administered agency) and Mizoram were initially constituted as Union Territories in 1972, before both were conferred statehood in 1987.
- 5. Sikkim joined India in 1975. This state was included in the North Eastern Council in 2002. Its sex-ratio has been included in the row marked 'Sex Ratio-NE Region' from 1951 onward to give a comparative estimate of the variation of sex ratio in areas now forming the NE Region. The data for the sex-ratio in Sikkim have been taken from the above-mentioned source document.
- 6. In view of the comments at above, the figures in the row marked 'Sex Ratio-NE Region' are to be interpreted as 'sexratio of population in the areas now forming a part of the NE Region, irrespective of their prior administrative position'. These ratios have been derived from the data furnished at Table-1.9.1 and at above.





Table-1.9.6: Literacy Rate of the NE States (1951-2011)

(In Percentage)

State	1951	1961	1971	1981	1991	2001	2011
Arunachal Pradesh	NA	7.13	11.29	25.55	41.59	54.34	65.39
Assam	18.53	32.95	33.94	NA	52.89	63.25	72.19
Manipur	12.57	36.04	38.47	49.66	59.89	70.50	76.90
Meghalaya	NA	26.92	29.49	42.05	49.10	62.56	74.43
Mizoram	31.14	44.01	53.80	59.88	82.26	88.80	91.33
Nagaland	10.52	21.95	33.78	50.28	61.65	66.59	79.60
Sikkim	NA	NA	17.74	34.05	56.94	68.81	81.42
Tripura	NA	20.24	30.98	50.10	60.44	73.19	87.22
Literacy Rate - NE Region		31.12	33.35		54.44	65.03	74.53
Literacy Rate - India	18.33	28.30	34.45	43.57	52.21	64.84	72.99

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from Censuses of India released by the Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India

- 1. In the areas now forming the state of Arunachal Pradesh, the census was conducted for the first time in 1961. The literacy rate for 1951 has been marked as 'NA' (meaning 'Not Available'). 'Literacy Rate-NE Region' for 1951 excludes the literate and illiterate population figures of areas now forming Arunachal Pradesh for that year, while deriving the literacy ratio for the region.
- 2. The 1981 Census could not be held in Assam. Its literacy rate for 1981 has not been given. Further, literacy rates are not available for the following states for the indicated census years: Meghalaya for 1951; Sikkim for 1951 and 1961; and Tripura for 1951.
- 3. India and Manipur figures for 2011 include the estimated populations of three sub-divisions *viz.*, Mao Maram, Paomata and Purul of the Senapati district of Manipur as census result of 2001 in these three sub-divisions were cancelled due to technical and administrative reasons.
- 4. The literacy rates of states that were formed from the composite Assam state (like Nagaland in 1963, and Meghalaya in 1972) have been obtained from the populations of literate and illiterate persons of areas forming these states before their constitution. Arunachal Pradesh (which was previously a directly administered agency) and Mizoram were initially constituted as Union Territories in 1972, before both were conferred statehood in 1987.
- 5. Sikkim joined India in 1975. This state was included in the North Eastern Council in 2002. Its literacy has been included in the row marked 'Literacy Rate-NE Region' from 1951 onward to give a comparative estimate of the variation of literacy rates in areas now forming the NE Region. The data for the literacy rates in Sikkim have been taken from the above-mentioned source document.
- 6. In view of the comments at above, the figures in the row marked 'Literacy Rates-NE Region' are to be interpreted as the 'Literacy Rates of the population living in the areas now forming a part of the NE Region, irrespective of their prior administrative position'. These rates have been derived from the data furnished at Table-1.9.1 and at above.
- 7. The 'Literacy Rates NE Region' have not been indicated for 1981 as the literacy rate of Assam (which had nearly 72% of the NE population in that census year) is not available. Further, as the literacy rates of many states are not available for 1951, the same has not been indicated for the NE Region in the above year.



Table-1.9.7: Estimated Birth Rate, Death Rate, Natural Growth Rate and Infant Mortality Rate, in the NE States (2020)

(Per Thousand)

State		Birth Rate			Death Rate		Natu	ıral Growth I	Rate	Infant Mortality Rate		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Arunachal Pradesh	17.3	17.8	15.0	5.7	5.9	4.4	11.6	11.8	10.6	21	22	13
Assam	20.8	21.9	14.3	6.2	6.4	5.4	14.5	15.5	8.9	36	39	17
Manipur	13.3	13.5	12.8	4.3	4.0	4.8	9.0	9.5	8.0	6	6	5
Meghalaya	22.9	25.1	12.9	5.3	5.5	4.4	17.6	19.6	8.5	29	30	16
Mizoram	14.4	16.8	11.7	4.2	3.8	4.6	10.2	13.0	7.1	3	3	3
Nagaland	12.5	12.9	11.8	3.7	3.9	3.5	8.8	9.0	8.4	4	7	NA
Sikkim	15.6	14.0	18.2	4.1	4.3	3.7	11.6	9.7	14.5	5	8	1
Tripura	12.6	13.4	10.7	5.7	5.4	6.5	6.9	8.0	4.2	18	18	17
Average Rate for India	19.5	21.1	16.1	6.0	6.4	5.1	13.5	14.7	11.0	28	31	19

Source: SRS Bulletin (Volume-55 No.-1, May 2022), Sample Registration System, Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India Notes

- 1. Birth Rate is a crude measure of fertility of a population and is a crucial determinant of population growth. It gives the number of live births per thousand population in a given region and year.
- 2. Mortality is one of the basic components of population change and the related data is essential for demographic studies and public health administration. Death rate is one of the simplest measures of mortality and is defined as the number of deaths per thousand population in a given region and time period.
- 3. The Infant Mortality Rate (IMR), which is widely accepted as a crude indicator of the overall health scenario of a country or a region, is defined as the infant deaths (less than one year) per thousand live births in a given time period and for a given region.
- 4. Infant mortality rates for smaller states and Union Territories (with populations of less than 10 million persons as per the 2011 Census) are based on three-year period 2018-20. All states of the NE Region, except Assam, are small states as per the above definition.
- 5. 'NA' means 'Not Applicable' as no infant death was recorded in the respective sample units for the year 2020.
- 6. Gross Natural addition to the Population = Total Registered Births Total Registered Deaths, assuming no migration.



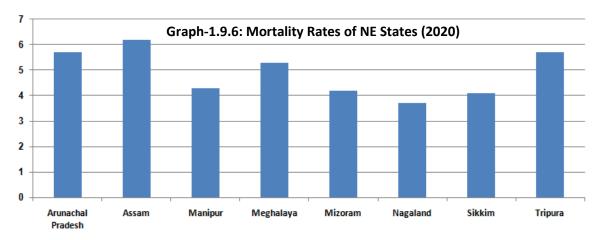
Table-1.9.8: Estimated Death Rate by Sex & Residence in the NE States (2020)

(Per Thousand)

State		Total			Rural		Urban			
	Total	Male	Female	Total	Male	Female	Total	Male	Female	
Arunachal Pradesh	5.7	5.9	5.4	5.9	6.2	5.7	4.4	4.5	4.2	
Assam	6.2	6.7	5.8	6.4	6.8	5.9	5.4	5.9	4.9	
Manipur	4.3	5.1	3.5	4.0	4.8	3.2	4.8	5.6	4.1	
Meghalaya	5.3	5.8	4.9	5.5	6.0	5.0	4.4	4.7	4.2	
Mizoram	4.2	4.5	3.8	3.8	3.9	3.7	4.6	5.2	4.0	
Nagaland	3.7	4.3	3.2	3.9	4.4	3.4	3.5	4.0	2.9	
Sikkim	4.1	4.5	3.6	4.3	4.8	3.8	3.7	3.9	3.4	
Tripura	5.7	6.2	5.2	5.4	6.0	4.8	6.5	6.8	6.1	
Average Rate for India	6.0	6.6	5.4	6.4	7.0	5.8	5.1	5.7	4.5	

Source: SRS Bulletin (Volume-55 No.-1, May 2022), Sample Registration System, Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India Notes

1. Mortality is one of the basic components of population change and the related data is essential for demographic studies and public health administration. Death rate is one of the simplest measures of mortality and is defined as the number of deaths per thousand population in a given region and time period.



Y-axis gives the Mortality Rate per Thousand Population in 2020



Table-1.9.9: Number of Registered Births in the NE States (2011-20)

(Number of Registered Births)

State	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Arunachal Pradesh	32,513	41,619	42,261	43,246	62,058	47,963	95,539	77,249	46,837	39,493
Assam	6,00,656	6,12,576	6,88,458	7,23,482	10,05,681	7,34,454	7,08,744	7,67,856	7,62,318	7,51,694
Manipur	28,762	30,172	47,615	58,756	59,703	N.A.	74,179	68,733	30,120	23,895
Meghalaya	92,994	1,02,012	76,616	75,223	87,242	N.A.	75,118	86,999	1,30,255	1,12,464
Mizoram	25,420	26,042	24,584	24,516	24,786	22,497	20,984	20,984	23,808	23,320
Nagaland	45,669	45,709	45,769	58,950	79,539	72,984	69,121	47,357	77,706	46,079
Sikkim	8,588	8,591	8,589	8,057	7,878	7,132	7,124	7,035	6,639	7,189
Tripura	44,615	46,449	46,498	45,741	51,930	43,334	79,200	73,575	72,053	66,589
Total-NE Region	8,79,217	9,13,170	9,80,390	10,37,971	13,78,817	9,28,364	11,30,009	11,49,788	11,49,736	10,70,723
Total- India	2,18,36,920	2,19,51,519	2,24,82,951	2,30,01,523	2,31,36,145	2,22,00,991	2,21,04,418	2,32,69,383	2,48,20,886	2,42,22,444

Source: 'Vital Statistics of India based on the Civil Registration System', Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India Notes

- 1. Civil Registration System (CRS) in India is the unified process of continuous, permanent, compulsory and universal recording of the vital events (births, deaths, stillbirths) and characteristics thereof.
- 2. Births can include live birth or still birth.
- 3. Live Birth is 'Complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which, after such expulsion or extraction, breathes or shows any other evidence of life, and each product of such birth is considered live-born'.
- 4. Foetal death where a product of conception has attained at least the prescribed period of gestation.



Table-1.9.10: Sex Ratio at Birth (SRB) in the NE States (2020)

(Female Babies per Thousand Male Babies)

State	Sex Ratio at Birth
Arunachal Pradesh	1,011
Assam	956
Manipur	880
Meghalaya	922
Mizoram	954
Nagaland	953
Sikkim	NA
Tripura	974
SRB-NE Region	941

Source: 'Vital Statistics of India based on the Civil Registration System', Office of the Registrar General and Census Commissioner, Ministry of Home Affairs, Government of India

### NOTES

- 1. Civil Registration System (CRS) in India is the unified process of continuous, permanent, compulsory and universal recording of the vital events (births, deaths, stillbirths) and characteristics thereof.
- 2. The above figures are based on the registered births.
- 3. NA means 'Not Available'
- 4. Sex Ratio of Registered Births is arrived at after deducting figures of delayed Registration of more than 1 year from the respective Total Registered Births.
- 5. Sex Ratio of Registered Birth
  - SRB (Registered) = [Number of Female Births registered during the Year] / [Number of Male Births registered during the Year] x 1000
  - The delayed Registered Birth events of more than one year have been duly deducted for arriving at the sex ratio of Registered Births.
- 6. Sex Ratio at Birth for NE Region excludes Sikkim, since SRB for this state is not available.







The Sex Ratio at Birth was 941 in 2020, i.e. 941 female babies were born that year for every 1,000 male babies



Table-1.9.11: Projected Total Population of the NE States (2011-23)

(In Thousands)

Year	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region	Total-India
2011	1,384	31,206	2,856	2,967	1,097	1,979	611	3,674	45,774	12,10,855
2012	1,399	31,598	2,887	2,999	1,109	2,000	617	3,714	46,323	12,26,901
2013	1,414	31,991	2,918	3,032	1,121	2,022	624	3,754	46,876	12,42,942
2014	1,429	32,383	2,949	3,064	1,133	2,043	631	3,794	47,426	12,58,985
2015	1,444	32,776	2,980	3,096	1,145	2,065	637	3,834	47,977	12,75,030
2016	1,459	33,168	3,012	3,129	1,157	2,086	644	3,874	48,529	12,91,074
2017	1,474	33,543	3,042	3,161	1,169	2,108	650	3,914	49,061	13,05,463
2018	1,489	33,918	3,073	3,192	1,181	2,129	657	3,953	49,592	13,19,844
2019	1,504	34,293	3,103	3,224	1,192	2,150	664	3,992	50,122	13,34,235
2020	1,519	34,668	3,134	3,256	1,204	2,171	670	4,032	50,654	13,48,616
2021	1,533	35,043	3,165	3,288	1,216	2,192	677	4,071	51,185	13,63,006
2022	1,548	35,378	3,194	3,318	1,227	2,213	683	4,109	51,670	13,75,586
2023	1,562	35,713	3,223	3,349	1,238	2,233	689	4,147	52,154	13,88,163

Source: Technical Group on Population Projections, 'Population Projections for India and States 2011-36' – Report published by the National Commission on Population, Ministry of Health & Family Welfare, Government of India

#### NOTES

- 1. Population projection is a scientific attempt to peep into the future population scenario, conditioned by certain assumptions using past data. Assumptions used and their holding true in future, is a critical condition in this exercise.
- 2. The Cohort Component Method is the universally accepted method of making population projections because growth of population is determined by fertility, mortality and migration rates. Twenty-one States and one UT have been considered and applied the Cohort Component method. These states include Assam.
- 3. The projection of the seven north-eastern states (excluding Assam) has also been carried out as a whole using the Cohort Component Method.
- 4. The methodology and assumptions made by the Technical Group have been detailed at Page Nos. 17 22 of the above source document, and may be referred to if needed. The source document is available at: https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload\_compressed\_0.pdf



Table-1.9.12: Salient Population Parameters used in the Population Projections (Based on the Census of 2011)

State	Total Population India's To		Population in the Broad Age Groups			Sex Ratio at Birth	9		Total Fertility	Life Expectancy (2001-2011)		Populatio n Sex
State	(2011) in Thousands	Population	0-14	15-59	60+	2009 (Note1)	Male	Female	Rate (2009-2011)	Male	Female	Ratio 2011 (*)
Assam	31,206	2.58	10,255	18,956	1,994	926	-0.07	-0.05	2.5	61.2	63.6	958
Other NE States	14,567	1.20	4,758	8,919	890	931	0.10	0.05	1.9	69.1	73.4	963
Total-NE Region	45,773	3.78	15,013	27,875	2,884		0.03	0.00		130.3	137	960
Total- India	1210,855	100.0	372,444	730,072	108,339	906	0.00	0.00	2.5	64.9	68.2	943

<sup>(\*)</sup> Females per 1000 Males

Source: Technical Group on Population Projections, 'Population Projections for India and States 2011-36' – Report published by the National Commission on Population, Ministry of Health & Family Welfare, Government of India based on the findings of the Census of India 2011 and other reports.

### NOTES

- 1. Sex Ratio at Birth
  - SRB (Registered) = [Number of Female Births registered during the Year] / [Number of Male Births registered during the Year] x 1000
  - The delayed Registered Birth events of more than one year have been duly deducted for arriving at the sex ratio of Registered Births.
- 2. Total Fertility Rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with age-specific fertility rates of the specified year.
- 3. **Life Expectancy (at birth) is 'the average number of years** that a newborn could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his or her birth, for a specific year, in a given country, territory, or **geographic area**'.



Table-1.9.13: Demographic Indicators of the NE States (2011-25)

Year	Unit	Assam	NE States (excluding Assam)	All-India
2011-15				
Population Growth Rate	In %	12.2	10.6	12.8
Crude Birth Rate (CBR)	Per 1000	20.3	15.6	20.1
Crude Death Rate (CDR)	Per 1000	7.5	5.0	7.2
Infant Mortality Rate (IMR)	Per 1000	51.4	31.8	42.9
Total Fertility Rate (TFR)	In Nos. / Female	2.34	1.79	2.37
Life Expectancy of Males	In Years	63.51	70.51	66.87
Life Expectancy of Females	In Years	66.22	73.88	69.96
2016-20				
Population Growth Rate	In %	11.0	9.9	10.8
Crude Birth Rate (CBR)	Per 1000	18.8	15.2	17.9
Crude Death Rate (CDR)	Per 1000	7.3	5.3	7.1
Infant Mortality Rate (IMR)	Per 1000	45.7	29.1	38.5
Total Fertility Rate (TFR)	In Nos. / Female	2.17	1.70	2.13
Life Expectancy of Males	In Years	65.51	71.31	68.37
Life Expectancy of Females	In Years	68.22	74.88	71.46
2021-25				
Population Growth Rate	In %	9.3	9.1	9.0
Crude Birth Rate (CBR)	Per 1000	17.1	14.7	16.0
Crude Death Rate (CDR)	Per 1000	7.2	5.7	7.0
Infant Mortality Rate (IMR)	Per 1000	41.5	26.5	35.3
Total Fertility Rate (TFR)	In Nos. / Female	2.0	1.65	1.94
Life Expectancy of Males	In Years	67.01	72.11	69.37
Life Expectancy of Females	In Years	69.72	75.88	72.66

Source: **Technical Group on Population Projections, 'Population Projections for India and States 2011-36' –** Report published by the National Commission on Population, Ministry of Health & Family Welfare, Government of India

- 1. Crude Birth Rate: It indicates the number of live births occurring during the year, per 1,000 population, with the population being estimated at the midyear point.
- 2. Crude Death Rate: It indicates the number of deaths occurring during the year, per 1,000 population, with the population being estimated at the midyear point.
- 3. Subtracting the crude death rate from the crude birth rate provides the rate of natural increase, which is equal to the rate of population change in the absence of migration.
- 4. Infant Mortality Rate: This is defined as the infant deaths (of infants aged less than one year) per thousand live births in a given time period and for a given region.
- 5. Total Fertility Rate: It represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with age-specific fertility rates of the specified year.
- 6. Life Expectancy: Life Expectancy (at birth) is 'the average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his or her birth, for a specific year, in a given country, territory, or geographic area'.



Table-1.9.14: Multi-Dimensional Poverty Index of the NE States

State	Headcoun In	t Ratio (H) %	Intensity (A) in %		MPI = H x A	
	2019-21	2015-16	2019-21	2015-16	2019-21	2015-16
Arunachal Pradesh	13.76	24.23	40.43	47.25	0.059	0.115
Assam	19.35	32.65	44.41	47.88	0.086	0.156
Manipur	8.10	16.96	41.91	44.61	0.034	0.076
Meghalaya	27.79	32.54	48.01	48.08	0.133	0.156
Mizoram	5.30	9.78	45.62	47.42	0.024	0.046
Nagaland	15.43	25.16	42.61	46.29	0.066	0.116
Sikkim	2.60	3.82	41.02	41.20	0.011	0.016
Tripura	13.11	16.62	42.68	45.03	0.056	0.075
India	14.96	24.85	44.39	47.14	0.066	0.117

Source: 'India National Multi-Dimensional Poverty Index – Progress Review 2023', NITI Aayog, Government of India Notes

- 1. The Global Multidimensional Poverty Index (MPI), which is based upon the Alkire-Foster (AF) methodology. MPI captures overlapping deprivations in health, education, and living standards. It complements income poverty measurements because it measures and compares deprivations directly.
- 2. The Government of India has acknowledged the significance of the global MPI under the mandate of the Global Indices for Reform and Action (GIRG) initiative.
- 3. NITI Aayog has developed an indigenized index for monitoring the performance of States and Union Territories in addressing multidimensional poverty.
- 4. **Like the global MPI, India's national MPI has three equally weighted dimensions –** Health, Education, and Standard of living which are represented by 12 indicators.
- 5. The indices of the national MPI comprise of:
  - (a) Headcount ratio (H): Proportion of multi-dimensionally poor in the population, which is arrived at by dividing number of multi-dimensionally poor persons by total population.
  - (b) Intensity of poverty (A): Average proportion of deprivations which is experienced by multi-dimensionally poor individuals. To compute intensity, the weighted deprivation scores of all poor people are summed and then divided by the total number of poor people.
  - (c) MPI value is arrived at by multiplying the headcount ratio (H) and the intensity of poverty (A), reflecting both the share of people in poverty and the degree to which they are deprived. MPI = H x A
- 6. According to the AF methodology, an individual is considered MPI poor if their deprivation score equals or exceeds the poverty cut-off of 33.33%.
- 7. NITI Aayog published the national MPI Baseline Report in November 2021, with estimates computed using the data from the 4th round of the National Family Health Survey (NFHS-4) conducted in 2015-16.
- 8. The estimates of 2019-21 have been computed using data from the 5th round of the NFHS (NFHS-5) conducted in 2019-21, employing the same methodology as the baseline report.



# 2. Economic Situation of the North Eastern Region

This chapter combines information on three separate sections that highlight in their own way, the economic situation of the North Eastern Region. The areas covered in this chapter include: (a) the economic conditions of the NE States; (b) the State Budgets; and (c) the status of enterprises in the region. The following paragraphs give a brief introduction about each of the above sections, while the details are available later on within the chapter.

#### **Economic Conditions of the NE States**

This section covers areas like Net State Domestic Product (NSDP) at constant and current prices (which give an idea of the real and nominal levels of the state's economies); the per capita NSDP at constant and current price levels (giving the citizen's economic conditions in the real and nominal terms); gross state value added (GSVA) for different sectors like agriculture, industry, and services, apart from sub-sectors like manufacturing, construction, and banking and insurance. The data have been presented in tabular formats, while the terms have been explained at brief notes given below the various tables.

# **Study of State Budgets**

The coverage of the State Budgets has been done for the NE states including major areas like major fiscal indicators, revenue deficits (and surpluses), gross fiscal deficits (and surpluses), tax and non-tax revenues, loans from the Government of India, outstanding liabilities of the states. The pertinent data have been furnished in tabular formats, while the related terms have been discussed in brief at the notes furnished below these tables.

# Status of the Enterprises in the Region

In addition, the chapter covers the levels of enterprise in the NE states by tabulating the data on enterprises as available from the 6<sup>th</sup> Economic Census, as the results of the 7<sup>th</sup> Economic Census have not been released till date. The data have been tabulated separately for segments like agricultural and non-agricultural establishments, as well as for establishments undertaking handicrafts and handlooms activities. Further, the data regarding women enterprise has been separately tabulated based on data from the 6<sup>th</sup> Economic Census.





# 2.1. Economic Conditions of the North Eastern States

The previous chapter had discussed the geographical and demographic conditions of the North Eastern states of India. This chapter (and the present section) focuses upon the economic conditions of the above states.

#### **Economic Activities at the National Level**

At the national level, Gross Domestic Product (GDP) measures the monetary value of final goods and services (i.e. those goods and services bought by the final user) produced in a country in a given period of time (usually a quarter or a year). It counts all of the output generated within the borders of a country. GDP is composed of goods and services produced for sale in the market and it also includes some non-market production, such as education or health services provided by the government. Not all productive activity is included in GDP. For example, unpaid work (such as that performed in the home or by volunteers) and black-market activities are not included because they are difficult to measure and value accurately. That means, for example, that a tailor who produces a shirt for a customer would contribute to GDP, but would not contribute to GDP if he stitched a skirt for his daughter (although the cloth and stitching yarn he purchased would be counted).

Moreover, Gross Domestic Product takes no account of the 'wear and tear' on the productive assets like machinery, buildings, and so on (the so-called capital stock) that are used in producing the output. If this depletion (or 'consumption') of the fixed capital stock is subtracted from GDP, it results in the Net Domestic Product.

It is necessary to know whether the total output of goods and services of an economy is growing or shrinking. Since the GDP is collected at current (or nominal) prices, the comparison of two periods without making adjustments for inflation will yield erroneous results. To determine 'real' GDP, its nominal value is adjusted to take into account price changes. The 'real' GDP enables an assessment whether the value of output has gone up because more is being produced or simply because prices have increased.

# **Economic Activities at the Sub-National (State) Level**

With the progress of time, the work on estimation of state income has improved and expanded in different states. At present, practically all the States and Union Territories of India compute state income estimates and are preparing district level estimates as well. These estimates are prepared by the State Income Units of the respective State Directorates of Economics and Statistics (DESs). The National Statistics Office (earlier the Central Statistical Organisation) assists the states in the preparation of these estimates by rendering advice on conceptual and methodological problems.

The following pages furnish the pertinent statistics related to the state income (or net state domestic product) and per capita income, as well as the Gross State Value Added (GSVA) from different sectors and sub-sectors of the economies of the states of the NE Region.



Table-2.1.1: Net State Domestic Product at Current Prices

State			In Rupe	es Lakh		
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	1820979	2056158	2320337	2752608	2772497	3166939
Assam	22239651	25372639	27662476	31103149	31566328	36316086
Manipur	1913227	2355665	2483997	2702476	2663187	3287444
Meghalaya	2464095	2645217	2882105	3122217	2997515	3444149
Mizoram	1543082	1823862	1953439	2340477	2099599	2429325
Nagaland	1917383	2164509	2341197	2652831	2625606	2785881
Sikkim	1816317	2283525	2480102	2752221	2793251	3151862
Tripura	3566759	3950463	4490106	4872817	4796426	5622603
NE Region	37281493	42652038	46613759	52298796	52314409	60204289

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table No. 26 at Page No. 67], supplemented by data furnished in the 'Handbook of Statistics on Indian States', 2022-23 [Table No. 29 at Page No. 78] released by Reserve Bank of India in November 2023

#### Notes

# 1. Net State Domestic Product

Net State Domestic Product (NSDP) or State Income is a measure in monetary terms of the volume of all goods and services produced in the state within a given period of time (generally a year) accounted without duplication.

The estimates of NSDP are <u>net</u> of Consumption of Fixed Capital (CFC) and are obtained by subtracting the CFC from Gross State Domestic Product (GSDP). The estimates of CFC are compiled at the national level using the estimates of asset wise Net Fixed Capital Stock (NFCS) and average life of asset, following the procedure of perpetual inventory method (PIM). The national level estimates of CFC are allocated to states using appropriate indicators.

The current concept of compiling the GSDP/NSDP is similar to that of compiling the GDP/NDP of the entire economy i.e., measuring the volume in monetary terms, the total value of goods and services produced within the geographical boundary of the state.

Additional details are available at the publication titled 'National Accounts Statistics – Source & methods 2012', brought out by the (then) Central Statistics Office of the Ministry of Statistics & Programme Implementation, Government of India from which the above has been sourced. It is available at the following link.

https://www.mospi.gov.in/sites/default/files/publication\_reports/sources\_method\_2012%20%281%29.pdf

#### 2. Current Prices

National income (or state) income is measured at prices prevailing during the period or in other words at current prices. However, such measurement is not comparable across years, since national (or state) income can change due to variations of both output and prices. Hence national (or state) incomes at current prices do not give a proper measure of the overall real increase in production of the country or the economic welfare of the people or growth of the economy. National (or state) income at current prices gives the nominal size of the economy, and not its real size.



Table-2.1.2: Net State Domestic Product at Constant Prices

State			n Rupees Lakh	(Base: 2011-12	2)	
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	1339538	1392149	1489570	1708654	1617597	1721355
Assam	17963190	19526228	20462706	21231535	21387131	23181649
Manipur	1520095	1687036	1619296	1694480	1562021	1780965
Meghalaya	1929486	1996368	2096795	2199730	1999048	2109610
Mizoram	1202937	1377941	1411598	1566274	1406367	1584673
Nagaland	1348789	1417779	1505470	1585325	1496526	1549543
Sikkim	1341584	1520436	1588906	1658771	1596438	1676374
Tripura	2720360	2950518	3270315	3369498	3205260	3485083
NE Region	29365979	31868455	33444656	35014267	34270388	37089252

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table No. 27 at Page No. 71], supplemented by data furnished in the 'Handbook of Statistics on Indian States', 2022-23 [Table No. 30 at Page No. 82] released by Reserve Bank of India in November 2023

#### **Notes**

### 1. Net State Domestic Product

The Note (2) under the previous table (Table-2.1) may be referred for the conceptual background. Additional details are available at the publication titled 'National Accounts Statistics – Source & methods 2012', brought out by the (then) Central Statistics Office of the Ministry of Statistics & Programme Implementation, Government of India from which the above has been sourced. It is available at the following link.

https://www.mospi.gov.in/sites/default/files/publication\_reports/sources\_method\_2012%20%281%29.pdf

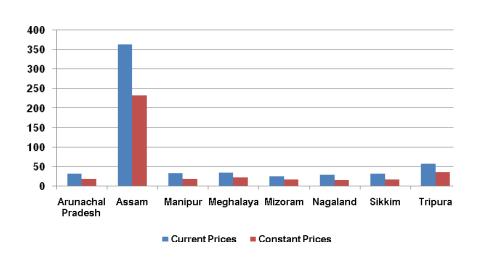
### 2. Constant Prices

National income (or State income) is measured at prices prevailing during the period or in other words at current prices. When calculated over a number of years, the changes in national income would, therefore, include implicitly not only the effect of the changes in production but also the changes in prices. This estimate compared over the period would not, therefore, give a proper measure of the overall real increase in production of the country or the economic welfare of the people or growth of the economy. Therefore, it would be necessary to eliminate the effect of prices, or in other words to re-compute the whole series at given prices of one particular base year. National income thus computed is termed as national income at constant prices or in real terms. The above observations for 'national income' are also applicable for 'state income' (or net state domestic product).

In India, the Base Year of the GDP Series was revised from 2004-05 to 2011-12 and released on 30 January, 2015. This was done after adaptation of the sources and methods in line with the SNA 2008, which is the latest version of the international statistical standard for the national accounts, adopted by the United Nations Statistical Commission (UNSC) in 2009. The revision in the base year of macroeconomic indicators like Gross Domestic Product (GDP) not only use latest data from censuses and surveys, but also incorporates information from administrative data that have become robust over time.

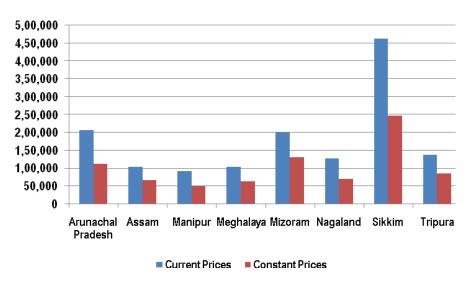


Graph-2.1.1: Net State Domestic Product of NE States (2021-22)
(at Current and Constant Prices)



Y-axis gives the Net State Domestic Product in Rs. Thousand Crore

Graph-2.1.2: Per-Capita Net State Domestic Product of NE States (2021-22) (at Current and Constant Prices)



Y-axis gives the Per-Capita Net State Domestic Product in Rs. Thousand



Table-2.1.3: Per Capita Net State Domestic Product at Current Prices

State			In Ru	ipees		
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	124,129	138,836	155,103	182,171	181,684	205,645
Assam	66,330	75,151	81,034	90,123	90,482	102,965
Manipur	59,345	71,507	73,795	78,574	75,784	91,560
Meghalaya	73,753	77,504	82,653	87,653	90,751	103,335
Mizoram	127,107	155,222	164,708	195,365	173,521	198,962
Nagaland	91,347	102,003	109,198	122,759	119,781	125,887
Sikkim	280,729	349,163	375,773	412,627	415,045	463,509
Tripura	91,596	100,444	113,016	121,456	118,401	137,472
NE Region (Average)	75,446	85,587	92,398	1,02,421	1,01,866	1,15,916

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table No. 22 at Page No. 51], supplemented by data furnished in the 'Handbook of Statistics on Indian States', 2022-23 [Table No. 25 at Page No. 62] released by Reserve Bank of India in November 2023

#### **Notes**

# 1. Per Capita Net State Domestic Product

Per Capita State Income (Net State Domestic Product) is obtained by dividing the NSDP (State Income) by midyear projected population of the state and is in contrast to the Per Capita National Income which is obtained by dividing the Net National Product (NNP) by the mid-year population of the country. Thus compilation of Per Capita State Income is based on income originating approach whereas compilation of Per Capita National Income is based on income accruing approach.

[Under the income originating approach, Net State Domestic Product is measured on the basis of income originating to the factors of production physically located within the geographical boundaries of the state and represents gross/net value of goods and services produced within the state.]

Additional details are available at the publication titled 'National Accounts Statistics – Source & methods 2012', brought out by the (then) Central Statistics Office of the Ministry of Statistics & Programme Implementation, Government of India from which the above has been sourced. It is available at the following link.

https://www.mospi.gov.in/sites/default/files/publication\_reports/sources\_method\_2012%20%281%29.pdf

#### 2. Current Prices

Comments under Note (2) at Table-2.1.1 may be referred to for the pertinent details.

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Table-2.1.4: Per Capita Net State Domestic Product at Constant Prices

State			In Rupees (B	ase: 2011-12)		
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	91,311	94,001	99,570	113,081	106,002	111,776
Assam	53,575	57,835	59,943	61,519	61,304	65,726
Manipur	47,151	51,211	48,106	49,267	44,449	49,602
Meghalaya	57,752	58,493	60,132	61,755	60,522	63,295
Mizoram	99,089	117,272	119,022	130741	116,229	129,785
Nagaland	64,259	66,813	70,218	73,361	68,272	70,020
Sikkim	207,355	232,483	240,743	248,691	237,212	246,526
Tripura	69,860	75,020	82,313	83,985	79,123	85,210
NE Region (Average)	59,427	63,949	66,294	68,571	66,731	71,411

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table No. 23 at Page No. 55] supplemented by data furnished in the 'Handbook of Statistics on Indian States', 2022-23 [Table No. 26 at Page No. 66] released by Reserve Bank of India in November 2023

#### **Notes**

- Per Capita Net State Domestic Product
   Comments under Note (1) at Table-2.1.3 may be referred to for the pertinent details.
- 2. Constant Prices

Comments under Note (2) at Table-2.1.2 may be referred to for the pertinent details.

Additional details are regarding the above terms are available at the publication titled 'National Accounts Statistics – Source & methods 2012', brought out by the (then) Central Statistics Office of the Ministry of Statistics & Programme Implementation, Government of India from which the above has been sourced. It is available at the following link.

https://www.mospi.gov.in/sites/default/files/publication\_reports/sources\_method\_2012%20%281%29.pdf



Sikkim has the highest per-capita NSDP in the North Eastern Region



Table-2.1.5: Gross State Value Added by Economic Activity at Current Prices - Agriculture

State			Rupees	in Lakh		
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	286311	307171	313168	333622	355176	389899
Assam	3419844	3447408	3685044	4176675	4729208	4768973
Manipur	224997	450711	509503	544732	594724	699360
Meghalaya	268160	287304	316280	327968	403401	440621
Mizoram	147435	167729	176503	182550	193827	197952
Nagaland	439814	485886	473063	477618	497214	346088
Sikkim	156908	199256	234174	257992	261938	279812
Tripura	738728	745449	932024	1036205	1181195	1197863
NE Region	5682197	6090914	6639759	7337362	8216683	8320568

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table No. 28 at Page No. 75] supplemented by data furnished in the 'Handbook of Statistics on Indian States', 2022-23 [Table No. 31 at Page No. 86] released by Reserve Bank of India in November 2023

#### **Notes**

1. Gross State Value Added (GSVA)

The following concepts may be noted. Gross State Value Added and Net State Value Added are the concepts at the state level, whereas the following are at the national level.

Gross Value Added & Net Value Added

Gross value added (GVA) is defined as output (at basic prices) minus intermediate consumption (at purchaser prices). By subtracting the consumption of fixed capital from GVA the corresponding net value added (NVA) is obtained.

Related Economic Concepts

As defined at above: Gross value added (GVA) is defined as output (at basic prices) minus intermediate consumption (at purchaser prices), where:

- Intermediate consumption is a national accounts concept which measures the value of the goods and services
  consumed as inputs by a process of production. It excludes fixed assets whose consumption is recorded as
  consumption of <u>fixed capital</u>. The goods and services may be either transformed or used up by the production
  process.
- Basic Price is the amount receivable by the producer from the purchaser for a unit of a good or service produced as output minus any tax payable, and plus any subsidy receivable, by the producer as a consequence of its production or sale. It excludes any transport charges invoiced separately by the producer.

By subtracting consumption of fixed capital (CFC) from GVA the corresponding net value added (NVA) is obtained.

NVA = GVA-CFC

Consumption of fixed capital, abbreviated as CFC, reflects the decline in the value of the fixed assets of enterprises, governments, and owners of dwellings in the household sector.

Unlike "depreciation" in business accounting, CFC in national accounts is not a method for allocating the costs of past expenditures on fixed assets over subsequent accounting periods. Rather, it is the decline in the future benefits of the assets due to their use in the production process

GVA & GDP

Gross Value Added = GDP + subsidies on products - taxes on products



### 2. Agriculture

The sector comprises agriculture proper, livestock and livestock products and operation of irrigation system. In addition, the broader sector includes: forestry & logging, and fishing. Agriculture and livestock activities go together as it is not always feasible to segregate the various inputs like livestock feed, repairs and maintenance costs, CFC etc., into those used in agricultural and livestock production.

The economic activities included in agriculture proper are (i) growing of field crops, fruits, nuts, seeds and vegetables, (ii) management of tea, coffee and rubber plantations, (iii) agricultural and horticultural services on a fee or on contract basis such as harvesting, baling and thrashing, preparation of tobacco for marketing, pest control, spraying, pruning, picking and packing and (iv) ancillary activities of cultivators such as gur making, transportation of own produce to primary markets, activities yielding rental income from farm buildings and farm machinery.

Livestock and livestock products include breeding and rearing of animals and poultry besides private veterinary services, production of milk, slaughtering, preparation and dressing of meat, production of raw hides and skins, eggs, dung, raw wool, honey and silk worm cocoons etc.

Operation of irrigation system comprises supply of water through various Government channels to the agricultural producers.

Under 'forestry and logging', the economic activities can include: (i) forestry (e.g., planting and conservation of forests, gathering of forest products, charcoal burning carried out in the forests), (ii) logging (e.g., felling and rough cutting of trees, hewing or rough shaping of poles, blocks etc.) and transportation of forest products to the sale depots/assembly centres and, (iii) farmyard wood (industrial wood and fuel wood collected by the primary producers from trees outside regular forests). The forest products are classified into two broad groups viz., (a) major products comprising industrial wood (timber, round wood, match and pulpwood) & fuel wood (firewood and charcoal wood) and (b) minor products comprising a large number of heterogeneous items such as bamboo, fodder, sandalwood, honey, resin, gum, tendu leaves etc.

Fishing: The activities covered in the fishing are (i) commercial fishing in (a) ocean, coastal and offshore waters (not applicable for the NE states) and (b) inland waters, that include catching, tackling and gathering of fish from rivers, irrigation and other canals, lakes, tanks, fields inundated tracts etc., (ii) subsistence fishing in inland waters and artificial ponds, (iii) gathering of sea weeds, sea shells, pearls, sponges and other ocean and coastal water products and (iv) fish curing viz., salting and sun-drying of fish.

#### 3. Current Prices

Comments under Note (2) at Table-2.1.1 may be referred to for the pertinent details.

50.00
40.00
20.00
10.00
Arunachal Assam Manipur Meghalaya Mizoram Nagaland Sikkim Tripura

Graph-2.1.3: Gross State Value Added (Agriculture) in NE States at Current Prices (2021-22)

Y-axis gives the GSVA (at Current Prices) from Agriculture in Rs. Thousand crore



Table-2.1.6: Gross State Value Added by Economic Activity at Constant Prices - Agriculture

State		F	Rupees in Lakh	(Base: 2011-12	2)	
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	190672	194524	195196	193780	205648	224282
Assam	2625728	2663201	2719183	2589529	2786187	3002451
Manipur	141966	267660	267685	254353	259734	267554
Meghalaya	213317	216247	210187	203712	206158	208326
Mizoram	86893	88582	95978	96695	104552	102930
Nagaland	295189	287378	268325	277715	286236	187910
Sikkim	95671	111000	124242	130857	122647	122795
Tripura	393209	423660	471732	474002	482982	483104
NE Region	4042645	4252252	4352528	4220643	4454144	4599352

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table No. 29 at Page No. 79] supplemented by data furnished in the 'Handbook of Statistics on Indian States', 2022-23 [Table No. 32 at Page No. 90] released by Reserve Bank of India in November 2023

# Note

- Gross State Value Added (GSVA)
   Comments under Note (1) at Table-2.1.5 may be referred to for the conceptual details.
- 2. Agriculture

  Comments under Note (2) at Table-2.1.5 may be referred to for the pertinent details.
- Constant Prices
   Comments under Note (2) at Table-2.1.2 may be referred to for the pertinent details.



Agriculture is the major source of engagement in the rural areas of NE Region



Table-2.1.7: Gross State Value Added by Economic Activity at Current Prices - Manufacturing

State			Rupees	in Lakh		
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	51608	40642	35247	24266	21948	25718
Assam	3170604	3365031	3651565	3619149	4028654	4701439
Manipur	60896	61998	63648	44819	46141	55589
Meghalaya	202964	257316	275531	314306	263793	322865
Mizoram	11155	11185	12313	15521	6328	13291
Nagaland	30403	31859	34357	32504	26177	31846
Sikkim	867560	1133260	1207663	1230060	1264459	1345203
Tripura	150940	147140	141287	157837	162002	199471
NE Region	4546130	5048431	5421611	5438462	5819502	6695422

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table No. 32 at Page No. 91] supplemented by data furnished in the 'Handbook of Statistics on Indian States', 2022-23 [Table No. 35 at Page No. 102] released by Reserve Bank of India in November 2023

#### **Notes**

1. Gross State Value Added (GSVA)

Comments under Note (1) at Table-2.1.5 may be referred to for the conceptual details.

### 2. Manufacturing

A 'manufacturing process', in general, is defined as any process for making, altering, repairing, finishing, packing, oiling, washing, cleaning, breaking up, demolishing or otherwise treating or adapting any article or substance with a view to its use, sale, transport, delivery or disposal. Railway workshops are included under manufacturing and not under railways. Conversion of sugarcane into indigenous gur, slaughtering of animals and dressing of meat carried out by farmers and individuals are excluded from the scope of manufacturing activities, as these are included under agriculture activities. Production in defence establishments is included under manufacturing.

For the purposes of estimation of GSDP, the entire manufacturing activities are classified into two broad segments, namely, manufacturing – registered and unregistered. The registered manufacturing segment covers all manufacturing factories registered under sections 2m(i) and 2m(ii) of the Indian Factories Act, 1948 which respectively refer to the factories employing 10 or more workers and using power or those employing 20 or more workers but not using power on any day of the preceding 12 months and bidi and cigar establishments registered under Bidi and Cigar Workers (Condition of Employment) Act, 1966 and employing 10 or more workers using power or 20 or more workers and not using power.

The unregistered manufacturing segment - being complementary to registered manufacturing segment - covers all those units which are not covered under the registered manufacturing segment. In other words, the unregistered manufacturing segment covers all the manufacturing, processing, repair & maintenance services units employing less than 10 workers and using power or less than 20 workers and not using power. It, by implication, also covers own account enterprises (OAE) engaged in the manufacturing activities

#### 3. Current Prices

Comments under Note (2) at Table-2.1.1 may be referred to for the pertinent details.



Table-2.1.8: Gross State Value Added by Economic Activity at Constant Prices – Manufacturing

State		F	Rupees in Lakh	(Base: 2011-12	2)	
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	49283	36892	48429	20977	19905	19173
Assam	2944863	3343622	3363102	3469328	4156660	4514500
Manipur	54581	53275	52165	36966	39218	41102
Meghalaya	182347	223499	233341	268230	224014	254002
Mizoram	10578	9890	10497	13004	5741	11342
Nagaland	26178	26407	29351	26936	21761	23850
Sikkim	675111	782910	820963	784857	742458	737701
Tripura	146648	129820	120953	134991	135246	149792
NE Region	4089589	4606315	4678801	4755289	5345003	5751462

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table No. 33 at Page No. 95] supplemented by data furnished in the 'Handbook of Statistics on Indian States', 2022-23 [Table No. 36 at Page No. 106] released by Reserve Bank of India in November 2023

#### Note

- Gross State Value Added (GSVA)
   Comments under Note (1) at Table-2.1.5 may be referred to for the conceptual details.
- 2. Manufacturing

  Comments under Note (2) at Table-2.1.7 may be referred to for the pertinent details.
- Constant Prices
   Comments under Note (2) at Table-2.1.2 may be referred to for the pertinent details.



**Tea Factory in Assam** 



Table-2.1.9: Gross State Value Added by Economic Activity at Current Prices-Construction

State			Rupees	in Lakh		
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	184477	221389	180745	190051	182900	243122
Assam	1968864	2164602	2093851	2129336	1961610	2289199
Manipur	191502	211321	138334	146254	129510	170733
Meghalaya	172996	201222	175643	202368	192196	236992
Mizoram	151505	218340	199565	173642	198694	257045
Nagaland	181176	216323	216496	216430	201689	248480
Sikkim	90014	101141	110248	132453	124695	157448
Tripura	215067	250384	312325	257473	256487	274221
NE Region	3155601	3584722	3427207	3448007	3247781	3877240

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table No. 36 at Page No. 107] supplemented by data furnished in the 'Handbook of Statistics on Indian States', 2022-23 [Table No. 39 at Page No. 118] released by Reserve Bank of India in November 2023

#### **Notes**

1. Gross State Value Added (GSVA)

Comments under Note (1) at Table-2.1.5 may be referred to for the conceptual details.

# 2. Construction

The construction activity as per the International Standard Industrial Classification (ISIC) adopted in the System of National Accounts (SNA) consists of contract construction by general builders, civil engineering contractors and special trade contractors. Also included is own account construction carried out by independent units of enterprises or other organizations, which are not part of the construction industry proper.

But, owing to the problems of availability of data separately for units carrying out construction work, construction industry, for the purpose of estimating domestic product, is taken to include the whole of construction activity (contractual as well as own account) including construction work connected with planting and cultivating of new forests, plantations and orchards. Due to lack of data, demolition activities have, however, been excluded.

# 3. Current Prices

Comments under Note (2) at Table-2.1.1 may be referred to for the pertinent details.





Table-2.1.10: Gross State Value Added by Economic Activity at Constant Prices – Construction

State		F	Rupees in Lakh	(Base: 2011-12	2)	
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	149873	172877	150236	165175	131967	154430
Assam	1725258	1849704	1817144	2056402	2075431	2254087
Manipur	167221	173285	106462	128361	96650	112116
Meghalaya	113894	124560	120674	115221	105942	119117
Mizoram	133065	180328	161692	142636	159852	181366
Nagaland	114874	133700	124732	121002	103563	116029
Sikkim	65242	69658	72050	81606	72230	85092
Tripura	203153	206984	259019	200494	195151	183169
NE Region	2672580	2911096	2812009	3010897	2940786	3205406

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table No. 37 at Page No. 111] supplemented by data furnished in the 'Handbook of Statistics on Indian States', 2022-23 [Table No. 40 at Page No. 122] released by Reserve Bank of India in November 2023

- Gross State Value Added (GSVA)
   Comments under Note (1) at Table-2.1.5 may be referred to for the conceptual details.
- 2. Construction

  Comments under Note (2) at Table-2.1.9 may be referred to for the pertinent details.
- Constant Prices
   Comments under Note (2) at Table-2.1.2 may be referred to for the pertinent details.



Govt. of India funded road construction work in Manipur



Table-2.1.11: Gross State Value Added by Economic Activity at Current Prices – Industry

State			Rupees	in Lakh		
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	440204	510220	499642	539467	552000	753221
Assam	8389063	9211507	10053768	9800152	9340095	11571080
Manipur	292065	333069	256950	246441	238828	292326
Meghalaya	520463	597991	568200	605264	556703	695606
Mizoram	362459	501130	560757	599072	621658	820126
Nagaland	255776	305838	314826	334838	309993	368821
Sikkim	1215386	1548329	1688786	1781231	1988277	2241024
Tripura	905232	958754	1091921	1053677	957838	1245956
NE Region	12380648	13966838	15034850	14960142	14565392	17988160

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table No. 40 at Page No. 123 supplemented by data furnished in the 'Handbook of Statistics on Indian States', 2022-23 [Table No. 43 at Page No. 134] released by Reserve Bank of India in November 2023]

#### Notes

1. Gross State Value Added (GSVA)

Comments under Note (1) at Table-2.1.5 may be referred to for the conceptual details.

#### 2. Industry

Industry includes all activities covered by the Index of Industrial production, viz. Mining & Quarrying; Manufacturing; and Electricity, Gas & Water Supply.

Mining & Quarrying: The economic activities covered in this sector comprise extraction of minerals which occur in nature as solids, liquids or gases; underground and surface mines, quarries and oil wells, with all supplementary operations for dressing and beneficiating ores and other crude minerals such as crushing, screening, washing, cleaning, grading, milling, floatation, melting, pelletizing, topping and other preparations needed to render the material marketable. All these activities are covered to the extent they are carried on at the mine site or up to the first point of sale

Manufacturing: Comments under Note (3) at Table-2.7 may be referred to for the pertinent details.

Electricity, Gas & Water Supply: The economic activities relating to generation, transmission and distribution of electric energy are covered under the electricity sub-sector, the manufacture of gas in gas works including gobar gas and distribution through mains to household, industrial, commercial and other users are covered under the gas subsector and the activities associated with collection, purification and distribution of water excluding the operation of irrigation system are covered under water supply sub-sector. The production of LPG has been included under manufacturing and only supply of gas through pipelines, where it cannot be alienated from the activity of its manufacturing, is included in the gas subsector.

#### 3. Current Prices

Comments under Note (2) at Table-2.1.1 may be referred to for the pertinent details.



Table-2.1.12: Gross State Value Added by Economic Activity at Constant Prices Industry

State		F	Rupees in Lakh	(Base: 2011-12	2)	
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	384390	402194	398171	397415	341144	411385
Assam	7451137	8356989	8687325	8766241	8616936	9313214
Manipur	280338	283582	194601	200089	173750	188846
Meghalaya	411816	454055	436585	447592	396751	455863
Mizoram	292920	385942	426931	435482	440151	533186
Nagaland	179568	210359	206573	216777	190299	203625
Sikkim	927571	1066000	1135718	1123970	1167893	1230340
Tripura	856670	866507	972978	868845	836572	1026735
NE Region	10784410	12025628	12458882	12456411	12163496	13363194

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table No. 41 at Page No. 127] supplemented by data furnished in the 'Handbook of Statistics on Indian States', 2022-23 [Table No. 44 at Page No. 138] released by Reserve Bank of India in November 2023]

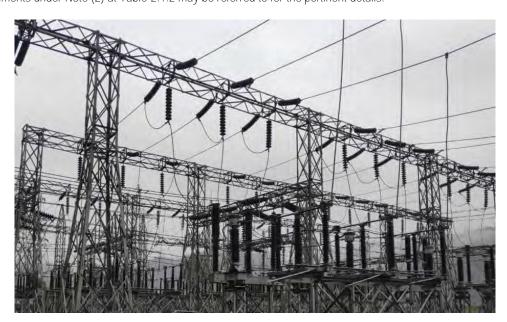
# Notes

- Gross State Value Added (GSVA)
   Comments under Note (1) at Table-2.1.5 may be referred to for the conceptual details.
- Industry

Comments under Note (2) at Table-2.1.11 may be referred to for the pertinent details.

3. Constant Prices

Comments under Note (2) at Table-2.1.2 may be referred to for the pertinent details.



**Electrical Substation in the NE Region** 



Table-2.1.13: Gross State Value Added by Economic Activity at Current Prices – Banking & Insurance

State			Rupees	in Lakh		
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	28567	28348	38089	46231	47409	31527
Assam	665033	795261	871795	1012700	1057215	1233770
Manipur	38515	43542	58371	69087	71562	77131
Meghalaya	71547	81407	75655	89412	92570	97914
Mizoram	28747	30595	38895	43619	46098	50730
Nagaland	53975	61020	70159	70710	88026	205994
Sikkim	26090	27801	32277	42274	45754	45671
Tripura	101476	135767	118086	144055	144030	161349
NE Region	1013950	1203741	1303327	1518088	1592664	1904086

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table No. 44 at Page No. 139] supplemented by data furnished in the 'Handbook of Statistics on Indian States', 2022-23 [Table No. 47 at Page No. 150] released by Reserve Bank of India in November 2023]

#### **Notes**

Gross State Value Added (GSVA)
 Comments under Note (1) at Table-2.1.5 may be referred to for the conceptual details.

# 2. Banking & Insurance

In the preparation of state income estimates, certain activities cut across state boundaries, and thus their economic contribution cannot be assigned to any one state directly. Apart from Railways, Communications, and Central Government Administration; such activities include Banking & Insurance. The estimates for these supra regional activities are compiled for the economy as a whole and allocated to the states on the basis of relevant indicators.

# 3. Current Prices

Comments under Note (2) at Table-2.1.1 may be referred to for the pertinent details.



Bank branch of a Scheduled Commercial Bank in a rural area



Table-2.1.14: Gross State Value Added by Economic Activity at Constant Prices – Banking & Insurance

State		F	Rupees in Lakh	(Base: 2011-12	2)	
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	26502	24411	30663	35294	35998	22276
Assam	617944	687214	696411	773476	850876	923220
Manipur	35788	37626	46629	52767	54338	54498
Meghalaya	66410	70347	60435	68290	70289	69182
Mizoram	26711	26438	31312	33315	35003	35844
Nagaland	50153	52731	56045	54007	66839	145548
Sikkim	24242	24024	25784	32288	34741	32270
Tripura	94142	117322	94330	110026	109364	114003
NE Region	941892	1040113	1041609	1159463	1257448	1396841

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table No. 45 at Page No. 143] supplemented by data furnished in the 'Handbook of Statistics on Indian States', 2022-23 [Table No. 48 at Page No. 154] released by Reserve Bank of India in November 2023]

- 1. Gross State Value Added (GSVA)
  - Comments under Note (1) at Table-2.1.5 may be referred to for the conceptual details.
- 2. Banking & Insurance
  - Comments under Note (2) at Table-2.1.13 may be referred to for the pertinent details.
- 3. Constant Prices
  - Comments under Note (2) at Table-2.1.2 may be referred to for the pertinent details.



Bank branch of a Regional Rural Bank in Tripura



Table-2.1.15: Gross State Value Added by Economic Activity at Current Prices – Services

State			Rupees	in Lakh		
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	769914	919854	980104	1144371	1171183	1341650
Assam	10766037	12303426	13125598	14517622	14296284	16881568
Manipur	1331872	1497350	1645662	1840776	1804293	2235446
Meghalaya	1420827	1587074	1836778	2005203	1860651	2177826
Mizoram	791309	881133	972783	1193299	1099181	1258700
Nagaland	1174548	1305637	1503862	1649870	1663930	1922773
Sikkim	553796	611630	728190	909183	869465	1014010
Tripura	1633676	1963529	2162827	2360641	2146096	2668941
NE Region	18441979	21069633	22955804	25620965	24911083	29500914

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table No. 48 at Page No. 155] supplemented by data furnished in the 'Handbook of Statistics on Indian States', 2022-23 [Table No. 51 at Page No. 166] released by Reserve Bank of India in November 2023

#### **Notes**

1. Gross State Value Added (GSVA)

Comments under Note (1) at Table-2.1.5 may be referred to for the conceptual details.

2. Services

Services include the following:

Trade, Hotels and Restaurants

Trade sector includes wholesale and retail trade in all commodities whether produced domestically, imported or exported. It covers activities of purchase and selling agents, brokers and auctioneers. Wholesale trade covers units, which resell without transformation, new and used goods generally to the retailer and industries, commercial establishments, institutional and professional users or to other wholesalers. Retail trade covers units, which mainly resell, without transformation, new and used goods for personal or household consumption. This sector also comprises of maintenance and repair of motor vehicles and repair of personal household goods.

Transport, Storage, Communication

The economic activities covered in this sector are (i) transport by railways, (ii) transport by other means, namely, road transport (mechanised and non-mechanised), water transport (coastal, ocean and inland), air transport and supporting & auxiliary transport activities, (iii) storage, and (iv) communication services.

Real Estate, Ownership of Dwellings, Business Services and Legal Services

Real estate includes buying, selling, renting and operating of self-owned or leased real estate such as apartment building and dwellings, non-residential buildings, developing and subdividing real estate into plots, etc. Other activities included are: renting of machinery and equipment without operator; computer and related activities in private sector; legal activities; accounting, book-keeping and related activities in private sector; Research and development, market research and public opinion polling, business and management consultancy, architectural, engineering and other technical activities, advertising and business activities n. e. c. excluding auctioning. The ownership of dwellings consists of the imputed value of owner occupied dwellings.

#### Public Administration

The estimates of value added in respect of Central Government Administration, being a supra-regional activity, are prepared by the CSO by undertaking the analysis of Central Government Budget documents and are supplied to



states. The estimates relating to State Government are prepared by respective states by undertaking an economic analysis of the State Government budget documents. The estimates of income in respect of local authorities are based on the information on compensation of employees obtained by the DESs in respect of the local authorities.

#### Other Services

The economic activities covered under this sector are (i) coaching and tuition (NIC-2004 codes 80903 and 80904), (ii) education excluding coaching and tuition (NIC-2004 code 80 (-) 80903 (-) 80904), (iii) human health activities including veterinary activities, (iv) sewage and refuse disposal, sanitation activities (NIC-2004 code 90), (v) activities of membership organizations (+) social work (NIC-2004, code 91+ 853), (vi) recreational cultural and sporting activities (NIC-2004, code 92), (vii) washing and cleaning of textiles and fur products (NIC2004, code-9301), (viii) hair dressing and other beauty treatment (NIC-2004, code 9302) (ix) funeral and related activities (NIC2004 code 9303+9309), (x) private households with employed person (NIC-2004 code 95), (xi) custom tailoring (NIC-2004, code 18105), and (xii) extra territorial organizations and bodies (NIC-2004 code 99).

#### Current Prices

Comments under Note (2) at Table-2.1.1 may be referred to for the pertinent details.



Educational services are an important component of the economies of the NE States

180
160
140
120
100
80
60
40
20
0
Arunachal Assam Manipur Meghalaya Mizoram Nagaland Sikkim Tripura

Graph-2.1.4: Gross State Value Added (Services) in NE States at Current Prices (2021-22)

Y-axis gives the GSVA from Services in Rs. Thousand crore

Pradesh



Table-2.1.16: Gross State Value Added by Economic Activity at Constant Prices - Services

State		F	Rupees in Lakh	(Base: 2011-12	2)	
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	586999	644070	641671	739362	732480	796027
Assam	7760599	8709156	8566039	9217075	8835416	9521848
Manipur	1063622	1103963	1137163	1221148	1151768	1326766
Meghalaya	1166042	1259568	1396706	1490460	1302541	1406250
Mizoram	664558	712190	762107	920374	834139	930923
Nagaland	886999	939473	1020192	1086218	1024624	1172455
Sikkim	418705	436133	486449	582533	566358	606740
Tripura	1283761	1552235	1691573	1853886	1690123	1805050
NE Region	13831285	15356788	15701900	17111056	16137449	17566059

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table No. 49 at Page No. 159] supplemented by data furnished in the 'Handbook of Statistics on Indian States', 2022-23 [Table No. 52 at Page No. 170] released by Reserve Bank of India in November 2023

# Notes

- Gross State Value Added (GSVA)
   Comments under Note (1) at Table-2.1.5 may be referred to for the conceptual details.
- 2. Services

Comments under Note (2) at Table-2.1.15 may be referred to for the pertinent details.

3. Constant Prices

Comments under Note (2) at Table-2.1.2 may be referred to for the pertinent details.



Care Centre for cancer patients forms a part of 'human health activities' included under 'Other Services'



# 2.2. State Budgets of the North Eastern States

Fiscal policy in India has responded to multiple challenges, protecting households and businesses from the impact of the pandemic and war-induced surges in energy and food prices while reorienting expenditure towards capital formation to revive growth. States account for 60% of the general government expenditure in India, as against the global average for sub-national spending of about 30%. States' capital outlay recorded a robust growth of 32% in 2021-22, partly supported by the Centre's budgetary allocation for States under the 'Scheme for Financial Assistance to the States for Capital Investment', providing the necessary support to the recovering economy.

The State Governments can promote investment through both direct and indirect channels. The direct channel involves spending on physical infrastructure and human capital. The indirect channels act by drawing-in private investment, promoting good governance, and attracting foreign direct investment (FDI), especially into technology; telecommunication; banking, financial services and insurance (BFSI); retail and consumer facing services. Since these sectors are also major job creators, it is important for the State governments to create a congenial policy environment for them to thrive.

This section undertakes an analysis of the fiscal position of the NE states in terms of actual expenditures for 2020-21, revised estimates (RE) and provisional accounts (PA) for 2021-22, and budget estimates (BE) for 2022-23. The tax and non-tax revenues of the states have been tabulated. It also examines the financing of the fiscal deficits of the NE states, including loans from the Centre and market borrowings of the states. The interest payments incurred by the State Governments have been tabulated, along with the outstanding liabilities of the states (both in absolute terms and as a percentage of their GSDPs).

# **Fiscal Balance**

When a government spends more than it collects by way of revenue, it incurs a deficit. Deficits must be financed by borrowing giving rise to government debt. The concepts of deficits and debt are closely related. Deficits can be thought of as a flow which adds to the stock of debt. If the government continues to borrow year after year, it leads to the accumulation of debt and the government has to pay more and more by way of interest. These interest payments themselves contribute to the debt.

By borrowing, the government transfers the burden of reduced consumption on future generations. This is because it borrows by issuing bonds to the people living at present but may decide to pay off the bonds some twenty years later by raising taxes or reducing expenditure. Also, government borrowing from the people reduces the savings available to the private sector. To the extent that this reduces capital formation and growth, debt acts as a 'burden' on future generations.

However, if government deficits succeed in their goal of raising production, there will be more income and, therefore, more saving. In this case, both government and industry can borrow more. Also, if the government invests in infrastructure, future generations may be better off, provided the return on such investments is greater than the rate of interest. The actual debt could be paid off by the growth in output. The debt should not then be considered burdensome.

[Excerpted from Section 1.5 of the 'State Finances Audit Report for the year ended 31 March 2021', prepared by the CAG for Nagaland and available at the following link: https://cag.gov.in/uploads/download\_audit\_report/2022/04-Chapter-1-Overview-of-the-State-Finances-063382ee82d4064.61615663.pdf]



Table-2.2.1 (A): Major Fiscal Indicators of the North Eastern States - Part A

(Per Cent)

State	Own Povoni	ue / Revenue	Evnondituro		nt Expenditure			elopment Exp		Interes	t Payment / R	evenue
	OWITKEVEIN	ue / Nevenue	Lxperiulture	Disbursement			Aggregate Disbursement			Expenditure		
	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23	2020-21	2021-22	2022-23
	(Accounts)	(RE)	(BE)	(Accounts)	(RE)	(BE)	(Accounts)	(RE)	(BE)	(Accounts)	(RE)	(BE)
1	2	3	4	5	6	7	8	9	10	11	12	13
Arunachal Pradesh	17.4	17.6	16.6	71.7	71.5	63.8	26.8	27.2	34.2	5.7	4.4	4.7
Assam	31.0	27.5	30.2	67.2	71.1	62.9	29.6	25.7	34.2	8.1	7.1	7.8
Manipur	11.6	11.9	15.6	60.1	69.7	72.6	33.7	26.5	23.7	6.7	5.2	5.4
Meghalaya	22.6	23.5	21.5	66.3	69.1	67.9	30.1	28.1	28.5	7.5	7.5	7.2
Mizoram	14.2	15.7	16.4	63.4	67.4	59.1	32.6	29.1	38.3	4.7	4.2	4.6
Nagaland	11.5	13.0	11.9	54.5	56.2	54.5	41.6	39.6	41.0	7.8	7.7	7.1
Sikkim	25.6	23.3	27.8	66.3	67.4	65.9	31.5	30.2	31.2	8.6	9.2	8.8
Tripura	16.4	12.8	13.5	56.6	60.1	57.8	37.5	35.7	37.2	8.9	7.4	6.9
All States & Union Territories (UTs)	45.6	49.8	53.6	61.2	63.6	63.0	28.8	27.0	27.6	13.1	12.2	11.9

Source: RBI 'State Finances: A Study of Budgets of 2022-23' [Statement-1 at Page No. 73]

#### Notes:

- 1. Development and Non-development expenditure as a ratio to aggregate disbursement may not add up to hundred as aggregate disbursement also includes repayments
- 2. RE stands for 'Revised Estimates' and BE for 'Budget Estimates'
- 3. Own Revenue

# State's own revenue includes (a) own tax revenues and (b) own non-tax revenues.

Own Tax Revenue: There are many taxes that are either levied by State Governments, or where the collection goes directly to State Governments. Except Goods and Services Tax (GST), the rates of such taxes are determined by State Governments, and hence there is a variance across States. The main taxes that can contribute to State Governments' revenue are: (a) Goods and Services Tax (GST): While GST is levied at the national level and the decisions regarding GST are taken by the GST Council, components of the total GST collection, known as State GST (SGST) and part of integrated GST (IGST) goes directly to State Governments. (b) State Excise Duty: As with Union excise duty, this is levied on the production of goods that are not under GST. After the introduction of GST, the main item on which State excise duty is applied is alcohol. (c) Sales tax and VAT: There are certain items whose sale is not covered by GST. The sale of such items falls under the State sales tax or State value added tax (VAT) (d) Stamps and Registration Duty: This is generally levied on the sale of land and/or immovable properties such as flats/houses/buildings. (e) Vehicle Registration Tax: As the name suggests, this tax is applied on the registration of new vehicles or in the case of a change in the ownership of a vehicle. (f) Entertainment Tax: This levy is generally applied on the sale of movie tickets, etc.

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Own Non-Tax Revenue includes revenues from Interest receipts, dividends and profits, general services, social services (health, education, water supply and sanitation, labour and employment, urban development, housing etc.), and economic services (crop husbandry, animal husbandry, fishery, forestry and wild life, cooperation, irrigation, power supply, petroleum, road transport, tourism etc.

Appendix-I (from Page No. 161 onwards) of the **RBI** 'State Finances: A Study of Budgets of 2022-23' gives the details of tax and non-tax revenues of each state / UT with Legislature in India

### 4. Revenue Expenditure

Revenue expenditure is for the normal running of Government Departments and for rendering of various services, making interest payments on debt, meeting subsidies, grants in aid, etc. Broadly, the expenditure which does not result in creation of assets for the Government is treated as revenue expenditure. All grants given to the Local Bodies / Panchayats and other parties are also treated as revenue expenditure even though some of the grants may be used for creation of capital assets.

Typically revenue expenditures include expenditures on salary, pension, interest payment, subsidy, old age pension, electricity, water charges, motor vehicle, contingent expenditure and maintenance of capital assets like roads, buildings, irrigation works etc. Thus, revenue expenditure is an establishment related and maintenance/house-keeping related expenditure.

# 5. Development Expenditure & Non-Development Expenditure

The analysis of the expenditure data is disaggregated into development and non-development expenditure. All expenditures relating to revenue account, capital outlay and loans and advances are categorised into social services, economic services and general services. While social and economic services constitute development expenditure, expenditure on general services is treated as non-development expenditure. Thus, development expenditure includes the development components of revenue expenditure, capital outlay and loans and advances by State governments. Social sector expenditure includes expenditure on social services, rural development, and food storage and warehousing (given under revenue expenditure, capital outlay and loans and advances by State governments).

# 6. Aggregate Disbursement

This is a summation of aggregate expenditure and debt repayments.



Table-2.2.1 (B): Major Fiscal Indicators of the North Eastern States - Part B

(Per Cent)

State	Interest Pay	t Payment / Revenue Receipts				penditure		Fransfers / Ag				
	2020-21	2021-22	2022-23	2020-21 2021-22 2022-23			2020-21 2021-22 2022-23			Disbursement 2020-21 2021-22 2022-23		
	(Accounts)	(RE)	(BE)	(Accounts)	(RE)	(BE)	(Accounts)	(RE)	(BE)	(Accounts)	(RE)	(BE)
1	2	3	4	5	6	7	8	9	10	11	12	13
Arunachal Pradesh	4.4	3.2	3.6	27.9	26.3	29.0	8.3	8.5	10.2	81.6	83.5	82.0
Assam	7.9	7.4	7.6	33.1	30.5	34.1	16.0	9.7	11.5	58.7	50.8	60.7
Manipur	6.4	4.2	3.9	38.2	35.1	32.7	14.0	15.1	13.1	78.3	75.7	78.3
Meghalaya	8.0	6.9	6.9	31.3	29.4	29.0	10.4	9.3	9.6	61.1	69.4	68.8
Mizoram	5.2	4.3	4.0	35.2	30.1	33.8	17.4	12.9	17.2	67.5	71.7	76.2
Nagaland	7.5	7.4	6.4	44.3	45.9	44.2	15.9	18.2	18.0	78.3	73.3	79.0
Sikkim	9.8	8.4	8.7	34.4	32.7	32.8	14.3	12.9	13.4	52.5	67.3	60.3
Tripura	9.7	7.7	7.1	39.0	36.9	35.8	16.2	15.5	15.7	72.3	74.9	71.1
All States & UTs	15.0	12.9	12.2	32.5	30.6	31.1	12.5	11.2	11.8	37.7	37.9	36.0

Source: RBI 'State Finances: A Study of Budgets of 2022-23' [Statement-1 (continued) at Page No. 74]

- 1. Development and Non-development expenditure as a ratio to aggregate disbursement may not add up to hundred as aggregate disbursement also includes repayments
- 2. RE stands for 'Revised Estimates' and BE for 'Budget Estimates'
- 3. Aggregate Disbursement: This is a summation of aggregate expenditure and debt repayments.
- 4. Revenue Receipts: The above includes (a) own tax and own non-tax revenues of the State Government; (b) share in central taxes; and (c) grants-in-aid from the Central Government
- 5. Revenue Expenditure: As detailed at Note (4) of Table-2.17 (A)
- 6. Committed Expenditure: This comprises of interest payments, administrative services and pension.
- 7. Gross Transfers: This includes (a) state's share in central taxes; (b) grants-in-aid from the Central Government for state's schemes, central schemes, centrally sponsored schemes, NEC schemes, Finance Commission Grants, and other grants; and (c) gross loans from the Central Government



Table-2.2.2: Revenue Deficit / Surplus of the North Eastern States

State	2	2020-21 (Accounts	)	2021-	-22 (Revised Estim	nates)	2022-23 (Budget Estimates)			
	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	
	Receipts	Expenditures	Deficit	Receipts	Expenditures	Deficit	Receipts	Expenditures	Deficit	
1	2	3	4= 3-2	5	6	7=6-5	8	9	10=9-8	
Arunachal Pradesh	17,123.5	13,087.5	-4,036.0	24,307.0	17,695.9	-6,611.1	23,838.5	18,201.5	-5,637.0	
Assam	65,896.2	64,519.6	-1,376.6	96,042.4	99,752.9	3,710.6	99,662.5	96,367.0	-3,295.5	
Manipur	12,982.7	12,428.5	-554.2	21,196.8	17,162.7	-4,034.1	24,447.9	17,914.4	-6,533.5	
Meghalaya	10,683.2	11,498.6	815.4	15,231.8	13,956.5	-1,275.3	16,035.4	15,375.5	-659.8	
Mizoram	7,740.7	8,514.8	774.1	10,298.7	10,487.2	188.4	11,426.2	10,006.5	-1,419.7	
Nagaland	11,427.4	11,052.1	-375.4	12,799.6	12,302.4	-497.1	16,075.1	14,398.9	-1,676.2	
Sikkim	5,607.8	6,368.6	760.8	8,223.3	7,461.9	-761.4	8,420.6	8,354.3	-66.3	
Tripura	13,292.4	14,367.8	1,075.4	19,659.9	20,354.5	694.6	21,047.2	21,606.9	559.7	
NE States	1,44,753.9	1,41,837.5	-2,916.5	2,07,759.5	1,99,174.0	-8,585.4	2,20,953.4	2,02,225.0	-18,728.3	
All States & UTs	25,86,621.9	29,57,843.9	3,71,222.1	33,52,862.6	35,68,709.5	2,15,846.8	38,56,878.2	39,40,864.7	83,986.6	

Source: RBI 'State Finances: A Study of Budgets of 2022-23' [Statement-2 at Page No. 75]

# Notes:

1. Negative figure under 'Revenue Deficit' indicates a 'Revenue Surplus'

2. Revenue Receipts

As detailed at Note (4) under Table-2.17 (B)

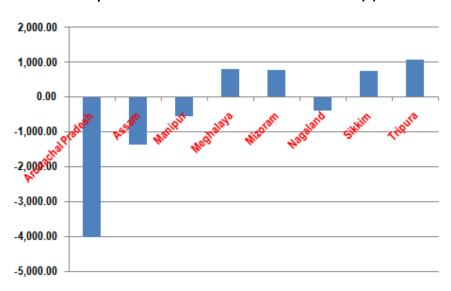
3. Revenue Expenditures

As detailed at Note (4) under Table-2.17 (A)

- 4. Revenue Deficit = Revenue Receipt Revenue Expenditure
- 5. Successive Finance Commissions have recognised the following rules as cornerstones of fiscal management for states: (i) keeping annual fiscal deficit within 3% of GSDP (the gap between total expenditure and total receipts), and (ii) eliminating revenue deficit (the gap between revenue expenditure and revenue receipts).



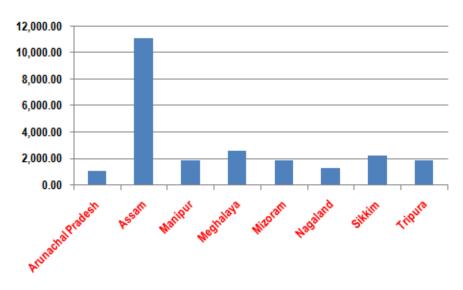
**Graph-2.2.1: Revenue Deficits of the NE States (\*)** 



(\*) as per 2020-21 (Accounts)

Y-axis gives the Revenue Deficit in Rs. Thousand Crore (Negative figures indicate a Revenue Surplus)

**Graph-2.2.2: Gross Fiscal Deficits of the NE States (\*)** 



(\*) as per 2020-21 (Accounts)

Y-axis gives the Fiscal Deficit in Rs. Thousand Crore



Table-2.2.3: Gross Fiscal Deficit / Surplus of the North Eastern States

State	2	2020-21 (Accounts	)	2021-	22 (Revised Estim	nates)	2022-23 (Budget Estimates)			
	Receipts	Expenditures	Deficit	Receipts	Expenditures	Deficit	Receipts	Expenditures	Deficit	
1	2	3	4= 3-2	5	6	7=6-5	8	9	10=9-8	
Arunachal Pradesh	17,123.5	18,209.7	1,086.2	24,307.0	25,062.6	755.6	23,838.5	24,898.3	1,059.8	
Assam	65,896.2	77,004.2	11,108.0	96,042.4	1,33,005.8	36,963.5	99,662.5	1,15,016.5	15,354.0	
Manipur	12,982.7	14,874.6	1,891.9	21,196.8	24,957.9	3,761.1	24,447.9	27,196.3	2,748.5	
Meghalaya	10,683.2	13,286.8	2,603.5	15,231.8	16,802.2	1,570.4	16,035.4	17,884.1	1,848.7	
Mizoram	7,740.7	9,610.0	1,869.3	10,298.7	12,055.8	1,757.0	11,426.2	12,636.6	1,210.4	
Nagaland	11,427.4	12,728.4	1,300.9	12,799.6	14,920.4	2,120.8	16,075.1	17,427.6	1,352.5	
Sikkim	5,607.8	7,881.3	2,273.5	8,223.3	9,963.7	1,740.4	8,420.6	9,947.9	1,527.3	
Tripura	13,292.4	15,201.5	1,909.1	19,659.9	23,024.6	3,364.7	21,047.2	25,868.5	4,821.4	
NE States	1,44,753.9	1,68,796.5	24,042.4	2,07,759.5	2,59,793.0	52,033.5	2,20,953.4	2,50,875.8	29,922.6	
All States & UTs	25,96,768.6	34,01,342.8	8,04,574.3	33,59,611.0	42,42,945.9	8,83,334.9	38,62,867.6	47,45,678.3	8,82,810.7	

Source: RBI 'State Finances: A Study of Budgets of 2022-23' [Statement-3 at Page No. 76]

- 1. Negative figure under 'Deficit' indicates a 'Surplus'
- 2. Gross Fiscal Deficit = GFD Expenditures GFD Receipts, where:
  - a. Gross Fiscal Deficit (GFD) Receipts include revenue receipts and miscellaneous capital receipts.
  - b. GFD Expenditures include revenue expenditures, capital outlay and loans and advances net of recoveries.
- 3. GFD can be decomposed into (a) Revenue Deficit (=Revenue Expenditure Revenue Receipts); (b) Capital Outlay; (c) Net Loans & Advances (=Gross Loans & Advances Recoveries); and (d) Non-debt capital receipts (which are negligible in the NE states).
- 4. Revenue Expenditure has been detailed at Note (4) under Table-2.17 (B); Revenue Receipts has been detailed at Note (4) under Table-2.17 (A)
- 5. Capital Expenditure is incurred with the objective of increasing concrete assets of a material and permanent character viz., on the acquisition of land, building, machinery and equipment, investment in shares, and loans and advances by the government to PSUs and other parties. It is equal to the Capital Outlay + Gross Loans & Advances.
- 6. Successive Finance Commissions have recognised the following rules as cornerstones of fiscal management for states: (i) keeping annual fiscal deficit within 3% of GSDP (the gap between total expenditure and total receipts), and (ii) eliminating revenue deficit (the gap between revenue expenditure and revenue receipts).



Table-2.2.4: Decomposition of Gross Fiscal Deficit of the North Eastern States

		202	0-21 (Accou	ınts)			2021-22 (	Revised Es	timates)		2022-23 (Budget Estimate				
	Revenue Deficit	Capital Outlay	Net Lending	Non-Debt Capital receipts	Gross Fiscal Deficit	Revenue Deficit	Capital Outlay	Net Lending	Non-Debt Capital receipts	Gross Fiscal Deficit	Revenue Deficit	Capital Outlay	Net Lending	Non-Debt Capital receipts	Gross Fiscal Deficit
1	2	3	4	5	6= 2+3+4+5	7	8	9	10	11= 7+8+9+10	12	13	14	15	16= 12+13+ 14+15
Arunachal Pradesh	-4036.0	5123.3	-1.1	0.0	1086.2	-6611.1	7372.3	-5.5	0.0	755.6	-5637.0	6701.2	-4.4	0.0	-4036.0
Assam	-1376.6	12399.4	85.2	0.0	11108.0	3710.6	33136.6	116.3	0.0	36963.5	-3295.5	18371.0	278.4	0.0	-1376.6
Manipur	-554.2	2439.2	6.9	0.0	1891.9	-4034.1	7796.9	-1.7	0.0	3761.1	-6533.5	9272.5	9.4	0.0	-554.2
Meghalaya	815.4	1734.0	54.1	0.0	2603.5	-1275.3	2816.5	29.2	0.0	1570.4	-659.8	2462.6	45.9	0.0	815.4
Mizoram	774.1	1126.0	-30.8	0.0	1869.3	188.4	1598.9	-30.3	0.0	1757.0	-1419.7	2663.1	-33.0	0.0	774.1
Nagaland	-375.4	1671.9	4.4	0.0	1300.9	-497.1	2616.7	1.3	0.0	2120.8	-1676.2	3029.6	-0.9	0.0	-375.4
Sikkim	760.8	1513.9	-1.2	0.0	2273.5	-761.4	2500.5	1.3	0.0	1740.4	-66.3	1592.3	1.3	0.0	760.8
Tripura	1075.4	832.1	1.6	0.0	1909.1	694.6	2566.1	104.0	0.0	3364.7	559.7	4256.3	5.4	0.0	1075.4
NE States	-2916.5	26839.8	119.1	0.0	24042.4	-8585.4	60404.5	214.6	0.0	52033.5	-18728.3	48348.6	302.1	0.0	-2916.5
All States & UTs	371222.1	413687.0	29811.9	10146.70	804574.3	215846.8	634037.6	40198.8	6748.4	883334.9	83986.6	754427.7	50385.9	5989.5	882810.7

Source: RBI 'State Finances: A Study of Budgets of 2022-23' [Statement-4 at Page No. 77]

- 1. Negative figure under deficit indicators indicates a 'surplus'
- 2. '---' means either 'Nil' or 'Negligible'
- 3. Gross Fiscal Deficit is the excess of expenditure (revenue and capital) over revenue receipt and recovery of loans. For NE states, it is equal to (a) revenue deficit (=revenue expenditure revenue receipts); (b) capital expenditure (outlay); and (c) net lending (net of recovery of loans), as there are no (or negligible) non-debt capital receipts.



Table-2.2.5: Tax Revenues (\*) of the North Eastern States

(Percent)

		Tax Revenue			Own Tax Revenue		Share in Central Taxes			
	2020-21	2021-22 (RE)	2022-23	2020-21	2021-22 (RE)	2022-23	2020-21	2021-22 (RE)	2022-23	
	(Accounts)		(BE)	(Accounts)		(BE)	(Accounts)		(BE)	
Arunachal Pradesh	0.7	0.7	0.6	0.1	0.1	0.1	1.8	1.7	1.7	
Assam	2.0	2.1	1.8	1.5	1.4	1.3	3.1	3.4	3.1	
Manipur	0.3	0.3	0.3	0.1	0.1	0.1	0.7	0.7	0.7	
Meghalaya	0.4	0.3	0.3	0.2	0.2	0.1	0.8	0.7	0.8	
Mizoram	0.2	0.2	0.2	0.1	0.1	_	0.5	0.5	0.5	
Nagaland	0.3	0.3	0.2	0.1	0.1	0.1	0.6	0.6	0.6	
Sikkim	0.2	0.2	0.2	0.1	0.1	0.1	0.4	0.4	0.4	
Tripura	0.4	0.4	0.3	0.2	0.1	0.1	0.8	0.8	0.7	
NE States	4.5	4.5	3.9	2.4	2.2	1.9	8.7	8.8	8.5	
All States & UTs	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

(\*) as a ratio of all States and Union Territories of India

Source: RBI 'State Finances: A Study of Budgets of 2022-23' [Statement-14 at Page No. 87]

- 1. RE stands for 'Revised Estimates' and BE for 'Budget Estimates'
- 2. State's Own Tax Revenues: As detailed at Note (3) of Table-2.17 (A)
- 3. Share in Central Taxes can include: State's share from Central Taxes like Central Goods & Services Tax, Corporation Tax, Income Tax, Customs, Union Excise Duty, Service Tax and Other taxes on Commodities and Services



Table-2.2.6: Non-Tax Revenues (\*) of the North Eastern States

(Percent)

		Non-Tax Revenue		0	wn Non-Tax Revenu	Je	Grants			
	2020-21 (Accounts)	2021-22 (RE)	2022-23 (BE)	2020-21 (Accounts)	2021-22 (RE)	2022-23 (BE)	2020-21 (Accounts)	2021-22 (RE)	2022-23 (BE)	
Arunachal Pradesh	0.6	0.9	0.6	0.5	0.3	0.3	0.7	1.0	0.7	
Assam	3.7	4.5	4.2	1.7	2.1	2.1	4.2	5.2	4.9	
Manipur	0.9	1.3	1.3	0.1	0.1	0.1	1.1	1.7	1.7	
Meghalaya	0.5	0.7	0.6	0.3	0.3	0.2	0.5	0.8	0.7	
Mizoram	0.5	0.5	0.5	0.3	0.3	0.3	0.5	0.6	0.6	
Nagaland	0.9	0.7	0.8	0.1	0.1	0.1	1.0	0.8	1.1	
Sikkim	0.3	0.4	0.3	0.4	0.2	0.3	0.3	0.4	0.3	
Tripura	0.8	1.0	1.0	0.2	0.1	0.1	1.0	1.3	1.3	
NE States	8.2	10.0	9.3	3.6	3.5	3.5	9.3	11.8	11.3	
All States & UTs	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

(\*) as a ratio of all States and Union Territories of India

Source: RBI 'State Finances: A Study of Budgets of 2022-23' [Statement-15 at Page No. 88]

- 1. RE stands for 'Revised Estimates' and BE for 'Budget Estimates'
- 2. Non-Tax Revenue = Own Non-Tax Revenue + Grants (from the Centre)
- 3. State's Own Non-Tax Revenues: As detailed at Note (3) of Table-2.17 (A)
- 4. Grants (from the Centre) can include: grants for State plan schemes, centrally sponsored schemes, NEC schemes, Finance Commission Grants, and other grants



Table-2.2.7: Financing of the Gross Fiscal Deficit of the North Eastern States – 2020-21 (Accounts)

State	Market Borrowings	Loans from Centre	Special Securities issued to NSSF	Loans from LIC, NABARD, NCDC, SBI & other Banks	Provident Funds etc.	Reserve Funds	Deposits & Advances	Suspense & Miscellaneous	Remittances	Others	Overall Deficit (+) / Surplus (-)	Gross Fiscal Deficit (+) / Surplus (-) (Col. 2 to 12)
1	2	3	4	5	6	7	8	9	10	11	12	13
Arunachal Pradesh	767.8	207.2	146.9	138.3	203.3	-298.7	-80.6	-49.5	-100.4	-3.7	155.5	1,086.2
Assam	14,230.0	414.4	-755.0	909.4	888.9	43.2	-229.7	343.1	-46.4	-0.6	-4,689.2	11,108.0
Manipur	1,154.0	319.4	-54.2	113.3	29.5	278.3	-59.2	2.3	-16.3	-0.8	125.4	1,891.9
Meghalaya	1,587.0	323.7	-53.8	96.9	211.4	-30.5	61.6	-23.4	-14.7	2.5	442.7	2,603.5
Mizoram	678.6	225.3	-16.7	107.8	215.9	6.9	-23.3	375.4	136.2	-1.5	164.8	1,869.3
Nagaland	1,365.6	186.7	-13.1	-1.5	-255.7	-0.9	18.0	-57.9	0.2	-35.4	94.9	1,300.9
Sikkim	1,292.0	191.9	-16.1	19.6	155.4	16.9	0.8	126.5	355.3	-2.4	133.6	2,273.5
Tripura	1,631.0	495.1	-119.0	100.0	638.7	249.9	242.6	-2.2	-32.3	-0.1	-1,294.7	1,909.1
NE States	22706.0	2363.7	-881.0	1483.8	2087.4	265.1	-69.8	714.3	281.6	-42.0	-4867.0	24042.4

Source: RBI 'State Finances: A Study of Budgets of 2022-23' [Statement-5 at Page No. 78]

- 1. '-' means either 'Nil' or 'Negligible
- 2. Others' include Loans from other institutions, compensation bonds, appropriation to contingency fund, inter-state settlement and contingency fund.
- 3. NSSF: National Small Savings Fund
- 4. Due to the change in the accounting procedure from 1999-2000, Loans from the Centre excludes States' share in small saving collections which is shown under Securities issued to the NSSF under Internal Debt. Accordingly, repayments of small saving collections included under repayments of Loans to Centre is now shown under discharge of Internal Debt to have consistent accounting for receipts and expenditure.
- 5. All figures are on a net basis.



Table-2.2.8: Financing of the Gross Fiscal Deficit of the North Eastern States – 2021-22 (Budget Estimates)

State	Market Borrowings	Loans from Centre	Special Securities issued to NSSF	Loans from LIC, NABARD, NCDC, SBI & other Banks	Provident Funds etc.	Reserve Funds	Deposits & Advances	Suspense & Miscellaneous	Remittances	Others	Overall Deficit (+) / Surplus (-)	Gross Fiscal Deficit (+) / Surplus (-) (Col. 2 to 12)
1	2	3	4	5	6	7	8	9	10	11	12	13
Arunachal Pradesh	906.1	-25.6	-133.1	302.6	136.0	-250.1	31.3	102.8	-703.2	12.1	680.9	1,059.8
Assam	15,604.5	679.1	-755.0	1,102.9	827.1	_	-333.0	307.0	-470.6	-0.6	-1,607.4	15,354.0
Manipur	1,525.0	-41.7	-54.2	228.0	-19.9	_	-100.0	_	_	-19.0	1,230.3	2,748.5
Meghalaya	1,518.1	43.0	-55.0	174.6	240.0	-21.1	-214.7	-8.9	4.4	-12.6	180.9	1,848.7
Mizoram	714.3	94.3	-14.3	66.9	61.0	1.0	51.5	_	43.0	349.2	-156.5	1,210.4
Nagaland	1,579.3	12.3	-13.5	-13.3	_	_	_	_	_	-62.0	-150.3	1,352.5
Sikkim	1,529.5	-8.0	-16.1	26.8	93.4	-96.0	_	_	_	-2.3	_	1,527.3
Tripura	1,647.0	950.7	-120.0	274.1	400.0	209.6	240.9	1.9	-2.4	_	1,219.5	4,821.4
NE States	25023.8	1704.1	-1161.2	2162.6	1737.6	-156.6	-324	402.8	-1128.8	264.8	1397.4	29922.6

Source: RBI 'State Finances: A Study of Budgets of 2022-23' [Statement-9 at Page No. 82]

- 1. '-' means either 'Nil' or 'Negligible
- 2. Others' include Loans from other institutions, compensation bonds, appropriation to contingency fund, inter-state settlement and contingency fund.
- 3. NSSF: National Small Savings Fund
- 4. Due to the change in the accounting procedure from 1999-2000, Loans from the Centre excludes States' share in small saving collections which is shown under Securities issued to the NSSF under Internal Debt. Accordingly, repayments of small saving collections included under repayments of Loans to Centre is now shown under discharge of Internal Debt to have consistent accounting for receipts and expenditure.
- 5. All figures are on a net basis.



Table-2.2.9: Financing of the Gross Fiscal Deficit of the North Eastern States – 2022-23 (Revised Estimates)

State	Market Borrowings	Loans from Centre	Special Securities issued to NSSF	Loans from LIC, NABARD, NCDC, SBI &	Provident Funds etc.	Reserve Funds	Deposits & Advances	Suspense & Miscellaneous	Remittances	Others	Overall Deficit (+) / Surplus (-)	Gross Fiscal Deficit (+) / Surplus (-) (Col. 2 to
				other Banks								12)
1	2	3	4	5	6	7	8	9	10	11	12	13
Arunachal Pradesh	726.5	-25.6	181.0	292.6	-85.0	-238.2	29.8	97.9	-669.7	1.7	444.7	755.6
Assam	18,836.9	580.1	-755.0	1,170.5	1,523.2	-	1,170.8	285.5	-120.1	-0.6	14,272.2	36,963.5
Manipur	1,326.0	-42.3	-54.2	248.0	-19.9	_	-100.0	_	_	-19.0	2,422.5	3,761.1
Meghalaya	1,340.0	44.5	-55.0	147.1	75.4	-3.5	-450.5	-5.9	455.6	-0.1	22.8	1,570.4
Mizoram	700.0	305.5	-9.0	78.5	61.0	5.0	551.5	_	44.2	10.6	9.7	1,757.0
Nagaland	1,222.0	198.8	-13.5	-11.3	-350.0	_	-500.0	-	-	-47.5	1,622.3	2,120.8
Sikkim	1,496.4	290.8	-16.1	17.3	163.1	-124.1	_	_	_	-2.4	-84.6	1,740.4
Tripura	1,362.0	671.4	-120.1	171.4	300	226.9	103.6	1.9	-2.4	_	650.0	3,364.7
NE States	27009.8	2023.2	-841.9	2114.1	1667.8	-133.9	805.2	379.4	-292.4	-57.3	19359.6	52033.5

Source: RBI 'State Finances: A Study of Budgets of 2022-23' [Statement-7 at Page No. 80]

- 1. '-' means either 'Nil' or 'Negligible
- 2. Others' include Loans from other institutions, compensation bonds, appropriation to contingency fund, inter-state settlement and contingency fund.
- 3. NSSF: National Small Savings Fund
- 4. Due to the change in the accounting procedure from 1999-2000, Loans from the Centre excludes States' share in small saving collections which is shown under Securities issued to the NSSF under Internal Debt. Accordingly, repayments of small saving collections included under repayments of Loans to Centre is now shown under discharge of Internal Debt to have consistent accounting for receipts and expenditure.
- 5. All figures are on a net basis.



Table-2.2.10: Loans from the Centre of the North Eastern States

(Rs. in Crore) for Columns (2) – (7)

State	2020-21 (	Accounts)	2021-22 (Revi	sed Estimates)	2022-23 (Bud	get Estimates)		Variation	(Percent)	
							Col 4 / Col 2	Col 5 / Col 3	Col 6 / Col 4	Col 7 / Col 5
	Gross	Net (*)	Gross	Net (*)	Gross	Net (*)	Gross	Net (*)	Gross	Net (*)
1	2	3	4	5	6	7	8	9	10	11
Arunachal Pradesh	233.0	207.2	_	-25.6	_	-25.6	_	-112.4	ı	-
Assam	563.8	414.4	743.5	580.1	838.7	679.1	31.9	40.0	12.8	17.1
Manipur	367.4	319.4	_	-42.3	_	-41.7	_	-113.2	ı	-1.4
Meghalaya	345.4	323.7	67.5	44.5	67.0	43.0	-80.4	-86.2	-0.8	-3.5
Mizoram	247.6	225.3	330.5	305.5	119.3	94.3	33.5	35.6	-63.9	-69.1
Nagaland	207.6	186.7	221.4	198.8	34.9	12.3	6.6	6.5	-84.2	-93.8
Sikkim	202.8	191.9	302.5	290.8	3.5	-8.0	49.1	51.6	-98.8	-102.8
Tripura	528.0	495.1	704.4	671.4	983.0	950.7	33.4	35.6	39.6	41.6
NE States	2695.6	2363.7	2369.8	2023.2	2046.4	1704.1	-12.1	-14.4	-13.6	-15.8

(\*) Gross loans from centre <u>minus</u> repayment of loans to the Centre

Source: RBI 'State Finances: A Study of Budgets of 2022-23' [Statement-16 at Page No. 89]

## Notes:

- 1. '-' means either 'Nil' or 'Negligible
- 2. '...' means abnormal growth due to low base



Table-2.2.11: Market Borrowings of the North Eastern States

(Rs. in Crore)

State	201	9-20	202	0-21	202	1-22
	Gross Amount Raised	Repayments	Gross Amount Raised	Repayments	Gross Amount Raised	Repayments
Arunachal Pradesh	1,366.0	79.1	767.0	NA	563.0	33.0
Assam	12,906.0	1,909.8	15,030.0	800.0	12,753.0	2,000.0
Manipur	1,757.0	502.8	1,302.0	258.1	1,476.0	150.0
Meghalaya	1,344.0	273.5	1,777.0	190.0	1,608.0	310.0
Mizoram	900.0	155.3	944.0	266.7	747.0	300.0
Nagaland	1,000.0	577.4	1,721.0	355.4	1,727.0	505.0
Sikkim	809.0	328.0	1,292.0	NA	1,511.0	40.0
Tripura	2,928.0	350.0	1,916.0	285.0	300.0	300.0
NE States	23,010.0	4,175.9	24,749.0	2,155.2	20,685.0	3,638.0

Source: RBI 'State Finances: A Study of Budgets of 2022-23' based on its records [Statement-21 at Page No. 96]

#### Market Borrowing of States

Over the past decade the size of State Government (SG) budgets have increased sharply and they now collectively spend substantially more than the Central Government (CG). Pursuant to the recommendation of Finance Commission-XIV, almost all states have opted out of National Small Savings Fund (NSSF). As a result, reliance of SGs on market borrowings has increased substantially in recent years. This has led to the pace of increase in market borrowings of SGs higher than that of the CG, which is more or less at stagnant levels over the past couple of years.

Increased reliance on market borrowings led to an oversupply of Government paper in and contributed to hardening of sovereign yields. This results in a spiral, whereby increased market borrowings result in increasing redemption pressures which induces further borrowing to service outstanding debt and accumulated interest burden. As the investor base for G-Sec and State Development Loans (SDLs) are almost same, the continuous and large supply of SDLs had resulted in hardening of yields of CG securities also. The increased supply and consequent hardening of yields, has a cascading effect on interest rates in other segments of the financial market, as pricing of other products are based on the risk-free yield curve. This feeds into inflation through input costs, further increasing yield levels, thereby creating a vicious cycle.

[Excerpted from Speech 'State Government Market Borrowings - Issues and Prospects' by Shri B. P. Kanungo, Deputy Governor, Reserve Bank of India - August 31, 2018 and available at the following link: https://www.ccilindia.com/Documents/Rakshitra/2018/SEP/Speeches.pdf]

Further, the RBI in a paper 'States' Fiscal Performance and Yield Spreads on Market Borrowings in India' has suggested, 'State Governments are borrowing significantly from the market to meet their budgetary requirements. As investors are risk-conscious, fiscal fundamentals may impact the yields, and states' borrowing costs. Indicator-based assessment of the states' performance is cumbersome, keeping in view a large number of indicators. Therefore, we develop a holistic measure of the states' performance by developing a composite index that incorporates fiscal, debt and market-related indicators. We empirically find that the index has a statistically significant relationship with the yield spreads, which suggests that better performance of states is rewarding as it lowers borrowing costs'.

[Excerpted from RBI Working Paper Series No. 4 'States' Fiscal Performance and Yield Spreads on Market Borrowings in India' and available at the following link: https://rbi.org.in/Scripts/PublicationsView.aspx?id=20995]



Table-2.2.12: Interest Payments of the North Eastern States

(Rs. in Crore) for Columns (2) – (7)

State	2020-21 (	Accounts)	2021-22 (Revi	sed Estimates)	2022-23 (Bud	get Estimates)		Variation	(Percent)	
						-	Col 4 / Col 2	Col 5 / Col 3	Col 6 / Col 4	Col 7 / Col 5
	Gross	Net (*)	Gross	Net (*)	Gross	Net (*)	Gross	Net (*)	Gross	Net (*)
1	2	3	4	5	6	7	8	9	10	11
Arunachal Pradesh	752.3	718.2	787.3	787.3	852.5	852.5	4.6	9.6	8.3	8.3
Assam	5,199.2	4,963.3	7,063.7	6,212.2	7,533.7	7,221.7	35.9	25.2	6.7	16.3
Manipur	831.6	829.4	894.8	892.6	963.1	948.1	7.6	7.6	7.6	6.2
Meghalaya	858.9	847.4	1,046.9	1,011.9	1,110.2	1,096.3	21.9	19.4	6.1	8.3
Mizoram	401.0	381.9	445.1	392.0	462.1	403.8	11.0	2.7	3.8	3.0
Nagaland	856.8	852.2	952.8	949.5	1,028.3	1,025.0	11.2	11.4	7.9	8.0
Sikkim	548.4	421.5	689.1	652.6	732.5	674.2	25.7	54.8	6.3	3.3
Tripura	1,284.8	1,266.7	1,505.3	1,465.3	1,499.2	1,454.2	17.2	15.7	-0.4	-0.8
NE States	10733.0	10280.6	13385.0	12363.4	14181.6	13675.8	24.7	20.3	6.0	10.6

<sup>(\*)</sup> Gross interest payments minus interest receipts

Source: RBI 'State Finances: A Study of Budgets of 2022-23' [Statement-13 at Page No. 86]



Table-2.2.13: Total Outstanding Liabilities of the North Eastern States (As at the end of March)

(Rs. in Crore)

State	2016	2017	2018	2019	2020	2021	2022 (RE)	2023 (BE)
Arunachal Pradesh	5,717.1	5,669.6	6,968.7	8,430.5	12,125.1	14,077.4	14,477.7	15,457.0
Assam	41,963.7	44,036.5	49,309.8	59,796.4	73,527.8	89,709.1	1,04,151.1	1,21,276.1
Manipur	8,146.7	8,831.4	9,564.9	10,463.0	11,405.8	13,060.5	14,399.1	15,917.3
Meghalaya	7,524.6	9,244.2	10,157.5	11,348.4	12,320.7	14,704.9	15,760.8	17,433.1
Mizoram	7,076.1	6,680.5	7,547.0	7,638.7	9,001.4	10,217.1	11,667.2	12,991.2
Nagaland	8,923.4	9,562.2	10,399.2	11,639.5	13,836.1	15,254.0	15,059.6	16,562.4
Sikkim	4,338.3	4,688.5	5,910.9	6,850.4	7,954.0	9,655.7	11,455.4	12,982.6
Tripura	10,354.1	11,851.5	13,383.7	15,085.5	18,178.9	21,490.5	22,843.7	26,446.1
NE States	94,044.0	1,00,564.4	1,13,241.7	1,31,252.4	1,58,349.8	1,88,169.2	2,09,814.6	2,39,065.8

Source: RBI 'State Finances: A Study of Budgets of 2022-23' [Statement-19 at Page No. 94]

Notes:

1. RE stands for 'Revised Estimates' and BE for 'Budget Estimates'



Table-2.2.14: Total Outstanding Liabilities of the North Eastern States – As percent of GSDP (As at the end of March)

(Percent)

State	2016	2017	2018	2019	2020	2021	2022 (RE)	2023 (BE)
Arunachal Pradesh	30.9	28.5	31.0	33.3	40.4	45.0	41.4	39.7
Assam	18.4	17.3	17.4	19.3	21.2	26.4	26.9	27.5
Manipur	41.7	41.5	37.1	38.2	36.4	38.3	38.4	38.3
Meghalaya	30.0	33.7	34.4	35.3	35.4	42.4	41.7	42.5
Mizoram	46.7	38.9	38.9	34.9	42.6	56.7	55.7	53.1
Nagaland	45.7	44.0	42.6	43.9	46.6	50.1	43.5	44.2
Sikkim	24.1	22.7	22.8	24.1	25.3	30.4	31.1	30.8
Tripura	28.8	30.0	30.6	30.3	33.6	39.5	35.3	34.8
NE States	24.8	23.8	23.9	25.2	27.3	32.8	32.1	32.2

Source: RBI 'State Finances: A Study of Budgets of 2022-23' [Statement-20 at Page No. 95]

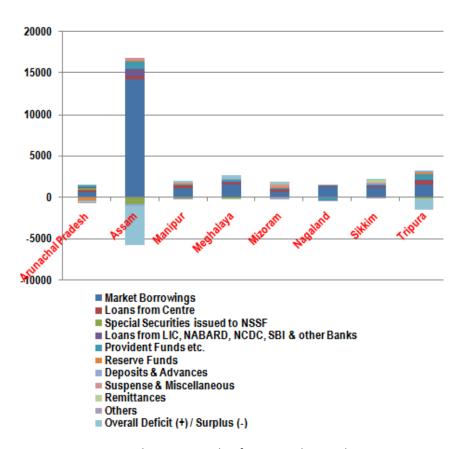
Notes:

1. RE stands for 'Revised Estimates' and BE for 'Budget Estimates'

2. GSDP: Gross State Domestic Product



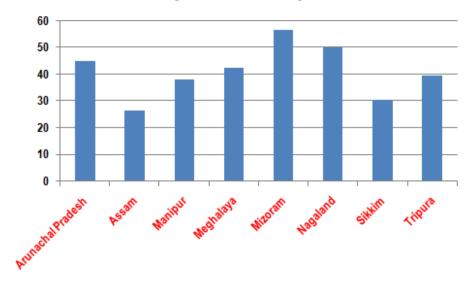
Graph-2.2.3: Financing of the Gross Fiscal Deficit of the North Eastern States – 2020-21 (Accounts) [from Table-2.2.7]



Y-axis gives the Gross Fiscal Deficit in Rs. Thousand Crore (Negative figures indicate a Gross Fiscal Surplus)

Graph-2.2.4: Total Outstanding Liabilities of the North Eastern States –
As percent of GSDP (As at the end of March 2021 as per Actual)

[from Table-2.2.14]



Y-axis gives the Total Outstanding Liabilities as a % of GSDP of State



# 2.3. Enterprises in the North Eastern Region

The Economic Censuses provide a count of the establishments; including those in the unorganized sector, which have a huge contribution in the Indian economy in terms of employment generation. The coverage of these economic censuses includes almost all the sectors of the country, excluding crop production, plantation, public administration, defence and compulsory social security. These censuses give a picture of the distribution of the economic units of the country at various levels, covering the all-India, State, district, and village or ward levels for comprehensive analysis of the structure of the economy.

The 7<sup>th</sup> Economic Census had been carried out in 2019. It aimed to develop a nation-wide Business Register as per the international practices adopted by developed nations. This was in addition to the collection of data on the economic activities of the non-farm establishments, including their distribution for a comprehensive analysis of the economic structure of India. While the results of the above economic census have been finalised, some of the states of the Union have not yet validated the data of their states (till October 2023). Consequently, the results of the 7<sup>th</sup> Economic Census have not yet been released for public access and use.

In view of the above position, the present discussion is based on the published data of the previous economic census, i.e. the 6<sup>th</sup> Economic Census.

The 6<sup>th</sup> Economic Census had been carried out in the previous decade. It is a data source which provides data on the number of establishments in the country, along with their distribution by geographic location and other pertinent parameters. It covered all States and Union Territories of Indian Union. The Economic Census enumerated all establishments engaged in various agricultural and non-agricultural activities excluding crop production, plantation, public administration, defence and compulsory social security. Data for handicraft/handloom establishments were collected for the first time. The Enumeration Blocks (EBs) of Population Census, 2011 were used as the primary geographical units for collection of data.

The following coverage includes the distribution of establishments and employment by sector and by type of establishment (from the 'Results at a Glance'); details of agricultural establishments (other than crop production and plantation), including their distribution by broad activity and the employment generated by such establishments; non-agricultural establishments; handicraft and handloom establishments; and women entrepreneurs.

The concepts and definitions used in the discussions have been covered subsequently. These have been furnished as notes to the tables to which they pertain.



# Results at a Glance (6th Economic Census)

Table-2.3.1: State-wise Percentage Distribution of Establishments & Employment by Sector in the NE Region as a Percentage of the all-India Total

(As a Percentage of the all India total)

State		Establishment	S		Employment	
	Rural	Urban	Combined	Rural	Urban	Combined
Arunachal Pradesh	0.06	0.07	0.06	0.09	0.08	0.08
Assam	4.18	2.42	3.47	4.04	1.90	3.01
Manipur	0.41	0.36	0.39	0.37	0.25	0.31
Meghalaya	0.21	0.14	0.18	0.28	0.16	0.22
Mizoram	0.06	0.15	0.10	0.06	0.13	0.09
Nagaland	0.10	0.12	0.10	0.13	0.12	0.12
Sikkim	0.06	0.07	0.06	0.07	0.06	0.07
Tripura	0.42	0.39	0.40	0.34	0.27	0.31
Percentage - NE Region	5.50	3.72	4.76	5.38	2.97	4.21
Percentage - India	100.00	100.00	100.00	100.00	100.00	100.00

Source: All India Report of 6<sup>th</sup> Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 2.5 Page No. 30]

#### Notes

#### Establishment

The establishment is a unit situated in a single location in which predominantly one kind of economic activity is carried out such that at least a part of the goods and/or services produced by the unit goes for sale (i.e. entire produce is not for sole consumption).

#### 2. Employment – Person Employed

All persons (including children under 15 years of age) working on the last working day prior to the date of fieldwork in the establishment, either as owners, members of the household, co-owner or partner or family members helping the owner in running the establishment including other persons engaged by the establishment, whether hired or not, besides regular and salaried employees, casual/daily wage labourers are considered as workers for the establishment.

#### 3. Urban Area

(a) All places with a municipality, corporation, cantonment board or notified town area committee, etc. or (b) All other places satisfying the following three criteria simultaneously: A minimum population of 5,000— At least 75% of male working population engaged in non-agricultural pursuits— A population density of at least 400 per sq. km.

The first category of urban units is known as Statutory Towns while the second category of towns is known as Census Towns, identified based on last population Census.

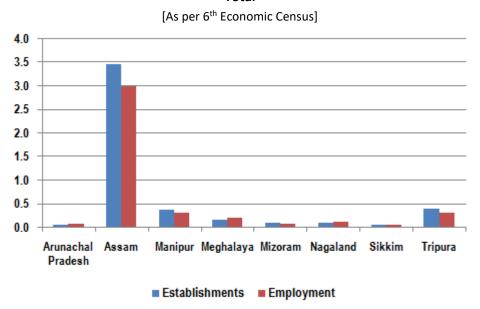
#### 4. Rural Area

All areas, which are not identified as urban, are rural areas. The basic unit for rural areas is revenue village.



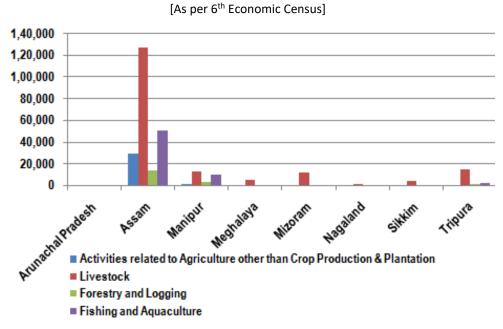
Graph-2.3.1: Establishments & Employment Generated in NE States as a Percentage of the all-India

Total



Y-axis gives the share of the State as a Percentage of the all-India Total [Blue Columns for Number of Establishments & Red Columns for Employment Generated]

Graph-2.3.2: State-wise distribution of Agricultural Establishments (from Table-2.3.5)



Y-axis gives the Numbers of Agricultural Establishments by Type in the State



# Results at a Glance (6th Economic Census)

Table-2.3.2: State-wise Percentage Distribution of Establishments & Employment by Type of Establishment in the NE Region as a Percentage of the all-India Total

(As a Percentage of the all India total)

State		Establishment	S		Employment	
	Without Hired Worker	With at least One Hired Worker	Total	Without Hired Worker	With at least One Hired Worker	Total
Arunachal Pradesh	0.05	0.10	0.06	0.11	0.05	0.08
Assam	3.48	3.45	3.47	2.99	3.03	3.01
Manipur	0.45	0.24	0.39	0.22	0.42	0.31
Meghalaya	0.13	0.30	0.18	0.29	0.13	0.22
Mizoram	0.09	0.13	0.10	0.10	0.08	0.09
Nagaland	0.09	0.13	0.10	0.15	0.09	0.12
Sikkim	0.07	0.06	0.06	0.07	0.06	0.07
Tripura	0.45	0.30	0.18	0.29	0.13	0.22
Percentage - NE Region	4.81	4.71	4.54	4.22	3.99	4.12
Percentage - India	100.00	100.00	100.00	100.00	100.00	100.00

Source: All India Report of 6<sup>th</sup> Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 2.6 Page No. 31]

## Notes

#### 1. Hired Worker

These are workers who are hired to perform a pre - determined task at a specified remuneration (fixed or variable partly or wholly). This is regardless of the days worked with an organization. The number of workers being paid wages on usual basis will be taken as hired worker.

## 2. Non-Hired Worker

This category may include household members/spouse/siblings/children/relatives, etc. Such workers will be working in the establishment on a fairly regular basis i.e. usually working on a working day. The primary motive of such workers is not monetary.

# 3. Other Definitions & Concepts

These have been covered in the previous tables.



Table-2.3.3: State-wise Distribution of Agricultural Establishments in the NE Region by Sector & Type of Establishment

(In Numbers)

State		Rural			Urban			Combined	
	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total
Arunachal Pradesh	161	74	235	32	53	85	193	127	320
Assam	184299	22959	207258	13698	2076	15774	197997	25035	223032
Manipur	24080	1421	25501	4087	365	4452	28167	1786	29953
Meghalaya	4924	1685	6609	593	144	737	5517	1829	7346
Mizoram	2224	1243	3467	6812	1752	8564	9036	2995	12031
Nagaland	1180	259	1439	154	31	185	1334	290	1624
Sikkim	3976	116	4092	248	13	261	4224	129	4353
Tripura	16615	553	17168	2390	239	2629	19005	792	19797
Total - NE Region	237459	28310	265769	28014	4673	32687	265473	32983	298456
Total - India	10954165	1131044	12085209	875117	171247	1046364	11829282	1302291	13131573

Source: All India Report of 6th Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 3.11 (A) Page No. 49]

## Notes

# 1. Agricultural Establishments

Establishments engaged in activities related to agriculture (other than crop production and plantation); livestock rearing and dairying; forestry and logging; fishing, fishery or aquaculture; etc. covered by NIC-2008 Section A and Division 01 (excluding NIC Groups 011 and 012), Division 02; and Division 03.

# 2. Other Definitions & Concepts

These have been covered in the previous tables



Table-2.3.4: State-wise Percentage Distribution of Agricultural Establishments in the NE Region by Sector & Type of Establishment as a Percentage of the all-India total

(As a percentage of the all India total)

State		Rural			Urban			Combined	
	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total
Arunachal Pradesh	0.00	0.01	0.00	0.00	0.03	0.01	0.00	0.01	0.00
Assam	1.68	2.03	1.71	1.57	1.21	1.51	1.67	1.92	1.70
Manipur	0.22	0.13	0.21	0.47	0.21	0.43	0.24	0.14	0.23
Meghalaya	0.04	0.15	0.05	0.07	0.08	0.07	0.05	0.14	0.06
Mizoram	0.02	0.11	0.03	0.78	1.02	0.82	0.08	0.23	0.09
Nagaland	0.01	0.02	0.01	0.02	0.02	0.02	0.01	0.02	0.01
Sikkim	0.04	0.01	0.03	0.03	0.01	0.02	0.04	0.01	0.03
Tripura	0.15	0.05	0.14	0.27	0.14	0.25	0.16	0.06	0.15
Percentage - NE Region	2.16	2.51	2.18	3.21	2.72	3.13	2.25	2.53	2.27
Percentage - India	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: All India Report of 6th Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 3.11 (B) Page No. 50]

Note



Table-2.3.5: State-wise Distribution of Agricultural Establishments) in the NE Region by Broad Activity

(In Numbers)

State	Activities related to Agriculture other than Crop Production & Plantation	Livestock	Forestry and Logging	Fishing and Aquaculture	TOTAL
Arunachal Pradesh	28	231	45	16	320
Assam	29982	127483	14470	51097	223032
Manipur	1953	12768	4176	11056	29953
Meghalaya	410	5360	1032	544	7346
Mizoram	12	11987	14	18	12031
Nagaland	65	1023	410	126	1624
Sikkim	24	4241	86	2	4353
Tripura	692	14566	2121	2418	19797
Total - NE Region	33166	177659	22354	65277	298456
Total - India	641479	11390326	602467	497301	13131573

Source: All India Report of 6<sup>th</sup> Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 3.12 (A) Page No. 52]

#### Notes

- 1. Activities related to Agriculture other than Crop Production & Plantation: As covered by NIC-2008 Section A and Division 01 excluding NIC Groups 011 (Growing of non-perennial crops) and 012 (Growing of perennial crops); also excluding NIC Groups 014 (Animal production) and 017 (Hunting, trapping and related service activities)
- 2. Livestock: As covered by NIC-2008 Section A and Division 01 under NIC Groups 014 (Animal production) and 017 (Hunting, trapping and related service activities)
- 3. Forestry & Logging: As covered by NIC-2008 Section A and Division 02
- 4. Fishing and Aquaculture: As covered by NIC-2008 Section A and Division 03



Table-2.3.6: State-wise Percentage Distribution of Agricultural Establishments in the NE Region by Broad Activity as a percentage of the all-India total

(As a percentage of the all India total)

State	Activities related to Agriculture other than Crop Production & Plantation	Livestock	Forestry and Logging	Fishing and Aquaculture	TOTAL
Arunachal Pradesh	0.00	0.00	0.01	0.00	0.00
Assam	4.67	1.12	2.40	10.27	1.70
Manipur	0.30	0.11	0.69	2.22	0.23
Meghalaya	0.06	0.05	0.17	0.11	0.06
Mizoram	0.00	0.11	0.00	0.00	0.09
Nagaland	0.01	0.01	0.07	0.03	0.01
Sikkim	0.00	0.04	0.01	0.00	0.03
Tripura	0.11	0.13	0.35	0.49	0.15
Percentage - NE Region	5.15	1.57	3.70	13.12	2.27
Percentage - India	100.00	100.00	100.00	100.00	100.00

Source: All India Report of 6<sup>th</sup> Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 3.12 (B) Page No. 53]

## Note



Forestry and logging establishments are comparatively numerous in Manipur



Table-2.3.7: State-wise Distribution of Employment in Agricultural Establishments in the NE Region by Sector & Type of Establishment

(In Numbers)

State		Rural			Urban			Combined	
	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total
Arunachal Pradesh	266	370	636	48	531	579	314	901	1215
Assam	274252	79932	354184	20169	6516	26685	294421	86448	380869
Manipur	34772	4417	39189	6335	1362	7697	41107	5779	46886
Meghalaya	7047	6327	13374	1053	510	1563	8100	6837	14937
Mizoram	3900	2687	6587	10848	3817	14665	14748	6504	21252
Nagaland	1925	951	2876	244	113	357	2169	1064	3233
Sikkim	5888	295	6183	423	112	535	6311	407	6718
Tripura	22149	1552	23701	3367	797	4164	25516	2349	27865
Total - NE Region	350199	96531	446730	42487	13758	56245	392686	110289	502975
Total - India	17620359	3436961	21057320	1261339	563842	1825181	18881698	4000803	22882501

Source: All India Report of 6th Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 3.13 (A) Page No. 55]

Note



Table-2.3.8: State-wise Percentage Distribution of Employment in Agricultural Establishments in the NE Region by Sector & Type of Establishment as a percentage of the all-India total

(As a percentage of the all India total)

State		Rural			Urban			Combined	
	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total
Arunachal Pradesh	0.00	0.01	0.00	0.00	0.09	0.00	0.01	0.00	0.00
Assam	1.56	2.33	1.68	1.60	1.16	1.56	2.33	1.68	1.60
Manipur	0.20	0.13	0.19	0.50	0.24	0.20	0.13	0.19	0.50
Meghalaya	0.04	0.18	0.06	0.08	0.09	0.04	0.18	0.06	0.08
Mizoram	0.02	0.08	0.03	0.86	0.68	0.02	0.08	0.03	0.86
Nagaland	0.01	0.03	0.01	0.02	0.02	0.01	0.03	0.01	0.02
Sikkim	0.03	0.01	0.03	0.03	0.02	0.03	0.01	0.03	0.03
Tripura	0.13	0.05	0.11	0.27	0.14	0.13	0.05	0.11	0.27
Percentage - NE Region	1.99	2.82	2.11	3.36	2.44	1.99	2.82	2.11	3.36
Percentage - All India	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: All India Report of 6th Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 3.13 (B) Page No. 56]

Note



Table-2.3.9: State-wise Distribution of Employment in Agricultural Establishments in the NE Region by Broad Activity

(In Numbers)

State	Activities related to Agriculture other than Crop Production & Plantation	Livestock	Forestry and Logging	Fishing and Aquaculture	TOTAL
Arunachal Pradesh	72	487	606	50	1215
Assam	69880	217815	19489	73685	380869
Manipur	3252	20449	6705	16480	46886
Meghalaya	1247	10736	2101	853	14937
Mizoram	18	21158	36	40	21252
Nagaland	127	1922	921	263	3233
Sikkim	30	6598	87	3	6718
Tripura	957	20825	2492	3591	27865
Total - NE Region	75583	299990	32437	94965	502975
Total - India	1361628	19418442	1224809	877622	22882501

Source: All India Report of 6<sup>th</sup> Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 3.14 (A) Page No. 57]

## Notes



Livestock establishments provide considerable employment in Assam



Table-2.3.10: State-wise Percentage Distribution of Employment in Agricultural Establishments in the NE Region by Broad Activity as a percentage of the all-India total

(As a percentage of the all India total)

State	Activities related to Agriculture other than Crop Production & Plantation	Livestock	Forestry and Logging	Fishing and Aquaculture	TOTAL
Arunachal Pradesh	0.01	0.00	0.05	0.01	0.01
Assam	5.13	1.12	1.59	8.40	1.66
Manipur	0.24	0.11	0.55	1.88	0.20
Meghalaya	0.09	0.06	0.17	0.10	0.07
Mizoram	0.00	0.11	0.00	0.00	0.09
Nagaland	0.01	0.01	0.08	0.03	0.01
Sikkim	0.00	0.03	0.01	0.00	0.03
Tripura	0.07	0.11	0.20	0.41	0.12
Percentage - NE Region	5.55	1.55	2.65	10.83	2.19
Percentage - India	100.00	100.00	100.00	100.00	100.00

Source: All India Report of 6<sup>th</sup> Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 3.14 (B) Page No. 58]

# Note



**Fishery Activities in Tripura** 



Table-2.3.11: State-wise Total Number of Establishments for Non-Agricultural Activities NE Region by Sector & Type of Establishment

(In Numbers)

State		Rural			Urban			Combined	
	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total
Arunachal Pradesh	9795	10053	19848	9539	6708	16247	19334	16761	36095
Assam	905569	342756	1248325	356341	202344	558685	1261910	545100	1807010
Manipur	97469	21126	118595	64602	16688	81290	162071	37814	199885
Meghalaya	33103	33326	66429	17361	14420	31781	50464	47746	98210
Mizoram	9884	7435	17319	17862	10274	28136	27746	17709	45455
Nagaland	22371	9636	32007	16027	11279	27306	38398	20915	59313
Sikkim	12102	5290	17392	11483	3991	15474	23585	9281	32866
Tripura	102021	26106	128127	66382	22467	88849	168403	48573	216976
Total - NE Region	1192314	455728	1648042	559597	288171	847768	1751911	743899	2495810
Total - India	16609685	6100860	22710545	13525037	9128204	22653241	30134722	15229064	45363786

Source: All India Report of 6th Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 4.14 (A) Page No. 87]

#### Notes

## 1. Non-Agricultural Establishments

Establishments engaged in activities <u>excluding</u> those covered by NIC-2008 Section A (Agriculture, forestry & fishing) and NIC-2008 Section O and Division 84 under NIC-2008 Groups 841 (Administration of the State and the economic and social policy of the community), 842 (Provision of services to the community as a whole) and 843 (Compulsory social security activities).

# 2. Other Definitions & Concepts

These have been covered in the previous tables.



Table-2.3.12: Percentage Distribution of Total Number of Establishments for Non-Agricultural Activities in the NE Region by State, Sector & Type of Establishment (as a percentage of the all India total)

(As a percentage of the all India total)

State		Rural			Urban			Combined	
	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total
Arunachal Pradesh	0.06	0.16	0.09	0.07	0.07	0.07	0.06	0.11	0.08
Assam	5.45	5.62	5.50	2.63	2.22	2.47	4.19	3.58	3.98
Manipur	0.59	0.35	0.52	0.48	0.18	0.36	0.54	0.25	0.44
Meghalaya	0.20	0.55	0.29	0.13	0.16	0.14	0.17	0.31	0.22
Mizoram	0.06	0.12	0.08	0.13	0.11	0.12	0.09	0.12	0.10
Nagaland	0.13	0.16	0.14	0.12	0.12	0.12	0.13	0.14	0.13
Sikkim	0.07	0.09	0.08	0.08	0.04	0.07	0.08	0.06	0.07
Tripura	0.61	0.43	0.56	0.49	0.25	0.39	0.56	0.32	0.48
Percentage - NE Region	7.17	7.48	7.26	4.13	3.15	3.74	5.82	4.89	5.50
Percentage - India	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: All India Report of 6th Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 4.14 (B) Page No. 88]

Note



Table-2.3.13: State-wise Total Number of Persons engaged in Non-Agricultural Establishments in the NE Region by Sector & Type of Establishment (In Numbers)

State		Rural			Urban			Combined	
	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total
Arunachal Pradesh	13343	45753	59096	12731	35894	48625	26074	81647	107721
Assam	1069498	1322463	2391961	399466	781267	1180733	1468964	2103730	3572694
Manipur	123929	87755	211684	80492	70555	151047	204421	158310	362731
Meghalaya	46226	131371	177597	22287	74610	96897	68513	205981	274494
Mizoram	12696	23106	35802	21658	43514	65172	34354	66620	100974
Nagaland	30858	54642	85500	20280	52805	73085	51138	107447	158585
Sikkim	14915	29428	44343	15268	24951	40219	30183	54379	84562
Tripura	115308	94427	209735	74346	92078	166424	189654	186505	376159
Total - NE Region	1426773	25178590	3215718	646528	1175674	1822202	2073301	2964619	5037920
Total - India	21659511	25178590	46838101	17607620	43965646	61573266	39267131	69144236	108411367

Source: All India Report of 6th Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 4.15 (A) Page No. 89]

Note



Table-2.3.14: State-wise Percentage Distribution of Total Number of Persons engaged in Non- Agricultural Establishments in the NE Region by Sector & Type of Establishment as a percentage of the all-India total

(As a percentage of the all India total)

State		Rural			Urban			Combined	
	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total
Arunachal Pradesh	0.06	0.18	0.13	0.07	0.08	0.08	0.07	0.12	0.10
Assam	4.94	5.25	5.11	2.27	1.78	1.92	3.74	3.04	3.30
Manipur	0.57	0.35	0.45	0.46	0.16	0.25	0.52	0.23	0.33
Meghalaya	0.21	0.52	0.38	0.13	0.17	0.16	0.17	0.30	0.25
Mizoram	0.06	0.09	0.08	0.12	0.10	0.11	0.09	0.10	0.09
Nagaland	0.14	0.22	0.18	0.12	0.12	0.12	0.13	0.16	0.15
Sikkim	0.07	0.12	0.09	0.09	0.06	0.07	0.08	0.08	0.08
Tripura	0.53	0.38	0.45	0.42	0.21	0.27	0.48	0.27	0.35
Percentage - NE Region	6.58	7.11	6.87	3.68	2.68	2.98	5.28	4.30	4.65
Percentage - India	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: All India Report of 6th Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 4.15 (B) Page No. 90]

## Note



Table-2.3.15: State-wise Distribution of Handicraft & Handloom Establishments in the NE Region by Type of Establishments, Percent Shares & Share of Rural Areas

State	No. of E	Establishments	by Type	S	9.	Lin S
	Without Hired Workers	With at least One Hired Worker	Total	% of Establishments without hired workers	% Share of State	% Share of Rural in Total No. Of Establishments
Arunachal Pradesh	115	90	205	56.1	0.0	50.2
Assam	65085	26038	91123	71.4	4.9	77.0
Manipur	52517	4487	57004	92.1	3.0	67.0
Meghalaya	3081	725	3806	81.0	0.2	82.7
Mizoram	1370	996	2366	57.9	0.1	26.8
Nagaland	4217	596	4813	87.6	0.3	86.8
Sikkim	611	159	770	79.4	0.0	77.3
Tripura	8680	2245	10925	79.5	0.6	60.4
NE Region	135676	35336	171012	79.3	9.1	72.3
All India	1477380	396244	1873624	78.9	100.0	59.6

Source: All India Report of 6<sup>th</sup> Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 5.1 Page No. 93]

## Notes

#### 1. Handicraft & Handloom Establishments

Establishments engaged in activities related to handicraft and handloom as defined below.

Handicraft/Handloom describes a craft or occupation requiring skilled use of hands. Handicrafts are items made by hand, often using simple tools. These items can be functional, artistic and/ or traditional in nature. Thus, to summarise, skill of worker and use of hand are two prerequisites for handicraft. It must be predominantly made by hand. It does not matter if some machinery is also used in the process. Handicrafts may range from the very simple (earthen lamps) to the very complex (stone temples, enamel jewellery) work. Certain products like baskets, brooms, pots, diyas, mats and chiks could range from very simple to quite complex, but are traditionally considered as handicrafts even in their simplest forms. At the same time, certain handmade articles are not usually categorized as handicrafts. Activities involving human labour without skill are usually not included.

For the purpose of Sixth Economic Census, the word handicraft includes handlooms, so all manner of hand weaving activities was considered under the same

Two broad categories for exclusion comprised of the following activities: (a) All food items like papads, pickles, etc which may be handmade; and (b) Items like bricks, bidis, agarbattis, match sticks, firecrackers etc. which are made by hand but not distinguished by distinctive skills.

#### 2. Other Definitions & Concepts

These have been covered in the previous tables.



Table-2.3.16: State-wise Number of Persons employed by Handicraft & Handloom Establishments in the NE Region by Type of Establishments and by Sector Share & Percent Share of State in Total Employment in India

State			Number of	Persons Emplo	yed by Type of	Establishment	and Sector			
		Rural		Urban				Combined		% Share of
	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total	Without Hired Workers	With at least One Hired Worker	Total	State in Total Employment
Arunachal Pradesh	69	225	294	91	262	353	160	487	647	0.02
Assam	83996	54886	138882	15130	35859	50989	99126	90745	189871	4.52
Manipur	40895	8459	49354	18843	6924	25767	59738	15383	75121	1.79
Meghalaya	4364	1876	6240	502	1005	1507	4866	2881	7747	0.18
Mizoram	545	577	1122	1255	3474	4729	1800	4051	5851	0.14
Nagaland	4881	7447	12328	608	653	1261	5489	8100	13589	0.32
Sikkim	569	267	836	97	638	735	666	905	1571	0.04
Tripura	7399	2807	10206	3666	4328	7994	11065	7135	18200	0.43
Total - NE Region	142718	76544	219262	40192	53143	93335	182910	129687	312597	7.44
Total - India	1572801	641995	2214796	870437	1119573	1990010	2443238	1761568	4204806	100.0

Source: All India Report of 6th Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 5.2 Page No. 95]

Note



## Table-2.3.17: State-wise Distribution of the Handicraft & Handloom Establishments in the NE Region by Type of Ownership

(In numbers)

State	Govt./PSU	Private Proprietary	Partnership	Company	Self Help Group	Co-operative	Non-profit Institution	Others	Total
Arunachal Pradesh	12	173	0	0	5	1	2	12	205
Assam	155	89421	143	20	1076	68	12	228	91123
Manipur	6	56878	26	0	16	6	0	72	57004
Meghalaya	17	3704	1	1	37	2	8	36	3806
Mizoram	17	2322	4	0	2	0	3	18	2366
Nagaland	56	707	0	0	1	4	0	2	770
Sikkim	56	707	0	0	1	4	0	2	770
Tripura	56	10596	42	2	14	12	2	201	10925
Total - NE Region	326	168566	217	23	1177	94	27	582	171012
Total - India	8745	1809750	10759	2254	2791	2285	1642	35398	1873624

Source: All India Report of 6th Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 5.3 Page No. 96]

#### Notes

Types of Establishments by Ownership

- 1. Government Establishment / PSU Establishment: Establishments which are wholly owned / run / managed by Central or State governments, quasi-government institutions, local bodies (like Panchayat, Zila Parishad, City Corporation, Municipal authorities, etc.,) are treated as Government/ public sector establishment. Autonomous bodies (like Universities, Education boards, etc.) and institutions (like schools, libraries, hospitals, etc.) setup by the government agencies or those running under control of government agency will also be treated as government/public sector establishment
- 2. All establishments which are not Government / Public Sector establishments will be treated as Private sector Establishments. Types of such establishments are given below.
  - a. Private Proprietary: When an entrepreneur is the sole owner of an establishment it is a Proprietary one.

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- b. Partnership: Partnership is defined as the 'relation between entrepreneurs who have agreed to share the profits / losses of a business carried on by all or anyone of them acting for all'. In a Partnership, there may be two or more entrepreneurs, belonging to the same or different households, with or without formal registration (i.e., there is a tacit understanding about the distribution of profit / loss among the partnership stablishment in the economic census.
- c. Company: Establishments registered under the Companies Act 2013, where government equity is below the threshold level conferring substantial management rights to the Government / PSU or any organization under the control of the Government.
- d. Self Help Group (SHG): A Self-Help Group (SHG) is a financial intermediary usually composed of 10–20 local women or men. Members make small regular savings contributions over a few months until there is enough money in the Group to begin lending. Funds may then be lent back to the members or to others in the village for any purpose. Many SHGs are 'linked' to banks for the delivery of micro-credit
- e. Cooperative: A cooperative is "an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise". Examples could be: (a) businesses owned and managed by the people who use their services (a consumer cooperative); (b) organizations managed by the people who work there (worker cooperatives); and (c) second- and third-tier cooperatives whose members are other cooperatives
- f. Non-Profit Institution: These establishments are operated by entities that are tax-exempt and operate to better the community, by receiving funds from individuals, corporations, and other donors.
- g. Others: All remaining non-government private sector establishments are classified under this category.

## Other Definitions and Concepts

These have been covered in the previous tables







Table-2.3.18: State-wise Distribution of the Handicraft & Handloom Establishments in the NE Region by Nature of Operation and Sector

(In Numbers)

State		Ru	ral			Urk	oan			To	tal	
	Perennial	Seasonal	Casual	Total	Perennial	Seasonal	Casual	Total	Perennial	Seasonal	Casual	Total
Arunachal Pradesh	75	9	19	103	70	7	25	102	145	16	44	205
Assam	60652	6902	2593	70147	19944	754	278	20976	80596	7656	2871	91123
Manipur	34537	2921	721	38179	17637	888	300	18825	52174	3809	1021	57004
Meghalaya	1767	754	628	3149	624	22	11	657	2391	776	639	3806
Mizoram	593	5	37	635	1585	18	128	1731	2178	23	165	2366
Nagaland	1974	1436	766	4176	467	128	42	637	2441	1564	808	4813
Sikkim	495	98	2	595	174	1	0	175	669	99	2	770
Tripura	6217	332	55	6604	4160	126	35	4321	10377	458	90	10925
Total - NE Region	106310	12457	4821	123588	44661	1944	819	110557	150971	14401	5640	171012
Total - India	947874	134854	34533	1117261	714300	34306	7757	756363	1662174	169160	42290	1873624

Source: All India Report of 6th Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 5.5 Page No. 99]

#### Notes

- 1. The above table does <u>not</u> give details for urban establishments. These have been calculated by formula = Urban = Total Rural Concepts & Definitions (as follows)
- 2. Perennial Establishment: where activity is carried on or likely to be carried on throughout the year more or less regularly
- 3. Seasonal Establishment: where activity of the establishment is confined to a particular season i.e. fixed months of a year, the same is called the seasonal activity. For the establishments to be categorized in this category it is essential that the same must have been operational for at least 15 days in the last season in the last 365 days
- 4. Casual Establishment: The economic activity of the establishment which is neither perennial nor seasonal is termed as casual. For the establishments to be categorized in this category it is essential that the same must have been operational for at least 30 days during the last 365 days.
- 5. Other Definitions & Concepts: These have been covered in the previous tables



## **Women Entrepreneurs**

Table-2.3.19: State-wise Distribution of Total Number of Establishments under Women Entrepreneurship in the NE Region by Type of Establishment, and the State's Percentage Share in Total Number of Establishments under Women Entrepreneurship

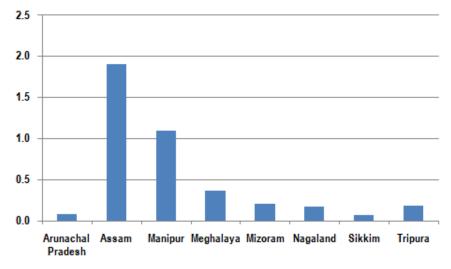
State		shments under Women by Type of Establishmer		Percentage Share of State in All-India
	Without Hired Workers	With at least One Hired Worker	All	Total (Establishments under Women Entrepreneurs)
Arunachal Pradesh	4438	1975	6413	0.08
Assam	130338	23820	154158	1.91
Manipur	84550	3736	88286	1.10
Meghalaya	21540	7990	29530	0.37
Mizoram	12808	3020	15828	0.20
Nagaland	11840	1817	13657	0.17
Sikkim	4383	921	5304	0.07
Tripura	13168	1338	14506	0.18
NE Region	283065	44617	327682	4.08
All India	6697354	1353465	8050819	100.00

Source: All India Report of 6<sup>th</sup> Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 6.1 Page No. 106]

## Notes

- 1. Establishments under Women Entrepreneurs: If the establishment is a proprietary establishment (where an entrepreneur is the sole owner of an establishment), and the proprietor is a woman, then the establishment is classified as being 'under women entrepreneur'.
- 2. Other Definitions & Concepts: These have been covered in the previous tables.

Graph-2.3.3: Total Number of Establishments under Women Entrepreneurship



Y-axis gives the Percentage Share of State in All-India Total (Establishments under Women Entrepreneurs)



## **Women Entrepreneurs**

Table-2.3.20: State-wise Total Number of Persons employed in Establishments under Women Entrepreneurship in the NE Region by Type of Establishment, and the State's Percentage Share in Total Employment in Establishments under Women Entrepreneurship

State	Total Number of Pe W	Percentage Share of State in All-India Total Employment				
	Without Hired Workers					
Arunachal Pradesh	5493	8586	14079	0.1		
Assam	162675	90397	253072	1.88		
Manipur	96938	13884	110822	0.82		
Meghalaya	28625	30076	58701	0.44		
Mizoram	15940	10387	26327	0.2		
Nagaland	14290	13233	27523	0.2		
Sikkim	5439	3627	9066	0.07		
Tripura	14951	4929	19880	0.15		
Total - NE Region	344351	175119	519470	3.86		
Total - India	8673957	4774225	13448182	100.00		

Source: All India Report of 6<sup>th</sup> Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [Table 6.3 Page No. 110]

## Note



Women food entrepreneur from Meghalaya



# **Women Entrepreneurs**

Table-2.3.21: State-wise Total Number of Establishments under Women Entrepreneurship in the NE Region by Nature of Operation

(In Numbers)

State	Perennial	Seasonal	Casual	Total
Arunachal Pradesh	6032	241	140	6413
Assam	132924	14285	6949	154158
Manipur	81106	5657	1523	88286
Meghalaya	27525	1233	772	29530
Mizoram	15264	259	305	15828
Nagaland	9636	3054	967	13657
Sikkim	5071	211	22	5304
Tripura	13586	714	206	14506
Total - NE Region	286144	25654	10884	327682
Total - India	7166019	726435	158365	8050819

Source: All India Report of 6<sup>th</sup> Economic Census, Central Statistical Organisation, Ministry of Statistics and Programme Implementation [**Table 6.5 Page No. 113**]

## Note



Women owned weaving establishment in Nagaland provides employment in remote villages



# 3. Development Initiatives of the Central and State Governments in the North Eastern Region

This chapter furnishes information related to major schemes and projects implemented in the NE Region by the Government of India, apart from discussing the developmental initiatives of the State Governments of the NE states.

Regarding the selection of the schemes and projects of the Government of India, the same has been decided on the basis of the budgetary allocations and expenditures of different Ministries and Departments as per information made available by the Finance Ministry in the public domain though the website on 'Union Budget'. The Ministries and Departments with the largest budgetary outlays and expenditures have been chosen. Further, the schemes and other initiatives of these Ministries and Departments were then identified from the Expenditure Budget of 2023-24. In this manner, the major schemes and projects of the Government of India have been identified. The discussion has been carried out as follows.

- (a) Gross Budgetary Support to the NE Region: In October 1996, the Central Government announced the 'New initiatives for the North Eastern Region (NER)'. One of these measures announced was the policy decision to earmark at least 10% of Plan Budgets of the Central Ministries and Departments for the development of NE States. Accordingly, it was decided that Central Ministries and Departments, unless specifically exempted, will set apart 10% of their Plan Gross Budgetary Support (GBS) for the NE Region in order to ensure a quantum jump in budgetary resource flows to the region and to fill the backlog and gaps in basic minimum service and infrastructure.
- (b) The Ministry of DoNER, being the nodal Ministry, monitors and keeps track of expenditure under mandatory 10% GBS by non-exempted Ministries/ Departments since inception. This section gives the details of Budget Estimates, Revised Estimates, and Actual Expenditures of the major Ministries and Departments.
- (c) Major Schemes implemented by Government of India: This section gives the schemes and other development initiatives being implemented by the Ministries and Departments of the Government of India that have the maximum outlays (and incur the maximum expenditures) on the NE Region. The discussion covers the institutions and other organizations being supported by these Ministries and Departments. All details regarding the schemes, programmes, missions, institutions etc. have been sourced from the Notes on the Demands for Grants of the various Ministries and Departments as furnished in the Expenditure Budget of 2023-24.
- (d) **Development Initiatives of the State Governments:** This section gives the developmental initiatives of the State Governments of the NE Region, based on the Budget Speeches for the State Budgets for 2023-24.

A perusal of the above sections will enable the reader to get an idea of the main schemes and other developmental initiatives being implemented in the NE Region with Government funding.



# 3.1. Gross Budgetary Support to the North Eastern Region

In October 1996, the Government of India announced the 'New initiatives for the North Eastern Region'. One of these measures announced was the policy decision to earmark at least 10% of Plan Budgets of the Central Ministries and Departments for the development of NE States. Accordingly, it was decided that Central Ministries and Departments, unless exempted, will set apart 10% of their Plan Gross Budgetary Support (GBS) for the NE Region in order to ensure a quantum jump in budgetary resource flows to the region and to fill the backlog and gaps in basic minimum service and infrastructure. Subsequently, allocation of funds under 10% GBS for the NE Region introduced in 2014-15 is being done annually on lump sum basis by the non-exempted Central Ministries and Departments at the BE/RE stage under Major Heads 2552 (for revenue expenditure), 4552 (for capital expenditure) and 6552 (for loan expenditure) under their respective functional schemes. In the Budget 2017-18, several changes were introduced, e.g. dispensing with the distinction between Plan and Non-Plan expenditure, adoption of revenue and capital classification, merger of Railway Budget with Union Budget, discontinuation of block grants, etc. In addition, the earmarking for NE Region was reflected through Statement-11 of Expenditure Profile of the Union Budget, as against Statement-23. To mitigate dislocation, Ministry of DoNER has special dispensation until year 2022 to carry out their schemes under Budget Head 3601. The Ministry of DoNER, being the nodal Ministry, monitors and keeps track of expenditure under mandatory 10% GBS by non-exempted Ministries/ Departments since inception. This exercise is being undertaken on annual basis and the allocation and actual expenditure figures by respective Ministries/Departments are collected, compiled and forwarded annually to Ministry of Finance for vetting. The expenditure figures (provisional) until 2019-20 against RE earmarked for the NE Region have already been compiled. The annual expenditure relative to the earmarked allocation since 2016-17 to 2022-23 (until second quarter ending 30.09.2022) is given below.

Table-3.1.1: Annual Expenditure relative to the earmarked allocation by non-exempted Ministries/Departments

(Rs. in Crore / %)

Year		(Rs. in Crore)								
real	Budget Estimate	Revised Estimate	Actual Expenditure	Revised Estimate						
2016-17	29,124.79	32,180.08	29,367.90	91.26						
2017-18	43,244.64	40,971.69	39,753.44	97.03						
2018-19	47,994.88	47,087.95	46,054.80	97.81						
2019-20	59,369.90	53,374.19	48,533.81	90.93						
2020-21	60,112.11	51,270.90	48,563.80	94.70						
2021-22	68,020.24	68,440.26	70,874.32	103.56						
2022-23	76,040.07	-	28,965.04	-						
Total	383906.63		312113.11							

Source: Annual Report 2022-23 of Ministry of Development of NE Region, based on Statements 23/11 (of Expenditure Profile) for various years, non-exempted Ministries/Departments (includes Ministry of DoNER partially, from 2017-18 onwards)

Note

Total Earmarked Allocation for NE Region in 2022-23 is RS. 76,040.07 Crore. Data shown for actual expenditure relate to 54 out of 55 non-exempted Ministries/Departments against the total Budget Estimate up to 30.09.2022



From the Expenditure Profile, it is seen that the following Ministries and Departments of the Government of India have the maximum outlays (and are incurring the maximum expenditures) on the NE Region:

- (a) Agriculture and Farmers' Welfare;
- (b) Road Transport and Highways;
- (c) Railways;
- (d) Drinking Water and Sanitation;
- (e) Rural Development;
- (f) Health and Family Welfare;
- (g) School Education and Literacy;
- (h) Higher Education;
- (i) Power;
- (j) Micro, Small and Medium Enterprises;
- (k) Development of North Eastern Region;
- (I) Labour & Employment;
- (m) Promotion of Industry and Internal Trade;
- (n) Telecommunications; and
- (o) Electronics and Information Technology.

In addition, the following Ministries and Departments have been considered, since the TOR for the preparation of the NEC Yearbook 2024 had specified the areas being looked after by them:

- (a) Civil Aviation;
- (b) Tribal Affairs; and
- (c) Women and Child Development.

The table at the following pages gives the Budget Estimate, Revised Estimate and Actual Expenditure for the above Ministries / Departments for the Financial Years from 2016-17 to 2021-22.

**Expenditure by Railways:** The Budget Estimate, Revised Estimate and Actual Expenditure of the Ministry of Railways in the NE Region are not included in the above-mentioned tables. The following table gives these details for the Ministry of Railways covering the financial years from 2016-17 to 2021-22.

Table 3.1.2: Budget Estimates, Revised Estimates and Actual Expenditures of Ministry of Railways in North East Region (NF Railway) since 2016-17 to 2020-21

Year		Rs. in Crore		Expenditure as % of		
	Budget Estimate	Revised Estimate	Actual Expenditure	Revised Estimate		
2016-17	4861.92	5510.63	6135.74	111.34		
2017-18	5136.83	3858.72	3907.31	101.26		
2018-19	4616.31	6364.80	2074.84	32.60		
2019-20	6729.36	7070.26	5593.72	79.12		
2020-21	2818.45	66.43	80.35	120.95		
2021-22	4480.17	5656.86	5656.86	100.00		
Total	28643.04	28527.7	23448.82	82.21		

Source: Annual Report 2022-23 of the Ministry of DoNER, based on data from the Ministry of Railways



Table 3.1.3 (A): Budget Estimate, Revised Estimate and Actual Expenditure of Non-Exempt Ministries and Departments for 2019-20, 2020-21 and 2021-22 (Rs. in Crore / %)

		2019	9-20			2020	)-21		2021-22				
Ministry / Department	Budget Estimates as per Statement 11	Revised Estimate as per Statement 11	Actual Expenditure in the NE Region (2019-20) up to the end of 4th Quarter	% of Expenditure of RE	Budget Estimates as per Statement 11	Revised Estimate as per Statement 11	Actual Expenditure in the NE Region (2019-20) up to the end of 4th Quarter	% of Expenditure of RE	Budget Estimates as per Statement 11	Revised Estimate as per Statement 11	Actual Expenditure in the NE Region (2019-20) up to the end of 4th Quarter	% of Expenditure of RE	
Agriculture, Cooperation and Farmers Welfare	12986.1	10136.7	4057.5	40.0	13381.0	11619.9	2926.8	25.2	12242.7	11731.8	2980.1	25.4	
Civil Aviation	70.0	70.0	68.7	98.1	70.0	70.0	70.0	100.0	70.0	94.0	80.3	85.4	
Development of North Eastern Region	1836.2	1494.5	1483.0	99.2	1808.2	1040.0	1066.3	102.5	1545.0	1555.0	1620.4	104.2	
Drinking Water and Sanitation	1999.5	1833.9	1883.9	102.7	2149.4	1700.0	1811.7	106.6	5897.2	4997.8	9335.7	186.8	
Electronics and Information Technology	375.1	321.3	320.8	99.8	395.8	305.0	298.5	97.9	680.6	638.8	571.7	89.5	
Health and Family Welfare	4750.1	4556.9	4222.3	92.7	5000.0	4573.4	4894.9	107.0	5464.4	6481.4	4784.7	73.8	
Higher Education	2863.0	2863.0	2583.1	90.2	2721.3	2496.2	2288.6	91.7	3012.2	2806.7	2725.0	97.1	
School Education and Literacy	4582.7	4448.2	4662.9	104.8	4705.7	1667.8	4792.7	287.4	4919.8	4878.9	4279.7	87.7	
Micro, Small and Medium Enterprises	755.3	755.3	720.6	95.4	758.9	566.8	482.1	85.1	1607.5	1622.7	1611.7	99.3	
Power	2346.9	2508.8	2071.0	82.6	2067.5	1056.0	1056.0	100.0	1892.5	2802.5	3001.5	107.1	
Promotion of Industry and Internal Trade	957.0	1297.6	1288.7	99.3	756.4	756.4	956.0	126.4	934.3	1834.4	1864.4	101.6	
Road Transport and Highways	6070.0	6070.0	5982.1	98.6	6780.0	7970.0	7935.2	99.6	9590.0	10520.0	10475.9	99.6	
Rural Development	5501.4	4349.0	5501.4	126.5	5608.4	5240.4	7979.2	152.3	5747.8	5055.8	12812.2	253.4	

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		2019	9-20		2020-21				2021-22			
Ministry / Department	Budget Estimates as per Statement 11	Revised Estimate as per Statement 11	Actual Expenditure in the NE Region (2019-20) up to the end of 4th Quarter	% of Expenditure of RE	Budget Estimates as per Statement 11	Revised Estimate as per Statement 11	Actual Expenditure in the NE Region (2019-20) up to the end of 4th Quarter	% of Expenditure of RE	Budget Estimates as per Statement 11	Revised Estimate as per Statement 11	Actual Expenditure in the NE Region (2019-20) up to the end of 4th Quarter	% of Expenditure of RE
Telecommunications	1344.0	799.8	862.1	107.8	1332.3	1150.6	802.4	69.7	1452.6	1382.6	399.8	28.9
Tribal Affairs	706.0	706.0	1128.5	159.8	751.0	551.3	814.7	147.8	760.0	615.8	809.3	131.4
Women and Child Development	2891.4	2592.0	2724.7	105.1	2979.0	2078.8	2326.0	111.9	2417.0	2274.2	2544.8	111.9
Labour & Employment	1080.3	1080.3	634.4	58.7	1137.2	1309.5	1165.1	89.0	1275.6	1382.21	2378.03	172.05

Source: Annual Reports, Ministry of Development of North Eastern Region, Government of India

#### Notes

- 1. Most of the above Ministries and Departments of the Government of India are the ones having the maximum outlays (and are incurring the maximum expenditures) on the NE Region.
- 2. In addition, some other Ministries and Departments have been considered, since the TOR for preparation of the NEC Yearbook 2024 had mentioned the areas being covered by them. These include the following:
  - (a) Civil Aviation;
  - (b) Tribal Affairs; and
  - (c) Women and Child Development.



Table 3.1.3 (B): Budget Estimate, Revised Estimate and Actual Expenditure of Non-Exempt Ministries and Departments for 2016-17, 2017-18 and 2018-19

(Rs. in Crore / %)

		2016	5-17			201	7-18		2018-19			
Ministry / Department	Budget Estimates as per Statement 11	Revised Estimate as per Statement 11	Actual Expenditure in the NE Region (2019-20) up to the end of 4th Quarter	% of Expenditure of RE	Budget Estimates as per Statement 11	Revised Estimate as per Statement 11	Actual Expenditure in the NE Region (2019-20) up to the end of 4th Quarter	% of Expenditure of RE	Budget Estimates as per Statement 11	Revised Estimate as per Statement 11	Actual Expenditure in the NE Region (2019-20) up to the end of 4th Quarter	% of Expenditure of RE
Agriculture, Cooperation and Farmers Welfare	765.1	1195.6	177.3	14.8	4116.6	2838.3	1237.0	43.6	4610.9	6726.3	2203.7	32.8
Civil Aviation					0.0	0.0	79.9		197.3	0.0	160.3	
Development of North Eastern Region	1007.0	966.7	950.6	98.3	1116.7	870.1	715.3	82.2	1274.0	1091.4	628.5	57.6
Drinking Water and Sanitation	1375.0	1625.0	1625.0	100.0	1969.8	2370.0	2369.8	100.0	2234.3	1997.8	1750.0	87.6
Electronics and Information Technology	320.0	314.9	186.8	59.3	281.0	221.0	221.0	100.0	308.0	337.0	337.0	100.0
Health and Family Welfare	3130.0	3130.0	3080.5	98.4	3625.4	4086.1	3945.3	96.6	4178.0	4345.4	4001.8	92.1
Higher Education	1623.0	1688.5	1561.1	92.5	2078.0	2783.5	2649.2	95.2	2459.6	2341.0	2263.3	96.7
School Education and Literacy	1894.3	3935.6	3696.5	93.9	4229.3	4110.3	4215.9	102.6	4457.7	3952.1	4125.3	104.4
Micro, Small and Medium Enterprises	300.0	476.4	326.4	68.5	644.9	463.1	590.7	127.6	670.1	679.7	667.5	98.2
Power	1220.0	1041.4	861.7	82.7								
Promotion of Industry and Internal Trade	267.0	267.5	240.0	89.7	909.3	1542.6	1541.7	99.9	1088.8	1088.8	1088.0	99.9
Road Transport and Highways	5000.0	4520.0	4464.7	98.8	5765.0	5265.0	5237.8	99.5	6210.0	6210.0	5944.5	95.7
Rural Development	4164.0	4381.2	4281.2	97.7	5461.7	4563.9	5275.5	115.6	5481.3	3271.0	9742.5	297.8

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	2016-17				2017-18				2018-19			
Ministry / Department	Budget Estimates as per Statement 11	Revised Estimate as per Statement 11	Actual Expenditure in the NE Region (2019-20) up to the end of 4th Quarter	% of Expenditure of RE	Budget Estimates as per Statement 11	Revised Estimate as per Statement 11	Actual Expenditure in the NE Region (2019-20) up to the end of 4th Quarter	% of Expenditure of RE	Budget Estimates as per Statement 11	Revised Estimate as per Statement 11	Actual Expenditure in the NE Region (2019-20) up to the end of 4th Quarter	% of Expenditure of RE
Telecommunications	586.5	1113.7	460.2	41.3	1510.6	1103.7	531.6	48.2	1571.0	790.9	307.5	38.9
Tribal Affairs	449.0	449.0	540.0	120.3	526.0	526.0	667.5	126.9	600.0	600.0	855.6	142.6
Women and Child Development	1630.0	1660.1	1550.3	93.4	2160.6	2045.0	1902.5	93.0	2445.4	2451.3	1665.0	67.9
Labour & Employment	155.0	60.95	60.95	100.0	678.8	631.1	631.0	100.0	741.2	947.5	947.5	100.0

Source: Annual Reports, Ministry of Development of North Eastern Region, Government of India

### Notes

- 1. Most of the above Ministries and Departments of the Government of India are the ones having the maximum outlays (and are incurring the maximum expenditures) on the NE Region.
- 2. In addition, some other Ministries and Departments have been considered, since the TOR for preparation of the NEC Yearbook 2024 had mentioned the areas being covered by them. These include the following:
  - (a) Civil Aviation;
  - (b) Tribal Affairs; and
  - (c) Women and Child Development
- 3. Data for some of the Ministries and Departments are not available in the source document.



# 3.2. Major Schemes being implemented by Government of India

The following pages give the major schemes and programmes being implemented by the Ministries and Departments that have the maximum outlays and incur the maximum expenditures on the NE Region. The details of the schemes, programmes, missions and institutions have been sourced from the Notes on the Demand for Grants as furnished in the Expenditure Budget of 2023-24.

# **Ministry of Agriculture and Farmers Welfare**

Agriculture plays a vital role in India's economy. 54.6% of the total workforce is engaged in agriculture and allied sector activities (Census 2011) and accounts for 18.6 % of India's GVA at current prices during 2021-22. Given the importance of the agriculture sector, Government of India has taken several steps for its development in a sustainable manner.

The Department of Agriculture & Farmers Welfare (DA&FW) is one of the two constituent Departments of the Ministry of Agriculture & Farmers Welfare, and the other Department is the Department of Agricultural Research and Education (DARE). The DA&FW is organized into 28 divisions; and it has five attached offices and twenty-one subordinate offices, which are spread across the country for coordination with state level agencies and implementation of Central Sector Schemes in their respective fields.

The major schemes of the Department of Agriculture & Farmers Welfare have been listed below. The Department has allocated 10% of its outlay for the NE Region in FY 2023-24.

- 1. **Pradhan Mantri Kisan Samman Nidhi (PM-Kisan):** With a view to provide income support to all farmer families across the country, to enable them to take care of expenses related to agriculture and allied activities as well as domestic needs, the Central Government has implemented PM-Kisan Scheme. The Scheme aims to provide a payment of Rs. 6,000 per year in three instalments of Rs. 2,000 each to the farmer families, subject to certain exclusion relating to higher income groups. About 12.50 crore farmer families are expected to be covered under this Scheme.
- 2. Crop Insurance Scheme (Pradhan Mantri Fasal Bima Yojana): It was launched from 1<sup>st</sup> April 2016; after rolling back earlier schemes like: Agriculture Insurance Scheme (NAIS), Weather-based Crop Insurance scheme, Modified National Agricultural Insurance Scheme (MNAIS). The Department has migrated from administered premium and claim support insurance schemes to an upfront subsidy for actuarial premium-based system.
- 3. **Modified Interest Subvention Scheme (MISS):** Under Modified Interest Subvention Scheme, short term crop loan up to Rs. 3 lakh is available to farmers engaged in Agriculture and other allied activities at benchmark rate of 9%. Government of India provides 2% Interest Subvention on the benchmark rate. Additional 3% subvention is also given to the farmers for prompt and timely repayment of loans; thus the effective rate of interest comes down to 4% per annum. Funds are released to the implementing agencies namely NABARD for RRBs/Cooperative Banks and RBI for Scheduled Commercial Banks.

The other schemes, missions, organizations and institutions of the Department of Agriculture & Farmers Welfare have been given below for both Central Sector Schemes and Centrally Sponsored Schemes.



- 4. **Distribution of Pulses to State / Union Territories for Welfare Schemes:** The scheme is intended to dispose the huge stock of pulses procured under Price Support Scheme (PSS) by offering a subsidy of Rs. 15/- per kg over the issue price to States/UTs for utilization under various welfare schemes like Mid-Day Meal, Public Distribution System, ICDS etc.
- 5. **Pradhan Mantri Kisan Man Dhan Yojana:** With a view to provide social security net for Small and Marginal Farmers (SMF) as they have minimal or no savings to provide for old age and to support them in the event of consequent loss of livelihood, the Government has implemented another new Central Sector Scheme for providing old age pension to these farmers. Under this Scheme, a minimum fixed pension of Rs. 3,000/- p.m. will be provided to the eligible small and marginal farmers, subject to certain exclusion clauses, on attaining the age of 60 years. The Scheme aims to cover around 3 crore beneficiaries in the first three years. It is a voluntary and contributory pension scheme, with entry age of 18 to 40 years.
- 6. Formation and Promotion of 10,000 Farmer Producer Organizations (FPOs): The scheme will contribute to enhance cost effective productivity and higher net incomes to the member farmer producers group through better liquidity and market linkages for their produce and will help to become FPOs sustainable through collective action.
- 7. Agriculture Infrastructure Fund (AIF): The Central Sector scheme was approved by the Cabinet on 8<sup>th</sup> July 2020 to provide a medium long term debt financing facility for investment in viable projects for post-harvest management Infrastructure and community farming assets through interest subvention and financial support. Under the scheme Rs. 1 Lakh Crore will be provided by banks and financial institutions as loans to Primary Agricultural Credit Societies (PACS), Marketing Cooperative Societies, Farmer Producers Organizations (FPOs), Self Help Group (SHG), Farmers, Joint Liability Groups (JLG), Multipurpose Cooperative Societies, Agri-entrepreneurs, Start-ups and Central/State agency or Local Body sponsored Public Private Partnership Project. All loans under this financing facility will have interest subvention of 3% per annum up to a limit o Rs. 2 crore. This subvention will be available for a maximum period of 7 years. Further, credit guarantee coverage will be available for eligible borrowers from this financing facility under Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) scheme for a loan up to Rs. 2 crore. The fee for this coverage will be paid by the Government.
- 8. **Protection of Plant Varieties and Farmers Rights Authority:** It is a statutory body set up under a legislation enacted in 2001 to fulfil obligations under agreement of World Trade Organization. It provides the establishment of an effective system for Protection of Plant Varieties, the Rights of farmers and plant breeders and to encourage the development of new varieties of plants.
- 9. **National Institute of Plant Health Management:** The Institute is engaged in promoting environmentally sustainable Plant Health Management practices in diverse and changing agroclimatic conditions, Bio-Security & Incursion Management and extending policy support to Central and State Governments.
- 10. National Institute of Agricultural Extension Management (MANAGE): The Institute facilitates the acquisition of managerial and technical skills by Extension Officers, Managers, Scientists and Administrators in all sectors of agricultural economy to enable them to provide most effective support and services to Farmers and Fishermen for practicing Sustainable Agriculture and fishing practices.
- 11. Chaudhary Charan Singh National Institute of Agricultural Marketing: It is an autonomous body and is playing pivotal role in creating awareness amongst farmers and providing consultancy and policy support to decision makers in government, cooperative and private sector for bringing efficiency in the agricultural marketing sector.
- 12. **Coconut Development Board:** Coconut Development Board (CDB) is a statutory body established under the Ministry of Agriculture and Farmers Welfare, Government of India for the integrated



development of coconut cultivation and industry in the country with focus on productivity increase and product diversification.

- 13. **National Horticulture Board:** The National Horticulture Board (NHB) is an Autonomous organization under the administrative control of Ministry of Agriculture and Farmers Welfare. The broad aims and objectives of the Board are to develop production clusters/hubs for integrated Hi-tech commercial horticulture, development of Post-harvest and cold chain infrastructure, ensuring availability of quality planting material and to promote adoption of new technologies/tools/ techniques for Hi-tech commercial horticulture etc.
- 14. **Agriculture Census:** Agriculture Census forms part of a broader system of collection of Agricultural Statistics. It is a large-scale statistical operation for the collection and derivation of quantitative information about the structure of agriculture in the country.
- 15. **Agriculture Economics and Statistics:** The overall objective of this scheme is to collect, compile, and maintain a database of different facets of the agriculture sector, study and analyze the socioeconomic conditions of the agricultural sector and provide policy inputs.
- 16. **IRRI South Asia Regional Centre:** The IRRI South Asia Regional Centre is a regional facility that supports research collaboration, training, and service provision to institutions, scientists, and other stakeholders from India and other South Asian and African nations.
- 17. Rashtriya Krishi Vikas Yojna: This is a programme for achieving high growth in agricultural sector, higher returns to the farmers and for integrated development by focusing on food security, sustainable agriculture, production of oil seeds and agricultural extension. The scheme has been restructured and erstwhile schemes viz. Pradhan Mantri Krishi Sinchai Yojna-Per Drop More Crop, Paramparagat Krishi Vikas Yojna, National Project on Soil and Health Fertility, Rain-fed Area Development and Climate Change, Sub-Mission on Agriculture Mechanization including Management of Crop Residue, etc. have been merged with RKVY.
- 18. **National Mission on Natural Farming:** National Mission on Natural farming aims at creating institutional capacities for documentation and dissemination of best practices, makes practicing farmers as partners in promotion strategy, ensures capacity building and continuous hand holding and finally attracting farmers to the natural farming willingly on the merit of the system. The basic object of NMNF is to promote alternative system of farming from external purchased inputs, cost reduction and thereby increasing income of farmers
- 19. **Krishionnati Yojana:** Krishonnati Yojana is an Umbrella Scheme comprising various Centrally Sponsored Schemes which aims at to develop the agriculture and allied sector in a holistic and scientific manner to increase the income of farmers by enhancing production, productivity and better returns on produce. Basically, this scheme focus on creating or strengthening of infrastructure of production, reducing production cost and marketing of agriculture and allied produce.





# **Ministry of Road Transport and Highways**

The Ministry of Road Transport and Highways was formed in 2009 by bifurcating the erstwhile Ministry of Shipping, Road Transport and Highways into two independent Ministries, i.e., Ministry of Road Transport and Highways and Ministry of Shipping.

Road Transport is a critical infrastructure for the economic development of a country. It impacts the pace, structure and pattern of development. The tasks and responsibilities of the Ministry of Road Transport and Highways encompass, inter alia, construction and maintenance of National Highways (NHs); administration of the National Highways Act, 1956; National Highways Authority of India Act, 1988; National Highways Fee (Determination of Rates and Collection) Rules, 2008; Motor Vehicles Act, 1988; and Central Motor Vehicles Rules 1989, as also formulation of broad policies relating to road transport and automotive norms, besides making arrangements for movement of vehicular traffic with neighbouring countries.

The major schemes, programmes and institutions of the Ministry have been listed below. The Union Budget of FY 2023-24 has accordingly made the following provisions. The Ministry has made substantial capital outlays in the NE Region as per is Demand for Grants under the Union Budget of FY 2023-24, apart from providing grants-in-aid to the State Governments of the region.

- 1. **National Highways Authority of India:** This provision is for Development of National Highways Authority of India (NHAI) for Bharat Mala Priyojana entrusted to the organisation for execution. The expenditure is also met from Central Road Infrastructure Fund, Permanent Bridges Fee Fund and Monetization of National Highways Fund.
- 2. Works under Roads Wing: The provision is for expenditure on development of National Highways, including projects relating to expressways and 6 laning of crowded stretches of Golden Quadrilateral and 2 laning of highways works under National Highways Development Project (NHDP), special programme for development of road connectivity in Naxalite affected areas and for providing last mile connectivity. The works are executed by the Public Works Department of the States / UTs on an agency basis, by the National Highways Authority of India (NHAI) and by the National Highways & Infrastructure.
- 3. **Development Corporation Ltd (NHIDCL):** This also includes the provision for Tribal component relating to development of road connectivity in Left Wing Extremism affected areas, NH works in NE States, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, etc. The provision also includes Development of Ropeways.
- 4. **Programme Component:** The provision is for Externally Aided Projects under Roads Wing financed from CRIF.
- 5. **EAP Component:** The provision includes foreign loan component for Externally Aided Projects under Roads Wing. The expenditure is met from budgetary support.
- 6. Schemes of States financed from CRIF: This provision is for financing the approved schemes of road works in various States. The funds are released to the States from the Central Road Infrastructure Fund. However, the projects are administratively approved by Government of India. Technical approval and financial sanctions are accorded by the relevant State Governments.



- 7. **Schemes of UTs financed from CRIF:** This provision is for financing the approved schemes of road works in various UTs. The funds are released to the UTs from the Central Road Infrastructure Fund. However, the projects are administratively approved by Government of India. Technical approval and financial sanctions are accorded by the relevant UTs.
- 8. **Grants to Inter-State and Economically Important Roads Schemes financed from CRIF:** This is for development of selected Inter-State and economically important roads for promoting better road infrastructure. This is a part of Central Road Infrastructure Fund as per CRF Act, 2000.
- 9. **Development, Planning, Quality Assurance, Research and Training financed from CRIF:** This includes the expenditure on Research & Development and Planning studies on Road Development and for trainings, workshop, seminars to be conducted by the Indian Roads Congress and other institutes. The expenditure is financed from CRIF.
- 10. Maintenance of National Highways financed from CRIF: The provision is mainly for expenditure on maintenance of National Highways financed from Central Road Infrastructure Fund. The works are executed on agency basis by the Public Works Department of the States, Border Roads Organisation, NHAI, and NHIDCL. This also includes the activities under Swachhta Action Plan.
- 11. Special Accelerated Road Development Program (SARDP) for North Eastern Areas financed from National Investment Fund: The provision is for Special Accelerated Road Development Programme including the Trans-Arunachal Highway and Kaladan Multi Model Transport Project and other road development projects including capital connectivity, district connectivity, connectivity to international border, improvement and strengthening of roads in the North Eastern Region and Sikkim. This is financed from National Investment Fund.
- 12. Research, Training, Studies and Other Road Safety Schemes: The provision is mainly for research and development, training, studies on transport industry, pollution checking equipment, road safety programmes, setting up of facilities on National Highways for extending relief to victims accidents consisting of provision for first aid to the victims and removal of the damaged vehicle for restoration of the traffic, development of National Database Network, creation of National Road Safety Board, strengthening of Public Transport, etc. The expenditure is financed from CRIF.
- 13. **Scheme on Women Safety:** The provision is for safety of women on public road transport. The expenditure is met from Nirbhaya Fund.





### **Ministry of Railways**

Indian Railways operates at a massive scale in every imaginable dimension and is among the world's largest rail network, spread over 1,23,236 kms, with 13,523 passenger trains and 9,146 freight trains, carrying 23 million travellers and 3.5 MT of freight daily from 7,349 stations. A dedicated 1.2 Million plus manpower works round the clock to keep the wheels moving. The Indian Railways operates on commercial basis, while serving the nation in many aspects that are not commercially viable, including the construction and operation of non-remunerative lines. The following are extracts from the Notes on the Demand for Grants of the Ministry in the Expenditure Budget (2023-24).

### Notes on the Demand for Grants of the Ministry in the Expenditure Budget (2023-24)

The net revenue expenditure of Railways is placed at Rs. 265,000 crore in the Budget Estimate 2023-24 as against Rs. 242,892.77 crore in the Revised Estimate 2022-23. Reimbursement of losses on operation of strategic lines has been kept at Rs. 487.51 crore in Budget Estimate 2023-24 as against Rs. 2,461.90 crore in RE 2022-23. An amount of Rs.780 crore has been provided in BE 2023-24 towards debt servicing of market borrowings for National Projects.

The provision in Capital section of this Demand is for expenditure on assets, acquisition, construction and replacement, met out of funds from the General Revenues as Gross Budgetary Support (including Railway Safety Fund and Rashtriya Rail Sanraksha Kosh) and Internal Resources of the Railways. It also includes provision out of Nirbhaya Fund. The total outlay provided for Capital Expenditure in Budget Estimate 2023-24 of Rs. 260,200 crore includes Rs. 2,40,000 crore from General Revenues, Rs. 200 crore from Nirbhaya Fund, Rs.3000 crore from Internal Resource and Rs.17,000 crore from IEBR.

Total Receipt of Railways comprising revenues from passenger, goods, other coaching, sundry other heads and Railway Recruitment Boards etc. have been placed at Rs. 2,65,000 crore in BE 2023-24 as against RE 2022-23 of Rs. 2,42,892.77 crore.

Goods Revenue against item No. 4.03 is with adjustment. Goods Revenue in 2021-22 (Actuals), BE 2022-23, RE 2022-23 and BE 2023-24 are Rs. 141,096.39 crore, Rs. 165,000 crore, Rs 179,500 crore respectively.

Sundry Revenue against item No 4.04 in Actual 2021-22 is with adjustment. The Actual Sundry Revenue in 2021-22 is Rs. 6067.96 Crore.

Customer Amenities includes Integration of Metro Station with Railway Station projects costing Rs. 500 crore in BE 2023-24.





### Department of Drinking Water and Sanitation, Ministry of Jal Shakti

The Department of Drinking Water and Sanitation provides technical and financial assistance to the States to provide safe and adequate drinking water to rural India with focus on service delivery. The Department of Drinking Water and Sanitation is the nodal Department for overall policy, planning, funding and coordination of two flagship programmes of the Government of India namely the Swachh Bharat Mission (Grameen) [SBM (G)] for rural sanitation and the Jal Jeevan Mission (JJM) for rural drinking water supply.

The following gives a brief write-up on the above Missions of the Department.

- Jal Jeevan Mission (JJM) / National Rural Drinking Water Mission: Jal Jeevan Mission is a flagship programme of the Government of India which aims at providing Functional Household Tap Connection (FHTC) to every rural household by 2024. Under this Centrally Sponsored Scheme, financial and technical assistance is provided to States / UTs for coverage of all rural households. The programme focuses on service delivery at household level, i.e. water supply on regular basis in adequate quantity and of prescribed quality.
  - The programme will also implement source sustainability measures as mandatory elements, such as recharge and reuse through grey water management, water conservation, rain water harvesting. The Jal Jeevan Mission will be based on a community approach to water and will include extensive Information, Education and communication as a key component of the mission. JJM looks to create a jan andolan (people's movement) for water, thereby making it everyone's priority.
- 2. Swachh Bharat Mission (Grameen) / SBM-Rural: The government continues to give utmost importance for supplementing the efforts of the State Governments to provide sanitation facilities to the rural masses. The Swachh Bharat Mission (Grameen) was launched on 2nd October, 2014 aims at attaining Swachh Bharat. Having achieved Open Defecation Free (ODF) status, the programme is being implemented to ensure sustainability of Open Defecation Free (ODF) status in all the rural areas and to cover all the villages of the country with Solid and Liquid Waste Management arrangements.

In order to accelerate the efforts to achieve universal sanitation coverage and to put focus on sanitation, the Prime Minister of India had launched the Swachh Bharat Mission on 2nd October 2014. The mission was implemented as nation-wide campaign/jan andolan which aimed at eliminating open defecation in rural areas during the period 2014 to 2019 through mass scale behaviours change, construction of household-owned and community-owned toilets and establishing mechanisms for monitoring toilet construction and usage. Under the mission, all villages, Gram Panchayats, Districts, States and Union Territories in India declared themselves "open-defecation free" (ODF) by 2 October 2019, the 150th birth anniversary of Mahatma Gandhi, by constructing over 100 million toilets in rural India.

In order to ensure that the open defecation free behaviours are sustained, no one is left behind, and that solid and liquid waste management facilities are accessible, the Mission is moving towards the next Phase II of SBMG i.e. ODF-Plus. ODF Plus activities under Phase II of Swachh Bharat Mission (Grameen) will reinforce ODF behaviours and focus on providing interventions for safe management of solid and liquid waste in villages.

The Department has been making substantial allocations to the NE Region for the above schemes, including under the Union Budget of FY 2023-24. These include Grants-in-Aid to State Governments.



### **Ministry of Rural Development**

The Ministry of Rural Development has two departments, i.e. Department of Rural Development and Department of Land Resources. Being the nodal Ministry for most of the development and welfare activities in the rural areas, the Ministry of Rural Development plays a pivotal role in the overall development strategy of the rural areas of the country, including in the NE Region. The vision and mission of the Ministry is sustainable and inclusive growth of rural India through a multipronged strategy for eradication of poverty by increasing livelihoods opportunities, providing social safety net and developing infrastructure for growth. This is expected to improve quality of life in rural India and to correct the developmental imbalances, aiming in the process, to reach out to most disadvantaged sections of the society. The major schemes, missions and programmes of the Ministry have been listed below along with their brief descriptions. These are also expected to benefit the NE Region, as there are substantial outlays made for the region as per the requirements of Government policy.

- 1. MGNREGA-Programme Component: The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) aims at enhancing livelihood security of households in rural areas of the country by providing at least one hundred days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work. In the first phase, Mahatma Gandhi NREGA was implemented in 200 most backward districts with effect from February 2nd 2006 and was expanded subsequently to additional 113 and 17 districts with effect from April 1st 2007 and May 15th 2007 respectively. The objectives of the Scheme involves providing up to 100 days of unskilled manual work in a financial year to every household in rural areas as per demand resulting in creation of productive assets of prescribed quality and durability, strengthening the livelihood resource base of the poor, pro-actively ensuring social inclusion, and strengthening Panchayati Raj Institutions (PRIs).
- 2. Pradhan Mantri Gram Sadak Yojna: Launched in 2000, Pradhan Mantri Gram Sadak Yojana (PMGSY) is a scheme for providing all weather road connectivity to all eligible habitations of designated population size (500 plus in plain areas, 250 plus in NE, Hills, Tribal and Desert Areas, 100-239 population size in LWE areas as per Census 2001). It is one of the most successful initiatives in Rural India. Since Inception till 13<sup>th</sup> January, 2023, a total of 162,384 habitations have been provided all-weather road connectivity under PMGSY.
  - Subsequently, new intervention verticals namely, PMGSY-II, Road Connectivity Project for Left Wing Extremism Areas (RCPLWEA) and PMGSY-III were added under the ambit of PMGSY for upgradation of rural roads and construction of strategically important roads in LWE Areas. Since, inception till 13th January, 2023, a total of 804,620 Km road length has been sanctioned and 724,191 Km completed under various interventions/verticals of PMGSY. The programme would require continuing assistance of Rs. 19,000 crore every year up to March, 2025 for completion of all ongoing components of PMGSY in partnership with the States.
- 3. National Rural Livelihood Mission: The Deendayal Antyodaya Yojana- National Rural Livelihoods Mission (DAY-NRLM) was launched in June 2011. The objective of DAY-NRLM is to organize the rural poor women into Self Help Groups (SHGs), and continuously nurture and support them till they attain appreciable increase in incomes over a period of time and improve their quality of life and come out of abject poverty. DAY-NRLM seeks to reach out to all rural poor women, estimated at 9.0 to 10.0 crore in a phased manner. The core financial support under the programme is the Revolving Fund (RF) and Community Investment Fund (CIF) provided to Self Help Group (SHGs) and their Federations to facilitate their livelihood activities. DAY-NRLM also has a provision for Interest Subvention to women SHGs to avail loans up to Rs. 3.00 lakh from



banks at an interest rate of 7% per annum and an additional subvention is also given to reduce the interest rate to 4% if the loan is repaid in time.

Mahila Kisan Sashkitikaran Pariyojna is a Sub-Scheme of DAY-NRLM, which seeks to strengthen the existing agriculture based livelihoods of the poor and participation of women in agriculture and improve productivity. Start-up Village Entrepreneurship Programme (SVEP) supports Self Help Group (SHG) and their family members to set-up small enterprises in the non-farm sector. This is done by setting up an eco-system for supporting small enterprises in rural areas.

- 4. Shyama Prasad Mukherjee Rurban Mission: The Shyama Prasad Mukherjee Rurban Mission (SPMRM) is a unique programme, designed to deliver catalytic interventions to rural areas, on the threshold of growth. The Mission is an attempt to make the selected rural areas socially, economically and amenities, thus leading to sustainable and balanced regional development in the country. 300 'Rurban Clusters' with thematic economic growth points are being developed across the country under this innovative Mission.
  - So far, 296 clusters have been identified and approved across 28 States and 7 Union Territories. Further, through intense engagements with the States, 289 Integrated Cluster Action Plans (ICAPs) have been approved for 28 States and 7 UTs with a funding support of up to 30% of the estimated investment for each Rurban cluster, given as Critical Gap Funding (CGF), while 70% of the funds is mobilized by the States through convergence with synergic State and Central programmes. The cluster based model of achieving focused area development in chosen Gram Panchayats, ensures de-centralised planning and efficient channelization of local efforts and resources to achieve their development aspirations. Twenty-one components envisaged as desirable under the Mission will be the key drivers for inclusive growth in these cluster areas. In these 289 clusters will be covered under three phases of the Mission. Rs. 27,945 crore of investment has been proposed under Convergence and Critical Gap Funding (CGF) activities.
- 5. **Pradhan Mantri Awas Yojana (PMAY)- Rural**: The Ministry of Rural Development is implementing Pradhan Mantri Awaas Yojana- Gramin (PMAY-G) as centrally sponsored scheme with effect from 1<sup>st</sup> April, 2016 to provide assistance to eligible rural households for construction of 2.95 crore Pucca houses with basic amenities to achieve the objective of Housing for All in rural areas by March, 2024. Against the allocated targets of 2.94 crore to the States UTs, the houses have been sanctioned to 2.79 crore beneficiaries and 2.13 crore houses have been completed.
- 6. National Social Assistance Programme: This includes: (i) Indira Gandhi National Old Age Pension Scheme (IGNOAPS) whereby assistance is provided to persons of 60 years and above and belonging to family living below poverty line as per the criteria prescribed by Government of India; (ii) National Family Benefit Scheme whereby a BPL household is entitled to lump sum amount of money on the death of primary breadwinner aged between 18 and 59 years; (iii) Indira Gandhi National Widow Pension Scheme (IGNWPS) wherein Central assistance at the rate of Rupees 300/- per month is provided to widows in the age- group of 40-79 years and belonging to family living below poverty line; (iv) Indira Gandhi National Disability Pension Scheme (IGNDPS) whereby Central assistance at the rate of Rs. 300/- per month is provided to persons aged 18-79 years with severe or multiple disabilities and belonging to family living below poverty line; (v) Annapurna Scheme wherein 10 kg of food grains per month are provided free of cost to those senior citizens who, though eligible under IGNOAPS, are not receiving pension.

In addition, the Department of Land Resources is operating the Watershed Development Component of the Pradhan Mantri Krishi Sinchai Yojana, which amalgamated the Integrated Watershed Management Programme (as the latter was closed in March 2022). This develops wastelands and provides rural employment, including in the NE states.



# Ministry of Health and Family Welfare

The Ministry of Health and Family Welfare has two Departments viz. the Department of Health & Family welfare, and the Department of Health Research. The Ministry of Health and Family Welfare has the following two attached Offices:

- (i) Directorate General of Health Services (DGHS) is an attached office of the Department of Health & Family welfare and has subordinate offices spread all over the country. The DGHS renders technical advice on all Medical and Public Health matters and is involved in the implementation of various Health Services.
- (ii) National Health Authority (NHA) has been set up as an attached Office to Ministry of Health & Family welfare vide extraordinary Gazette Notification no. 3(4)12018- H&FW (Part.III) Vol.2 dated 01.02.2019 of NITI Aayog. NHA is the apex body responsible for implementing India's flagship public health insurance/assurance scheme called "Ayushman Bharat- Pradhan Mantri Jan Arogya Yojana" & has been entrusted with the role of designing strategy, building technological infrastructure and implementation of "National Digital Health Mission" to create a National Digital Health Eco-system.

The major schemes, programmes, institutions and missions of the Ministry have been given below. These have been benefitting the NE Region, for which the Ministry is making allocations as per Government Policy, including grants to the State Governments of the region.

- 1. Pradhan Mantri Swasthya Suraksha Yojana: It has been launched with the objective of correcting regional imbalances in the availability of affordable/reliable tertiary healthcare services and to also augment facilities for quality medical education in the country. The Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) envisages creation of tertiary healthcare capacity in medical education, research and clinical care, in the underserved areas of the country. It aims at correcting regional imbalances in the availability of affordable/reliable tertiary healthcare services and also augmenting facilities for quality medical education in the country. The scheme has two broad components: (a) Setting up of All India Institute of Medical Sciences (AIIMS); and (b) Up-gradation of existing Government Medical Colleges/Institutions (GMCIs). So far, establishment of 22 new AIIMS and 75 up-gradation Projects of existing Government Medical Colleges/Institutions (GMCIs) have been approved under this scheme. Six AIIMS approved under Phase- I (AIIMS-Bhopal, AIIMS-Bhubaneswar, AIIMS-Jodhpur, AIIMS-Patna, AIIMS-Raipur and AIIMS- Rishikesh) are already fully functional. 16 AIIMS have been sanctioned / approved by the Cabinet in subsequent phases at Gorakhpur (UP), Raebareli (UP), Nagpur (Maharashtra), Kalyani (West Bengal), Mangalagiri (Andhra Pradesh), Bibinagar (Telangana), Bathinda (Punjab) Deoghar (Jharkhand), Bilaspur (Himachal Pradesh), Rajkot (Gujarat), Guwahati (Assam), Vijaypur (Jammu), and Madurai (Tamil Nadu), Darbhanga (Bihar), Awantipura(Kashmir) and Manethi (Haryana). The up-gradation programme broadly envisages improving tertiary health infrastructure through construction of Super Speciality Blocks / Trauma Care Centres etc. and/or procurement of medical equipment at/for existing Government Medical Colleges / Institution.
- 2. National AIDS and STD Control Programme: This includes activities for (A) Prevention including (i) Targeted Intervention among High Risk Groups and Bridge population, (ii) Information, Education and Communication activities in States and UTs, (iii) Treatment of Sexual Transmission Infection, (iv) Blood safety and quality assurance, (v) Provision of Integrated Counseling & Testing facilities including prevention of Parent to Child Transmission, (vi) Rural outreach through Link Worker Scheme, (B) Activities for providing Care, Support & Treatment to People



living with HIV / AIDS, (C) Capacity Building , and (D) Strategic Information Management. (BTS) Comprises more than 3700 Blood centres in the Country licensed Blood Centres in Government/NGOs, Private Sectors of which 1131 are NACO supported Blood centres could be hospital based or stand-alone. The BTS comprises of - 26 Regional Training Centres, 34 Model Blood Centres, 367 Blood Component Separating Unit (BCSU), 186 Major Blood Centres, 544 District Level Blood Banks (DLBB). NBTC is the policy formulating apex body for all matters pertaining to the organisation, operation, standards and training of a sustainable and safe blood transfusion service for the country.

- 3. Global Fund Grant under COVID 19 Response Mechanism 2021 (EAP): Global fund is providing 100% grant for mobile PSA units, Advance Life Support Ambulances. Pressure Swing Adsorption plants, training causal booster pumps, training courses booster pump fo cylinder refilling procurement of D type Oxygen cylinder and national level training workshop on Oxygen management and administrative capacity building.
- 4. **Family Welfare Schemes:** The scheme provides for Swastha Nagrik Abhiyan (SNA), Population Research Centres, Health Surveys & Research Studies, procurement of Contraceptives for Social Marketing and Free Distribution, Training of Doctors in No Scalpal Vasectomy /Recanalisation Technique etc.
- 5. Establishment and strengthening of NCDC Branches and Health Initiatives Inter Sectoral coordination for preparation and control of Zoonotic Diseases and other neglected tropical diseases surveillance of Viral Hepatitis Anti Microbial Resistance: The scheme is envisaged as a centre par-excellence to give impetus to the advancement of knowledge in the field of prevention and control of communicable/ infectious diseases of public health importance and Strengthening of other Health Initiatives. Up to 2017-18, the schemes viz Strengthening of existing branches & establishment of 27 branches of NCDC, strengthening inter-sectoral coordination of prevention and control of Zoonotic diseases, Viral Hepatitis and Anti-Micro Resistance were separate schemes which have been merged into one scheme from 2018-19.
- 6. **National Pharmaco-vigilance Programme:** It is a Central Sector Scheme with an objective to collect Adverse Drug Reaction (ADR) to commonly prescribed medicines in India; and to enable the maintenance of a Data base on the efficacy and safety of new drugs after their introduction in the country.
- 7. **Development of Nursing Services:** It is an ongoing Central Sector Scheme. The main objective of the scheme is to train nurses in order to upgrade the knowledge and skill of nursing personnel in nursing education, administration and Strengthening/Upgradation of School of Nursing infrastructure of nursing schools to upgrade them into college of Nursing.
- 8. Health Sector Disaster Preparedness and Response and Human Resources Development for Emergency Medical Services: This Scheme is being implemented with the objective to build capacities in human resource to respond to health aspects of disasters, Capacity building on structural and non-structural interventions for disaster resilience for hospitals, promote risk communication for creating awareness for risk reduction and develop specialized capacities for handling medical aspects of Chemical, Biological, Radiological and Nuclear (CBRN) disasters in identified hospitals in vulnerable States/ Districts.
- 9. **National Organ Transplant Programme:** The objective of the scheme is to organize a system of organ procurement and distribution for deserving cases for transplantation.
- 10. Pradhan Mantri Ayushman Bharat Health Infrastructure Mission (PMABHIM) (Health): This is a Centrally Sponsored Scheme with some Central Sector component spread over 5 years from 2021-22 to 2025-26 for implementation of the Atmanirbhar Bharat Package for Health Sector



announced by the Hon'ble Prime Minister as part of the series of Government measures for providing stimulus to the economy. The measures under the PM ABHIM focus on developing capacities of health systems and institutions across the continuum of care at all levels, primary, secondary and tertiary, to prepare health systems in responding effectively to the current and future pandemics/disasters.

- 11. National Tele Mental Health Programme: To provide universal access to equitable, accessible, affordable and quality mental health care through 24x7 tele-mental health counselling services as a digital component of the National Mental Health Programme (NMHP) across all Indian States and UTs with assured linkages.
- 12. **National Digital Health Mission NHM:** It provides for creating a National Digital Health Eco-System that supports universal health Coverage in an efficient, accessible, inclusive, affordable, timely and safe manner through provision of a wide range of data, information and infrastructure services, duly leveraging, open, interoperable, standards based digital systems, and ensuring the security, confidentiality and privacy of health related personal information.

### 13. Regulatory and Statutory Bodies: As follows

Food Safety & Standards Authority of India - It has been established under the Food Safety and Standards Act, 2006 for laying down the science based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import, to ensure availability of safe and wholesome food for human consumption.

Indian Pharmacopeia Commission - It provide for performing activities to Publish Indian Pharmacopeia and its Addendum, to develop and validate the Indian Pharmacopeia Reference Substances (IPRS) and Impurity Standards, Skill Development of Drugs Analyst, Drugs Inspectors and Stakeholders etc

National Medical Council - It is a statutory body with the responsibility of establishing and maintaining high standards of medical education and recognition of medical qualifications in India. It registers doctors to practice in India, in order to protect and promote the health and safety of the public by ensuring proper standards in the practice of medicine.

Dental Council of India: It is a Statutory Body incorporated under an Act of Parliament [viz. Dentists Act, 1948 (XVI of 1948)] to regulate the Dental Education and the profession of Dentistry throughout India.

Pharmacy Council of India - It is a statutory body governed to regulate Pharmacy education and profession up to graduate level and prescribe minimum standard of education required for qualifying as pharmacist.

Indian Nursing Council - It is a statutory body constituted by the Central Government under section 3(1) of the Indian Nursing Council Act, 1947 to establish a uniform standard of training for nurses, Midwives and health visitors.

National Academy of Medical Sciences (NAMS) - It is a unique institution which fosters and utilizes academic excellence as its resource to meet medical and social goals, established under Societies Registration Act XXI of 1860.

National Board of Examinations - It is an independent autonomous body of its kind in the country in the field of medical sciences with the prime objective of improving the quality of the medical education by elevating the level and establishing standards of post graduate examinations in modern medicine on an all India basis.



- 14. All India Institute of Medical Sciences, N Delhi: It has been set up by an Act of Parliament in 1956 as a premier institution to conduct experiments and research on various disciplines of medical services. Dr. Rajendra Prasad Centre for Ophthalmic Sciences is attached to it.
- 15. **Post Graduate Institute of Medical Education and Research, Chandigarh:** It was set up by an Act of Parliament as an Institute of National importance having the same functions as AIIMS, New Delhi, but in the field of post-graduate medical education. The Institute is wholly financed by Central Govt. and is a centre for medical education research and specialized hospital services.
- 16. Jawaharlal Institute of Post Graduate Medical Education and Research, Puducherry: The institute seeks to be model health system of India through innovations in education, patient-oriented research, population health and service excellence. Its mission is to develop compassionate, ethically sound health professional and provide service of the highest order across the healthcare continuum, through innovations in education that yield lifelong learners and leaders in healthcare.
- 17. **National Institute of Mental Health and Neuro-Sciences, Bengaluru:** Providing Services, training and research functions in the field of mental health and neurosciences. The Institute is a deemed university and offers degrees and diploma courses in this field in medical and para-medical disciplines.
- 18. North Eastern Indira Gandhi Regional Institute of Health and Medical Sciences, Shillong: The institute was setup in 1987 with the objective of providing inter-alia specified medical care to the people of entire North Eastern Region and to produce trained medical manpower.
- 19. **Regional Institute of Medical Sciences, Imphal:** It is a medical institute established at Imphal having a 1074 bedded hospital, equipped with modern equipments and teaching facilities having an intake capacity of 100 MBBS, 50 BDS, 50 B Sc. Nursing and 147 Post Graduate Degree Diploma Seats. Students from 7 North Eastern States (except Assam) and all over India are trained in Undergraduate and Post-Graduate courses.
- 20. **Regional Institute of Paramedical and Nursing Sciences, Aizawl:** The institute has been identified as 9th RIPS (Regional Institute of Paramedical Sciences) for taking up necessary measures for starting various paramedical courses apart from the present five degree courses. The main objective of the institute is to provide education in Nursing, Pharmacy and paramedical Sciences to the whole North Eastern Region.
- 21. Lokpriya Gopinath Bordoloi Regional Institute of Mental Health, Tezpur: It is a Tertiary psychiatric care institute in the North East. The Institute caters to patients from all over the North Eastern Region country. Apart from the patient care services, the institute has also expanded its activities in the academic field.
- 22. **International Cooperation:** It provides for Government of India's contribution to the International Organisations in the field of Health and Family Planning, viz. World Health Organisation, International Committee on Red Cross Society and other expenditure on International Health Conferences.
- 23. Flexible Pool for RCH & Health System Strengthening, National Health Programme and National Urban Health Mission: It provides for transfer to state to support decentralized planning and flexible programming by the States including development of State and district level Project Implementation Plans (PIPs) with a focus on outcomes particularly relating to vulnerable sections, and community based monitoring & evaluation. The activities under the Mission provides for health needs of rural population including control of Vector Borne Diseases, TB, and Leprosy etc., It also includes transfer to state to address healthcare needs of the urban



- population with focus on urban poor and vulnerable sections of society. The scheme has been launched as a sub mission of National Health Mission.
- 24. Infrastructure Maintenance: It provides for support to States to meet salary requirement of Scheme, viz. Direction and Administration (Family Welfare Bureaus at State & District level), Subcentres, Urban Family Welfare Centres, Urban Revamping Scheme (Health Posts), Auxiliary & Nursing Midwife (ANM) & Lady Health Visitors (LHVs) Training Schools, Health and Family Welfare Training Centres and Training of Multi-purpose Workers (Male). This dispensation would continue. However, any new Health Sub-Centre (SHCs) or health posts under this component would be supported only with the approval of Govt. of India.
- 25. **Strengthening National Programme Management of the NRHM:** This provides for National Programme Management Support, National Health Systems Resources Centre, Operational research, technical support requirement from other institutions.
- 26. **Strengthening of State Drug Regulatory System:** It provides for financial assistance to states and UTs for strengthening drug regulatory system in the country.
- 27. **Tertiary Care Programme:** It provides for transfer to states for implementation of Tertiary Care Programme/Schemes viz. Tobacco Control, National Mental Health Programme, Assistance for Capacity Building for Trauma Centres, National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke, Health Care for the Elderly, National Programme for Blindness and Telemedicine.
- 28. Pradhan Mantri Ayushman Bharat Health Infrastructure Mission (PMABHIM): This is a Centrally Sponsored Scheme with some Central Sector component spread over 5 years from 2021-22 to 2025-26 for implementation of the Atmanirbhar Bharat Package for Health sector announced by the Honble Prime Minister as part of the series of Government measures for providing stimulus to the economy. The measures under the PM-ABHIM focus on developing the capacities of health systems and institutions across the continuum of care at all levels, primary, secondary and tertiary, to prepare health systems in responding effectively to the current and future pandemics/disasters.
- 29. Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PMJAY): Provides cashless and paper less benefit cover of Rs. 5.00 lakh per annum per family on floater basis in the empanelled hospitals across India. At present; AB-PMJAY targets to cover 12 Crore families (covering more than 50.00 crore population in India). The erstwhile Rashtriya Swasthya Bima Yojna (RSBY) Scheme has been subsumed in the name of Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PMJAY). In addition, PMJAY has subsumed the Senior Citizen Health Insurance Scheme, which was a top up of Rashtriya Swasthya Bima Yojana (RSBY) implemented with effect from 01.04.2016. The scheme covered senior citizens aged 60 years and above that were already covered under RSBY. This enabled coverage of senior citizens belonging to BPL and 11 other defined categories of unorganized workers.





### Department of School Education and Literacy, Ministry of Education

The Ministry of Education comprises of two Departments: The Department of School Education & Literacy (SE&L) and the Department of Higher Education (HE).

The Department of School Education & Literacy deals with matters like Elementary Education, Basic Education, Social Education and Adult Education, and Secondary Education and Vocational Guidance, apart from all incidental areas related to the above like books, educational research, audio-visuals etc. In addition, it administers institutions like National Council for Teacher Education, National Council for Educational Research and Training, and Bal Bhavan, Children's Museum related to the subjects being dealt by it. The schemes, programmes, missions and institutions being handled by the Department have been listed below. The NE Region is being benefitted by outlays made on these initiatives by the Government of India for the development of education in the country.

- Directorate of Adult Education: The Directorate of Adult Education (DAE) has been functioning
  as the National Resource Centre in the field of Adult Education. The Directorate was set up as
  subordinate office of the Department of Elementary Education & Literacy under the Ministry of
  Human Resource Development to provide academic and technical resource support to various
  government and nongovernment agencies implementing Adult Education Programme in the
  country.
- 2. **National Award to Teachers:** Instituted in 1958, the National Award to Teachers are given away by the President of India on 5th September (Teacher's Day) every year to give public recognition to meritorious teachers working in primary, middle and secondary schools.
- 3. **Pradhan Mantri Innovative Learning Programme (DHRUV):** This Scheme is an initiative to provide guidance from renowned/prominent persons in their field to select talented students.
- 4. **National Means cum Merit Scholarship Scheme:** National Means-cum-Merit Scholarship Scheme launched in 2008 provides for one lakh Scholarships of Rs. 6000/- per annum (Rs. 500/- per month) at class IX stage which continues upto class XII subject to fulfilment of eligibility criteria. The objective of the scheme is to award scholarships to meritorious students of economically weaker sections to arrest their drop-out at class VIII and encourage them to continue the secondary stage i.e upto class XII. In this Scheme, the corpus of Madhyamik and Uchchtar Shiksha Kosh (MUSK) in Revised Estimates 2022-23 and Budget
- 5. **Kendriya Vidyalaya Sangathan (KVS):** Kendriya Vidyalaya Sangathan was set up in 1965, as a registered body, wholly financed by Government to establish, control and manage Kendriya Vidyalayas, the main objective of which is to meet the educational needs of the children of transferable Central Government employees. In this Scheme, the corpus of Madhyamik and Uchchtar Shiksha Kosh (MUSK) in Revised Estimates 2022-23 and Budget Estimates 2023-24 is kept at Rs.2500 crore and Rs. 1000 crore respectively.
- 6. Navodaya Vidyalaya Samiti (NVS): In pursuance of National Policy of Education (NPE),-1986 (as modified in 1992) on setting up of residential schools where good quality education could be imparted to the talented children from rural area, a Central Scheme was launched by the Government of India in 1986 to setup Jawahar Navodaya Vidyalayas (JNVs) in each district of the Country. These JNVs are run by an Autonomous organization, the Navodaya Vidyalayas Samiti (NVS) established in 1986 under the Registration of Societies Act, 1860. In the Scheme of NVS, the corpus of Madhyamik and Uchhatara Shiksha Kosh (MUSK) in Revised Estimates 2023 and Budget Estimates 2023-24 is kept as Rs 3350 Cr and Rs. 1750 Cr respectively.



- 7. National Council of Educational Research and Training (NCERT): National Council of Educational Research and Training (NCERT) was set up in 1961 by the Government of India as an autonomous organization to advise and assist the Ministry of Human Resource Development, Government of India and Departments of Education in States/UTs in formulation and implementation of their policies and major programmes including finalization of National Curriculum Framework (NCF) in the field of Education particularly for qualitative improvement in School Education.
- 8. **Central Tibetan School Administration (CTSA):** Central Tibetan Schools Administration (CTSA) was established as an Autonomous organization in the year 1961. The main objective of the CTSA is to provide free education to the children of Tibetan refugees scattered in different remote areas in our country.
- 9. National Bal Bhawan: National Bal Bhawan (NBB), New Delhi established by the Government of India in 1956 at the initiative of the first Prime Minister of India, Pt. Jawahar Lal Nehru, is an autonomous body which is fully financed by the Ministry of Education, Department of School Education and Literacy. National Bal Bhawan has been contributing towards achieving creativity amongst children in the age group of 5-16 years, especially those from weaker sections of the society
- 10. Samagra Shiksha: The erstwhile Schemes of Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Strengthening of Teacher Training Institutions have been merged to form the Scheme of Samagra Shiksha. The merger intends to give a holistic approach to School Education. In this Scheme, the corpus of Prarambhik Shiksha Kosh (PSK) and Madhyamik and Uchchtar Shiksha Kosh (MUSK) in Revised Estimates 2022-23 is kept at Rs. 26000 crore and Rs. 4000 crore respectively. In Budget Estimates 2023-24, the corpus of Prarambhik Shiksha Kosh (PSK) and Madhyamik and Uchchtar Shiksha Kosh (MUSK) is Rs. 20000 crore and Rs. 3000 crore respectively.
- 11. National Programme of Mid Day Meal in Schools: With a view to enhancing enrolment, retention and attendance and simultaneously improving nutritional levels among children, the National Programme of Nutritional Support to Primary Education was launched in 1995. From 2008-09 onwards the programme covers all children studying in class I to VIII in all areas across the country.
- 12. **Pradhan Mantri Poshan Shakti Nirman (PM POSHAN):** Pradhan Mantri Poshan Shakti Nirman (PM POSHAN) earlier known as the National Programme of Mid-Day Meals in Schools is one of the foremost rights based Centrally Sponsored Schemes under the National Food Security Act, 2013 (NFSA). The primary objective of the scheme is to improve the nutritional status of children studying in classes I-VIII in eligible schools. In Financial Year 2022-23, the corpus of Prarambhik Shiksha Kosh (PSK) at Revised Estimates is kept at Rs. 12000 crore in the Scheme of Pradhan Mantri Poshan Shakti Nirman (PM -POSHAN).In Financial Year 2023-24, the corpus of Prarambhik Shiksha Kosh (PSK) at Budget Estimates stage is kept at Rs. 10000 crore in the Scheme of Pradhan Mantri Poshan Shakti Nirman (PM POSHAN).
- 13. Strengthening Teaching-Learning and Results for States (STARS): The Strengthening Teaching-Learning and Results for States (STARS) project seeks to support the states in developing, implementing, evaluating and improving interventions with direct linkages to improved education outcomes and school to work transition strategies for improved labour market outcomes. The overall focus and components of the STARS project are aligned with the objectives of National Education Policy (NEP) 2020 of Quality Based Learning Outcomes.



- 14. **Exemplar:** The Scheme of Exemplar aims to prepare more than 15000 schools of excellence which will help showcase the implementation of the National Education Policy 2020 and emerge as exemplars and schools of excellence over a period of time. They will provide leadership in their respective regions in providing high-quality education in an equitable, inclusive and joyful school environment that takes care of the diverse background, multilingual needs, and different academic abilities of children and makes them active participants in their own learning process as per the vision of NEP 2020.
- 15. **PM Schools for Rising India (PM SHRI):** The Scheme of PM Shri earlier known as Exemplar aims to prepare more than 15000 schools of excellence which will help show case the implementation of the National Education Policy 2020 and emerge as exemplars and schools of excellence over a period of time. They will provide leadership in their respective regions in providing high-quality education in an equitable, inclusive and joyful school environment that takes care of the diverse background, multilingual needs, and different academic abilities of children and makes them active participants in their own learning process as per the vision of NEP 2020.
- 16. **Padhna Likhna Abhiyan:** The existing Scheme of Saakshar Bharat was modified as Padhna Likhna Abhiyan under which adult learners are to be made literate
- 17. **New India Literacy Programme (NILP):** A new Centrally Sponsored Scheme of Adult Education 'New India Literacy Programme (NILP)' for Financial Years 2022-27 has been designed and developed by aligning with the recommendations on 'Adult Education and Lifelong Learning' of National Education Policy (NEP), 2020



# Department of Higher Education, Ministry of Education

The Department of Higher Education is responsible for Higher Education sector, both in terms of policy and planning. It handles higher and university education; Central Universities; Rural Higher Education Foreign Aid Programme relating to Higher Education, Technical Education Planning and Development of School Education; Institutions of higher learning (other than Universities) etc. apart from institutions like University Grants Commission. 33. National Book Trust. 34. Administrative Staff College of India, Hyderabad. The matters related to reputed institutes are also dealt by the Department – including the Indian Institutes of Technology, Indian Institute of Science, Bangalore; Indian School of Mines and Applied Geology; and The Tata Institute of Social Sciences, Mumbai.

The schemes, programmes, missions and institutions being administered by the Department of Higher Education have been given below. These initiatives are also benefitting the NE Region.



- Directorate of Hindi: The Central Hindi Directorate with its four Regional Centres located at Hyderabad, Calcutta, Guwahati and Chennai was set up in 1960 as a subordinate office with the objective of propagation and development of Hindi as a link language. It operates the schemes of Publication of bilingual and trilingual dictionaries, Correspondence Courses and Awards to Hindi writers, etc.
- 2. Commission for Scientific and Technical Terminology: The Commission for Scientific and Technical Terminology was set up in October, 1961 for evolution of Scientific and Technical Terminology in Hindi and other Indian languages. The Commission runs a scheme of Production of University level Books in Hindi and other Indian Languages to facilitate the change to Indian Languages as the medium of instruction at the University level and it coordinates with the State level academies for development of books in regional languages.
- 3. Central Institute of Indian Languages (CIIL), Mysore and Regional Language Centres: The Central Institute of Indian Languages with its main campus at Mysore and seven Regional Language Centres (RLC) in Bhubaneswar, Guwahati, Lucknow, Mysore, Patiala, Pune and Solan was set up in July, 1969. It helps to evolve/implement the Language Policy of the Government of India and coordinate the development of Indian languages by conducting research in the areas of language analysis, language pedagogy, language technique and language use in society. It also conducts training programmes for school teachers of different languages.
- 4. **Educational Institutions Abroad:** This includes provision for Permanent Delegation of India (PDI) in UNESCO, Paris and Consulate General of India (CGI), New York.
- 5. **National Research Professors:** This scheme is in the nature of recognition of the very exceptional contributions made by National Research Professors in their respective fields. Under it the NRPs are provided financial assistance to carry out research work.
- 6. Establishment of multi disciplinary research universities including Central University of Himalayan Studies (CUHS), creation of Centres of Excellence and National Centre for Excellence in humanities: This includes provision for Establishment of Multi disciplinary Research Universities Including Central University of Himalayan Studies (CUHS), Creation of Centre of Excellence and National Centre for Excellence in Humanities.
- 7. **Higher Education Financing Agency (HEFA):** Higher Education Financing Agency(HEFA), a not-for profit organization has been set up to leverage funds from the market and supplement them with donations and CSR funds. These funds are to be used to finance improvement in infrastructure in our top institutions and be serviced through internal accruals.
- 8. **World Class Institutions:** The provision is for establishing ten world class institutions each in public and private sector in a reasonable time by providing an enabling regulatory environment that will allow them to achieve the highest levels of global excellence in teaching and research.
- 9. Indian Knowledge Systems: It is a Scheme based on the recommendations of the NEP. Elements of knowledge from ancient India and its contributions to modern India and its successes and challenges will be incorporated in an accurate and scientific manner throughout the school curriculum wherever relevant; in particular, Indian Knowledge Systems, including tribal knowledge and indigenous and traditional ways of learning.
- 10. **Glue Grant for Higher Education Institutes:** Glue Grant has been set aside for the purpose of creating formal umbrella structures for institutes supported by the GoI, to have better synergy while also retaining autonomy.
- 11. **PM Uchchatar Shiksha Protsahan (PM-USP) Yojana:** This is a scheme to encourage students in the higher education levels.



Through the component Interest Subsidy and contribution for Guarantee Funds, the Central government provides interest subsidy during the moratorium period on educational loans taken by students with family income of less than Rs 4.5 lakh per annum. A student loan guarantee corpus would be created under the management of a Credit Guarantee Trust to guarantee against default in repayment of student loans. This will substantially protect lending institutions from student default thereby encouraging them to make more student loans. In addition, the government guarantee should reduce the rate of interest on student loans. Through the component Scholarship for College and University students, scholarship to 2% of the students passing out of schools is provided every year for pursuing higher studies in Colleges and University system. The scholarship amount is disbursed directly to the beneficiaries through e-banking, to avoid delays.

From FY 2023-24, erstwhile schemes like Scholarship for College and University students, Interest Subsidy and contribution for Guarantee Funds, and Special Scholarship Scheme for Jammu and Kashmir have been merged into this scheme.

- 12. **PM Research Fellowship:** Under this scheme, the best students who have completed or are in the final year of B. Tech or Integrated M. Tech or M.Sc. in Science and Technology streams from IISc, IITs, IIITs, and IISERs will be offered direct admission in PhD programme in the IITs and IISc. Such students, who fulfil the eligibility criteria, and shortlisted through a selection process, as laid down in the PMRF Guidelines, will be offered a fellowship of Rs. 70,000/- per month for the first two years and Rs. 75,000/- per month for the 3rd year, and Rs. 80,000/- per month in the 4th and 5th years. Apart from this, a research grant of Rs. 2.00 lakh will be provided to each of the Fellows for a period of 5 years to cover their foreign travel expenses for presenting research papers in international conferences and seminars. A maximum of 3,000 Fellows (1000 per year) would be selected during a three-year period.
- 13. National Mission in Education through ICT: The National Mission on Education through Information and Communication Technology (NMEICT) has been envisaged to leverage the potential of ICT, in teaching and learning process for the benefit of all the learners in Higher Education Institutions It plans to focus on appropriate pedagogy for e-learning, providing facility of performing experiments through virtual laboratories, on-line testing and certification, on-line availability of teachers to guide and mentor learners and Direct to Home TV channels etc. It has subsumed some of the erstwhile schemes like (a) Setting up of Virtual Classrooms & Massive Open Online Courses; (b) e-shodh Sindhu; (c) Higher Education Statistics and Public Information System; and (d) National Digital Library.
- 14. **National Academic Depository:** This is an initiative to bring administrative and academic reform through the use of technology for delivery of efficient services to all stakeholders. NAD is a 24X7 online store house of academic awards (degrees, diplomas, certificates, mark sheets etc.) lodged by academic institutions/ boards/ eligibility assessment bodies in digital format. NAD not only ensures easy access to and retrieval of an academic award but also validates and guarantees its authenticity and safe storage.
- 15. **PM e-Vidya:** This new scheme unifies all efforts related to digital/online/on-air education and provisioning of digital devices to enable multi-mode access to education. With this scheme, students and teachers will get multimode access to digital education.
- 16. Academic Bank of Credits (ABC): This scheme envisages development of a digital depository for storage and delivery of Credits earned by the students pursuing the higher education. An Academic Bank of Credit (ABC) shall be established which would digitally store the academic credits earned from various recognized HEIs so that the degrees from an HEI can be awarded taking into account credits earned.



- 17. **National Initiative for Design Innovation:** Setting up of 20 new Design Innovation Centres, One Open Design School and National Design Innovation Network and linking them together. ODS would ensure maximum reach through collaborative education programmes. NDIN would be network of design schools to further reach and access of design education and raise standards of design education and innovation in the country.
- 18. Start-up India Initiative in Higher Educational Institutions: The erstwhile scheme 'National Initiative for Technology Transfer' has been revamped as Start-up India Initiative in Higher Education Institutions. Under this initiative, special efforts would be made to strengthen international research linkages and involve a larger number of Indian institutions in forging such links with industry through a framework of research parks for collaborative and joint research programmes
- 19. **Unnat Bharat Abhiyan:** The Mission of Unnat Bharat Abhiyan is to enable higher educational institutions to work with the people in rural India in identifying development challenges and evolving appropriate solutions for accelerating sustainable growth. It also aims to create a virtuous cycle between society and an inclusive academic system by providing knowledge and practices for emerging professions and to upgrade the capabilities of both the public and the private sectors in responding to the development needs of rural India.
- 20. Implementation of the IMPRINT Research Initiative (Impacting Research Innovation and Technology): This scheme intends to channelize the research in premier institutions into areas that can have largest social and economic good for the country. Under this initiative, research projects under 10 selected domains are jointly funded by MHRD and other participating Ministries/Departments. Second phase IMPRINT-II has been taken up with a slightly revised strategy.
- 21. Impactful Policy Research in Social Science (IMPRESS): The main objective of IMPRESS scheme is to encourage policy relevant research in social science in India, contributing thereby to the process of nation-building and advancement of our society.
- 22. Scheme for Promotion of Academic and Research Collaboration (SPARC): Scheme for Promotion of Academic and Research Collaboration or SPARC aims at improving the research ecosystem of India's higher educational institutions by facilitating academic and research collaborations between Indian institutions and the best institutions in the world from 28 selected nations to jointly solve problems of national and international relevance in the first phase.
- 23. Scheme for Transformational and Advanced Research in Sciences (STARS): The scheme aims to integrate science education and research for a sustainable and equitable India. To develop state-of-the-art research facilities in higher education institutions, inculcate research culture in science faculties of HEIs, orient science towards addressing needs and issues of the country in key sectors including health, energy, agriculture etc, attaining international benchmarks in scientific research are the main objectives of the scheme.
- 24. **Multidisciplinary Education and Research Improvement in Technical Education-EAP (MERITE):**This is a new scheme aiming at integration with the objectives of New National Education Policy (NEP), 2020 and fulfilling the targets of AatmaNirbhar Bharat Abhiyan. It is proposed to be implemented across the country in about 350 Govt./Govt. Aided engineering institutions and affiliated technical universities. The project will be Externally Aided Project (EAP) with external borrowing from the World Bank under IDA.
- 25. Pandit Madan Mohan Malviya National Mission on Teachers and Teaching: The programme envisions focusing holistically on whole sector of education. This would consolidate and



strengthen on-going programmes related to teachers and teaching through effective coordination. It will also provide an integrated platform for building synergies among all the existing initiatives and will attempt to create a comprehensive vehicle for Teacher/Faculty related programmes and schemes. The programme envisages to augment capacity at individual level and also to enhance institutional infrastructure to give impetus to training of teachers at pre service and in service level.

- 26. **National Institutional Ranking Framework:** This framework outlines a methodology to rank institutions across the country. The methodology draws from the overall recommendations and broad understanding arrived at by a Core Committee set up by MoE, to identify the broad parameters for ranking various universities and institutions.
- 27. Global Initiative for Academic Network (GIAN): It is aimed at tapping the talent pool of scientists and entrepreneurs, internationally to encourage their engagement with the institutes of Higher Education in India so as to augment the country's existing academic resources, accelerate the pace of quality reform, and elevate India's scientific and technological capacity to global excellence.
- 28. **Technical Education Quality Improvement Programme of Government of India (EAP):** This is a World Bank funded project having activities for (i) Development of academic excellence Networking Engineering Institution (iii) Developing Management Capacity under the Central Sector.
- 29. **Study in India:** This initiative aims to make India a preferred education hub for students all across the globe, by elevating its position in the global educational landscape. It will help facilitate the student fraternity from all across the globe to come and experience the best of academic learning from the top institutions in India which would help accommodate the growing quality educational needs of students across the world.
- 30. Planning Administration and Global Engagement: This includes provision for Initiatives for Global Engagement, Quality Improvement Programme for Management, Pharmacy Education and Hotel Management, National Monitoring Committee For Minority Education, Expenditure on Seminars, Committees Meetings etc. /TA/DA to Non-Official Members, Shastri Indo Canadian Institute, Refund of Income Tax and Customs Duty to United States Education Foundation in India, Contribution to UNESCO, Deputation and Delegation to UNESCO Conferences Etc, Visit of Foreign Delegation to India, and the Holding of Meetings of Committees/Conference and Organization of exhibitions in furtherance of UNESCO aims and Objectives, Asian Institute of Technology, Bangkok, International Technical Corporation.
- 31. Education Services-Internationalization of Higher Education: This is a component of the Government Action Plan for Champion Services Sector in the field of Education Services. It will help internationalization of education services of India through various identified activities.
- 32. **University Grants Commission (UGC):** University Grants Commission was founded under an Act of Parliament in 1956 for the purpose of co-ordination and determination of standards in universities. While UGC provides assistance to all eligible universities, provision for assistance to Central Universities is being distinctly made. In RE 2022-23, allocation of Rs 4355 crore will be funded through MUSK.
- 33. **All India Council for Technical Education (AICTE):** All India council for Technical Education (AICTE), New Delhi was set up in 1945 as an Advisory Body. It was given a statutory status through an Act of Parliament in 1987, which came into effect on March 28, 1988. Main functions of All India Council for Technical Education (AICTE) are proper planning and coordinated development of the technical education system throughout the country, promotion of



- qualitative improvements of such education in relation to planned quantitative growth and regulation and proper maintenance of norms and standards in the technical education system.
- 34. **Grants to Central Universities (CUs):** Central Universities are autonomous bodies established with a view to create and disseminate knowledge by providing research and instructional facilities, by providing interdisciplinary studies, and innovation in teaching learning process. The Central Universities are governed by their respective Act and Statutes and Ordinances framed there under. In RE 2022-23, allocation of Rs 3595 crore will be funded through MUSK. In BE 2023-24 allocation of Rs 1000crore will be funded through MUSK.
- 35. **Deemed Universities promoted by Central Government:** An Institution of Higher Education other than a University, working with very high standard in a specific area of study, can be declared by the Central Government (on the advice of the UGC) as Institution Deemed to be University. Institutions deemed to be universities enjoy the academic status and privilege of universities. Some of the Deemed Universities are funded by UGC and some are privately managed.
- 36. **Support to Indian Institutes of Technology:** Indian Institutes of Technology have been established as Institutions of National Importance. Their main objective is to impart world class training in engineering and technology; to conduct research in the relevant fields and for advancement of learning and dissemination of knowledge. Provision is for supporting these premier institutions. In RE 2022-23, allocation of Rs 2500 crore will be funded through MUSK. In BE 2023-24 allocation of Rs 1500 crore will be funded through MUSK.
- 37. **IIT, Hyderabad (EAP):** Provides for allocation to EAP projects of IIT Hyderabad.
- 38. **Support to Indian Institutes of Management (IIMs):** Indian Institutes of Management were set up by the Government of India as centres of excellence with the objective of providing educational training, research and consultancy in management. The Institutes are running Post Graduate programme (PGP), Fellowship Programmes, Management Development Programmes and Organisation Based Programmes.
- 39. Support to National Institutes of Technology (NITs) and IIEST: This includes provisions for NITs and IIEST. The National Institutes of Technology are Centrally Funded autonomous Technical Institutions and have been declared as Institutions of National Importance. Indian Institute of Engineering Science and Technology (IIEST) has been converted into an institution of national importance from a State University, namely, Bengal Engineering and Science University, Shibpur, by incorporation in NITSER Act. In RE 2022-23, allocation of Rs 2500 crore will be funded through MUSK. In BE 2023-24 allocation of Rs 1500 crore will be funded through MUSK.
- 40. **Support to Indian Institute(s) of Science, Education and Research (IISER):** The IISERs represent a unique initiative in India where teaching and education are totally integrated with state-of-theart research nurturing both curiosity and creativity in an intellectually vibrant atmosphere of research. Each IISER is an autonomous institution awarding its own Master's and Doctoral degrees.
- 41. **Support to Indian Institute of Science (IISc):** The Indian Institute of Science (IISc) was founded in 1909. Over these years since its establishment, IISc has become the premier institute for advanced scientific and technological research and education in India.
- 42. **Support to Indian Institute(s) of Information Technology (Allahabad, Gwalior, Jabalpur and Kanchipuram):** This includes provision for funds for Centrally funded Indian Institutes of Information Technology at Allahabad, Gwalior, Jabalpur, Kanchipuram & Kurnool.



- 43. **Setting up Indian Institutes of Information Technology in PPP mode:** Looking to the demand of IT professionals, more Indian Institutes of Information Technology (IIIT) have been set up on 'Public Private Partnership' basis.
- 44. Grants to Councils/Institutes for Excellence in Humanities and Social Sciences: This initiative is to encourage bright students to choose programmes in humanities and also to improve its quality of teaching and research. The Councils that have been covered under the Scheme are Indian Council of Historical Research (ICHR), Indian Institute of Advance Study (IIAS) Shimla, Indian Council of Philosophical Research (ICPR) New Delhi National Council of Rural Institutes (NCRI), Indian Council of Social Science Research (ICSSR), New Delhi.
- 45. **Grants to Institutes for Promotion of Indian Languages:** This includes provision for Rashtriya Sanskrit Sansthan, Kendriya Hindi Sansthan, National Council for Promotion of Urdu Language, National Council for Promotion of Sindhi Language, Central Institute of Classical Tamil and National Initiative for Quality Higher Education in Indian Languages.
- 46. **Bharatiya Bhasha University & Institute of Translation:** This will aim at promoting Indian languages and mother tongues and advising the government on all matters relating to languages of India. There will be an Indian Institution of Translation and Interpretation (IITI) under Bhartiya Bhasha University. As per NEP recommendation, such an Institute would provide truly important service for the country as well as employ numerous multilingual language and subject experts, and experts in translation and interpretation which will help to promote all Indian Languages.
- 47. **National Institute of Industrial Engineering, Mumbai:** The National Institute of Industrial Engineering (NITIE), Mumbai was established as a National Institute in 1963 by the Government of India with the assistance of UNDP through the International Labour Organisation (ILO). NITIE has also been recognized as a Quality Improvement Programme Centre.
- 48. Board of Apprenticeship Training, Bombay, Calcutta, Madras and Kanpur: Govt. of India, has established four such Boards of Apprenticeship/Practical Training catering to the needs of four regions of India with the sole aim of improving the capability of fresh Engineers through one year 'on the job training' in actual working environment as Graduate / Technician/ Technician (Vocational) apprentices under the provisions of the Apprentices Act, 1961 amended in 1973 & 1986.
- 49. **Schools of Planning and Architecture (SPAs):** The Schools of Planning and Architecture are considered as premier institutions of its kind in the country and among the very institutions in the world offering specialized education in design and development of human settlements in all its aspects. This budget line includes provision for new as well as old SPAs.
- 50. Indira Gandhi National Open University (IGNOU): IGNOU was established by an Act of Parliament in 1985 to provide access to higher education to all sections of the population, specially the disadvantaged groups; to impart continuing education, to upgrade knowledge and skill; and to initiate special programmes of higher education for specific target groups like women, people living in backward regions, hilly areas etc. and to promote open and distance learning. IGNOU has contributed to the growth of State Open Universities (SOU) and, there is a distinct provision for assistance to SOUs through the IGNOU, as distinct from assistance for activities of IGNOU.
- 51. National Institutes of Technical Teachers Training and Research (NITTTRs): It is an initiative to establish institutions that are aimed at providing pre & in-service training to the teachers and staff of Degree and Diploma level training institutions and also for conducting various activities related to quality improvement of the technical education system of the country.



- 52. **Assistance to Other Institutions:** This includes provision for various programmes Association of Indian Universities, National Book trust, Grants for Promotion Activities and Voluntary Agencies, National Institute of Educational Planning and Administration (NIEPA), Auroville Management, National Commission for Minority Educational Institutions and Assistance to other Institutions including SLIET, NERIST, NIFFT, CIT Kokrajhar & GKCIET Malda.
- 53. **Rashtriya Uchhatar Shiksha Abhiyan (RUSA):** This is a Centrally Sponsored Scheme aimed at providing strategic funding to state higher and technical institutions. States will develop comprehensive state higher education plans that utilize an interconnected strategy to address issues of expansion, equity and excellence together. Central funding will be linked to academic, administrative and financial reforms of state higher education. In RE 2022-23, allocation of Rs 250 crore will be funded through MUSK.
- 54. **Improvement in Salary Scale of University and College Teachers:** Provision has been made for meeting liability on account of financial assistance to State Governments revision of pay-scales of University and College Teachers.



#### **Ministry of Power**

The Ministry of Power is responsible for overseeing electricity production and infrastructure development in India, including the generation, transmission, and delivery of electrical power, as well as maintenance projects. It operates the following schemes, programmes, and institutions etc., which are benefitting the NE Region along with other parts of India. Some of these are specifically targeted at the power sector in the region.

- Central Electricity Authority: The Central Electricity Authority (CEA) as a statutory organization is
  responsible for overall power sector planning, coordination, according concurrence to
  hydroelectric schemes, promoting and assisting the timely completion of projects, specifying
  technical standards and safety requirements, Grid Standards and conditions for installation of
  meters applicable to the Power Sector of the country
- 2. **Appellate Tribunal for Electricity:** Under the provisions of Electricity Act, 2003, the Central Government has set up the Appellate Tribunal for Electricity. It hears appeals against the orders of the adjudicating officer or the Appropriate Commissions under the Electricity Act, 2003. Under the provisions of the Petroleum and Natural Gas Regulatory Board Act, 2006, APTEL is the Appellate Tribunal for the purpose of that Act.
- 3. **Central Electricity Regulatory Commission (CERC) Fund:** CERC is a statutory body constituted under the provision of the erstwhile Electricity Regulatory Commissions Act, 1998 and continued



under Electricity Act, 2003 (which has since repealed inter alia the ERC Act, 1998). The main functions of the CERC are to regulate the tariff of generating companies owned or controlled by the Central Government, to regulate the tariff of generating companies other than those owned or controlled by the Central Government, if such generating companies enter into or otherwise have a composite scheme for generation and sale of electricity in more than one State, to regulate the inter-State transmission of energy including tariff of the transmission utilities, to grant licences for inter-State transmission and trading and to advise the Central Government in formulation of National Electricity Policy and Tariff Policy.

- 4. Energy Conservation: The funds would be utilized for (i) carrying out awareness creation on Energy Conservation through print, electronic and other media for general public, (ii) Continuation of EC awards and painting competition on Energy Conservation, (iii) implementation of the National Mission for Enhanced Energy Efficiency (NMEEE) and (iv) the upscaling of the efforts to create and sustain market for energy efficiency to unlock investments. (v) Shields and certificates are given by MoP to generating stations, transmission and distribution utilities and rural distribution franchise for recognising meritorious performance in operation, project management and environmental protection.
- 5. **Smart Grids:** The scheme envisages setting up of an institutional mechanism by launching 'National Smart Grid Mission' which would serve the need of an electrical grid with automation, communication and IT systems that can monitor power flows from points of generation to points of consumption and ensure control of power flow or curtailment of loads matching generation on real time basis.
- 6. **Green Energy Corridors:** The scheme is proposed for maximization of renewable energy generation and integration with the main grid without compromising on the security and stability of power system.
- 7. **Interest Subsidy to National Electricity Fund:** The National Electricity Fund (NEF) is being set up to provide interest subsidy on loans to be disbursed to the Distribution Companies (DISCOMS) both in the Public and Private Sector, to improve the distribution network for areas not covered by RGGVY and R-APDRP scheme (since subsumed in DDUGJY and IPDS respectively) Project areas.
- 8. Power System Improvement in North Eastern States excluding Arunachal Pradesh and Sikkim (Program Component): The project is for Power System Improvement in six NE Region states viz. Assam, Manipur, Meghalaya, Mizoram, Tripura and Nagaland. It is funded by the World Bank. Intra-State Transmission & Distribution projects for Sikkim & Arunachal Pradesh have been segregated for implementation through budgetary support from Government of India in view of these States having sensitive borders.
- 9. Strengthening of Transmission System in the States of Arunachal Pradesh and Sikkim: A comprehensive scheme for strengthening of transmission, sub-transmission and distribution system in the entire NE Region including Sikkim has been conceptualized.
- 10. **Power System Development Fund:** The scheme envisages (a) strengthening of existing distribution and transmission infrastructure by part-funding through Grants. (Non-Gas component) (b) Provision for subsidy to DISCOMS purchasing electricity from stranded Gas based Power Plants (Gas component).
- 11. **Reform Linked Distribution Scheme:** The scheme is for Distribution sub-sector as a mix of Results and Reforms based financial support with an objective of ensuring 24X7 sustainable Power for all and a financially viable Distribution Sector. The scheme envisages support to DISCOMs in case of adoption of Reform Packages including Public Private Ownership of



Distribution Companies, adoption of various franchisee models at distribution level including multiple supply franchisees.

- 12. Scheme for Promoting Energy Efficiency activities in different sectors of Indian Economy: Funds are provided to Bureau of Energy Efficiency (BEE) for implementation of various energy efficiency initiatives in the areas of household lighting, commercial buildings, Standards & Labelling appliances, Demand Side Management in Agriculture or Municipalities, SMEs and large industries including the initiation of the process for development of Energy Consumption norms for industrial sub-sectors, capacity building of SDAs, DISCOMS etc.
- 13. **Central Power Research Institute:** Central Power Research Institute, Bengaluru serves as a National Laboratory for applied research in the field of electrical power and also functions as an independent authority for testing, evaluation and certification of electrical equipment and components.
- 14. **National Power Training Institute:** National Power Training Institute is engaged in imparting training in various aspects of power sector including operation and maintenance of power stations.
- 15. Conservation and Energy Efficiency: Funds are provided to Bureau of Energy Efficiency (BEE) for implementation of various energy efficiency initiatives in the areas of household lighting, commercial buildings, Standards & Labelling appliances, Demand Side Management in Agriculture or Municipalities, SMEs and large industries including the initiation of the process for development of Energy Consumption norms for industrial sub-sectors, capacity building of SDAs, DISCOMS etc.
- 16. **Gol fully serviced bond issue expenditure and interest (PFC bonds):** The allocation is required for expenses and on the issue of Bonds, interest payable on infrastructure bonds raise by Power Finance Corporation (PFC).
- 17. Gol fully serviced bond issue expenditure and interest (REC Bonds): Interest payment on account of EBR of Rs 4000 crore raised during FY 2017-18 and Rs 15000 crore raised during FY 2018-19 for DDUGJY & Saubhagaya (Rural).
- 18. Grant towards cost of downstream protection work of Subansiri Lower Project (NHPC): Expenditure on Downstream protection work of Subansiri Lower project (NHPC). As per decision taken in the meeting in NITI Aayog held on 24.09.2019, the cost of downstream protection work of Subansiri Lower project is to be borne by the Government of India.
- 19. **Support for cost of enabling infrastructure i.e Roads/ Bridge etc:** Allocation for developing enabling infrastructure such as Roads, Bridges etc at site of Hydro Project.
- 20. **Support for flood moderation storage- electric projects:** Allocation for support for Flood moderation storage at Hydro electric projects.
- 21. **Creation of a Central Transmission Utility (CTU):** Review the progress in separation of CTU from PowerGrid, it was decided that necessary action may be taken for creation of the separate CTU company. The same is under consideration of the Committee regarding Establishment Expenditure (CEE) for formation of CTU Ltd as a separate Gol company.
- 22. Manufacturing Zones under Atmanirbhar Bharat Package: This scheme is for setting up of 3 manufacturing Zones for Power and Renewable equipment to be set up in 3 different States. The manufacturing facilities in the zones shall be based on cutting edge, clean and energy efficient technology for minimizing dependency on import of equipment, critical components, basic raw material, critical spares etc. required for Power sector and renewable.



23. **Viability Gap Funding:** A scheme for development of Pump Storage Plants and Battery Energy Storage Systems. The objective is development of a financially viable Grid-scale Long duration energy storage and to enable deployment renewable energy, of energy storage services, integration of larger amount of renewable energy.



### Ministry of Micro, Small and Medium Enterprises

The Ministry of MSME is the apex executive body at the Government of India level for the formulation and administration of rules, regulations and laws relating to micro, small and medium enterprises in India.

The Ministry envisions a progressive MSME sector by promoting growth and development of the Sector, including Khadi, Village and Coir Industries, in cooperation with concerned Ministries/Departments, State Governments and other Stakeholders, through providing support to existing enterprises, adopting cutting edge technologies and encouraging creation of new enterprises. A number of statutory and non-statutory bodies work under the aegis of the Ministry of MSME. These include the Khadi and Village Industries Commission (KVIC) and the Coir Board besides National Small Industries Corporation (NSIC), National Institute for Micro, Small and Medium Enterprises (NIMSME) and Mahatma Gandhi Institute for Rural Industrialisation (MGIRI). The Ministry of MSME runs various schemes aimed at financial assistance, technology assistance and upgradation, infrastructure development, skill development and training, enhancing competitiveness and market assistance of MSMEs.

The schemes, programmes, and institutions being supported by the Ministry have been given below. These initiatives are also benefitting the NE Region, apart from the rest of India.

1. **Development Commissioner (MSME):** The office of Development Commissioner (MSME) is an attached body of the Ministry of MSME which looks after several aspects relating to formulation, coordination and monitoring of policies and programmes for promotion and development of Micro, Small and Medium Enterprises in the country. Provision is for establishment related expenses such as salaries, allowances, contingent, Domestic/Foreign Travel, repair, hospitality, office expenses etc. of Headquarter DC (MSME), MSME-DFOs and MSME-TCs. This also provides establishment related Capital expenses such as Motor vehicles, machinery and Equipments, Information, Computer, telecommunication Equipments, Building and structures, Furniture and



fixtures, land, infrastructural assets, other fixed assets etc. for Secretariat, M/o MSME, Development commissioner (MSME), MSME-DFOs and MSME-TCs.

- 2. Scheme for Fund for Regeneration of Traditional Industries (SFURTI): The Scheme aims to organize traditional industries and artisans into collectives and add value to their products, thereby providing them with increased and sustainable income. Artisans are provided financial assistance for setting up of common facility centres, procurement of new machineries and raw materials, capacity building, marketing and design related interventions etc under the Scheme. Major sectors covered the Scheme include handicrafts, textiles, agro processing, honey, bamboo etc. A total of 498 clusters have been approved under SFURTI since 2015-16, with a total Gol assistance of Rs. 1294.92 crore, directly benefitting 2.94 lakh traditional artisans, across the country. Out of these 498 clusters, 261 clusters are already functional. A total of 677 new SFURTI clusters are projected to be sanctioned during 2021-22 to 2025-26 with a budget outlay of Rs. 2000 crore benefitting 406200 artisans.
- 3. **Coir Vikas Yojana:** The Coir Vikas Yojana is implemented by the Coir Board which is a statutory body established under the Coir Industry Act, 1953 for promoting overall development of the coir industry and improving the living condition of the workers engaged in this traditional industry. The activities of the Board for development of coir industries, inter-alia, include undertaking scientific, technological and economic research and development activities developing new products & designs; and marketing of coir and coir products in India and abroad. It also promotes co-operative organizations among producers of husks, coir fibre, coir yarn and manufacturers of coir products; ensuring remunerative returns to producers and manufacturers, etc.

Under Coir Vikas Yojana, various programmes like R and D activities, Market Development programmes, Entrepreneurship Development Programme, Awareness Programme, Workshop, Seminar, Exposure Tour, etc. are organised under various components of the scheme for attracting more entrepreneurs to coir sector. In order to create skilled man power required for the coir industry the Board is organizing various training programmes on manufacture of value added products. Skill Development and employment generation (through Skill Upgradation and Mahila Coir Yojana), providing assistance for setting up new units through PMEGP Schemes, and Welfare measures for coir workers. Assistance is provided for export and domestic market promotion in coir sector.

- 4. **Khadi Grant (KG):** By subsuming all the existing schemes/sub schemes/components under Khadi Grant and Village Industries Grant umbrellas, a new scheme namely Khadi and Gramodyog Vikas Yojana (KGVY) with sub schemes of Khadi Grant, Khadi Vikas Yojana (KVY) and Gramodyog Vikas Yojana (GVY) was approved by the Government of India in February 2019 and the same has been continued for the period of five year i.e. from FY 2021-22 to 2025-26.
  - (a) Khadi Vikas Yojana: The Khadi Vikas Yojana (KVY) is meant for promotion of Khadi in the country. It has a new component of Design House (now renamed as Centre of Excellence for Khadi) besides the existing schemes like Modified Market Development Assistance (MMDA), Interest Subsidy Eligibility Certificate (ISEC), Workshed Scheme for Khadi Artisans, Strengthening of Infrastructure of Existing weak Khadi Institutions and Assistance for Marketing Infrastructure, Science & Technology (S and T), Marketing Promotion (Exhibitions) etc.
  - (b) **Gramodyog Vikas Yojana:** Under sub scheme Gramodyog Vikas Yojana (GVY), Promotion and development of the village industries through common facilities, Technological modernization, training etc other support and services for promotion of village Industries are done.



- 5. A Scheme for Promotion of Innovation, Rural Industry & Entrepreneurship (ASPIRE): The Ministry of Micro, Small & Medium Enterprises launched scheme namely ASPIRE (A Scheme for Promoting Innovation, Rural Industries and Entrepreneurship) by Hon'ble Minister of MSME on 16.3.2015 to accelerate entrepreneurship and to promote start-ups for innovation and entrepreneurship in agro-industry. The scheme was introduced in 2015-16. The scheme was launched with three main components with focus on setting up of: (a) Livelihood Business Incubation Centre (LBI), (b) Technology Business Incubation Centre (TBI) and (c) Fund of Funds (FoF) under SIDBI. TBI component got discontinued due to convergence with Incubation scheme of DC (MSME). From FY 2021-22 to FY 2025-26, a total of 125 LBIs is projected to be sanctioned under the scheme with a budget outlay of Rs. 194.87 crore.
- 6. **MSME Champions Scheme:** The programme covers MSME Champions Scheme viz. MSME Sustainable (ZED), MSME Competitive (Lean), MSME Innovative (Incubation, Design, IPR, Digital MSME) components for enhancing competitiveness of MSMEs.
- 7. Prime Minister Employment Generation Programme (PMEGP): A credit linked subsidy scheme titled Prime Minister's Employment Generation Programme (PMEGP) was launched in 2008-09 through merger of the erstwhile schemes of Prime Minister's Rozgar Yojana (PMRY) and Rural Employment Generation Programme (REGP). PMEGP is aimed at generating self-employment opportunities through establishment of micro-enterprises in the non-farm sector by helping traditional artisans and unemployed youth. General category beneficiaries can avail of margin money subsidy of 25% of the project cost in rural areas and 15 % in urban areas. For beneficiaries belonging to special categories such as scheduled caste, scheduled tribe, women, Ex-Servicemen, Transgenders, Differently-abled, NER, Inspirational Districts, Hill and Border areas, etc. the margin money subsidy is 35 percent in rural areas and 25 percent in urban areas. The maximum cost of projects is Rs.50 lakhs in the manufacturing sector and Rs. 20 lakhs in the service sector. The 2nd Financial Assistance of up to Rs. 1 cr. with subsidy of 15 percent (20 percent for NER/Hill areas) for upgradation is admissible for good performing existing PMEGP/MUDRA units. Since its inception in 2008-09, about 8.14 Lakh units have been assisted with Rs. 20000 crore of Margin Money subsidy, generating estimated employment for about 64 lakh youths across the country. About 80 percent of the units assisted are in rural areas and about 50 percent units are owned by SC, ST and women categories.
- 8. **Credit Support Programme:** Under the Credit Support Programme, through the Credit Guarantee Trust Fund for Micro and Small Enterprises (CGTMSE) credit Guarantee Scheme for Micro and Small Enterprises is operational. Through this scheme, the guarantee cover is provided for collateral free credit facility extended by member Lending Institutions (MLIs) to the new as well as existing Micro and Small enterprises. The maximum loans limit has been enhanced from Rs. 100 lakhs to Rs. 200 lakhs. The corpus of this fund has been enhanced from Rs. 2500 crore to 7500 crores. During the Financial Year 2019-20 GoI share i.e. Rs. 7000 Crore has been sanctioned and released to CGTMSE.
- 9. Guarantee Emergency Credit Line (GECL) facility to eligible MSME borrowers: As part of the Aatma Nirbhar Bharat Abhiyaan, Emergency Credit Line Guarantee Scheme (ECLGS 1.0) was launched by Ministry of Finance on 23.05.2020 to support eligible MSMEs and other business enterprises to meet their operational liabilities and resume businesses in view of the distress caused by the COVID-19 crisis. This scheme covers all the sectors of the economy. Under this, 100% guarantee is provided to Member Lending Institutions (MLIs) in respect of the credit facility extended by them to eligible borrowers. The ECLGS is implemented by Department of Financial Services (DFS), Ministry of Finance.



- 10. Procurement and Marketing Support Scheme: Promoting new market access initiatives like organising/ participation in National / International Trade Fairs / Exhibitions / MSME Expo. etc. To create awareness and educate the MSMEs about importance / methods / process of packaging in marketing, latest packaging technology, import-export policy and procedure, GeM portal, MSME Conclave, latest developments in international /national trade and other topics relevant for market access developments
- 11. Studies, Publicity & International Cooperation (SPIC): Studies, Publicity & International Cooperation (SPIC) This scheme is formed by merging of schemes: International Cooperation Scheme, Information Education and Communication (IEC), Survey, Studies and Policy Research and National Award and National Board Schemes with the direction of MoF. Now the scheme has following sub components: (a) The International Cooperation (IC) sub component aims to capacity build MSMEs for entering export market by facilitating their participation in international exhibitions/fairs/ conferences/seminar/buyer-seller meets abroad as well as providing them with actionable market-intelligence and reimbursement of various costs involved in export of goods and services. (b) Survey, Studies and Policy Research: The main objectives of the component are to regular periodically collect reverent and reliable data on various aspects and features of MSMEs, to study and analyze the constraints and challenges faced by the MSME as well as the opportunities available to them, in the context of liberalization and globalization of the economy and to use the results of these surveys, evaluation studies of scheme for this Ministry and analytical studies for policy research, designing appropriate strategies and measures of intervention by the Government. Under the scheme, data on enterprises owned and/or managed by women, SC ST and OBC are also collected. (c) National Award and National Board: the main objective of the component is to recognize the contributions of MSME entrepreneurs for their outstanding performance and motivate and encourage them.
- 12. **Assistance to Training Institutions:** The revised guidelines (effective from 01.12.2021) provide financial assistance in the form of (i) Infrastructure support and capacity building of training institution of Ministry of MSME and the existing State Level EDIs and (ii)Training (Skill Development programmes/Training of Trainers) by training institution of Ministry of MSME.
- 13. **Fund of Funds** (Self Reliant India Fund (SRI)- The Government of India has announced Fund of Funds with the nomenclature Self Reliant India (SRI) Fund to infuse Rs. 50,000 crores as equity funding in those MSMEs which have the potential and viability to grow and become large units. Under this scheme total size of fund of Rs. 50,000 Crore has a provision of Rs. 10,000 Crore from Government of India and Rs. 40,000 Crore leverage through Private Equity / Venture Capital funds. This initiative is aimed at providing growth capital to the deserving and eligible units of MSME sector. For further operationalization of SRI Fund, Ministry of MSME has sanctioned and released Rs. 180.35 crore to NVCFL during FY 2021-22.
- 14. Entrepreneurship cum Skill Development Programme (ESDP): The objective of the Entrepreneurship and Skill Development Programme (ESDP) scheme of the Ministry of Micro, Small and Medium Enterprises is to motivate youth representing different sections of the society including SC/ST/Women, differently abled, Ex-servicemen and BPL persons to consider self-employment or entrepreneurship as one of the career options. The main objective is to promote new enterprises, capacity building of existing MSMEs and inculcating entrepreneurial culture in the country.
- 15. **Establishment of New Technology Centres:** To enhance the outreach of Technology Centres of Ministry throughout the country by establishing 20 new Technology Centres and 100 new Extension Centres, a scheme Establishment of New Technology Centres / Extension Centres was approved by CCEA on 01.11.2018 and announced by Hon'ble Prime Minister on 02.11.2018. The



- total outlay of the scheme was initially Rs 6000 Cr with validity up to 31st March 2022. The Scheme has been extended further in July 2022 for implementation up to FY 2025-26 with a revised outlay of Rs 3500 crore (Rs 2500 crore for TCs and Rs 1000 crore for ECs)
- 16. **Technology Centre Systems Programme (TCSP) EAP:** Infrastructure Development and Capacity Building- EAP Component: To expand and upgrade the network of Technology Centres in the country, Ministry of MSME is implementing Technology Centre Systems Programme (TCSP) at an estimated Projected Cost of Rs. 2200Crores including World Bank. Loan assistance to establish 15 new Technology Centre (TCs) and upgrade existing TCs across the country: Out of 15 new TCs, 5 TCs have been dedicated to the Nation. Civil Works of new TC Kanpur has been completed and training machines (92%) have been installed, civil works of remaining TCs are in progress. 614 nos. of machines and lab (Training & Production) have been delivered at new TC sites.
- 17. Raising and Accelerating MSME Performance RAMP: Raising and Accelerating MSME Performance (RAMP) A World Bank assisted programme: RAMP is a World Bank supported Central Sector Scheme aimed at improving access of MSMEs to market, finance and technology upgradation. The programme also aims at strengthening institutions at the Central and State level, and enhancing Centre- State collaboration. RAMP scheme would enhance the performance of MSMEs by promoting technology upgradation, innovation, digitization, market access, credit, greening initiatives, etc through active participation of the State Governments. The total outlay of the scheme, over a period of five years from FY 2022-23 to FY 2026-27 is Rs 6062.45 Cr, with the World Bank support being Rs 3750 Cr (USD 500mn). RAMP scheme supports the following existing schemes of Ministry of MSME, apart from providing assistance to States MSME Champions Scheme, Procurement and Marketing Support, International Co-operation, Capacity Building for Technology Centres, and Research and Evaluation Studies. RAMP scheme envisages benefiting more than 5.5 lakh MSMEs during the programme period (FY 2022-23 to 2026-27).
- 18. Micro and Small Enterprise-Cluster Development Programme (MSE-CDP): Development Commissioner (MSME), Ministry of MSME, Govt. of India operates a scheme viz. MSE-Cluster Development Programme. Under this scheme, Common Facility Centres (CFCs) are set up and also support is given for setting up of new Industrial Infrastructure Development Projects (e.g. Industrial Estates) and up-gradation of existing industrial estates. MSE-CDP is a demand driven scheme with objectives of Support sustainability, competitiveness and growth of MSMEs by addressing common issues, Capacity Building of MSMEs for common supportive action, Create / upgrade Infrastructural Facilities in Industrial Estates / Clusters, Setting up of Common Facility Centres (CFCs), Promotion of green & sustainable manufacturing technology.
- 19. **Tool Rooms & Technical Institutions (TR/TIs):** Tool Rooms and Technical Institutions have been providing technology support services to MSMEs and also conducting technical training programmes for providing skilled manpower to industries. The budget provides funds for release of grant -in- aid to the Institutions for procurement of Machinery and Equipment of latest technology and also for meeting cash deficit, if any. The training fee is reimbursed by Government out of the provisions made for SCSP / TASP Head.
- 20. Promotion of MSMEs in NER and Sikkim: Infrastructure Development and Capacity Building (Promotion of MSMEs in NE Region and Sikkim): The Promotion of MSMEs in NE Region and Sikkim scheme is a fully dedicated for development of MSMEs of North Eastern and Sikkim Region. The Scheme envisages financial assistance to State Governments for setting up new and modernization of existing Mini Technology Centres mainly for augmenting Infrastructure for enhancing the productivity and competitiveness as well as capacity building of Micro, Small and Medium Enterprises (MSMEs). Financial assistance will also be provided for development of new



- and existing Industrial Estates, Flatted Factory Complexes. The various activities for creation of common services such as kitchen, bakery, laundry & dry cleaning, refrigeration and cold storage, IT infra, potable water, display centre for local products, centre for cultural activities etc. in a cluster of home stays may be considered under the Tourism Development component.
- 21. National Schedule Caste/Schedule Tribe Hub Centre: This facility was formally launched by Hon'ble Prime Minister in October 2016. The Hub provides professional support to SCST entrepreneurs to fulfil the obligations under the Central Government Public Procurement Policy for Micro and Small Enterprises Order 2012, adopt applicable business practices and leverage the Stand-up India initiatives. The Scheme is being implemented through National Small Industries Corporation Ltd. (NSIC). The functions of Hub include collection, collation and dissemination of information regarding SC and ST enterprises and entrepreneurs, capacity building among existing and prospective SC, ST entrepreneurs through skill training and EDPs, vendor development.
- 22. Mahatma Gandhi Institute for Rural Industrialisation: Mahatma Gandhi Institute for Rural Industrialization, which is an autonomous body under the administrative control of the Ministry of MSME, has been established in 2001 by revamping the Jamnalal Bajaj Central Research Institute, Wardha. The objective of MGIRI is to accelerate the process of Rural Industrialization in the Country along the lines of Gandhian vision of sustainable and self-reliant village economy and to provide S&T support to upgrade products of rural industry so that they gain wide acceptability in local and global markets.





# **Ministry of Development of North Eastern Region**

The Ministry of Development of North Eastern Region is the only Ministry with a territorial jurisdiction and functions to coordinate the developmental efforts in the North Eastern Region (NER). It was constituted, first as a Department in 2001 and then as a Ministry in 2004, basically for better coordination between the State Governments of North Eastern Region and the Central Ministries/Departments of Government of India. The Ministry aims to give focused attention to address the special needs of the NE Region. It coordinates with various Ministries and Departments primarily concerned with development activities in NE Region. However, respective Ministries and Departments remain responsible for implementation of programmes in their respective fields.

The Ministry is now implementing some schemes for development of North East Region viz. Prime Minister's Development Initiative for North East Region (PM-DevINE), North East Special Infrastructure Development (NESIDS) Scheme, Schemes of North Eastern Council (NEC), and Special Development Packages. In the year 2022, the Union Cabinet approved project the PM-DevINE Scheme, with total outlay of Rs. 6,600 crores for remaining 15<sup>th</sup> Finance Commission Period from 2022-23 to 2025-26. The schematic budget of Ministry of DoNER is very limited and is essentially for gap filling schemes and projects. Over and above, the Ministry also coordinates with other stake holders, who can also be from non-government sector or multilateral sector, to work for the development of NE Region.

The major schemes, programmes and organizations being supported by the Ministry have been listed below.

- 1. Prime Minister's Development Initiative for North East Region (PM-DevINE): PM-DevINE is implemented through the North-Eastern Council/ Central administrative Ministries / Departments to fund infrastructure, in the spirit of PM GatiShakti, and social development projects based on felt needs of the North-East. This scheme will enable livelihood activities for youth and women, filling the gaps in various Sectors.
- 2. **NESIDS Programme:** The provision is for the North East Special Infrastructure Development Scheme (NESIDS) which was approved by the Cabinet on 04.01.2023 to ensure focused development of North Eastern Region by providing financial assistance for infrastructure projects relating to water supply, power, connectivity -- specially the projects promoting tourism; and projects of social sector for creation of infrastructure in primary and secondary sectors of education and health
  - As per EFC recommendation, the following gave been closed or subsumed with the NESIDS: (a) Hill Area Development Programme; (b) Central Pool of Resources for North East and Sikkim; (c) North Eastern Road Sector Development Scheme (NERSDS)-Programme.
- 3. Schemes of North East Council: The schemes are to ensure integrated socioeconomic development of the eight States of North Eastern Region including Sikkim. The objectives, interalia, include balanced development of the North Eastern Region by taking up sectors that need critical gap filing. The provision also includes expenditure of the Secretariat of North Eastern Council, Shillong. The NEC gives Grants-in-aid to the State Governments of North Eastern Region for Development of Sectors like Bamboo, Piggery, Regional Tourism, Higher Education, Tertiary Healthcare, Telemedicine, Science and Technology Interventions in NER, etc. The committed



liabilities of ongoing projects under Schemes of NEC- Special Development Projects will be met under Schemes of NEC.

- 4. **Special Development Packages**: These Special Development Packages have been extended to give grants for funding the infrastructure and development projects of the area under the concerned council, such as: (a) Bodoland Territorial Council; (b) Karbi Anglong Autonomous District Council; and (c) Dima Hasao Autonomous District Council.
- 5. North East Enterprise Development Scheme (NEEDS): North Eastern Development Finance Corporation Ltd. (NEDFi) was incorporated as a public financial institution incorporated under the Companies Act, 1956 on August 9, 1995 with its registered office at Guwahati. NEDFi aims to catalyse economic, development of the North Eastern Region by identifying, financing and nurturing eco-friendly viable industrial infrastructure and agro-horticulture projects in the region. It is renamed to North East Enterprise Development Scheme (NEEDS). The provision is for extending long term soft loan to NEDFi.
- 6. **North East Regional Agricultural Marketing Corporation**, a Central PSU, operates to promote food processing and trading of Agricultural and Horticultural produce in the North Eastern Region. The provision is to be used as working capital by the Corporation for carrying out its business activities and also for meeting expenditure for revival of North Eastern Regional Agricultural Marketing Limited (NERAMAC), as approved by Cabinet on 18th August, 2021.
- 7. North Eastern Handicrafts and Handlooms Development Corporation (NEHHDC) was set up in March 1977 to provide the developmental and promotional inputs for products and design development, training and upgradation of technologies and for marketing the finished products of the region. Ministry provides loan to NEHHDC to cover its cash losses while undertaking the promotional activities like participation in exhibitions, etc

Additional details of PM-DevINE and NESIDS have been furnished below.

### Prime Minister's Development Initiative for North East Region (PM-DevINE) Scheme

The Union Cabinet has approved the PM-DevINE Scheme on 12.10.2022. It is a Central Sector Scheme with 100% Central funding, to be implemented by Ministry of DoNER through North Eastern Council or Central Ministries/agencies for the remaining 15<sup>th</sup> Finance Commission Period with a total outlay of Rs 6600 crore for the 4-year period from 2022-23 to 2025-26.

An Empowered Committee under the chairmanship of Secretary, Ministry of DoNER has been formed. The Committee will be serviced by the Ministry of DoNER. It will screen, appraise and recommend project proposals for implementation by appropriate agency. The Committee will also monitor progress of sanctioned projects to ensure project utilization of the allocated funds under PM-DevINE Scheme.

PM-DevINE will aim at rapid and holistic development of the North-East Region by funding infrastructure and social development projects based on felt needs of the States. It will strive to fill gaps in various sectors and will not be a substitute for existing Central and State Schemes. The objectives of PM-DevINE are to:

- (a) Funds infrastructure in a convergent manner, in the spirit of PM GatiShakti;
- (b) Support social development projects based on felt needs of the NER;
- (c) Enable livelihood activities for youth and women;
- (d) Fill the development gaps in various sectors.



### North East Special Infrastructure Development Scheme (NESIDS)

The Cabinet has approved a new scheme of North East Special Infrastructure Development Scheme (NESIDS) on 15.12.2017 after restructuring the existing NLCPR scheme of Ministry of DoNER. NESIDS initially approved for a period of three years i.e., from 2017-18 to 2019-20 was later extended up to March, 2026. The broad objective of NESIDS is to ensure focused development of North East Region by providing financial assistance for the projects of:

- a. Physical infrastructure sectors relating to water supply, power connectivity enhancing tourism;
- b. Social sector of education and health for creation of infrastructure in the areas of primary and secondary sectors

Projects taken up under NESIDS are 100% funded by Government of India. While identifying the projects, emphasis is given to the backward areas by earmarking 25% share for them. The NESIDS is over and above the existing schemes of Governments of the NE Region. Under the scheme only those projects are taken up which are not covered under any scheme of Government of India or the State Government. NLCPR saving of Rs.402.47 crore has been carried forward to NESIDS. Since approval of NESIDS on 15.12.2017, so far 145 projects worth Rs.3392.98 crore have been sanctioned by Ministry of DoNER.



### **Ministry of Labour & Employment**

The Ministry of Labour & Employment is one of the oldest and important Ministries of the Government of India. The main responsibility of the Ministry is to protect and safeguard the interests of workers in general and those who constitute the poor, deprived and disadvantage sections of the society, in particular, with due regard to creating a healthy work environment for higher production and productivity and to develop and coordinate vocational skill training and employment services.

The Government's attention is also focused on promotion of welfare and providing social security to the labour force both in organized and unorganized sectors, in tandem with the process of liberalization. These objectives are sought to be achieved through enactment and implementation of various labour laws, which regulate the terms and conditions of service and employment of workers.



The State Governments are also competent to enact legislations, as labour is a subject in the concurrent list under the Constitution of India. At present, there are 44 labour related statutes enacted by the Central Government dealing with minimum wages, accidental and social security benefits, occupational safety and health, conditions of employment, disciplinary action, formation of trade unions, industrial relations, etc.

The schemes, programmes, and institutions supported by the Ministry have been listed below. The NE Region is being benefitted by such support, along with the rest of the country.

- 1. Labour Bureau: Establishment expenditure of the Labour Bureau.
- 2. Other Expenditure related to Chief Labour Commissioner, Central Government Industrial Tribunal, Research and Information Technology: Establishment expenditure for CLC(C), CGITs and Information Technology
- 3. **Directorate General of Factory Advice Services (DGFASLI):** Establishment expenditure of Directorate General of Factory Advice Services (DGFASLI)
- 4. **Directorate General of Mines Safety (DGMS):** Establishment expenditure of Directorate General of Mines Safety
- 5. **International Cooperation:** International Co-operation includes payment of annual subscription to International Labour Organization (ILO), International Social Security Association and funds for providing accommodation and infrastructural facilities to the Regional Office of ILO and Asian Regional Team for Employment Promotion
- 6. **Directorate General of Employment:** Establishment expenditure of Directorate General of Employment.
- 7. **Directorate General of Labour Welfare Scheme:** Establishment expenditure of Directorate General of Labour Welfare.
- 8. **Labour and Employment Statistical System (LESS):** Provides for collection and publication of statistics, conducting enquiries, surveys and research studies on various Labour subjects.
- 9. **Labour Welfare Scheme:** The schemes provide for welfare of Beedi Workers, Cine Workers and Labour Working in (i) Mica Mines (ii) Iron Chrome Manganese Ore Mines (iii) Limestone and Dolomite Mines. The scheme of Housing has been merged in PMAY
- 10. **Bima Yojana for Unorganised Workers:** Bima Yojana for unorganized workers is a Social Security scheme. Only token amounts have been proposed.
- 11. Employees' Pension Scheme, 1995: Provides for pension to the members of EPS 1995 and Family Pension to their members in case of death of member. The provision is for the Government contribution to the EPS 1995 at the rate 1.16% off employees pay limited to the amount payable on prescribed wage ceiling. The wage ceiling prescribed from 01.09.2014 is Rs. 15000. Further, it also includes Grants-in-aid towards minimum monthly pension of Rs. 1000 per month for member / widow(er) / disabled/ nominee/ dependent parent pensioners.
- 12. **Social Security for Plantation Workers in Assam:** The scheme provides for family pension-cumlife insurance and Deposit Link Insurance Scheme for Tea Plantation Workers in Assam. These schemes are administered through the State Government of Assam, governed by the Assam Tea Plantation Provident Fund and Family Pension and Employees Deposit Linked Insurance Act. The provision under the schemes caters for Central Government contribution to the Scheme as also for the reimbursement of administrative charges.



- 13. **Pradhan Mantri Shram Yogi Maandhan:** Pradhan Mantri Sharam Yogi Maandhan Yojana provides for assured pension of Rs. 3000/- per month for those unorganised sector workers who contribute under the scheme and contribute defined amount every month. Government of India provides matching share under the scheme.
- 14. **Pradhan Mantri Karam Yogi Maandhan:** This is a pension scheme for shopkeepers/retail traders and self-employed person for providing minimum pension of Rs. 3000/- per month who contribute under the scheme and contribute defined amount every month. Government of India provides matching share under the scheme.
- 15. Aatmanirbhar Bharat Rojgar Yojana: Aatmanirbhar Bharat Rojgar Yojana launched as a new scheme to encourage new employment in post lockdown period. This scheme provides for payment of 12 percentage of Wages towards employees share of EPF contribution for Establishments having more than 1000 employees and 24 percentage of wage towards employers and employees share of EPF contribution for establishment having up to 1000 employees, in respect of new employees drawing salary less than Rs. 15000/- per month. Fresh registration in ABRY has been closed on 31.3.2022.
- 16. **National database for Unorganized Workers:** A portal (e-SHRAM portal) to create a National Data Base for Unorganized workers has been launched with an aim to register approximately 38 crore workers of unorganized sector.
- 17. National Child Labour Project including grants in aid to voluntary agencies and reimbursement of assistance to bonded labour: Provides for the formulation, co-ordination and implementation of policies and programmes concerning the welfare of National Child Labour Project including grants-in-aid to voluntary agencies and reimbursement of assistance to bonded Labour. One part of the scheme i.e. National Child Labour Project has been merged with Samagra Shikha Abhiyan (SSA) of Department of School Education & Literacy.
- 18. Coaching and Guidance for SC, ST and Other Backward Classes: The scheme provides for setting up of Coaching and guidance centres for SC/ST and OBCs to provide confidences building training programmes and vocation guidance for candidates belonging to these categories.
- 19. **National Career Services:** National Career Services project is a Mission Mode Project which envisages a digital portal that provides a nation-wide online platform for job seekers and employers for job matching in a dynamic efficient and responsive manner.
- 20. **Central Board for Workers Education:** The objective of the scheme is to increase awareness and educate them for their effective participating in the socio economic development of the country. To achieve this objective, various training programmes are conducted by the Board for the Workers of Organized, Unorganized, Rural and Informal Sector at national, regional and unit levels through a network of 50 Regional and 9 Sub-Regional Directorates spread all over the country and an Apex Training Institute viz. Indian Institute of Workers Education at Mumbai.
- 21. Dattopant Thengadi National Board for Workers Education and Development: The objective of the scheme is to increase awareness and educate them for their effective participating in the socio-economic development of the country. To achieve this objective, various training programmes are conducted by the Board for the Workers of Organized, Unorganized, Rural and Informal Sector at national, regional and unit levels through a network of 50 Regional and 9 Sub-Regional Directorates spread all over the country and an Apex Training Institute viz. Indian Institute of Workers Education at Mumbai.
- 22. **National Labour Institute:** The V.V. Giri National Labour Institute is a premier Institute for Labour Research, Training and Education. Since its inception the Institute has endeavoured, through research, training and publication, to reach all those who are concerned with various aspects of labour, both in the organized and unorganized sectors.



- 23. Coaching and Guidance for SC and ST and Other Backward Classes: The scheme provides for setting up of Coaching and guidance centres for SC/ST and OBCs to provide confidences building training programmes and vocation guidance for candidates belonging to these categories.
- 24. **Pradhan Mantri Rojgar Protsahan Yojna:** The scheme has been designed to incentivise employers for generation of new employment, wherein Government of India pays employers contribution of 8.33 percentage of wage and subsequently revised to 12% of Wages in respect of new employees for first 3 years. The scheme will be stand closed on wage month of March 2022.
- 25. **National Career Services:** National Career Services project is a Mission Mode Project which envisages a digital portal that provides a nation-wide online platform for job seekers and employers for job matching in a dynamic efficient and responsive manner.



## **Department of Promotion of Industry and Internal Trade**

The Department for Promotion of Industry and Internal Trade (DPIIT) is a department of the Government of India under the Ministry of Commerce and Industry in India. It is responsible for formulation and implementation of promotional and developmental measures for growth of the industrial sector, keeping in view the national priorities and socio-economic objectives. While individual administrative ministries look after the production, distribution, development and planning aspects of specific industries allocated to them, DPIIT is responsible for the overall industrial policy. It is also responsible for facilitating and increasing the foreign direct investment (FDI) flows to the country.

The Department for Promotion of Industry and Internal Trade (DPIIT) was established in the year 1995 and was reconstituted in the year 2000 with the merger of the Department of Industrial Development. The department was earlier called Department of Industrial Policy & Promotion and was renamed as DPIIT in January, 2019. In 2018, matters related to e-commerce were transferred to the Department and in 2019; the Department has been given charge for matters related to Internal Trade, welfare of traders and their employees and Start-ups. The mandate for integrated development of Logistic Sector has also been allocated to DPIIT in November, 2021. The role of DPIIT is to promote industrial Development of the Country by facilitating investment in new and upcoming technology, accelerate & foreign direct investment and support a balanced development of industries & trade. The schemes, institutions and programmes supported by the DPIIT have been listed below. The NE Region benefits from such support, along with the other parts of India.



- 1. **Controller General of Patent Designs and Trademarks:** This office is responsible for the administration of laws relating to Industrial Property Rights, namely, Patents Act 1970, the Designs Act, 2000, the Trade Marks Act, 1999, Geographical Indications Act, 1999, Copyright Act, 1957 and Semiconductor Integrated Circuits Layout Design Act, 2000.
- 2. Intellectual Policy Rights (IPR) Policy Management: Intellectual Property Rights (IPR) Policy Management is the revised version of two Schemes one being the Cell for Intellectual Property Rights Promotion & Management (CIPAM) and the other is the Scheme for Pedagogy & Research in IPRs for Holistic Education and Academia (SPRIHA) (Erstwhile Promotion of Copyright and IPR). The Scheme is in accordance with the National IPR Policy and lays special thrust on furthering IPR awareness, commercialization and enforcement in India and IP teaching in institutes as also to promote studies/research in different field of IPR. SPRIHA aims to facilitate intellectual property education and research.
- 3. Infrastructure Development in Controller General of Patents Designs and Trade Marks (IDCGPDTM): Infrastructure Development in Controller General of Patents Designs and Trade Marks (IDCGPDTM) will provide support for Infrastructure Development of various offices under office of the Controller of General Patents Designs and Trade Marks.
- 4. Petroleum and Explosives Safety Organisation (PESO): It provides for establishment costs of the Organisation which Administers the Indian Explosives Act, 1884, Petroleum Act, 1934 and the Inflammable Substances Act, 1952 and various rules framed there under. The organisation grants licences for manufacture, possession, sale, use, transport, import/export of explosives/petroleum/ Gas Cylinder and Pressure Vessels. The organisation also administers Manufacture, Storage & Import of Hazardous Chemical rules 1989 under Environment (Protection) Act 1986 related to Petroleum & Explosives including pipelines. The establishment renders advice to all authorities on matters covered by above said Acts. The Organization undertakes and destruction of seized & deteriorated explosives (other than military explosives).
- 5. **Salt Commissioner:** The Organisation is responsible for planning, production targets and distribution of salt, price surveillance, custody & superintendence of department salt lands including court cases thereon, maintenance of standards & quality of salt, export of salt. It is nodal agency for implementation of National Iodine Deficiency Control Programme (NIDDCP). It regulates the production and rational distribution of salt including iodised salt. It also regularly monitors the price and availability of salt. The budget provides for establishment charges of the organization, for development/welfare schemes of salt workers and cost incurred on management of SCO land.
- 6. **Survey of Boiler:** It provides for organizing workshops on operation and maintenance of boilers and conducting examinations for implementation of Boilers Act.
- 7. **Footwear, Leather and Accessories Development Programme (FLADP):** This scheme has been approved for continuation by the Cabinet on 19.01.2022 with changed name as Footwear and Leather Development Programme for implementation during 2021-26.
- 8. **Industrial Infrastructure Upgradation Scheme (IIUS):** To enhance competitiveness of industry by providing quality infrastructure to promote industrial growth Infrastructure Development in the selected functional clusters will be done through implementing agencies of the State Government.
- 9. Price and Production Statistics: This scheme for Price and Production Statistics was formed by merger of two continuing old plan schemes. During the 12th plan period, OEA was operating a plan scheme viz. Development of Business Service Price Index. Similarly, DPIIT was also operating a scheme 'Strengthening Industrial Statistics'. The funds allocated under this scheme are only



meant for Revenue Expenditure (Professional Services) and mainly utilized for payment of salaries and honorariums and transport allowance of contractual field investigators and supervisors engaged in collection of data by NSSO and payment for professional services of hired consultants by OEA.

- 10. National Industrial Corridor Development and Implementation Trust (NICDIT): Government of India (GoI) on 7th December, 2016 had approved the expansion of the scope of existing Delhi Mumbai Industrial Corridor Project Implementation Trust Fund (DMIC-PITF) and re-designated it as National Industrial Corridor Development and Implementation Trust (NICDIT) for coordinated and unified development of Industrial Corridor Projects in India. NICDIT is under administrative control of DPIIT and presently 11 different Industrial Corridors and various other Industrial Corridors which might come in future will also function under the administrative control of NICDIT. The development framework for the industrial corridors is based on the partnership approach between GoI and the respective State Govt.(s) where GoI provides funds as equity and/or debt to city/node/project Special Purpose Vehicles (SPVs) for development of trunk infrastructure, the States are responsible for providing land as part of their equity in the city/node/project SPV.
- 11. Scheme for Investment Promotion: This is a multi-faceted strategic activity that pursues bringing Investment opportunities to the existing and potential investors. To garner the benefits of influx of capital, jobs, skills, technology, productivity, and innovation for a country, Investment Promotion requires continuous efforts to be channelized around the main activities such as Foreign Direct Investment (FDI) reforms, Investment facilitation and Targeted outreach. To increase the investment inflow, the Department for Promotion of Industry and Internal Trade (DPIIT) has been undertaking various initiatives and reforms such as the launching of Make in India, supporting champion sectors and sub-sectors, setting up of an Empowered Group of Secretaries and Project Development Cells, creating an Industrial Information System and National Investment Clearance Cell amongst others. The components for continuation of the Scheme for Investment Promotion for 2021-22 to 2025-26 include Investor targeting and facilitation Domestic and International activities, Investment promotion Amplification and outreach activities, Project management activities and foreign travel.
- 12. Fund of Funds: Fund of Funds for Start-ups (FFS) is being implemented with a corpus of Rs. 10,000 crores to provide much-needed boost to the Indian Start-up ecosystem and enable access to domestic capital. The FFS is managed by Small Industries Bank of India (SIDBI). Rs 500 crore was released in 2015-16, Rs. 100 crores were released in 2016-17, Rs. 431.3044 crore released in 2019-20 and Rs. 429.99 crore was released in 2020-21 and Rs. 1330 crore was released in 2021-22 towards the FFS corpus. Total fund released till 31st October 2022 is Rs. 3466.29 crore.
- 13. Credit Guarantee Fund: DPIIT has established the Credit Guarantee Scheme for Start-ups (CGSS) aimed at providing credit guarantee up to a specified limit against loans extended by Member Institutions (MIs) to finance eligible borrowers, viz. DPIIT recognized by Start-ups. The credit guarantee cover under the Scheme would be transaction based and umbrella based. The exposure to individual cases would be capped at Rs. 10 crores per case or the actual outstanding credit amount, whichever is less. A dedicated credit guarantees for DPIIT recognized start-ups will address the issue of unavailability of collateral free loan and enable flow of financial assistance to innovative start-ups through their journey to becoming full-fledged business entities. The Scheme further reiterates Governments focus towards promoting innovation and fostering entrepreneurship for making Indian start-up ecosystem the best in the world. With the objective of mobilizing domestic capital for Indian start-ups, CGSS will complement the existing Schemes under Start-up India initiative viz. Fund of Funds for Start-ups (FFS) and Start-up India Seed Fund Scheme (SISFS).



- 14. **Start-up India:** Start-up India is a flagship initiative of the Government of India, intended to catalyze start-up culture and build a strong and inclusive ecosystem for innovation and entrepreneurship in India. The Department for Promotion of Industry and Internal Trade (DPIIT) recognizes start-ups in cognizance of G.S.R. 127(E) notification dated February 19, 2019. As of 31<sup>st</sup> October 2022, 81,484 start-ups have been recognized by Department for Promotion of Industry and Internal Trade (DPIIT) in 662 districts. 8.41 lakh jobs created by recognized start-ups with an average of 11 jobs created per start-up.
- 15. **Start-up India Seed Fund Scheme (SISFS):** Easy availability of capital is essential for entrepreneurs at the early stages of growth of an enterprise. The capital required at this stage often presents a make-or-break situation for start-ups with good business ideas. The SISFS with an outlay of Rs. 945 crore aims to provide financial assistance to start-ups for proof of concept, prototype development, product trials, market entry and commercialization. As on 31st October 2022, Rs. 442.25 crore has been approved to 123 Incubators.
- 16. **Ease of Doing Business:** The Project aims to create a business and investor friendly ecosystem in India by facilitating access to all business and investment related regulatory services across central, state and local governments.
- 17. Production Linked Incentive Scheme (PLI) for White Goods (ACs and LED Lights): Union Cabinet chaired by Hon'ble Prime Minister has approved the Production Linked Incentive (PLI) Scheme for White Goods on 7th April, 2021 with an outlay of Rs. 6,238 crores for the period of 5 years. The scheme was notified in E-Gazette on 16th April, 2021 and the Scheme Guidelines was published on the website of DPIIT on 4th June, 2021. The scheme will boost the domestic manufacturing and attract large investment in white goods manufacturing in India. Altogether, 64 applicants have been approved under the Scheme and are expected to bring investments in component manufacturing eco-system of ACs and LED Lights industry to the tune of Rs. 6,766 Crore.
- 18. **North Eastern Industrial and Investment Promotion Policy (NEIPP):** The North East Industrial and Investment Promotion Policy NEIIPP), 2007 has been discontinued with effect from 31.03.2017. However, the grandfathering of the scheme shall continue till 31.03.2027.
- 19. **North East Industrial Development Scheme (NEIDS) 2017:** To promote industrialization in NE States and to boost employment income generation, a Scheme namely North East Industrial Development Scheme (NEIDS), 2017 was notified on 12.04.2018 which has come into force with effect from 01.04.2017 for a period of five years. The scheme is closed on 31/03/2022, however, industrial units registered under the scheme will be eligible for the benefits of the scheme up to 31/03/2028.
- 20. Refund of Central and Integrated GST to Industrial Units in North Eastern Region and Himalayan States: The Scheme of Budgetary Support under GST regime to the eligible units located in States of Uttarakhand, Himachal Pradesh, North East including Sikkim and Union Territories of Jammu & Kashmir and Ladakh was notified on 05.10.2017 as a measure of goodwill gesture to help eligible units in transition to new GST regime by way of reimbursement of their claims for the residual period with effect from 01.07.2017 but not beyond 30.06.2027 limited to Central Government shares 58 percent in the taxes so retained after devolution States share.
- 21. **Support to Autonomous Institutions:** Under this project support is provided to Autonomous Institutions viz., Five National Institute of Design namely Ahmadabad, Andhra Pradesh, Haryana, Madhya Pradesh and Assam, Central Pulp and Paper Research Institute, National Council for Cement and Building Materials, Central Manufacturing Technology Institute, Indian Rubber Manufacturers Research Association and National Productivity Council.



- 22. **World Intellectual Property Organisation (WIPO):** Provides for contribution towards India membership of WIPO.
- 23. Asian Productivity Organization and United Nations Industrial Development Organization: Provides for contribution towards India's membership of the Asian Productivity Organisation and United Nations Industrial Development Organisation (UNIDO).
- 24. **Assistance to Autonomous Bodies:** Under this project based support is provided to Autonomous Institutions viz. National Council for Cement and Building Materials, Development Council for Cement Industry, Development Council for Paper, Pulp and Allied Industries and National Productivity Council.



## **Department of Telecommunications**

The Department of Telecommunications, abbreviated to DoT, is a Department of the Ministry of Communications of the Government of India that deals with the policymaking and supervision of the telecom sector of the country. Its vision is 'to provide secure, reliable affordable and high quality converged telecommunication services anytime, anywhere for an accelerated inclusive socioeconomic development'.

The DOT had stated that its Mission is 'To develop a robust and secure state-of-the-art telecommunication network providing seamless coverage with special focus on rural and remote areas for bridging the digital divide and thereby facilitate socio- economic development; create an inclusive knowledge society through proliferation of affordable and high quality broadband services across the nation; reposition the mobile device as an instrument of socio-economic empowerment of citizens; make India a global hub for telecom equipment manufacturing; promote development of new standards to meet national requirements; attract investment, both domestic and foreign and promote creation of jobs.' In order to carry out the above Mission, the Department is implementing several schemes, besides supporting some institutions. These have been listed below from the Budget documents. The NE Region has been benefitting from these initiatives, with direct benefits flowing from many of the listed initiatives.

1. **Regulatory Bodies:** The provision is for transfer to Telecom Regulatory Authority of India General Fund and construction of Office Building of the Authority. The provision is for expenditure relating to Telecom Disputes Settlement and Appellate Tribunal.



- 2. **Human Resource Management (NICF):** The provision is for operational expenses of National Institute of Communication Finance (NICF) and for imparting training.
- 3. Compensation to Service Providers for creation and augmentation of telecom infrastructure: The provision is for providing compensation to telecom service providers for creation and augmentation of telecom infrastructure and access to various telecom services to people in the rural and remote areas including operation and maintenance of Village Public Telephones. This also includes provision for development of North Eastern Region. Provision towards transfer to Universal Service Obligation Fund is also included.
- 4. **Bharatnet:** The provision is for Bharatnet project towards creation of telecom infrastructure required for providing broadband connectivity to all the Gram Panchayats in the country and facilitating non-discriminatory access to service providers, for provisioning of broadband services in rural areas.
- 5. **R&D (Revenue):** It will promote R&D and commercialization of technologies and solutions. To enable affordable broadband and mobile service proliferation in rural and remote areas
- 6. **Optical Fibre Cable based network for Defence Services:** The provision is for providing Optical Fibre Cable Based Network for Defence Services.
- 7. **Domestic Industry Incentivisation Scheme:** This provides for Technology Development and Investment Promotion (Rs. 55 crore), Champion Service Sector Scheme (Rs. 60 crore) and Production Linked Incentive Scheme (Rs. 800 crore).
- 8. Wireless Planning and Coordination: (i) The provision is for expenditure of Wireless Monitoring Organization, which provides for technical and allied data on the basis of monitoring observations for radio frequency management, enforcement of national and international radio regulations and for carrying out certain statutory functions under the Indian Telegraph Act, 1885 and rules made there-under as also for keeping round the clock watch on radio transmissions for effective national radio frequency management. This includes provision towards civil works; and (ii) The provision is for expenditure relating to Wireless Planning and Co-ordination Wing. This Wing issues licenses under various provisions of Indian Wireless Telegraph Act, 1885 for transmitting and receiving stations and conducts examinations for wireless operators as per international standards.
- 9. **Telecom Engineering Centre:** The provision is for Telecom Engineering Centre.
- 10. **Telecom Testing and Security Certification Centre:** The provision is for Telecom Testing and Security Certification Centre.
- 11. **Telecom Computer Emergency Response Team (T-Cert):** The provision is for Telecom Computer Emergency Response Team (T-Cert).
- 12. **Central Equipments Identity Register (CEIR):** The provision is for Central Equipment's identity Register (CEIR).
- 13. **5G Connectivity Test Bed:** The provision is for 5G connectivity Test Bed.
- 14. **Digital Intelligence Unit Project:** Digital intelligence Unit (DIU) Project's objective is for investigating fraudulent activity involving telecom resources, such as Unsolicited Commercial Communication (UCC) etc.
- 15. **Centre for Development of Telematics (C-DoT):** The provision is for meeting the expenses of Centre for Development of Telematics (C-DoT).



- 16. **Capital infusion in BSNL:** The provision is made for Capital infusion for technology upgradation and restructuring in BSNL.
- 17. **Implementation of Voluntary Retirement Scheme (BSNL/MTNL):** The provision is made for implementation of voluntary retirement of Scheme (BSNL/MTNL).
- 18. **Grants-in-aid to BSNL for payment of GST:** The provision is made for Grant-in-aid to BSNL for payment of GST on allocation of 4G Spectrum.
- 19. **Viability Gap Funding:** The provision is for providing of Grant-in-aid BSNL toward unviable rural wire-line operations for 2014-15 to 2020-21.



## **Ministry of Electronics and Information Technology**

The Ministry of Electronics and Information Technology (MeitY) is responsible for formulation, implementation and review of national policies in the field of Information Technology, Electronics and Internet (all matters other than licensing of Internet Service Provider). The vision of the Ministry is the 'e-Development of India as the engine for transition into a developed nation and an empowered society'. Accordingly, its mission has been enunciated as 'to promote e-Governance for empowering citizens, promoting the inclusive and sustainable growth of the Electronics, IT and ITeS industries, enhancing India's role in Internet Governance, adopting a multipronged approach that includes development of human resources, promoting of R&D and innovation, enhancing efficiency through digital services and ensuring a secure cyber space'.

The schemes, programmes and institutions being supported by the Ministry have been listed below. These benefit the whole country, including the NE Region (either directly or indirectly).

- 1. **National Informatics Centre:** National Informatics Centre (NIC), an attached office of the Ministry of Electronics & Information Technology (MeitY), is a premier Scientific/Technical organization providing e-Governance ICT Infrastructure, applications and services for the delivery of citizen centric services.
- 2. **Standardization Testing and Quality Certification (STQC):** Standardization Testing and Quality Certification (STQC) Directorate, an attached office, provides testing, calibration, training and certification services to the industry and Government for assuring quality and reliability of electronics and information technology (IT) products.



- 3. Cyber Security (CERT-In): Cyber Security (CERT-In): In accordance with the provisions contained under the IT Act 2000, CERT-In has been established. CERT-In serves as the national agency to perform various functions in the area of cyber security like collection, analysis and dissemination of information on cyber incidents, issue of guidelines, advisories, vulnerability notes and whitepapers relating to information security practices, procedures, prevention, response and reporting of cyber incidents, etc.
- 4. **Controller of Certifying Authorities (CCA):** CCA issues licences to Certifying Authorities (CAs) for issue of Digital Signature Certificates (DSC). CCA certifies the Public Keys of CAs, lays down the standards to be maintained by CAs and carries out other functions as included in Section 18 of the IT Act, 2000.
- 5. **Electronic Governance:** The objective of e-Governance, in broader terms, is to deliver all Government services electronically to the citizens in his/her locality through integrated and inter-operable systems via multiple modes, while ensuring efficiency, transparency and reliability of such services at affordable costs. The World Bank supported India: e-Delivery of Public Services project is an externally aided project under Electronic Governance Scheme under which financial support is extended for various e-governance initiatives of the Centre and States/UTs in the broad areas of policies, human resources, technology, project development, etc.
- 6. **National Knowledge Network:** The scheme has been initiated for establishing the National Knowledge Network with multiple gigabit band-width to connect Knowledge Institutions across the country.
- 7. Promotion of Electronics and IT HW Manufacturing (MSIPS, EDF and Manufacturing Clusters): The Government has been taking several initiatives for promotion of electronics manufacturing in the country to provide an enabling environment for the industry to compete globally. Electronics manufacturing is one of the important pillars of the Digital India and Make in India Programmes. Its target to achieve net zero imports is a striking demonstration of intent. The National Policy on Electronics 2019 (NPE 2019) envisions positioning India as a global hub for Electronics System Design and Manufacturing (ESDM) by encouraging and driving capabilities in the country for developing core components, including chipsets and creating an enabling environment for the industry to compete globally.
- 8. **Promotion of IT/ITES Industries:** Two schemes (NEBPS and IBPS) under IT for Jobs pillar have been launched under Digital India Programme to incentivize BPO/ITES operations across the country, particularly digitally deficit areas for creation of employment opportunities for the youths and the balanced regional growth of IT/ITES Industry.
- 9. **Cyber Security Projects:** The objective of the scheme is to adopt a holistic approach towards securing the cyber space of the country by pursuing multiple initiatives like Security Policy, Compliance and Assurance, Security, Incident-Early warning & Response, Security Training, Enabling Legal Framework and Collaboration.
- 10. R&D in IT/Electronics/CCBT: Proliferation and absorption of emerging technology by supporting R&D is one of the important objectives of this program apart from creating essential R&D infrastructure and scientific & technical human capital. The outcome of these endeavours is expected to increase the start-up base in the country, enhance the IP portfolio, development of indigenous technologies and know-how and its transfer to Indian companies for manufacturing. The focused R&D being supported by the department are classified as R&D in Electronics (Electronics System Design & Application, Microelectronics, Nanoelectronics, Electronic Component & Material Technology, Medical Electronics & Health Informatics, Innovation Promotion & start-ups, National Language Technology Mission (NLTM) under TDIL, High



Performance Computing (HPC) including National Supercomputing Mission); R&D in IT (Blockchain, Quantum Technologies, Artificial Intelligence, Perception Engineering and Data Analytics); R&D in CC&BT (Next Generation Communication-5G & beyond, Cognitive & Software Defined Radio and Networks, Cloud Communications, IoT, Big Data Analytics, Broadband Wireless Technology and Strategic Electronics); and Security Specific R&D.

- 11. **Promotion of Digital payment:** Promotion of Digital Payments has been accorded highest priority by the Government of India to bring each and every segment of our country under the formal fold of digital payment services. The vision is to provide facility of seamless digital payment to all citizens of India in a convenient, easy, affordable, quick and secure manner.
- 12. **Champion Service Sector Scheme:** This scheme has identified 12 Champion Services Sectors for promoting their development, realizing potential to increase export, generate employment and improving quality and standards. The Information Technology & Information Technology enabled Services (IT & ITeS) is one of the 12 identified sectors with Ministry of Electronics & Information Technology being the nodal ministry.
- 13. Capacity Building and Skill Development Scheme: The objective of the program is to ensure the availability of trained human resources for the manufacturing & service sectors of Electronics and IT industry. Initiatives include identifying gaps emerging from the formal sector and planning programmes in non-formal and formal sectors for meeting these gaps. This includes Skill Development in the domain of Electronics & IT and related areas. The PMGDIHSA component of this scheme is aimed at empowering the citizens in rural areas by imparting them training to operate computer or digital access devices, especially for digital payments to actively participate in the process of nation-building.
- 14. Modified Programme for Development of Semiconductors and Display Manufacturing Ecosystem in India: In furtherance of the vision of Aatmanirbhar Bharat and positioning India as the global hub for electronic system designing and manufacturing, ESDM, a comprehensive programme for the development of semiconductors and display manufacturing ecosystem in India has been approved by Government of India with an outlay of Rs. 76,000 crores. The Programme contained various schemes to attract investments in the field of semiconductors and display manufacturing. The programme aims to provide attractive incentive support to companies or consortia that are engaged in Silicon Semiconductor Fabs, Display Fabs, Compound Semiconductors, Silicon Photonics, Sensors, including MEMS, Fabs, Discrete Semiconductor Fabs, Semiconductor Packaging, ATMP or OSAT and Semiconductor Design.
- 15. **Production Linked Incentive Scheme (PLI):** The two Production Linked Incentive (PLI) Schemes offer production linked incentives to boost domestic manufacturing and attract large investments in Mobile Phones & Specified Electronic Components, and IT Hardware respectively. Under the PLI Scheme for Mobile Phones & Specified Electronic Components, incentives of 6% to 3% shall be extended on incremental sales (over the base year 2019-20) of goods manufactured in India and covered under the target segment to eligible companies for a period of five years. Under the PLI Scheme for IT Hardware, incentives of 4% to 2% shall be extended on incremental sales (over the base year 2019-20) of goods manufactured in India and covered under the target segments of Laptops, Servers, Tablets and All-in-One PCs to eligible companies for a period of four years.
- 16. Centre for Development of Advanced Computing (C-DAC): It is a premier R&D organization for carrying out R&D in IT, Electronics and associated areas. It has 12 centres in the cities of Bengaluru, Chennai, Delhi, Hyderabad, Kolkata, Mohali, Mumbai, Noida, Patna, Pune, Silchar and Thiruvananthapuram. Some of the thrust areas in which C-DAC is currently working includes High Performance, Grid and Cloud Computing (including National Supercomputing Mission),



- Multilingual Computing, Professional Electronics; Software Technologies, Cyber Security and Cyber Forensics, Health Informatics, and Education & Training.
- 17. Centre for Materials for Electronics and Information Technology (C-MET): It is a registered scientific society of MeitY working in high technology electronic materials which includes LTCC electronic packaging, energy storage materials (Rechargeable battery, super capacitors, hydrogen storage), Renewable energy materials (solar cell, hydrogen and fuel cell), Additive manufacturing with photonics and 2D materials including quantum materials and nanomaterials. C-MET is also working on Ultrapure electronic materials Compound semiconductors (SiC), electronic waste recycling technologies & RoHS compliance, And also Microwave dielectrics materials & packaging, Multilayer ceramics for actuators/sensors & plasmonic materials sensors for biomedical application.
- 18. Society for Applied Microwave Electronics Engineering and Research (SAMEER): It is a registered scientific society of MeitY working in high technology areas of microwaves, millimetre waves and electro-magnetics with the specific goal of developing applications for these technologies with its five centres at Mumbai, Chennai, Kolkata, Visakhapatnam and Guwahati.
- 19. **Unique Identification Authority of India (UIDAI):** Unique Identification Authority of India (UIDAI) has been established' to implement the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016, to provide for, as good governance, efficient, transparent and targeted delivery of subsidies, benefits and services, the expenditure for which is incurred from the Consolidated Fund of India/ Consolidated Fund of States. Hence, it aims at providing 'good governance', through the fair and just execution of welfare services of the Government. It provides a unique identity to each resident, towards ease of living.
- 20. **Bhaskaracharya National Institute for Space Applications and Geo-Information:** It is an Autonomous Scientific Society, registered under the Societies Registration Act, 1860 under MeitY, to undertake technology development and management, research and development, facilitate National and International cooperation, capacity building and support technology transfer and entrepreneurship development in the area of geo-spatial technology.
- 21. **Semi-Conductor Laboratory (SCL):** It is an Autonomous Body under the Ministry of Electronics & Information Technology and is engaged in Research & Development in the area of Microelectronics to meet the strategic needs of the country. It is also engaged in Fabrication of high tech electronic systems and indigenization of electronic sub systems.
- 22. **Digital India Corporation erstwhile Media Lab Asia:** It is a Section 8 Company under MeitY which focuses on bringing the benefits of ICT solutions to the common man in the area of Livelihood Generation, Empowerment of Disabled, Healthcare and Education





## **Ministry of Tribal Affairs**

The Ministry was set up in 1999 after the bifurcation of Ministry of Social Justice and Empowerment with the objective of providing more focused approach on the integrated socio-economic development of the Scheduled Tribes (STs). The programmes and schemes of the Ministry are intended to support and supplement other Central Ministries, State Governments and partly of voluntary organizations, and to fill critical gaps in institutions and programmes taking into account the situation of STs through financial assistance.

These schemes comprising economic, educational and social development through institution building are administered by the Ministry and implemented mainly through the State Governments/ Union Territory Administrations. The Ministry also supplements the efforts of other Ministries by way of various developmental interventions in critical sectors through specially tailored schemes. These schemes benefit the NE states, as these have either tribal majorities or substantial tribal populations. The various schemes, programmes, missions and institutions being supported by the Ministry have been listed below.

- 1. **National Commission for Scheduled Tribes:** The provision is for Secretariat Expenditure of the National Commission for Scheduled Tribes.
- 2. Marketing and Logistics Development for Promoting Tribal Products from North Eastern Region.: Financial Assistance is provided under the scheme Marketing and Logistics development for promoting Tribal products from North Eastern to identify artisans, develop markets for their produces, mainstream and scale-up sale of the NE products and enhance incomes of the Tribal persons of The North East and facilitate year-round livelihoods for the community
- 3. Eklavya Model Residential Schools (EMRS): The Eklavya Model Residential Schools (EMRS) for Scheduled Tribes (ST) students are being established as quality residential schools for the promotion of education in all areas and habitations in the country. The objective of EMRS is to provide quality middle and high-level education to Scheduled Tribes (ST) students in remote areas, not only to enable them to avail of reservation in high and professional educational courses and as jobs in government and public and private sectors but also to have access to the best opportunities in education at par with the non-ST population.
- 4. Aid to Voluntary Organizations working for the welfare of scheduled Tribes: GIA is also given to Voluntary Organizations to assist the reach of welfare schemes of Government and fill the gaps in service deficient tribal areas, in sectors such as education, health, livelihood etc., to provide a favourable environment for socio-economic uplift of the Scheduled Tribes (STs). From 2023-2024, this Sub-Scheme has been brought under the Scheme 'National Tribal Welfare Programme'.
- 5. Venture Capital Fund for Scheduled Tribes: As a Social Sector Initiative, the objectives of the scheme of Venture Capital Fund for Scheduled Tribes are to promote entrepreneurship among the scheduled tribes population in India, who are oriented towards innovation and growth technologies. The scheme aims to provide hand holding support to new incubation ideas and start up ideas by ST Entrepreneurs. The scheme provides for concessional finance to ST entrepreneurs, who will create wealth and value for society and at the same time will promote profitable businesses. From 2023-2024, this Sub-Scheme has been brought under the Scheme National Tribal Welfare Programme.



- 6. Pradhan Mantri Jan Jatiya Vikas Mission (PMJVM): The objectives of the scheme Pradhan Mantri Jan Janjatiye Vikas Mission (PMJVM) are to bring about transformational changes in tribal livelihood and to utilize the potential of tribal enterprises in the growth of Indian economy. The prime objective of the mission will be ensuring round-the-year income generating opportunities for tribal people by undertaking non-MFP activities also, based on Agriculture/ Floriculture/ Horticulture/ Medicinal & aromatic plants / others. From 2023-2024, this Sub-Scheme has been brought under the Scheme 'National Tribal Welfare Programme'.
- 7. **Tribal Research Information, Education, Communication and Events (TRIECE):** The scheme is implemented in States having Schedule V areas. Grants are also given for organizing tribal festivals and for Research/Evaluation projects, Seminar/Workshops and Publication of books, relating to issues concerning tribal peoples. Centres of Excellence have been recognized to involve them for working out long term and policy oriented research studies for the development of tribal people in the country. From 2023-2024, this Sub-Scheme has been brought under the Scheme 'National Tribal Welfare Programme'.
- 8. **Monitoring, Evaluation, Survey, Social Audit (MESSA):** Provision has also been made for expenditure on Monitoring and Evaluation of schemes and projects of this Ministry. From 2023-2024, this Sub-Scheme has been brought under the Scheme 'National Tribal Welfare Programme'.
- 9. National Fellowship and Scholarship for Higher Education of ST students: Financial Assistance is provided in the form of Fellowships and Scholarships to ST Students to pursue higher studies in India i.e. for M. Phil and PhD as well as professional courses in identified Top Class Institutions through National Fellowship and Scholarship for Higher Education of ST Students. From 2023-2024, this Sub-Scheme has been brought under the Scheme 'National Tribal Welfare Programme'.
- 10. **National Overseas Scholarship Scheme:** Scholarships are also provided to selected ST students to pursue Post Graduation, PhD & Post- Doctoral studies abroad. From 2023-2024, this Sub-Scheme has been brought under the Scheme 'National Tribal Welfare Programme'
- 11. Programme for Development of Scheduled Tribes (PM Vanbandhu Kalyan Yojana): This is an Umbrella Scheme Programme for Development of Scheduled Tribes with the following components:
  - (a) Pre- Matric Scholarship for STs: The objective of the Pre Matric Scholarship for STs is to fill the critical gaps in the education of ST Children. Financial Assistance is provided to State Governments through a cafeteria mode of options to reduce their financial burden and provide better access to education to the Scheduled Tribe Children. From 2022-2023, this Sub-Scheme has been brought under the Umbrella Scheme Programme for Development of Scheduled Tribes.
  - (b) Post- Matric Scholarship for STs: The objective of the Post Matric Scholarship for STs is to fill the critical gaps in the education of ST Children. Financial Assistance is provided to State Governments through a cafeteria mode of options to reduce their financial burden and provide better access to education to the Scheduled Tribe Children. From 2022-2023, this Sub-Scheme has been brought under the Umbrella Scheme Programme for Development of Scheduled Tribes.
  - (c) **Support to Tribal Research Institute:** Under the scheme Support to Tribal Research Institute financial assistance is provided to Tribal Research Institutes of the States for Research and Evaluation, Preservation and Documentation of cultural heritage of Tribals, Indigenous practices, Art and culture, Training and Capacity Building of Panchayati Raj Institution (PRI)



- representatives, Officers, teachers on FRA, PESA, constitutional provisions and schemes of State and Central Government for welfare of tribal through Seminars / Workshops etc. From 2022-2023, this Sub-Scheme has been brought under the Umbrella Scheme Programme for Development of Scheduled Tribes
- (d) **Development of Particularly Vulnerable Tribal Groups (PVTGs):** Provision under the scheme has been kept for various measures for the overall development of the backward population of STs. GIA is given to concerned States for the development of identified Particularly Vulnerable Tribal Groups (PVTGs) in a comprehensive manner, while retaining their culture and heritage. From 2022-2023, this Sub-Scheme has been brought under the Umbrella Scheme Programme for Development of Scheduled Tribes.
- (e) Special Central Assistance to Tribal Sub-Scheme (SCA to TSS): The Ministry of Tribal Affairs supplements the efforts of the State Governments by extending Grants-in-aid through Special Central Assistance to (SCA) to Tribal Sub Scheme (TSS). Under the Scheme Ministry provides grant in aid to States for employment-cum- income generation activities and infrastructure work relating to basic services and facilities are taken up for implementation. The core objective of extending SCA to TSS is to boost the demand based income-generation programmes in tribal areas and thus raise the economic and social status of STs. From 2022-2023, this Sub-Scheme has been brought under the Umbrella Scheme Programme for Development of Scheduled Tribes.
- (f) Pradhan Mantri Adi Adarsh Gram Yojna (PMAAGY): Erstwhile the scheme of Special Central Assistance to Tribal Sub-Scheme (SCA to TSS), provides funds to the States/ UTs. Government having notified ST population, including North Eastern States (NE States) for development and welfare of tribal people to bridge the gaps in sectors like education, health, agriculture, skill development, employment-cum-income generation, etc
- 12. Grants under proviso to Article 275(1) of the Constitution (Charged): Under this provision, grants are given to States having Scheduled Areas and ST population including Tribal Majority States for creating critical infrastructural projects in the Tribal Areas for the Welfare of STs and for raising the level of administration of Scheduled Areas therein, to that of the rest of the State, with a view to bring them at par with the developed areas.
- 13. Grant to Assam Government under Clause A of the Second Provision to Article 275(1) of the Constitution: Provision is for Grants to Assam Government under Clause (a) of second provision to Article 275(1) of the constitution.





## **Ministry of Civil Aviation**

The Ministry of Civil Aviation is responsible for formulation of national policies and programmes for the development and regulation of the Civil Aviation sector in the country. It is responsible for the administration of the Aircraft Act, 1934, Aircraft Rules, 1937 and various other legislations pertaining to the aviation sector in the country. This Ministry exercises administrative control over attached and autonomous organizations like the Directorate General of Civil Aviation, Bureau of Civil Aviation Security and Indira Gandhi Rashtriya Uran Akademi and affiliated Public Sector Undertakings like Airports Authority of India and Pawan Hans Helicopters Limited. The Commission of Railway Safety, which is responsible for safety in rail travel and operations in terms of the provisions of the Railways Act, 1989 also comes under the administrative control of this Ministry.

The various schemes, programmes and projects, and organizations of the Ministry have been listed below, from the provisions made for them under the Union Budget of 2023-24. These directly or indirectly benefit the states of the NE Region, along with other parts of the country.

- 1. **Directorate General of Civil Aviation:** The provision is for meeting the establishment expenditure of the Director General of Civil Aviation and its Regional and Field Offices. It provides for Training Projects, eGCA Project, construction of DGCA Bhawan. It also includes provision for India's contribution to International Civil Aviation Organisation.
- 2. **Bureau of Civil Aviation Security:** The provision is for meeting the establishment expenditure of Bureau of Civil Aviation Security and its Regional Offices: procurement of Security Equipment, IT Equipment, Construction of Headquarter Building, India's contribution for ICAO's Cooperative Aviation Security Programme and for conference and summits related to aviation security.
- 3. **Commissioner for Railway Safety:** The provision is for meeting the establishment expenditure of CRS and its Regional Offices which is concerned with Safety in Rail Travel and Operations.
- 4. **Grants for Skill Development:** Grants in Aid to institutions in Civil Aviation sector for Skill Development
- 5. **Grants-in-Aid to Institution in Civil Aviation for Promotion/Development of Aero Sports:** Grants -in Aid to institutions in Civil Aviation for Promotion / Development of Aero Sports.
- 6. **Medical Benefits to Retired Employees of Air India:** The provision is for providing medical benefits to Retired employees of Air India in the post-divestment period.
- 7. **Regional Connectivity Scheme:** The proposal is for revival of 22 airports and for commencement of 100 RCS routes, Viability Gap Funding for North East Connectivity. To improve connectivity in NE Region, a new scheme has also been formulated for Providing Air connectivity and Aviation infrastructure.
- 8. **Purchase of two new aircraft for Special Extra Section Flight operations:** The provision is for purchase of aircraft for special operations.
- 9. Krishi Udaan Scheme: A token provision is made for Krishi Udaan Scheme.
- 10. **Production Linked Incentive (PLI) Scheme for Drone and Drone Component:** The Budgetary provision is to provide Productivity Linked incentives for Drones and Drone components Industry/ Companies.



- 11. Indira Gandhi Rashtriya Udaan Academy and National Aviation University: The budgetary provision for NAU is made for Machinery and Equipment and other establishment expenditure. A provision is made for CAE Payments by IGRUA.
- 12. **Airports Economic Regulatory Authority:** Grants-in-aid for Salary and Grants-in-aid General for meeting establishment related expenditure of AERA.
- 13. **Air India Asset Holding Limited (SPV):** The provision is kept for servicing of loan transferred to SPV as a result of financial restructuring of Air India.
- 14. **Airports Authority of India:** The budgetary provision for construction of New Green Field Airport at Hollongi, Arunachal Pradesh.



## Ministry of Women and Child Development

The Department of Women and Child Development, Government of India, came into existence as a separate Ministry with effect from 30th January, 2006, Earlier; it was a Department under the Ministry of Human Resources Development since 1985. The Ministry was constituted with the prime intention of addressing gaps in State action for women and children for promoting inter-Ministerial and inter-sectoral convergence to create gender equitable and child-cantered legislation, policies and programmes.

The Ministry is supporting the following schemes, missions, and organizations. It has been making allocations for the NE Region as per the extant Government policy. The following initiatives are directly or indirectly benefitting this region, along with the rest of the country.

- 1. **Food and Nutrition Board:** The Food and Nutrition Board (FNB) is a technical support wing under Child Development Bureau of the Ministry. FNB is responsible for the policy issues related to nutrition. It provides inputs for nutrition education and awareness through a wide range of nutrition education and extension services as well as training programmes.
- 2. National Institute of Public Cooperation and Child Development (NIPCCD): NIPCCD conducts research and evaluation studies, organizes training programmes, seminars, workshops, conferences, provides information services in the field of public cooperation and child development and also caters to the need of training and research consultancy through its headquarters in New Delhi and its four regional centres at Bangalore, Guwahati, Indore and Lucknow.



- 3. Central Adoption Resource Agency (CARA): Central Adoption Resource Authority is a statutory body of Ministry of Women & Child Development, Government of India. It functions as the nodal body for adoption of Indian children and is mandated to monitor and regulate in country and inter country adoptions. CARA primarily deals with adoption of orphan, abandoned and surrendered children through its associated recognised adoption agencies. Adoption Regulations, 2017 framed by Central Adoption Resource Authority as mandated under section 68 c of Juvenile Justice (Care and Protection of Children) Act, 2015 has been notified on 4th January 2017. The Adoption Regulations, 2017 replace the Adoption Guidelines, 2015.
- 4. **National Commission for Protection of Child Rights (NCPCR):** The NCPCR was set up under the Commissions for Protection of Child Rights Act, 2005 to ensure better protection of the rights of the child through the monitoring of constitutional and legal rights of children and monitoring programmes relating to the survival, welfare and development of children.
- 5. National Commission for Women: National Commission for Women is a statutory body constituted under National Commission for Women Act 1990. It has the mandate to investigate and examine all matters relating to the safeguards provided for women under the Constitution and other laws. It looks into complaints and takes suo-moto notice of matters relating to deprivation of Women rights etc.
- 6. Central Social Welfare Board: CSWB has initiated several programmes for the welfare and development of women and children, especially in rural areas. The important programmes that are currently being implemented include Condensed Courses of Education for women and girls, Awareness Generation programmes, Crèche Scheme, Family Counselling Centres and Short Stay Homes. These schemes are implemented through Voluntary Organizations in collaboration with State Social Welfare Boards.
- 7. National Awards: This includes provision for the National Awards for Child Welfare.
- 8. **Contribution to UNICEF:** This is meant for meeting expenditure on India contribution to the UNICEF.
- 9. Saksham Anganwadi and POSHAN 2.0 (Umbrella ICDS Anganwadi Services, Poshan Abhiyan Scheme for Adolescent Girls): The objective of the scheme is to develop practices that nurture health, wellness and immunity among malnutrition. The schemes of Anganwadi Services, Adolescent Girls and Poshan Abhiyaan have been re-aligned under Poshan 2.0 for maximizing nutritional outcomes. Components under the schemes have been reorganized in 3 primary verticals viz. Nutrition Support for POSHAN and for Adolescent Girls, Early Childhood Care and Education (3-6 years) and Anganwadi Infrastructure including modern, upgraded Saksham Angawadis.
- 10. Mission VATSALYA (Child Protection Services and Child Welfare Services): The scheme is being implemented with a view to create a safe and secure environment for comprehensive development of children who are in need of care and protection, children in conflict with law and other vulnerable children. The programme components include Institutional Services by way of Child Care Institutions and Family based non institutional care through sponsorship, foster care and adoption. It also supports after care programme and emergency outreach service through Child line and Child Tracking System.
- 11. SAMBAL (Beti Bachao Beti Padhao, One Stop Centre, Nari Adalat, Mahila Police Volunteer, Women's Helpline etc.): The objective of the sub-scheme is to improve the accessibility and integrate all efforts and various Government initiatives towards the safety and protection of women, as well as for securing their rights and entitlements on a comprehensive continuum of



- care and support to women affected by violence and in distress and to assist them in reemerging as integrated partners in nation-building.
- 12. SAMARTHYA (Shakti Sadan (Swadhar, Ujjawala, Widow Home), Shakhi Niwas (Working Women Hostel), Palna (National Creche Scheme), Pradhan Mantri Matru Vandana Yojana/ National Hub for Women Empowerment/Gender Budgeting/Research/ Skilling/ Trg/ Media etc.): The objective of the sub-scheme is to improve the accessibility of various Government services available for women at various levels through re-enforcement and convergence for development and empowerment of women. The sub-scheme aims at social, cultural, political and economic development and empowerment of women. The components of this sub-scheme are Shakti Sadan, Shakhi Niwas, Palna -Creche facility, Pradhan Mantri Matru Vandana Yojana, Hub for Women Empowerment, Gender Budgeting and Research/ Skilling/ Training/Media Advocacy.





# 3.3. Developmental Initiatives of the State Governments

The State Governments, which form the second tier of governance in India, have a major role in the implementation of most developmental works undertaken by the Government to benefit the common man. The concerned Departments of the State Government have the crucial role in planning and implementing the works in various areas of socio-economic development; such as agriculture and allied sectors, rural roads, power distribution, education, health, water supply, social welfare, rural development, support to the MSME units, skills development etc. In doing so, the State Departments are facilitated by their long-standing presence at the district and sub-district levels of the state, as well as by the coordinating and monitoring roles played by the District Administration through mechanism like the District Development Committees.

The State Governments receive support from the Government of India to implement several schemes. In fact, in several of the crucial developmental areas being covered by the states, the Government of India has been operating the 'Centrally Supported Schemes' (CSS), to extend such support. In 2016, the CSS schemes had been rationalized as six 'Core of the Core Schemes' and 'Core Schemes', based on the recommendations of a Sub-Group of Chief Ministers of the country. As per the 'Expenditure Profile' document of the Union Budget of 2023-24, there are 52 'Core Schemes' being supported under the CSS, apart from the 6 identified 'Core of the Core Schemes'.

In the NE states, the Government of India is providing 90% of the outlays of 'Core Schemes' under the CSS, while the states have to provide the balance amount as the 'State Matching Share'. The CSSs are operationalized by the Ministries of Government of India based on scheme specific guidelines and are implemented by State Governments or their designated agencies. In addition, the Government of India had announced the scheme 'Special Assistance to States for Capital Investment 2023-24' in order to provide boost to capital spending by states. In addition, State Governments can operate schemes from their own resources, as per the budgetary provisions.

The developmental initiatives of the State Governments depend upon the priorities of the State Governments, and the availability of funds. These are usually spelt out in the Budget Speeches presented on the floor of the State Assemblies. The following pages list many of the development initiatives of the NE states. This has been done by referring to documents that that have been uploaded by the State Finance Departments along with their budgets, such as: (a) Budget Speeches delivered in the floor of the State Legislative Assemblies in connection with the State Budgets of 2023-24, or (b) other documents like 'Budget Highlights' for Assam.

#### Note

The list of development initiatives is indicative and not exhaustive. Such details of schemes and other initiatives can be accessed from various websites and other documents of the State Government that are available in the public domain. Additional information can be obtained as needed from the Departments and various Agencies of the State Governments.



Indicative State-wise List of Initiatives (from Budgets Documents for 2023-24)

## Arunachal Pradesh

Vision Pillar-1: Government Reforms & Prudent Financial Management

- Life Insurance Cover for contingency workers, casual labourers and ALCs working with State Government under Pradhan Mantri Jeevan Jyoti Bima Yojana and Pradhan Mantri Suraksha Bima Yojana
- Special campaign Payment of Premium for Anganwadi Workers, Mid-Day Meal Workers, Auxiliary Nurse Midwives and Gaon-Burhas under above schemes
- Arunachal Uday Scheme (reconstruction of dilapidated infrastructure)
- Infrastructure Development at New District HQs & Divisional HQs
- Employment Generation for 1,000 new entrepreneurs, especially women (contribution to DDUSY)
- Entrepreneurship Development Program
- Arunachal Pradesh Innovation & Investment Park (start-ups)
- Achiever's Awards
- Seva Aapke Dwar (Bottom-up micro-planning)
- Honorarium for Gaon Burahs and Gaon Burhis
- Police Housing, Police Training Centre, and new notified Police Stations
- Central Jail in Papum Pare District
- High Court Building and other Judicial Infrastructure
- Strengthening and Modernization' of Fire & Emergency Services
- Administrative Training Institute, Naharlagun
- Devolution of Funds to Panchayati Raj Institutions

## Vision Pillar-2: Synergy and Convergence

- Infrastructure Development for Civil Aviation Sector
- Chief Minister Comprehensive State Road Development Phase II (road construction)
- Cable suspended structure bridge over Noa-Dihing River
- Completing the New District Secretariats in the State; Vijoynagar Circuit House; and Building Infrastructure Plan
- Maintenance of PMGSY Roads
- Shifting of Office of Chief Engineer (Eastern Zone), Rural Works Department and Office of Chief Engineer (Eastern Zone) Water Resources Department
- State share for Revamped Distribution Sector Scheme (power sector)
- Strengthening of power distribution infrastructure in Itanagar Capital Complex
- Activities under 'Water for all' Programme
- Extension of Water Supply to AWCs, PHCs and Schools
- Ongoing and new initiatives of Water Resources Department
- Municipal Solid Waste Management in Urban Towns
- Sector wise re-modelling of existing govt. quarters into multi-storey residential block
- Grants-In-Aid to Itanagar MC and Pasighat MC for Solid Waste Management
- Multi-storey Parking Lots
- Vibrant Village Program / Border Village Illumination Project (border villages)
- Repair & Renovation of Foot Suspension Bridges in Border Areas
- Natural Resources Inventory for Micro Level Agriculture Planning
- Use of 'Drones for Social Impact

### Vision Pillar-3: Investment in Health

- Chief Minister Arogya Arunachal Yojana (CMAAY)
- Mukhya Mantri Nasha Mukti Yojana
- Dulari Kanya Scheme (top-up)
- 'Medicine from the Sky' program (delivery of medicines by drones)
- Grants-in-Aid to the Tomo Riba Institute of Health and Medical Sciences
- Upgradation of Bakin Pertin General Hospital, Pasignat / Upgradation of Health Centers in the state

### Vision Pillar-4: Investment in Human Capital

Upgradation of Government Upper Primary Schools; Construction of bachelor barracks in rural schools



- School Uniforms of Students
- Mukhya Mantri Shiksha Kosh; Champion Fund
- Strengthening of DIET (better teacher training)
- NCC Academy Complex
- Development activities at Arunachal Pradesh University
- Construction of Infrastructures for Colleges & Schools (individual projects)
- Chief Minister's Yuva Kaushal Yojana
- Construction of Arun Rang Manch, an Auditorium cum Theatre in Itanagar
- Promotion of Sports through Participation in Sports Events, Prizes and Incentives for winners, and Construction of Sports Infrastructure; apart from Mission Football
- Volunteer Programmes of NSS, NYKS and Bharat Scouts
- Phal se Poshan Yojana (local fruits and vegetables for AWCs)
- Chief Minister's Social Security Scheme (social security)

### Vision Pillar-5: Atmanirbhar Arunachal

- Atmanirbhar Krishi Yojana (for agriculture)
- Atmanirbhar Bagwani Yojana (horticulture)
- Atmanirbhar Pashupalan Yojana (animal husbandry and veterinary)
- Atmanirbhar Matsyapalan Yojana (fishery)
- Atmanirbhar Plantation Yojana (rubber plantations)
- Atmanirbhar Bharat (Vocal For Local)
- Atma Nirbhar Khadya Yojana (aggregation centres and micro-food processing through FPOs & FPCs)
- Infrastructure Development at State Horticulture Research and Development Institute
- Establishment of unity Malls and Strengthening of District Emporia
- Chief Minister Indigenous Textile Promotion Scheme
- CM's Adarsh Gram Yojana
- Arunachal Gramin Express Yojana
- Arun Shree Rinn Yojana (Self Help Groups)
- Support for VDVKs/ SHGs/PLFs/CLFs under ArSLM

## Vision Pillar-6: Environment Protection & Climate Resilient Development

- On-going activities under Environment & Forest Department, including focusing on the Bamboo sector
- Construction of Paryavaran Bhavan at Itanagar
- Projects in the Environment and Forest sector: like Upgradation of Biological Park, Itanagar; Establishment of Forest
  Museum and Martyr's Memorial; Elephant Rescue and Rehabilitation Centre in Namsai Forest Division; Eco-tourism
  Projects for job creation; Strengthening of Van Vigyan Kendra; Establishment of Ayurvedic park at Tawang; and
  Strengthening of GIS Lab for e-monitoring of Forest cover and plantations
- Chief Minister Paryatan Vikas Yojana (CMPVY)

[Source: Excerpted from Budget Speech 2023-24 of Hon'ble Deputy CM (http://www.arunachalbudget.in/docs/speech.pdf)]





## Assam

### Flagship Schemes 2023-24

- Mukhya Mantri Sva-Niyojan Mission
- One Lakh Jobs
- Assam Micro-Finance Incentive and Relief Scheme (AMFIRS)
- Daridrata Nivaran
- Pragyan Bharati
- Assam Urban Health Mission (AUHM)
- 200 years of Assam Tea
- Quest for Cultural Identity
- Mission for Prevention of Child Marriage
- Amar Gaon Amar Gaurav
- Khel Maharan and Sanskritik Mahasangram
- Reviving the movement around women empowerment
- Creating Growth Corridors
- Right to Public Service Commission
- Standing with Our Employees APUN GHOR, APUN BAHAN
- New Infrastructure Push
- Support to MSME sector
- Mission Basundhara

## Major Budget Announcements 2023-24

- Most Outstanding District Initiative (MODI): Swacch Zila Puruskar
- Implementation of Peace Accord
- Assam Police Emergency Management System (APEMS) Dial 112
- Strengthening of Infrastructure for Police
- SU-SWASTHYARE SAMRIDDHI
- Cabinet Outreach Program
- Viability Gap Funding for Non-UDAN Routes
- Commercial Tree Plantation
- Exemption from Electricity Duty on Green Energy
- Electric Vehicle (EV) Policy
- Climate Action
- Assam Mental Health & Social Care Scheme
- Mobile Veterinary Units (MVUs) in Assam
- Pension Fund for AAU
- Maximum Governance, Minimum Government
- Mukhya Mantri Sohoj Griha Nirman Achoni (MMSGNA)
- Drink from Tap (DFT) in Tezpur
- Financial Institutional Reforms
- CCTV in Public Places
- Renaming of Directorate of Tea Tribes Welfare into 'Directorate of Tea Tribes and Adivasi Welfare'

[Source: Excerpted from Budget Highlights Assam Budget (https://fin.assam.gov.in/budget\_documents/)]





## Manipur

#### Education

- School Fagathansi Mission (to strengthen 120 High and Higher Secondary schools across the State)
- College Fagathansi Mission (to improve the infrastructure of the Government Colleges)
- Chief Minister's Scheme for Support to EWS students for pursuing Professional Courses

#### Health

- Chief Minister's Hakshelgi Tengbang' scheme (to reduce the out-of-pocket health expenses, especially by the poorer sections of the society)
- Chief Minister's Health for All (CMHFA) scheme (to provide door-to-door healthcare services and complete primary health checkup for all the people in Manipur)
- CM's Menstrual Hygiene Scheme (to provide school going adolescent girls with sanitary napkins)

## Sports

- Manipur State Football Academy
- Development of 'natural grass' football grounds in 10 locations
- Saikhom Mirabai Chanu Fitness Centre at Nongpok Kakching
- Chief Minister's Sagol Kangjei Championship (to promote Polo, the traditional game of the state)
- Indigenous Sports Complex in Senapati under the Scheme for Capital Investment

### Entrepreneurship & Start-Ups

- Manipur Start-Up Scheme (to support start ups)
- Manipur Credit Guarantee Scheme (MCGS) to increase the guaranteed coverage of loans given to Micro and Small Enterprises (MSEs) and Start Ups

## Tourism & Culture

- 'Multipurpose Cultural Complex' at the Manipur State Kala Academy
- Support to various tourism infrastructure and events
- Construction of Unity Malls

### Connectivity

- Construction of Imphal Ring Road
- Provision of concrete roads in Imphal City

## Agriculture & Associated Sectors

- Promotion of millets in the State
- Promotion of Natural Farming
- Support to Agriculture Start-Ups

## Security & Policing

- Upgradation of equipment, vehicles, arms & ammunition of our Police
- Construction of Police outposts in the districts along the international border and Police outposts along Imphal-Jiribam National Highway
- Housing for Police personnel
- Scheme for 'Alternative Livelihoods' for farmers in areas affected by 'War on Drugs'

## Welfare

- Chief Ministergi Shotharabasinggi Tengbang (CMST) Scheme (to provide care-giver allowances, scholarships etc.)
- Chief Minister's Widow Pension Scheme
- Manipur Old Age Pension Scheme

# Drinking Water & Sanitation

- Manipur Water Supply Project (to ensure adequate sources of water from multiple sources to meet the state's present and future needs)
- Imphal Sewerage System Phase-II (to provide sewerage services within the Imphal area)

## Inclusive Development & Public Administration

- 'Welfare of smaller tribes' in the state
- Major infrastructure projects taken up in the hill districts under Pradhan Mantri Jan Vikas Karyakram (PMJVK)
- Funding to meet infrastructure and development gaps in the hill districts



#### Forest & Environment

- Protection of Reserve Forests and Protected Forests
- Plantation drives to tackle forest degradation
- Project for 'Sustainable Loktak Lake Ecosystem Restoration, Eco Tourism and Livelihood Improvement'

[Source: Budget Speech of Hon'ble Chief Minister of Manipur (in-charge Finance) 2023-24, which is available at the following link: https://ebudgetmanipur.mn.gov.in/view/2023-2024/EB\_2023-2024\_BudgetSpeechEnglish32.pdf]



# Meghalaya

### Agriculture

- Lakadong Mission for the production of turmeric
- Other Mission Mode Projects: Mushroom and Spice Mission; Aroma Mission (Cultivation of Herbs)
- Fruit development with particular emphasis on improving the value chains of pineapple and orange
- Vegetable development to benefit growers of potato, carrot, cabbage and other vegetables
- Dedicated Floriculture mission focusing on cut flowers like Gerberas, Carnations, Anthuriums, Roses and Orchids
- Megha-LAMP program for agri-marketing initiatives such as (a) Network of collectives including Cooperative Societies, Farmer Producer Organizations and Village Organizations to provide decentralized agri-marketing support (including strengthening the existing 200 collective marketing centres and establishing another 200 centres in the next financial year); and (b) PRIME Hubs, which will be higher level aggregation and processing centres are operational at some locations, and being established at others.
- State-of-the-Art food testing lab at Upper Shillong
- New tissue culture lab to ensure availability of high-quality planting material
- 'PRIME Agricultural Response Vehicle' program for providing pickup vehicles at a 50% subsidy to identified agricultural groups and entrepreneurs
- Increasing the total area under organic certification to 1 lakh hectares in the next five years
- FOCUS Programme (Farmers Collectivization For Up-scaling Production and Marketing System) FOCUS Plus programme (to provide a direct cash transfer of Rs. 5,000 to the individual bank accounts of one member for every rural and urban household in the State)
- e PROGRESS Prosperity of Grass-root Families through Livestock Interventions program seeks to provide high yielding piglets, poultry birds and goats free of cost to the poorest households
- Continuation of Piggery Mission and the Milk Mission through cooperative societies

### Connectivity

- Chief Minister's Rural Connectivity Scheme to connect villages not covered under PMGSY, including suspension and footbridges across streams and rivers to improve connectivity for villages
- Construction and expansion of additional critical roads under State Road Projects
- Restoration of the roads and bridges damaged during the floods of June 2022
- 'Integrated Transport Network Development Plan' and 'Road Asset Management System' to streamline the building of new roads and maintain existing road network

### Water Supply & Sanitation

Water supply schemes for major district headquarters and other towns



#### Power

- 'Meghalaya Power Distribution Sector Improvement Project' for strengthening the distribution network
- Capacity augmentation will be done in a public private partnership mode

#### Healthcare

- Chief Minister's Affordable Drug Centres scheme to provide generic medicines at cheaper rates
- Meghalaya Health Systems Strengthening Project
- the MOTHER program, and the 'Chief Minister's Safe Motherhood Scheme' for reducing IMR and MMR
- Early Childhood Development Mission
- Megha Health Insurance Scheme

### Education

- Building and upgrading infrastructure at all the government schools in the State
- Selection and operationalization of additional people's colleges
- Scholarship schemes for students of the state
- Implementation of Govt. of India schemes

### Other Infrastructure

- Construction of the New Assembly building in New Shillong
- Construction work on the 'Integrated Administrative Complexes' at Pynursla in East Khasi Hills, Tura and Jowai., along with proposals for construction of similar complexes in other districts
- Upgradation and new construction of block infrastructure
- Completing the State Guest House at Shillong; Construction of Circuit House annexes at Tura and Sohra
- Shillong Technology park (2<sup>nd</sup> Phase)
- Shillong Smart City and Tura Smart Town projects
- Optical fibre network for drawing 100 GBpE bandwidth from Bangladesh (together with Govt. of Assam)
- Luxury accommodation in the New Shillong Township in PPP mode
- Upgradation of police infrastructure including police stations, housing and outposts including the seven newly created border outposts

### Tourism

- Meghalaya's Homestay Scheme (in convergence with PMEGP) for the construction of 5,000 home-stays between 2023-24 and 2027-28, including 1,000 home-stays in 2023-24
- Major ecotourism projects
- Construction of more luxury accommodation units at several places of tourist interest
- Comprehensive development of new tourism circuits including accommodation units, approach roads to sites, wayside amenities and other ancillary infrastructure
- Shillong peak ropeway project

## Livelihoods, Entrepreneurship & Skill Development

- 'Livelihood Improvement Finance Company of Meghalaya' LIFCOM for interest free capital and working capital loans
- Provision of interest subvention and strengthening financial inclusion
- Skills Meghalaya Programme
- Strengthening the forward linkage component of the skilling programs to create employment opportunities
- Soft Skills Program ASPIRE Meghalaya for youth
- PRIME Meghalaya (Promotion and Incubation of Market Driven Enterprises)
- Programme for cluster-based skill development, targeting 10,000 weavers and building common facility centres for the weavers
- State Government funded program for livelihood support for the urban areas focussing on workforce in the informal sectors

## Sports & Culture

- Mission Football
- Construction of various sports related infrastructure like construction and renovation works of stadia and indoor stadium, aquatic complex, tennis complex etc.
- Meghalaya Games as an annual event
- STAR program for talent identification



- Construction of infrastructure related to culture, including construction of the Tura Convention Centre and district auditoria in all the districts (construction and renovation)
- Support to festivals like Cherry Blossom festival, the Shillong literary festival, the Me-gong festival, Meghalaya film festival etc.
- Support traditional festivals and celebrations in the state

#### Governance & Service Delivery

- Deployment of e-proposal system and the Budget Estimation Allocation Monitoring System (including till the district and DDO level)
- 'Chief Minister's Service Delivery Centres' will be set up in about 750 locations to act as one-stop-shops for providing all citizen services
- Deployment of business correspondents for improving the delivery of banking services to the remotest villages

#### Social Welfare

- CM-CARES programme for pension benefits to senior citizens, single mothers and infirm citizens
- Drug Reduction Elimination and Action Mission (DREAM) to make Meghalaya drug-free

# Environment, Conservation & Climate Change

- State Water Mission for an integrated and coordinated approach to water management
- Implementing interventions for protecting forests
- 'Payment for Ecosystem Services' project called Green Meghalaya to incentivize communities to conserve forests

## Externally Aided Projects

- IFAD funded 'Meghalaya Livelihood and Access to Markets Project',
- The World Bank funded 'Community led Landscape Management Project',
- JICA funded 'Community-based Forest Management and Livelihood Improvement in Meghalaya'.

[Source: Budget Speech 2023-2024 by Hon'ble Chief Minister of Meghalaya, which is available at the following link https://megfinance.gov.in/budget\_documents/2023-2024/others/budget\_speech.pdf



## Mizoram

## Major Initiatives

- 'Family Oriented SEDP' under the State Flagship Programme, the Socio Economic Development Programme (SEDP), to provide beneficiaries with financial assistance to supplement their on-going economic activities or to start fresh economic activities: including expenditure on (a) counterpart funding of various schemes like CSS, EAP, NCDC etc., (b) Family Oriented Schemes, (c) Health Care Scheme
- Integrated Financial Management Information System (IFMIS) project of the Finance Department, which has been partially launched, including for use by DDOs for the online processing of bills and major functions of the Treasuries
- Implementation of the Mizoram Responsible Tourism Policy as one of the priorities of the Government to make tourism a tool for providing livelihood for the local population while upholding the principles of economic, social and environmental responsibilities



- Implementation of various Centrally Sponsored Schemes, including Police Modernization Schemes, Accelerated Irrigation Benefit Program (AIBP), RKVY, Border Areas Development Plan, NSAP
- Focus on Sewage and Solid Waste Management, including the elimination of Single Use Plastics and working on alternatives

## State Matching Shares

- Separate State matching share earmarked for Samagra Shiksha Abhiyan (SSA), including 'Top-up' State Matching Share in order to pay off the increase of Salaries for SSA employees
- 'Top-up' State Matching Share to pay salaries of ICDS staff engaged under Women & Child Development even after termination of Government of India scheme
- State Matching Share for PMGSY

## Other Initiatives

- Establishment of Municipal Council in Lunglei, the state's second largest town
- Meeting the management requirements of various Colleges
- Supporting the activities of NGOs in Mizoram under Art & Culture Department
- Allocation for power purchases and transmission charges
- Water pumping charges and maintenance of water supply schemes
- Administration and management of newly opened District Rural Development Offices

Major portion of the State's resources is used to meet obligatory and operating expenses such as salaries & wages, pensions, subsidies, interest payments, power purchase cost, health care, State's 'Top-up' share for salaries of SSA employees. Capital expenditure is mainly for creation of assets for the Public including lands and buildings, roads and bridges, irrigation, sports infrastructures, large machineries etc.

[Source: Budget Speech of Hon'ble Chief Minister and Finance Minister of Mizoram for 2023-24, which is available at the following link: https://finance.mizoram.gov.in/uploads/attachments/2023/02/113fe8f9bf55d4ac57883d4a09ec02e9/budget-speech-2023-24-eng.pdf]



## Nagaland

## Agriculture & Allied Sectors

- Promotion of post-harvest economic activities including organic products through construction of organic AC Market,
   120-bedded Farmers' Hostel and Community Market Complex (at 4<sup>th</sup> Mile)
- Construction of Horti-link roads, augmentation of marketing of horticultural produce, development of flower clusters, and other core activities of Horticulture Department
- Establishment of Sub-Divisional Horticulture Offices
- Construction of Departmental Guest House (of Soil & Water Conservation Department) and other core activities of the
  Department, including State Matching Share for CSS, bio-fertilizer production units, soil testing & analysis units,
  distribution of micro-nutrients in four newly created districts
- Strengthening of pig breeding farms and setting up of feed and fodder manufacturing units through private participation; capacity building and training in meat production



- Development of cluster based fisheries and institutionalizing FPOs; construction of fisherman houses; upgrading demonstration fish farms
- Setting up of high tech nurseries to promote indigenous wild fruits, bringing degraded forest area under afforestation;
   Increasing the Protected Area Network by notifying community reserves
- Construction of MARCOFED Office at Mokokchung and other core activities of Cooperation Department including the implementation of the 'Integrated Cooperative Development Project' to benefit cooperative societies through construction of godowns, cold storages, and banking counters; small processing units; poultry, piggery and dairy units; purchase of transport vehicles etc.
- Coffee planting project including roasting units through Land Resources Department
- Support for core activities of Nagaland Bamboo Development Agency; Bee & Honey Missions;
- Anti-erosion projects of Water Resources Department; along with State Development program for construction of water harvesting ponds

## Rural Development

- Construction of farmers' markets
- Improvement of roads
- Construction of Academic Block of SIRD
- Mobilization of Self Help Groups, Village Organizations and Cluster Level Federations under Nagaland State Rural Livelihoods Mission (Govt. of India funded)

#### Other

- Under Developed Areas: Construction of Guest House of Department of Under Developed Area (DUDA) at Dimapur for facilities for people from those areas
- Sericulture: Augmentation of eri and muga, silkworm host plant cultivation, training to local youth in spinning and weaving
- Geology & Mining: Purchase of drilling rig for mineral testing and geological investigation, support to Nagaland State Mineral Development Corporation
- Tourism: Hornbill Festival, Mini Hornbill Festivals, Participation in various fairs and festivals, Construction works
- Industries: Incentives for start-ups, Ease of Doing Business, Upgradation of International Trade Centres and support for PSUs

### Power Sector & Renewable Energy

- Upgradation of 33/11 KV Substations
- Construction of transmission lines, new electrical stores, godowns and store rooms
- Drilling and survey works for preparation of Detailed Project Reports
- Infrastructure works at new Directorate complex (for New & Renewable Energy), conversion of off-grid power plants to grid connections, solar plant in Dimapur
- Smart and Green Village initiatives for energy conservation (of Electrical Inspectorate)

## Roads & Bridges and Road Transport

- Development and improvement of roads, rehabilitation of bridges, research lab at Dimapur
- Construction of helipads, DPR of short landing strip
- Acquisition of new buses
- Installation of weighbridges under Motor Vehicle Department

## Science & Technology and Information Technology

- Popularization of science, Science Centre at Dimapur
- Promotion of rural technology
- Construction works at Science & Technology Directorate
- Construction of State Data Centre, website and software development

### Education

- Construction works in Govt. High Schools, Girls Hostels
- Approach road to Sainik School
- State matching Share for CSS
- Construction works in various Govt. Colleges like academic buildings and girls hostels
- Support to SCERT
- Boys Hostel at Government Polytechnic



## Youth & Sports

- Capacity Building for youth empowerment, tournaments, sports activities
- Capacity Building for music and arts, TAFMA and Hornbill related activities
- Chief Minister's Scholarship for Music & Arts
- Hosting North East Olympics
- Multi-disciplinary Indoor Sports Facilities in 5 districts
- Centre of Excellence for Music & Arts

### Health & Family Welfare

- Construction works in hospitals, staff quarters, and for upgradation of health centres in new districts
- Support to Nagaland Institute of Medical Sciences
- State Matching Share for CSS in Health & Family Welfare

### Water Supply & Sanitation

- Water supply works and constructions
- Construction works of offices and quarters, and purchase of multi-media mobile vehicles
- State Matching Share for CSS in Water Supply & Sanitation

## Labour & Employment and Skills Development

- Construction of flats, labour welfare centres for Labour Department
- Construction of staff quarters, skill development programmes, state matching share for CSS in skills development

## Externally Aided Projects

- Fostering Climate Change Resilient Upland Agriculture System (Agriculture)
- Enhancing Landscape and Ecosystem Management (Agriculture)
- Nagaland Enhancing Classroom Teaching and Resource (NECTAR) (School Education)
- Nagaland Health Project (Health)
- Nagaland Urban Infrastructure Development Project (Urban Infrastructure)
- Nagaland Forest Management Project (Forest)
- Forest & Bio-diversity Management in Himalaya Nagaland (Forest)

[Source: Budget Speech of Hon'ble Chief Minister of Nagaland (Minister in-charge Finance) 2023-24, which is available at the following link: https://finance.nagaland.gov.in/subpageframe.aspx?val=990]



## Sikkim

## Health Sector

- Establishment of Viral Research & Diagnostic Laboratory (VRDL)
- Setting up of Haemodialysis Services in District Hospitals; Peritoneal Dialysis Services in STNM Hospital; Tele Consultation Services by connecting all SHC-HWC to District Hospitals and STNM Hospital
- Specialist consultations in all districts on weekly roster basis, along with launch of 102 & 108 services
- Making Mangan District Hospital fully functional



- Introduction of mobile health clinics for provision of basic health facilities in remote areas, as well as dispensing of free medicines
- Steps to reverse the low Total Fertility Rates by: Increasing maternity leave entitlement for all working women, and paternity leave for all male Govt. employees; benefit of one increment for second child and two increments for third child for government employee; IVF treatment under 'Vatsalya' scheme

### **Education Sector**

- Special emphasis upon Early Child Care & Education, including by co-location of Anganwadi Centres with Government Primary Schools, and coverage of all primary school teachers with ECCI training
- Further steps for the improvement in teaching-learning outcomes at primary level by training school heads and primary teachers for foundation literacy and numeracy
- Establishment of Junior Tinkering Labs in Junior Hgh Schools
- Setting up of separate laboratories for Science, Technology, Engineering and Mathematics (STEM)
- Developing Sikkim as a hub for higher education, by starting several universities as well as a College for Women with free hostel seats in pipeline
- Completion of construction of 100 school buildings, and moving towards developing Green Schools with components like rainwater harvesting, solar panels, biodegradable toilets, and water purifier
- Foundation Stone for campus of National Institute of Technology
- Extension of Chief Minister Scholarship Scheme to Graduate level

## Tourism

- Creation of innovative tourism infrastructures at places of tourist interest and along tourism circuits to cater to needs and fill the gaps wherever required
- Harnessing Sikkim's vast rural tourism potential through community-based tourism under the Mega Homestay Project for 1,000 home-stays
- Improving air-connectivity to boost tourism
- Increasing high end tourism, including by promoting Sikkim as a Wellness Destination

## Agriculture & Allied Sectors

- Undertaking various measures to increase the volume of organic produce in the state
- Mukhya Mantri Krishi Aatmanirbhar Yojana for providing cash incentives to farmers growing 13 crops
- Conducting trails for introduction of cash crops like saffron cultivation
- Mukhya Mantri Pasudhan Samriddhi Yojana to encourage farmers to increase production of milk and pork, with two
  production-linked incentive schemes Milk Production Incentive Scheme (MPIS) and Pork Production Incentive
  Scheme (PPIS)
- 'Gwala Day' to commemorate contributions by milk producers (gwalas)
- Mega Seed project for breeding of high quality piglets
- Mukhya Mantri Matsya Utpadan Yojana to increase production of fish

#### Others

- Sikkim Garib Awas Yojana for rural housing of lower income households
- Sikkim Urban Garib Awas Yojana for urban housing of lower income households
- Implementation of Government of India schemes like Jal Jeevan Mission, PM Gram Sadak Yojana, Sansad Adarsh Gram Yojana, SP Mukherjee Rurban Mission, PM Awas Yojana Gramin
- 50% reservation of women in Panchayat elections
- Improvement of road network
- Approaching Government of India for taking up State Highways as National Highways
- ICT enabled inclusive development through digital initiatives like Information Technology Policy, Right of Way Policy, E-Waste policy, various e-governance projects like e-district, Sikkim Government Services Portal, e-office, State Data Centre, State Portal, Unemployed Youth Database, Task Monitoring System etc.
- Observance of 'A Day for Mother Earth' to promote environmental consciousness
- Mero Rukh Mero Santati for planting 100 trees for every new-born child
- Payment for Ecosystem services to charge for commercial use of water from commercial establishments
- Several bans on the basis of eco-friendly policy like ban on firecracker, Styrofoam products, burning of waste and tyres, use of polythene carry bags etc.
- Nagar Van Yojana for urban forestry
- Online Consent Management & Monitoring System for improving Ease of Doing Business



- Implementation of MSME Policy to provide facilitation services, incentives and subsidies to local entrepreneurs
- Skilled Youth Start-up Scheme to create self-employment opportunities
- Technology Business Incubation Foundation under Atal Innovation Mission
- One Family One Entrepreneur Scheme to promote entrepreneurship in the state
- Reservations for women 33% in Government services and 50% in Panchayat elections

[Source: Excerpted from Budget Speech of Hon'ble Governor of Sikkim for Budget of 2023-24, available at the following link: http://www.sikkimfred.gov.in/Budget\_2023-24/Documents/Combined%20Governor%20Speech.pdf]

The Developmental Goals and Strategies of Sikkim have been defined in terms of the following crucial areas:

- (a) Rejuvenating the rural economies by focussing on both agricultural and non-agricultural activities;
- (b) Making efforts to bring as much green industries as possible:
- (c) Concentrating on some services sectors activities, given the distinct advantages of the state;
- (d) Emphasizing on alternative highways both to connect with the national markets and also state highways; and
- (e) Focusing on making the institutions of local governance as autonomous and capable.

The various developmental initiatives being taken on each of the above areas have been listed below.

### Rejuvenating Rural Economies

- Inducting commercial crops, besides traditional crops
- Dairy, piggery and off-farm activities
- Innovative interventions like "Mukhya Mantri Krishi Aatmanirbhar Yojana" that covers a band of 13 crops
- Production clusters with evolving Farmers Producing Organisations
- Encouraging the commercial banks, other financing and investment agencies to support the agriculture and allied sector

## Green Industries

- Efforts for setting up of traditional industries like pharmaceuticals and breweries
- Efforts for Setting up of non-traditional ventures like information technologies, food processing, green energy, green tourism and other green services
- Green technology to enhance the productivity and yield in the very limited farmlands manned mostly by small and marginal farmers
- Exploring the possibility of entering into fair trade principles and practices to value chain arrangement so that farmers get remunerative prices right at the farm gate
- Potential of value additions and processing facilities within the State that would create an organic niche in cardamom, ginger, turmeric, chillies, buckwheat and other millets, tea, fresh drinking water, flowers, fruits, traditional medicinal herbs, faith healers' abundant yet vanishing knowledge and farm animal products
- Attracting investment in areas and make Sikkim a green agro-ecological destination of the global world, including from G-20 countries

### Service Sector Activities

Setting up of new tourism ventures, educational enterprises and health amenities

## Highways and Other Connectivity

- Construction of a number of roads including a number of them in progress
- Completion of Siliguri-Rangpo railway line and its extension to Gangtok and
- Completion of National Highway 717A, connecting Bagrakote in West Bengal and Sikkim by National Highways and Infrastructure Development Corporation Limited (NHIDCL)
- Construction of Multimodal Economic Corridor linking West Sikkim with the districts of eastern Nepal through Chewabhanjyang

## Institutions of Local Governance

- Panchayat elections in entire state on a political manner
- De-politicising the functioning of the Panchayats so that every rural household gets the best access to the extended facilities and benefits
- Re-training and re-skilling of officials and adding value to the principles of effective, transparent and accountable
  governance.



### Other Action Points

Strident actions against Climate Change

- Appointing a high-level Climate Change Impact and Mitigation Commission to study the likely impacts and also to suggest both short term and long term preparatory strategies and mitigation policies
- Taking up a unique innovative novel green initiative namely Mero Rukh Mero Santati, which aims to strengthen the connect between parents, children and nature by planting 100 trees to celebrate the birth of a child
- Planning to introduce Electric Vehicles in Sikkim and gradually phase out the fuel based vehicles
- Revamping of Civil Defence mechanism mainly to quickly and effectively handling various disasters

# Internal Security: Changing Dimensions

- Proposal to raise a Mahila Battalion of the India Reserve Battalion
- Dial 112 project (for Emergency Response Support System) is fully implemented and functional in the State
- Launching Mission Cyber SAFAI (Sikkim Against Fraud Action Initiative)
- Creating one Cyber Police Station in each district under the supervision of SP Cyber-crimes
- Enhancing capabilities of the Police to use Cyber and Narco forensic tools more effectively

#### **Education and Health**

- Bringing both the education and health sectors to the forefront of our human security campaign
- Enhancing the educational infrastructure and quality in the State by taking many measures such as free medical
  education, bringing newer universities in the rural areas, reorienting the curriculum and teaching practices as per the
  New Education Policy of the Government of India and constructing school building and play grounds to providing basic
  amenities in the schools and colleges
- Ensuring immediate and emergency evacuation and timely access to medical facilities to the students, teachers and staff members, by providing ambulances with health workers to 8 colleges
- Sanitary napkin vending machines are provided to all Government Schools under Bahini scheme
- Exposure visits, Know your State Tours, Ad-hoc Teacher Regularization, Land for NIT Campus

# Taking IT to the Rural Areas

Project to set up an Overhead OFC Network in Soreng and Pakyong Districts to provide IT facility to all GPs

### **New Tourist Attractions**

- Bhaleydhunga Ropeway with state-of-the-art technology from France
- 15 ft tall gun metal Statue of former Prime Minister of India Late Shri Atal Bihari Vajpayee near the Atal Setu Bridge at Rangpo

### Women's' Welfare

- Sikkim Unmarried Women Pension Scheme
- Enhancement of amounts under the Indira Gandhi National Old Age Pension Scheme, Indira Gandhi National Widow Pension Scheme, Indira Gandhi National Disability Pension Scheme, and Chief Minister's State Disability Scheme

## Multi Village Water Supply Schemes

- Jal Jeevan Mission of Govt. of India
- Additional schemes where the Government is targeting water stressed areas in Sikkim
- Multi Village Water Supply Scheme in the water stressed areas

[Source: Excerpted from Budget Speech by Hon'ble Chief Minister of Sikkim (and I/C of Finance) in 17<sup>th</sup> May 2023, available at: http://www.sikkimfred.gov.in/Budget 2023-24/Documents/CM%20Budget%20Speech%20203.pdf]





## Tripura

### Agriculture & Farmers Welfare

- Awareness and sensitization programme for cultivation of millets
- Organic Queen Pineapple with Tripura geographical identification tag
- Urban Farming for selected persons
- Mukhyamantri Fasal Bima Yojana (MMFBY) for payment of up to 95% of the premium for crop insurance
- New scheme namely 'Mukhyamantri Integrated Crop Management Programme (MICMP)' for increasing production and productivity of Aman paddy
- New app namely 'Kisan Sahayata Mobile App' for giving agricultural advices to farmers
- Setting up two new Agriculture Development Research Cum Training Centres with IT facilities

#### Animal Resources Development

- Chief Minister's Swanirvar Parivar Yojana for supporting self-employment through piggery, duck-rearing, goat-rearing and poultry units
- Provision of mobile Veterinary Units fordelivering veterinary health services at the doorstep of farmer
- Establishing a modern Artificial Insemination Training Centre and five veterinary Dispensaries
- New revamped scheme named 'Mukhyamantri Prani Sampad Bikash Yojana' for overall development of animal husbandry sector in the State

#### Fisheries

- Distribution of fingerlings to fish farmers under Chief Minister's Swanirvar Paribar Yojana
- New scheme namely 'Mukhyamantri Matsya Bikash Yojana' for augmentation of fish production, fish seed production
  etc.
- Framing a comprehensive Fisheries Policy to optimally utilize the land and water resources to enhance the production of fish in the State, thereby creating gainful employment opportunities for large number of youth

#### Education

- Setting up one Model School in each Block under 'PMSHRI' Scheme
- Development of web application portal for the disadvantaged groups and weaker sections for online admission of students
- Distribution of bicycles to girl students under the Scheme 'Cycle to Girls Student'
- New scheme namely 'Mukhyamantri Konya Atmonirbhor Yojana' to provide free Scooty to girl toppers of Class XII to motivate the girls for higher education
- Modernisation of Government schools under PMSHRI and Vidyajyoti Schemes
- 'Tripura Agniveer Programme' in higher secondary schools to boost youth participation in Agnipath Scheme to serve the nation
- Waiver of various types of fees like Admission fee, College Development fee, Exam fee etc. for girl students enrolled in Under Graduate/Post Graduate Courses in Govt. Degree Colleges
- Chief Minister's Special Scholarship for Divyanga (Blind) to encourage Divyanga (Blind) students to pursue higher education
- Provision of WiFi coverage to all degree colleges and polytechnic institutes in the State
- Construction of infrastructure for higher education like: new Science Building at Netaji Subhas Mahavidyalaya, Udaipur, new Science Building at MBB and an Administrative and Academic Building at IASE, Kunjaban, Agartala

### Youth Affairs & Sports

- Construction of Youth Hostels at Kailashahar and Udaipur
- Construction of stadium at Santir bazaar
- 'Mukhyamantri State Talent Search Programme' to provide world class training and one-time financial assistance to selected female athletes
- New scheme namely 'Mukhyamantri Sports Development Scheme' to establish world-class sports facilities and provide Scholarships to aspiring athletes

### Health Services

- CM Jana Arogya Yojana, 2023 (CM-JAY, 2023), a universal health insurance scheme on the pattern of Ayushman Bharat-PMJAY of Central Government, with provisions for State Employees
- Commencement of BDS sessions at newly established 'Agartala Government Dental College' at IGM Hospital complex, with an annual intake capacity of 50 students
- Upgradation of Nurses Training Institute in IGM Hospital complex into a College of Nursing for B.Sc. (Nursing) course, with intake capacity of 50 students per year



- Upgradation of ANM Training Institute, Udaipur, Gomati into a GNM Training Institute with intake capacity of 40 per year
- Increasing the number of Post Graduate seats in Agartala Govt. Medical College
- Upgradation of CHCs to Sub-Divisional Hospitals at Panisagar, Kumarghat and Karbook
- Upgradation of Kakraban PHC and Rajnagar PHCs to CHCs
- Inauguration of six new PHC buildings at Boxanagar, Kanchanmala, Mohanpur, Kalyanpur, Natunbazar and Ompi, besides the construction of two new PHCs at Nitya Bazar and Durpabari; as well as new PHC buildings to be inaugurated at Anandanagar, Bamutia, Taibandal, Dayarampara and Niharnagar
- Introduction of 'Mera Aspataal Portal' a digital initiative and its integration with the e-hospital platform of ABVRCC for better services to cancer patients
- Construction of eleven Health and Wellness Centres in Bru resettlement locations at North, Dhalai and Gomati Districts
- Upgradation of Maharani PHC, Madhupur PHC and Bishramganj PHC to CHC level in 2023-24
- Construction of Health Sub Centre buildings for strengthening basic health care infrastructure
- Construction of Centre for Communicable Diseases in the State
- Establishment of 50-bedded Drug De-addiction Centres in phased manner in all districts

#### Social Welfare

- Aadhaar based payment of social pension to beneficiaries under State and Central Social Pension Schemes
- New Anganwadi Centres for uncovered areas (including AW Centres for the welfare of Bru settlers)
- Payment of Rs. 2000/- under 'Mukhyamantri Matrupushti Upahar' to all eligible pregnant women in four instalments after each antenatal check-ups
- Tripura State Policy for Empowerment of Women 2022 for the holistic development and empowerment of women in the State
- Tripura State Policy for Empowerment of Divyanga for their holistic development and empowerment
- One-time award to top students in Madhyamik and Higher Secondary Examinations under Chief Minister's Meritorious Award for students with benchmark disabilities
- Comprehensive policy to support transgender persons for their socio-economic development

### Tribal Welfare

- Construction of new ST College Hostels attached to (i) Women's College, Agartala (ii) Ambedkar College, Fatikroy and (iii) Gandacherra Govt. Degree College
- Making functional two new Tribal Rest Houses namely (i) Kumari Madhuti Rupasree at Melarmath, Agartala and (ii) Kalachera Tribal Rest House at Sabroom, South Tripura
- Soft loan to ST youths and Education loan to ST students by Tripura ST Development Co-operative Corporation Ltd
- Benefits to tribal rubber growers under Chief Minister's Rubber Mini Mission
- Construction of Fifty smoke houses to benefit tribal rubber growers
- Launching of World Bank funded 'Tripura Rural Economic Growth and Service Delivery Project' (TRESP) for improving quality of life of tribal communities at Tripura through sustainable livelihood and infrastructure development
- New mission, i.e. 'Mukhyamantri Tribal Development Mission', for comprehensive development of tribal areas with focus on Education, Health, Roads, Nutrition, Sanitation and Drinking Water services.

## Rural Development

- Implementation of Govt. of India schemes for rural housing (under PMAY-G), rural employment (under MGNREGS), 'Rurban' clusters under National Rurban Mission (NRuM), and livelihoods through SHGs, Village Organizations, and Cluster Federations (under DAY-NRLM) along with bank linkages, skills development of rural youth under Deen Dayal Upadhyaya Grameen Kaushalya Yojana
- Construction of RCC Footbridges to improve rural connectivity
- Construction of Market Stalls at select places, and of passenger shed in every Block

## Drinking Water & Sanitation

Implementation of Govt. of India schemes for rural water supply (JJM) and sanitation (SBM)

## Forests

- Afforestation of degraded forest lands, including with the plantation of bamboo
- 'Roadside Plantation and Beautification of Tripura (RBPT)' Scheme to improve the travelling experience of people through road-side plantations
- Tripura Agarwood Policy for the development of the Agarwood sector
- Conduct of a mass planting programme for planting large number of seedlings within a record time
- Development of Sepahijala Zoological Park; establishment of four new 'Nagar Vans'; Beautification of at least two islands of Dumboor Lake by creating theme parks like Biodiversity Park with Orchid house, Fern house, Cactus house, Children's park, aquarium & wellness centres etc.



## Establishment of the 'Tripura Nature Trails and Resorts Limited (TNTR)' to promote Eco-Tourism

### Panchayat

- Construction of 44 Panchayat Bhawans and 02 District Panchayat Resource Centers (DPRC) under
- Rastriya Gram Swaraj Abhiyan (RGSA),
- Capacity Building and Training (CB&T) of elected Representatives and Functionaries
- Revamped web-based application portal namely 'Amar Sarkar' for speedy and effective redress of development and services related public grievances pertaining to various Departments
- Under Chief Minister Model Village Scheme (CMMVS), development of GPs /VCs as Model Village within three years for replication by others

### Information Technology

- Rolling out e-office in the State in a mission mode with an initiative to make Digital Tripura to enhance transparency and increase accountability in Governance
- Provision of support to students for purchasing Smart phones under Mukhyamantri Yuba Yogayog Yojana
- Provision of FTTH connections for rural State Government establishments, private establishments and households
- Provision of Facility of Public WiFi in 300 GP/VCs of Tripura
- Launching of Mobile Common Service Center (mCSCs) in Tripura
- Setting up of Video Conferencing (VC) System in all offices of Sub-Divisional Magistrates and Block Development Offices for better governance and review of government programmes

### Home (Police)

- Sanctioning of Women Police Stations in Khowai and Dhalai District
- Upgradation of Police Outposts to Police Stations
- Deployment of Highway Patrol vehicles for dedicated highway patrolling in all districts

#### Fire & Emergency Services

- Construction of permanent accommodation for Fire Stations
- Inauguration of Training School (Phase I)
- Procurement of conventional Fire Tenders and light operational vehicles for effective fire service delivery
- Construction of permanent buildings for Fire Stations
- Setting up of State Fire Service Training College to provide training to the firemen

### Revenue

- Framing of policy for lease of Government Land to help easy availability of land for commercial and industrial activities
- Construction of new DM office Complexes and SDM office buildings and SDM's residential Quarters
- Installation of Automated Weather Stations (AWSs) and Automated Rain Gauges (ARGs) for disaster management
- Disaster Preparedness training of Civil Defence Volunteers and Aapda Mitra Volunteers

## Science, Technology & Environment

- Inauguration of Science City at Badharghat, Agartala to develop scientific temper in people especially youth
- Development of Bio-Villages (appreciated by Hon'ble PM of India)
- Implementing the DNA club project in HS Schools to strengthen the scientific temper in students

## Industries & Commerce

- Launching of Tripura City Gas Distribution Policy and Tripura Logistic Policy
- Active participation in the Road Shows under the aegis of 'North East Global Investors Summit' to highlight state's
  potential to attract private investment
- Improvement of Power Infrastructure in different Industrial Estates
- Undertaking massive infrastructure development with the help of Asian Development Bank at various industrial estates in six districts
- Construction of a Unity Mall at Agartala to display and sell unique products of Tripura and other States

#### Skill Development

- Training of youths on different skills and employment of many within and outside the State
- Introduction of new scheme namely 'Mukhyamantri Dakhyata Unnayan Prakalpa' to promote employment opportunities for the youths of the State with tie-ups with reputed institutions of the country

## Tourism

- Comprehensive plan for promotion of tourism in the State by improving the last mile connectivity, creating infrastructure facilities and improving manpower skills at tourist destinations
- Appointing Shri Saurav Ganguly, Former Captain of Indian Cricket Team as Brand Ambassador of Tripura Tourism



- Introduction of multiple activities like Para-motoring, Paragliding, Water Scooter, Water Ski, Zorbing, Banana boat, Hot air balloon etc. for Adventure Tourism
- Development of Infrastructure facilities at major tourist destinations namely Sepahijala, Udaipur, Chhabimura, Neermahal, Ujjayanta Palace, Dumboor Lake, Jampui Hills, and Unakoti under Swadesh Darshan-I
- Construction of Ropeway projects at (i) Udaipur Railway Station to Matabari (ii) Maharani to Chabimura (iii) Surmacherra and (iv) Jampui Hills
- Development of facilities for eco-tourism; tea museum; and beautification of Mahadeb Dighi at Udaipur to attract tourists in the temple city of Udaipur

#### Transportation

- Steps for strengthening connectivity & logistics hub for transnational trade & communication including International flights on Agartala-Chittagong-Agartala
- Approval of the 'Tripura Electric Vehicle Policy, 2022' for transition of state's transportation sector towards electric based mobility
- New 'Vehicle Scrapping Policy, 2023' for scrapping of old Government vehicles and their replacement by new environment friendly vehicles
- Setting up a Multimodal logistics park at Udaipur for development of Inland Water Transport in Tripura
- Construction of new motor stands
- Construction of office building of the Transport Commissioner at Agartala and 4(four) District Transport Offices

## Roads and Bridges

- Improvement and maintenance of roads
- Completion of RCC bridges
- Completion of PMGSY roads to provide all weather connectivity to habitations (under Government of India scheme)
- Construction of National Highways and State Highways

## Power

- Asian Development Bank assisted 'Tripura Power Distribution Strengthening and Generation Efficiency Improvement Project' as the largest ever project investment in the power sector in Tripura
- Implementation of 'Revamped reformed based result-linked Distribution Sector Scheme (RDSS)' to improve operational and financial viability of the Existing electricity network system of TSECL
- Formation of a new company 'Tripura Power Transmission Ltd. (TPTL)' to strengthen transmission infrastructure in the State
- Signing of MOU with the renewal energy division of NTPC towards setting up 130 MW floating Solar Power plant
- Feasibility study to study the possibility of establishing small hydro power plants in Tripura
- Illumination of rural and remote markets and Solar Street Lighting Systems under 'Grameen Bazaar Alok Jyoti Project' Urban Development
- Awarded as the best performing state in the category of North-Eastern States for PMAY (Urban) Housing in FY 2022-23
- Launching a new scheme called 'Mukhyamantri Satellite Town Development Scheme' to develop new satellite towns at Agartala, Udaipur and Dharmanagar
- New scheme namely 'Mukhyamantri Nagar Unnayan Prakalpa' for investment in urban infrastructure across the State

[Source: Budget Speech 2023-24 by the Hon'ble Finance Minister of Tripura, which is available at the following link: https://finance.tripura.gov.in/sites/default/files/Budget%20Speech%20English\_0.pdf]





# 4. Brief about the North Eastern Council and Different Agencies, Societies & Institutions working in NE Region

The Ministry of Development of North Eastern Region (DoNER) is the only Ministry with a territorial jurisdiction. It functions to coordinate the developmental efforts in the North Eastern (NE) Region. Apart from the implementation of various schemes for the development of the region, the Ministry administers matters related to the North Eastern Council (NEC) and various agencies, societies and institutions working in the NE Region.

This chapter provides a comprehensive overview of NEC and its mandate and role within the region. In addition, the mandates and functions of key institutions of the region have been furnished, covering the following organizations, apart from NEC:

- North Eastern Development Finance Corporation Ltd. (NEDFi);
- North Eastern Regional Agricultural Marketing Corporation Ltd. (NERAMAC);
- North Eastern Handicrafts & Handlooms Development Corporation Ltd. (NEHHDC);
- North Eastern Region Community Resource Management Society (NERCRMS);
- North East Resource Centre (NERCEN); and
- North East Cane and Bamboo Development Council (NECBDC).

The chapter explores the sector-specific initiatives undertaken by NEC, offering insights into the significant projects and developments. Additionally, the chapter outlines the financial allocations made by NEC to State Governments and various NE Region based agencies as part of NEC schemes. Furthermore, it provides a snapshot of the sector-wise disbursement of funds by NEC over the past seven years, which have empowered the region's developmental trajectory. In addition, the discussion includes a write-up on the background and activities of the above-mentioned organizations.

The pertinent details have been largely sourced from the public domain, especially from the Annual Reports brought out by the Ministry of Development of North Eastern Region and many of the organizations listed at above. In addition, some data had been obtained from the NEC and the some of the above organizations for use in the present document.





# 4.1. North Eastern Council

The North Eastern Council (NEC) was established under the North Eastern Council Act, 1971 as an apex level advisory Body, for securing balanced and coordinated development and facilitating effective co-ordination amongst seven States of North Eastern Region. Subsequent to the amendment of NEC Act in December, 2002, Sikkim was added as 8th Member State, and NEC was mandated to function as a statutory Regional Planning Body for the NE Region.

Over the past five decades, NEC has been playing a significant role in ushering development in the region at a time when most states were in their formative stages. In the initial period, road and air connectivity was supported, foundation for important regional institutions were established, and various socio-economic infrastructures were created across the region, making a difference in the lives of the people and thereby earning a lot of goodwill in the local community.

NEC extends financial assistance to States and Institutions in the NE Region in different sectors, which have been listed in the table at the next page. Since its inception, NEC has focused upon improving connectivity of the region which has been a major bottleneck for all developmental activities. In its endeavour, the Council has contributed immensely towards the improvement of the inter-State connectivity in the region. Presently, NEC is looking to continue its efforts, especially in terms of gap-filling in areas which have escaped the attention of various development agencies, and creating convergence at different levels. NEC is also looking at building capacities, sharing best practices and introducing cutting edge technologies among the NE states.

The table at the following page gives the sector-wise releases by NEC from 2016-17 onward. From the table it can be inferred that the major sectors of NEC include: Agriculture and Allied, Transport and Communication (T&C), NE Road Development Scheme, and Human Resource Development and Employment (HRD&E). These four sectors have accounted for over three-fifths of NEC's fund releases (expenditures) from 2016-17 onward till 2023-24 (up to 30<sup>th</sup> September 2023).





Table-4.1.1: Sector-wise Release of Funds by NEC from FY 2016-17 to FY 2023-24 (till 30<sup>th</sup> September 2023)

(Rupees in Lakh)

Sector	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Agriculture & Allied	20588.00	18875.00	27477.00	19495.00	14822.00	9867.00	10923.00	8335.00
Power & RRE	6199.99	9880.00	6548.00	5637.00	1586.00	1448.00	511.00	326.00
Irrigation, Flood Control & Watershed Management	3750.00	8660.00	4556.00	5115.00	2343.00	1328.00	778.00	1369.00
Industries	5222.52	3257.00	4298.00	4307.00	6762.00	5070.00	7098.00	1735.00
Tourism	3736.49	3588.00	3962.00	4215.00	4263.00	7685.00	3112.00	1328.00
Transport & Communications	34438.79	38973.00	18248.00	9834.00	6719.00	3959.00	2097.00	2129.00
Medical & Health	2612.31	3000.00	1728.00	1345.00	4454.00	3104.00	1175.00	109.00
Human Resource Development & Employment	15126.79	16135.00	9441.00	14046.00	8278.00	11050.00	4814.00	4713.00
Science & Technology	2508.91	2780.00	839.00	1371.00	3907.00	4059.00	2724.00	2805.00
Information & Public Relations	2012.65	3002.00	1796.00	1367.00	1794.00	2082.00	1278.00	1406.00
Evaluation & Monitoring	384.97	286.00	551.00	552.00	311.00	103.00	106.00	91.00
Establishment	1413.58	1416.00	1674.00	1761.00	2045.00	1915.00	1958.00	1042.00
Establishment (Admin)	0.00	0.00	0.00	0.00	0.00	323.00	450.00	565.00
NE Road Sector Development Scheme (NERSDS)	0.00	1200.00	100.00	35583.00	13512.00	47553.00	19.00	3504.00
Non Lapsable Central Pool of Resources -C	0.00	0.00	7634.00	19700.00	14456.00	13781.00	12873.00	0.00
TOTAL	97995.00	111052.00	88852.00	124328.00	85252.00	113327.00	49916.00	29457.00

Source: NEC Records

# Notes

1. For the FY 2023-24, the above figures refer to the expenditures up to 30<sup>th</sup> September 2023



# Release of Funds by NEC to the States

NEC extends financial assistance to States and Institutions in the North Eastern Region in different sectors, which inter alia include Agriculture and allied sectors, Power and Water Resources, Industries & Minerals, Transport & Communication, Medical Health Sectors, Human Resources Development, Science Technology, Tourism etc. The Hon'ble Prime Minister Shri Narendra Modi presided over the 65th Plenary Session of NEC on 27th May, 2016. Addressing the NEC Plenary, the Hon'ble PM had announced: 'The NEC should also consider focusing on issues in emerging areas of livelihood, entrepreneurship, venture funds, start-ups and skill development. All this will help in generating jobs.'

The table at the following page gives the actual release of funds by NEC to the State Governments and Other Agencies from 2015-16 onward till 2023-24 (up to 30<sup>th</sup> September 2023).



# Schemes of NEC - CSS Scheme with 100% Govt. of India funding

In January 2020, the Union Cabinet approved earmarking of 30% of North Eastern Council's (NEC's) allocation for new projects under the existing 'Schemes of North Eastern Council' for focused development of deprived areas; deprived/neglected sections of society and emerging priority sectors in the North Eastern States. The balance allocation shall be bifurcated in the existing two components viz. State component (60%) and Central component (40%). The Union Cabinet also approved allowing projects under State component, up to 25% of each State's normative allocation, for sectors not covered in the mandate of NEC, but which are considered important as per local felt needs, as per the recommendations of the State Governments. Projects to be undertaken under the 25% flexibility clause would generally be of bigger size to have optimum output and outcomes as well as for avoidance of thin spread of resources. The 'Schemes of the NEC' has now become a Central Sector Scheme on 100% funding by Government of India.



Table-4.1.2: Actual Release of Funds by NEC to State Governments & Other Agencies from FY 2016-17 to FY 2023-24 (till 30<sup>th</sup> September 2023)

(Rupees in Crore)

	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Other Agencies	TOTAL
2015-16	104.62	26.88	154.71	70.59	80.85	93.62	28.78	31.02	183.08	774.15
2016-17	68.05	54.85	107.71	39.16	68.74	105.45	33.26	55.91	446.83	979.96
2017-18	172.08	51.57	114.05	83.43	147.95	122.26	31.36	35.58	352.24	1110.52
2018-19	88.37	37.24	84.79	40.99	76.60	45.65	40.90	13.70	460.27	888.51
2019-20	82.06	63.07	191.50	84.54	73.19	247.43	64.55	18.80	418.14	1243.28
2020-21	55.27	113.45	122.69	50.07	92.48	71.45	33.78	169.06	144.27	852.52
2021-22	94.00	66.19	97.41	206.42	97.82	239.74	71.73	184.93	75.03	1133.27
2022-23	25.29	36.37	58.78	52.27	38.91	38.58	23.78	141.58	83.60	499.16
2023-24 (*)	51.41	46.83	19.98	39.39	25.94	26.71	18.84	24.23	41.24	294.57
TOTAL	741.15	496.45	951.62	666.86	702.48	990.89	346.98	674.81	2204.70	7775.94

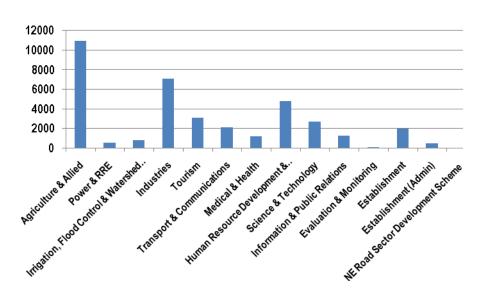
Source: NEC Records

Notes

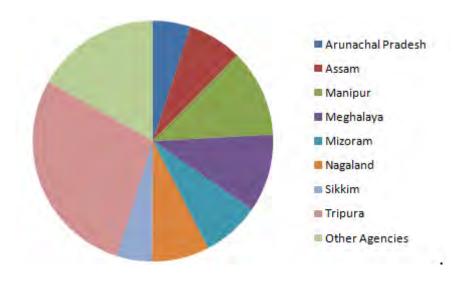
(\*) For the FY 2023-24, the above figures refer to the expenditures up to 30th September 2023



Graph-4.1.1: Release of Funds by NEC in FY 2022-23 for Different Sectors



Graph-4.1.2: Release of Funds by NEC in FY 2022-23 to State Governments & Other Agencies







# Sector-wise Works undertaken by NEC

The North Eastern Council (NEC) has been actively engaged in a wide range of development sectors in North East India. The initial selection of sectors had been made based on the weak infrastructural position of the region (e.g. transport and communications, power, irrigation and flood control etc.), as well as the need to strengthen the resource-base of the region (through human resources development, interventions to establish medical facilities, support to science and technology etc.). With the passage of time the sector-wise focus has shifted considerably, especially due to the considerable funding support extended to the region by Central Ministries, which were required (unless exempted) to set aside 10% of their gross budgetary support for the NE Region.

As per the 'NEC General Guidelines, 2020', 'NEC shall focus on issues in emerging areas of livelihood entrepreneurship, venture funds, start-up and skill development enabling in generating jobs. NEC would focus on interstate projects having wide ranging impact and on selected areas of critical nature. The NEC shall take up new projects in selective and focussed sectors like bamboo, piggery, regional tourism, higher education (hostels, tertiary medical education, telemedicine, interventions in 6<sup>th</sup> Schedule areas etc.), livelihood projects, science and technology, surveys and investigations, and promotion of the NE Region.

The following paragraphs give a brief overview of the sector-wise works undertaken by NEC. These initiatives are crucial for the holistic development of the region, which boasts unique natural beauty and cultural diversity, while also facing distinct challenges due to its geography and terrain apart from the overall developmental back-log.

## **Agriculture and Allied**

NEC is giving maximum emphasis to the Agriculture and Allied Sector for the development of North Eastern Region, especially of the rural areas. The region is still not at par with the rest of the country in agricultural matters. Several activities such as double cropping, organic farming, horticulture, floriculture, animal husbandry (especially piggery), fishery, sericulture, forestry, bee-keeping, plantations (like tea, rubber and coffee), and sustainable livelihoods require impetus for improvement on a self-sustaining basis. In addition, aspects like credit flow, organized marketing facilities, construction of adequate number of go-downs and warehouses, crop insurance and production of large quantities of value added products etc. need attention. In view of the above, the 'NEC General Guidelines, 2020' has listed areas where NEC can make focussed interventions, including bamboo, piggery (with value chain development of piggery right from setting up of swine flu vaccine plants to proposed processing and packaging), and livelihoods.

In bamboo, in order to realise the potential of turning bamboo into green gold in the NER, NEC would support multi-sectoral interventions covering the entire value chain including support to regional centres of excellence including strengthening of state, regional level and national level institutions located in NE Region. Regarding livelihoods: the 'NEC General Guidelines,2020' suggests 'interventions throughout the value chain in other sectors which are local strengths of NE Region having great potential of augmenting livelihood employment generation and augmenting incomes and capture the entire value chain from production till processing and packaging in areas like: (a)



Floriculture; (b) Medicinal and Aromatic plants (c) Bee-keeping (d) Poultry (e) Fishery (f) Handloom (g) Handicraft and (h) Horticulture/Agri-Allied could also be taken up'.

#### **Evaluation and Monitoring**

Besides funding development works, NEC also actively monitors their implementation. NEC engages Regional Level Monitors (on the same lines as National Level Monitors for PMGSY under the Ministry of Rural Development) who are retired senior officers with domain expertise for evaluation of projects. NEC also engages Institutes/Organisations for conducting Impact Assessment Studies of the NEC assisted projects. These evaluations are apart from the monitoring done by the respective states through mandatory Quarterly Review meetings of NEC projects as well as audits by the Comptroller and Auditor General.

# **Human Resource Development and Employment (HRD & E)**

This sector is one of the important sectors in the North Eastern Council. It deals with Education, Sports, Social Welfare, Skill Development and Training. It makes Regional planning in the field of Education, Sports, Social Welfare, Skill Development and Training. In addition to planning, the sector plays a catalytic role in infrastructure development and promotional activities in all eight North Eastern States in the field of Education, Sports, Social Welfare and gainful employment. Higher education is an area highlighted for focus as per the 'NEC General Guidelines 2020'

The sector's objectives encompass augmenting human resource capabilities in the region, which requires building skills among people so that they become agent of change and development. It provides funding for infrastructure development in Education, Sports and Social sector. Further, it promotes Science and Mathematics for improvement of quality education in the region. Additionally, the sector offers support for sports and youth promotion activities for productive engagement of the youth and to wane them away from directions that can lead to social unrest.

## **Industries**

The development of industries in the NE Region has lagged behind the rest of the country. Small industries dominate the industrial scenario in the NE Region and, so, special efforts need to be made for their expansion and growth. NEC has been acting as a facilitator of industrial development in the region, especially of the micro and small-sectors. It has funded the participation of entrepreneurs in various international and national events that can enhance their marketing profile. In addition, capacity building occupies a strategic position for the overall industrial development of the region for which the NEC extends support to the NE states.

# Information, Public Relations and Culture

Given the backdrop of inadequate coverage of the NE Region in the Print and Electronic Media, as well as the occasional negative publicity; it seems that one of the first and foremost objectives of the IPR Sector of NEC would be to herald a new genre of publicity for the North Eastern Region in the country as a whole. This can be done by means of innovative concerted, cohesive and continuous multimedia campaign. The publicity exercise should pave the way for the socio-economic and



cultural development and progress of the region towards actualization of the concept of 'Look East Policy' and NE Region 'Vision 2020 Document' in its true spirit and measure.

## **Irrigation, Flood Control and Water Shed Management**

The NE Region witnesses substantial rainfall during the monsoon months, but many areas suffer from water scarcity during the dry season. The State Governments had been tackling the adverse effects of heavy rainfall like floods and erosion, and landslides; while extending the supply of water to the urban areas and far-flung villages. The Irrigation, Flood Control and Water Shed Management (IFC&WSM) Sector has been providing assistance in implementing water supply, watershed management, survey and investigation of hydro-power projects, minor irrigation and anti-erosion projects. In the recent years, the investment by NEC has been reduced in the IFC&WSM Sector in view of the focus of other Government of India schemes upon areas like water supply, irrigation, water shed management etc., as well as the investments made by Central PSUs in the power sector, including for surveys and investigations.

#### **Medical and Health**

In the NE Region, the provision of healthcare is an arduous task given the geographical and demographic factors including terrain, rainfall, ethnic and lifestyle diversity etc. In addition, the transport and communication difficulties hamper the provision of such services. Since the early years, NEC has been focussing upon the Health Sector, including the establishment of several medical institutions across the region. These improved the availability of qualified manpower of all categories, besides enabling the provision of healthcare at the tertiary level. These institutions have been largely taken over by Government of India Ministries. In view of the attention being devoted to the sector by the Government of India and the State Governments, NEC will focus on the subject of Tertiary Healthcare including Health Education as per the 'NEC General Guidelines 2020'.

## **Power and Renewable Resources of Energy**

The development of the Power sector was one of the areas of initial focus of NEC. The North Eastern Electric Power Corporation Ltd. (NEEPCO) was initially established under the aegis of the Council. Under this sector, NEC has so far taken up the development of a total installed capacity of 694.50 MW, i.e. about 30% of the current installed capacity in the region. The projects have benefitted by all the NE States for their power requirement, including major industries and other large establishments located in the region. In view of the investments being made by Central Sector PSUs in the region, NEC had discontinued for funding larger power projects since the 9<sup>th</sup> Plan period. At present, investments by NEC in this sector have been largely discontinued as per the decision of the Government of India due to the above changed scenario.

## **Science and Technology**

A good information technology base is essential for the development of every sector in the economy. Considering the importance of IT infrastructure for the development of virtually every sector in the economy of NER, this sector is accorded top priority. Other areas for promotion of Science and Technology and its applications include rural technologies, eco-preservation etc.



As per the 'NEC General Guidelines, 2020', NEC shall take up new projects in selective and focussed sectors covering 'Science and Technology interventions in the NE Region (STINER) including use of remote sensing applications for planning and project monitoring; popularisation of ICT uses and innovation for livelihoods; setting up of Technology Facilitation Centres (TFCs) with focus on appropriate technological interventions for farm, nonfarm and other sectors across NER; Early Warning System (EWS) for disaster mitigation including use of space technology'.

#### **Tourism**

The eight states of North East India are blessed with scenic natural beauty, salubrious weather, rich biodiversity, rare wild life, historical sites, distinct cultural and ethnic heritage and warm and welcoming people. The region offers unforgettable visits for tourists interested in wild life, religious, cultural and ethnic tourism, river cruises, golf and a host of others. There is also great scope for mountaineering, trekking and adventure tourism in the region. The promotion of theme based regional tourism circuit has been identified as an area where NEC shall take up new projects as per the 'NEC General Guidelines, 2020' document.

# **Transport and Communication**

The Transport & Communication (T&C) Sector is amongst the major sectors of NEC. Connectivity is essential for the integration of the NE Region. The development of this sector is largely reliant upon roads, given the fact that over 70% of the NE Region is mountainous or hilly. Further, due to the farflung nature of various administrative centres and scattered nature of the population, a comparatively longer length of roads is necessary. However, the construction and maintenance of roads faces many challenges due to the prevailing terrain, soil types, high rainfall, long rainy season, and shorter working season. In view of the revenue position of the States, the development of this sector is largely reliant upon the funding from Government of India, including through the NEC.

# **Sector-wise Release of Funds**

The sector wise release of funds from 2016-17 to 2023-24 (up to 30<sup>th</sup> September 2023) has been furnished at Table-4.1.1. The same may be referred to for the pertinent details in this connection.

## **NOTE**

As per the 'NEC General Guidelines 2020', NEC will take up new projects in selective and focussed sectors as: Bamboo, Piggery, Regional Tourism, Higher Education, Tertiary Education, Special Interventions in Backward Areas, Livelihood projects, Science and Technology Interventions in the NER (STINER), Surveys & Investigations, and Promotion of the North Eastern Region.

In addition; 30% of the allocation of NEC for new projects under the existing 'Schemes of North Eastern Council' will be earmarked for 'focused development of deprived areas; deprived/neglected sections of society and emerging priority sectors in the North Eastern States', such as afforestation of denuded hills, organic farming, studies into problems of ethnic groups, inter-state disputes, study of languages and scripts etc.



# 4.2. North Eastern Development Finance Corporation Ltd.

The North Eastern Development Finance Corporation Ltd. (NEDFi) was incorporated as a Public Limited Company on 9<sup>th</sup> August 1995, with an authorised capital of Rs. 500 crore and a paid-up capital of Rs. 100 crore. It was notified as a public financial institution in July 1996 under Section 4-A of the Companies Act 1956. NEDFi is also categorised as Non-Banking Financial Company (NBFC) - Loan Company. It has been registered with the Reserve Bank of India (RBI) on 20<sup>th</sup> December 2002.

The Mission of NEDFi is to be a dynamic and responsive organisation catalysing economic development of the North Eastern Region of India by identifying and financing commercially viable industries, providing valued advisory & consultancy services, promoting entrepreneurship through effective mentoring, skill development and capacity building of the micro, small and medium enterprises and generating sustainable livelihoods through Microfinance and CSR activities.

**Core Businesses:** The core businesses of NEDFi comprises of fund-based lending activities and feebased activities. The lending activities are undertaken through the project finance schemes and microfinance schemes. Since its inception, NEDFi has extended financial assistance to 12,642 projects with a cumulative sanction of Rs. 7,385.03 crore. At present, its loan portfolio is Rs 1,554.10 crore. The asset quality is very strong, as NPAs are only 1.12% on a net basis (at end of FY 2022-23).

NEDFi has made significant strides in promoting entrepreneurship and capacity building across the North Eastern Region through a diverse array of initiatives. This includes organizing business meets for first-generation entrepreneurs, mentoring assistance through Business Facilitation Centres, capacity-building programmes, sustainable livelihood programmes, marketing support etc.

NEDFi's financial support is mainly structured mainly towards development of the Micro, Small and Medium Enterprises (MSME) segment which is a key driver of economic growth and capital formation in the North Eastern Region. For development of this segment, NEDFi has taken initiative to identify and nurture potential first generation local entrepreneurs at the micro and small-scale levels, and to provide finance on easy terms to them to set up viable industrial projects.

**Venture Funding:** One remarkable support to entrepreneurs in the NE Region is the North East Venture Fund, which has been established by NEDFi in collaboration with the Ministry of DoNER and SIDBI. It is managed by its subsidiary, NEDFi Venture Capital Ltd (NVCL), which is supporting startups, early-stage, and growth-stage companies with innovative products and technologies. The Fund had committed investments of Rs. 93.17 crore to 62 start-up companies (as on 31<sup>st</sup> March 2023).

**Micro-level Support:** Other initiatives to support the MSME sector include:

- 'NEDFi Micro Lending Scheme', which plays a pivotal role in empowering micro-entrepreneurs by providing direct financial support for various income-generating activities through Business Correspondents at affordable interest rates; and
- 'NEDFi Micro Finance Scheme', which provides microcredit to Micro Finance Institutions (MFIs)
  operating in the region, at affordable interest rates, to offer door-step credit support in far flung
  un-served & underserved areas.



Table-4.2.1: Sanctions and Disbursements of NEDFi (till 31st March 2023)

(Rupees in Lakh)

	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total
SANCTIONS									
Cumulative 1996- 2013	21,061.92	1,83,394.64	10,553.50	44,532.68	5,488.63	5,581.34	4,595.27	12,011.92	2,87,219.90
2013-2014	5,078.51	25,684.12	2,898.48	6,431.44	766.10	1,026.44	2,405.50	1,459.98	45,750.57
2014-15	3,623.00	15,069.69	4,404.45	4,285.74	681.20	810.00	1,111.30	1,217.97	31,203.35
2015-16	1,047.00	24,654.63	2,048.50	4,587.50	571.30	488.95	2,096.25	692.05	36,186.18
2016-17	3,273.00	21,091.03	3,299.85	7,166.81	490.33	623.10	2,117.00	1,427.10	39,488.22
2017-18	1,599.50	15,087.53	3,957.72	1,463.05	623.50	1,174.50	1,322.00	3,688.00	28,915.80
2018-19	1,549.50	18,882.45	4,900.62	4,945.07	780.30	716.00	1,443.50	2,737.80	35,955.24
2019-20	1,620.00	27,330.35	5,792.70	2,049.25	2,408.00	1,300.90	1,748.50	1,823.75	44,073.45
2020-21	1,418.50	23,584.59	5,532.50	3,690.59	742.39	875.57	1,021.19	1,140.37	38,005.70
2021-22	2,015.75	50,362.27	3,624.86	9,432.00	937.58	1,114.57	3,196.32	1,217.74	71,901.09
2022-23	1,870.50	52,268.22	10,357.10	2,738.65	3,455.80	2,063.40	3,820.51	3,229.52	79,803.70
Total	44,157.18	4,57,409.52	57,370.28	91,322.78	16,945.13	15,774.77	24,877.34	30,646.20	7,38,503.20

Continued

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	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total
DISBURSEMENTS									
Cumulative 1996- 2013	14,036.49	1,28,160.32	6,466.39	31,252.59	4,025.85	3,869.40	2,702.20	5,593.05	1,96,106.29
2013-2014	3,947.53	18,488.41	3,483.36	5,165.63	700.73	865.79	1,630.55	2,187.12	36,469.12
2014-15	3,799.85	20,726.39	3,858.78	5,989.06	701.92	725.00	1,799.80	1,119.42	38,720.22
2015-16	1,072.01	17,278.44	2,895.94	5,510.86	556.50	633.23	1,468.25	883.47	30,298.70
2016-17	2,371.70	18,527.08	4,644.26	4,463.30	474.83	553.89	2,436.00	1,437.90	34,908.96
2017-18	1,780.50	15,671.70	2,636.80	1,290.25	478.53	916.50	1,252.50	1,114.65	25,141.43
2018-19	803.70	15,518.35	4,372.30	3,506.77	794.75	753.50	1,244.50	1,683.15	28,677.02
2019-20	795.00	16,818.78	6,496.39	1,726.90	1,859.84	1,060.90	1,285.89	1,899.00	31,942.70
2020-21	1,709.80	19,645.90	4,143.61	1,877.92	936.71	948.89	961.32	905.12	31,129.27
2021-22	1,582.75	27,250.54	4,384.21	3,162.33	1,315.88	1,109.47	1,280.91	1,436.65	41,522.74
2022-23	1,615.47	46,269.91	6,426.43	7,987.07	3,516.33	1,848.70	3,950.25	2,500.07	74,114.23
Total	33,514.80	3,44,355.82	49,808.47	71,932.68	15,361.87	13,285.27	20,012.17	20,759.60	5,69,030.68

Source: NEDFI Annual Report 2022-23 (https://www.nedfi.com/wp-content/uploads/2023/10/Annual-Report-2022-23.pdf)



Other Activities: Besides financing, the Corporation offers Advisory & Consultancy services to the State Governments, private sectors and other agencies. NEDFi conducts sector or state specific studies under its Techno-Economic Development Fund (TEDF). It is the designated nodal agency for disbursal of Govt. of India incentives to the industries in the North-East India under North-East Industrial and Investment Promotion Policy 2007 (NEIIPP-2007). NEDFi has been playing an important role in facilitating setting up of new industrial and service sector projects in the North Eastern States.

Advisory & Consulting Services: NEDFi has positioned itself as a comprehensive provider of Advisory & Consultancy services, catering to State Governments, Central Ministries/Institutions, and Public Sector Undertakings operating in the North East Region of India. The organization specializes in executing consultancy projects in various functional areas, including Strategy Consulting, Monitoring & Evaluation of Infrastructure & Natural Resource Management Projects, Programme Management & Implementation Support, and Capacity Building & Institutional Strengthening. These services are offered across a range of domains, encompassing Agriculture & Allied Sectors, Food Processing, Handloom, Textile & Handicrafts, Tourism & Hospitality, Urban Infrastructure, Water Resources, Natural Resources Management, Environment & Forest, Education & Skill Development, and IT & ITES. NEDFi plays a crucial role in advancing development and sustainability in the region through its consultancy initiatives.

**Corporate Social Responsibility:** NEDFi's Corporate Social Responsibility (CSR) policy focuses on women empowerment, livelihood enhancement projects, cluster development project, development of craft sector in rural & backward areas and also facilitating marketing support to the artisans of the region through participation in exhibitions, trade fairs & sales from its various showrooms.





# 4.3. North Eastern Regional Agricultural Marketing Corporation Ltd.

The North Eastern Regional Agricultural Marketing Corporation Ltd. (NERAMAC) is a Government undertaking under the administrative control of the Ministry of Development of North Eastern Region (DoNER), Government of India. It was established in 1982 in order to undertake various activities in order to support horticultural growers of the North Eastern states of India in getting remunerative prices for their produce. As envisioned, its primary role is to act as a bridge between these growers and the market. NERAMAC's envisaged role also includes enhancing the agricultural, procurement, processing and marketing infrastructure of horticultural products in the North Eastern Region of India.

In order to fulfil the above objectives, NERAMAC has been offering a helping hand in procuring cash crops of farmers and producers by intervening in the market and providing them remunerative prices. Earlier, the Corporation had focussed upon the establishment and operation of three processing units in the areas of pineapple, ginger and cashew. These plants have become non-operational. NERAMAC has added retail outlets within the North East region, which directly sell various processed and value added products produced locally in the region. Thus, NERAMAC has taken up its role as a dynamic and vibrant marketing organisation essentially to support farmers of the North East Region with all sincerity.

Apart from the above roles, NERAMAC also undertakes agricultural-horticultural projects, skill curriculum supplies inputs, GI produce promotion activities, agro- events and assists in setting up of horticulture value chain (food processing) etc. to holistically approach the aspect of agricultural-horticultural development

NERAMAC is actively involved in a range of key activities covering the marketing of agriculture and horticulture products of the region. These include procuring agricultural and horticultural products such as pineapple, carrots, black rice, cashew, ginger, king chilli etc., which are now being marketed under the 'NE Fresh' brand. NERAMAC has a diverse product line-up of over 80 items, which can be similarly branded. The Corporation is expanding into exports, including to Bangladesh and Bhutan in the neighbourhood. It is exploring procurement through a private entity in Mumbai. Further, it has opened a kiosk at ICP Agartala; and it is setting up stalls in collaboration with NF Railway.

In addition, NERAMAC had supplied agricultural inputs and planting materials for State Governments. It has been active in initiatives like forming and promoting Farmer Producer Organizations (FPOs) in the North Eastern Region. The Corporation is also involved in projects like bamboo plantation, Geographical Indication (GI) registration for regional products, and establishing Dragon Fruit juice processing plants to enhance the horticultural value chain in the Mizoram region. These efforts underscore NERAMAC's pivotal role in promoting agricultural and horticultural activities in the North East.

The revenues of NERAMAC have recovered considerably in the recent years. The following table gives the details.



Table-4.3.1: Revenues of NERAMAC

(Rs. in Crore)

Financial Year	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Revenue (Rs. in Crore)	4.39	7.62	1.52	23.92	14.60	26.14

Source: Annual Report of Ministry of DoNER (2022-23) / Annual Reports of NERAMAC

Note

Revenues for 2016-17 and 2017-18 have been obtained from Annual Reports of NERAMAC.

The sale of agricultural-horticultural items by NERAMAC has been tabulated below for some of the recent years.

**Table-4.3.2: Product-wise Performance of NERAMAC** 

Product	Unit	2016-17	2017-18	2018-19	2019-20
Black Pepper	Kg	306	200	1686	718
Bay Leaf	Kg	15033	3138		
Hill Grass	Kg		52970		
Large Cardamom	Kg	5680	10858	7329	4214
Ginger Seed / Rhizome	Kg		15000		37593
Fresh Ginger	Kg	8558		66691	72202
Black Rice	Kg			5217	1044
Fresh Kiwi	Kg			1469	4363
Assam Lemon Cuttings	Nos.				612053
Black Gram Seed	Kg				286820
Green Gram Seed	Kg				111000
Ber Seedling	Nos.				49396
Turmeric Rhizome	Kg				73691
Banana Seedling	Nos.				443755
Processed Food Item	Nos.	1699	9959	NQ	NQ
Vegetables	Kg	16480			
Raw Cashew nut	Kg	15756			
Cashew Nut Loose	Kg	3			

Source: Annual Reports of NERAMAC

Note

NQ stands for 'Not Quantified' (i.e. sales had been carried out, but reported in monetary terms only).

Figures have been rounded off.



# 4.4. North Eastern Handicrafts & Handlooms Development Corporation Ltd.

The North Eastern Handicrafts and Handlooms Development Corporation (NEHHDC) had been established in 1977 by the Government of India. It was entrusted with the mandate of promoting and developing handicrafts and handlooms in the North Eastern Region of India. The vision of NEHHDC is to improve the quality of life of artisans, weavers and entrepreneurs by increasing demand for North East handicrafts and handloom products in the national and international markets.

Since its formation, NEHHDC has been striving for the growth of artisans and weavers living in the NE Region. It has been providing marketing support through procurement of Handicrafts and Handlooms products directly from the Artisans, Weavers, Self-Help Groups at Clusters and selling the same through its Sales Emporia located at Shillong, Guwahati, Kolkata, New Delhi and Gujarat and through Sales Promotion Offices located at Chennai and Bangalore. In addition, NEHHDC has been participating in the conduct of various exhibitions and marketing events all across the country. In addition, it has undertaken various other activities such as the training and capacity building of artisans and weavers, design development workshops, and seminars for skill and knowledge upgradation.

Within the past two years, NEHHDC has gone through a huge transformation. Working towards impact driven initiatives in the sectors of Handloom and Handicrafts in the NE Region, it has undertaken initiatives such as technology interventions, implementation of government schemes, upgradation in the marketing platforms, MOUs and Collaborations etc.

The new initiatives also include: diversification of the portfolio; revamping of the model of Purbashree-managed by vendors and entrepreneurs; establishment of testing, finishing and calendaring units; In house design cum handloom and handicraft production centre; own brand – 'Nature's Weaves', introduction of Departments to strategically develop the organization, Free platform to artisans to participate in various exhibitions, and setting up an 'Eri Silk Spinning Plant' at Integrated Textile Park, Mushalpur, Baksa (Assam).





# 4.5. North Eastern Region Community Resource Management Society

The North Eastern Region Community Resource Management Society (NERCRMS) is a society under the North Eastern Council (NEC), Ministry of DoNER, Government of India, which has been formed for the implementation of development projects in the North Eastern Region of India. The Society successfully implemented 3 (three) phases of North Eastern Region Community Resource Management Project (NERCORMP) i.e. (a) NERCORMP-I from 1999 to 2008 jointly funded by the Government of India and International Fund for Agricultural Development (IFAD); (b) NERCORMP-II from 2010 to 2017 jointly funded by Government of India and IFAD and (c) NERCORMP-III from 2014 to 2021 with the full funding from Government of India.

The NERCORMP-I and II were implemented in 6 districts in three states i.e. Karbi Anglong and Dima Hasao districts of Assam; Ukhrul and Senapati districts of Manipur; West Garo Hills and West Khasi Hills districts of Meghalaya. The NERCORMP-III was implemented in Changlang and Tirap (including Longding) districts of Arunachal Pradesh; and Chandel and Churachandpur districts of Manipur. The Society developed community based institutions for implementation of NERCORMP-I, II & III. During the above phases of NERCORMP, the Society had formed 2,889 Natural Resource Management Groups (NaRMGs), 8403 Self Help Groups (SHGs), 290 NaRM-G Cluster Associations, 300 SHG Federations, 4 Community Based Micro Credit institutions and 50 Farmer Producer Groups. In all, 118,843 households in 2,532 villages have been benefited by various interventions under the three phases of the NERCORMP. The project had been implemented at a total cost of Rs. 970.94 crore, of which the Government of India contributed Rs 731.28 crore. Other sources included support from IFAD, financial institutions and community contributions.

The Society also implemented few additional projects received from North Eastern Council i.e. Setting up of piggery fattening units in NERCORMP-III districts of North East India; Setting up of poultry hatchery and rearing units in NERCORMP-III districts of North East India; Construction of Kankhu market complex at Chandel, Manipur; Construction of Resource Centre at Ukhrul, Manipur; Construction of U Tirot Sing Market Complex, Mairang, West Khasi Hills, Meghalaya; Construction of Wayside amenities; Construction of Wino Bazar Sabji-Mandi at Ukhrul, Manipur etc.

NERCRMS plans to continue implementation of development interventions beyond NERCORMP, covering all the eight states of NE Region with the support of NEC.





# 4.6. North East Resource Centre

The North East Resource Centre (NERCEN) has been established by the North-Eastern Council as a State-of-the-art Resource Centre. It will function as a key vertical within the NEC, by helping the latter to fulfil its twin roles, viz. (a) acting as a Planning and Development body for the NE Region, and (b) working as a Resource Centre for the NE Region.

Based on a consultancy study, NEC has created a North East Resource Centre (NERCEN) within the Council headed by a Joint Secretary level officer. There will be six Centres of Excellence (COEs), all of which have been mapped with the different NEC sectors. NERCEN will have a governance structure to guide its overall functioning, which will include the Members of NEC in advisory capacity and a Steering Committee headed by Secretary, NEC.

NERCEN has been mandated with the task of establishing Centres of Excellence across different work streams such as Technology Acceleration, Skill & Competency, Policy & Planning, Research & Monitoring, Data & Analytics and Regional Documentation & Information Centre. The Centre of Excellence shall cover major sector such as Agriculture - allied, Tourism, Education, Health, Science & Technology, Sports, etc.

NERCEN shall enable the imbibing of good governance and adoption of best practices for development across important sectors in the region. The resource centre can enable the states and the implementing agencies to properly plan and execute projects, promote research and innovations, and provide strategic policy vision for the region.





# 4.7. North East Cane and Bamboo Development Council

The North East Cane and Bamboo Development Council (NECBDC) was earlier known as the Cane and Bamboo Technology Centre (CBTC)). It is an institution of the Ministry of DoNER that has been tasked with development of the cane and bamboo sector in the country especially in the NE Region. It is involved in areas like (a) Capacity Building/Skilled Development; (b) functioning as the Bamboo Technical Support Group (BTSG) of National Bamboo Mission; (c) Participation in Domestic and International Trade Fairs and Exhibitions; (d) Development of Cane and Bamboo Clusters in NER; and (e) Bamboo Technology Park at Byrnihat, Assam. It has created 16 Cane and Bamboo clusters on different themes in all 8 States (two in each States) of the NE Region.

The NE Region accounts for nearly 39% of the country's total Bamboo area. Government is giving a focused attention on the plantation of Bamboo in NER. Central Government has launched a restructured National Bamboo Mission in 2018-19 under the Ministry of Agriculture and Farmers Welfare focusing on the complete value chain of bamboo sector to link growers to consumers starting from plantation to processing to marketing. Bamboo has been removed from the classification of trees in Indian Forest Act 1927 through Indian Forest (Amendment) Act, 2017 and re-classified as 'grass' by the Ministry of Environment, Forest & Climate Change. The decision is a game changer for development of Bamboo in the North Eastern Region as it would facilitate large scale cultivation and processing of bamboo.

The NECBDC has facilitated the emergence of a new scenario in the North Eastern India. Almost two decades of its existence in this part of India has struck the imaginations of the population here and led them on to dream about the possibility of a healthy future. Inevitably a future replete with expanded livelihood opportunities stemming unendingly from the right and rich harvest of Bamboos. NECBDC strongly believe in the thrust which will be felt globally following our role as the matchmaker of the human resource, bamboo and technology.

The NECBDC was incorporated with the objective of organizing the hitherto untapped bamboo sector of NE India which is a significant occupant of its topography, culture and customary practices since time immemorial. Its formal existence came into being as a coordinated effort headed by the North Eastern Development Finance Corporation (NEDFi) along with the Department of Science and Technology, Govt of India, UNIDO and UNDP. NECBDC is the field implementation agency and forms a part of the Technology Management Program (TMP) which is a joint effort of Govt of India and UNDP. It has embarked on a new phase of programmes and projects in the bamboo sector with renewed vigour under the aegis of North Eastern Council (NEC). It can be said that NECBDC is one of core outreach programme of NEC for giving a shift to the economy of NE in the positive direction. The progress of these two organizations has been acknowledged by the greater community as the change agent whose need was continually felt in the region.



# 5. Sector Specific Statistics

This chapter furnishes statistics pertaining to the North Eastern (NE) states, which are related to the following major sectors:

- Agriculture & Horticulture;
- Livestock & Animal Husbandry;
- Fisheries;
- Forests & Bamboo;
- Minerals & Mining;
- Industry including MSME and Handicrafts & Handlooms;
- Electricity & Renewable Energy Sources;
- Transportation (Roads, Railways, Airways and Waterways);
- Information & Communication Technology;
- Tourism;
- Banking & Insurance;
- Education (School Education & Higher Education including Technical Education);
- Health & Family Welfare;
- Water Supply & Sanitation;
- Rural Development;
- Science & Technology;
- Sports; and
- Labour & Employment.

The above themes cover various sectors of the economy like the primary sector (agriculture and allied as well as minerals and mining), secondary sector (industry, electricity and water supply) and tertiary (services) sector in major areas like transportation, banking and finance, information and communications technology, and tourism. Further, the coverage includes the socially important aspects like health and family welfare, education, water supply and sanitation, rural development, and sports. In addition, the labour and employment position of the states has been separately discussed.

It may be noted that the various tables have been developed based on data available in the source documents used for their preparation. The reader is requested to refer to these cited sources for additional information on each of the above themes that may be of his or her interest.

All attempts have been made to furnish the latest data. However, given the wide range of topics covered by the Terms of Reference and the relatively short time available for the completion of works related to this yearbook, the Consultants had to rely (except in a few cases) upon secondary information as readily available in the public domain. The terms of the assignment had also permitted this approach. Hence; the data, as reported in the following pages, is based upon the latest available sources till October 2023, when this yearbook was prepared.



# 5.1. Agriculture & Horticulture

In the NE Region, consisting of eight states of India, the reliance upon the farm sector is quite marked. The Census of India conducted in 2011, had reported that about 42% of the workforce in the region consisted of 'cultivators' (with own or tenanted land), while 13% were reported to be 'agricultural labourers'. As per the registration of unorganized sector workers on e-Shram (the National Database Of Unorganized Workers), about 54% of the registrations in the NE Region (in mid-September 2023) were from the agricultural sector. Hence, it can be inferred that over 50% of the work-force of the region remains wholly or partially reliant upon the farm sector.

There is a wide prevalence of traditional agricultural practices marked by proven and age-old techniques. These include the shifting agricultural system (known as jhum cultivation) in the hill areas, and the wet rice cultivation pre-dominantly practiced in the valley areas. While progressive farmers have started diversifying into cash-based fields in order to meet the growing demand for a wider variety of crops (including fruits and vegetables, fish, meat, milk, and eggs in the urban areas), large swathes of the farm system in the NE states are marked by subsistence level practices and low productivity. Consequently, the states are still largely reliant upon imports of farm-based products like food-grains (including pulses), sugar, edible oil, potato, onion, fish, etc. including items routed through the public distribution system.

While agricultural development in India has always been viewed from the production perspective, the Hon'ble Prime Minister of India had given a clarion call for 'doubling farmers' income'. Hence, policymakers have to approach agriculture from the producers' point of view too. Under this paradigm, there is a need to think about agriculture with the aim of not only meeting the national requirements of food and other farm-based produce, but also equally for the improvement of the farmers' income and welfare. While the NE states are largely deficit in the output of field crops to meet their own needs, they have a large marketable surplus of several horticultural crops. There is a need to aggregate these crops (wherever economically feasible) and consider viable processing technologies given the constraints of lower output, variable quality and seasonality. Such a move can help to improve farmers' incomes and welfare across the region.

As agriculture sector is primary employer in the NE Region, priority is being accorded for its planned development. Following a joint review of the sector at the Ministerial level by the Ministries of Agriculture & Farmers' Welfare and of Development of the NE Region, a Task Force was constituted to steer its growth in the NE Region. The Task Force considered modifications required for existing schemes and new schemes for the utilization of the 10% Gross Budgetary Support. It recommended that the following sub-sectors be focused upon: bamboo, spices (ginger, chili, turmeric and large cardamom), pineapple and agar wood. In addition, NEC has also been working for the all-round development and modernisation of agriculture in the region along with the State Governments.

The following pages give the statistics related to field crops and horticultural crops sourced from various government sources, including output, area under crops and yields, apart from the status of inputs and related infrastructure. The role of the farm sector in the Gross State Value Added has been highlighted. In addition, the statistics cover two major plantation crops of the region, viz. tea and rubber.



Table-5.1.1: Net State Value Added by Economic Activity-Agriculture (at Current Prices) - NE States

State			Rupees	in Lakh		
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	274703	294708	300113	319568	339885	373699
Assam	2967137	3112293	3323795	3784860	4341828	5009152
Manipur	194498	418727	475386	508327	554631	654763
Meghalaya	236640	253690	279834	288528	359824	392310
Mizoram	139764	159623	168041	173464	183698	186775
Nagaland	360220	400530	380830	376920	385517	222502
Sikkim	137539	178394	211691	233508	234837	249226
Tripura	720137	725687	911299	1014006	1157026	1171027
NE Region	5030638	5543652	6050989	6699181	7557246	8259454

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States 2021-22', based on data from the National Statistics Office, Ministry of Statistics & Programme Implementation, Government of India [Table-30 Page Nos. 85-86] supplemented by data from 'Handbook of Statistics on Indian States 2022-23', [Table-33 Page No 94] released by Reserve bank of India in mid-November 2023

#### Notes

## 1. NSVA

Gross value added (GVA) is defined as output (at basic prices) minus intermediate consumption (at purchaser prices). By subtracting the consumption of fixed capital from GVA the corresponding net value added (NVA) is obtained. NVA for all economic activities within a state is termed as the Net State Value Added.

Basic Price is the amount receivable by the producer from the purchaser for a unit of a good or service produced as output minus any tax payable, and plus any subsidy receivable, by the producer as a consequence of its production or sale. It excludes any transport charges invoiced separately by the producer.

## 2. Agriculture & Allied Sector

The sector comprises agriculture proper, livestock and livestock products and operation of irrigation system. In addition, the broader sector includes: forestry & logging, and fishing.

# 3. Current Prices

National income (or state income) is measured at prices prevailing during the period or in other words at current prices. However, such measurement is not comparable across years, since national (or state) income can change due to variations of both output and prices. Hence national (or state) incomes at current prices do not give a proper measure of the overall real increase in production of the country or the economic welfare of the people or growth of the economy. National (or state) income at current prices gives the nominal size of the economy, and not its real size.



Table-5.1.2: Net State Value Added by Economic Activity-Agriculture (at Constant Prices) - NE States

State		F	Rupees in Lakh	(Base: 2011-12	2)	
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	182046	185502	185995	184225	195685	214217
Assam	2390436	2416994	2461170	2319352	2318891	2479968
Manipur	119341	244531	243709	229677	233738	240105
Meghalaya	189646	191585	184203	176566	177377	178011
Mizoram	81225	82746	90048	90554	98010	96072
Nagaland	235054	224332	202099	207913	211872	109707
Sikkim	81071	95637	108145	113933	104611	104809
Tripura	379442	409401	457178	458961	467297	466565
NE Region	3658261	3850728	3932547	3781181	3807481	3889454

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the National Statistics Office, Ministry of Statistics & Programme Implementation, Government of India [Table-31 Page Nos. 89-90] supplemented by data from 'Handbook of Statistics on Indian States 2022-23', [Table-34 Page No 98] released by Reserve bank of India in mid-November 2023

#### Notes

#### Constant Prices

National income (or State income) is measured at prices prevailing during the period or in other words at current prices. When calculated over a number of years, the changes in national income would, therefore, include implicitly not only the effect of the changes in production but also the changes in prices. This estimate compared over the period would not, therefore, give a proper measure of the overall real increase in production of the country or the economic welfare of the people or growth of the economy. Therefore, it would be necessary to eliminate the effect of prices, or in other words to re-compute the whole series at given prices of one particular base year. National income thus computed is termed as national income at constant prices or in real terms. The above observations for 'national income' are also applicable for 'state income' (or net state domestic product).

In India, the Base Year of the GDP Series was revised from 2004-05 to 2011-12 and released on 30 January, 2015. This was done after adaptation of the sources and methods in line with the SNA 2008, which is the latest version of the international statistical standard for the national accounts, adopted by the United Nations Statistical Commission (UNSC) in 2009. The revision in the base year of macroeconomic indicators like Gross Domestic Product (GDP) not only use latest data from censuses and surveys, but also incorporates information from administrative data that have become robust over time.

#### 2. Other Concepts and Definitions

These have been covered in the previous tables.



Table-5.1.3: Gross Sown Area in the NE States

State			In '000 hectares		
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	313	316	320	320	328
Assam	4087	4045	4004	3975	3888
Manipur	469	446	441	331	410
Meghalaya	309	309	312	313	309
Mizoram	186	188	187	195	206
Nagaland	521	530	529	530	532
Sikkim	146	153	162	162	140
Tripura	491	487	487	487	487
Total – NE Region	6522	6474	6442	6313	6300
Total - India	201158	200876	201179	211359	216107

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table-52 Page No. 174] — based on data from 'Land Use Statistics- at a Glance', brought out by the Ministry of Agriculture & Farmers' Welfare, Government of India; supplemented by data from 'Handbook of Statistics on Indian States', 2022-23 [Table-55 Page No. 182] brought out by the Reserve Bank of India in mid-November 2023

#### Notes

- 1. Gross Sown area for the following states have been taken from latest Agriculture Census or are estimated based on latest available year data received from the states: Manipur, Mizoram, and Sikkim.
- 2. Gross Sown Area (also known as Gross Cropped Area)

This represents the total area sown once and/or more than once in a particular year, i.e. the area is counted as many times as there are sowings in a year. This total area is also known as total cropped area or total area sown.



Wet rice cultivation in the Ziro Valley of Arunachal Pradesh



Table-5.1.4: Net Sown Area in the NE States

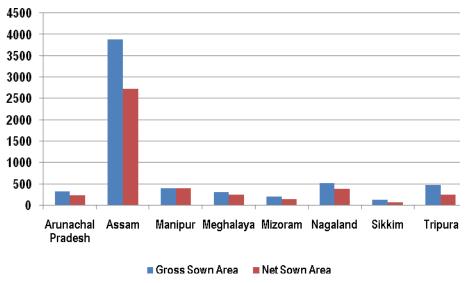
State		In '000 hectares									
	2016-17	2017-18	2018-19	2019-20	2020-21						
Arunachal Pradesh	232	233	234	235	242						
Assam	2774	2723	2723	2699	2724						
Manipur	469	446	441	331	410						
Meghalaya	252	253	255	255	253						
Mizoram	145	145	145	145	145						
Nagaland	385	385	384	384	386						
Sikkim	77	77	77	77	77						
Tripura	255	255	256	255	255						
Total - NE Region	4589	4517	4515	4381	4492						
Total - India	139000	138770	138439	139901	141544						

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table-53 Page No. 176] — based on data from 'Land Use Statistics- at a Glance', brought out by the Ministry of Agriculture & Farmers' Welfare, Government of India; supplemented by data from 'Handbook of Statistics on Indian States', 2022-23 [Table-55 Page No. 182] brought out by the Reserve Bank of India in mid-November 2023

#### Notes

- 1. Net Sown area for the following states have been taken from latest Agriculture Census or are estimated based on latest available year data received from the states: Manipur, Mizoram, and Sikkim.
- 2. Net Sown Area: This represents the total area sown with crops and orchards. Area sowed more than once in the same year is counted only once.

Graph-5.1.1: Gross Sown Area & Net Sown Area in the NE States (2020-21)



Y-axis gives the sown area in thousands of hectares



Table-5.1.5: Gross Irrigated Area in the NE States

State			In '000 hectares		
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	56	56	56	56	63
Assam	465	483	494	543	571
Manipur	75	73	72	54	69
Meghalaya	143	140	142	135	120
Mizoram	30	29	29	29	29
Nagaland	121	123	126	128	130
Sikkim	16	15	15	14	14
Tripura	118	117	117	118	116
Total – NE Region	1024	1036	1051	1077	1112
Total - India	99620	101467	104711	112443	118934

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table-54 Page No. 178] — based on data from 'Land Use Statistics- at a Glance', brought out by the Ministry of Agriculture & Farmers' Welfare, Government of India; supplemented by data from 'Handbook of Statistics on Indian States', 2022-23 [Table-57 Page No. 186] brought out by the Reserve Bank of India in mid-November 2023

#### Notes

1. Gross Irrigated Area for the following states have been taken from latest Agriculture Census or are estimated based on latest available year data received from the states: Manipur, Mizoram, and Sikkim.

# 2. Gross Irrigated Area

It is the total area under crops, irrigated once or more than once in a year. It is counted as many times as the number of times the areas are cropped and irrigated in a year.



Solar powered pumps have been installed for irrigation purposes at many places in the NE Region



Table-5.1.6: Net Irrigated Area in the NE States

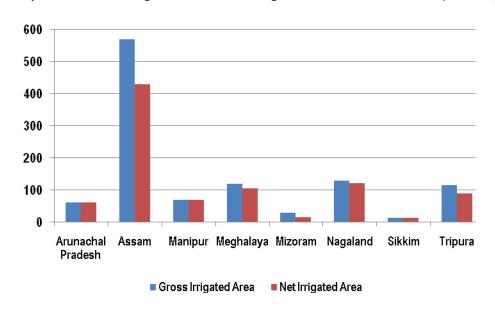
State			In '000 hectares		
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	54	55	55	56	62
Assam	362	357	366	425	431
Manipur	75	73	72	54	69
Meghalaya	97	100	101	105	106
Mizoram	16	16	16	16	16
Nagaland	110	116	118	120	122
Sikkim	16	15	15	14	14
Tripura	82	80	87	89	90
Total – NE Region	812	812	830	879	910
Total - India	69270	70164	72244	75469	77729

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table-55 Page No. 180] — based on data from 'Land Use Statistics- at a Glance', brought out by the Ministry of Agriculture & Farmers' Welfare, Government of India; supplemented by data from 'Handbook of Statistics on Indian States', 2022-23 [Table-58 Page No. 188] brought out by the Reserve Bank of India in mid-November 2023

#### Notes

- 1. Net Irrigated Area for the following states have been taken from latest Agriculture Census or are estimated based on latest available year data received from the states: Manipur, Mizoram, and Sikkim.
- 2. Net Irrigated Area: It is the area irrigated through any source once in a year for a particular crop. Area irrigated more than once in the same year is counted only once.

Graph-5.1.2: Gross Irrigated Area & Net Irrigated Area in the NE States (2020-21)



Y-axis gives the irrigated area in thousands of hectares



Table-5.1.7: Cropping Intensity in the NE States

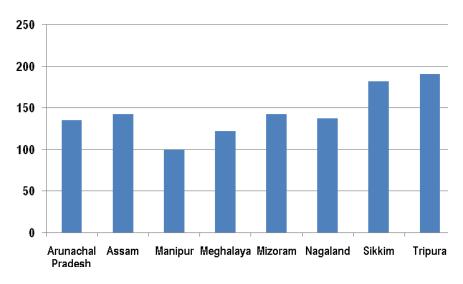
State	In Percentage				
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	135.0	135.9	136.7	136.6	135.7
Assam	147.4	148.6	147.0	147.2	142.8
Manipur	100.0	100.0	100.0	100.0	100.0
Meghalaya	122.3	122.1	122.5	122.7	122.2
Mizoram	128.8	130.1	129.2	134.9	142.5
Nagaland	135.5	137.8	137.9	137.9	137.7
Sikkim	189.2	197.8	210.2	210.0	181.9
Tripura	192.0	190.8	190.6	190.7	190.8
Average - NE Region	142.1	143.3	142.7	144.1	140.2
Average - India	144.7	144.8	145.3	151.1	152.7

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 [Table-56 Page No. 181] — based on data from 'Land Use Statistics- at a Glance', brought out by the Ministry of Agriculture & Farmers' Welfare, Government of India; supplemented by data from 'Handbook of Statistics on Indian States', 2022-23 [Table-59 Page No. 190] brought out by the Reserve Bank of India in mid-November 2023

#### Notes

- 1. Cropping Intensity for the following states have been taken from latest Agriculture Census or are estimated based on latest available year data received from the states: Manipur, Mizoram, and Sikkim
- 2. Cropping Intensity of NE Region has been derived from the figures for Gross Net Area and Net Sown Area provided at Tables-5.1.3 and 5.1.4 respectively.
- 3. Cropping Intensity refers to the raising of a number of crops from the same field during one agriculture year; it can be expressed as follows: Cropping Intensity = (Gross Cropped Area / Net Area Sown) x 100%

**Graph-5.1.3: Cropping Intensity in the NE States** 



Y-axis Cropping Intensity of NE States as a Percentage (in 2020-21)



Table-5.1.8: State-wise Total Production of Foodgrains in NE States

State	In '000 MT				
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	343.3	359.1	365.2	373.2	377.1
Assam	4952.5	5525.9	5465.9	5236.4	5487.5
Manipur	525.1	706.5	495.0	421.4	697.1
Meghalaya	260.1	361.8	260.7	360.8	353.3
Mizoram	75.2	74.2	76.9	76.5	80.7
Nagaland	536.9	552.3	558.1	565.4	570.2
Sikkim	101.3	93.9	92.0	92.1	91.8
Tripura	859.6	855.4	836.3	853.3	867.6
Total – NE Region	7654.0	8529.1	8150.1	7979.1	8525.3
Total - India	275111.7	285013.2	285209.1	297504.5	310741.7

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-61 Page No. 192]

#### Note

# 1. Foodgrains

Foodgrains shall be whole or broken kernel of cereals (including cereals) and pulses meant for human consumption. These include cereals like paddy, rice, wheat, oats, barley, maize, various millet varieties (including jowar or sorghum, bajra or pearl millet, ragi or finger millet etc.), and pulses (such as lentils, pea, cow pea, chick pea, green gram, black gram etc.).

5000
4000
2000
Arunachal Assam Manipur Meghalaya Mizoram Nagaland Sikkim Tripura
Pradesh

Graph-5.1.4: Total Production of Foodgrains in the NE States

Y-axis gives the Total Production in Thousands of MT (in 2020-21)

■ Total Foodgrain Production



Table-5.1.9: State-wise Production of Foodgrains in the NE States - Rice

State	In '000 MT				
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	220.0	233.3	240.0	244.7	247.1
Assam	4727.4	5283.7	5220.6	4984.6	5214.8
Manipur	430.4	607.8	401.6	385.5	602.2
Meghalaya	203.0	304.6	202.0	303.4	295.8
Mizoram	61.5	59.6	60.0	60.0	62.2
Nagaland	336.7	349.6	356.7	363.3	367.4
Sikkim	19.7	17.6	17.2	16.1	16.2
Tripura	814.6	812.1	793.2	810.2	803.1
Total - NE Region	6813.3	7668.3	7291.3	7167.8	7608.8
Total - India	109698.4	112757.6	116477.8	118870.3	124368.3

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-57 Page No. 184]

## Note

#### 1. Rice

Rice is the most important staple food of India and it continues to play a vital role in the national food and livelihood security system. India is having largest area under rice crop. However, productivity is lower than world's average productivity. The reason for low productivity is that rice is being grown in the country under various agro-ecologies ecologies i.e. irrigated and rain-fed systems.

Un-milled rice is called paddy. The milling process removes the husk ('hulling' of paddy), which gives brown rice as it includes the bran. 'Polishing' removes the bran and yields polished ('white') rice. The weight of husk and bran is about one-third of the weight of the paddy. The rest (around two-thirds by weight) is polished rice, usually called 'rice'.



Transplanting rice in Assam



Table-5.1.10: State-wise Production of Foodgrains in the NE States - Wheat

State	In '000 MT				
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	7.7	7.7	7.7	6.7	7.7
Assam	23.5	24.7	23.7	14.4	12.9
Manipur	5.6	5.6	5.7	5.8	5.8
Meghalaya	0.9	0.9	0.9	0.9	0.9
Mizoram	NA	NA	NA	NA	NA
Nagaland	6.2	6.3	6.3	6.3	6.3
Sikkim	0.4	0.2	0.2	0.2	0.1
Tripura	0.5	0.4	0.3	0.3	0.1
Total - NE Region	44.8	45.8	44.8	34.6	33.8
Total - India	98510.2	99869.5	103596.2	107860.5	109586.5

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-58 Page No. 186]

#### Notes

- 1. NA stands for 'Not Available'
- 2. '---' stand for no / negligible production
- 3. Wheat

Wheat is the second most important staple food crop and plays a key role in food and nutritional security of the country. Higher productivity of wheat is mainly confined to states contributed to green revolution like Punjab, Haryana and Western parts of Uttar Pradesh.

With the increasing consumption of bread, rotis and other items made out of wheat, its consumption has started rising in the NE states, which have traditionally relied upon rice.





Table-5.1.11: State-wise Production of Foodgrains in the NE States - Coarse Cereals

State	In '000 MT				
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	102.5	104.5	105.4	107.6	107.9
Assam	94.1	101.8	108.0	131.3	151.2
Manipur	58.8	63.1	58.2	4.9	59.7
Meghalaya	44.4	44.4	44.4	44.5	44.5
Mizoram	8.9	9.5	11.0	11.0	12.6
Nagaland	149.5	150.3	148.8	149.0	149.4
Sikkim	75.9	71.0	69.8	70.7	70.5
Tripura	21.3	23.6	24.0	24.1	44.2
Total - NE Region	555.4	568.2	569.6	543.1	640.0
Total - India	43772.1	46970.2	43059.4	47748.4	51323.8

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-59 Page No. 188]

## Notes

#### 1. NA stands for 'Not Available'

#### 2. Coarse Cereals

Coarse cereals include cereals other than rice and wheat. These cereals are the important food and fodder crops in semi-arid regions of India, source of nutrition to the malnourished and regions facing large climatic uncertainties. These crops have wider adoptability for wide range of temperatures, moisture regimes. Coarse cereals are mainly grown for dual purpose and used as food for human being and feed and fodder for livestock.

Maize (corn) is widely grown in the hill states as a jhum crop. Its cultivation has started picking up in the valley areas, primarily as a source of animal feed.



Maize farming is picking up in many places of the NE Region



Table-5.1.12: State-wise Production of Foodgrains in the NE States – Pulses

State	In '000 MT				
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	13.1	13.5	12.0	14.2	14.3
Assam	107.5	115.8	113.5	106.1	108.7
Manipur	30.3	30.0	29.5	25.2	29.4
Meghalaya	11.8	11.9	13.4	12.0	12.0
Mizoram	4.8	5.1	5.9	5.5	5.9
Nagaland	44.5	46.1	46.4	46.8	47.1
Sikkim	5.5	5.1	4.8	5.0	5.0
Tripura	23.2	19.3	18.9	18.7	20.3
Total - NE Region	240.7	246.8	244.4	233.5	242.7
Total - India	23130.9	25415.9	22076.0	23025.3	25463.1

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-60 Page No. 190]

#### Notes

# 1. NA stands for 'Not Available'

## 2. Pulses

Pulses are an important source of protein for human being. More than 80% of the pulses are grown in rain-fed condition. India is one of the largest producers as well as consumers of pulses.

Pulses are the edible seeds of plants in the legume family. Pulses grow in pods and come in a variety of shapes, sizes and colours. The United Nations Food and Agriculture Organization (FAO) recognizes 11 types of pulses: dry beans, dry broad beans, dry peas, chickpeas, cow peas, pigeon peas, lentils, Bambara beans, vetches, lupins and pulses nes (not elsewhere specified – minor pulses that don't fall into one of the other categories).

The NE states have large deficits in the output of pulses.





Table-5.1.13: State-wise Production of Non-Foodgrains in the NE States - Oilseeds

State		In '000 MT				
	2016-17	2017-18	2018-19	2019-20	2020-21	
Arunachal Pradesh	36.6	37.0	37.0	37.1	37.3	
Assam	204.3	200.6	198.4	192.4	199.9	
Manipur	32.3	32.8	32.2	27.4	32.6	
Meghalaya	14.9	15.1	15.1	15.1	15.2	
Mizoram	2.5	2.4	2.8	2.8	2.9	
Nagaland	68.9	69.2	69.5	70.8	70.2	
Sikkim	6.4	5.8	5.6	5.6	5.7	
Tripura	12.5	13.8	14.0	14.4	13.2	
Total - NE Region	378.4	376.7	374.6	365.6	377.0	
Total - India	31275.62	31459.3	31521.8	33219.2	35946.2	

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-62 Page No. 194]

#### Notes

#### 1. NA stands for 'Not Available'

2. Oilseeds data includes data on nine oilseeds. India has been cultivating almost all oilseed crops. The major oilseeds are soybean, groundnut, rapeseed-mustard, sesame, sunflower, castor, safflower, linseed and niger seed. India's output of palm oil is inadequate and large-scale imports of this commodity have been taking place.

Nationally, the highest average contribution to total production of oilseeds is of soybean (38%) followed by Rapeseed-Mustard (27%) and groundnut (27%). The above are based on production data from 2016-17 to 2020-21. Similarly, highest average area contribution to total oilseed area is of soybean (44%) followed by Rapeseed-Mustard (24%) and Groundnut (20%). On an average, total Kharif oilseed crops contribution to total production is about 67% and the remaining 33% is of Rabi / summer oilseed crops. The NE states have large deficits in the output of oilseeds, and large scale movement of edible oil takes place into these states.



Groundnut field in Tripura promoted by the Agriculture Department



Table-5.1.14: State-wise Production of Non-Foodgrains in the NE States - Cotton (Lint)

State		In '000 Bales					
	2016-17	2017-18	2018-19	2019-20	2020-21		
Arunachal Pradesh	NA	NA	NA	NA	NA		
Assam	NA	NA	NA	NA	0.4		
Manipur	NA	NA	NA	NA	NA		
Meghalaya	NA	NA	NA	NA	8.6		
Mizoram	NA	NA	NA	NA	0.0		
Nagaland	NA	NA	NA	NA	0.0		
Sikkim	NA	NA	NA	NA	NA		
Tripura	NA	NA	NA	NA	0.9		
Total - NE Region	NA	NA	NA	NA	9.9		
Total - India	32577.4	32805.0	28042.0	36065.0	35248.3		

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-63 Page No. 196]

#### Notes

- 1. Cotton output is measured in terms of bales of 170 kg each
- 2. NA stands for 'Not Available'
- 3. Cotton (Lint)

Cotton lint refers to the fibrous coat that covers the cotton seeds. Cotton fibre is separated from the seeds by a process of ginning. This leads to the availability of the cotton (lint), which is processed further to remove the trash (seed fragments, dust and motes etc.) before the subsequent processes of spinning, weaving etc. The NE Region has a negligible output of cotton.





Table-5.1.15: State-wise Production of Non-Foodgrains in the NE States – Sugarcane

State	In '000 MT				
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	37.7	38.4	45.8	39.2	46.4
Assam	1207.2	1143.0	1093.9	1218.1	1093.1
Manipur	348.0	348.0	315.1	0.0	279.4
Meghalaya	0.4	0.4	0.4	0.4	0.4
Mizoram	50.5	44.8	44.3	44.3	43.0
Nagaland	192.4	192.8	193.2	193.6	203.0
Sikkim	NA	NA	NA	NA	NA
Tripura	44.1	42.5	35.9	36.4	48.6
Total – NE Region	1880.3	1809.9	1728.6	1532.0	1713.9
Total – India	306069.0	379904.9	405416.2	370500.3	405398.7

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-64 Page No. 198]

#### Notes

## 1. NA stands for 'Not Available'

## 2. Sugarcane

It is a tall and perennial grass that is used for the production of sugar. Most of the sugar in the world is obtained from sugarcane. India is a major sugarcane producer, but the output in the NE states is low. Consequently, sugar is imported into the region.





Table-5.1.16: State-wise Production of Non-Foodgrains in the NE States - Raw Jute & Mesta

State	In '000 Bales					
	2016-17	2017-18	2018-19	2019-20	2020-21	
Arunachal Pradesh	NA	NA	NA	NA	NA	
Assam	824.1	861.5	781.4	811.7	794.2	
Manipur	NA	NA	NA	NA	NA	
Meghalaya	94.7	94.8	94.9	95.0	95.0	
Mizoram	NA	NA	NA	NA	NA	
Nagaland	7.9	44.3	44.5	44.6	38.1	
Sikkim	NA	NA	NA	NA	NA	
Tripura	10.3	10.0	10.0	5.3	6.2	
Total - NE Region	937.0	1010.6	930.8	956.6	933.5	
Total - India	10962.4	10032.9	9819.7	9876.8	9354.4	

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-65 Page No. 199]

#### Notes

- 1. Raw Jute & Mesta output is measured in terms of bales of 180 kg each
- 2. NA stands for 'Not Available'
- 3. Raw Jute & Mesta

Jute is an important natural fibre crop in India next to cotton. In trade and industry, jute and mesta crop together known as raw jute as their uses are almost the same. However, they belong to two different species; jute is *Corchorus* spp. from *Sparrmanniaceae* family, while mesta is *Hibiscus* spp. from *Malvaceae* family.

Raw jute plays an important role in the country's economy. Raw jute was originally considered as a source of raw material for packaging industries only. But it has now emerged as a versatile raw material for diverse applications, such as, textile industries, paper industries, building and automotive industries, use as soil saver, use as decorative and furnishing materials, etc





Table-5.1.17: State-wise Total Area under Foodgrains in NE States

State	In '000 Hectares					
	2016-17	2017-18	2018-19	2019-20	2020-21	
Arunachal Pradesh	203.5	226.7	228.2	228.8	229.0	
Assam	2667.0	2643.0	2629.8	2487.7	2558.2	
Manipur	304.2	297.0	293.2	207.6	284.7	
Meghalaya	140.9	141.0	142.0	140.8	137.5	
Mizoram	46.2	45.4	45.5	45.6	46.5	
Nagaland	329.5	336.5	335.4	340.6	342.6	
Sikkim	62.7	56.4	55.1	55.2	54.7	
Tripura	317.4	318.6	312.9	308.0	313.6	
Total - NE Region	4071.4	4064.6	4042.1	3814.3	3966.8	
Total - India	129231.2	127524.2	124776.2	126994.5	129795.0	

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-70 Page No. 209]

Notes

- 1. NA stands for 'Not Available'
- 2. Foodgrains: described under Table-5.1.8

Table-5.1.18: State-wise Area under Foodgrains in the NE States – Rice

State	In '000 Hectares					
	2016-17	2017-18	2018-19	2019-20	2020-21	
Arunachal Pradesh	131.0	132.0	133.2	133.5	133.8	
Assam	2467.1	2433.7	2425.2	2290.5	2360.5	
Manipur	244.0	236.7	233.5	175.6	225.8	
Meghalaya	111.2	111.1	110.9	111.0	107.6	
Mizoram	36.9	36.1	35.6	35.2	35.2	
Nagaland	206.7	212.0	214.5	217.0	218.8	
Sikkim	10.7	9.5	9.3	8.7	8.7	
Tripura	277.1	274.1	269.4	267.3	263.8	
Total - NE Region	3484.7	3445.2	3431.6	3238.8	3354.2	
Total – India	43993.4	43774.1	44156.4	43662.3	45768.7	

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-66 Page No. 201]

Notes

1. NA stands for 'Not Available'



Table-5.1.19: State-wise Area under Foodgrains in the NE States - Wheat

State	In '000 Hectares				
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	3.9	3.9	3.9	3.4	3.9
Assam	17.5	17.8	16.9	11.3	9.3
Manipur	2.3	2.3	2.3	2.3	2.3
Meghalaya	0.5	0.5	0.5	0.5	0.5
Mizoram	NA	NA	NA	NA	NA
Nagaland	3.4	3.4	3.4	3.4	3.4
Sikkim	0.3	0.2	0.2	0.2	0.1
Tripura	0.2	0.2	0.2	0.1	0.0
Total - NE Region	28.1	28.3	27.4	21.2	19.5
Total - India	30785.2	29650.6	29318.8	31357.0	31125.2

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-67 Page No. 203]

Notes

1. NA stands for 'Not Available'

Table-5.1.20: State-wise Area under Foodgrains in the NE States – Coarse Cereals

State	In '000 Hectares					
	2016-17	2017-18	2018-19	2019-20	2020-21	
Arunachal Pradesh	55.6	77.6	77.8	78.5	78.0	
Assam	36.1	36.8	37.5	41.8	46.1	
Manipur	26.8	26.9	26.4	2.2	25.5	
Meghalaya	21.1	21.1	21.1	21.1	21.1	
Mizoram	5.8	6.0	6.2	6.4	6.9	
Nagaland	80.8	81.4	79.8	79.9	79.9	
Sikkim	46.1	41.3	40.7	41.1	40.8	
Tripura	15.7	17.1	17.5	16.0	23.6	
Total - NE Region	288.0	308.2	307.0	287.0	321.9	
Total - India	25007.6	24286.5	22145.7	23987.9	24117.8	

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-68 Page No. 205]

Notes

1. NA stands for 'Not Available'



Table-5.1.21: State-wise Area under Foodgrains in the NE States – Pulses

State	In '000 Hectares				
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	13.0	13.2	13.3	13.4	13.4
Assam	146.4	154.7	150.2	144.0	142.3
Manipur	31.1	31.1	31.1	27.5	31.1
Meghalaya	8.2	8.3	9.6	8.3	8.3
Mizoram	3.5	3.3	3.8	4.1	4.3
Nagaland	38.7	39.7	37.7	40.3	40.4
Sikkim	5.7	5.4	5.0	5.2	5.1
Tripura	24.3	27.2	25.9	24.6	26.1
Total - NE Region	270.9	282.9	276.6	267.4	271.0
Total - India	29445.0	29813.0	29155.6	27987.3	28783.3

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-69 Page No. 207]

Notes

1. NA stands for 'Not Available'

Table-5.1.22: State-wise Area under Non-Foodgrains in the NE States – Oilseeds

State	In '000 Hectares					
	2016-17	2017-18	2018-19	2019-20	2020-21	
Arunachal Pradesh	35.2	35.6	35.6	35.7	35.6	
Assam	317.6	314.2	308.9	310.8	309.65	
Manipur	37.6	37.7	37.7	32.4	37.86	
Meghalaya	14.2	14.3	14.3	14.3	14.3	
Mizoram	2.2	2.2	2.3	2.5	2.5	
Nagaland	65.7	65.9	66.2	67.4	66.5	
Sikkim	7.0	6.3	6.1	6.1	6.1	
Tripura	15.4	17.7	17.1	17.2	15.3	
Total - NE Region	494.9	493.9	488.2	486.4	487.81	
Total - India	26177.1	24507.9	24794.3	27139.3	28833.69	

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-75 Page No. 219]

- 1. NA stands for 'Not Available'
- 2. Oilseeds data includes data on nine oilseeds



Table-5.1.23: State-wise Area under Non-Foodgrains in the NE States – Sugarcane

State		In '000 Hectares				
	2016-17	2017-18	2018-19	2019-20	2020-21	
Arunachal Pradesh	1.8	1.8	2.1	1.8	2.1	
Assam	31.4	30.6	31.2	29.7	30.5	
Manipur	6.0	6.0	5.5	NA	5.0	
Meghalaya	0.1	0.1	0.1	0.1	0.1	
Mizoram	1.6	1.6	1.5	1.5	1.4	
Nagaland	4.4	4.4	4.4	4.5	4.5	
Sikkim	NA	NA	NA	NA	NA	
Tripura	0.8	0.8	0.7	0.7	0.9	
Total - NE Region	46.1	45.3	45.5	38.3	44.5	
Total - India	4435.7	4737.1	5061.1	4602.7	4851.23	

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-77 Page No. 223]

Notes

1. NA stands for 'Not Available'

Table-5.1.24: State-wise Area under Non-Foodgrains in the NE States – Raw Jute & Mesta

State	In '000 Hectares							
	2016-17	2017-18	2018-19	2019-20	2020-21			
Arunachal Pradesh	0.3	0.3	0.0	NA	NA			
Assam	78.7	73.4	69.1	67.5	66			
Manipur	NA	NA	NA	NA	NA			
Meghalaya	11.1	11.1	11.2	11.2	11.2			
Mizoram	NA	NA	NA	NA	NA			
Nagaland	5.0	5.0	5.0	5.0	4.4			
Sikkim	NA	NA	NA	NA	NA			
Tripura	1.2	1.1	1.1	1.1	0.7			
Total - NE Region	96.3	90.9	86.4	84.8	82.3			
Total - India	763.4	741.8	704.8	673.3	662.44			

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-78 Page No. 224]

- 1. NA stands for 'Not Available'
- 2. '---' stands for no / negligible area



Table-5.1.25: State-wise Estimates of Yields for all Foodgrains in NE States

State			In Kg per Hectare	;	
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	1687	1584	1600	1631	1646
Assam	1857	2091	2078	2105	2145
Manipur	1726	2379	1688	2030	2448
Meghalaya	1846	2566	1835	2562	2570
Mizoram	1629	1634	1691	1676	1736
Nagaland	1629	1641	1664	1660	1664
Sikkim	1616	1665	1669	1669	1676
Tripura	2709	2685	2673	2770	2767
Average Yield – NE Region	1880	2098	2016	2092	2149
Average Yield - India	2129	2235	2286	2343	2394

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-83 Page No. 234]

Notes

1. NA stands for 'Not Available'

Table-5.1.26: State-wise Estimates of Yields in the NE States - Rice

State			In Kg per Hectare	),		
	2016-17	2017-18	2018-19	2019-20	2020-21	
Arunachal Pradesh	1679	1768	1802	1833	1847	
Assam	1916	2171	2153	2176	2209	
Manipur	1764	2568	1720	2195	2667	
Meghalaya	1826	2740	1821	2734	2750	
Mizoram	1669	1650	1688	1704	1764	
Nagaland	1629	1649	1663	1675	1679	
Sikkim	1847	1856	1856	1858	1861	
Tripura	2940	2963	2944	3031	3045	
Average Yield - NE Region	1955	2226	2125	2213	2268	
Average Yield - India	2494	2576	2638	2723	2717	

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-79 Page No. 226]

Notes

1. NA stands for 'Not Available'



Table-5.1.27: State-wise Estimates of Yields in the NE States - Wheat

State			In Kg per Hectare			
	2016-17	2017-18	2018-19	2019-20	2020-21	
Arunachal Pradesh	1969	1970	1970	1970	1970	
Assam	1344	1386	1398	1273	1379	
Manipur	2498	2498	2502	2502	2535	
Meghalaya	1913	1928	1931	1935	1935	
Mizoram	NA	NA	NA	NA	NA	
Nagaland	1840	1836	1830	1831	1834	
Sikkim	1078	1079	1079	1082	1154	
Tripura	2300	2031	2115	2230	2071	
Average Yield – NE Region	1594	1618	1635	1632	1733	
Average Yield - India	3200	3368	3533	3440	3521	

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-80 Page No. 228]

Notes

1. NA stands for 'Not Available'

Table-5.1.28: State-wise Estimates of Yields in the NE States – Coarse Cereals

State			In Kg per Hectare	1,	
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	1844	1348	1355	1371	1384
Assam	2609	2769	2883	3137	3277
Manipur	2194	2343	2205	2228	2340
Meghalaya	2105	2107	2108	2112	2113
Mizoram	1542	1584	1780	1727	1807
Nagaland	1850	1847	1865	1866	1870
Sikkim	1647	1716	1716	1722	1728
Tripura	1355	1379	1365	1507	1874
Average Yield – NE Region	1928	1844	1855	1892	1988
Average Yield - India	1750	1934	1944	1991	2128

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-81 Page No. 230]

Notes

1. NA stands for 'Not Available'



Table-5.1.29: State-wise Estimates of Yields in the NE States - Pulses

State			In Kg per Hectare	;	
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	1011	1020	901	1060	1070
Assam	735	748	756	737	764
Manipur	973	965	950	918	944
Meghalaya	1446	1439	1396	1444	1444
Mizoram	1352 154		1573	1353	1385
Nagaland	1151	1159	1230	1161	1166
Sikkim	961	954	961	962	964
Tripura	952	710	732	760	775
Average Yield – NE Region	889	872	884	873	896
Average Yield - India	786	853	757	823	885

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-82 Page No. 232]

Notes

1. NA stands for 'Not Available'

Table-5.1.30: State-wise Estimates of Yields in the NE States - Oilseeds

State			In Kg per Hectare	),	
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	1040	1040	1040	1041	1049
Assam	643	638	642	619	646
Manipur	858	870	855	846	862
Meghalaya	1051	1057	1059	1060	1062
Mizoram	1140	1113	1193	1123	1170
Nagaland	1050	1050	1050	1050	1056
Sikkim	918	924	925	925	925
Tripura	814	780	817	838	864
Average Yield - NE Region	765	763	767	752	773
Average Yield - India	1195	1284	1271	1224	1247

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-84 Page No. 236]

- 1. NA stands for 'Not Available'
- 2. Oilseeds data includes data on nine oilseeds



Table-5.1.31: State-wise Estimates of Yields in the NE States – Sugarcane

State			In Kg per Hectare	<u>}</u>	
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	21397	21406	21500	21500	21589
Assam	38466	37402	35063	41010	35845
Manipur	58000	58000	57811	NA	56561
Meghalaya	3000	2983	2992	3000	3000
Mizoram	31822 28763		30274	30150	31198
Nagaland	43527	43510	43509	43510	45520
Sikkim	NA	NA	NA	NA	NA
Tripura	53650	52716	54251	52940	56486
Average Yield – NE Region	40787	39954	37991	52000	38515
Average Yield - India	69001	80198	80105	80497	83566

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-86 Page No. 240]

Notes

1. NA stands for 'Not Available'

Table-5.1.32: State-wise Estimates of Yields in the NE States – Raw Jute & Mesta

State			In Kg per Hectare	1,	
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	NA	NA	NA	NA	NA
Assam	1885	2114	2036	2165	2166
Manipur	NA	NA	NA	NA	NA
Meghalaya	1531	1532	1532	1532	1532
Mizoram	NA	NA	NA	NA	NA
Nagaland	289	1600	1597	1594	1552
Sikkim	NA	NA	NA	NA	NA
Tripura	1585	1642	1560	909	1592
Average Yield – NE Region	1751	2001	1939	2031	2042
Average Yield - India	2585	2435	2508	2641	2542

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-87 Page No. 241]

- 1. NA stands for 'Not Available'
- 2. '---' stand for no / negligible area



Table-5.1.33: State-wise Per Hectare Consumption of Fertilizers in the NE States

State			In Kg per Hectare	<u>,</u>	
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	0.0	0.0	0.0	NA	NA
Assam	74.6	63.5	74.0	61.3	56.81
Manipur	34.7	58.0	33.2	47.9	40.39
Meghalaya	0.0	0.0	0.0	0.0	0.0
Mizoram	22.9	36.8	48.5	32.0	8.78
Nagaland	NA	NA	0.6	NA	NA
Sikkim					
Tripura	46.2	27.4	32.3	37.7	30.5
Average - India	124.4	127.9	132.1	127.8	137.15

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the 'Agricultural Statistics at a Glance', published by the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-88 Page No. 243]

#### Notes

#### NA stands for 'Not Available'

- 2. Fertilizers mainly consist of the N-P-K triad (standing for Nitrogen, Phosphorous and Potassium respectively), which are obtained from urea, phosphoric fertilizers (like DAP, MAP, TSP, SSP etc.) and muriate of potash. Di ammonium phosphate (DAP) provides the soil with both N and P, while Triple Superphosphate (TSP) provides P and Ca (calcium) a macronutrient.
- 3. Other fertilizers include those which provide the soil with: (a) macro-nutrients like sulphur (S), magnesium (Mg), calcium (Ca); and (b) micro-nutrients, such as Zinc (Zn), Copper (Cu), Manganese (Mn), Iron (Fe), Boron (B), Molybdenum (Mo), chloride (Cl) and nickel (Ni).
- 4. Sikkim has declared itself as an 'organic state' and has prohibited the use of inorganic inputs as per the Sikkim Agricultural, Horticultural Input and Livestock Feed Regulatory Act, 2014



The use of (chemical) fertilizers is very low in the NE states of India



Table-5.1.34: State-wise Storage Capacity of Foodgrains in the NE States

State			In lak	h MT		
	2016	2017	2018	2019	2020	2021
Arunachal Pradesh	0.23	0.39	0.27	0.30	0.33	0.33
Assam	6.29	3.98	4.68	3.98	4.18	4.2
Manipur	0.32	0.32	0.32	0.49	0.49	0.52
Meghalaya	0.23	0.23	0.22	0.22	0.22	0.22
Mizoram	0.67	0.25	0.93	0.67	0.25	0.25
Nagaland	0.45 0.44		0.48	0.49	0.46	0.46
Sikkim	0.00	0.00	0.00	0.00	0.23	0.23
Tripura	0.83	0.43	0.44	0.99	0.44	0.44
Total – NE Region	9.02	6.04	7.34	7.14	6.60	6.65
Total - India	814.84	772.93	843.03	855.68	755.94	817.96

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the 'Agricultural Statistics at a Glance', published by the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-95 Page No. 268]

#### Note

1. Includes storage capacity of the Food Corporation of India (both owned and hired) and of State Agencies

Table-5.1.35: State-wise Cold Storage Capacity in the NE States (at March end)

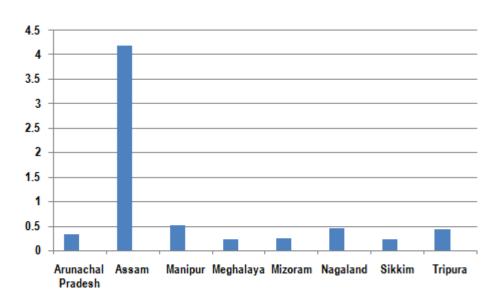
State			In I	MT		
	2016	2017	2018	2019	2020	2021
Arunachal Pradesh	5000	5000	6000	6000	6000	6000
Assam	152706	157906	163258	168096	178096	196996
Manipur	3000	3000	7100	7100	4500	4500
Meghalaya	8200	8200	8200	8200	8200	8200
Mizoram	4471	4471	3971	3971	4001	3971
Nagaland	6150	6150	7350	7350	7150	8150
Sikkim	2100	2100	2100	2100	2100	2100
Tripura	45477	45477	45477	46354	46354	51140
Total – NE Region	227104	232304	243456	249171	256401	281057
Total - India	34050359	34673886	36229675	36770637	37425097	38088249

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the 'Agricultural Statistics at a Glance', published by the Ministry of Agriculture & Farmers' Welfare, Government of India [Table-97 Page No. 271]

- 1. Data for 2020 pertains to the cold storage capacity as on 31.12.2020
- 2. Data for 2021 pertains to the cold storage capacity as on 31.01.2022
- 3. Data for other years pertains to the cold storage capacity as on 31st of March of the respective year.



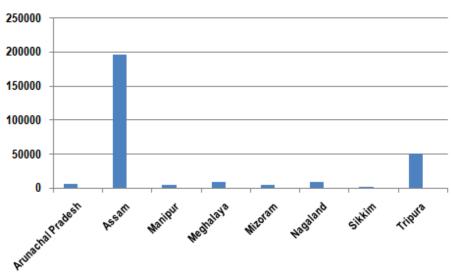
**Graph-5.1.5: Storage Capacity of Foodgrains in the NE States** 



Y-axis gives the storage capacity in Lakh MT in 2021

Note: Storage capacity of the Food Corporation of India (both owned and hired) and of State Agencies is indicated

**Graph-5.1.6: Cold Storage Capacity in the NE States (at March end)** 



Y-axis gives the cold storage capacity in MT as on 30<sup>th</sup> January 2022



Table-5.1.36: State-wise Area & Production of Horticultural Crops (2016-17)

State	Fru	uits	Vege	tables	Plantatio	on Crops	Aroma Medicina		Flowers		Spices		Honey	Honey Total		
	А	Р	А	Р	А	Р	А	Р	А	P (Loose)	P (Cut)	А	Р	Р	Р	А
Arunachal Pradesh	48.71	124.38	1.75	14.42	0.07	0.10	0.46	0.99	0.02	0.01	0.07	11.44	68.72	NA	62.46	208.70
Assam	142.89	2024.84	300.75	3329.58	91.33	177.72	4.43	0.17	5.03	33.76	55.60	119.99	291.30	1.00	664.42	5913.97
Manipur	50.58	478.77	59.39	369.85	0.90	0.32	0.00	0.00	0.08	0.05	0.24	10.47	23.14	NA	121.41	872.37
Meghalaya	37.37	426.86	49.50	523.42	25.52	32.96	0.00	0.00	0.01	0.00	0.33	18.61	92.16	0.20	131.01	1075.93
Mizoram	62.56	339.05	37.02	179.88	11.90	7.38	0.93	0.90	0.20	0.46	0.00	24.81	97.20	0.15	137.42	625.02
Nagaland	39.19	388.49	47.17	564.62	1.36	4.68	0.11	0.49	0.05	0.02	6.18	15.69	105.00	0.45	103.57	1069.92
Sikkim	18.55	25.56	25.54	190.72	0.00	0.00	0.00	0.00	0.24	16.50	0.09	32.25	66.58	0.35	76.58	299.80
Tripura	57.84	559.92	46.68	817.94	13.56	35.60	0.00	0.00	0.00	0.00	0.00	5.69	18.04	NA	123.77	1431.50
Total - NE Region	457.69	4367.87	567.79	5990.44	144.65	258.76	5.92	2.55	5.64	50.80	62.51	238.95	762.14	2.15	1420.63	11497.22
Total - India	6373.33	92918.05	10237.92	178172.40	3598.00	17972.03	664.16	971.65	306.95	1699.57	693.30	3671.09	8122.07	93.75	24851.45	300642.82

Source: https://agricoop.gov.in/en/StatHortEst (State Level Horticulture Estimates) under 'Statistics' tab in the website of the Ministry of Agriculture and Farmers Welfare, Government of India (based on Final Estimates)

- 1. NA stands for 'Not Available'
- 2. Production of flowers includes loose flowers and cut flowers.
- 3. Honey is obtained from apiaries, which house bees in hives. Bees collect flower nectar from an unspecified area around such apiaries in order to make honey. Hence only production figures are given for 'honey'.



Table-5.1.37: State-wise Area & Production of Horticultural Crops (2017-18)

Ctata	Fruits		Vegetables		Plantation Crops		Aromatics & Medicinal Plants		Flowers			Spices		Honey	To	otal
State	А	Р	А	Р	А	Р	А	Р	А	P (Loose)	P (Cut)	А	Р	Р	Р	А
Arunachal Pradesh	48.13	125.70	2.58	16.60	0.06	0.14	0.25	0.16	0.00	0.00	0.00	7.48	35.02	NA	58.49	177.62
Assam	147.26	2123.62	300.17	3293.01	101.78	195.04	4.45	0.17	5.06	33.93	56.08	100.63	297.81	1.20	659.34	6000.86
Manipur	47.61	455.59	45.30	342.17	0.90	0.32	0.22	2.38	0.16	0.49	0.00	11.62	27.93	NA	105.81	828.88
Meghalaya	32.81	316.51	49.11	519.70	25.51	31.11	0.00	0.00	0.01	0.00	0.34	18.67	78.79	0.25	126.11	946.70
Mizoram	63.19	340.51	36.25	171.06	11.89	7.37	0.76	0.82	0.24	0.00	2.55	27.66	100.93	0.18	139.98	623.41
Nagaland	39.50	380.52	46.21	555.12	2.07	9.35	0.08	0.49	0.07	4.55	8.79	9.86	56.70	0.55	97.79	1016.06
Sikkim	19.36	54.90	38.42	229.10	0.00	0.00	0.00	0.00	0.24	16.50	0.09	32.25	66.58	0.40	90.27	367.57
Tripura	53.75	547.52	45.94	795.78	14.81	45.88	0.00	0.00	0.00	0.00	0.00	6.59	32.43	NA	121.10	1421.61
Total - NE Region	451.60	4344.86	563.98	5922.53	157.01	289.22	5.76	4.02	5.78	55.47	67.84	214.76	696.18	2.58	1398.89	11382.69
Total - India	6510.40	96447.00	10060.84	184040.79	3743.91	18082.41	720.28	866.37	324.00	1966.57	669.34	3876.48	8497.31	105.00	25235.91	310674.80

Source: https://agricoop.gov.in/en/StatHortEst (State Level Horticulture Estimates) under 'Statistics' tab in the website of the Ministry of Agriculture and Farmers Welfare, Government of India (based on Final Estimates)

- 1. NA stands for 'Not Available'
- 2. Production of flowers includes loose flowers and cut flowers.
- 3. Honey is obtained from apiaries, which house bees in hives. Bees collect flower nectar from an unspecified area around such apiaries in order to make honey. Hence only production figures are given for 'honey'.



Table-5.1.38: State-wise Area & Production of Horticultural Crops (2018-19)

Chala	Fru	Fruits Vege		tables	es Plantation Crops		Aromatics & Medicinal Plants		Flowers		Spic	ces	Honey	Total		
State	А	Р	А	Р	А	Р	А	Р	А	P (Loose)	P (Cut)	А	Р	Р	Р	А
Arunachal Pradesh	48.14	125.84	2.62	17.39	0.07	0.21	0.24	0.16	0.00	0.00	0.00	12.10	29.47	0.10	63.16	173.17
Assam	146.82	2166.77	300.00	3479.21	103.28	205.79	4.45	0.17	5.10	32.37	56.16	97.20	300.24	1.25	656.84	6241.96
Manipur	46.94	454.77	45.67	356.04	0.90	0.31	0.04	0.12	0.03	0.01	0.25	11.53	28.63	0.35	105.11	840.47
Meghalaya	38.03	406.87	49.02	514.75	27.00	29.75	0.00	0.00	0.01	0.00	0.02	15.65	75.36	0.28	129.72	1027.03
Mizoram	62.93	347.02	34.65	200.45	12.17	9.20	0.77	0.78	0.18	0.00	2.25	27.66	100.93	0.20	138.36	660.82
Nagaland	33.96	314.10	41.10	455.08	1.76	7.90	0.13	0.88	0.04	0.00	24.40	11.36	44.11	0.70	88.35	847.17
Sikkim	19.54	55.45	38.80	231.40	0.00	0.00	0.00	0.00	0.24	16.50	0.09	42.61	106.27	0.40	101.20	410.10
Tripura	54.68	559.90	46.28	808.78	15.36	37.34	0.00	0.00	0.00	0.00	0.00	6.61	24.28	0.18	122.92	1430.47
Total - NE Region	451.04	4430.72	558.14	6063.09	160.54	290.50	5.63	2.11	5.60	48.88	83.17	224.72	709.29	3.46	1405.66	11631.19
Total - India	6597.41	97966.66	10072.91	183169.61	4068.68	16591.78	627.48	794.78	303.21	2263.20	646.53	4067.03	9499.75	120.00	25736.71	311052.30

Source: https://agricoop.gov.in/en/StatHortEst (State Level Horticulture Estimates) under 'Statistics' tab in the website of the Ministry of Agriculture and Farmers Welfare, Government of India (based on Final Estimates)

- 1. NA stands for 'Not Available'
- 2. Production of flowers includes loose flowers and cut flowers.
- 3. Honey is obtained from apiaries, which house bees in hives. Bees collect flower nectar from an unspecified area around such apiaries in order to make honey. Hence only production figures are given for 'honey'.



Table-5.1.39: State-wise Area & Production of Horticultural Crops (2019-20)

Ctoto	Fruits		Vege	Vegetables Pla		lantation Crops		Aromatics & Medicinal Plants		Flowers		Spi	ces	Honey	Total	
State	А	Р	А	Р	А	Р	А	Р	А	P (Loose)	P (Cut)	А	Р	Р	Р	А
Arunachal Pradesh	48.14	125.84	2.62	17.39	0.07	0.21	0.24	0.16	0.00	0.00	0.00	15.62	29.21	0.12	66.68	172.94
Assam	148.577	2247.745	301.027	3572.218	104.29	190.82	4.07	0.17	5.04	33.88	55.50	104.61	331.01	1.25	667.61	6432.59
Manipur	47.32	500.15	34.93	362.78	0.90	0.30	0.04	0.12	0.06	0.00	0.09	8.12	83.87	0.40	91.37	947.71
Meghalaya	37.60	393.51	49.12	515.87	26.47	34.40	0.00	0.00	12.41	0.00	1.55	15.53	74.94	0.25	141.12	1020.52
Mizoram	63.76	344.91	40.48	188.10	13.03	10.94	0.77	0.78	0.08	0.00	0.80	28.22	101.49	0.25	146.34	647.27
Nagaland	35.00	313.95	40.28	453.84	1.78	7.92	0.13	0.66	0.04	0.02	25.00	11.35	44.56	0.65	88.57	846.60
Sikkim	19.54	55.45	38.80	231.40	0.00	0.00	0.00	0.00	0.24	16.50	0.09	42.61	106.54	0.45	101.20	410.42
Tripura	55.04	565.79	46.46	813.29	16.08	40.42	0.00	0.00	0.00	0.00	0.00	6.59	24.78	0.20	124.16	1444.48
Total - NE Region	454.97	4547.34	553.72	6154.89	162.61	285.01	5.25	1.88	17.87	50.40	83.03	232.64	796.40	3.57	1427.06	11922.523
Total - India	6760.11	102006.94	10239.71	188132.08	4076.88	15678.57	641.46	734.11	323.33	2323.44	676.27	4350.84	10297.86	120.00	26392.33	319969.27

Source: https://agricoop.gov.in/en/StatHortEst (State Level Horticulture Estimates) under 'Statistics' tab in the website of the Ministry of Agriculture and Farmers Welfare, Government of India (based on Final Estimates)

- 1. NA stands for 'Not Available'
- 2. Production of flowers includes loose flowers and cut flowers.
- 3. Honey is obtained from apiaries, which house bees in hives. Bees collect flower nectar from an unspecified area around such apiaries in order to make honey. Hence only production figures are given for 'honey'.



Table-5.1.40: State-wise Area & Production of Horticultural Crops (2020-21)

Ctata	Fruits		Vegetables		Plantation Crops		Aromatics & Medicinal Plants		Flowers		Spi	ces	Honey	Total		
State	А	Р	А	Р	А	Р	А	Р	А	P (Loose)	P (Cut)	А	Р	Р	Р	А
Arunachal Pradesh	48.14	125.84	2.62	17.41	2.67	11.76	0.24	0.16	0.00	0.00	0.00	13.86	21.49	0.13	67.53	176.80
Assam	147.23	2251.97	301.05	3628.77	89.63	156.93	4.11	0.17	5.10	34.07	55.70	103.22	338.54	1.35	650.33	6467.50
Manipur	41.62	463.86	32.90	339.87	0.90	0.30	0.04	0.12	0.07	0.01	0.17	7.38	72.70	0.40	82.91	877.43
Meghalaya	37.23	382.21	49.28	517.76	27.04	34.06	0.00	0.00	12.53	0.00	0.35	14.62	71.97	0.25	140.70	1006.60
Mizoram	65.95	345.18	40.62	224.39	21.45	33.64	0.77	0.78	0.08	0.00	0.80	27.82	100.93	0.25	156.68	705.98
Nagaland	34.01	316.59	41.09	456.78	2.79	7.87	0.11	0.86	0.05	0.00	0.22	11.79	46.34	0.65	89.84	829.31
Sikkim	20.13	50.69	17.08	108.68	0.00	0.00	0.00	0.00	0.24	16.50	0.09	42.35	102.58	0.45	79.80	278.99
Tripura	55.45	571.43	48.56	848.08	16.11	40.79	0.00	0.00	0.00	0.00	0.00	6.73	25.22	0.20	126.86	1485.72
Total - NE Region	449.76	4507.77	533.20	6141.74	160.59	285.36	5.27	2.08	18.08	50.57	57.34	227.77	779.76	3.68	1394.66	11828.31
Total - India	6930	102481	10859	200445	4255	16629	653	825	322	2152	828	4457	11117	125	27476	334603

Source: https://agricoop.gov.in/en/StatHortEst (State Level Horticulture Estimates) under 'Statistics' tab in the website of the Ministry of Agriculture and Farmers Welfare, Government of India (based on Final Estimates)

- 1. NA stands for 'Not Available'
- 2. Production of flowers includes loose flowers and cut flowers.
- 3. Honey is obtained from apiaries, which house bees in hives. Bees collect flower nectar from an unspecified area around such apiaries in order to make honey. Hence only production figures are given for 'honey'.



Table-5.1.41: State-wise Area & Production of Horticultural Crops (2021-22)

Ctata	Fruits		Vegetables Plantation		on Crops Aromatics & Medicinal Plants		Flowers			Spic	ces	Honey	Total			
State	А	Р	А	Р	А	Р	А	Р	А	P (Loose)	P (Cut)	А	Р	Р	Р	А
Arunachal Pradesh	30.09	138.16	2.62	17.41	1.60	7.05	0.24	0.16	0.00	0.00	0.00	12.33	18.59	0.15	46.88	181.52
Assam	161.980	2504.191	306.235	3747.482	90.482	163.000	4.620	0.179	5.307	35.583	57.799	100.14	317.24	1.40	668.76	6826.87
Manipur	43.12	468.16	38.35	376.58	0.90	0.32	0.04	0.12	0.07	0.01	0.17	9.34	66.48	0.40	91.82	912.23
Meghalaya	37.38	378.16	49.61	520.15	27.73	35.07	0.00	0.00	12.47	0.00	0.35	14.52	72.02	0.27	141.71	1006.03
Mizoram	66.47	345.36	40.67	224.64	21.45	33.64	0.77	0.78	0.08	0.00	0.80	27.82	100.93	0.30	157.26	706.45
Nagaland	34.41	316.29	41.51	455.96	3.41	7.12	0.08	0.66	0.04	0.04	0.24	12.03	40.84	0.72	91.48	821.87
Sikkim	20.17	50.78	22.44	129.37	0.00	0.00	0.00	0.00	0.24	16.50	0.09	42.44	102.95	0.53	85.28	300.22
Tripura	57.72	596.55	54.74	1179.22	16.21	37.21	0.00	0.00	0.00	0.00	0.00	7.26	27.43	0.22	135.92	1840.62
Total - NE Region	451.32	4797.65	556.16	6650.82	161.78	283.41	5.75	1.89	18.22	52.13	59.45	225.87	746.46	3.99	1419.10	12595.81
Total - India	7063.94	107507.24	11374.40	209143.40	4292.95	15763.56	667.55	663.51	282.38	2198.83	614.64	4360.46	11155.14	133.20	28041.69	347179.50

Source: https://agricoop.gov.in/en/StatHortEst (State Level Horticulture Estimates) under 'Statistics' tab in the website of the Ministry of Agriculture and Farmers Welfare, Government of India (based on Final Estimates)

- 1. NA stands for 'Not Available'
- 2. Production of flowers includes loose flowers and cut flowers.
- 3. Honey is obtained from apiaries, which house bees in hives. Bees collect flower nectar from an unspecified area around such apiaries in order to make honey. Hence only production figures are given for 'honey'.



Table-5.1.42: Classification of Agricultural Workers in the NE States (2011)

(In Numbers)

State		Cultivators (Main & Marginal)	Agricultural Labourers (Main & Marginal)	Male Cultivators (Main & Marginal)	Male Agricultural Labourers (Main &	Female Cultivators (Main & Marginal)	Female Agricultural Labourers (Main &
			,	,	Marginal)	,	Marginal)
Arunachal Pradesh	Total	302723	36171	152863	18377	149860	17794
	Rural	298137	33558	150267	16862	147870	16696
	Urban	4586	2613	2596	1515	1990	1098
Assam	Total	4061627	1845346	3099763	1129210	961864	716136
	Rural	4018907	1814075	3066222	1107173	952685	706902
	Urban	42720	31271	33541	22037	9179	9234
Manipur	Total	574031	114918	327109	46032	246922	68886
	Rural	523537	90644	293208	35797	230329	54847
	Urban	50494	24274	33901	10235	16593	14039
Meghalaya	Total	494675	198364	277330	106342	217345	92022
	Rural	486320	192223	272616	102620	213704	89603
	Urban	8355	6141	4714	3722	3641	2419
Mizoram	Total	229603	41787	129482	22488	100121	19299
	Rural	192194	19085	107813	9555	84381	9530
	Urban	37409	22702	21669	12933	15740	9769
Nagaland	Total	537702	62962	259454	31857	278248	31105
	Rural	516783	55677	250559	28133	266224	27544
	Urban	20919	7285	8895	3724	12024	3561
Sikkim	Total	117401	25986	63327	12883	54074	13103
	Rural	116532	24880	62869	12297	53663	12583
	Urban	869	1106	458	586	411	520
Tripura	Total	295947	353618	228868	214106	67079	139512
	Rural	285729	338922	219951	203358	65778	135564
	Urban	10218	14696	8917	10748	1301	3948
Total - NE Region	Total	6613709	2679152	4538196	1581295	2075513	1097857
	Rural	6438139	2569064	4423505	1515795	2014634	1053269
_	Urban	175570	110088	114691	65500	60879	44588
Total - India	Total	118808780	144333690	82762934	82742337	36045846	61591353
	Rural	115084638	136998308	79895308	77932222	35189330	59066086
	Urban	3724142	7335382	2867626	4810115	856516	2525267

Source: 'Agricultural Statistics at a Glance, 2022', Ministry of Agriculture & Farmers' Welfare, Government of India – based on the Census of India 2011 [Table-1.1.(b) Page Nos. 3-6]

- 1. A person is considered as cultivator if he or she was engaged either as employer, single worker or family worker in cultivation of land owned or held from private persons or institutions for payment in money, kind or share of crop. Cultivation includes supervision or direction of cultivation.
- 2. A person who has given out his/her land to another person or persons for cultivation or money, kind or share of crop and who did not even supervise or direct cultivation of land was not treated as cultivator. Cultivation does not include fruit growing, vegetable growing or keeping orchards or groves or working on plantations like tea, coffee, rubber, cinchona and other medicinal plantations
- 3. A person who worked in another person's land for wages in cash, kind or share was regarded as an agricultural labourer.



Table-5.1.43: Consumption of Electricity for Agricultural Purposes in the NE States

State		2020-21			2021-22	
	Agricultural Use (GWh)	Total Energy Sold (GWh)	% Share of Agriculture	Agricultural Use (GWh)	Total Energy Sold (GWh)	% Share of Agriculture
Arunachal Pradesh	0.77	405.11	0.19	0.06	518.25	0.01
Assam	39.00	7356.29	0.53	54.23	8520.06	0.64
Manipur	7.08	651.30	1.09	7.19	731.70	0.98
Meghalaya	0.14	1326.45	0.01	0.13	906.67	0.01
Mizoram	0.16	453.54	0.04	0.00	660.92	0.00
Nagaland	0.00	682.57	0.00	0.00	654.23	0.00
Sikkim	0.00	414.77	0.00	0.00	440.60	0.00
Tripura	38.00	982.33	3.87	39.15	1051.06	3.72
Total - NE Region	85.15	12272.36	0.69	100.76	13483.49	0.75
Total - India	221303.44	1041655.63	21.25	228451.47	1136124.53	20.11

Source: 'Agricultural Statistics at a Glance, 2022', Ministry of Agriculture & Farmers' Welfare, Government of India – based on data from Central Electricity Authority [Table-3.18 (b) Page No 166]

- 1. The usage of electricity is usually measured in units which are equal to one kilowatt hour (i.e. the consumption of 1,000 watts for one hour).
- 2. Giga-watt hour (GWh) is equal to one million units (Giga = 109 or one billion).



The greater use of electricity for agriculture can help in improving farm incomes in the NE states



Table-5.1.44 Number of Active Kisan Credit Cards (KCCs) in the NE States (Operative as on 31<sup>st</sup> December 2022)

(In Numbers)

State	Operative KCCs
Arunachal Pradesh	10,100
Assam	673,151
Manipur	19,147
Meghalaya	70,056
Mizoram	35,455
Nagaland	29,870
Sikkim	7,816
Tripura	247,332
Total - NE Region	1,092,927
Total - India	73,725,630

Source: 'Agricultural Statistics at a Glance, 2022', Ministry of Agriculture & Farmers' Welfare, Government of India – based on data from (a) Reserve Bank of India for Scheduled Commercial Banks and Regional Rural Banks; and (b) NABARD for Cooperative Banks [Table-3.20 Page No 169]

- 1. The Reserve Bank of India had issued the Master Circular on Kisan Credit Card (KCC) Scheme in 2018. The scheme aims at providing adequate and timely credit support from the banking system under a single window with flexible and simplified procedure to the farmers individual/joint borrowers who are owner cultivators, tenant farmers, oral lessees & share croppers, Self Help Groups (SHGs) or Joint Liability Groups (JLGs) of farmers including tenant farmers, share croppers etc. for their cultivation and other needs.
- 2. In 2019, the KCC scheme was extended to farmers engaged in Animal Husbandry and Fisheries for their working capital requirements.
- 3. Government of India is also implementing Interest Subvention Scheme under which interest subvention (IS) of 2% and Prompt Repayment Incentive (PRI) of 3% is given to farmers on Short Term Agricultural Loans up to Rs. 3 lakh which makes the effective rate of interest on such loans at 4%.

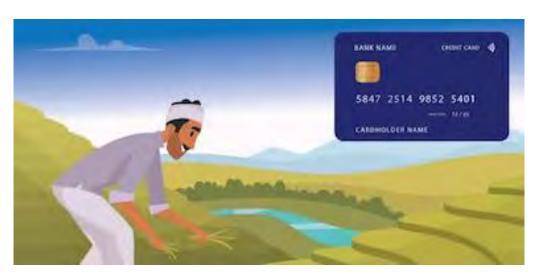




Table-5.1.45: Number of Operational Holdings in the NE States (By Size Group)

(In numbers)

State		Numbers of	Operational Holo	lings by Size		All Holdings
	Marginal	Small	Semi-medium	Medium	Large	
Arunachal Pradesh	27161	24056	29018	26328	6690	113253
Assam	1868020	495313	295286	79262	3830	2741711
Manipur	76705	48737	22269	2734	39	150484
Meghalaya	122748	60268	39863	9256	262	232397
Mizoram	44963	27483	13834	3209	285	89774
Nagaland	8211	29790	63332	73769	21430	196532
Sikkim	44294	12767	10591	3513	367	71532
Tripura	504105	47987	18538	2491	73	573194
Total - NE Region	2696207	746401	492731	200562	32976	4168877
Total - India	100251309	25809332	13993214	5561480	838406	146453741

Source: 'Agricultural Statistics at a Glance, 2022', Ministry of Agriculture & Farmers' Welfare, Government of India – based on data from 'All India Report on Agriculture Census 2015-16' [Table-5.2 (a) Page No 201]

#### Notes:

- 1. The reference period in the above Agriculture Census is the agriculture year 2015-16, which stared from July of 2015 and ended in June in 2016.
- 2. **Operational Holding is** 'All land which is used wholly or partly for Agricultural production and is operated as one technical unit by one person alone or with others without regard to the title, legal form, size or location'.
- 3. The size of operational holdings is given as follows.

Type of Holding	Area Operated
Marginal Holdings	Less than 1.0 hectare
Small Holdings	1.0 hectare – 2.0 hectares
Semi-medium Holdings	2.0 hectare – 4.0 hectares
Medium Holdings	4.0 hectare – 10.0 hectares
Large Holdings	Above 10 hectares

Source: Table-5.2 of 'Agricultural Statistics at a Glance, 2022' (Page No 200)





Table-5.1.46: Area of Operational Holdings in the NE States (By Size Group)

(In hectares)

State		Area under (	Operational Holo	lings by Size		All Holdings
	Marginal	Small	Semi-medium	Medium	Large	
Arunachal Pradesh	14356.98	30640.11	77432.38	153215.31	104294.29	379939.07
Assam	784971.32	696107.03	806250.00	410090.50	278835.70	2976254.56
Manipur	40295.68	62773.84	55322.02	13357.23	432.42	172181.19
Meghalaya	55929.89	79595.89	108904.36	51413.49	4236.04	300079.67
Mizoram	27167.00	35063.65	31671.94	14908.92	3653.20	112464.71
Nagaland	4608.78	36803.15	169447.92	431165.51	314413.88	956439.24
Sikkim	18073.30	17755.51	28763.89	19957.59	6315.02	90865.31
Tripura	148777.52	70095.55	49196.28	12633.75	1082.06	281785.17
Total - NE Region	1094180.47	1028834.73	1326988.79	1106742.30	713262.61	5270008.92
Total - India	37923352.95	36150710.41	37619306.71	31810427	14313539.2	157817336.26

Source: 'Agricultural Statistics at a Glance, 2022', Ministry of Agriculture & Farmers' Welfare, Government of India – based on data from 'All India Report on Agriculture Census 2015-16' [Table-5.2 (b) Page No 202]

### Notes:

- 1. The reference period in the above Agriculture Census is the agriculture year 2015-16, which stared from July of 2015 and ended in June in 2016.
- 2. Operational Holding is 'All land which is used wholly or partly for Agricultural production and is operated as one technical unit by one person alone or with others without regard to the title, legal form, size or location'.
- 3. The size of operational holdings is given as follows.

Marginal Holdings	Less than 1.0 hectare
Small Holdings	1.0 hectare – 2.0 hectares
Semi-medium Holdings	2.0 hectare – 4.0 hectares
Medium Holdings	4.0 hectare – 10.0 hectares
Large Holdings	Above 10 hectares

Source: Table-5.2 of 'Agricultural Statistics at a Glance, 2022' (Page No 200)





Table-5.1.47: Rural & Agricultural Households in the NE States (During Agricultural Year 2018-19)

State	Estimated N	lumbers of:	Ratio of	Estimated	Proportion of	Average
	Rural	Agricultural	Agricultural to	Number of	Agricultural	Monthly
	Households	Households	Rural	Agricultural	Households	Income of
			Households	Households	which are	Agricultural
			(In %)	with Loan	Indebted (in	Households
					%)	(Rs.)
Arunachal Pradesh	2207	1524	69.1	191	12.5	19225
Assam	57990	30999	53.5	9617	31.0	10675
Manipur	3732	2412	64.6	497	20.6	11427
Meghalaya	4964	3647	73.5	333	9.1	29348
Mizoram	1029	764	74.2	61	8.0	17964
Nagaland	2402	1918	79.9	116	6.0	9877
Sikkim	984	652	66.3	69	10.6	12447
Tripura	6982	2893	41.4	1380	47.7	9918
For NE Region	80290	44809	55.8	12264	27.4	15110
For India	1724433	930935	54.0	467196	50.2	10218

Source: 'Agricultural Statistics at a Glance, 2022', Ministry of Agriculture & Farmers' Welfare, Government of India – based on data from Situation Assessment Survey of Agricultural Households (Jan-Dec 2019), National Statistical Office(NSO) [Table-5.10 Page No 211]

#### Notes:

- 1. The reference period for the above period is the agriculture year 2018-19 which stared from July of 2018 and ended in June in 2019.
- 2. **Reference period for Indebtedness is 'as on the date of survey**'. Indebtedness relates to all kind of outstanding loans irrespective of the purpose for which taken.
- 3. Household

A household is usually a group of persons who normally live together and take their meals from a common kitchen / common cooking unless the exigencies of work prevent any of them from doing so.



## **Sub-Sector: Tea Plantation**

Table-5.1.48: State-wise Tea Growers & Tea Area in the NE States

State	Organize	ed Sector	Small Tea	a Growers	To	otal
	No. of Tea Gardens	Tea Area (in Hectares)	No. of Small Tea Growers	Tea Area (in Hectares)	Growers	Tea Area (in Hectares)
Arunachal Pradesh	30	2,849	3,526	7,852	3,556	10,701
Assam	762	2,32,962	1,25,484	1,17,304	1,26,246	3,50,266
Manipur	1	312	473	347	474	659
Meghalaya	2	97	734	936	736	1,033
Mizoram	1	15	450	248	451	263
Nagaland	1	102	2,509	5,005	2,510	5,107
Sikkim	1	178	35	14	36	192
Tripura	52	6894	2,875	1,423	2,927	8,317
Total – NE Region	850	2,43,409	1,36,086	1,33,129	1,36,936	3,76,538
Total - India	1,567	4,21,461	2,37,068	2,02,865	2,38,635	6,24,326

Source: Tea Board India (Letter No. File 6 (97) / ZON/GAU/ STAT\_DATA/ 2022 dated 26-10-2023 from the North Eastern Zonal Office of The Tea Board India)

- 1. The organised sector details are based on the Baseline Survey 2022, the details of which had been furnished in Letter No. File 6 (97) / ZON/GAU/ STAT\_DATA/ 2022 dated 26-10-2023 from the North Eastern Zonal Office of The Tea Board India.
- 2. The number of Small Tea Growers is provisional, subject to revision. The details had been furnished in the above letter from the North Eastern Zonal Office of The Tea Board India, and these reflect the position up to 31.03.2023.
- 3. Tea Areas have been rounded off.
- 4. 'Organized Sector' consists of those establishments that grow tea (and usually process green leaf into made tea) and which are subject to the provisions of various legislative measures. These include the Tea Act 1953 (and amendments thereto), and the Plantation Labour Act of 1951. Under the legislative framework, the tea producing states have enacted regulations for many aspects of tea, including the welfare of the tea workers.
- 5. Small Tea Grower (STG) is defined as 'a person who has a tea cultivation of up to 25 acres (10.12 hectares)' as per the Tea Board India guidelines.





Table-5.1.49: State-wise Production of Tea in the NE States

(In Million Kg)

State		2018-19			2019-20			2020-21			2021-22			2022-23	
	Tea	Small Tea	Total												
	Gardens	Growers		Gardens	Growers		Gardens	Growers		Gardens	Growers		Gardens	Growers	
Arunachal Pradesh	3.89	7.78	11.67	2.76	9.14	11.90	2.16	8.65	10.81	2.93	9.33	12.26	2.93	9.27	12.20
Assam	389.79	311.55	701.34	385.75	309.63	695.38	336.09	290.14	626.23	385.15	313.99	672.14	363.66	334.72	698.38
Manipur															
Meghalaya	0.10	0.46	0.56	0.11	0.38	0.49	0.08	0.35	0.43	0.08	0.36	0.44	0.06	0.30	0.36
Mizoram															
Nagaland	0.00	1.68	1.68	0.00	1.80	1.80	0.00	1.52	1.52	0.12	2.11	2.23	0.00	2.51	2.51
Sikkim	0.09	0.00	0.09	0.09	0.00	0.09	0.07	0.00	0.07	0.05	0.00	0.05	0.08	0.00	80.0
Tripura	6.38	2.24	8.62	6.22	2.72	8.94	6.13	2.08	8.21	6.70	2.16	8.86	6.07	1.62	7.69
Total - NE Region	400.25	323.71	723.96	394.93	323.67	718.60	344.53	302.74	647.27	368.03	327.95	695.98	372.80	348.42	721.22
Total - India	696.49	653.55	1350.04	690.75	670.06	1360.81	637.81	645.22	1283.03	652.89	691.51	1344.40	659.96	715.01	1374.97

Source: Tea Board India (Letter No. File 6 (97) / ZON/GAU/ STAT\_DATA/ 2022 dated 26-10-2023 from the North Eastern Zonal Office of The Tea Board India)

Notes

- 1. There is no tea production in the states of Manipur and Mizoram, as reported by the Tea Board India.
- 2. Production is reported, based on the location of the tea factory.



Table-5.1.50: Enumeration of Small Tea Growers in the NE States (Up to 31.03.2023)

State	Number of Small Growers	Tea Area (in Hectare)	Number of QR Code based ID Cards Issued
Arunachal Pradesh	3,526	7,852	0
Assam	125,484	117,304	90,968
Manipur	473	347	0
Meghalaya	734	936	399
Mizoram	450	248	250
Nagaland	2,509	5,005	2,169
Sikkim	35	14	0
Tripura	2,875	1,423	856
Total - NE Region	136,086	133,129	94,642
Total - India	237,068	202,865	157,955

Source: Letter No. File 6 (97) / ZON/GAU/ STAT\_DATA/ 2022 dated 26-10-2023 from the North Eastern Zonal Office of The Tea Board India

- 1. Tea Areas have been rounded off.
- 2. The enumeration of Small Tea Growers (STGs) is a continuous process, and the data furnished is provisional, subject to revision.
- 3. Small Tea Grower (STG) is defined as 'a person who has a tea cultivation of up to 25 acres (10.12 hectares)' as per the Tea Board India guidelines



Small Tea Growers in Assam now produce nearly 48% of the state's output of tea



## **Sub-Sector: Rubber Plantation**

Table-5.1.51: Area under Rubber Trees & Production of Natural Rubber in the NE States

State	Area in He	Area in Hectare						
	Area under Rubber Trees	Tappable Area						
Assam								
2019-20	58128.55	26658.59	28930.95					
2020-21	58897.20	29051.54	34347.52					
2021-22	59750.29	36527.99	40637.39					
2022-23	65037.40	43294.64	56847.67					
Tripura								
2019-20	85453.63	69837.00	83701.23					
2020-21	86797.13	69836.13	90711.54					
2021-22	89264.23	74605.13	93371.19					
2022-23	97171.93	78084.13	102989.36					

Source: Zonal Offices of Rubber Board India in Guwahati & Agartala

## Note

1. Tappable area is the area under rubber trees that is available for tapping the rubber trees.





# Table-5.1.52: Rubber Plantation in the NE States (Under NE-MITRA for NE Region)

(In hectares)

State	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region
Area	285.77	474.52	84.50	292.54	174.00	177.83	0.00	2372.52	285.77

Source: Source: Annual Report 2021-22, Rubber Board India (http://rubberboard.org.in/rbfilereader?fileid=825)

- 1. North East Mission of Tyre Industry for Rubber Augmentation (NE-MITRA) is a collaborative project for development of rubber plantations in North East and improving quality of processed forms of rubber. It was agreed upon between the Ministry of Commerce and Industry, Government of India, National Bank for Agriculture and Rural Development (NABARD), and the Automotive Tyre Manufacturers Association (ATMA).
- 2. The objective of NE-MITRA [formerly termed as Credit Linked Rubber Plantation Development Plan (CLRPDP)] is to increase production of natural rubber in India by accelerating new planting and replanting of rubber in NE Region with and technical coordination and extension support by the Rubber Board.
- 3. The plan is to develop 200,000 hectares of rubber plantations in North East and undertake quality improvement and skill development activities over a period of 5 years from 2021-22 to 2025-26.



Rubber plantations can help to boost rural incomes and provide other economic opportunities



Table-5.1.53: Licensed Rubber Dealers, Manufacturers & Processors in the NE States (Up to 31st March 2023)

State	Rubber Dealers	Rubber Manufacturers	Rubber Processors
Arunachal Pradesh	2	0	0
Assam	115	7	1
Manipur	2	0	0
Meghalaya	6	0	0
Mizoram	1	0	0
Nagaland	13	0	0
Sikkim	0	0	0
Tripura	1681	4	12
Total - NE Region	1820	11	13
Total - India	8749	4594	103

Source: E-Mail from the Zonal Office of Rubber Board in Agartala to NEDFi

- 1. Transactions in natural rubber are regulated by licenses issued by the Rubber Board under various provisions of the Rubber Act 1947 and the Rubber Rules 1955. Licensing & Excise Duty (L&ED) Department is entrusted with the works related to issue of fresh and renewal of license to Rubber Dealers, Processors and Manufacturers.
- 2. Ordinarily, Dealer's licence is issuing initially for 3 years and renewing for 5 years. Total number of licensed dealers as on 31.03.2023 was 8749. The processors are mainly producing Centrifuged Latex and Block Rubber. Total number of licensed processors in India as on 31.03.2023 was 103.



**Collecting latex from rubber trees** 



## **Sub-Sector: Sericulture**

Table-5.1.54: Break-up of Silk Production in the NE States (2019-20)

(In MT – except Mulberry Plantation which is in Hectares)

State	Mulberry	Mulb	erry Raw Sill	(MT)		Vanya S	Silk (MT)		Total
	Plantation (Ha)	Bivoltine Hybrids	Cross Bred	Total	Tasar	Eri	Muga	Total	(M+V) MT
Arunachal Pradesh	278.0	NA	3.5	3.5	NA	58.0	2.5	60.5	64.0
Assam	2,095.0	57.6	NA	57.6	NA	3,680.0	159.9	3,839.9	3,897.4
Manipur	3,291.2	135.0	14.2	149.2	5.0	347.4	2.1	354.6	503.8
Meghalaya	3,289.0	49.9	4.2	54.1	NA	1,102.9	35.1	1,138.0	1192.1
Mizoram	1,678.8	73.3	20.0	93.3	0.1	7.7	2.4	10.3	103.6
Nagaland	694.4	10.7	1.2	11.9	0.0	587.8	0.4	588.3	600.1
Sikkim	300.0	1.0	NA	1.0	NA	NA	NA	NA	1.0
Tripura	2,064.0	26.7	83.8	110.5	NA	NA	NA	NA	110.5
Total – NE Region	13,690.4	354.2	126.9	481.1	5.1	5,783.8	202.4	5,991.6	6,472.5
Total - India	239,966.8	7,008.7	18,230.0	25,238.6	3,136.4	7,204.0	240.5	10,580.9	35,819.6

Source: Annual Report 2019-20, Central Silk Board, Ministry of Textiles, Government of India, based on data from the Sericulture Departments of State Governments [Annexure-IV (A) Page No.95]

- 1. Mulberry silk is produced by the *bombyx mori*, a domesticated silkworm whose diet consists exclusively of leaves from the mulberry tree.
- 2. Vanya silk includes: tasar, eri and muga.
- 3. Tasar silk is obtained from *Antheraea mylitta* in the wild, which feed on Asan and Arjun trees in the wild. Eri silk is obtained from *Samia ricini*. The most striking feature of Eri silk is that it is obtained without killing the silkworm. It is also called "Ahimsa" or nonviolence silk. It is popular among Buddhists and Jains. Muga silk is produced from *Antheraea assamensis*, a semi-domesticated silkworm that feeds on the leaves of Som and Soalu plants).





Table-5.1.55: Break-up of Silk Production in the NE States (2018-19)

(In MT – except Mulberry Plantation which is in Hectares)

State	Mulberry	Mulbe	Mulberry Raw Silk (MT)			Vanya S	Silk (MT)		Total
	Plantation	Bivoltine	Cross	Total	Tasar	Eri	Muga	Total	(M+V)
	(Ha)	Hybrids	Bred						MT
Arunachal Pradesh	300.0	3.3	0.0	3.3	0.0	53.6	2.6	56.2	59.5
Assam	2370.0	52.0	0.0	52.0	0.0	3563.0	157.0	3720.0	3772.0
Manipur	3300.0	124.1	13.1	137.1	5.2	320.0	1.8	327.0	464.1
Meghalaya	3209.0	49.3	0.0	49.3	0.0	1103.5	34.3	1137.8	1187.1
Mizoram	4094.0	64.8	18.5	83.3	0.1	7.9	8.0	8.7	92.0
Nagaland	394.0	10.2	2.9	13.1	0.0	606.4	0.6	607.0	620.1
Sikkim	185.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.4
Tripura	1935.0	90.0	140.0	230.0	0.0	0.0	0.0	0.0	230.0
Total - NE Region	15787.0	394.1	174.5	568.5	5.3	5654.4	197.1	5856.7	6425.2
Total - India	235001.0	6986.9	18357.6	25344.5	2980.6	6909.6	233.4	10124	35468.1

Source: Annual Report 2019-20, Central Silk Board, Ministry of Textiles, Government of India, based on data from the Sericulture Departments of State Governments [Annexure-IV (B) Page No. 96]

#### Note

1. The details furnished at the previous page may be seen.

4000
3500
2500
2000
1500
1000
Arunachal Assam Manipur Meghalaya Mizoram Nagaland Sikkim Tripura Pradesh

**Graph-5.1.7: Silk Production in the NE States (2018-19)** 

Y-axis gives the Total Production of Mulberry Raw Silk and Vanya Silk in Metric Tonnes





Table-5.1.56: Total Raw Silk Production in the NE States (2018-19)

(In MT)

State	2018-19	2019-20	2020-21	2021-22	2022-23 (till December 22)
Arunachal Pradesh	59	64	43	53	49
Assam	5026	5316	5462	5700	5004
Manipur	464	504	327	462	328
Meghalaya	1187	1192	1213	1234	1014
Mizoram	92	104	43	59	68
Nagaland	620	600	264	315	304
Sikkim	0.4	1	0.08	0.03	0.2
Tripura	230	111	112	113	88
Total – NE Region	7678.4	7892	7464.08	7936.03	6855.2
Total - India	35468	35820	33770	34903	27744

Source: 'Functioning of Central Silk Board & Performance of Indian Silk Industry' (as on 1st January 2023), Central Silk Board, Ministry of Textiles, Government of India [Annexure-I Page No. 21]

- 1. Figure for 2022-23 is provisional, up to December 2022.
- 2. The above includes the production of all types of raw silk, mulberry and vanya (eri, muga and tasar)





Table-5.1.57: Mulberry Silk Acreage in the NE States

(In Hectares / %)

State		Mulber	ry Acreage (in H	ectare)		Average
	2016-17	2017-18	2018-19	2019-20	2020-21	Growth Rate (%)
Arunachal Pradesh	100	140	300	278	218	21.51
Assam	7898	8594	2783	2539	2653	-23.87
Manipur	7548	3590	3300	3300	3291	-18.74
Meghalaya	3209	3209	3209	3289	3300	0.70
Mizoram	4009	4094	4094	1698	1658	-19.81
Nagaland	290	290	394	694	570	18.40
Sikkim	198	185	185	300	179	-2.49
Tripura	2450	2184	1935	2064	1944	-5.62
Total - NE Region	25702	22286	16200	14162	13813	-14.38
Total - India	216810	223927	235001	239676	237578	2.31

Source: Annual Report 2020-21, Central Sericulture Research & Training Institute (CSRTI) Berhampore (West Bengal), Central Silk Board, Ministry of Textiles, Government of India [Page 108]

- 1. Data for 2020-21 is provisional.
- 2. Average Growth Rate (of Mulberry Acreage) between 2016-17 and 2020-21 has been computed from the formula given below, since the growth rate shown in the source document appears to be erroneous.
  - Average Annual Growth Rate (in %) =  $[{(Acreage in 2020-21) / (Acreage in 2016-17)} ^(1/4)-1]*100%$





Table-5.1.58: Mulberry Silk Production in the NE States

(In MT / %)

State		Mulbe	erry Production (	in MT)		Average	
	2016-17	2017-18	2018-19	2019-20	2020-21	Growth Rate (%)	
Arunachal Pradesh	2	2.3	3	3	1	-15.91	
Assam	52	59	69	69	16	-25.52	
Manipur	161	92.5	137	150	111	-8.88	
Meghalaya	28	39	49	54	56	18.92	
Mizoram	65	75	83	93	37	-13.14	
Nagaland	8	12	13	12	6	-6.94	
Sikkim	6	0.001	0.4	1	0.08	-66.02	
Tripura	75	87	230	94	112	10.55	
Total – NE Region	397	366.801	584.4	476	339.08	-3.87	
Total - India	21273	22066	25345	25384	23896	2.95	

Source: Annual Report 2020-21, Central Sericulture Research & Training Institute (CSRTI) Berhampore (West Bengal), Central Silk Board, Ministry of Textiles, Government of India [Page 108]

# Notes

- 3. Data for 2020-21 is provisional.
- 4. Average Growth Rate (of Mulberry Production) between 2016-17 and 2020-21 has been computed from the formula given below, since the growth rate shown in the source document appears to be erroneous.

Average Annual Growth Rate (in %) =  $[{(Production in 2020-21) / (Production in 2016-17)} ^(1/4)-1]*100%$ 





# 5.2. Livestock & Animal Husbandry

Livestock rearing is one of the most important economic activities in the rural areas of the country. It contributes significantly to the national economy. In fact, livestock rearing is an indispensable part for the rural community, especially for the small and marginal farmers. It provides income to household dependent on agriculture and for many landless households. The livestock also act as a source of protein in the form of milk, egg and meat.

The Livestock Sector plays a significant role for the welfare of rural population of India. Livestock is also important as a part of agricultural diversification and income enhancement and also for crucial nutritional value. Hence, the Government is continuously trying for bringing further improvements and developing this sector in the country as an industry.

Various schemes have been initiated aimed at increasing the availability of genetically improved livestock and poultry, control of diseases, assisting and encouraging the farmers to go for genetically up-graded animals and assured protection against loss of such animals through an established mechanism.

In the NE Region, the consumption of animal protein is comparatively high. Meat and meat products form an integral part of most indigenous diets, along with the consumption of eggs. The consumption of milk has been traditionally lower, as many of the tribal communities may be less lactose-tolerant.

The NE Region has a high population of some livestock like pigs, where Assam is having the largest pig population in India, Meghalaya the 3<sup>rd</sup> largest and Nagaland and Mizoram having the 7<sup>th</sup> and 10<sup>th</sup> largest pig population as per the latest 20<sup>th</sup> Livestock Census. In poultry, Assam has been reported to have the 7<sup>th</sup> largest population in India. The mithun is found exclusively in the NE Region. Yaks are found in Arunachal Pradesh and Sikkim, which have the 2<sup>nd</sup> and 3<sup>rd</sup> largest populations in India.

There is considerable scope for improvement in the region. The contribution of livestock is about 2% towards the region's economic output. This is despite the NE Region having over 4% of the nation's livestock. The growth of the sector has been slower here than elsewhere in the country. The facilitation of the livestock ecosystem from improvement of breeds, feed and animal care practices, veterinary care, availability of information, and forward linkages to markets can boost the sector in the future.



Table-5.2.1: Total Number of Livestock & Poultry in the NE States

State	Ru	ıral	Urk	oan	Total (Rura	al & Urban)
	Livestock	Poultry	Livestock	Poultry	Livestock	Poultry
Arunachal Pradesh	1126620	1489612	34808	109963	1161428	1599575
Assam	17662876	45668840	429325	1043501	18092201	46712341
Manipur	472294	4636781	78425	1260856	550719	5897637
Meghalaya	2005372	5179252	33731	200280	2039103	5379532
Mizoram	224264	1310814	135440	736996	359704	2047810
Nagaland	481710	2400500	72093	438444	553803	2838944
Sikkim	269526	572296	4806	8568	274332	580864
Tripura	1265410	3887504	52482	280742	1317892	4168246
Total - NE Region	23508072	65145599	841110	4079350	24349182	69224949
Total - India	514110739	812197763	22650604	39612168	536761343	851809931

Source: '20th Livestock Census 2019 – All India Report' published by the Ministry of Fisheries, Animal Husbandry & Dairying, Government of India [Table-1 Page No. 45]

#### Notes

- 1. **'Livestock' includes domesticated** species such as Cattle, Buffalo, Sheep, Goat, Pig, Horses & Ponies, Mules, Donkeys, Camels, Mithun and Yak are covered in the Livestock Census. In addition, dogs, rabbits and elephants have been counted.
- 2. 'Poultry' includes domesticated fowls, duck and other domesticated poultry birds like turkeys, quails, guinea fowl, ostrich, emu & geese.
- 3. Urban & Rural (Areas) have the meaning assigned to them in the Population Census as follows.

### Urban Area

(a) All places with a municipality, corporation, cantonment board or notified town area committee, etc. or (b) All other places satisfying the following three criteria simultaneously: A minimum population of 5,000— At least 75% of male working population engaged in non-agricultural pursuits— A population density of at least 400 per sq. km.

The first category of urban units is known as Statutory Towns while the second category of towns is known as Census Towns, identified based on last population Census.

### Rural Area

All areas, which are not identified as urban, are rural areas. The basic unit for rural areas is revenue village.



500.00 450.00 400.00 350.00 300.00 250.00 200.00 150.00 100.00 50.00 0.00 Arunachal Assam Manipur Meghalaya Mizoram Nagaland Sikkim Tripura Pradesh ■Livestock ■ Poultry

**Graph-5.2.1:** Total Number of Livestock & Poultry in the NE States

Y-axis gives the number of livestock and poultry in lakh

Note: Above data is obtained from the 20th Livestock Census, 2019





Table-5.2.2: Total Number of Cattle in the NE States

State	Е	xotic / Cross-Bre	ed		Non-Descript		Total Cattle		
							(Exotic / Cross bred & Non-Descript)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Arunachal Pradesh	1591	5396	6987	139503	192731	332234	141094	198127	339221
Assam	121050	647899	768949	3107299	7032991	10140290	3228349	7680890	10909239
Manipur	1242	16684	17926	65747	140799	206546	66989	157483	224472
Meghalaya	3544	29861	33405	339765	530400	870165	343309	560261	903570
Mizoram	4096	17359	21455	9098	15148	24246	13194	32507	45701
Nagaland	5076	13325	18401	30913	28982	59895	35989	42307	78296
Sikkim	24109	92741	116850	9198	21962	31160	33307	114703	148010
Tripura	10019	118818	128837	112758	497436	610194	122777	616254	739031
Total - NE Region	170727	942083	1112810	3814281	8460449	12274730	3985008	9402532	13387540
Total - India	3610759	47745646	51356405	43941167	98165299	142106466	47551926	145910945	193462871

Source: '20th Livestock Census 2019 – All India Report' published by the Ministry of Fisheries, Animal Husbandry & Dairying, Government of India [Table-7 Page 55-56 (Exotic / Cross Breed) and Table-8 (Non-Descript) Page Nos. 57-58]

- 1. Exotic / Cross-bred cattle: as follows
  - Cross-bred Cattle: Cattle which are produced by crossing indigenous cattle with exotic breeds or indigenous cattle which have exotic inheritance are described as crossbred cattle.
  - Exotic Cattle: Cattle which are developed in other countries are described as exotic cattle. The most important exotic dairy cattle breeds in India are Jersey and Holstein Friesian (HF).
- 2. Non-descript cattle: Non-descript breeds are those indigenous breeds which cannot be classified as a particular recognized breed or do not have more than 50% similarities of any recognized breed of cattle.



Table-5.2.3: Total Number of Buffalos in the NE States

State	Male	Female	Total
Arunachal Pradesh	2813	3566	6379
Assam	149356	272359	421715
Manipur	15852	20378	36230
Meghalaya	10271	5443	15714
Mizoram	837	1272	2109
Nagaland	10010	5644	15654
Sikkim	263	881	1144
Tripura	1728	5403	7131
Total - NE Region	191130	314946	506076
Total - India	9283137	100568541	109851678

Source: '20th Livestock Census 2019 – All India Report' published by the Ministry of Fisheries, Animal Husbandry & Dairying, Government of India [Table-11 Page No. 63-64]



Buffalos can be used for dairy farming



Table-5.2.4: Total Number of Sheep in the NE States

State	Е	xotic / Cross-Bre	ed		Indigenous		Total Sheep (Exotic / Cross bred & Indigenous)			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Arunachal Pradesh	55	205	260	2836	4249	7085	2891	4454	7345	
Assam	2710	4099	6809	76162	249129	325291	78872	253228	332100	
Manipur	3	28	31	2391	3499	5890	2394	3527	5921	
Meghalaya	37	62	99	4993	10587	15580	5030	10649	15679	
Mizoram	250	192	442	20	23	43	270	215	485	
Nagaland	35	126	161	151	49	200	186	175	361	
Sikkim	31	14	45	945	1026	1971	976	1040	2016	
Tripura	53	167	220	1362	3878	5240	1415	4045	5460	
Total - NE Region	3174	4893	8067	88860	272440	361300	92034	277333	369367	
Total - India	829249	3258884	4088133	12533328	57639154	70172482	13362577	60898038	74260615	

Source: '20th Livestock Census 2019 – All India Report' published by the Ministry of Fisheries, Animal Husbandry & Dairying, Government of India [Table-22 Page No. 75 (Exotic / Cross Bred) and Table-23 No. Page 76 (Indigenous)]

- 1. Exotic Animal: Animals which are developed in other countries are described as exotic animals.
- 2. Cross-Bred Animal: Animals which are produced by crossing indigenous animals with exotic breeds or indigenous animals which have exotic inheritance are described as crossbred animals.
- 3. Indigenous Animal: Animals which belongs to descript/non-descript breeds of indigenous origin.



**Table-5.2.5: Total Number of Goats in the NE States** 

State	Male	Female	Total
Arunachal Pradesh	69392	90348	159740
Assam	1221788	3093385	4315173
Manipur	15367	23330	38697
Meghalaya	142275	255228	397503
Mizoram	5881	8939	14820
Nagaland	13929	17673	31602
Sikkim	50935	39571	90506
Tripura	51768	308436	360204
Total - NE Region	1571335	3836910	5408245
Total - India	32104795	116779991	148884786

Source: '20th Livestock Census 2019 – All India Report' published by the Ministry of Fisheries, Animal Husbandry & Dairying, Government of India [Table-26 Page No. 79]



Goat farming has become popular in some areas



Table-5.2.6: Total Number of Pigs in the NE States

State	Е	xotic / Cross-Bre	ed		Indigenous		Total Pigs (Exotic / Cross bred & Indigenous)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Arunachal Pradesh	8254	5424	13678	134006	123779	257785	142260	129203	271463
Assam	238654	219586	458240	691289	949471	1640760	929943	1169057	2099000
Manipur	6081	21402	27483	99701	108071	207772	105782	129473	235255
Meghalaya	153306	122747	276053	222252	208059	430311	375558	330806	706364
Mizoram	143549	119512	263061	17060	12344	29404	160609	131856	292465
Nagaland	121817	85273	207090	121758	75847	197605	243575	161120	404695
Sikkim	9425	2593	12018	11327	3975	15302	20752	6568	27320
Tripura	50807	53820	104627	37244	64164	101408	88051	117984	206035
Total - NE Region	731893	630357	1362250	1334637	1545710	2880347	2066530	2176067	4242597
Total - India	927310	969634	1896944	2892983	4265561	7158544	3820293	5235195	9055488

Source: '20th Livestock Census 2019 – All India Report' published by the Ministry of Fisheries, Animal Husbandry & Dairying, Government of India [Table-31 Page No. 84 (Exotic / Cross Bred) and Table-32 Page No. 85 (Indigenous)]

- 1. Exotic Animal: Animals which are developed in other countries are described as exotic animals.
- 2. Cross-Bred Animal: Animals which are produced by crossing indigenous animals with exotic breeds or indigenous animals which have exotic inheritance are described as crossbred animals.
- 3. Indigenous Animal: Animals which belongs to descript/non-descript breeds of indigenous origin



Table-5.2.7: Total Number of Fowls (Back-yard Poultry) in the NE States

State	Cod	cks	Не	ns	Chicken (under 5 months)		Total Fowl	
	Desi	Improved	Desi	Improved	Desi	Improved	Desi	Improved
Arunachal Pradesh	225393	24675	365883	42044	726857	87728	1318133	154447
Assam	5759314	236115	9227875	365390	16940617	576261	31927806	1177766
Manipur	387151	378817	537694	543354	899251	1087708	1824096	2009879
Meghalaya	884561	19436	1254742	32652	2882849	158209	5022152	210297
Mizoram	145547	46459	230564	88455	644185	863285	1020296	998199
Nagaland	296100	97151	426789	126512	1327870	380735	2050759	604398
Sikkim	65649	55157	119392	59460	164119	109710	349160	224327
Tripura	434477	76700	764397	113548	1469988	319930	2668862	510178
Total - NE Region	8198192	934510	12927336	1371415	25055736	3583566	46181264	5889491
Total - India	46930118	10906461	73992071	21105805	106673805	21202955	227595994	53215221

Source: '20th Livestock Census 2019 - All India Report' published by the Ministry of Fisheries, Animal Husbandry & Dairying, Government of India [Table-51 Page No. 106-107]

### Notes

1. 'Desi' and 'Improved' poultry birds: As follows

If a hen/duck lays more than 100 eggs in a year then it is categorized as 'improved' hen/duck or else it is categorized as 'desi'. If a cock/chicken/drake/ duckling falls into the flock of an 'improved' hen/duck then it an 'improved' cock/chicken/ drake/ duckling or else it is 'desi'.



Table-5.2.8: Total Number of Ducks (Back-yard Poultry) in the NE States

State	Drakes	Ducks	Ducklings (under 5 months)	Total Ducks
Arunachal Pradesh	25756	37676	60986	124418
Assam	2613485	4247105	5158139	12018729
Manipur	388266	579059	730039	1697364
Meghalaya	10876	29558	20143	60577
Mizoram	2375	3729	6552	12656
Nagaland	27405	39465	98222	165092
Sikkim	371	480	172	1023
Tripura	182750	382537	285602	850889
Total - NE Region	3251284	5319609	6359855	14930748
Total - India	7748131	13509528	11245380	32503039

Source: '20th Livestock Census 2019 – All India Report' published by the Ministry of Fisheries, Animal Husbandry & Dairying, Government of India [Table-52 Page No. 108]



Most of the duck population in the region is found in Assam



Table-5.2.9: Total Number of Fowls (Poultry Farm) in the NE States

State	Coo	cks	Не	ns	Chicken (unc	ler 5 months)	Total	Fowl
	Desi	Improved	Desi	Improved	Desi	Improved	Desi	Improved
Arunachal Pradesh	19	600	56	1000	80	0	155	1600
Assam	28067	188951	22402	245660	47302	127689	97771	562300
Manipur	6616	62184	7381	75966	6608	136568	20605	274718
Meghalaya	665	5288	1487	23761	19329	35558	21481	64607
Mizoram	6	30	5	1235	12	14511	23	15776
Nagaland	156	605	207	2662	536	7419	899	10686
Sikkim	249	456	1383	1961	104	353	1736	2770
Tripura	144	32813	449	36144	702	19558	1295	88515
Total - NE Region	35922	290927	33370	388389	74673	341656	143965	1020972
Total - India	7085566	36543948	33378626	240712547	24383242	184974990	64847434	462231485

Source: '20th Livestock Census 2019 – All India Report' published by the Ministry of Fisheries, Animal Husbandry & Dairying, Government of India [Table-58 Page No. 116-117]

### Notes

# 1. Poultry Farm

Farms having more than 1,000 birds will be considered as Poultry Farms. Farms having only Emu/Ostrich birds will be considered as farm if having more than 20 birds. However, all government enterprises having poultry are considered as poultry farms irrespective of the number of birds in them.

# 2. 'Desi' and 'Improved' poultry birds: As follows

If a hen/duck lays more than 100 eggs in a year then it is categorized as 'improved' hen/duck or else it is categorized as 'desi'. If a cock/chicken/drake/ duckling falls into the flock of an 'improved' hen/duck then it an 'improved' cock/chicken/ drake/ duckling or else it is 'desi'.



Table-5.2.10: State-wise Production of Meat in the NE States

State			In '000 MT		
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	20	21	22	23	22
Assam	47	48	50	53	54
Manipur	27	28	28	29	29
Meghalaya	41	43	45	46	39
Mizoram	15	16	16	16	15
Nagaland	31	32	32	32	24
Sikkim	4	4	4	4	3
Tripura	40	45	48	51	52
Total - NE Region	225	237	245	254	238
Total - India	7386	7656	8114	8599	8798

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the 'Basic Animal Husbandry Statistics' of the Ministry of Fisheries, Animal Husbandry & Dairying, Government of India [Table-89 Page No. 245]

60
50
40
30
20
10
Arunachal Assam Manipur Meghalaya Mizoram Nagaland Sikkim Tripura Pradesh

**Graph-5.2.2: Production of Meat in the NE States** 

Y-axis gives the production of meat in the NE States in thousand of MT (for 2020-21)





Table-5.2.11: State-wise Production of Milk in the NE States

State			In '000 MT		
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	53	54	55	61	44
Assam	861	872	882	920	954
Manipur	79	82	86	90	71
Meghalaya	84	85	87	88	89
Mizoram	24	25	26	24	25
Nagaland	79	74	73	62	56
Sikkim	54	59	61	84	74
Tripura	160	174	185	199	206
Total - NE Region	1394	1425	1455	1528	1519
Total - India	165404	176347	187749	198440	209960

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the 'Basic Animal Husbandry Statistics' of the Ministry of Fisheries, Animal Husbandry & Dairying, Government of India [Table-90 Page No. 247]



Milk production can be increased in the NE states



Table-5.2.12: State-wise Production of Eggs in the NE States

State			Nos. in Lakh		
	2016-17	2017-18	2018-19	2019-20	2020-21
Arunachal Pradesh	495	550	595	605	639
Assam	4771	4952	5015	5149	5253
Manipur	992	1018	1053	1082	1142
Meghalaya	1064	1074	1090	1102	1108
Mizoram	408	410	415	433	434
Nagaland	397	401	375	382	385
Sikkim	68	63	55	48	98
Tripura	2294	2621	2760	2950	3032
Total - NE Region	10489	11089	11358	11751	12091
Total - India	881370	952170	1038040	1143831	1220486

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the 'Basic Animal Husbandry Statistics' of the Ministry of Fisheries, Animal Husbandry & Dairying, Government of India [Table-90 Page No. 247]

1000
800
600
400
200

\*\*Eggs\*\*

\*\*Regretative\*\*

\*\*Regret

Graph-5.2.2: Production of Milk and Eggs in the NE States

Y-axis gives the production of milk in Thousand MT and of eggs in Million Nos. (for 2020-21)



# 5.3. Fisheries

India is the third largest fish producing country and the second largest aquaculture fish producer in the world. India contributes about 7% to the global fish production. The country is also home to more than 10% of the global fish biodiversity and is one of the 17-mega biodiversity rich countries. Around 14 million people are engaged in fisheries and its allied activities. Andhra Pradesh is the largest fish producer in the country followed by West Bengal and Gujarat. The total fish production during 2017-18 is estimated to be 12.60 million metric tonnes, of which nearly 70% is from inland sector and about 50% of the total production is from culture fisheries. Fisheries contribute to over 7% of the GVA from the agriculture and allied sectors.

More than 50 different types of fish and shellfish products are being exported to 75 countries around the world. Fish and fish products have presently emerged as the largest group in agricultural exports from India, with 13.77 lakh tonnes in terms of quantity and Rs. 45,106.89 crore in value.

Around 70% of India's fish production comes from inland waters, of which nearly 65% comes from aquaculture. Out of the total inland aquaculture production, Indian Major Carps are the most cultured freshwater fish followed by Exotic Carps, Minor Carps, Catfish and Trout. There are around 1,300 Carp Hatcheries in India that produced seed and supply to fish farmers.

The NE Region is rich in fresh-water fish species, and it is considered as one of the world's hotspots for freshwater fish biodiversity. In fact, as many as 422 fish species have been reported from NE India, belonging to 133 genera and 38 families, including indigenous and exotic species.

While the NE Region has considerable water resources, the development of fisheries in the region has not been commensurate. As per data for 2019-20, it is estimated that the region faces a deficit of at least 17% in its estimated requirement of fish. The shortage is over 33% of the requirements in Tripura, and about 7% for Assam. Since over 90% of the population in the NE states consume fish regularly, there is ample scope for the development of fisheries in the different states. Accordingly, livelihood initiatives funded by NEC like NERCORMP, as well as similar measures by the State Governments, have been focussing upon the development of the fisheries of the region.





Table-5.3.1: State-wise Fish Production in the NE States

Inland Fish Production in Lakh MT

State	2016-17	2017-18	2018-19	2019-20
Arunachal Pradesh	0.04	0.04	0.05	0.05
Assam	3.07	3.27	3.31	3.73
Manipur	0.32	0.33	0.32	0.32
Meghalaya	0.12	0.12	0.13	0.14
Mizoram	0.08	0.08	0.07	0.07
Nagaland	0.09	0.09	0.09	0.09
Sikkim	0.00	0.00	0.00	0.00
Tripura	0.72	0.77	0.70	0.78
Total - NE Region	4.44	4.70	4.67	5.18
Total - India	78.06	89.48	97.2	104.37

Source: 'Handbook on Fisheries Statistics: 2020' published by the Ministry of Fisheries, Animal Husbandry & Dairying, Government of India [Table-1.2 Page No. 8]

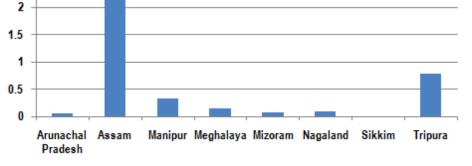
#### Notes

- 1. Fisheries is an economic activity that involves harvesting fish or any aquatic organism from the wild (Capture Fisheries) or raising them in confinement (Culture Fisheries/ Aquaculture). It may be Traditional/ Small Scale Fisheries (SSF) for sustenance, or Large-Scale/ Commercial Fisheries for profit.
- 2. Thus, fish production can be from confined water-bodies or from the wild.
- 3. Fish production in the NE states includes fresh water fish only.

Freshwater Fish are fish that spend most or all of their life in freshwaters, such as rivers and lakes, having a salinity of less than 0.5 ppt. Around 40% of all known species of fish are found in freshwater. They may be divided into Coldwater Fish (5 – 20°C); examples: Mahseer, Trout, etc., and Warm-water Fish (25 – 35°C); example: Carps, Catfish, Snakeheads, Featherbacks, etc.

3.5 3 2.5

**Graph-5.3.1:** Fish Production in the NE States



Y-axis gives the Fish Production in Lakh MT for 2019-20



Table-5.3.2: State-wise Fish Seed Production in the NE States

(In Lakh Fry)

State	2016-17	2017-18	2018-19	2019-20
Arunachal Pradesh	65	70	0	0
Assam	67,580	80,000	98,930	95,190
Manipur	2,150	2,500	4,060.8	2,494.8
Meghalaya	75.6	97	0	3
Mizoram	310	426	406.6	400
Nagaland	480	481	760	795
Sikkim	23.2	6.5	16.25	16.25
Tripura	3,137	4,350	0	0
Total - NE Region	73,820.8	87,930.5	104,173.7	98,899.05
Total - India	357,439.2	444,207.7	481,974.4	521,706.1

Source: 'Handbook on Fisheries Statistics: 2020' published by the Ministry of Fisheries, Animal Husbandry & Dairying, Government of India [Table-1.7 Page No. 17]

# Notes

# 1. Fish seed

Seed fish are early developmental stage of commercial fishes. A large number of them are produced in a confined space by the process of induced breeding. Fish seed includes fish egg or larva or post-larva of fish or the spawn, fry or fingerling of fish



Fish seed farming can lead to enhanced rural incomes



Table-5.3.3: State-wise Fish Consumption in the NE States (2019-20)

(In Kg per capita)

State →	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	NE Region (Average)
Per Capita Consumption (in Kg)	3.52	11.72	14.1	10.98	5.54	6.68	1.16	29.29	12.47

Source: 'Handbook on Fisheries Statistics: 2020' published by the Ministry of Fisheries, Animal Husbandry & Dairying, Government of India [Table-3.1 Page No. 26]

35
30
25
20
15
10
Arunachal Assam Manipur Meghalaya Mizoram Nagaland Sikkim Tripura
Pradesh

Graph-5.3.2: Fish Consumption in the NE States (2019-20)

Y-axis gives the per capita consumption of fish in Kg



Tripura has the highest consumption of fish in the NE Region on a per-capita basis



### 5.4. Forests & Bamboo

Forests play a multi-faceted function in maintaining the overall environmental balance of a country. The founding fathers of India had recognized this role of forests. Accordingly, the National Forest Policy of 1952, the first of its kind in independent India, mentioned that 'Practical consideration suggests, however, that India, as a whole, should aim at maintaining one-third of its total land area under forests'. Subsequently, the Forest Departments of State Governments worked to balance the traditional emphasis upon timber extraction with the increasingly prominent need for the conservation of forests. Over the decades, the general public too had become increasingly sensitive about the need to protect the nation's forests. By the mid-1980s, the emphasis of the Central and State Governments has shifted to the conservation of forests. Accordingly, the principal aim of the Forest Policy of 1988 was 'to ensure environmental stability and maintenance of ecological balance including atmospheric equilibrium which are vital for sustenance of all life forms, human, animal and plant. The derivation of direct economic benefit must be subordinate to this principal aim'.

In the recent decades, the Government has undertaken massive afforestation initiatives across the country in order to cover a larger area under forests and also to regenerate degraded forests. Consequently, the area of India covered by forests and trees has increased from below one-fifth in 1987 to nearly one-quarter as per the latest State of Forest Report (of 2021). In the NE Region, forests and trees cover almost two-thirds of the region's area. However, there have been losses of such forest cover between the successive forest area surveys undertaken for the preparation of the 'State of Forest Reports'. This is despite the efforts of State Governments to undertake tree plantation and forest regeneration with support from the Government of India. It may be necessary to undertake more outcome oriented measures to conserve the forests of the region, which includes a wide variety of forest types that also shelter several genera and species of flora and fauna not found elsewhere in the country.

Further, forests are the source of several non-timber forest products that can be harvested in a sustainable manner, including medicinal and aromatic plants. Considering the wide availability of such plants in the NE Region, the Ministry of Development of North Eastern Region has an Inter-Ministerial Committee on Medical & Aromatic Plants. This is a forum for the discussions of the sectoral opportunities and challenges with the concerned Line Ministry.

Bamboo is another forest resource that is widely found in the NE Region and used for millennia by local communities of all its states. The region has nearly 45% of the nation's bamboo stock as measured by the 'green equivalent weight' of bamboo. Cane is another such resource that is widely used in the states of NE India. In view of the importance of bamboo and cane, NEC has been funding the Cane and Bamboo Technology Centre (CBTC) since 2004. This organization has been now renamed as the North East Cane and Bamboo Development Council (NECBDC), along with a mandate for working to develop the cane and bamboo sector in the NE Region.



Table-5.4.1: Recorded Forest Area of the NE States

(In square kilometres / %)

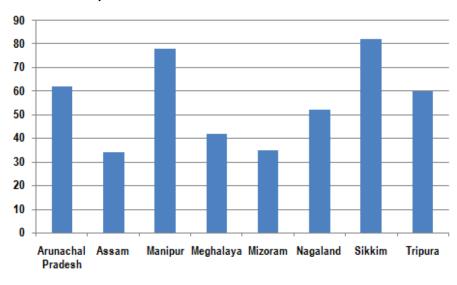
State		Recorded Forest A	Area (in square km)		Recorded Forest
	Reserve Forest	Protected Forest	Unclassified Forest	Total Recorded Forest Area	Area as a % of Total Geographical Area
Arunachal Pradesh	12,371	11,857	27,312	51,540	62
Assam	17,864	0	8,972	26,836	34
Manipur	984	3,254	13,180	17,418	78
Meghalaya	1,113	12	8,371	9,496	42
Mizoram	4,499	1,823	1,157	7,479	35
Nagaland	234	0	8,389	8,623	52
Sikkim	5,452	389	0	5,841	82
Tripura	3,588	2	2,704	6,294	60
Total – NE Region	46,105	17,337	70,085	133,527	51
Total - India	442,276	212,259	120,753	775,288	24

Source: 'India State of Forest Report, 2021', Forest Survey of India, Ministry of Environment, Forest & Climate Change of Government of India

- 1. Recorded Forest Area is area that has been classified as 'forest' in the government records. Such areas include Reserve Forests (RF), Protected Forests (PF) and Unclassified Forests that have been notified as per the provisions of the Indian Forests Act, 1927 or similar acts of State Governments. Some of these areas may be even without significant forest cover, as RFA can even include wetlands, water bodies, grass lands etc.
- 2. Reserve Forest: This is an **area**, which has been notified as 'Reserved Forest' area under the Indian Forest Act. In the entire area of such reserved forests, all types of activities are prohibited and nothing can be done there without the specific permission for the purpose.
- 3. Protected Forest: Such area, which has been notified as 'partially protected' under the Indian Forest Act. In such areas, unless and until any activity is specifically prohibited, all other work and activities can be performed
- 4. Un-classified Forest: An area, which is, although notified as forest area, but is neither categorized as reserved forests nor protected forest, is called an 'Unclassified Forest' area.

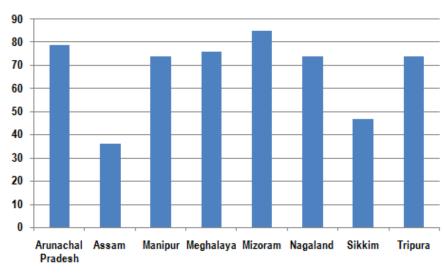


**Graph-5.4.1: Recorded Forest Area of the NE States** 



Y-axis gives the Recorded Forest Area as a Percentage of Total Geographical Area

**Graph-5.4.2: Area under Forest Cover in the NE States** 



Y-axis gives the Forest Cover as a Percentage of Total Geographical Area





Table-5.4.2: Area under Forest Cover in the NE States

(In square kilometres / %)

State	-	orest Cover (in	square km)		Forest Cover as	Scrub	Scrub as a %
	Very Dense Forest	Moderately Dense Forest	Open Forest	Total Forest Cover	a % of Geographical Area		of Geographical Area
Arunachal Pradesh	21,058	30,176	15,197	66,431	79	797	1
Assam	3,017	9,991	15,304	28,312	36	228	0
Manipur	905	6,228	9,465	16,598	74	1,215	5
Meghalaya	560	9,160	7,326	17,046	76	663	3
Mizoram	157	5,715	11,948	17,820	85	1	0
Nagaland	1,272	4,449	6,530	12,251	74	824	5
Sikkim	1,102	1,551	688	3,341	47	296	4
Tripura	647	5,212	1,863	7,722	74	33	0
For NE Region	28,718	72,482	68,321	169,521	65	4,057	2
For India	99,779	306,890	307,120	713,789	22	46,539	1

Source: 'India State of Forest Report, 2021', Forest Survey of India, Ministry of Environment, Forest & Climate Change of Government of India

# Notes

- 1. Forest Cover is a concept used by the Forest Survey of India to determine the area under forests. It refers to all tree patches that have a canopy density of more than 10% and an area of 1 hectare or more, irrespective of land use, ownership and species of trees. It may include bamboo clumps, orchards, palms etc. as assessed through remote sensing.
- 2. Forest cover is classified as follows, depending upon canopy density:
  - Very Dense Forest: Canopy density ≥ 70%
  - Moderately Dense Forest: Canopy density ≥ 40% but below 70%
  - Open Forest: Canopy density ≥ 10% but below 40%
  - Scrub: Canopy density below 10%

Canopy refers to the cover of branches and foliage formed by crowns of trees. Canopy Cover is the percentage of ground covered by a vertical projection of outermost perimeter of natural spread of foliage of plants. Canopy Density is the percent area of land covered by canopy of trees. It is expressed as a decimal coefficient (or percentage), taking closed canopy as unity (i.e. 100%).



Table-5.4.3: Changes in Area under Forest Cover in the NE States

(In square kilometres / %)

State	Geographical Area	Forest Cover (in sq. km)			Forest Cover as a % of Geographical Area		
	(sq. km)	ISFR 2019	ISFR 2021	Change (+ / -)	ISFR 2019	ISFR 2021	
Arunachal Pradesh	83,743	66,688	66,431	-257	79.63	79.33	
Assam	78,438	28,327	28,312	-15	36.11	36.09	
Manipur	22,327	16,847	16,598	-249	75.46	74.34	
Meghalaya	22,429	17,119	17,046	-73	76.33	76.00	
Mizoram	21,081	18,006	17,820	-186	85.41	84.53	
Nagaland	16,579	12,486	12,251	-235	75.31	73.89	
Sikkim	7,096	3,342	3,341	-1	47.10	47.08	
Tripura	10,486	7,726	7,722	-4	73.68	73.64	
For NE Region	262,179	170,541	169,521	-1,020	65.05	64.66	
For India	3,287,469	712,249	713,789	1,540	21.67	21.71	

Sources: 'India State of Forest Report, 2021' & 'India State of Forest Report, 2019' brought out by Forest Survey of India of the Ministry of Environment, Forest & Climate Change of Government of India

- 1. Forest Cover is a concept used by the Forest Survey of India to determine the area under forests. It refers to all tree patches that have a canopy density of more than 10% and an area of 1 hectare or more, irrespective of land use, ownership and species of trees. It may include bamboo clumps, orchards, palms etc. as assessed through remote sensing.
- 2. The above table gives the changes between the forest cover assessed in the 'India State of Forest Report, 2019' and the 'India State of Forest Report, 2021'.



Mizoram has nearly 85% of the state's area under 'Forest Cover'



Table-5.4.4: Trees Outside Forest (TOF) in the NE States

(In square kilometres)

State	Forest Cover outside Recorded Forest Area	Tree Cover	Tree Outside Forest (TOF)
Arunachal Pradesh	7,751	1,001	8,752
Assam	8,309	1,630	9,939
Manipur	1,765	169	1,934
Meghalaya	2,248	698	2,946
Mizoram	264	444	708
Nagaland	3,623	365	3,988
Sikkim	1,287	39	1,326
Tripura	2,289	228	2,517
Total - NE Region	27,536	4,574	32,110
Total - India	197,159	95,748	292,907

Source: 'India State of Forest Report, 2021', Forest Survey of India, Ministry of Environment, Forest & Climate Change of Government of India

- 1. Trees outside Forests (TOF) refers to tree resources found outside the forests as defined in the Government records. TOF is equal to the sum of: (a) Forest Cover outside the Recorded Forest Area (also called as the 'Green Wash'); and (b) Tree cover.
- 2. Tree Cover is defined as all tree patches of size less than 1 hectare occurring outside the recorded forest area. Tree cover includes trees in all formations including scattered trees.



'Tree Covers' refers to forested patches of less than one hectare outside the Recorded Forest Area (Representational Image)



Table-5.4.5: Growing Stock in the Forests of the NE States

(In million cubic metres / %)

State	Growing Stock in Recorded Forest Area (million cum)	As a % of India's Total of Growing Stock in RFA	Growing Stock in Trees Outside Forests (million cum)	As a % of India's Total of Growing Stock in TOF
Arunachal Pradesh	418.99	9.55	73.48	4.13
Assam	112.68	2.57	23.94	1.35
Manipur	54.99	1.25	5.10	0.29
Meghalaya	35.44	0.81	20.82	1.17
Mizoram	28.87	0.66	46.05	2.59
Nagaland	30.28	0.69	15.60	0.88
Sikkim	33.91	0.77	1.73	0.10
Tripura	23.13	0.53	7.46	0.42
For NE Region	738.29	16.82	194.18	10.91
For India	4388.15	100.00	1779.35	100.00

Source: 'India State of Forest Report, 2021', Forest Survey of India, Ministry of Environment, Forest & Climate Change of Government of India

- 1. Growing stock is estimated separately for: (a) Recorded Forest Area; and (b) 'Trees Outside Forests' (TOF).
- 2. Growing stock is the sum (by number or volume) of all the trees growing / living in the forest or a specified part of it. In the above table, the volumes of all trees growing / living in RFA and TOF have been estimated separately.
- 3. Figures have been rounded off.
- 4. Regional percentages of the growing stocks have been computed on the basis of the region's total growing stock and India's total growing stock.



Arunachal Pradesh has nearly 10% of India's Growing Stock in Recorded Forest Areas



Table-5.4.6: Carbon Stock in the Forests of the NE States (Including TOF Patches)

(In '000 MT / %)

State		Carbo	on Stock in F	orests (in '00	0 MT)		As a % of
	AGB	BGB	Dead Wood	Litter	SOC	Total	<b>India's</b> Total
Arunachal Pradesh	340,351	102,229	9,163	11,802	560,298	1,023,843	14.21
Assam	87,070	21,495	1,875	4,890	156,042	271,372	3.77
Manipur	47,590	14,101	880	2,652	111,708	176,931	2.46
Meghalaya	55,241	15,820	1,238	3,075	108,014	183,388	2.55
Mizoram	48,157	10,622	758	3,140	95,961	158,638	2.20
Nagaland	39,339	10,618	854	2,006	82,115	134,932	1.87
Sikkim	18,024	5,466	498	607	30,944	55,539	0.77
Tripura	24,349	5,358	477	1,486	43,304	74,974	1.04
Total - NE Region	660,121	185,709	15,743	29,658	1,188,386	2,079,617	28.87
Total - India	2,319,190	718,852	47,665	107,251	4,010,168	7,203,846	100.00

Source: 'India State of Forest Report, 2021', Forest Survey of India, Ministry of Environment, Forest & Climate Change of Government of India

### Notes

1. Carbon stock includes Trees Outside Forests (patches over 1.0 hectare outside recorded forest area).

2. Abbreviations used for different pools of carbon stock are as follows:

AGB: Above Ground Biomass BGB: Below Ground Biomass SOC: Soil Organic Carbon





Table-5.4.7: Growing Stock of Bamboo in the NE States

State	Bamboo Be	earing Area	Total Numb	er of Culms	Total Green Equivalent Weight		
	Area in sq. km	As a % of India's Total	In Million Nos.	As a % of India's Total	In '000 MT	As a % of India's Total	
Arunachal Pradesh	15,739	10.53	8,824	16.54	46,546	11.58	
Assam	10,659	7.13	5,656	10.60	38,600	9.60	
Manipur	8,377	5.61	1,568	2.94	11,321	2.82	
Meghalaya	5,007	3.35	2,199	4.12	24,745	6.16	
Mizoram	4,561	3.05	1,490	2.79	12,585	3.13	
Nagaland	3,947	2.64	2,705	5.07	32,402	8.06	
Sikkim	994	0.67	326	0.61	624	0.16	
Tripura	4,201	2.81	1,562	2.93	12,413	3.09	
For NE Region	53,485	35.79	24,330	45.62	179,236	44.59	
For India	149,443	100.00	53,336	100.00	402,000	100.00	

- 1. Bamboo bearing areas in Recorded Forest Area and Green Wash (Forest Cover outside Recorded Forest Area) have been taken.
- 2. Culms of one year and above have been included in the total number of culms.
- 3. Figures have been rounded off.
- 4. Regional percentages of bamboo bearing area, total number of culms and total green equivalent weight have been computed on the basis of the region's figures and India's total figures.



The NE Region has nearly 45% of the nation's growing stock of bamboo



Table-5.4.8: Details of Bamboo Bearing Areas in the NE States

	Ar	ea as per Class	of Bamboo Bea	ring Area (km²)	(*)	<b>.</b>
State	Pure Bamboo	Dense	Scattered	Bamboo Present but Clumps completely hacked	Regeneration Crop	Total Bamboo Bearing Area (km²)
Arunachal Pradesh	274	3,148	11,906	0	411	15,739
Assam	449	2,300	7,798	56	56	10,659
Manipur	161	1,450	6,766	0	0	8,377
Meghalaya	484	750	3,676	0	97	5,007
Mizoram	383	1,781	2,331	33	33	4,561
Nagaland	172	772	2,917	0	86	3,947
Sikkim	66	155	773	0	0	994
Tripura	94	669	3,318	13	107	4,201
Total - NE Region	2,083	11,025	39,485	102	790	53,485
Total – India	5,516	29,208	89,648	7,765	17,306	149,443
NER to India (%)	38	38	44	1	5	36

# Notes

- 1. All figures are in km<sup>2</sup> (square kilometres), but the ratio of NER to India (last row) is given as a percentage.
- 2. The above classification is done of the basis of the density of bamboo culms in the Recorded Forest Area.

18,000
14,000
10,000
8,000
4,000
2,000
Arunachal Assam Manipur Meghalaya Mizoram Nagaland Sikkim Tripura Pradesh

**Graph-5.4.3: Bamboo Bearing Areas in the NE States** 

Y-axis gives the Bamboo Bearing Area in Square Kilometres as per the India State of Forest Report, 2021



Table-5.4.9: Number of Bamboo Culms in Recorded Forest Areas of NE States

Ctata		Number of Bamboo	Culms (in Millions)		
State	Green Sound	Dry Sound	Decayed	Total	
Arunachal Pradesh	7,455	812	557	8,824	
Assam	4,813	407	436	5,656	
Manipur	1,277	279	12	1,568	
Meghalaya	1,803	214	182	2,199	
Mizoram	1,219	173	98	1,490	
Nagaland	2,095	296	314	2,705	
Sikkim	285	23	18	326	
Tripura	1,311	185	66	1,562	
Total – NER	20,258	2,389	1,683	24,330	
Total – India	39,150	9,352	4,834	53,336	
NER to India (%)	52	26	35	46	

- 1. All figures are in km<sup>2</sup> (square kilometres), except those in the last row.
- 2. Figures in the last row show the ratio of bamboo culms of different classes in the NE Region to bamboo culms of the corresponding class in India. These are given as percentages.
- 3. The above classification is done of the basis of the soundness of bamboo culms in the Recorded Forest Area.





Table-5.4.10: Equivalent Green Weight of Bamboo Culms in Recorded Forest Area of NE States

State	Equiva	lent Green Weight in Thousand	I MT			
State	Green Culms	Dry Culms	Total			
Arunachal Pradesh	38,083	38,083 8,463				
Assam	33,978	4,622	38,600			
Manipur	7,778	3,543	11,321			
Meghalaya	19,096	5,649	24,745			
Mizoram	9,606	2,979	12,585			
Nagaland	24,039	8,363	32,402			
Sikkim	533	91	624			
Tripura	9,193	3,220	12,413			
Total – NER	142,306	36,930	179,236			
Total – India	263,556	138,444	402,000			
NER to India (%)	54	27	45			

- **1.** Bamboo culms are classified into three categories, namely green sound, dry sound and decayed. The estimated number of culms is converted into equivalent green weight using appropriate weight factors.
- 2. All figures are in thousands of Metric Tonnes, except those in the last row.
- **3.** Figures in the last row show the ratio of equivalent green weight of bamboo culms of different classes (green culm and dry culm) in the NE Region to that of bamboo culms of similar class in India. These are given as percentages.





# 5.5. Minerals & Mining

Minerals provide vital raw materials for many basic industries of India. They are major components for the economic growth and industrial development of the country. Hence, the management of mineral resources has to be closely integrated with the national economic policies and industrial plans. After the economic liberalization of India, which commenced in 1991, the National Mineral Policy was announced in March 1993. This policy opened the mineral sector for development by private entrepreneurs, from India and overseas.

Subsequently, in view of the changing global scenario, it was felt necessary to revise the National Mineral Policy. This led to the notification of the National Mineral Policy 2019, which had an objective ensure a more effective, meaningful and implementable policy that results in transparency, better regulation and enforcement, balanced social and economic growth as well as sustainable mining practices. In parallel, the National Mineral Exploration Policy (NMEP) was approved by Government of India in June, 2016. It aims at accelerating the exploration activity in the country through enhanced participation of the private sector. The above-mentioned policy initiatives are expected to bring about a turnaround to the entire mineral sector of India.

The NE Region has some notable mineral deposits like petroleum, natural gas, coal and limestone; apart from other minerals that have been classified as 'minor minerals'. Much of the region remains to be properly explored for its mineral resources. In addition, coordinated efforts can be undertaken by the different stakeholders, including the Governments at the Centre and the States, so that such mineral resources get well-established on the economic, technical feasibility and geological parameters and thereby become 'proven reserves' and 'probable reserves' in the future years.





Table-5.5.1: Balance Recoverable Reserves of Crude Oil in the NE States

(In Million MT)

State	2017	2018	2019				2020			2021					
	Total	Total	Reserves (2P)	Contingent Resources (2C)	Total	% of Total (2022)									
Arunachal Pradesh	1.5	1.7	2.7	0.0	2.7	3.1	0.0	3.1	3.6	0.0	3.6	2.4	0.5	2.9	0.4
Assam	160.0	160.3	115.9	42.7	158.6	112.6	42.9	155.5	110.8	42.2	153.1	107.4	41.2	148.6	22.8
Nagaland	2.4	2.4	2.4	0.0	2.4	0.0	2.4	2.4	0.0	2.4	2.4	0.0	2.4	2.4	0.4
Tripura	0.1	0.1	0.1	0.0	0.1	0.1		0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0
Total - NE Region	164.0	164.5	121.1	42.7	163.8	115.8	45.3	161.1	114.5	44.6	159.2	109.9	44.1	154.0	23.6
Total - India	604.1	594.5	504.9	114.1	618.9	490.9	117.4	608.3	475.3	116.6	591.9	449.0	202.8	651.8	100.0

**Source:** 'Indian Petroleum & Natural Gas Statistics 2021-22', furnished by the Ministry of Petroleum & Natural Gas, Government of India [Table II.9 Page No 27]

- 1. Balance Recoverable Reserves of Crude Oil have been indicated as per the position on 1st April of the year.
- 2. Reserves indicated for 2022 are provisional
- 3. ONGC adopted PRMS System with effect from 01.04.2019; OIL & Contract Regime adopted PRMS system with effect from 01.04.2022. Revision/changes in Reserves figures are mainly attributed to the adoption of PRMS guidelines in reserves reporting.
- 4. As per PRMS system, Under PRMS, each project must be classified individually so that the estimated recoverable sales quantities associated with that project can be correctly assigned to one of the three main classes: Reserves, Contingent Resources or Prospective Resources.
  - Reserves are associated with projects that the owners can demonstrate to be economic and that have approval for development by all partners.
  - Contingent resources are associated with projects that are discoveries, but for some reason the project is not yet approved for development.
  - Prospective resources are from projects that remain as prospects, i.e. are yet to be discovered."
- 5. Other NE States do not have any significant reserves of crude oil.



Table-5.5.2: Balance Recoverable Reserves of Natural Gas in the NE States

(In Billion Cubic Metres)

State	2017	2018	2019				2020			2021			2022			
	Total	Total	Reserves (2P)	Contingent Resources (2C)	Total	Reserves (2P)	Contingent Resources (2C)	Total	Reserves (2P)	Contingent Resources (2C)	Total	Reserves (2P)	Contingent Resources (2C)	Total	% of Total (2022)	
Arunachal Pradesh	0.7	1.3	1.6	0.0	1.6	2.7	0.0	2.7	3.1	0.0	3.1	0.0	7.3	7.3	0.6	
Assam	158.6	161.7	144.9	21.0	165.9	145.3	21.3	166.6	144.3	22.2	166.5	80.3	84.8	165.1	14.5	
Nagaland	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	
Tripura	36.1	35.2	21.3	6.7	28.0	21.7	7.8	29.5	22.2	7.1	29.3	18.8	11.5	30.3	2.7	
Total - NE Region	195.5	198.3	167.9	27.7	195.6	169.8	29.1	198.9	169.6	29.4	199.0	99.1	103.7	202.8	17.8	
Total - India	1,289.7	1,339.6	1,156.2	227.9	1,384.1	1,156.1	217.5	1373.5	1,142.0	230.3	1372.4	649.8	488.8	1,138.7	100.0	

Source: 'Indian Petroleum & Natural Gas Statistics 2021-22', furnished by the Ministry of Petroleum & Natural Gas, Government of India [Table II.10 Page No 28]

- 1. Balance Recoverable Reserves of Natural Gas have been indicated as per the position on 1st April of the year.
- 2. Reserves indicated for 2022 are provisional
- 3. ONGC adopted PRMS System with effect from 01.04.2019; OIL & Contract Regime adopted PRMS system with effect from 01.04.2022. Revision/changes in Reserves figures are mainly attributed to the adoption of PRMS guidelines in reserves reporting.
- 4. As per PRMS system, Under PRMS, each project must be classified individually so that the estimated recoverable sales quantities associated with that project can be correctly assigned to one of the three main classes: Reserves, Contingent Resources or Prospective Resources.
  - Reserves are associated with projects that the owners can demonstrate to be economic and that have approval for development by all partners.
  - Contingent resources are associated with projects that are discoveries, but for some reason the project is not yet approved for development.
  - Prospective resources are from projects that remain as prospects, i.e. are yet to be discovered."
- 5. Other NE States do not have any significant reserves of natural gas.



Table-5.5.3: Estimated Reserves of Coal in the NE States

(In Million Metric Tonnes)

State	Proved		Indic	cated	Infe	rred	То	tal	As a % of India's Total		
	2021-22	2022-23	2021-22	2022-23	2021-22	2022-23	2021-22	2022-23	2021-22	2022-23	
Arunachal Pradesh	31	31	40	40	19	19	90	90	0.03	0.02	
Assam	465	465	57	55	3	3	525	522	0.15	0.14	
Meghalaya	89	89	17	17	471	471	576	576	0.16	0.16	
Nagaland	9	9	22	22	416	448	446	478	0.13	0.13	
Sikkim	0	0	58	58	43	43	101	101	0.03	0.03	
Total - NE Region	594	594	194	192	952	984	1,738	1,767	0.47	0.45	
Total - India	1,77,179	1,87,105	1,46,949	1,47,250	27,998	27,054	3,52,126	3,61,409	100.00	100.00	

Source: : 'Energy Statistics India-2023', Ministry of Statistics & Programme Implementation, Government of India based on data from the Office of Coal Controller, Ministry of Coal

- 1. Estimated Reserves of Coal have been indicated as per the position on 1st April of the year.
- 2. Reserves indicated for 2022 are provisional
- 3. Other NE States do not have any significant reserves of coal.



### Mineral Resources other than Crude Oil & Natural Gas and Coal

The table at overleaf gives the mineral resources of the states of NE Region in terms of 'reserves' and 'remaining resources'. Mineral classified as 'minor minerals' are not listed, as these are dealt by the State Governments.

It may be noted that mineral reserves and resources have been categorized under the United Nations Framework Classification (UNFC) of Mineral Resources on three axes — viz. Economic Viability, Feasibility Assessment and Geological Assessment.

### Under the above system:

Code	Three digit code based system is used with the economic viability axis representing the first digit, the feasibility axis the second digit and the geologic axis the third digit. The highest category of resources under UNFC system will have the code (111) and lowest category the code (334).
Economic Viability	This is assessed in the course of prefeasibility and feasibility studies.  A prefeasibility study provides a preliminary assessment with a lower level of accuracy than that of a feasibility study, by which economic viability is assessed in detail.  The three categories of economic viability have codes 1, 2 and 3 in decreasing order.
Feasibility Assessment	This forms an essential part of the process of assessing a mining project.  The typical successive stages of feasibility assessment, i.e. geological study as initial stage followed by prefeasibility study and feasibility study/mining report, are well defined.  The three categories of feasibility study have also codes 1, 2 and 3.
Geological Assessment	The typical successive stages of geological investigation i.e. reconnaissance, prospecting, general exploration and detailed exploration, generate resource data with a clearly defined degrees of geological assurance.  These four stages of geological assessment are represented by 4 codes i.e. 1 (detailed exploration), 2 (general exploration), 3 (prospecting) and 4 (reconnaissance.

**Source:** 'Guidelines under MCDR for United Nations Framework Classification of Mineral Reserves/ Resources', Indian Bureau of Mines, 2000

It is seen that the reserves (proven and probable) of minerals, excluding (a) crude oil and natural gas, and (b) minor minerals dealt by the State Governments, include coal in Assam, Meghalaya, Arunachal Pradesh and Nagaland; and limestone in Assam and Meghalaya. The other mineral deposits have not been well established yet on the economic, (technical) feasibility and geological axes.



Table-5.5.4: Mineral Resources of the NE Region (Other than Crude Oil & Natural Gas and Coal)

In Thousand MT (unless specified otherwise)

		Rese	rves					Remair	ning Resource	es			
STATE / Mineral	Proved		Probable	Total of Reserves	Feasibility	:	Pre-teasibility	Measured	Indicated	Inferred	Reconnaissance	Total of 'Remaining Resources'	Total Resources
Code →	111	121	122	(A)	211	221	222	331	332	333	334	(B)	(A)+(B)
ARUNACHAL PRADESH				, ,								` /	` , ` ,
Copper (Ore & Metal)				0.00							10.02	10.02	10.02
Dolomite				0.00					204	77,633		77,837	77,837
Fuller's Earth				0.00					10.7	20,000		20,010.7	20010.7
Graphite				0.00						72,758.3		72,758.3	72,758.3
Limestone				0.00					40,220	433,575	9,000	482,795	482,795
Quartzite				0.00						5,270		5,270	5,270
ASSAM													
China Clay				0		131		392		3,520		4,043	4,043
Fireclay				0						3,161		3,161	3,161
Fuller's Earth				0						18,860		18,860	18,860
Granite (in '000 cubic m)				0					800	583,150		583,950	583,950
Iron Ore (Haematite)				0					8,600	4,000		12,600	12,600
Iron Ore (Magnetite)				0						15,380		15,380	15,380
Limestone	25,542	15,2546		178,088	167,902	21,973	4,257	154,644	39,859	901,623		1290,258	1468,346
Quartz-Silica Sand				0						1,790		1,790	1,790
Sillimanite				0					850	6.7	3748	4604.7	4604.7
MANIPUR													
China Clay				0				2,520				2,520	2,520
Chromite				0	3	21	52		504	6,077		6,657	6,657
Limestone				0				10,197	2,138	33,718		46,053	46,053
MEGHALAYA													
Apatite				0						1,300		1,300	1,300
China Clay				0				1,200	6,266	76,242	5,167	88,875	88,875
Copper													



		Rese	rves					Remai	ning Resource	es			
STATE / Mineral	Proved		Probable	Total of Reserves	Feasibility		Pre-teasibility	Measured	Indicated	Inferred	Reconnaissance	Total of 'Remaining Resources'	Total Resources
Code →	111	121	122	(A)	211	221	222	331	332	333	334	(B)	(A)+(B)
Ore				0					880			880	880
Metal				0					9			9	9
Feldspar				0					37.5			37.5	37.5
Fireclay				0					10,999			10,999	10,999
Granite (in '000 cubic m)				0							286467	286,467	286,467
Iron Ore (Haematite)				0						225		225	225
Iron Ore (Magnetite)				0						3380		3,380	3,380
Lead Zinc													
Ore				0					880			880	880
Lead Metal				0					16.5			16.5	16.5
Zinc Metal				0					14			14	14
Limestone	135,836	87,904	1,822	22,562	68,457	39,289	46,200	464,670	2811,179	14048,758		17478,553	17704,115
Quartz				0					177	6,906		7,083	7,083
Rock Phosphate				0						1311,035		1311,035	1311,035
Sillimanite				0						55,807		55,807	55,807
Silver													
Ore				0					88			88	88
Metal				0					0.02			0.02	0.02
NAGALAND													
Copper													
Ore				0						2,000		2,000	2,000
Metal				0						15		15	15
Chromite				0						3,200		3,200	3,200
Cobalt Ore				0							5,000	5,000	5,000
Dunite				0						4,800		4,800	4,800
Limestone				0	825				1,005,500	745,875		1,752,200	1,752,200
Iron Ore (Magnetite)				0					5,280			5,280	5,280
Nickel ore				0						5,000		5,000	5,000

# The NEC Yearbook 2024



		Rese	rves					Remai	ning Resource	es			
STATE / Mineral	Proved	- - 0	Probable	Total of Reserves	Feasibility		Pre-feasibility	Measured	Indicated	Inferred	Reconnaissance	Total of 'Remaining Resources'	Total Resources
Code →	111	121	122	(A)	211	221	222	331	332	333	334	(B)	(A)+(B)
SIKKIM													
Copper													
Ore				0		445	63	300		150		958	958
Metal				0		7.86	0.91	8.47		4.23		21.47	21.47
Dolomite				0						2756		2756	2756
Lead-Zinc													
Ore				0		436	64	300		150		950	950
Lead Metal				0		6.9	1.7					8.6	8.6
Zinc Metal				0		12.9	3.1	3		1.1		20.1	20.1
Limestone				0						2380		2380	2380
Marble				0						2382		2382	2382
Quartzite				0						16444		17119	17119
Silver													
Ore				0		435.8	63.8	300		150		949.6	949.6
Metal				0		0.015		0.028		0.014		0.057	0.057
Talc / Soapstone				0			60					60	60
TRIPURA													
Fireclay				0				1		369		370	370
Quartz-Silica Sand				0				225		264		490	490

Sources: 'Indian Minerals Yearbook 2019, Volume-I, Indian Bureau of Mines, Ministry of Mining

# Notes:

- 1. The three digit code based system is used with the economic viability axis representing the first digit, the feasibility axis the second digit and the geological axis the third digit. The highest category of resources under UNFC system will have the code (111) and lowest category the code (334).
- 2. Economic viability, feasibility assessment and geological assessment are carried out as per details furnished earlier.



Table-5.5.5: Production of Crude Oil in the NE States

State	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	55	50	43	56	53	48
Assam	4,203	4,345	4,309	4,093	3,902	3,988
Tripura	-	-	-	-	-	3
Total - NE Region	4,258	4,395	4,352	4,149	3,955	4,039
Total - India	36,009	35,684	34,203	32,170	30,494	29,691

**Source:** 'Indian Petroleum & Natural Gas Statistics 2021-22', furnished by the Ministry of Petroleum & Natural Gas, Government of India [Table-II.12 Page No 30]

## Notes:

- 1. Production figures are inclusive of condensate.
- 2. Production figures indicated for 2022 are provisional.
- 3. Other NE States do not have any production of crude oil.

Table-5.5.6: Production of Natural Gas in the NE States

(In Million Metric Standard Cubic Metres)

State	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	28	30	28	46	55	58
Assam	3,128	3,219	3,289	3,141	2,995	3,371
Tripura	1,430	1,440	1,554	1473	1,634	1,531
Total – NE Region	4,586	4,689	4,871	4,660	4,684	4,960
Total - India	31,897	32,649	32,873	31,184	28,673	34,024

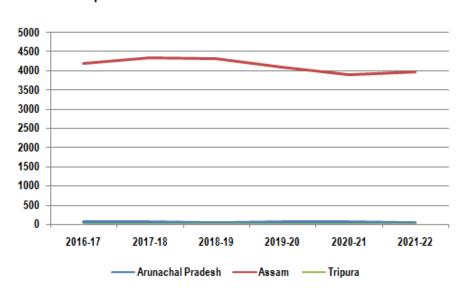
**Source:** 'Indian Petroleum & Natural Gas Statistics 2021-22', furnished by the Ministry of Petroleum & Natural Gas, Government of India [Table-II.15 Page No 33]

# Notes:

- 1. Production figures indicated for 2022 are provisional.
- 2. Other NE States do not have any production of natural gas.

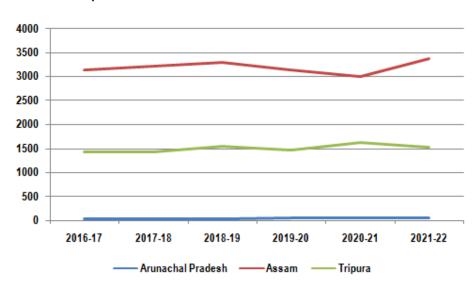


**Graph-5.5.1: Production of Crude Oil in the NE States** 



Y-axis gives the production of crude oil in Thousand MT

**Graph-5.5.2: Production of Natural Gas in the NE States** 



Y-axis gives the production of natural gas in Million Metric Standard Cubic Metres



Table-5.5.7: Production of Coal in the NE States

# (In Thousand Metric Tonnes)

State	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Assam	487	600	781	784	517	36
Meghalaya	3712	2308	1529			
Total – NE Region	4199	2908	2310	784	517	36
Total - India	639230	657868	675400	728718	730874	716083

Sources: (a) Mineral Reviews & State Reviews, Indian Mineral Yearbooks (2016 to 2022), Indian Bureau of Mines (https://ibm.gov.in/IBMPortal/pages/Indian\_Minerals\_Yearbook), and (b) 'Coal Directory of India 2020-21' brought out by the Coal Controller's Organization, Ministry of Coal of the Government of India

#### Notes:

- 1. Production figures indicated for 2020-21 are provisional.
- 2. Coal production in Meghalaya has not been reported since FY 2018-19 onward.
- 3. Other NE States do not have any reported production of coal as per the above sources.

Table-5.5.8: Production of Limestone in the NE States

# (In Thousand Metric Tonnes)

State	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Assam	777	1594	1432	1652	1552	1552
Meghalaya	3834	5095	6599	7195	7248	6028
Total – NE Region	4611	6689	8031	8847	8800	7580
Total - India	307001	314669	340417	379974	359464	349170

Source: Mineral Reviews & State Reviews, Indian Mineral Yearbooks (2016 to 2022), Indian Bureau of Mines (https://ibm.gov.in/IBMPortal/pages/Indian\_Minerals\_Yearbook)

## Notes:

- 1. Production figures indicated for 2020-21 are provisional.
- 2. Other NE States do not have any reported production of limestone as per the above sources.



# 5.6. Industry including MSME and Handicrafts & Handlooms

The industrial sector is one of the important sectors of the Indian economy. Economically speaking, 'industry' (as exemplified in the Index of Industrial Production) includes manufacturing, apart from some other activities.

At the all-India level, the Department for Promotion of Industry and Internal Trade (DPIIT) aims at the promotion of industrial development of the country by facilitating investment in new and upcoming technology, accelerating foreign direct investment, and supporting a balanced development of industries and trade. In 2018, the matters related to e-commerce were transferred to the Department. Further, DPIIT has been given charge for matters related to Internal Trade, welfare of traders and their employees and start-ups in 2019. The mandate for integrated development of the Logistic Sector has also been allocated to DPIIT in November, 2021. DPIIT has been at the forefront of supporting the manufacturing and investment ecosystem in the country. The 'Make in India' was launched in 2014 to facilitate investment, foster innovation, building best in class infrastructure, and making India a hub for manufacturing, design, and innovation. Further, the Government of India is developing various Industrial Corridor Projects that are aimed at the development of futuristic industrial cities in India which can compete with the best manufacturing and investment destinations in the world.

As per the revised classification applicable with effect from 1st July 2020, Micro Small and Medium Enterprises (MSMEs) are defined based on Composite criteria including both (a) Investment in Plant & Machinery/equipment, and (b) Annual Turnover. The Ministry of MSME is mandated to support the MSME sector in the country. The Micro, Small and Medium Enterprises (MSME) sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last five decades. It contributes significantly in the economic and social development of the country by fostering entrepreneurship and generating large employment opportunities at comparatively lower capital cost, next only to agriculture.

In the NE Region of India, the NE Region Vision 2020 envisaged the industrial development of the states in order to foster higher human development. It is felt that a development strategy based on the resources of the region will occur simultaneously with the emergence of a group of strong, indigenous entrepreneurs, which, in turn, shall call for enhancement in the skill levels of the region. The promotion of markets and institutions to disseminate information on prices of products is extremely important. The MSME sector dominates the industrial scenario in the NE Region and, so, special efforts need to be made for their expansion and growth. In view of this, the Ministry of Development of North Eastern Region is represented in the Inter-Ministerial Committee on MSME to discuss common matters and make suggestions for actions to benefit the region.

The following pages cover the status of industry in the NE Region, including the factory sub-sector, oil refining sub-sector, and the MSME sub-sector (including Khadi and Village Industries). In addition, the coverage spans the handloom and handicraft units in the region. It may be noted that factories and MSMEs may overlap, as these are not defined in a mutually exclusive manner.



**Sub-sector: Factories** 

Table-5.6.1: Number of Factories in the NE States

(In Numbers)

State	2016-17	2017-18	2018-19	2019-20
Arunachal Pradesh	125	117	115	116
Assam	4154	4538	5020	5196
Manipur	188	191	197	204
Meghalaya	120	133	148	158
Mizoram	NA	NA	NA	215
Nagaland	192	186	187	190
Sikkim	71	82	84	84
Tripura	585	607	621	657
Total – NE Region	5,435	5,854	6,372	6,820
Total - India	2,34,865	2,37,684	2,42,395	2,46,504

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India [Table-109 Page Nos. 293-294]

#### Notes

## NA stands for 'Not Available'

- 2. Data for Arunachal Pradesh has been included in ASI from 2014-15.
- 3. Mizoram was included for the first time in ASI 2019-20.

# 4. Note on Annual Survey of Industries

The ASI covers all factories registered under Sections 2(m) (i) and 2(m (ii) of the Factories Act, 1948, where the manufacturing process is defined under Section 2(k) of the said Act.

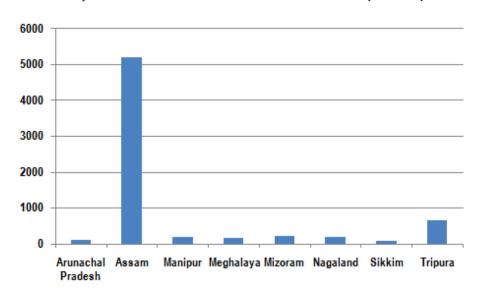
As per Sections 2(m) (i) and 2(m (ii) of the Factories Act, 'factory' means any premises including the precincts thereof— (i) whereon ten or more workers are working, or were working on any day of the preceding twelve months, and in any part of which a manufacturing process is being carried on with the aid of power, or is ordinarily so carried on, or (ii) whereon twenty or more workers are working, or were working on any day of the preceding twelve months, and in any part of which a manufacturing process is being carried on without the aid of power, or is ordinarily so carried on,—but does not include a mine subject to the operation of 5 [the Mines Act, 1952 (35 of 1952)], or 6 [a mobile unit belonging to the armed forces of the Union, railway running shed or a hotel, restaurant or eating place.

The survey also covers Bidi and cigar manufacturing establishments registered under the Bidi and Cigar Workers (Conditions of Employment) Act 1966. All electricity undertakings engaged in generation, transmission and distribution of electricity, not registered with the Central Electricity Authority (CEA) are also covered under ASI. However, defence establishments, oil storage and distribution depots, departmental units such as railway workshops, RTC workshops, Govt. Mints, sanitary, water supply, gas storage etc. are excluded from the purview of the survey.

As per the decision taken by the Standing Committee on Industrial Statistics (SCIS), the coverage of ASI may be extended beyond the purview of the Section 2m (i) and 2m (ii) of the Factories Act, 1948 and the Bidi & Cigar Workers (Conditions of Employment) Act, 1966. Accordingly, the units with 100 or more employees not registered under Section 2m (i) and 2m (ii) of the Factories Act, 1948 but registered under any of the seven Acts / Board / Authority viz., Companies Act. 1956, Factories Act. 1948, Shops and Commercial Establishment Act, Societies Registration Act, Cooperative Societies Act, Khadi and Village Industries Board, Directorate of Industries (District Industries Centre) in the Business Register of Establishments (BRE) prepared and maintained by the State Governments are also considered for selection.

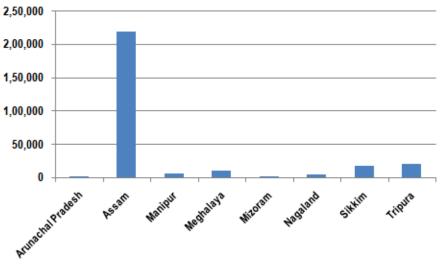


**Graph-5.6.1: Number of Factories in the NE States (2019-20)** 



Y-axis gives the Numbers of Factories (as per Annual Survey of Industry data for 2019-20)

Graph-5.6.2: Number of Workers in Factories in the NE States (2019-20)



Y-axis gives the Numbers of Factory Workers (as per Annual Survey of Industry data for 2019-20)





Table-5.6.2: Number of Workers in Factories in the NE States

(In Numbers)

State	2016-17	2017-18	2018-19	2019-20
Arunachal Pradesh	2,569	2,671	2,470	1,975
Assam	1,81,098	1,80,489	2,00,433	2,19,176
Manipur	6,942	7,334	7,558	5,675
Meghalaya	10,517	10,758	10,802	10,635
Mizoram	NA	NA	NA	1417
Nagaland	5,109	5,227	5,073	4,591
Sikkim	13,372	15,069	17,241	17,482
Tripura	23,956	23,393	21,731	20,388
Total – NE Region	2,43,563	2,44,941	2,65,308	2,81,339
Total - India	1,16,62,947	1,22,24,422	1,27,98,588	1,30,58,156

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India [Table-115 Page Nos. 305-306]

## Notes

- 1. NA stands for 'Not Available'
- 2. Data for Arunachal Pradesh has been included in ASI from 2014-15.
- 3. Mizoram was included for the first time in ASI 2019-20.
- 4. Worker

'Worker' means a person [employed, directly or by or through any agency (including a contractor) with or without the knowledge of the principal employer, whether for remuneration or not], in any manufacturing process, or in cleaning any part of the machinery or premises used for a manufacturing process, or in any other kind of work incidental to, or connected with, the manufacturing process, or the subject of the manufacturing process 3 [but does not include any member of the armed forces of the Union]





Table-5.6.3: Number of Total Persons Engaged in Factories in the NE States

(In Numbers)

State	2016-17	2017-18	2018-19	2019-20
Arunachal Pradesh	3,347	3,298	3,103	2,581
Assam	2,18,002	2,17,155	2,37,953	2,63,106
Manipur	8,133	8,532	8,760	6,898
Meghalaya	12,367	12,689	12,848	12,904
Mizoram	NA	NA	NA	1,664
Nagaland	5,895	6,004	5,936	5,361
Sikkim	17,232	19,659	22,624	23,039
Tripura	27,258	26,632	25,050	24,266
Total – NE Region	2,92,234	2,93,969	3,16,274	3,39,819
Total - India	1,49,11,189	1,56,14,619	1,62,80,211	1,66,24,291

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India [Table-116 Page Nos. 307-308]

## Notes

- 1. NA stands for 'Not Available'
- 2. Data for Arunachal Pradesh has been included in ASI from 2014-15.
- 3. Mizoram was included for the first time in ASI 2019-20.
- 4. Persons Engaged in Factories

It relates to all persons engaged by the factory whether for wages or not, in work connected directly or indirectly with the manufacturing process and include all administrative, technical and clerical staff as also labour in production of capital assets for factory's own use. This is inclusive of persons holding position of supervision or management or engaged in administrative office, store-keeping section and welfare section, watch and ward staff, sales department as also those engaged in the purchase of raw materials etc. and production of fixed assets for the factory. It also includes all working proprietors and their family members who are actively engaged in the work of the factory even without any pay and the unpaid members of the co-operative societies who work in or for the factory in any direct and productive capacity.

[From 'Instruction Manual Annual Survey of Industries (Concepts, Definitions and Procedures)' issued by the Ministry of Statistics and Programme Implementation and available at the following link:

https://www.mospi.gov.in/sites/default/files/publication\_reports/ASI%2BManual%2B2020-211649844161758\_0.pdf]



Table-5.6.4: Fixed Capital in Factories in the NE States

State	2016-17	2017-18	2018-19	2019-20
Arunachal Pradesh	19,982	19,343	17,139	16,100
Assam	28,02,255	27,33,666	30,63,797	31,85,207
Manipur	15,327	15,929	15,082	14,553
Meghalaya	3,77,159	3,61,974	3,62,247	3,58,224
Mizoram	NA	NA	NA	5,436
Nagaland	21,422	20,764	20,221	17,982
Sikkim	7,10,069	7,05,218	7,43,555	7,34,106
Tripura	46,357	45,161	45,781	49,991
Total – NE Region	39,92,571	39,02,055	42,67,822	43,81,599
Total - India	31,90,38,649	32,85,88,927	34,66,06,975	36,41,35,165

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India [Table-110 Page Nos. 295-296]

## Notes

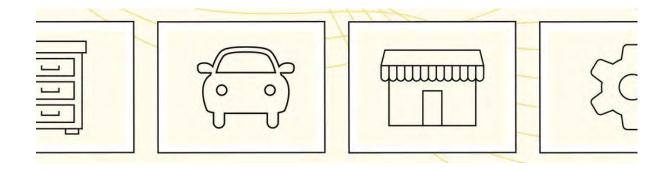
- 1. NA stands for 'Not Available'
- 2. Data for Arunachal Pradesh has been included in ASI from 2014-15.
- 3. Mizoram was included for the first time in ASI 2019-20.

# 4. Fixed Capital

Fixed Capital represents the depreciated value of fixed assets owned by the factory as on the closing day of the accounting year. Fixed assets are those, which have normal productive life of more than one year. Fixed capital covers all type of assets, new or used or own constructed, deployed for productions, transportation, living or recreational facilities, hospitals, schools, etc. for factory personnel. It would include land, building, plant and machinery, transport equipment etc. It includes the fixed assets of the head office allocable to the factory and also the full value of assets taken on hire-purchase basis (whether fully paid or not) excluding interest element. It excludes intangible assets except computer software.

[From 'Instruction Manual Annual Survey of Industries (Concepts, Definitions and Procedures)' issued by the Ministry of Statistics and Programme Implementation and available at the following link:

https://www.mospi.gov.in/sites/default/files/publication\_reports/ASI%2BManual%2B2020-211649844161758\_0.pdf]





## : Table-5.6.5: Working Capital in Factories in the NE States

(Rs. in Lakh)

State	2016-17	2017-18	2018-19	2019-20
Arunachal Pradesh	31,014	16,633	21,461	20,546
Assam	761,596	906,161	970,637	998,000
Manipur	4,271	2,039	1,670	1,530
Meghalaya	-17,161	69,964	101,269	132,648
Mizoram	NA	NA	NA	1,339
Nagaland	18,316	18,664	17,832	14,437
Sikkim	137,840	305,055	294,388	261,991
Tripura	7,980	18,337	7,810	11,916
Total – NE Region	943,856	13,36,853	14,15,067	14,42,407
Total - India	663,08,287	644,11,890	808,72,883	883,30,079

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India [Table-111 Page Nos. 297-298]

#### Notes

- 1. NA stands for 'Not Available'
- 2. Data for Arunachal Pradesh has been included in ASI from 2014-15.
- 3. Mizoram was included for the first time in ASI 2019-20.
- 4. Working Capital

Working Capital is the sum total of the physical working capital as already defined above and the cash deposits in hand and at bank, the net balance of amounts receivable over amounts payable at the end of the accounting year. Amounts receivable include value of credit items on revenue account, such as sums due to the factory for goods sold, amounts advanced in connection with normal factory work, bills of exchange payable to the factory, payments made in advance such as for fire insurance, telephone charges, rates and taxes, call deposits and security deposits having a normal life of less than one year, etc. It excludes unused overdraft facility, advances for acquisition of fixed assets, long-term loans including interest thereon and investment.

[From 'Instruction Manual Annual Survey of Industries (Concepts, Definitions and Procedures)' issued by the Ministry of Statistics and Programme Implementation and available at the following link:

 $https://www.mospi.gov.in/sites/default/files/publication\_reports/ASI\%2BManual\%2B2020-211649844161758\_0.pdf]$ 



**Table-5.6.6: Physical Working Capital in Factories in the NE States** 

State	2016-17	2017-18	2018-19	2019-20
Arunachal Pradesh	15,744	13,770	10,690	11,717
Assam	933,890	926,654	890,570	987,858
Manipur	4,891	6,696	7,429	7,092
Meghalaya	103,309	133,103	129,194	120,245
Mizoram	NA	NA	NA	408
Nagaland	11,742	11,369	11,309	7,911
Sikkim	158,874	185,651	228,520	236,126
Tripura	23,252	31,702	31,895	31,697
Total – NE Region	12,51,702	13,08,945	13,09,607	14,03,054
Total - India	11,05,86,841	11,75,05,552	13,11,22,287	13,32,27,187

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India [Table-112 Page Nos. 299-300]

## Notes

- 1. NA stands for 'Not Available'
- 2. Data for Arunachal Pradesh has been included in ASI from 2014-15.
- 3. Mizoram was included for the first time in ASI 2019-20.
- 4. Physical Working Capital

This is defined to include all physical inventories owned, held or controlled by the factory as on the closing day of the accounting year such as the materials, fuels and lubricants, stores, etc. that enter into products manufactured by the factory itself or supplied by the factory to others for processing. Physical working capital also includes the value of stock of materials, fuels and stores etc. purchased expressly for re-sale, semi-finished goods and goods-in-process on account of others and goods made by the factory which are ready for sale at the end of the accounting year. However, it does not include the stock of the materials, fuels, stores, etc. supplied by others to the factory for processing. Finished goods processed by others from raw materials supplied by others, are excluded.

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https://www.mospi.gov.in/sites/default/files/publication\_reports/ASI%2BManual%2B2020-211649844161758\_0.pdf]



Table-5.6.7: Productive Capital in Factories in the NE States

State	2016-17	2017-18	2018-19	2019-20
Arunachal Pradesh	50,996	35,976	38,600	36,646
Assam	35,63,851	36,39,827	40,34,434	41,83,207
Manipur	19598	17,,968	16,752	16,083
Meghalaya	359,998	431,938	463,516	490,872
Mizoram	NA	NA	NA	6,775
Nagaland	39,738	39,428	38,053	32,419
Sikkim	847,909	10,10,273	10,37,943	9,96,097
Tripura	54,337	63,498	53,591	61,907
Total - NE Region	49,36,427	52,38,908	56,82,889	58,24,006
Total - India	38,53,46,936	39,30,00,817	42,74,73,434	45,24,65,244

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India [Table-113 Page Nos. 301-302]

# Notes

- 1. NA stands for 'Not Available'
- 2. Data for Arunachal Pradesh has been included in ASI from 2014-15.
- 3. Mizoram was included for the first time in ASI 2019-20.
- 4. Productive Capital

This is the total of fixed capital and working capital. These terms have been described previously.

[From 'Instruction Manual Annual Survey of Industries (Concepts, Definitions and Procedures)' issued by the Ministry of Statistics and Programme Implementation and available at the following link:

https://www.mospi.gov.in/sites/default/files/publication\_reports/ASI%2BManual%2B2020-211649844161758\_0.pdf]





**Table-5.6.8: Invested Capital in Factories the NE States** 

State	2016-17	2017-18	2018-19	2019-20
Arunachal Pradesh	35,726	33,113	27,829	27,817
Assam	37,36,145	36,60,320	39,54,367	41,73,065
Manipur	20,218	22,625	22,511	21,645
Meghalaya	4,80,468	4,95,077	4,91,441	4,78,469
Mizoram	NA	NA	NA	5,844
Nagaland	33,164	32,133	31,530	25,893
Sikkim	8,68,943	8,90,869	9,72,075	9,70,232
Tripura	69,609	76,863	77,676	81,688
Total – NE Region	52,44,273	52,11,000	55,77,429	57,84,653
Total - India	42,96,25,490	446,0,94,480	47,77,26,474	49,73,62,352

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India [Table-114 Page 303-304]

## Notes

- 1. NA stands for 'Not Available'
- 2. Data for Arunachal Pradesh has been included in ASI from 2014-15.
- 3. Mizoram was included for the first time in ASI 2019-20.
- 4. Invested Capital: Invested capital is the total of fixed capital and physical working capital. These terms have been described previously.

[From 'Instruction Manual Annual Survey of Industries (Concepts, Definitions and Procedures)' issued by the Ministry of Statistics and Programme Implementation and available at the following link:

https://www.mospi.gov.in/sites/default/files/publication\_reports/ASI%2BManual%2B2020-211649844161758\_0.pdf]

45,00,000

35,00,000

25,00,000

15,00,000

10,00,000

5,00,000

Arunachal Assam Manipur Meghalaya Mizoram Nagaland Sikkim Tripura

Graph-5.6.3: Invested Capital in Factories the NE States (2019-20)

Y-axis gives the Invested Capital in Rs. Lakh for 2019-20 based on data from Annual Survey of Industries



Table-5.6.9: Gross Output from Factories in the NE States

State	2016-17	2017-18	2018-19	2019-20
Arunachal Pradesh	1,14,492	99,998	1,06,282	59,716
Assam	62,93,606	67,32,646	81,00,540	77,48,672
Manipur	3,6295	42,083	46,742	49,845
Meghalaya	3,95,194	5,68,899	7,13,670	7,40,369
Mizoram	NA	NA	NA	6,300
Nagaland	51,746	54,104	57,320	51,901
Sikkim	16,77,216	18,36,037	19,10,564	19,67,242
Tripura	1,37,953	1,55,929	1,81,849	1,72,792
Total – NE Region	87,06,502	94,89,696	1,11,16,967	1,07,96,837
Total - India	72,65,51,423	80,72,17,258	92,83,36,190	89,83,30,129

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India [Table-119 Page No. 314]

#### Notes

- NA stands for 'Not Available'
- 2. Data for Arunachal Pradesh has been included in ASI from 2014-15.
- 3. Mizoram was included for the first time in ASI 2019-20.
- 4. Gross Output: Gross output is defined to include the ex-factory value, (i.e., exclusive of taxes, duties, etc. on sale and inclusive of subsidies etc., if any) of products and by-products manufactured during the accounting year, and the net value of the semi-finished goods, value of own construction and also the receipts for industrial and non-industrial services rendered to others, rent received for building, plant & machinery and other fixed assets, net balance of goods sold in the same condition as purchased, value of electricity generated and sold and an amount equal to expenses on research & development (R&D). Value of gross output and total output has been used in the text inter-changeably to mean the same thing.

[From 'Instruction Manual Annual Survey of Industries (Concepts, Definitions and Procedures)' issued by the Ministry of Statistics and Programme Implementation and available at the following link:

https://www.mospi.gov.in/sites/default/files/publication\_reports/ASI%2BManual%2B2020-211649844161758\_0.pdf]

90,00,000

70,00,000

60,00,000

40,00,000

20,00,000

10,00,000

Arunachal Assam Manipur Meghalaya Mizoram Nagaland Sikkim Tripura

Graph-5.6.4: Gross Output from Factories in the NE States (2019-20)

Y-axis gives the Gross output from Factories in Rs. Lakh for 2019-20 based on Annual Survey of Industries



Table-5.6.10: Net Value Added in Factories in the NE States

State	2016-17	2017-18	2018-19	2019-20
Arunachal Pradesh	20,203	12,206	12,463	8,182
Assam	12,82,165	13,64,876	14,15,078	15,21,363
Manipur	7,383	8,376	9,131	8,700
Meghalaya	28,578	1,22,400	1,20,267	1,24,374
Mizoram	NA	NA	NA	2,523
Nagaland	12,540	13,167	14,690	11,107
Sikkim	9,65,582	10,64,105	10,84,827	9,44,805
Tripura	33,840	30,480	26,736	29,007
Total - NE Region	235,0,291	26,15,610	26,83,192	26,50,061
Total - India	11,45,91,911	12,29,67,418	12,73,69,428	12,12,64,771

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India [Table-120 Page No. 316]

## Notes

#### 1. NA stands for 'Not Available'

- 2. Data for Arunachal Pradesh has been included in ASI from 2014-15.
- 3. Mizoram was included for the first time in ASI 2019-20.

# 4. Net Value Added

This is obtained by deducting the value of total input and depreciation from gross output. Gross output has been defined previously.

Depreciation is consumption of fixed capital (CFC) by the factory due to wear and tear and obsolescence during the accounting year and is taken as provided by the factory owner, or if not provided by the factory this is estimated on the basis of cost of installation and working life of the fixed assets

Total input: This comprises gross value of fuels, materials etc. consumed (as defined above) and also other inputs viz. (a) cost of non-industrial services received from others, (b) cost of materials consumed for repair and maintenance of factory's fixed assets including cost of work done by others to the factory's fixed assets, (c) cost of contract and commission work done by others on materials supplied by the factory, (d) cost of office supplies and products reported for sale during last year & used for further manufacture during the accounting year and (e) rent paid for buildings and plant & machinery and other fixed assets, (f) expenses on Research & Development (R&D).

[From 'Instruction Manual Annual Survey of Industries (Concepts, Definitions and Procedures)' issued by the Ministry of Statistics and Programme Implementation and available at the following link:

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Table-5.6.11: Gross Value Added in Factories in the NE States

State	2016-17	2017-18	2018-19	2019-20
Arunachal Pradesh	22,804	15,791	15,270	10,422
Assam	14,86,664	15,78,019	16,66,585	17,55,876
Manipur	8,990	10,259	11,057	10,481
Meghalaya	82,588	164,679	160,287	168,813
Mizoram	NA	NA	NA	3,111
Nagaland	13,997	14,487	15,822	13,344
Sikkim	10,27,918	11,41,644	11,63,279	10,21,465
Tripura	38,959	35,357	32,120	34,592
Total – NE Region	2681,920	29,60,236	30,64,420	30,18,104
Total - India	13,68,05,049	14,66,97,043	15,35,31,685	14,85,74,512

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Annual Survey of Industries, Ministry of Statistics & Programme Implementation, Government of India [Table-121 Page No. 318]

## Notes

- 1. NA stands for 'Not Available'
- 2. Data for Arunachal Pradesh has been included in ASI from 2014-15.
- 3. Mizoram was included for the first time in ASI 2019-20.
- 4. Gross Value Added

Gross value added is defined as additional value created by the process of production. This is calculated by deducting the value of total input from gross value of output. The above terms have been previously defined.

[From 'Instruction Manual Annual Survey of Industries (Concepts, Definitions and Procedures)' issued by the Ministry of Statistics and Programme Implementation and available at the following link:

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**Sub-sector: Oil-Refining** 

Table-5.6.12: Refining Capacities in the NE Region

(In Million MT per annum)

Refinery	2017	2018	2019	2020	2021	2022
IOC Digboi Assam	0.65	0.65	0.65	0.65	0.65	0.65
IOC Noonmati Assam	1.00	1.00	1.00	1.00	1.00	1.00
IOC Bongaigaon Assam	2.35	2.35	2.35	2.35	2.70	2.70
NRL Numaligarh Assam	3.00	3.00	3.00	3.00	3.00	3.00
Total – NE Region	7.00	7.00	7.00	7.00	7.35	7.35
Total - India	233.97	247.57	249.37	249.87	249.22	251.22

**Source:** 'Indian Petroleum & Natural Gas Statistics 2021-22', furnished by the Ministry of Petroleum & Natural Gas, Government of India [Table-III.1 Page No 41]

#### Notes:

- 1. Capacity expansion of IOC Digboi Refinery (by 0.65 MMTPA) is expected in 2022-23 and of IOC Noonmati Refinery (by 1.20 MMTPA) is expected in 2023-24.
- 2. Capacity expansion of NRL Refinery (at Numaligarh Assam) to 6 million MT per annum is underway.

Table-5.6.13: Refinery-wise Crude Oil Processed in the NE Region

(In Thousand MT)

Refinery	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
IOC Digboi Assam	533	666	676	664	605	708
IOC Noonmati Assam	864	1,024	863	892	849	730
IOC Bongaigaon Assam	2,486	2,402	2,513	2,045	2,450	2,639
NRL Numaligarh Assam	2,683	2,809	2,900	2,383	2,707	2,624
Total – NE Region	6,566	6,901	6,952	5,984	6,611	6,701
Total - India	245,362	251,935	257,205	254,386	221,773	241,703

**Source:** 'Indian Petroleum & Natural Gas Statistics 2021-22', furnished by the Ministry of Petroleum & Natural Gas, Government of India [Table-III.3 Page No 43]

## Notes:

1. Figures for 2021-22 are provisional.



Table-5.6.14: Refinery-wise Total Production of Petroleum Products in the NE Region

Refinery	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
IOC Digboi Assam	542	665	676	665	604	717
IOC Noonmati Assam	1,121	1,142	1,030	1,151	1,008	905
IOC Bongaigaon Assam	2,273	2,241	2,337	1,863	2,314	2,428
NRL Numaligarh Assam	2,653	2,823	2,882	2,300	2,741	2,583
Total – NE Region	6,589	6,871	6,925	5,979	6,667	6,633
Total - India	243,551	254,405	262,361	262,940	233,513	254,305

**Source:** 'Indian Petroleum & Natural Gas Statistics 2021-22', furnished by the Ministry of Petroleum & Natural Gas, Government of India [Table-III.4 Page No 44]

# Notes:

1. Figures for 2021-22 are provisional.



The Bongaigaon Refinery of Indian Oil Corporation in Assam



Table-5.6.15: Refinery-wise Production of various POL Items in the NE Region (2021-22)

Refinery	LPG	Motor Spirit	Naphtha	ATF	SKO	HSD	LDO	Furnace Oil	Petroleum Coke	Others	Total
IOC Digboi Assam	12	132	0	0	0	395	0	104	40	33	717
IOC Noonmati Assam	30	166	41	55	24	504	0	0	46	38	905
IOC Bongaigaon Assam	160	451	111	12	37	1,506	29	0	114	10	2,428
NRL Numaligarh Assam	44	591	-5	28	49	1,722	0	0	86	69	2,583
Total – NE Region	246	1,340	147	95	110	4,127	29	104	286	150	6,633
Total - India	12,238	40,238	19,994	10,294	1,916	107,175	805	7,587	15,508	32,266	254,305

Source: Indian Petroleum & Natural Gas Statistics 2021-22, Ministry of Petroleum & Natural Gas [Table-III.5 Page No 45]

# Notes:

- 1. Figures for 2021-22 are provisional.
- 2. Abbreviations: LPG Liquefied Petroleum Gases; ATF Aviation Turbine Fuel; SKO Superior Kerosene Oil; HSD High Speed Diesel; LDO Light Diesel Oil
- 3. Others include: Propylene, Solvents (Hexane, Benzene, Toluene, Xylene and Specialty solvents), Reformate, MTO, Carbon Black Feed Stock, Sulphur etc.





Table-5.6.16: State-wise Consumption of Total Petroleum Products in the NE Region

State	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	225	242	248	263	276	302
Assam	2,243	2,517	2,744	2,823	2,710	2,923
Manipur	163	207	241	255	237	254
Meghalaya	428	484	492	550	409	473
Mizoram	117	125	139	141	130	146
Nagaland	132	143	154	172	163	191
Sikkim	104	117	126	130	108	130
Tripura	215	235	235	232	230	237
Total – NE Region	3,627	4,070	4,379	4,566	4,263	4,656
Total - India	194,597	206,166	213,216	214,127	194,295	204,233

**Source:** 'Indian Petroleum & Natural Gas Statistics 2021-22', furnished by the Ministry of Petroleum & Natural Gas, Government of India [Table-V.5 Page No 107]

## Notes:

1. Figures for 2021-22 are provisional.

Table-5.6.17: State-wise Per-capita Consumption of Total Petroleum Products in the NE Region

(In Kg / person)

State	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	162.7	175.3	179.7	190.5	199.5	197.1
Assam	72.0	80.8	88.0	90.6	86.9	83.4
Manipur	59.9	76.2	88.5	93.6	86.9	80.2
Meghalaya	144.4	163.4	166.0	185.7	138.1	143.7
Mizoram	107.5	114.1	127.2	129.2	119.5	120.1
Nagaland	66.8	72.2	77.9	86.6	82.1	87.0
Sikkim	171.7	192.7	207.1	214.1	178.0	191.5
Tripura	58.5	64.0	64.0	63.1	62.6	58.3
Per Capita - NE Region	79.6	89.3	96.0	100.2	93.5	90.9
Per Capita - India	141.5	149.7	157.3	157.5	142.6	149.8

**Source:** 'Indian Petroleum & Natural Gas Statistics 2021-22', furnished by the Ministry of Petroleum & Natural Gas, Government of India [Table-V.6 Page No 108]

## Notes:

1. Figures for 2021-22 are provisional.



Table-5.6.18: State-wise Consumption of LPG in the NE Region

State	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	17.8	19.9	21.6	23.2	23.8	25.4
Assam	325.0	372.6	420.9	450.9	505.7	486.3
Manipur	23.7	28.4	35.7	40.8	48.6	51.9
Meghalaya	18.8	21.3	25.1	26.6	27.4	27.7
Mizoram	22.1	21.7	25.1	27.0	29.0	29.6
Nagaland	19.9	22.2	22.6	24.2	24.8	27.5
Sikkim	12.9	14.0	15.6	16.8	16.2	18.2
Tripura	37.6	44.1	49.2	52.9	60.0	57.7
Total – NE Region	477.8	544.2	615.8	662.4	735.5	724.3
Total - India	21,608	23,342	24,907	26,330	27,558	28,329.7

**Source:** 'Indian Petroleum & Natural Gas Statistics 2021-22', furnished by the Ministry of Petroleum & Natural Gas, Government of India [Table-V.10 Page No 111]

# Notes:

1. Figures for 2021-22 are provisional.



The establishment of fuel pumps has helped the economic growth of the NE states



# Sub-sector: Micro Small Medium Enterprises incl. Khadi & Village Industries

Table-5.6.19: Estimated Number of Micro Small Medium Enterprises (MSMEs) in the NE States
(Numbers in Lakh)

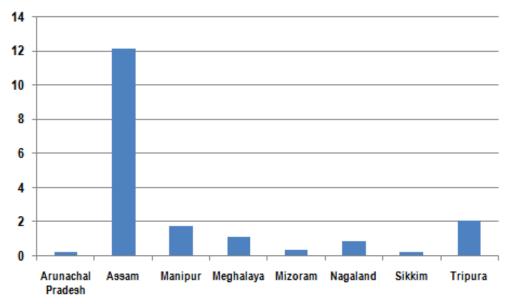
State	Estimated Number of Enterprises								
	Micro	Small	Medium	Total					
Arunachal Pradesh	0.22	0.00	0.00	0.23					
Assam	12.10	0.04	0.00	12.14					
Manipur	1.80	0.00	0.00	1.80					
Meghalaya	1.12	0.00	0.00	1.12					
Mizoram	0.35	0.00	0.00	0.35					
Nagaland	0.91	0.00	0.00	0.91					
Sikkim	0.26	0.00	0.00	0.26					
Tripura	2.10	0.01	0.00	2.11					
Total – NE Region	18.86	0.05	0.00	18.92					
Total - India	630.52	3.31	0.05	633.88					

Source: Ministry of Micro, Small & Medium Enterprises, 'Annual Report 2022-23' based on data from National Sample Survey 73rd Round (2015-16) [Annex-1 Table-1 Page No. 46]

#### Notes

- 1. The classification of MSME has been revised with effect from 1st July 2020. The revised criteria include investment in plant and machinery (or equipment) and annual turnover.
- 2. The above data is based on an NSS Survey that was carried out before the above revision, and as such it reflects the older definitions of micro-enterprises, small-enterprises and medium enterprises.
- Befinition of MSME (with effect from 1st July 2020) In accordance with the provision of Micro, Small & Medium Enterprises Development (MSMED) Act, 2006 the Micro, Small and Medium Enterprises (MSME) are classified as below: (i) a micro enterprise, where the investment in plant and machinery or equipment does not exceed one crore rupees and turnover does not exceed five crore rupees; (ii) a small enterprise, where the investment in plant and machinery or equipment does not exceed ten crore rupees and turnover does not exceed fifty crore rupees; and (iii) a medium enterprise, where the investment in plant and machinery or equipment does not exceed fifty crore rupees and turnover does not exceed two hundred and fifty crore rupees.

**Graph-5.6.5: Estimated Number of MSMEs in the NE States** 



Y-axis gives the Estimated Numbers of MSMEs based on 73rd Round of National Sample Survey



Table-5.6.20: Estimated Employment in MSMEs in the NE States

(Numbers in Lakh)

State		Estimated Employment	
	Male	Female	Total
Arunachal Pradesh	0.29	0.11	0.41
Assam	16.37	1.78	18.15
Manipur	1.52	1.4	2.92
Meghalaya	1.19	0.72	1.91
Mizoram	0.34	0.28	0.62
Nagaland	1.18	0.59	1.77
Sikkim	0.31	0.14	0.45
Tripura	2.51	0.44	2.95
Total - NE Region	23.71	5.46	29.18
Total - India	844.7	264.9	1109.9

Source: Ministry of Micro, Small & Medium Enterprises, 'Annual Report 2022-23' based on data from National Sample Survey 73rd Round (2015-16) [Annex-1 Table-2 Page 47]

#### Notes

- 1. The Employment numbers include persons who draw compensation for their services in terms of salaries and wage payable in kind, payable, and value of social contributions made by their employer.
- 2. The classification of MSME has been revised with effect from 1st July 2020. The revised criteria include investment in plant and machinery (or equipment) and annual turnover.
- 3. The above data is based on an NSS Survey that was carried out before the above revision, and as such it reflects the older definitions of micro-enterprises, small-enterprises and medium enterprises.
- 4. <u>Definition of MSME</u> (with effect from 1st July 2020)

Arunachal

Pradesh

Assam

As furnished at the previous page under Note 3.

20 18 16 14 12 10 8 6 4 2

**Graph-5.6.6: Estimated Employment in MSMEs in the NE States** 

Y-axis gives the Estimated Employment in Lakh in MSMEs based on 73<sup>rd</sup> Round of National Sample Survey

Manipur Meghalaya Mizoram Nagaland

Sikkim

Tripura



Table-5.6.21: Distribution of Proprietary MSMEs in the NE States by Gender of Owner

State	Numbe	er of Proprietary N	//SMEs	Share of State	Share of State
	Male Owned	Female Owned	Total	among all MSMEs with Male Owners (%)	among all MSMEs with Female Owners (%)
Arunachal Pradesh	16,153	6,274	22,427	0.03	0.05
Assam	11,28,411	66,665	11,95,076	2.33	0.54
Manipur	86,383	86,604	172,987	0.18	0.70
Meghalaya	72,191	39,462	111,653	0.15	0.32
Mizoram	20,439	13,698	34,137	0.04	0.11
Nagaland	65,778	20,865	86,643	0.14	0.17
Sikkim	20,880	5,036	25,916	0.04	0.04
Tripura	1,79,169	28,042	2,07,212	0.37	0.23
Total – NE Region	15,89,404	2,66,646	18,56,051	3.28	2.16
Total - India	4,84,50,722	1,23,90,523	6,08,41,245	100.00	100.00

Source: Ministry of Micro, Small & Medium Enterprises, 'Annual Report 2022-23' based on data from National Sample Survey 73rd Round (2015-16) [Page Nos. 138-139]

## Notes

- 1. 'Proprietary' has the usual meaning, i.e. 'of, relating to, or characteristic of an owner or title holder'. Proprietary MSMEs have an individual owner, in contrast to other ownership patterns like Partnership, Company, Self Help Group (SHG), Cooperative Society etc.
- 2. The classification of MSME has been revised with effect from 1st July 2020. The revised criteria include investment in plant and machinery (or equipment) and annual turnover.
- 3. The above data is based on an NSS Survey that was carried out before the above revision, and as such it reflects the older definitions of micro-enterprises, small-enterprises and medium enterprises.
- 4. <u>Definition of MSME</u> (with effect from 1st July 2020)

In accordance with the provision of Micro, Small & Medium Enterprises Development (MSMED) Act, 2006 the Micro, Small and Medium Enterprises (MSME) are classified as below: (i) a micro enterprise, where the investment in plant and machinery or equipment does not exceed one crore rupees and turnover does not exceed five crore rupees; (ii) a small enterprise, where the investment in plant and machinery or equipment does not exceed ten crore rupees and turnover does not exceed fifty crore rupees; and (iii) a medium enterprise, where the investment in plant and machinery or equipment does not exceed fifty crore rupees and turnover does not exceed two hundred and fifty crore rupees.



Table-5.6.22: Performance of Khadi in the NE States (during 2022-23)

State	Į	Jp to 31-12-2022	2	Expe	cted up to 31-12	-2022
	Production (Rs. in Lakh)	Sales (Rs. in Lakh)			Sales (Rs. in Lakh)	Cumulative Employment (in Nos.)
Arunachal Pradesh	15.10	38.47	31	42.00	81.00	33
Assam	917.03	1136.39	5793	1627	2040.78	10570
Manipur	95.03	60.00	318	130.50	90.30	300
Meghalaya	16.24	15.59	61	36.99	34.31	61
Mizoram	3.03	7.98	17	1.50	8.50	20
Nagaland	44.24	45.07	110	50.96	80.98	295
Sikkim	0.00	0.00	0	0.00	0.00	0
Tripura	0.00	0.00	0	0.00	0.00	0
Total - NE Region	1090.67	1303.50	6330	1837.99	2335.87	11279

Source: Ministry of Micro, Small & Medium Enterprises, 'Annual Report 2022-23' [Page No. 134]

# Notes

- 1. Khadi includes polyvastra and solarvastra
- 2. "Khadi" means any cloth woven on handlooms in India from cotton, silk or woollen yarn handspun in India or from a mixture of any two or all of such yarns.

[As defined in The Khadi and Village Industries Commission Act, 1956]





Table-5.6.23: Performance of Village Industries in the NE States (during 2022-23)

State		Jp to 31-12-2022	2	Exped	cted up to 31-12	2-2022
	Production (Rs. in Lakh)	(Rs. in (Rs. in Lakh) Employment		Production (Rs. in Lakh)	Sales (Rs. in Lakh)	Cumulative Employment (Nos. in Lakh)
Arunachal Pradesh	12,994.65	19,859.59	0.26	17,278.91	26,623.69	0.27
Assam	139,318.91	214,502.93	6.40	210,363.45	337,710.48	6.66
Manipur	61,127.10	87,943.19	1.48	98,811.01	145,252.33	1.62
Meghalaya	24,901.47	37,001.20	0.74	39,812	65,775.22	0.82
Mizoram	47,697.29	76,328.67	1.48	68,777.69	109,174.85	1.53
Nagaland	63,577.31	88,962.62	1.24	92,852.24	131,641.29	1.32
Sikkim	6,419.78	10,447.13	0.29	8,559.71	14,810.10	0.3
Tripura	47,103.46	69,901.69	1.43	70,009.65	103,609.18	1.49
Total - NE Region	403,139.97	604,947.02	13.32	606,464.66	934,597.14	14.01

Source: Ministry of Micro, Small & Medium Enterprises, 'Annual Report 2022-23' [Page No. 135]

# Notes

# 1. Village Industry

(i) 'Any industry located in a rural area which produces any goods or renders any service with or without the use of power and in which the fixed capital investment per head of an artisan or a worker does not exceed fifteen thousand rupees or such other sum as may, by notification in the Official Gazette, be specified from time to time by the Central Government:

Provided that any industry specified in the Schedule and located in an area other than a rural area and recognised as a village industry at any time before the commencement of the Khadi and Village Industries Commission (Amendment) Act, 1987 shall, notwithstanding anything contained in this sub-lause, continue to be a village industry under this Act;

(ii) any other non-manufacturing unit established for the sole purpose of promoting, maintaining, assisting, servicing (including mother units) or managing any village industry;] 3. [Power to add to the Schedule.] omitted by Act 12 of 1987, s.3 (w.e.f. 24.7.1987).

Where "rural area" means the area comprised in any village, and includes the area comprised in any town, the population of which does not exceed ten thousand or such other figure as the Central Government may specify from time to time.

[As defined in The Khadi and Village Industries Commission Act, 1956]



# **Sub-sector: Handlooms & Handicrafts**

Table-5.6.24: Distribution of Handloom Workers in the NE States

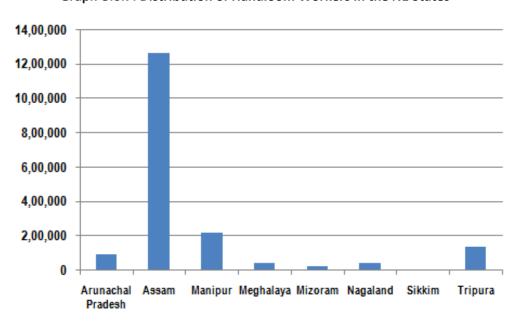
(In Numbers)

State	Rural	Urban	Total
Arunachal Pradesh	84,014	9,300	93,314
Assam	12,52,188	17,318	12,69,506
Manipur	1,92,431	29,424	2,21,855
Meghalaya	42,647	108	42,755
Mizoram	21,100	6,302	27,402
Nagaland	31,970	10,441	42,411
Sikkim	690	7	697
Tripura	1,35,001	2,454	1,37,455
Total – NE Region	17,60,041	75,354	18,35,395
Total - India	27,48,445	3,96,394	31,44,839

Source: Office of the Development Commissioner for Handlooms, **Ministry of Textiles**, '4<sup>th</sup> All-India Handloom Census 2019-20' [Annex-II Page No. 71]

## Notes

1. The 'Basic Concepts and Definitions of the Handloom Census' have been furnished at Chapter-2 of the source document (at Page Nos. 26-30). This chapter may be referred to in connection with the above table.



**Graph-5.6.7: Distribution of Handloom Workers in the NE States** 

Y-axis gives the Numbers of Handloom Workers based on 4th All-India Handloom Census 2019-20



Table-5.6.25: Total Workforce by Type of Handloom Workers & Gender (NE States)

(In Numbers)

State	Location	Ma	ale	Fen	nale	Transgender		
		Weavers	Allied Workers	Weavers	Allied Workers	Weavers	Allied Workers	
Arunachal Pradesh	Rural	10,885	8,184	60,335	5,778	6	1	
	Urban	353	1,295	6,001	1,757	20	1	
	Total	11,238	9,479	66,336	7,535	26	2	
Assam	Rural	75,136	27,592	10,21,349	1,42,165	120	161	
	Urban	451	910	10,368	5,625	4	0	
	Total	75,587	28,502	10,31,717	1,47,790	124	161	
Manipur	Rural	7,522	5,176	1,76,755	5,657	16	0	
	Urban	414	207	27,753	1,162	21	1	
	Total	7,936	5,383	2,04,508	6,819	37	1	
Meghalaya	Rural	12,098	342	29,007	1,210	9	0	
	Urban	5	0	102	1	0	0	
	Total	12,103	342	29,109	1,211	9	0	
Mizoram	Rural	1,863	2,948	12,236	4,164	0	1	
	Urban	272	371	2,926	2,757	1	1	
	Total	2,135	3,319	15,162	6,921	1	2	
Nagaland	Rural	1,686	2,273	26,964	1,364	1	1	
	Urban	416	1,964	6,882	1,932	1	0	
	Total	2,102	4,237	33,846	3,296	2	1	
Sikkim	Rural	20	4	610	56	0	0	
	Urban	0	0	2	5	0	0	
	Total	20	4	612	61	0	0	
Tripura	Rural	34195	9,410	75,949	15,609	3	0	
	Urban	355	87	1,425	606	0	0	
	Total	34,550	9,497	77374	16,215	3	0	
Total - NE Region	Rural	143,405	55,929	1,403,205	176,003	155	164	
	Urban	2266	4,834	55,459	13,845	47	3	
	Total	145,671	60,763	1,458,664	189,848	202	167	
Total - India	Rural	6,01,562	1,77,210	17,54,391	5,20,125	174	229	
	Urban	1,57,587	39,374	1,60,108	1,11,661	69	22	
	Total	7,59,149	2,16,584	19,14,499	6,31,786	243	251	

Source: Office of the Development Commissioner for Handlooms, **Ministry of Textiles**, '4<sup>th</sup> All-India Handloom Census 2019-20' [Annex-II Page 72-75]

# Notes

1. The 'Basic Concepts and Definitions of the Handloom Census' have been furnished at Chapter-2 of the source document (at Page Nos. 26-30). This chapter may be referred to in connection with the above table.



Table-5.6.26: Total & Average Number of Days Worked by Weavers (in NE States)

(In Days)

State	Location	Total Number of Working Days	Average Number of Days Worked
Arunachal Pradesh	Rural	1,03,57,457	145
	Urban	8,84,970	139
	Total	1,12,42,427	145
Assam	Rural	18,72,10,413	171
	Urban	19,51,344	180
	Total	18,91,61,757	171
Manipur	Rural	3,99,93,834	217
	Urban	6,3,70,777	226
	Total	4,63,64,611	218
Meghalaya	Rural	50,39,486	123
	Urban	17,186	161
	Total	50,56,672	123
Mizoram	Rural	17,96,045	127
	Urban	4,57,117	143
	Total	22,53,162	130
Nagaland	Rural	25,62,160	89
	Urban	7,06,624	97
	Total	32,68,784	91
Sikkim	Rural	51,365	82
	Urban	385	193
	Total	51,750	82
Tripura	Rural	1,83,20,252	166
	Urban	4,05,197	228
	Total	1,87,25,449	167
Total - NE Region	Rural	265,331,012	1120
	Urban	10,793,600	1367
	Total	276124612	1127
Total - India	Rural	47,37,06,969	201
	Urban	8,31,11,263	262
	Total	55,68,18,232	208

Source: Office of the Development Commissioner for Handlooms, **Ministry of Textiles**, '4th All-India Handloom Census 2019-20' [Annex-II Table 39 Page 203-206]

# Notes

1. The 'Basic Concepts and Definitions of the Handloom Census' have been furnished at Chapter-2 of the source document (at Page Nos. 26-30). This chapter may be referred to in connection with the above table.



# 5.7. Electricity & Renewable Energy Sources

In India, the development of the electrical power sector commenced at the end of 19th century during the British rule of the country. In the pre-independence era, the supply of electricity was mainly carried out by private sector companies, with the supply being restricted to the major urban areas. After the independence of India, State Electricity Boards were formed in the various parts of the country. This was done in the early 1950s, and it resulted in the systematic growth of power supply industry all over the country. Concurrently, a number of multipurpose hydro projects were commissioned; and the installation of thermal and nuclear stations was taken up. Consequently, the generation of electrical power started increasing significantly.

In 1975, the Government of India created two generating corporations viz. the National Thermal Power Corporation (NTPC) and the National Hydro Power Corporation (NHPC). This gave a fillip to the growth of power sector in the country. The above was followed up by the establishment of the Nuclear Power Corporation and Power Grid Corporation of India Ltd., which gave further boost to the power development programme in India under the Central sector.

In order to liberalize the development of the electrical power sector, the Government of India brought the Electricity Act, 2003 into force in June, 2003. It replaced the three pre-existing legislations namely, Indian Electricity Act 1910, the Electricity (Supply) Act 1948 and Electricity Regulatory Commission Act, 1998. The Electricity Act 2003 consolidated laws relating to generation, transmission, distribution, trading and use of electricity. It facilitated measures that were conducive for the development of the electricity sector by promoting competition, protecting the interests of electricity consumers, and facilitating the supply of electricity to all areas. It enabled the rationalization of electricity tariff, and ensured transparent policies regarding subsidies. The other provisions of the above Act pertained to the promotion of efficient and environmentally benign policies, constitution of Central Electricity Authority, Regulatory Commissions and establishment of Appellate Tribunal and for matters connected therewith or incidental thereto.

The North Eastern Region has ample sources that can be harnessed to generate electricity, including hydro-power, coal, natural gas, solar power and bio-mass. The creation of adequate power generating capacity is now being taken up, with several projects being implemented. Central PSUs like the North Eastern Electric Power Corporation Ltd. (NEEPCO), which is now a subsidiary of NTPC, NHPC and NTPC have created generation capacities, along with the ONGC Tripura Power Corporation Ltd. The capacity created by State Governments has been lower. NEC has so far taken up 7 hydropower and thermal projects with a total installed capacity of 694.50 MW. These projects constitute a significant portion of the capacity created in the power sector.

The following pages give the pertinent data about the electricity sector of the NE Region, covering the entire spectrum of the generation, transmission and distribution of electrical power.



Table-5.7.1 (A): Break-up of the Installed Capacity of Power Utilities in the NE States (as on 31.03.2022)

(Including allocated shares in Joint & Central Sector Utilities)

(In Mega Watt)

State	Ownership				М	Mode-wise Breakup							
	/ Sector			Thermal			Nuclear		Renewable		]		
		Coal	Lignite	Gas	Diesel	Total		Hydro	RES (MNRE)	Total			
Arunachal Pradesh	State	0.00	0.00	0.00	0.00	0.00	0.00	0.00	107.11	107.11	107.11		
	Private	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.23	35.23	35.23		
	Central	37.05	0.00	46.82	0.00	83.87	0.00	544.55	0.00	544.55	628.42		
	Sub-Total	37.05	0.00	46.82	0.00	83.87	0.00	544.55	142.34	686.89	770.76		
Assam	State	0.00	0.00	329.36	0.00	329.36	0.00	100.00	5.01	105.01	434.37		
	Private	0.00	0.00	0.00	0.00	0.00	0.00	0.00	124.04	124.04	124.04		
	Central	402.52	0.00	435.56	0.00	838.08	0.00	422.08	25.00	447.08	1285.16		
	Sub-Total	402.52	0.00	764.92	0.00	1167.44	0.00	522.08	154.05	676.13	1843.57		
Manipur	State	0.00	0.00	0.00	36.00	36.00	0.00	0.00	5.45	5.45	41.45		
	Private	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.25	12.25	12.25		
	Central	47.10	0.00	81.58	0.00	128.68	0.00	95.34	0.00	95.34	224.02		
	Sub-Total	47.10	0.00	81.58	36.00	164.68	0.00	95.34	17.70	113.04	277.72		
Meghalaya	State	0.00	0.00	0.00	0.00	0.00	0.00	322.00	32.53	354.53	354.53		
	Private	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.95	17.95	17.95		
	Central	51.60	0.00	109.69	0.00	161.29	0.00	87.27	0.00	87.27	248.56		
	Sub-Total	51.60	0.00	109.69	0.00	161.29	0.00	409.27	50.48	459.75	621.04		
Mizoram	State	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.47	36.47	36.47		
	Private	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.90	7.90	7.90		
	Central	31.05	0.00	60.46	0.00	91.51	0.00	97.94	0.00	97.94	189.45		
	Sub-Total	31.05	0.00	60.46	0.00	91.51	0.00	97.94	44.37	142.31	233.82		
Nagaland	State	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30.67	30.67	30.67		
	Private	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.04	3.04	3.04		
	Central	32.10	0.00	73.93	0.00	106.03	0.00	66.33	0.00	66.33	172.36		
	Sub-Total	32.10	0.00	73.93	0.00	106.03	0.00	66.33	33.71	100.04	206.07		

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State	Ownership				M	ode-wise Break	up				Grand Total
	/ Sector			Thermal			Nuclear		Renewable		
		Coal	Lignite	Gas	Diesel	Total		Hydro	RES (MNRE)	Total	
Sikkim	State	0.00	0.00	0.00	0.00	0.00	0.00	360.00	52.11	412.11	412.11
	Private	0.00	0.00	0.00	0.00	0.00	0.00	209.00	4.68	213.68	213.68
	Central	53.57	0.00	0.00	0.00	53.57	0.00	64.00	0.00	64.00	117.57
	Sub-Total	53.57	0.00	0.00	0.00	53.57	0.00	633.00	56.79	689.79	743.36
Tripura	State	0.00	0.00	137.00	0.00	137.00	0.00	0.00	16.01	16.01	153.01
	Private	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.89	9.89	9.89
	Central	56.10	0.00	381.94	0.00	438.04	0.00	68.49	5.00	73.49	511.53
	Sub-Total	56.10	0.00	518.94	0.00	575.04	0.00	68.49	30.90	99.39	674.43
Unallocated	Central	112.50	0.00	63.62	0.00	176.12	0.00	140.00	0.00	140.00	316.12
Total - NE Region	State	0.00	0.00	466.36	36.00	502.36	0.00	422.00	233.25	655.25	1157.60
	Private	0.00	0.00	0.00	0.00	0.00	0.00	0.00	210.30	210.30	210.30
	Central	770.20	0.00	1253.60	0.00	2023.62	0.00	1522.00	30.00	1552.00	3575.62
	Grand Total	770.02	0.00	1253.60	0.00	2023.62	0.00	1522.00	30.00	1552.00	3575.62
Grand Total: All- India		2,04,079.50	6,620.00	24,899.51	509.71	236,108.72	6780.00	46,722.52	109,885.38	156,607.90	399,496.61

Source: Central Electricity Authority, 'Annual Report 2021-22' [Page No. 237 / Page No. 232 for All-India Grand Total]

# Notes:

- 1. RES include SHP, BP, U&I, Solar and Wind Energy. Installed capacity in respect of RES (MNRE) as on 31.03.2022 (As per latest information available with MNRE) Abbreviations: SHP=Small Hydro Project (≤ 25 MW), BP=Biomass Power, U&I=Urban & Industrial Waste Power, RES=Renewable Energy Sources
- 2. Allocation from central sector stations has been updated till 28.02.2022



Table-5.7.1 (B): Total Installed Capacity of Power in the NE States (as on 31<sup>st</sup> March of Financial Year)

(In Mega Watt)

State	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	274	301	337	379	765	771
Assam	1600	1571	1710	1757	1794	1844
Manipur	233	242	259	268	262	278
Meghalaya	518	565	582	609	616	621
Mizoram	137	196	206	212	207	234
Nagaland	155	159	170	175	179	206
Sikkim	758	962	962	674	678	743
Tripura	727	733	752	764	724	674
Total – NE Region	4402	4729	4978	4838	5225	5371
Total - India	326,849	330,580	356,100	370,106	382,151	399,497

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Central Electricity Authority, Ministry of Power, Government of India [Table-133 Page No. 344]

## Notes

- 1. Installed capacity includes the capacity of state generation companies, private-sector companies, and the allocated shares in Joint & Central Sector Utilities
- 2. Installed capacity includes all types of units such as thermal units like coal, lignite, gas, and diesel powered units; nuclear units; and renewable power from hydro-units and renewable energy sources (as per Ministry of Non-Conventional Energy Sources) like include small hydro project (up to 25 MW capacity), biomass power, urban & industrial waste power,, solar and wind energy.





Table-5.7.2: Statement showing the Average Rates of Electricity in the NE States

(In Paisa per Kilowatt-Hour for FY 2020-21)

				State & Effectiv	e Date of Tariff			
Category of Consumer	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
	01.06.2018	01.04.2020	01.04.2020	01.04.2020	01.04.2020	01.04.2020	01.04.2020	01.09.2020
DOMESTIC								
1 KW (100 KWh/ month)	400.00	588.00	480.00	435.00	380.00	523.00	150.00	548.00
4 KW (400 KWh/ month)	400.00	722.00	623.00	548.00	518.00	618.00	288.00	643.00
10 KW (1000 KWh/ month)	400.00	782.00	669.00	600.00	555.00	667.00	355.00	793.00
COMMERCIAL								
2 KW (300 KWh/ month)	500.00	868.00	727.00	776.00	573.00	812.00	483.00	743.00
10 KW (1500 KWh/ month)	500.00	868.00	784.00	808.00	613.00	874.00	599.00	826.00
30 KW (4500 KWh/ month)	500.00	909.00	794.00	813.00	620.00	885.00	698.00	826.00
50 KW (7500 KWh/ month)	500.00	909.00	795.00	814.00	621.00	887.00	702.00	826.00
AGRICULTURE								
2 HP (400 KWh/ month)	310.00	485.00	442.00	347.00	309.00	310.00	NA	394.00
5 HP (1000 KWh/ month)	310.00	485.00	442.00	347.00	309.00	310.00	NA	394.00
10 HP (2000 KWh/ month)	310.00	485.00	442.00	347.00	309.00	310.00	NA	513.00
SMALL INDUSTRY 10 KW (1500 KWh/month)	430.00	583 (U) 550 (R)	483.00	685.00	565.00	633.00	717 (U) 567 (R)	796.00
MEDIUM INDUSTRY 50 KW (7500 KWh/month)	430.00	762.00	707.00	685.00	580.00	673.00	657.00	821.00
LARGE INDUSTRY (11 KV) 1000 KW 60% LF (438000 KWh/month)	385.00	725.00	814.00	795.00	645.00	729.00	799.00	NA
HEAVY INDUSTRY (11 KV) 10000 KW 60% LF (4380000 KWh/month)	385.00	725.00	814.00	795.00	645.00	730.00	799.00	NA
HEAVY INDUSTRY (33 KV) 20000 KW 60% LF (8760000 KWh/month)	350.00	725.00	NA	750.00	NA	NA	NA	NA
Railway Traction 12500KW (25000000 KWh/ Month)	NA	826.00	NA	NA	NA	NA	NA	NA

Source: Central Electricity Authority, 'Annual Report 2021-22' [Page No 227]

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# Notes

1. Electricity duty of Sikkim is of the year 2019-20

2. U: Urban; R: Rural

3. Consumer Categories: as follows

Domestic: Private dwelling houses and some other establishments of a non-commercial nature operated by public organizations

Commercial: Establishments like shops, banks, hotels and restaurants, commercial medical establishments (diagnostic labs etc.), other business and commercial establishments, fairs and exhibitions etc.

Agriculture: irrigation pumping and other agricultural purposes only

Industry: Factories and other manufacturing or industrial establishments - classified as per power consumption and connected load as small, medium, large etc.

Railway Traction: For traction load of Indian Railways





Table-5.7.3: Power Supply Position for 2021-22 in the NE States

State		ENER	GY			PE,	٩K	
	Energy Required	Energy Supplied	Energ Supp	gy not olied	Peak Demand	Peak not Met	Demand	not Met
	MU	MU	MU MU %		MW	MW	MW	%
Arunachal Pradesh	875	874	1	0.1	197	168	29	14.6
Assam	10,844	10,825	19	0.2	2,126	2,121	5	0.2
Manipur	1,019	1,018	1	0.1	258	258	0	0.0
Meghalaya	2,256	2,243	13	0.6	408	408	0	0.0
Mizoram	656	644	12	1.8	169	156	13	7.6
Nagaland	852	851	1	0.1	173	153	20	11.7
Sikkim	610	609	0	0.0	133	133	0	0.0
Tripura	1,578	1,578	0	0.0	328	327	1	0.3
Total - NE Region	18,690	18,642	47	0.3	3,792	3,724	68	1.7
Total - India	13,79,812	13,74,024	5,787	0.4	203,014	200,539	2,475	1.2

Source: Central Electricity Authority, 'Annual Report 2021-22' [Page No. 197]

- 1. Power Supply Position Report has been compiled based on the data furnished by State Utilities/ Electricity Departments to CEA
- 2. Excludes power supply from Tripura to Bangladesh
- 3. MU stands for Million Units while MW stands for Mega Watt. One Unit is equal to one Kilo-watt Hour
- 4. Energy not Supplied in % = (Energy Required Energy Supplied) / Energy Required x 100%
- 5. Peak Demand not Met in % = Peak not Met / Peak Demand x 100%





Table-5.7.4: Power Supply Position for 2022-23 in the NE States

State		ENER	GY			PE,	AK	
	Energy Required	Energy Supplied	Energ Supp	yy not olied	Peak Demand	Peak not Met	Demand	not Met
	MU	MU	MU	%	MW	MW	MW	%
Arunachal Pradesh	895	875	20	2.2	166	166	0	0.0
Assam	11,481	11,467	14	0.1	2,379	2,376	3	0.1
Manipur	1,005	1,003	2	0.2	248	248	0	0.0
Meghalaya	2,242	2,242	0	0.0	404	404	0	0.0
Mizoram	648	648	0	0.0	159	159	0	0.0
Nagaland	910	869	41	4.5	168	167	1	0.5
Sikkim	598	598	0	0.0	124	124	0	0.0
Tripura	1,546	1,546	0	0.0	333	333	0	0.0
Total - NE Region	19325	19248	77	0.4	3981	3977	4	0.1
Total - India	15,15,300	15,07,372	7,928	0.5	2,15,888	2,07,231	8,657	4.0

Source: Central Electricity Authority, 'Load Generation Balance Report 2023-24' [Annex-IV (A) & IV (B)]

- 1. Data for March 2023 is as per LGBR for 2022-23
- 2. MU stands for Million Units while MW stands for Mega Watt. One Unit is equal to one Kilo-watt Hour
- 3. Energy not Supplied in % = (Energy Required Energy Supplied) / Energy Required x 100%
- 4. Peak Demand not Met in % = Peak not Met / Peak Demand x 100%



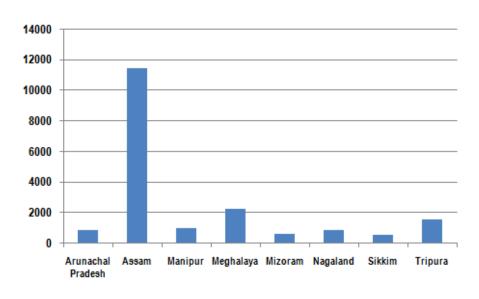


Graph-5.7.1: Installed Capacity of Power Utilities in the NE States (31.3.2022)

2000 1800 1600 1400 1200 1000 800 600 400 200 Arunachal Assam Manipur Meghalaya Mizoram Nagaland Sikkim Tripura Pradesh

Y-axis gives the Installed Capacity in Mega Watts (MW) (as on 31st March 2022)

**Graph-5.7.2: Power Supply Position for 2022-23 in the NE States** 



Y-axis gives the Energy Supplied in Million Units (For FY 2022-23)





Table-5.7.5: Availability of Power in the NE States

(In Crore Kilowatt-hours)

State	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	71	79	86	75	71	87
Assam	869	878	924	929	982	1,083
Manipur	74	83	90	92	97	102
Meghalaya	171	155	196	206	201	224
Mizoram	50	49	64	64	72	64
Nagaland	74	77	80	81	82	85
Sikkim	47	48	53	55	55	61
Tripura	162	255	184	152	148	158
Total – NE Region	1,518	1,624	1,677	1,654	1,708	1,864
Total - India	113,533	120,470	126,753	128,444	127,066	137,402

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Central Electricity Authority, Ministry of Power, Government of India [Table-132 Page No. 342]

- 1. Total for India includes availability from states and from utilities like the Damodar Valley Corporation (DVC).
- 2. One kilowatt hour is equal to electricity supplied at one kilowatt (1,000 watts) for one hour.





Table-5.7.6: Per Capita Availability of Power in the NE States

(In Kilowatt-hour)

State	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	515.7	570.7	618.4	539.2	514.0	629.8
Assam	278.9	281.7	295.3	296.9	313.7	346.0
Manipur	271.1	303.8	332.8	341.0	360.3	378.9
Meghalaya	578.3	523.3	658.9	695.3	675.4	752.7
Mizoram	457.4	447.3	605.9	613.5	689.9	613.2
Nagaland	375.1	389.3	408.5	415.7	422.4	437.9
Sikkim	780.0	798.1	842.5	885.7	872.9	968.1
Tripura	441.6	695.2	500.4	411.8	402.5	429.7
Per Capita – NE Region	333.2	356.2	367.1	362.4	374.2	408.4
Per Capita-India	938.1	978.1	1028.9	1042.6	1031.4	1115.3

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Central Electricity Authority, Ministry of Power, Government of India [Table-131 Page No. 340]

#### Notes

- 1. Per capita availability of power is worked out as per the projected population of states based on the census population.
- 2. One kilowatt hour is equal to electricity supplied at one kilowatt (1,000 watts) for one hour

1000
800
600
400
200
Arunachal Assam Manipur Meghalaya Mizoram Nagaland Sikkim Tripura Pradesh

Graph-5.7.3: Per Capita Availability of Power in the NE States

Y-axis gives the per-capita availability of electrical power in the NE States in 2021-22 in Kilowatt-hours





Table-5.7.7: Requirement of Power in the NE States

(In Net Crore Kilowatt-hours)

State	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	73	80	86	75	72	88
Assam	902	910	953	980	1019	1084
Manipur	76	87	92	92	97	102
Meghalaya	171	156	196	211	203	226
Mizoram	51	50	67	65	73	66
Nagaland	76	80	90	81	83	85
Sikkim	47	49	51	55	55	61
Tripura	162	260	186	154	148	158
Total - NE Region	1558	1672	1721	1713	1750	1870
Total - India	114,293	119,215	127,456	129,101	127,553	137,981

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Central Electricity Authority, Ministry of Power, Government of India [Table-134 Page No. 346]

# Note

1. One kilowatt hour is equal to electricity supplied at one kilowatt (1,000 watts) for one hour





Table-5.7.8: Category-Wise Percentage Utilisation of Electrical Energy sold by Utilities

State				Percenta	ige of Total Ene	rgy Sold				Total
	Domestic	Commercial	Industri	al Power	Public	Traction	Agriculture	Public	Miscellaneous	Energy Sold
			Low & Medium Voltage	High Voltage	Lighting			Water Works & Sewage Pumping		(GWh)
Arunachal Pradesh	46.62	13.26	0.32	31.15	2.55	0.00	0.19	2.30	3.61	405.11
Assam	51.45	14.95	1.63	21.35	0.25	0.00	0.53	1.09	8.74	7356.29
Manipur	65.87	11.64	2.90	1.80	0.79	0.00	1.09	3.24	12.67	651.30
Meghalaya	37.70	6.15	0.34	46.49	0.04	0.00	0.01	2.94	6.34	1326.45
Mizoram	60.91	11.62	0.89	1.22	0.47	0.00	0.04	18.18	6.67	453.54
Nagaland	57.14	12.47	9.28	0.00	3.07	0.00	0.00	1.53	16.51	682.57
Sikkim	27.82	7.23	0.53	58.49	0.07	0.00	0.00	0.00	5.86	414.77
Tripura	59.88	7.33	1.77	2.65	4.69	0.00	3.87	7.73	12.08	982.33
Average - NE Region	50.92	10.58	2.21	20.39	1.49	0.00	0.72	4.63	9.06	1534.05
Average - India	31.76	8.35	5.87	24.87	0.88	1.41	21.25	2.26	3.36	1041655.63

Source: Central Electricity Authority, 'All India Electricity Statistics – General Review 2022' [Table No. 9.6 Page Nos. 146 & 147]

- 1. Definitions of consumer categories have been provided at Table-5.7.2
- 2. GWh stands for Giga Watt Hours (i.e. one million units of electricity, where one unit equals one kilo-watt hour)



Table-5.7.9: Classification of Consumers and Connected Load

		Total - NF	Total - All							
Classification of Load	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Region	India
DOMESTIC										
Connected Load (KW)	94290	5667992	796529	633014	287420	114702	131386	287455	8012788	319629049
No. of Consumers	204945	5501765	488527	563089	223698	279467	101673	832221	8195385	258309177
COMMERCIAL										
Connected Load (KW)	30749	1425061	110970	103559	59742	18480	32717	75908	1857186	97679783
No. of Consumers	27135	282682	27374	28932	18989	23081	11827	74568	494588	29220864
INDUSTRIAL (LOW & MEDIUM VOLTAGE)										
Connected Load (KW)	2927	243705	20030	10084	4997	12173	1371	49006	344293	58190406
No. of Consumers	260	18874	2897	700	1034	4918	385	4676	33744	3712670
INDUSTRIAL (HIGH VOLTAGE)										
Connected Load (KW)	65756	1151812	16510	168008	7982	0	72260	104048	1586376	103365364
No. of Consumers	43	4514	105	137	196	0	774	1140	6909	188908
PUBLIC LIGHTING										
Connected Load (KW)	7189	8184	4130	1502	912	8480	55	16881	47333	5577087
No. of Consumers	1816	1955	989	60	1244	645	30	2674	9413	1532875
TRACTION										
Connected Load (KW)	0	0	0	0	0	0	0	0	0	3309314
No. of Consumers	0	0	0	0	0	0	0	0	0	760
AGRICULTURE										
Connected Load (KW)	23	129325	1019	219	0	11	0	37290	167887	142786501
No. of Consumers	18	33340	66	28	0	1	0	7268	40721	26253015
PUBLIC WATER WORKS										
Connected Load (KW)	2786	60922	23825	16425	79557	795	0	81435	265745	9722172
No. of Consumers	85	4679	211	453	79	39	0	7271	12817	850994
MISCELLANEOUS										
Connected Load (KW)	26760	498872	53430	57898	58990	39112	35692	84657	855411	23167734
No. of Consumers	96	53770	760	2615	20055	2040	1819	2897	84052	3046778
TOTAL										
Connected Load (KW)	2,30,482	91,85,873	10,26,444	9,90,709	4,99,600	193,752	273,482	736,680	131,37,022	7634,27,411
No. of Consumers	234,398	5901,579	520,929	596,014	265,295	310,191	116,508	932,715	88,77,629	3231,16,041

Source: Central Electricity Authority, 'All India Electricity Statistics – General Review 2022' [Table No. 10 Page Nos. 160 – 162]

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- 1. Definitions of consumer categories have been provided at Table-5.7.2
- 2. **'Connected load' mea**ns the sum of the ratings in kilowatt or kilovolt-ampere of the apparatus connected to the installation of the consumer which may be connected simultaneously to the source (as per the Central Electricity Authority Regulations, 2010)
- 3. Kilowatt = 1,000 watts





Table-5.7.10: Aggregate Technical & Commercial (AT&C) Losses for Distribution Utilities Selling Directly to Consumers in the NE States

State /			2018-19					2019-20					2020-21		
Distribution	(MI	J)		(%)		(MI	J)		(%)		(MI	J)		(%)	
Utility	Net Input	Net	Billing	Collection	AT&C	Net Input	Net	Billing	Collection	AT&C	Net Input	Net	Billing	Collection	AT&C
	Energy	Energy Sold	Efficiency	Efficiency	Losses	Energy	Energy Sold	Efficiency	Efficiency	Losses	Energy	Energy Sold	Efficiency	Efficiency	Losses
Arunachal Pradesh / PD	922	438	47.47	100.00	52.53	766	456	59.51	100.00	40.49	627	346	55.13	100.00	44.87
Assam / APDCL	8,678	6,968	80.30	99.39	20.19	8,966	7,257	80.94	94.65	23.39	9,156	7,458	81.45	99.78	18.73
Manipur / MSPDCL	795	627	78.88	94.75	25.26	805	649	80.67	95.07	23.30	869	748	86.07	92.57	20.33
Meghalaya / MePDCL	1,706	1,105	64.78	100.00	35.22	1,796	1,259	70.12	97.44	31.67	1,919	1,326	69.12	100.00	30.88
Mizoram / PD	463	388	83.80	100.00	16.20	613	486	79.34	100.00	20.66	627	445	70.95	89.46	36.53
Nagaland / PD	700	299	42.66	80.32	65.73	750	353	47.11	74.73	64.79	790	404	51.20	77.36	60.39
Sikkim/ PD	542	381	70.20	82.86	41.83	577	411	71.23	100.00	28.77	572	404	70.63	100.00	29.37
Tripura / TSECL	1,271	868	68.32	90.71	38.03	1,307	914	69.96	91.89	35.71	1,373	982	71.54	87.55	37.36
NE Utilities	15077	11074	73.45	97.47	28.41	15580	11785	75.64	87.65	33.7	15933	12113	76.02	90.16	31.46
Total - India	11,47,282	9,62,626	83.90	93.39	21.64	11,57,440	9,88,603	85.41	92.80	20.73	11,50,467	9,67,219	84.07	92.40	22.32

Source: Power Finance Corporation, 'Report on Performance of Power Utilities 2020-21' [Annexure 1.8 Page Nos. 75-80]

- 1. Net Input Energy = Gross Input Energy Transmission Loss Interstate Sale/ Trading; and Net Energy Sold = Gross Energy Sold Interstate Sale/ Trading; where Gross Input Energy = Energy Generated Auxiliary Consumption + Energy Purchased (Gross) Energy Traded/ Inter State Sales
- 2. Billing Efficiency = Net Energy Sold / Net Energy Input; and Collection Efficiency = Adjusted Revenue from Sale of Energy on Subsidy Received basis + Opening Debtors for Sale of Energy Adjusted Closing Debtors for sale of Energy
- 3. Aggregate Technical & Commercial (AT&C) Losses (in %) = (Units Unrealised) / Net Input Energy) x 100%, where Units Unrealised = Net Input Energy Units Realised (with Units Realised = Energy Sold x Collection Efficiency)
- 4. Abbreviations used: PD Power Department; APDCL Assam Power Distribution Company Ltd.; MSPDCL Manipur State Power Distribution Company Ltd.; MSPDCL Manipur State Power Distribution Company Ltd.; TSECL Tripura State Electricity Company Ltd.; MU Million Units (where one unit is equal to one kilo-watt hour)



Table-5.7.11: Length of Transmission & Distribution Lines in the NE States (31st March 2021)

(In circuit-km)

State		HVDC		765 KV	400 KV	230 KV	220 KV	132 KV	110/90 KV	78/66 KV	33	KV	22/20	0 KV	15/11	KV
	800 KV	500 KV	320 KV	OH	ОН	OH	OH	ОН	ОН	OH	ОН	UG	ОН	UG	OH	UG
Arunachal Pradesh	0	0	0	0	0	0	19	341	0	0	4478	0	0	0	19917	0
Assam	0	0	0	0	1280	0	2048	3045	0	613	8147	0	0	0	86248	0
Manipur	0	0	0	0	90	0	0	699	0	0	1677	0	0	0	7797	88
Meghalaya	0	0	0	0	4	0	227	1134	0	0	2261	0	0	0	16299	0
Mizoram	0	0	0	0	0	0	0	870	0	111	1509	0	0	0	5641	0
Nagaland	0	0	0	0	0	0	0	348	0	474	2066	0	0	0	5529	0
Sikkim	0	0	0	0	522	0	30	55	0	413	0	0	0	0	3204	110
Tripura	0	0	0	0	1007	0	0	572	0	408	911	0	0	0	18577	0
Central Sector (NER)	0	0	0	0	3733	0	649	2187	0	0	0	0	0	0	0	0
Total - NE Region	0	0	0	0	6636	0	2973	9251	0	2019	21049	0	0	0	163212	198
Total - India	9656	9432	330	46108	190426	11847	179518	178205	41686	72987	413382	9983	90540	6400	4505637	67186

Source: Central Electricity Authority, 'All India Electricity Statistics – General Review 2022' [Table No. 8.1 Page Nos. 125 & 126]

- 1. HVDC stands for 'High Voltage Direct Current' / OH stands for 'Overhead' / 'UG' stands for 'Underground' / 'KV' stands for kilo-volts
- 2. **'Circuit kilometre'** " means one kilometre of electrical transmission or distribution circuitry including all necessary conductors, insulators and supporting structures required to provide a complete circuit or double circuit



Table-5.7.12: Number of Transformers & their Aggregate Capacity (31st March 2021)

State	St	ер Ир	Ste	p Down	Distri	bution
	Nos.	Capacity (KVA)	Nos.	Capacity (KVA)	Nos.	Capacity (KVA)
Arunachal Pradesh	39	20,031	185	609,465	8,892	4,48,648
Assam	27	5,55,000	3,270	118,32,480	88,178	58,08,501
Manipur	4	50,000	241	18,94,250	8,205	600,000
Meghalaya	25	4,41,900	221	24,59,526	11,828	7,76,022
Mizoram	20	63,239	120	6,18,400	2,705	3,26,167
Nagaland	12	32,330	128	5,62,100	3,626	3,27,391
Sikkim	40	47,07,430	52	4,05,000	2,934	3,92,410
Tripura	11	927,640	168	16,22,100	16,862	12,36,830
Central Sector (NER)	91	59,37,970	101	110,70,600	53	62,230
Total - NE Region	269	1,27,35,540	4,486	310,73,921	143,283	99,78,199
Total - India	5521	37,30,74,168	92,438	205,19,80,528	131,46,526	6776,71,408

Source: Central Electricity Authority, 'All India Electricity Statistics – General Review 2022' [Table No. 8.2 Page Nos. 127 & 128]

#### Notes

## 1. Step up and Step down Transformers

Windings, made out of mainly Copper and or Aluminium wires, form another important part of the transformer. In a two winding transformer, two windings would be present. The one which is connected to the voltage source and creates the flux is called a primary winding. The second winding where the voltage is induced by induction is called a secondary winding. If the secondary voltage is less than that of the primary, the transformer is called a step down transformer. If the secondary voltage is more, it is a step up transformer. A step down transformer can be made to operate as a step up transformer by making the low voltage winding its primary. Hence it may be more appropriate to designate the windings as High Voltage (HV) and Low Voltage (LV).

## 2. Distribution Transformers

Distribution Transformer is a device that provides the final voltage transformation by stepping down the available voltages to the voltage as used by the end user/consumer.

['Guidelines & Best Practices for Operation and Maintenance of Distribution Transformers', Central Electricity Authority available at https://cea.nic.in/wp-content/uploads/dp\_t/2023/03/Guidelines\_for\_OM\_of\_DTs.pdf]





Table-5.7.13: Estimated Potential of Renewable Power in the NE States

(In Mega Watt)

State	Wind Power @ 120 m above ground level	Small Hydro Power	Biomass Power	Co-generation Bagasse	Waste to Energy	Solar Energy	Total	As a % of <b>India's</b> Potential
Arunachal Pradesh	274	2065	8	NA	NA	8650	10997	0.7
Assam	246	202	212	NA	8	13760	14428	1.0
Manipur	0	100	13	NA	2	10630	10745	0.7
Meghalaya	1	230	11	NA	2	5860	6104	0.4
Mizoram	0	169	1	NA	2	9090	9262	0.6
Nagaland	0	182	10	NA	NA	7290	7482	0.5
Sikkim	0	267	2	NA	NA	4940	5209	0.3
Tripura	0	47	3	NA	2	2080	2132	0.1
Total - NE Region	521	3262	260	0	16	62300	66359	4.5
Total - India	6,95,509	21,134	17,538	5,000	2,556	7,48,990	14,90,727	100

Source: 'Energy Statistics India-2023', Ministry of Statistics & Programme Implementation, Government of India [Table-1.3 Page No. 12]

- 1. Wind Power @ 120 m above ground level: For NE states other than Arunachal Pradesh & Assam: 'In these states, even though the wind potential is indicated as negligible based on the applied methodology and land suitability analysis, there can be scattered potential pockets available for wind farm development due to the localized wind flows and such pockets can only be identified through in-situ measurements'. (Source: Table E-1 of 'India's Wind Potential Atlas', published by National Institute of Wind Energy)
- 2. Small hydro power includes projects up to 25 MW capacity
- 3. Waste to Energy includes waste from agricultural and industrial sources, urban waste etc.
- 4. Solar energy potential is as assessed by the National Institute of Solar Energy



Table-5.7.14: Total Installed Capacity of Grid interactive Renewable Power in the NE States (As at March-end)

(In Mega Watt)

State	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Arunachal Pradesh	105	105	110	137	137	137
Assam	34	46	47	57	75	79
Manipur	5	5	6	9	11	12
Meghalaya	31	31	45	46	46	46
Mizoram	37	42	37	37	38	38
Nagaland	31	31	32	32	32	32
Sikkim	52	52	52	52	52	52
Tripura	21	21	21	21	25	25
Total - NE Region	316	333	350	391	416	421
Total - India	42,849	57,244	69,784	78,316	87,078	94,434

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from 'Energy Statistics-India', Ministry of Statistics & Programme Implementation, Government of India [Table-135 Page No. 348]

## Notes:

1. Renewable energy sources include small hydro project (up to 25 MW capacity), biomass power, urban & industrial waste power, solar and wind energy etc.





# 5.8. Transportation (Roads, Railways, Airways and Waterways)

Transportation of people and goods is one of the basic pillars of the human progress. In the present times, technology has evolved and various means of transportation have been developed. These include automobiles to run on modern highways, railways, airways and modernized water-borne transport (that handles the bulk of international trade). New trends have been seen in the area of transportation including the use of compressed natural gas and electrical power to move road vehicles.

The NE Region of India presents several challenges in maintaining effective transportation at low costs. On account of the prevailing topography, where about 70% of the region is either mountainous or hilly, road transportation has been the sole means of reaching the interior, despite the recent construction of some railway lines into the hill states. The reach of airways and inland waterways is very limited in such terrain. The other major factor is the prolonged and heavy period of rainfall, which makes the construction works difficult. Such rains are accompanies by landslides and floods that regularly disrupt roads across the region, besides affecting flights and railway services. The excessive sedimentation of the rivers have made water transportation a challenging proposition, even on the traditionally used rivers of Assam that once connected riverside towns with the distant Calcutta during the British era.

Despite the challenges, the spread of roads, railways and airways has been impressive in the states of the region. Air services are available to all the NE states now, while railway tracks have been extended to almost all of them. The expansion of roads has reached all the administrative centres, industrial areas and strategic locations in the region. Vehicle ownership has grown in all NE states, in tandem with the national trends. The number of railway and air passengers has rapidly grown in the past decade, aided by the growth of the economy and tourism in the region.

The Government has been prioritizing the transport projects in the NE Region, including for connectivity with nearby nations like Bangladesh, Bhutan, Myanmar, and Nepal. The completion and inauguration of such projects are being regularly announced, along with the commencement of new initiatives. These developments are positive signs and will assist the further growth of the regional economy in the near future, by facilitating the smoother passage of passengers and freight traffic by various modes of travel.

Accordingly, both the Ministry of Development of North Eastern Region and NEC have been supporting transportation projects, since their formation. Transport and Communications (T&C) had been traditionally one of the major areas of investment in the NEC Plans. The Ministry has been prioritizing the development of roads and other transport links under its different schemes, including under the Non-Lapsable Central Pool of Resources, the North East Special Infrastructure Development Scheme and the various Externally Aided Projects, apart from Special Development packages announced for different areas of the region. Further, the Ministry is represented in the Inter-Ministerial Committees on Roads Transport & Highways, and on Railways to discuss common matters for implementation by the concerned Line Ministries.



# **Sub-sector: Roads**

Table-5.8.1: National Highways in the NE States

State	Length of National Highways (In Kilometres)	As a % of India's Total Length of National Highways
Arunachal Pradesh	2,537	1.9
Assam	3,909	2.9
Manipur	1,750	1.3
Meghalaya	1,156	0.9
Mizoram	1,423	1.1
Nagaland	1,548	1.2
Sikkim	463	0.3
Tripura	854	0.6
Total - NE Region	13,640	10.3
Total - India	1,32,499	100.0

Source: 'Basic Road Statistics of India 2018-19', published by the Ministry of Road Transport & Highways, Government of India [Table-2.5 Page Nos. 30-31]

#### Notes

1. National Highway means any highway declared to be a national highway under Section 2 of the National Highways Act, 1956 (Act 48 of 1956). As per the above section, '(1) Each of the highways specified in the Schedule is hereby declared to be a national highway. (2) The Central Government may, by notification in the Official Gazette, declare any other highway to be a national highway and on the publication of such notification such highway shall be deemed to be specified in the Schedule. (3) The Central Government may, by like notification, omit any highway from the Schedule and on the publication of such notification; the highway so omitted shall cease to be a national highway.

The Ministry of Road Transport & Highways is primarily responsible for development and maintenance of National Highways (NHs) in India. The Ministry receives proposals from various State Governments/Union Territories (UTs) for declaration of state roads as new National Highways (NHs). The Ministry considers declaration of state roads as new NHs from time to time, based on requirement of connectivity, priority, and availability of funds.

- 2. The above table gives the position of National Highways in the NE States as on 31st March 2019. The above cited 'Basic Road Statistics of India 2018-19' has been brought out in May 2022.
- 3. The entire length of National Highways in India is surfaced.





Table-5.8.2: Expansion of National Highways in the NE States (Status at March end of Year)

(In Kilometres)

State	2016	2017	2018	2019	2021	2022
Arunachal Pradesh	2513	2537	2537	2537	2537	2537
Assam	3821	3845	3845	3909	3936	4077
Manipur	1746	1746	1746	1750	1750	1840
Meghalaya	1203	1204	1204	1156	1156	1156
Mizoram	1381	1423	1423	1423	1423	1423
Nagaland	1150	1547	1547	1548	1548	1670
Sikkim	463	463	463	463	709	709
Tripura	805	854	854	854	854	854
Total - NE Region	13082	13619	13619	13640	13913	14266
Total - India	101011	120493	120543	132500	136440	140995

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Road Transport & Highways, Government of India [Table-136 Page No. 350]

#### Notes

- 1. The above table gives the position of National Highways in the NE states as on 31st March of the indicated Year. For 2022, the status is furnished for 31st December 2021.
- 2. Data for 2020 is not available.

14,400 14,200 14,000 13,800 13,600 13,400 13,200 13,000 12,800 12,600 12,400 2016 2017 2018 2019 2021 2022 Length of NH

Graph-5.8.1: Expansion of National Highways in the NE Region

Y-axis gives the total length of National Highways in all the NE states on 31st March of the indicated Year



Table-5.8.3: Lane-wise Length of National Highways in the NE States

(In Kilometres)

State	Total Length of National Highways	Less than Two- Lane	Two-Lane	Four-Lane & Above
Arunachal Pradesh	2,537	1,757	758	22
Assam	3,909	1,196	2,598	115
Manipur	1,751	277	1,442	32
Meghalaya	1,155	564	534	57
Mizoram	1,423	1,115	308	0
Nagaland	1,548	1,460	88	0
Sikkim	463	171	292	0
Tripura	854	556	298	0
Total - NE Region	13,640	7,096	6,318	226
Total - India	126,350	36,808	61,607	27,935

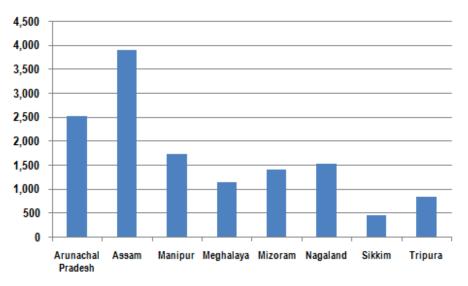
Source: 'Basic Road Statistics of India 2018-19', published by the Ministry of Road Transport & Highways, Government of India [Annexure-2.2 Page No. 77]

- 1. The above table gives the lane-wise length of National Highways in the NE States as on 31st March 2018.
- 2. The above cited 'Basic Road Statistics of India 2018-19' has been brought out in May 2022.
- 3. All National Highways are surfaced.

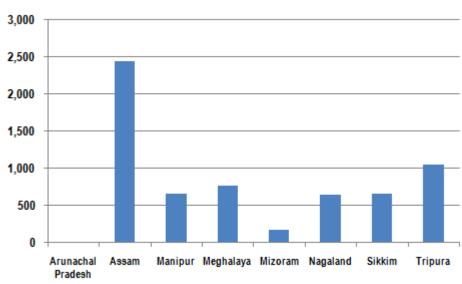




**Graph-5.8.2: National Highways in the NE States** 



**Graph-5.8.3: State Highways in the NE States** 



Y-axis gives the Length of National Highways in kilometres (as on 31st March 2019)

Y-axis gives the Length of State Highways in kilometres (as on 31st March 2019)

- 1. The source document for the above data is the 'Basic Road Statistics of India 2018-19', which has been brought out in May 2022.
- 2. Arunachal Pradesh has not yet made official classification of State Roads into State Highways, Major District Roads (MDR) and Other District Roads (ODR)



Table-5.8.4: State Highways in the NE States

State	Length of State Highways (In Kilometres)	As a % of India's Total Length of State Highways	Surfaced Length of State Highways (In Kilometres)	Surfaced Length as a % of the Total Length of State Highways in the State
(1)	(2)	(3)	(4)	(5) = (4) / (2) x 100%
Arunachal Pradesh	13,500	7.52	13,500	100.0
Assam	2,530	1.41	2,452	96.9
Manipur	781	0.44	661	84.6
Meghalaya	768	0.43	768	100
Mizoram	170	0.09	170	100
Nagaland	650	0.36	650	100
Sikkim	663	0.37	663	100
Tripura	1,057	0.59	1,057	100
Total - NE Region (*)	6,619	3.69	6,421	97
Total - India	1,79,535	100	1,78,384	99.4

<sup>(\*)</sup> Excluding Arunachal Pradesh, in view of remarks at Note (2) below

Source: 'Basic Road Statistics of India 2018-19', published by the Ministry of Road Transport & Highways, Government of India [Table-3.3 Page 35 / Table-3.4 Page No. 37]

- 1. The above table gives the position of State Highways in the NE States as on 31st March 2019. The above cited 'Basic Road Statistics of India 2018-19' has been brought out in May 2022.
- 2. Figure for Arunachal Pradesh pertains to roads under State PWD. Arunachal Pradesh has not yet made official classification of State Roads into State Highways, Major District Roads (MDR) and Other District Roads (ODR). [This figure (in the source document) has not been agreed to by the Arunachal PWD in its Annual Report for 2021-22, as per the 'Preface' by the Chief Engineer (SID&P). This document states that the State PWD has approx. 9,370.39 km under its jurisdiction on 31.3 2022. In the 'Basic Road Statistics of India 2016-17', published by the Ministry of Road Transport & Highways, the length of such roads in Arunachal Pradesh has been given as 8,123 km on 31.3.2017.]





#### State Highways

The Nagpur Plan defined State Highway as: "State Highways should be the main arteries of commerce by road within a State or similar geographical unit. In places, they may carry heavier traffic than many of the National Highways, but this will not alter their designation or function".

The Road Development Plan of India, 1981-2001, (Lucknow Plan) laid down the following policy and goal for State Highways: "State Highways should be extended to serve district headquarters, sub-divisional headquarters, major industrial centres, and places of commercial interest, places of tourist attraction, major agricultural market centres and ports". The Lucknow Plan also envisaged that the NH and SH network should link all towns with a population of 5000 and above.

In the Indian Roads Congress document on Geometric Design Standards for Rural (Non-Urban) Highways, IRC: 73-1980, the following definition has been given: "State Highways are arterial routes of a State linking district headquarters and important cities within the State and connecting them with National Highways or highways of the neighbouring States". [https://pwdroads.assam.gov.in/frontimpotentdata/state-highways]

Table-5.8.5: District Roads in the NE States

(In Kilometres / %)

State	Length of District Roads (In Kilometres)	As a % of India's Total Length of District Roads	Surfaced Length of District Roads (In Kilometres)	Surfaced Length as a % of the Total Length of District Roads in the State
(1)	(2)	(3)	(4)	(5) = (4) / (2) x 100%
Arunachal Pradesh	8,616	0.01	4,726	54.85
Assam	6,093	0.01	5,201	85.36
Manipur	3,095	0.01	2,164	69.92
Meghalaya	4,624	0.01	3,853	83.33
Mizoram	1,714	0.00	1,610	93.93
Nagaland	5,129	0.01	2,913	56.79
Sikkim	1,469	0.00	732	49.83
Tripura	461	0.00	461	100.00
Total - NE Region	31,201	0.05	21,660	69.42
Total - India	6,12,778	100.00	5,87,004	95.8

Source: 'Basic Road Statistics of India 2018-19', published by the Ministry of Road Transport & Highways, Government of India [Table-4.2 Page No. 40]

- 1. District Roads include Major District Roads (MDR) and Other District Roads (ODR).
- 2. The important roads with a district connecting production and markets places with each other or with the main highways are known as 'Major District Roads'. The responsibility of construction and maintenance is vested with the State Government, which gives grants for their development.
- 3. The roads connecting market centres, revenue circle head quarters, railway station in district known as 'other district roads'. The design specification is lower as compared to M.D.R
- 4. The above table gives the position of District Roads in the NE States as on 31st March 2019. The above cited 'Basic Road Statistics of India 2018-19' has been brought out in May 2022. The length for Arunachal Pradesh has been shown as furnished in the source document, despite remarks under Note (2) at the previous table.



Table-5.8.6: Rural Roads in the NE States

State	Length of Rural Roads (In Kilometres)	As a % of India's Total Length of Rural Roads	Surfaced Length of Rural Roads (In Kilometres)	Surfaced Length as a % of the Total Length of Rural Roads in the State
(1)	(2)	(3)	(4)	(5) = (4) / (2) x 100%
Arunachal Pradesh	25,832	0.01	11,083	42.9
Assam	3,72,510	0.08	75,645	20.3
Manipur	25,339	0.01	12,376	48.8
Meghalaya	32,537	0.01	11,544	35.5
Mizoram	11,849	0.00	6,879	58.1
Nagaland	28,039	0.01	11,765	42.0
Sikkim	8,550	0.00	6,803	79.6
Tripura	40,236	0.01	24,147	60.0
Total - NE Region	5,44,892	0.12	1,60,242	29.4
Total – India (*)	45,22,228	100.00	26,12,590	57.8

# (\*) Including JRY Roads

Source: 'Basic Road Statistics of India 2018-19', published by the Ministry of Road Transport & Highways, Government of India [Source: Table-5.7 Page Nos. 47-48]

- 1. Rural Roads include roads constructed under Govt. of India schemes like PM Gram Sadak Yojana (PMGSY) and Jawahar Rojgar Yojana (JRY), as well as roads built by Panchayati Raj Institutions, State Public Works Departments and Rural Works Departments etc.
- 2. The above table gives the position of Rural Roads in the NE States as on 31st March 2019.
- 3. The above cited 'Basic Road Statistics of India 2018-19' has been brought out in May 2022.





Table-5.8.7: Urban Roads in the NE States

State	Length of Urban Roads (In Kilometres)	As a % of India's Total Length of Urban Roads	Surfaced Length of Urban Roads (In Kilometres)	Surfaced Length as a % of the Total Length of Urban Roads in the State
(1)	(2)	(3)	(4)	(5) = (4) / (2) x 100%
Arunachal Pradesh	59	0.00	57	96.6
Assam	6,268	0.01	3,978	63.5
Manipur	126	0.00	70	56.1
Meghalaya	571	0.00	564	98.7
Mizoram	11	0.00	5	48.2
Nagaland	1,470	0.00	913	62.1
Sikkim	156	0.00	155	99.2
Tripura	1,073	0.00	1,062	98.9
Total - NE Region	9734	0.01	6804	69.8
Total – India	541554	100.00	4,28,076	79.0

Source: 'Basic Road Statistics of India 2018-19', published by the Ministry of Road Transport & Highways, Government of India [Source: Table-5.7 Page No. 54]

- 1. Urban Roads consist of Municipal Roads under Urban Development Departments of States and UTs, roads in Railway Zones, MES roads constructed by Military Engineering Services (MES) and Major and Minor Port Roads.
- 2. The above table gives the position of Urban Roads in the NE States as on 31st March 2019.
- 3. The above cited 'Basic Road Statistics of India 2018-19' has been brought out in May 2022.





Table-5.8.8: Project Roads in the NE States

State	Length of Project Roads (In Kilometres)	As a % of India's Total Length of Project Roads	Surfaced Length of Project Roads (In Kilometres)	Surfaced Length as a % of the Total Length of Project Roads in the State
(1)	(2)	(3)	(4)	(5) = (4) / (2) x 100%
Arunachal Pradesh	4,717	0.01	3,073	65.2
Assam	7,813	0.02	1,026	13.1
Manipur	1,298	0.00	1,202	92.6
Meghalaya	603	0.00	229	37.9
Mizoram	1,082	0.00	778	71.9
Nagaland	1,035	0.00	796	76.9
Sikkim	881	0.00	501	56.8
Tripura	1,439	0.00	20	1.4
Total - NE Region	18,868	0.05	7,625	415.8
Total – India	3,43,163	100.00	1,57,171	45.8

Source: 'Basic Road Statistics of India 2018-19', published by the Ministry of Road Transport & Highways, Government of India [Table-7.3 Page No. 58]

- 1. Project Roads largely include roads built/coming under the purview of Central and State Government agencies and departments. Roads under this category include roads of Forest Departments, Irrigation Departments, Electricity Departments, roads in coal fields and coal mines of Coal India Ltd., roads under the plant areas of Steel Authority of India Limited (SAIL), National Mineral Development Corporation (NMDC), Sugarcane Departments of States/UT
- 2. The above table gives the position of Project Roads in the NE States as on 31st March 2019.
- 3. The above cited 'Basic Road Statistics of India 2018-19' has been brought out in May 2022.





Table-5.8.9: Road Density (per 1000 sq km) for Different Categories of Roads in the NE States

State			Leng	th of Roads (	in km)				Total		Road	Density (k	m per 1000	sq. km)	
	National Highways	State Highways	District Roads	Rural Roads	Urban Roads	Project Roads	Total	Total Area (sq. km)	Road Density (km / 10 <sup>3</sup> sq. km)	National Highways	State Highways	District Roads	Rural Roads	Urban Roads	Project Roads
Arunachal Pradesh	2,537	13,500	8,616	25,832	59	4,717	55,262	83,743	659.90	30.3	161.2	103	308.47	0.71	56.33
Assam	3,909	2,530	6,093	3,72,510	6,268	7,813	3,99,122	78,438	5,088.38	49.8	32.3	78	4,749.11	79.90	99.6
Manipur	1,750	781	3,095	25,339	126	1,298	32,389	22,327	1,450.66	78.4	35.0	139	1,134.90	5.63	58.13
Meghalaya	1,156	768	4,624	32,537	571	603	40,258	22,429	1,794.91	51.5	34.2	206	1,450.66	25.46	26.86
Mizoram	1,423	170	1,714	11,849	11	1,082	16,250	21,081	770.82	67.5	8.1	81	562.09	0.52	51.34
Nagaland	1,548	650	5,129	28,039	1,471	1,035	37,871	16,579	2,284.29	93.4	39.2	309	1,691.21	88.70	62.44
Sikkim	463	663	1,469	8,550	156	881	12,182	7,096	1,716.72	65.2	93.4	207	1,204.95	22.02	124.10
Tripura	854	1,057	461	40,236	1,073	1,439	45,120	10,486	4,302.87	81.4	100.8	44	3,837.12	102.36	137.20
Total - NE Region	13,640	20,119	31,201	5,44,892	9,735	18,868	6,38,454	2,62,179	2,435.18	52.03	76.74	119.01	2,078.32	37.13	71.97
Total – India	1,32,499	1,79,535	6,12,778	36,22,228	5,41,554	3,43,163	54,31,757	32,87,469	1,652.26	40.3	54.6	186	1,101.83	164.73	104.39

Source: 'Basic Road Statistics of India 2018-19', published by the Ministry of Road Transport & Highways, Government of India [Annex-7.9 b Page No. 102]

- 1. The above table gives the position of Road Density in the NE States as on 31st March 2019.
- 2. The above cited 'Basic Road Statistics of India 2018-19' has been brought out in May 2022.



Table-5.8.10: Expansion of Road Length in the NE States (Status at March end of Year)

(In Kilometres)

State	2016	2017	2018	2019
Arunachal Pradesh	30692	37025	50555	55262
Assam	329520	337777	343609	399122
Manipur	24776	27612	29180	32389
Meghalaya	21727	22939	43836	40258
Mizoram	8108	11012	13374	16250
Nagaland	36114	36239	36703	37871
Sikkim	8243	11386	13510	12182
Tripura	39365	42925	43215	45120
Total - NE Region	498545	526915	573982	638454
Total - India	4703293	4997671	5315797	5431757

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Road Transport & Highways, Government of India [Table-138 Page No. 354]

- 1. The above table gives the position of road length in the NE states as on 31st March of the indicated Year.
- 2. Road length includes all types of roads National Highways, State Highways, District Roads, Rural Roads, Urban Roads, and Project Roads.





# **Sub-sector: Railways**

Table-5.8.11: Length of Railways in the NE States (as on 31st March 2022)

State	Route Km	Running Track Km	Total Track Km
Arunachal Pradesh	12	12	26
Assam	2,571	2,895	3,888
Manipur	13	13	18
Meghalaya	9	9	13
Mizoram	2	2	6
Nagaland	25	25	41
Sikkim	0	0	0
Tripura	265	265	337
Total - NE Region	2,897	3,221	4,329
Total – India	68,043	1,02,831	1,28,305

Source: Indian Railways Year Book 2021-22 [Page Nos. 62-63]

- 1. The above table gives the position of railways in the NE States as at the end of 2021-22 (on 31st March 2022) for operational (open) lines. The status has remained the same till 31st October 2022, as per the PIB Press Release on 7th December 2022 titled 'Railway has taken up New Line projects for capital connectivity of remaining 5 States of North Eastern Region' (available at https://www.pib.gov.in/PressReleseDetailm.aspx?PRID=1881394)
- 2. Based on details at Table-5.8.13 (which reflects the position till 31st August 2023), the following additional railway lines have been completed / made operational.

Table-5.8.11 (A): Railway Tracks completed after 1st April 2022 (till 31st August 2023)

Railway Line	State	Completed Length (Km)	Remarks
Jiribam-Imphal	Manipur	55	Commissioned till Khongsang in two phases and good services started in July 2023. [In addition, passenger services have commenced]
Agartala – Akhaura (Bangladesh) – Indian Part	Tripura	5	Rail link has been jointly inaugurated on 1st Nov 2023 by the Hon'ble PMs of the two nations
Dhansiri - Kohima (Zubza)	Nagaland & Assam	16	Completed till Sukhovi and passenger services started in August 2023
Bongaigaon – Goalpara – Guwahati (Doubling Project)	Assam	67	CRS authorisation received after 1st April 2022 for 3 sections under Phases III, V and VIII totalling 67.31 km (of second BG track) CRS approvals received for other phases prior to 31.03.22 for track length of 45.63 km (2nd track)
New Bongaigaon – Agthori (Doubling Project)	Assam	63	CRS authorisation received after 1st April 2022 for 3 sections under Phases I, II and IV totalling 63.29 km (of second BG track)

- 3. Sikkim has no length of operational railway line.
- 4. Route km is the distance between two points on the Railway irrespective of the number of lines connecting them, whether single line, double line etc.
- 5. Running Track km is the length of all running tracks excluding tracks in sidings, yards and crossings.
- 6. Total Track km is the length of all running tracks and tracks including tracks in sidings, yards and crossings.



Table-5.8.12: Expansion of Railways in the NE States (Status at March end of Year)

(In Route Kilometres)

State	2016	2017	2018	2019	2020	2021
Arunachal Pradesh	12	12	12	12	12	12
Assam	2443	2440	2465	2519	2519	2519
Manipur	1	13	13	13	13	13
Meghalaya	-	-	9	9	9	9
Mizoram	2	2	2	2	2	2
Nagaland	11	11	11	11	11	11
Sikkim	0	0	0	0	0	0
Tripura	193	203	216	226	265	265
Total - NE Region	2662	2681	2728	2792	2831	2831
Total - India	66687	67360	68442	67415	67956	68103

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Ministry of Railways, Government of India [Table-137 Page No. 352]

- 1. The above table gives the position of operational (open) rail lines in terms of route km in the NE States as on 31st March of the indicated Year.
- 2. Sikkim has no length of operational railway line.





Table-5.8.13: Railways Projects in the NE States under the Northeast Frontier Railways

Name of the Project	Length in Km	Anticipated Cost (Rs. in Crore)	Expenditure up to 31.8.2023 (Rs. in Crore)	Status / Target Date of Commissioning (TDC)
NEW LINES				
New Maynaguri-Jogighopa New Line with Gauge conversion of new Mal-Maynaguri Road and New Changrabandha-Changrabandha	285	4110.57	4207.51	Entire project has been completed and commissioned.
Bhairabi-Sairang	51	9362.06	6589.96	Work has been taken up after inclusion in Budget in 2008-09. TDC: Phase-I (Bairabi-Hortoki) Feb 2024 / Phase-II (Hortoki-Sairang) Feb 2024
Agartala (India) - Akhaura (Bangladesh)	12.03 (5.46 km within India)	865.00	862.56	TDC: October 2023 [Line has been completed by end of August 2023, and inaugurated on 1st November 2023]
Byrnihat-Shillong	108	8324.28	269.81	Land acquisition is held up in Meghalaya portion due to protest by Khasi Students Union (KSU).
Dimapur (Dhansiri) - Kohima (Zubza)	82	6662.30	2662.82	Work has been taken up on this project after inclusion in Budget in 2007-08. 16 km section has been commissioned and work has been taken up in remaining length. TDC: Phases-II and III – September 2024 / Phase-IV (Pherima-Zubza) – March 2026
Jiribam-Imphal	111	14322.00	13860.82	55 km section has been commissioned and work has been taken up in remaining length. TDC for Phase-III (Khongsang-Noney) is March 2024 / Pt-IV (Noney-Imphal) is March 2025
Sivok-Rangpo	45	7876.92	6008.58	Work has been taken up on this project after inclusion in Budget in 2008-09.  TDC for Phase-I (Sivok Yard) is May 2023 / Phase-II (Sivok-Rangpo) is December 2024
Tetelia-Byrnihat (as alternative alignment to Azara-Byrnihat project)	22	1304.62	1118.53	Tetelia-Kamalajari (10 km) section has been completed and commissioned. Work taken up in balance section. Work in Meghalaya State is stopped due to law and order problem. TDC has not been fixed as a result.



Name of the Project	Length in Km	Anticipated Cost (Rs. in Crore)	Expenditure up to 31.8.2023 (Rs. in Crore)	Status / Target Date of Commissioning (TDC)
Murkongselek-Pasighat	27	1187.49	354.35	Land acquisition is held up due to demand of high rate of land in Arunachal Pradesh.  Later on, Land Acquisition had been completed in full in state of Assam as well as in Arunachal Pradesh as per 'Brief of All Projects' (as on 31st August 2023).  TDC: Murkong Selek – Sille: March 2024 / Sille – Pasighat: October 2024
Dimapur-Tizit	257	4274.00	0.00	The work has been included in Budget 2013-14 subject to requisite approvals.  As per 'Brief of All Projects' (as on 31st August 2023): 'this project has been kept in abeyance by Railway Board which has instructed that no further expenditure & execution on this project to be made till further orders.'
Salona-Khumtai	99	6542.00	0.00	The work has been included in Budget 2017-18 subject to requisite approvals.  'Issue of reserve forest is being addressed', as per 'Brief of All Projects' (as on 31st August 2023)
Sibsagar-Jorhat	62	1832.00	0.00	The project has been shelved on 31.10.2022 due to no operational benefit.
Tezpur-Silghat	25	2279.84	0.00	The work has been included in Budget 2017-18 subject to requisite approvals.  Sanction is awaited from the Railway Board.
Maishashan (India) - Zero Point (Bangladesh Border)	3	38.88	19.15	The project has been sanctioned in 2020-21 TDC: December 2023
DOUBLING OF LINES				
New Bongaigaon-Agthori via Rangia	143	2047.51	2078.77	26.87 km section (Pathsala-Nalbari) has been completed. Work has been taken up in balance section.TDC ranges from May 2023 to January 2024.CRS inspection has been completed for Phases-I, II and IV.
New Bongaigaon-Kamakhya via Goalpara	176	4059.65	2933.78	113 km has been completed, including Phases-I to V (New Bongaigaon to Dhupdhara) and Phase-VIII (Mirza-Azara). Work has been taken up in remaining portion



Name of the Project	Length in Km	Anticipated Cost (Rs. in Crore)	Expenditure up to 31.8.2023 (Rs. in Crore)	Status / Target Date of Commissioning (TDC)
New Bongaigaon-Kamakhya via Goalpara [Continued]				As per 'Brief of All Projects' (as on 31st August 2023):  'National Green Tribunal (NGT)/East Zone, Kolkata ordered to stop doubling works in Km 163 to Km168 (5 km) in between Azara and Kamakhya stations, which is the last block section of the project. The existing line and proposed double line in this stretch pass through Deepor Beel and falls partly in Elephant corridor, where instances of dashing with elephants have taken place in past. Though no Forest Land acquisition is involved, (NGT) has ordered and directed to stop doubling works since Jan-2018 till the mitigation measures to avoid collision with elephants are done.  Mitigation measures suggested by the Wildlife Institute of India (WII), Dehradun is diversion of the existing line and double line from Km 163 to Km 172 on Northern periphery of Deepor Beel through viaduct for freeing the Elephant Corridor. It involves additional works costing Rs. 1040 Crs. This additional works is not in the scope of sanctioned doubling works. Railway has submitted in the Affidavit to bear this additional cost by MoEF as per extant instructions issued by Rly Board and land required in new alignment to be provided free of cost by state govt. in lieu of surrender of Railway land along existing alignment through Deepor Beel. The case is pending with NGT/East Zone/Kolkata under hearing. Since the alignment is changing from Km 163 to Km 172 from the existing alignment, it tantamount material modification in the estimate and require sanction of Railway Board once the alignment and funding issue is decided by NGT  In an order dated 28/04/2022, Hon'ble NGT agreed with the proposal of NF Railway for construction of underpass/viaduct at all elephant corridors. All those bridges except Br No. 750 will be integral part of underpass/viaduct. Br. No. 750 will be constructed as planned earlier.

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Name of the Project	Length in Km	Anticipated Cost (Rs. in Crore)	Expenditure up to 31.8.2023 (Rs. in Crore)	Status / Target Date of Commissioning (TDC)
Kamakhya – New Guwahati Quadrupling	21	6124.00	0.00	The work has been included in Budget 2017-18 subject to requisite approvals. FLS has been sanctioned.  As per Brief of All Projects' (as on 31st August 2023): 'Alignment passing through thickly populated part of Guwahati City. Land not available to lay additional two lines. It was discussed to drop the work as it is not found feasible due to non-availability of land.'  It is planned to study two separate by pass lines to Guwahati from North side as well as South side to ease congestion at Guwahati.
Saraighat Bridge (Doubling)	7	1106.67	0.70	The work has been included in Budget 2017-18 subject to requisite approvals. FLS has been sanctioned Detailed Estimate amounting Rs. 1473.77 sent to the Railway Board on 23.03.2022 against Board's observation dated 19.01.2022
Lumding - Tinsukia Jn. Doubling	381	3810.00	0.00	The work has been included in Budget 2020-21 subject to requisite approvals. Survey is in progress.

Source: Indian Railways Annual Report & Accounts 2021-22 [Page Nos. 101-104] / 'Brief of All Projects' (as on 31st August 2023), NF Railway (Construction)

Notes

- 1. The above table gives the position as at the end of August 2023 as obtained from the 'Brief of All Projects' (as on 31st August 2023), brought out by the Office of the General Manager, NF Railway (Construction).
- 2. List of projects has been taken from 'Indian Railways Annual Report & Accounts 2021-22'.
- 3. Some lengths of a few of the above projects are located outside the NE states of India.



# **Sub-sector: Waterways & Airways**

Table-5.8.14: National Waterways in the NE States

NW No.	National Waterway Name	State/Territory	Length (km)
NW 2	Brahmaputra River	Assam	891.0
NW 6	AAI RIVER	Assam	71.0
NW 16	BARAK RIVER	Assam	121.0
NW 18	BEKI RIVER	Assam	73.0
NW 30	DEHING RIVER	Assam	114.0
NW 31	DHANSIRI / CHATHE	Assam	110.0
NW 32	DIKHU RIVER	Assam	63.0
NW 33	DOYANG RIVER	Assam	61.0
NW 38	GANGADHAR RIVER	West Bengal & Assam	62.0
NW 39	GANOL RIVER	Meghalaya	49.0
NW 50	JINJIRAM RIVER	Meghalaya & Assam	43.0
NW 57	KOPILI RIVER	Assam	46.0
NW 61	KYNSHI RIVER	Meghalaya	28.0
NW 62	LOHIT RIVER	Assam & Arunachal Pradesh	100.0
NW 82	PUTHIMARI RIVER	Assam	72.0
NW 93	SIMSANG RIVER	Meghalaya	62.0
NW 95	SUBANSIRI RIVER	Assam	111.0
NW 101	TIZU and ZUNGKI RIVERS	Nagaland	42.0
NW 102	TLWANG (DHALESWARI RIVER)	Mizoram & Assam	86.0
NW 106	UMNGOT (DAWKI) RIVER	Meghalaya	20.0
	TOTAL – NE STATES		2225.0
	TOTAL - INDIA		20275.5

Source: Inland Waterways Authority of India (https://pani.iwai.nic.in/list-of-nws.html)

- 1. NW stands for National Waterway. There are 5 old NWs and 106 new NWs, with the present total of NWs in India being 111 now.
- 2. River Gangadhar flows through Assam and West Bengal. State-wise length is not available.





Table-5.8.15: Passenger Movements through Airports in the NE States

(In Numbers)

Airport	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Guwahati	3,789,656	4,668,053	5,745,628	5,457,449	2,189,135	3,148,956	5,051,480
Agartala	1,183,867	1,379,090	1,441,089	1,506,435	577,085	901,206	1,386,087
Imphal	886,338	987,506	1,277,163	1,285,860	492,752	814,913	1,233,997
Dibrugarh	305,796	336,851	367,929	531,993	386,694	525,925	675,304
Silchar	212,228	366,955	386,665	398,910	265,203	316,178	399,006
Lengpui (Aizawl)	235,613	295,739	225,586	206,647	79,104	190,462	357,639
Dimapur	144,449	186,390	193,522	192,899	110,590	206,519	295,361
Jorhat	58,266	75,414	152,438	145,347	42,190	75,172	151,617
Barapani (Shillong)	13,376	12,957	12,482	30,502	5,690	62,824	109,788
Rupsi (Dhubri)						26,181	36,574
Hollongi (Itanagar)							35,538
Lakhimpur	11,042	13,044	11,250	19,795	12,122	27,486	30,417
Tezu					9	6,770	16,517
Pakyong (Sikkim)			18,963	3,749	11,494	44,740	15,707
Pasighat			1,201	1,343	370	5,814	9,920
Tezpur	7,889	8,560	6,614	3,346	2,700	4,896	4,024
Ziro							181
Total – NE Region	6,848,520	8,330,559	9,840,530	9,784,275	4,175,138	6,358,042	9,809,157
Total - India	264,969,723	308,753,400	344,699,733	341,050,651	115,379,783	188,891,441	327,279,136

Source: Airports Authority of India (https://www.aai.aero/en/business-opportunities/aai-traffic-news)

- 1. The figures include both arrivals and departures.
- 2. '---'indicates that either no passengers used the airport for the year or airport was not operational.



Table-5.8.16: Cargo Movements through Airports in the NE States

(In MT)

Airport	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Guwahati	17,286	22,345	23,840	21,270	15,951	21,858	22,823
Imphal	4,720	4,306	6,313	7,860	4,838	7,195	7,646
Agartala	6,057	5,322	5,195	4,661	2,002	3,505	4,118
Dibrugarh	543	665	825	909	738	1,014	1,303
Dimapur	398	567	467	372	255	1,054	1,148
Silchar	312	522	895	794	601	828	742
Lengpui	730	746	525	413	364	319	471
Jorhat	66	50	34	0	24	13	242
Lakhimpur	0	0	0	0	0	6	7
Total – NE Region	30,112	34,523	38,094	36,279	24,773	35,792	38,500
Total - India	2,978,241	3,357,028	3,560,019	3,328,629	2,473,911	3,140,802	3,158,589

Source: Airports Authority of India (https://www.aai.aero/en/business-opportunities/aai-traffic-news)

# Notes

1. The figures include both incoming and outgoing cargo.





# **Road Vehicles**

Table-5.8.17: Total Registered Vehicles in the NE States (as in March 2019 & March 2020)

State	Total Registered Vehicles in Nos. (as on 31.3.2019)	As a % of the Total Nos. of vehicles Registered in India (2018-19)	Total Registered Vehicles in Nos. (as on 31.3.2020)	As a % of the Total Nos. of vehicles Registered in India (2019-20)
Arunachal Pradesh	2,30,156	0.08	2,30,126	0.07
Assam	39,36,517	1.33	43,58,529	1.34
Manipur	3,61,970	0.12	3,61,970	0.11
Meghalaya	3,65,804	0.12	3,65,804	0.11
Mizoram	2,33,567	0.08	2,67,350	0.08
Nagaland	4,89,688	0.17	5,20,293	0.16
Sikkim	54,106	0.02	54,106	0.02
Tripura	4,95,859	0.17	5,51,097	0.17
Total – NE Region	6167667.00	2.09	6709275	2.06
Total - India	29,57,71,688	100.00	32,62,98,801	100.00

Source: 'Road Transport Year Book (2019-20)', Ministry of Road Transport & Highways, Government of India – based on data furnished by the Offices of the State Transport Commissioners [Annexure -3.1 Page No 72]

- 1. The above reference document was brought out in April 2023.
- 2. Data for the states of Arunachal Pradesh, Manipur, Meghalaya and Sikkim regarding 'Total Registered Vehicles (as on 31.3.2020)' relates to the data for 2018-19 as these State Government did not furnish the data for 2019-20.





# Table-5.8.18: Total Registered Vehicles in the NE States (As on 31<sup>st</sup> March of the Indicated Year)

(In thousands)

State	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	CAGR 2010-2020 (in %)
Arunachal Pradesh	22	145	151	151	151	151	265	180	210	230	230	26.40
Assam	1,384	1,582	1,807	1,878	2,217	2,510	2,817	3,029	3,442	3,937	4,359	12.16
Manipur	194	207	215	296	395	307	306	340	308	362	362	6.41
Meghalaya	158	176	198	220	248	267	558	553	333	366	366	8.75
Mizoram	80	93	102	121	137	151	171	187	208	234	267	12.76
Nagaland	254	273	291	311	318	334	380	410	449	490	520	7.41
Sikkim	34	39	43	36	40	43	49	54	54	54	54	4.87
Tripura	160	188	204	245	256	282	319	383	435	496	551	13.15
Total – NE Region	2,264	2,703	3,011	3,107	3,611	3,894	4865	5136	5439	6169	6709	11.48
Total - India	1,27,746	1,41,866	1,59,490	1,76,044	1,90,704	2,10,023	2,30,031	2,53,311	2,72,587	2,95,772	3,26,299	9.83

Source: 'Road Transport Year Book (2019-20)', Ministry of Road Transport & Highways, Government of India – based on data furnished by the Offices of the State Transport Commissioners [Annexure-3.2 Page No 73]

- 1. The above reference document was brought out in April 2023.
- 2. Data for Arunachal Pradesh regarding 'Total Registered Vehicles' is as follows: (a) for 2010 figure of 1997 is used; (b) for 2013, 2014 & 2015 figure of 2012 is used; and (c) for 2020 figure of 2019 is used. Regarding Manipur and Meghalaya, data regarding 'Total Registered Vehicles' for 2020 figure of 2019 is used. In the case of Sikkim, data after 2017 is based on the figures of 2017.
- 3. CAGR stands for Compound Annual Growth Rate. This is got from the formula: CAGR= [(Vehicle Nos. in 2020 / Vehicle Nos. in 2010)^0.10-1] x 100%



Table-5.8.19: Total Registered Transport Vehicles (Category Wise) in the NE States (As on 31<sup>st</sup> March 2020)

Stata	Articulated	Lorries	Light Vehicles			Bus	ses			Taxis			Motor icles engers)	les of Hire	· Vehicles Not Included	Transport
State	Multi-Axle /	Trucks &	Four Wheelers	Three Wheelers	Stage Carriages	Contract Carriages	Private Service Vehicles	Other Buses	Motor Cabs	Maxi Cabs	Other Taxis	Three Seater	Four to Six Seater	Motor Cycles	Other Ver Inclu	Total Tr
Arunachal Pradesh	1,544	6,367	7,292	2,566	681	6,677	1,189	733	85	1,015	65	7,010	4,272	0	0	39,496
Assam	9,225	1,47,374	1,57,201	50,119	2,105	17,029	0	4,472	21,097	9,647	47,933	1,37,189	0	0	0	6,03,391
Manipur	1,651	15,437	1,637	1,296	1,568	120	8	33	3,165	4,289	44	4,481	11,683	0	0	45,412
Meghalaya	0	32,711	15,426	0	5,921	0	0	0	28,206	0	0	15,941	0	0	0	98,205
Mizoram	2	7,101	16,096	74	733	21	8	0	7,663	3,619	0	6,425	228	657	0	42,627
Nagaland	60,697	1,20,788	18,592	8,556	2,246	3,738	429	882	7,687	2,157	873	20,542	989	9	0	2,48,185
Sikkim	126	3,721	1,585	0	263	0	53	47	7,487	5,734	1,061	0	0	5	0	20,082
Tripura	144	8,680	23,106	4,667	2,142	825	0	0	8,996	892	0	34,525	0	0	0	83,977
Total – NE Region	73,389	74,017	83,734	67,278	15,659	28,410	1,687	6,167	84,386	27,353	49,976	88,924	17,172	671	0	329,799
Total - India	16,32,594	58,26,471	46,97,352	21,31,844	9,83,662	3,39,112	1,33,754	2,66,895	23,63,997	9,36,873	1,58,047	60,07,797	21,95,193	54,372	4,34,961	2,81,62,924

Source: 'Road Transport Year Book (2019-20)', Ministry of Road Transport & Highways, Government of India — based on data furnished by the Offices of the State Transport Commissioners [Annexure-3.3 (c) Page No 77]

- 1. The above reference document was brought out in April 2023.
- 2. Data for Arunachal Pradesh, Manipur, Meghalaya and Sikkim is based on the figures of 2018-19.



Table-5.8.20: Total Registered Non-Transport Vehicles (Category Wise) in the NE States (As on 31st March 2020)

	Two-Wheelers								Other		Grand Total
State	Scooters	Mopeds	Motor Cycles	Cars	Jeeps	Omni Buses	Tractors	Trailers	Vehicles (Not	Total – Non Transport	Transport + Non-
			,						Covered)		Transport
Arunachal Pradesh	39,405	3,684	65,170	67,553	5,228	39	1,490	927	7,134	1,90,630	2,30,126
Assam	0	0	28,81,439	7,70,530	0	1,392	75,728	26,049	0	37,55,138	43,58,529
Manipur	2,24,473	10,921	7,322	53,026	16,033	1,150	1,629	308	1,696	3,16,558	3,61,970
Meghalaya	1,32,321	0	0	1,00,922	23,114	0	936	2,909	7,397	2,67,599	3,65,804
Mizoram	1,69,097	1,225	0	54,225	0	1	93	26	56	2,24,723	2,67,350
Nagaland	87,847	16,944	0	1,30,638	0	523	2,993	1,099	32,064	2,72,108	5,20,293
Sikkim	1,717	0	3,345	18,662	9,928	0	0	217	155	34,024	54,106
Tripura	43	1,871	3,95,393	63,408	0	0	439	590	5,376	4,67,120	5,51,097
Total - NE Region	6,54,903	34,645	33,52,669	12,58,964	54,303	3,105	83,308	32,125	53,878	55,27,900	67,09,275
Total - India	10,23,26,818	1,40,20,019	12,73,35,512	3,77,29,158	24,62,112	4,71,815	94,20,452	22,74,803	20,95,188	29,81,35,877	32,62,98,801

Source: 'Road Transport Year Book (2019-20)', Ministry of Road Transport & Highways, Government of India – based on data furnished by the Offices of the State Transport Commissioners [Annexure-3.3 (d) Page No 78]

- 1. The above reference document was brought out in April 2023.
- 2. Data for Arunachal Pradesh, Manipur, Meghalaya and Sikkim is based on the figures of 2018-19.



Table-5.8.21: Total Number of Commercial Vehicles in Use in the NE States (As per Primary Permit Valid as on 31.3.2020)

Category of Commercial Vehicle	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region	Total India
Stage Carriage										
Public (STU)	0	1,466	0	254	0	1,960	245	1,409	5,334	1,92,933
Private	27	0	0	4,832	0	0	55	0	4,914	1,75,068
Contract Carriage										
Auto-Rickshaw	2,035	1,52,475	1,892	14,223	6,425	18,992	0	34,525	78,092	39,08,997
E-Rickshaw	0	19,043	45	0	0	0	0	0	19,088	24,105
Ordinary Taxi	91	42,459	16	11,582	0	843	0	0	54,991	2,60,424
Motor Cab (All India Permit)	0	17,853	0	8,859	0	4,767	0	0	31,479	5,48,276
Motor Cab (State Permit)	26	0	4,676	1,389	7,663	0	7,342	8,996	30,092	6,95,394
Maxi Cab (All India Permit)	8	10,197	130	4,379	0	0	0	0	14,714	1,15,581
Maxi Cab (State Permit)	126	0	2,910	5,365	2,727	1,612	5,553	892	19,185	3,43,603
Omni Bus (All India Permit)	0	1,118	94	122	0	0	0	0	1,334	7,569
Omni Bus (State Permit)	31	0	173	1,106	0	498	0	2,967	4,775	40,031
Any Other	142	27,215	0	282	613	605	1,061	0	29,918	1,54,330
Private Service Vehicle										
Educational Institution Buses	376	2,320	23	148	14	326	49	376	3,632	2,53,536
Ambulance	21	2,854	30	312	141	0	155	0	3,513	45,498
Fire Fighter	18	127	0	28	21	0	42	0	236	2,937
Any Other	7	0	0	679	7	0	0	0	693	63,986

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Category of Commercial Vehicle	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region	Total India
Goods Carriage										
Lorry (State Permit)	631	1,30,267	1,606	18,738	0	87,496	3,565	9,642	1,21,678	16,39,291
Lorry (National Permit)	0	5,011	89	7,262	0	0	0	0	12,362	6,97,608
Tankers (State Permit)	68	0	479	463	0	0	35	0	1,045	1,34,159
Tankers (National Permit)	0	0	270	172	0	0	0	0	442	1,73,369
Tractors & Trailers	0	87,881	5	4,218	465	0	217	0	92,786	16,95,388
Light Motor Vehicle	446	1,37,586	2,473	5,912	16,096	22,733	1,569	3,066	52,295	19,37,728
Multi-Axle / Articulated Vehicle	91	7,873	35	56	0	42,715	126	0	50,896	5,82,223
Any Other	0	46,803	1,371	2,119	0	0	0	1,554	51,847	5,85,015
Total Commercial Vehicle in Use (in State)	4,144	6,92,548	16,317	92,500	34,172	1,82,547	20,014	63,427	2,30,574	1,42,77,049

Source: 'Road Transport Year Book (2019-20)', Ministry of Road Transport & Highways, Government of India – based on data furnished by the Offices of the State Transport Commissioners [Annexure-3.6 Page No 81-82]

- 1. The above reference document was brought out in April 2023.
- 2. Data for Arunachal Pradesh, Manipur, Meghalaya and Sikkim is based on the figures of 2018-19.
- 3. Terms used in above table have been described at the following page.



## Terms used inTable-5.8.21 (in preceding two pages)

## Stage Carriage

A motor vehicle constructed or adapted to carry more than six passengers excluding the driver for hire or reward at separate fares paid by or for individual passengers, either for the whole journey or for stages of the journey.

## Contract Carriage

A motor vehicle which carries a passenger or passengers for hire or reward and is engaged under a contract, whether expressed or implied, for the use of such vehicle as a whole for the carriage of passengers mentioned therein and entered into by a person with a holder of a permit in relation to such vehicle or any person authorised by him in this behalf on a fixed or an agreed rate or sum –

- (a) on a time basis, whether or not with reference to any route or distance; or
- (b) from one point to another, and in either case, without stopping to pick up or set down passengers not included in the contract anywhere during the journey, and includes
  - (i) a maxi cab; and
  - (ii) a motor cab notwithstanding that separate fares are charged for its passengers;

Motor cab: any motor vehicle constructed or adapted to carry not more than six passengers excluding the driver for hire or reward

Maxi cab: any motor vehicle constructed or adapted to carry more than six passengers, but not more than twelve passengers, excluding the driver, for hire or reward

Omni Bus: any motor vehicle constructed or adapted to carry more than six persons excluding the driver

Educational Institution Bus: an omnibus, which is owned by a college, school or other educational institution and used solely for the purpose of transporting students or staff of the educational institution in connection with any of its activities;

Goods Carriage: any motor vehicle constructed or adapted for use solely for the carriage of goods, or any motor vehicle not so constructed or adapted when used for the carriage of goods

Light Motor Vehicle: a transport vehicle or omnibus the gross vehicle weight of either of which or a motor car or tractor or road-roller the un-laden weight of any of which, does not exceed 7,500 kilograms

#### Permit

It means a permit issued by a State or Regional Transport Authority or an authority prescribed in this behalf under this Act authorising the use of a motor vehicle as a transport vehicle

### National Permit

National Permits are issued to goods vehicles to enable them to go outside the home state. National Permit is issued for a minimum of four contiguous states (including the home state)





# 5.9. Information & Communication Technology

The past decades have witnessed unprecedented transformation in the technology for conveying information, as well as for communicating between two parties. The convergence between the above areas has resulted in their fusion leading to the emergence of Information & Communications Technology (ICT). This enables the user to access, store, transmit, understand and manipulate information. ICT has enabled humans to transcend the barriers that impede many of the human interactions like distances, terrain, costs etc. It has empowered the disadvantaged sections of humanity and enabled them to convey their voice and talents across the pre-existing impediments. The fast-paced progress in the area of mobile telephony has revolutionized communications and access to the internet. It has also fostered the emerging era of social media.

ICT has enabled the people of the NE Region to interact with peers across the globe in a meaningful way. It has also enabled a better understanding of the region and its positive aspects. In one way, it has facilitated the flow of tourists to the region, by easing matters like bookings (air tickets and hotel rooms), tour plans, information regarding sightseeing etc. In the Government sector, ICT has enabled Ministries and Departments to interact with citizens (on a G2C basis) including through social media. Further, they have been able to interact with one another (on a G2G basis) as well as with businesses (G2B). Government entities have been able to use innovations like video-conferencing and remote sensing for improving their business processes.

The concerned Government entities like the Ministry of Communications (functioning through its arms, the Department of Telecommunications and the Department of Posts), and the Ministry of Electronics and Information Technology (MeitY) have been active in reaching the remote parts of the NE Region in order to provide ICT services. The India Posts has been offering savings, remittances and other financial services since the past many decades, which are especially helpful in the remote areas. In addition, the flow of information is being still facilitated by the older media channels like television and press.

The Ministry of Development of North Eastern Region has been using ICT, including social media, in the conduct of its works, including for project management and G2C interactions. A dashboard has been developed for the large-scale projects being undertaken in the NE Region. The NEC has also been leveraging the use of ICT in the conduct of its various activities.





Table-5.9.1: Status of Telecom facilities in the NE States (BSNL) (As on 30.11.2022)

	State	Telephone Exchange (Nos.)	Total Capacity (Wire-line + Wireless) in Lakh Line	Total DEL (Wire-line + Wireless) in Lakh	Broadband Connection Wire-line + Wireless) in Nos.
1	Assam	401	23.12	34.065	3,04,853
2	NE-I	155	13.64	11.067	2,03,240
	Meghalaya	42	4.51	3.524	83,065
	Mizoram	39	2.56	2.731	33,346
	Tripura	74	6.57	4.812	86,829
3	NE-II	141	11.93	3.486	1,17,001
	Arunachal Pradesh	68	5.16	1.924	53,131
	Nagaland	32	2.87	0.752	31,505
	Manipur	41	3.90	0.810	32,365
4	Sikkim	32	1.38	0.437	40,810
	Total – NE Region	729	50.57	49.054	6,65,904

Source: Annual Report 2022-23, Department of Telecommunications, Government of India [Table at Page No 168]

Notes

DEL – Direct Exchange Line

Table-5.9.2: Status of Telephone Connections in the NE Region and its Tele-density (As on 31.10.2022)

Name of Circle / State	Projected Population as on 31.10.2022	Telephone Connection (BSNL)	% Tele-density by BSNL	% Tele-density by all- Operators	% Market Share of BSNL
Assam	37,365	34,44,622	9.22	66.34	13.90
NE-I	8,635	11,06,220	12.81	78.28	11.88
NE-II	7,077	3,55,317	5.02	NA	NA
Sikkim	685	43,423	6.34	NA	NA
Total – NE Region	53,762	49,49,582	9.21	NA	NA

Source: Annual Report 2022-23, Department of Telecommunications, Government of India [Table at Page No 168]

- 1. The figure of tele-density by all operator and market share for Sikkim is not available separately as this information is compiled for LSA viz. West Bengal.
- 2. NE-I includes Meghalaya, Mizoram & Tripura; and NE-II includes Arunachal Pradesh, Manipur, & Nagaland. Separate state-wise figures have not been furnished for these states.
- 3. NA means 'Not available'



Table-5.9.3: Number of Telephones in the NE Region (Wire-line & Wireless)
(As on 30<sup>th</sup> November of 2021 & 2022)

Service Area			Wireline	Phones						TOTAL PHONES				
	TO	ΓAL	PSU Op	erators	Private Operators		TO <sup>-</sup>	TAL	PSU Op	perators	Private C	perators		
	Nov 21	Nov 22	Nov 21	Nov 22	Nov 21	Nov 22	Nov 21	Nov 22	Nov 21	Nov 22	Nov 21	Nov 22	Nov 21	Nov 22
Assam	185824	261452	102769	108550	83055	152902	24386765	24585121	3127340	3297907	21259425	21287214	24572589	24846573
North East	148699	199944	81557	75703	67142	124241	12075363	12127487	1350345	1379535	10725018	10747952	12224062	12327431
Total - NE Region	334523	461396	184326	184253	150197	277143	36462128	36712608	4477685	4677442	31984443	32035166	36796651	37174004
Total - India	23533218	27085638	10419084	9562138	13114134	17523500	1167493166	1143010739	116446941	110322128	1051046225	1032688611	1191026384	1170096377

Source: Annual Report 2022-23, Department of Telecommunications, Government of India [Table -2 at Page No 302]

- 1. North East includes both NE-I (Meghalaya, Mizoram & Tripura) and NE-II (Arunachal Pradesh, Manipur & Nagaland). State-wise figures have not been furnished for these states.
- 2. Total of NE Region excludes Sikkim, as data for this state is included under West Bengal Circle.
- 3. Subscriber data is as furnished by the Telecom Service Providers.





Table-5.9.4: Tele-density in the N.E Region (As on 30<sup>th</sup> November of 2021 & 2022)

		Tele-c	lensity (per	r 100 Popu	lation)				Rural Phones as					
Service Area	Ove	erall	Urk	oan	Ru	ıral	Overall		Urban		Rural		% of Overall Phones	
	Nov 21	Nov 22	Nov 21	Nov 22	Nov 21	Nov 22	Nov 21	Nov 22	Nov 21	Nov 22	Nov 21	Nov 22	Nov 21	Nov 22
Assam	69.62	69.74	169.89	167.88	51.35	51.69	24572589	24846573	9240509	9288630	15332080	15557943	62.40	62.62
North East	78.50	78.43	116.19	115.37	59.12	58.94	12224062	12327431	6143096	6264496	6080966	6062935	49.75	49.18
Total – NE Region	72.34	72.40	143.42	141.87	53.34	53.54	36796651	37174004	15383605	15553126	21413046	21620878	58.19	58.16
All- India	86.89	84.6	138.79	134.56	59.31	57.67	1191026384	1170096377	660219032	651817584	530807352	518278793	44.57	44.29

Source: Annual Report 2022-23, Department of Telecommunications, Government of India [Table -1 at Page No 301]

- 1. North East includes both NE-I (Meghalaya, Mizoram & Tripura) and NE-II (Arunachal Pradesh, Nagaland & Manipur). State-wise figures have not been furnished for these states.
- 2. Total of NE Region excludes Sikkim, as data for this state is included under West Bengal Circle.
- 3. Subscriber data is as furnished by the Telecom Service Providers.





Table-5.9.5: Progress of Tele-Density in the N.E Region (2016-2022)

(Telephones per 100 Persons)

Service Area	2016	2017	2018	2019	2020	2021	2022
Assam	57.64	66.97	76.87	68.81	70.01	70.86	68.50
North East	80.22	89.94	98.06	84.17	83.37	81.11	77.35
All - India	83.4	93.01	93.3	90.10	88.66	88.15	84.87

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Department of Telecommunications, Government of India [Table -142 at Page No 361]

#### Notes

- Telephones include Public DELs, Private DELs, CMPs and WLL (Fixed & Limited).
   [DEL Direct Exchange Line / WLL Wireless in Local Loop / CMP Cellular Multi Processing]
- 2. North East includes both NE-I (Meghalaya, Mizoram & Tripura) and NE-II (Arunachal Pradesh, Manipur & Nagaland). State-wise figures have not been furnished for these states.

Table-5.9.6: Wireline Subscriber Base the NE States (As on 31.3.2023)

(In Numbers)

Service Area	BSNL	Bharti Airtel.	Vodafone Idea	Reliance Jio	Total
Assam	110813	18633	2640	151238	283324
North East	73127	0	510	140732	214369
Total – NE Region	183940	18633	3150	291970	497693
Total - India	7105823	7147472	703179	9115969	28409776

Source: Press Release (No 46 / 2023 dated 22<sup>nd</sup> May 2023) from Telecommunications Regulatory Authority of India (TRAI), Government of India [Annexure-I at Page No 15]

- 1. Other service providers (MTNL, Reliance Comm. and Tata Tele) do not have any subscribers in any of the above service areas.
- 2. North East includes both NE-I (Meghalaya, Mizoram & Tripura) and NE-II (Arunachal Pradesh, Manipur & Nagaland). State-wise figures have not been furnished for these states.
- 3. Total for NE Region excludes Sikkim, which is under the West Bengal Service Area. Separate figures for Sikkim have not been provided.



Table-5.9.7: Wireless Subscriber Base the NE States (As on 31.3.2023)

Service Area	BSNL	Bharti Airtel.	Vodafone Idea	Reliance Jio	Total
Assam	3184184	11,006,187	2002622	8800862	24993855
North East	1,365,085	5934222	941,136	4110061	12350504
Total – NE Region	4549269	16940409	2943758	12910923	37344359
Total - India	103580534	370910873	236750467	430230251	1143927943

Source: Press Release (No 46 / 2023 dated 22<sup>nd</sup> May 2023) from Telecommunications Regulatory Authority of India (TRAI), Government of India [Annexure-II at Page No 16]

- 1. Other service providers (MTNL and Reliance Comm.) do not have any subscribers in any of the above service areas.
- 2. Figures for Bharti Airtel include those of and Tata Tele.
- 3. North East includes both NE-I (Meghalaya, Mizoram & Tripura) and NE-II (Arunachal Pradesh, Manipur & Nagaland). State-wise figures have not been furnished for these states.
- 4. Total for NE Region excludes Sikkim, which is under the West Bengal Service Area. Separate figures for Sikkim have not been provided.













# Table-5.9.8: Rural & Urban Post Offices in the NE States (As on 31.3.2022)

(In Numbers)

		Departmental Post Office									Gramin Dak Sewak Post Office			Total Post Office		
Circle	Head Post Office			Sub Post Office			Total		Branch Post Office			]				
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	
Assam	0	19	19	369	208	604	396	227	623	3298	84	3382	3694	311	4005	
North East	0	9	9	191	142	333	191	151	342	2485	86	2571	2676	237	2913	
Total - NE Region	0	28	28	560	350	937	587	378	965	5783	170	5953	6370	548	6918	
Total - India	15	793	808	12314	11988	24302	12329	12781	25110	131656	2485	134141	143985	15266	159251	

Source: Annual Report 2022-23, Department of Posts, Government of India [Table - 14 Page No 86]

- 1. State-wise break-up is not available except for Assam; with rest of the NE states (excluding Sikkim) being clubbed under NE Circle.
- 2. NE Region total excludes Sikkim, which is under the West Bengal Circle. Sikkim is reported to have 209 Post Offices (Page No. 145 of Annual Report 2022-23). However, additional details regarding these post offices are not available.
- 3. The number of Post Offices is as per the position on 31st March 2022.







Table-5.9.9: Function-wise Distribution of Post Offices in the NE States (As on 31.3.2022)

Circle	Total Post Office	Night Post Office	Post Office with Full Range of Services	Post Office without Delivery	Delivery Post Offices
Assam	4005	1	623	104	3901
North East	2913	1	2873	40	2873
Total - NE Region	6918	2	3496	144	6774
Total - India	159251	113	80890	7940	151313

Source: Annual Report 2022-23, Department of Posts, Government of India [Table – 15 at Page No 87]

## Notes

- 1. State-wise break-up is not available except for Assam; with rest of the NE states (excluding Sikkim) being clubbed under NE Circle.
- 2. NE Region total excludes Sikkim, which is under the West Bengal Circle. Sikkim is reported to have 209 Post Offices (Page No. 145 of Annual Report 2022-23). However, additional details regarding these post offices are not available.
- 3. The number of Post Offices is as per the position on 31st March 2022.

Table-5.9.10: Letter Box, Post Box & Post Bag in the NE States (As on 31.3.2022)

(In Numbers)

		Letter Box		Post Box	Post Bag	Post Box-
Circle	Urban	Rural	Total	rented to Public	rented to Public	cum-Bag rented to Public
Assam	795	5005	5800	246	0	0
North East	720	2917	3637	3028	0	0
Total - NE Region	1515	7922	9437	3274	0	0
Total - India	64920	329064	393984	27440	1139	531

Source: Annual Report 2022-23, Department of Posts, Government of India [Table - 17 at Page No 89]

- 1. State-wise break-up is not available except for Assam; with rest of the NE states (excluding Sikkim) being clubbed under NE Circle.
- 2. NE Region total excludes Sikkim, which is under the West Bengal Circle. Separate figures for Sikkim have not been furnished.
- 3. The number of letter boxes, post boxes and post bags is as per the position on 31st March 2022.



Table-5.9.11: Postal Savings Scheme Accounts in the NE States (As on 31.3.2022)

(Number of Accounts)

Circle	Savings Scheme	Recurring Deposit	Time Deposit	Monthly Income Scheme	Senior Citizen	Sukanya Samriddhi Accounts	Public Provident Fund	Total
Assam	2259701	1461664	185316	130342	14189	480949	44434	4576595
North East	849869	665502	92186	58494	10290	138255	9140	1823736
Total – NE Region	3109570	2127166	277502	188836	24479	619204	53574	6400331
Total - India	82340469	106997745	21050058	9652052	2869127	24663716	3576964	251150131

Source: Annual Report 2022-23, Department of Posts, Government of India [Table – 10 at Page No 68]

- 1. State-wise break-up is not available except for Assam; with rest of the NE states (excluding Sikkim) being clubbed under NE Circle.
- 2. NE Region total excludes Sikkim, which is under the West Bengal Circle. Separate figures for Sikkim have not been furnished.
- 3. The number of postal savings scheme accounts is as per the position on 31st March 2022.









Table-5.9.12: Outstanding Balance of Postal Savings Scheme Accounts in the NE States (As on 31.3.2022)

Circle	Savings Scheme	Recurring Deposit	Time Deposit	Monthly Income Scheme	Senior Citizen	Sukanya Samriddhi Accounts	Public Provident Fund	Total
Assam	5436.45	3545.41	2910.68	4313.00	847.13	997.00	1390.53	19440.19
North East	2119.12	1533.51	1502.35	1438.51	514.23	325.92	188.04	7621.68
Total - NE Region	7555.57	5078.92	4413.03	5751.51	1361.36	1322.92	1578.57	27061.87
Total - India	153786.04	156870.95	251283.53	235822.10	119328.53	93431.81	118347.16	1128870.12

Source: Annual Report 2022-23, Department of Posts, Government of India [Table – 11 at Page No 69]]

- 1. State-wise break-up is not available except for Assam; with rest of the NE states (excluding Sikkim) being clubbed under NE Circle.
- 2. NE Region total excludes Sikkim, which is under the West Bengal Circle. Separate figures for Sikkim have not been furnished.
- 3. The outstanding balance of various postal savings scheme accounts is as per the position on 31st March 2022.



Table-5.9.13: Total Number of Registered Publications in the NE States (Till 31.3.2021)

State	Daily	Bi / Tri Weekly	Weekly	Fortnightly	Monthly	Quarterly	Annual	Other	Total
Arunachal Pradesh	17	1	7	1	5	0	1	0	32
Assam	160	25	280	97	218	49	24	33	886
Manipur	77	2	24	18	71	9	38	16	255
Meghalaya	24	1	36	14	21	13	3	7	119
Mizoram	58	15	44	3	65	8	2	11	206
Nagaland	10	0	11	1	4	2	1	0	29
Sikkim	23	2	81	1	6	3	0	4	120
Tripura	45	0	93	12	13	5	1	2	171
Total – NE Region	414	46	576	147	403	89	70	73	1818
Total - India	20278	543	45395	16415	47102	8903	2441	4968	146045

Source: 'Press in India 2021-22', Office of the Registrar of Newspapers for India (https://rni.nic.in/all\_page/press\_india.aspx) [Chapter-2 / Table -2.4 / Page No-26]









Table-5.9.14: Details of Doordarshan Stations in the NE States (As on 31.3.2020)

State	Studios		ſ	No. of Transmitter	-S	
		DD-I (Prima	ry Channel)	DD News (Ne	ws Channel)	DTT
		HPT	LPT	HPT	LPT	
Arunachal Pradesh	1	1	3	1	NA	NA
Assam	3	3	12	1	NA	1
Manipur	1	2	1	1	NA	NA
Meghalaya	2	2	3	2	NA	NA
Mizoram	1	2	NA	1	NA	NA
Nagaland	1	2	1	1	NA	NA
Sikkim	1	1	NA	1	NA	NA
Tripura	1	1_	4	1	NA	NA
Total - NE Region	11	14	24	9	NA	1

Source: Annual Report 2019-20, Prasar Bharati [Studios: 217-218 / Transmitters: Annex-XIV Page No 219] Notes

- 1. HPT High Power Transmitters
- 2. LPT Low Power Transmitters
- 3. DTT Digital High Power Transmitters





# 5.10. Tourism

'All the states of the North East region are blessed with natural scenic beauty, distinct historical cultural and ethnic heritage. All this offers tremendous scope for tourism in the region. There is also a great scope for mountaineering, trekking and adventure tourism in the region. If developed and promoted well, this can emerge as the biggest employer in the region. It can also add to the growth and income of the region.' [Prime Minister Shri Narendra Modi while addressing the 65th Plenary of the NEC on 27.05.2016]

The eight states of North East India are blessed with scenic natural beauty, salubrious weather, rich biodiversity, rare wild life, historical sites, distinct cultural and ethnic heritage and warm and welcoming people. The region offers unforgettable visits for tourists interested in wild life, religious, cultural and ethnic tourism, river cruises, golf and a host of others. There is also great scope for mountaineering, trekking and adventure tourism in the region.

The promotion of tourism in the NE Region is a high-priority focus sector of Ministry of Development of North Eastern Region. Sustainable tourism is emerging as a key driver of faster economic growth, as it does not suffer from extra transportation costs and the resultant non-competitiveness that plagues other economic activities in the region. The natural beauty and environment, rich flora and fauna assets, distinctive lifestyles and adventure settings, diverse culture & tradition etc. are resources being tapped for boosting tourism with spin-offs for job creation, investment and trade, infrastructure development and social inclusion of local youth, women and local communities etc.

In addition, regional tourist circuits are being planned for improved tourist footfalls in the NE states, apart from boosting the local economies. Under the NE Special Infrastructure Development Scheme (NESIDS), as many as 80 projects had been sanctioned up to March 2022 for tourism related infrastructure such as connectivity, power and water supply. Further, 63 tourism development projects had been sanctioned till the Financial Year 2021-22 through NEC, which has been also focusing upon the above sector.





Table-5.10.1: Domestic & Foreign Tourist Visits to the NE States

	201	6	201	7	201	8	201	9	202	20	202	1
State	Domestic Tourist Visits	Foreign Tourist Visits										
Arunachal Pradesh	385875	6598	444005	7147	512436	7653	555639	7825	42871	961	102915	182
Assam	5160599	19456	6052667	21760	4710617	15592	5447805	26878	1266898	7285	1409161	536
Manipur	150638	3064	153454	3497	176109	6391	167560	13608	49669	3139	49371	648
Meghalaya	830887	8476	990856	12051	1198340	18114	1245633	25813	24734	2311	154409	411
Mizoram	67238	942	67772	1155	76551	967	163762	2249	30890	265	87232	234
Nagaland	58178	3260	63362	4166	101588	5010	125949	5577	10979	518	23968	325
Sikkim	747343	66012	1375854	49111	1426127	71172	1421823	133388	316408	19935	511669	11508
Tripura	370618	36780	398669	69899	414388	102861	437201	154405	127815	31877	177816	5
Total – NE Region	7771376	144588	9546639	168786	8616156	227760	9565372	369743	1870264	66291	2516541	13849
Total - India	1615388619	24714503	1657546152	26886684	1853787719	28851130	2321982663	31408666	610216157	7171769	677632981	1054642

Source: 'India Tourism Statistics' for the Years from 2018 to 2022 - brought out by Ministry of Tourism, Government of India

'India Tourism Statistics' 2022: Table-5-1-2 Pages 138-139 (gives data for 2020 & 2021)

'India Tourism Statistics' 2021: Table-5-1-2 Pages 133-134 (gives data for 2019 & 2020)

'India Tourism Statistics' 2020: Table-5-1-2 Pages 137-138 (gives data for 2018 & 2019)

'India Tourism Statistics' 2019: Table-5-1-2 Pages 101-103 (gives data for 2017 & 2018)

'India Tourism Statistics' 2018: Table-5-1-2 Pages 95-96 (gives data for 2016 & 2017)



Table-5.10.2: Ranking of the NE States on Domestic & Foreign Tourist Visits

(Out of 37 States & Union Territories in India)

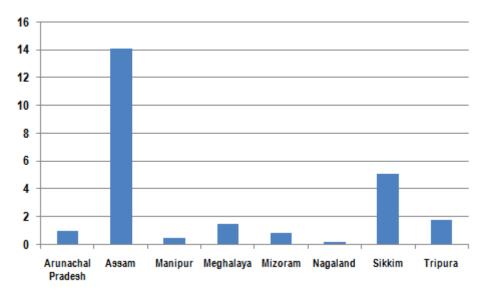
State	20	19	20	20	20	21
	Domestic Tourist	Foreign Tourist	Domestic Tourist	Foreign Tourist	Domestic Tourist	Foreign Tourist
	Visits	Visits	Visits	Visits	Visits	Visits
Arunachal Pradesh	30	31	32	32	33	32
Assam	22	27	23	24	23	27
Manipur	34	30	31	27	35	26
Meghalaya	27	28	34	29	31	28
Mizoram	35	35	33	36	34	31
Nagaland	36	34	35	33	36	29
Sikkim	26	21	26	20	25	13
Tripura	32	18	29	19	30	36
Total States & UTs (*)	37	37	37	37	37	37

(\*) number of States & UTs ranked by the Ministry

Source: 'India Tourism Statistics' for the Years from 2020 to 2022 - brought out by Ministry of Tourism, Government of India Notes

- 1. Ranking has been done for 37 states and UTs of India. The sources are listed below:
  - 'India Tourism Statistics' 2022: Table-5-1-3 Pages 140-141 (gives the ranks for 2021)
  - 'India Tourism Statistics' 2021: Table-5-1-3 Pages 135-136 (gives the ranks for 2020)
  - 'India Tourism Statistics' 2020: Table-5-1-3 Pages 139-140 (gives the ranks for 2019)

**Graph-5.10.1: Domestic Tourist Visits to the NE States** 



Y-axis gives the number of domestic visits in Lakh Nos. for 2021



# Table-5.10.3: Distribution of Classified Hotels in the NE States (As on 30<sup>th</sup> April 2022)

(In Numbers)

State	5 Star Deluxe	5 Star	4 Star	3 Star	2 Star	1 Star	Apartment Hotel	Time Share Resort	Heritage Hotel	B&B Establishment	Guest House	Total
Arunachal Pradesh	0	0	0	2	1	0	0	0	0	0	0	3
Assam	2	2	2	12	4	0	0	0	0	6	1	29
Manipur	0	0	0	2	0	0	0	0	0	1	0	3
Meghalaya	0	0	1	1	0	0	0	0	0	0	0	2
Mizoram	0	0	0	2	0	0	0	0	0	0	0	2
Nagaland	0	0	0	0	0	0	0	0	0	20	0	20
Sikkim	0	3	3	2	3	0	0	0	0	0	0	11
Tripura	0	0	0	0	0	0	0	0	0	0	0	0
Total – NE Region	2	5	6	21	8	0	0	0	0	27	1	70
Total India	149	185	423	564	25	10	2	2	55	459	8	1929

Source: 'India Tourism Statistics 2022' brought out by Ministry of Tourism, Government of India [Table 6.2.1 Page Nos. 158-161]

#### Notes

1. The numbers have been provided based on classification done by the Ministry of Tourism. This exercise is done on the basis of inspection of hotels which is undertaken by the Hotel and Restaurant Approval and Classification Committee (HRACC), set up by this Ministry.

- 2. The above process is voluntary. The hotel promoters and owners seek voluntary approval from the Ministry of Tourism for their projects and classification under various categories by submitting applications.
- 3. The above numbers of hotels reflect the position as on 30<sup>th</sup> April 2022, based on the classification / reclassification done by the Ministry on the basis of voluntary applications received from hotel promoters and owners.



# Table-5.10.4: Distribution of Classified Hotel Rooms in the NE States (As on 30<sup>th</sup> April 2022)

(In Numbers)

	5 Star Deluxe	5 Star	4 Star	3 Star	2 Star	1 Star	Apartment Hotel	Time Share Resort	Heritage Hotel	B&B Establishment	Guest House	Total
Arunachal Pradesh	0	0	0	95	19	0	0	0	0	0	0	114
Assam	312	240	65	460	118	0	0	0	0	21	0	1216
Manipur	0	0	0	82	0	0	0	0	0	5	0	87
Meghalaya	0	0	50	30	0	0	0	0	0	0	0	80
Mizoram	0	0	0	66	0	0	0	0	0	0	0	66
Nagaland	0	0	0	0	0	0	0	0	0	81	0	81
Sikkim	0	128	203	45	53	0	0	0	0	0	0	429
Tripura	0	0	0	0	0	0	0	0	0	0	0	0
Total - NE Region	312	368	318	778	190	0	0	0	0	107	0	2073
Total India	35483	22498	20041	17209	922	294	297	253	1495	2304	96	100892

Source: 'India Tourism Statistics 2022' brought out by Ministry of Tourism, Government of India [Table 6.2.1 at Page Nos. 158-161.

- 1. The numbers have been provided based on classification done by the Ministry of Tourism. This exercise is done on the basis of inspection of hotels which is undertaken by the Hotel and Restaurant Approval and Classification Committee (HRACC), set up by this Ministry.
- 2. The above process is voluntary. The hotel promoters and owners seek voluntary approval from the Ministry of Tourism for their projects and classification under various categories by submitting applications.
- 3. The above numbers of hotel rooms reflect the position as on 30<sup>th</sup> April 2022, based on the classification / reclassification done by the Ministry on the basis of voluntary applications received from hotel promoters and owners.



Table-5.10.5: Recognized Travel Trade Service Providers in the NE States during 2021-22 (As on 30<sup>th</sup> June 2022)

State	Green Shoot / Start-up	Tour Operator	Travel Agent	Tourist Transport Operator	Total
Arunachal Pradesh					
Assam		2	1		3
Manipur	2	2			4
Meghalaya					
Mizoram					
Nagaland					
Sikkim					
Tripura		1			1
Total - NE Region	2	5	1		8
Total India	50	105	40	16	211

Source: 'India Tourism Statistics 2022' brought out by Ministry of Tourism, Government of India [Table 7.1.2 at Page Nos. 168-169]

## Notes:

1. '—'means NO recognised travel trade service provider.

## 2. Tour Operator

A Tour Operator is one who plans, promotes and operates tours and makes arrangements for transport, accommodation, sightseeing, entertainment and other tourism related services and activities for tourists visiting destinations within India. Tour Operators would include:

- (a) An Inbound tour operator is one who makes arrangements for transport, accommodation, sightseeing, entertainment and other tourism related services for foreign tourists.
- (b) A domestic tour operator is one who makes arrangements for transport, accommodation, sightseeing, entertainment and other tourism related services for domestic tourists.
- (c) MICE Tour Operator: Tour Operators making arrangements for Meetings, Incentives, Conferences and Exhibitions (MICE) held within the country.
- (d) Cruise Tour Operator: Tour Operators Specialized/having expertise in handling/operating river cruises with accommodation facilities within the country and exclusively promotes Cruise Tourism in domestic & foreign source markets.
- (e) Adventure Tour Operator: Tour Operators engaged in activities related to Adventure Tourism in the country such as mountaineering, rock climbing, trekking, safaris, bicycling, motorcycling, motoring tours and making required arrangements for the same.

## 3. Travel Agent

A Travel Agent is one who makes arrangements of tickets for travel by air, rail, ship, passport, visa, etc. It may also arrange accommodation, tours, entertainment and other tourism related services.



# 4. Tourist Transport Operator

A Tourist Transport Operator Organization is one, who provides tourist transport like cars, coaches, boats etc. to tourists for transfers, sightseeing and journeys to tourist places etc.

[https://tourism.gov.in/travel-trade]

# 5. Green Shoot / Start Up Travel Service Provider

A new organization registered with Registrar of Companies (OMC / LLP / Private Limited / Public Limited) which has just ventured into the tourism sector and has no previous experience in the field of tourism.







# 5.11. Banking & Insurance

The North Eastern Region has unique challenges which require innovative practical solutions. The area of banking and insurance is an area where this maxim holds especially true. In the past decade, peace, and stability have been largely ensured in this region, In addition, there is a political focus of the leadership to address the developmental issues. Consequently, massive developments are unfolding in the region that (inter alia) require the focus of the banking and insurance sectors. The North East Region has a huge potential in various sectors like agriculture and horticulture, tourism, hospitality, manufacturing, etc along with a hugely talented workforce. This potential needs to be leveraged and the banking fraternity can step up their support in building a robust start-up ecosystem in the region, which will boost economic growth and generate employment opportunities. It is felt that there is a need and opportunity for the banking sector to promote industrialization, financial inclusion, and promoting entrepreneurship across the emerging sectors by increasing credit flow in the states of the NE Region.

There are the seven strategic priorities, the 'Saptarishis' i.e., inclusive development, reaching the last mile, infrastructure & investment, unleashing the potential of green growth, youth power, and financial sector for holistic development of the NE Region. The banking and insurance community has a vital role to play on each of the above-mentioned seven priorities. Further, MSMEs are the backbone of the NE economy and are rooted in the greater vision of Atmanirbhar Bharat. Banks can prioritize support and promote this sector. There is a need to support the entrepreneurs in developing market linkages and value-added support to the entrepreneurs to ensure the success of the MSMEs and start-ups in the region. Close coordination with the State governments can be ensured to maximize the potential of the banking and insurance fraternity in the region.

In view of the above context, the major stakeholders like commercial banks, development banks, insurance companies, start-ups, policymakers, think-tank organizations, micro-lending organizations, regulatory authorities, and entrepreneurs can develop actionable ideas on how the banking and insurance sector in the NE Region can catalyze accelerating development here.

The State Level Bankers' Committee (SLBC), which is set-up as per the Lead Bank Scheme of the Reserve Bank of India, is the highest body of bankers in the state. These committees have been formed in all states of the NE Region, as elsewhere in India. These Committees meet once a quarter. In addition to reviewing the activities of the institutional lending, the quarterly meetings discuss various issues concerning the economic development of the state, where banks play a pivotal role. Such meetings aim at finding solution to the various problems confronting the state covered by the SLBC. The forum takes the lead in initiating, streamlining and accelerating the process of development in close co-ordination with various government departments, Reserve Bank of India, NABARD and other developmental agencies. In addition, the Ministry of Development of North Eastern Region and NEC are working with the North Eastern Development Finance Corporation Ltd. to support MSME units and larger projects in the region.



Table-5.11.1: Offices of Scheduled Commercial Banks in the NE States

State	2016	2017	2018	2019	2020	2021	2022
Arunachal Pradesh	143	151	153	155	164	169	172
Assam	2209	2306	2370	2404	2957	3020	3043
Manipur	150	159	176	192	203	210	225
Meghalaya	319	338	343	346	364	367	368
Mizoram	167	186	190	192	203	210	220
Nagaland	150	157	160	164	176	180	182
Sikkim	128	131	137	143	162	164	165
Tripura	424	442	455	463	565	579	589
Total - NE Region	3690	3870	3984	4059	4794	4899	4964
Total - India	134858	140216	141909	145374	153102	154485	154758

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Basic Statistical Returns of Banks [Table-143 at Page No 366]

## Notes

1. The above table gives the number of offices of scheduled commercial banks in the NE states as at End-March of the indicated year.

Table-5.11.2: Credit-Deposit Ratio of Scheduled Commercial Banks in the NE States (According to the Place of Sanction)

(In Percent)

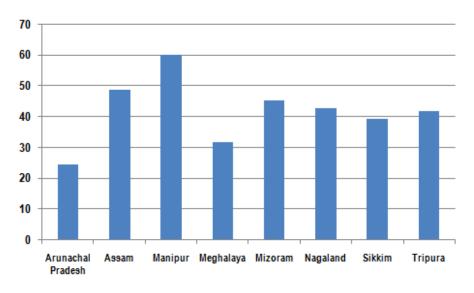
State	2016	2017	2018	2019	2020	2021	2022
Arunachal Pradesh	29.0	24.0	25	23.0	24.9	25.2	24.5
Assam	42.2	40.3	42.6	44.3	43.0	46.7	48.9
Manipur	41.1	38.7	44.6	49.4	57.2	57.7	60.2
Meghalaya	24.8	25.9	27.2	26.9	35.3	37.6	32.0
Mizoram	40.1	36.4	35.8	36.8	36.1	42.0	45.4
Nagaland	34.1	31.5	34.7	35.4	37.5	43.2	43.0
Sikkim	28.0	27.4	26.6	28.4	31.2	35.8	39.3
Tripura	35.3	35.9	40.7	41.7	42.5	42.1	41.9
CD Ratio – NE Region	38.4	36.8	39.3	40.4	41.1	44.1	44.8
CD Ratio - India	78.4	73.8	76.7	78.3	76.5	71.7	72.1

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Basic Statistical Returns of Banks [Table-144 at Page No. 368]

- 1. The above table gives the credit-deposit ratio of scheduled commercial banks in the NE states (according to the place of sanction) as at End-March of the indicated year.
- 2. Credit-Deposit Ratio of NE Region excludes Sikkim, which is covered under 'Eastern Region' in the RBI analyses.

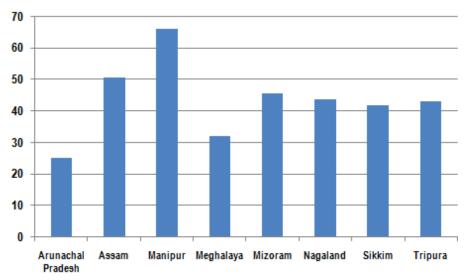


Graph-5.11.1: Credit-Deposit Ratio of Scheduled Commercial Banks in the NE States (According to the Place of Sanction)



Y-axis gives the CD Ratio in Percentage(for 2022) according to the place of sanction of credit

Graph-5.11.2: Credit-Deposit Ratio of Scheduled Commercial Banks in the NE States (According to the Place of Utilization)



Y-axis gives the CD Ratio in Percentage(for 2022) according to the place of utilization of credit





Table-5.11.3: Credit-Deposit Ratio of Scheduled Commercial Banks in the NE States (According to the Place of Utilization)

(In Percent)

State	2016	2017	2018	2019	2020	2021	2022
Arunachal Pradesh	29.1	25.1	30.3	23.2	25.3	30.2	25.1
Assam	43.4	42.1	44.0	45.8	44.4	48.1	50.7
Manipur	42.3	39.7	45.1	49.8	59.1	60.1	66.3
Meghalaya	25.2	26.3	30.8	31.0	35.5	37.9	32.3
Mizoram	41.7	37.8	38.2	41.5	36.8	42.2	45.7
Nagaland	34.7	33.1	34.8	35.7	37.9	57.3	43.8
Sikkim	35.2	31.6	29.7	30.3	31.7	36.3	41.8
Tripura	35.9	36.5	41.4	42.1	42.8	42.6	43.3
CD Ratio – NE Region	39.3	38.2	41.0	41.9	42.2	46.1	46.4
CD Ratio - India	78.4	73.8	76.7	78.3	76.5	71.7	72.1

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Basic Statistical Returns of Banks [Table-145 at Page No. 370]

## Notes

- 1. The above table gives the credit-deposit ratio of scheduled commercial banks in the NE states (according to the place of utilization) as at End-March of the indicated year.
- 2. Credit-Deposit Ratio of NE Region excludes Sikkim, which is covered under 'Eastern Region' in the RBI analyses.

Table-5.11.4: Deposits of Scheduled Commercial Banks in the NE States

(Rs. in Crore)

State	2016	2017	2018	2019	2020	2021	2022
Arunachal Pradesh	8700	11866	13400	16659	17171	19525	24121
Assam	102300	120976	134300	147091	164299	173014	189483
Manipur	6000	7774	9000	9927	10369	12323	13813
Meghalaya	18100	20450	21500	24063	23756	25821	29441
Mizoram	5900	7166	8500	9255	11332	12000	13102
Nagaland	7700	9422	10000	11183	12242	12579	14579
Sikkim	6300	6954	8500	9632	10130	10604	12411
Tripura	17300	20481	22000	24880	26487	28400	31304
Total - NE Region	172300	205089	227200	252690	275786	294266	328254
Total - India	9599500	10730029	11434400	12639009	13748655	15443510	17008795

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Basic Statistical Returns of Banks [Table-146 at Page No. 372]

## Notes

1. The above table gives the deposits of scheduled commercial banks in the NE states as at End-March of the indicated year.



Table-5.11.5: Credit by Scheduled Commercial Banks in the NE States

State	2016	2017	2018	2019	2020	2021	2022
Arunachal Pradesh	2500	2843	3400	3869	4338	5897	6053
Assam	43200	48754	57200	67360	72954	83235	95992
Manipur	2400	3005	4000	4946	6129	7405	9163
Meghalaya	4400	5290	5800	7448	8435	9785	9512
Mizoram	2300	2607	3000	3837	4174	5063	5982
Nagaland	2600	2970	3500	3991	4644	7208	6381
Sikkim	1700	1905	2300	2921	3216	3847	5182
Tripura	6100	7354	9000	10463	11346	12093	13562
Total - NE Region	65200	74728	88200	104835	115236	134533	151827
Total - India	7522600	7917868	8767000	9897595	10518812	11078050	12258748

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Basic Statistical Returns of Banks [Table-147 at Page No. 374]

## Notes

1. The above table gives the total credit extended by scheduled commercial banks in the NE states as per amount outstanding at End-March of the indicated year.

Table-5.11.6: Credit to Agriculture by Scheduled Commercial Banks in the NE States

(Rs. in Crore)

State	2016	2017	2018	2019	2020	2021	2022
Arunachal Pradesh	100	200	400	182	241	248	224
Assam	9400	10500	11300	12080	12916	12992	13397
Manipur	400	500	500	478	520	470	1004
Meghalaya	900	700	800	1230	572	561	623
Mizoram	300	300	400	405	397	475	559
Nagaland	200	300	300	255	249	281	278
Sikkim	100	100	100	140	154	169	386
Tripura	1700	1900	2200	3001	2835	2483	2534
Total - NE Region	13100	14500	16000	17771	17884	17679	19005
Total - India	951000	1078300	1199500	1349626	1367970	1518112	1703315

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Basic Statistical Returns of Banks [Table-148 at Page No. 376]

## Notes

1. The above table gives the credit extended to agriculture by scheduled commercial banks in the NE states as per amount outstanding at End-March of the indicated year.



Table-5.11.7: Credit to Industry by Scheduled Commercial Banks in the NE States

State	2016	2017	2018	2019	2020	2021	2022
Arunachal Pradesh	200	300	400	286	269	477	444
Assam	7200	8400	8500	8744	8741	8970	11573
Manipur	100	200	200	280	345	429	450
Meghalaya	800	900	1100	1148	2175	1848	1566
Mizoram	100	100	300	547	275	408	468
Nagaland	300	400	400	344	342	1855	340
Sikkim	500	400	400	348	186	209	722
Tripura	400	1400	1400	1107	883	907	1047
Total - NE Region	9600	12100	12700	12804	13216	15103	16610
Total - India	2760600	2982500	3038700	3195058	3222760	3096597	3254239

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Basic Statistical Returns of Banks [Table-149 at Page No. 378]

#### Notes

1. The above table gives the credit extended to industry by scheduled commercial banks in the NE states as per amount outstanding at End-March of the indicated year.

Table-5.11.8: Personal Loans by Scheduled Commercial Banks in the NE States

(Rs. in Crore)

State	2016	2017	2018	2019	2020	2021	2022
Arunachal Pradesh	1400	1700	2300	2473	2900	3678	4366
Assam	15500	18200	22900	27327	31826	37876	44357
Manipur	1500	1900	2700	3306	4292	5262	6369
Meghalaya	1900	2500	3100	3552	4318	5056	5760
Mizoram	1500	1700	1900	2106	2671	3229	3863
Nagaland	1600	1900	2300	2757	3380	4235	4947
Sikkim	1000	1100	1400	1541	1844	2232	2744
Tripura	2300	2400	2900	3617	4248	4873	5581
Total – NE Region	26700	58100	70900	86179	102158	121920	144428
Total - India	1258000	1563200	1865100	2136649	2530090	2873641	3345818

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Basic Statistical Returns of Banks [Table-150 Page 380]

## Notes

1. The above table gives the personal loans extended by scheduled commercial banks in the NE states as per amount outstanding at End-March of the indicated year.



Table-5.11.9: Deposits of Regional Rural Banks in the NE States

State	2016	2017	2018	2019	2020	2021	2022
Arunachal Pradesh	450	570	600	656	730	837	1094
Assam	7930	8540	9300	10148	11113	11504	11814
Manipur	215	280	300	315	316	381	433
Meghalaya	1240	1800	1800	2136	2252	2678	3247
Mizoram	1520	1820	2100	2600	3478	4155	4235
Nagaland	67	90	100	101	114	117	123
Sikkim							
Tripura	4790	5380	5900	6692	7190	7567	7857
Total - NE Region	16212	18480	20100	22648	25193	27239	28803
Total - India	306500	364900	391200	426568	467422	510900	546237

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Regional Rural Banks [Table-151 at Page No. 382]

#### Motes

- 1. The above table gives the deposits of regional rural banks in the NE states as at End-March of the indicated year.
- 2. Sikkim has no regional rural bank.

Table-5.11.10: Credit by Regional Rural Banks in the NE States

(Rs. in Crore)

State	2016	2017	2018	2019	2020	2021	2022
Arunachal Pradesh	120	140	200	198	162	200	257
Assam	4440	4520	4300	4140	4044	4406	5047
Manipur	90	110	100	140	163	190	763
Meghalaya	620	660	700	701	756	842	947
Mizoram	860	950	1100	1231	1536	2050	2508
Nagaland	22	20	NA	30	34	33	43
Sikkim							243
Tripura	1844	1990	2400	2576	2747	2705	3022
Total – NE Region	7996	8390	8800	9016	9442	10426	12830
Total - India	206700	22921000	238600	284494	301051	339609	372066

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Regional Rural Banks [Table-152 at Page No. 384]

- The above table gives the credit extended by regional rural banks in the NE states as per amount outstanding at End-March of the indicated year.
- 2. Sikkim has no regional rural bank.



Table-5.11.11: Credit-Deposit Ratio of Regional Rural Banks in the NE States

(In Percent)

State	2016	2017	2018	2019	2020	2021	2022
Arunachal Pradesh	26.7	24.6	33.3	30.1	22.1	23.9	23.5
Assam	56.0	52.9	46.2	40.8	36.4	38.3	42.7
Manipur	41.9	39.3	33.3	44.4	51.7	49.7	176.1
Meghalaya	50.0	36.7	38.9	32.8	33.6	31.4	29.2
Mizoram	56.6	52.2	52.4	47.4	44.2	49.3	59.2
Nagaland	32.8	22.2	0.0	29.4	29.8	28.2	34.9
Sikkim							
Tripura	38.5	37.0	40.7	38.5	38.2	35.7	38.5
CD Ratio – NE Region	49.4	45.4	43.8	39.8	37.5	38.3	43.7
CD Ratio - India	67.4	62.8	65.2	66.7	64.4	71.4	68.1

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Regional Rural Banks [Table-153 at Page No. 386]

#### Notes

- 1. The above table gives the credit-deposit ratio of regional rural banks in the NE states as at End-March of the indicated year.
- 2. Sikkim has no regional rural bank.

Table-5.11.12: Number of Branches of Regional Rural Banks in the NE States

(In Numbers)

State	2016	2017	2018	2019	2020	2021	2022
Arunachal Pradesh	29	29	30	30	31	32	32
Assam	465	479	481	481	482	482	482
Manipur	21	21	23	28	27	27	27
Meghalaya	79	91	93	94	93	93	93
Mizoram	80	85	86	86	88	92	102
Nagaland	10	10	10	11	11	11	11
Sikkim	0	0	0	0	0	0	0
Tripura	137	144	144	149	149	149	149
Total – NE Region	821	859	867	879	881	886	896
Total - India	20416	21251	21,805	22042	22130	22172	22187

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the Regional Rural Banks [Table-154 at Page No. 388]

- 1. The above table gives the number of branches of regional rural banks in the NE states as at End-March of the indicated year.
- 2. Sikkim has no regional rural bank.



Table-5.11.13: Distribution of Offices of Insurers in the NE States

State	Number of Offices			Total	Number of Districts with Offices			
	Life Insurers	General Insurers	Stand- alone Health Insurers	Number of Districts	Life Insurers	General Insurers	Stand- alone Health Insurers	
Arunachal Pradesh	15	12	NA	25	7	3	0	
Assam	281	221	20	34	32	27	10	
Manipur	25	12	2	16	6	2	2	
Meghalaya	23	24	2	12	7	3	1	
Mizoram	12	10	NA	11	6	4	0	
Nagaland	18	12	NA	15	7	3	0	
Sikkim	11	10	1	6	2	2	1	
Tripura	37	46	2	8	8	4	1	
Total – NE Region	422	347	27	127	75	48	15	
Total - India	11,060	9,410	1,365	750	691	575	387	

Source: Annual Report 2021-22, Insurance Regulatory & Development Agency of India [Statement-9 at Page No. 111]

- 1. The above table gives the number of offices of insurers in the NE states, as well as the number of districts with offices (of insurers) as on 31st March 2022.
- 2. Insurance Penetration is measured as percentage of insurance premium to GDP.
- 3. Insurance Density is measured as ratio of insurance premium to population.





Table-5.11.14: Individual New Business (Life) Underwritten in the NE States

# Policies in Number / Premium in Rs. Crore

Ctoto	2016	5-17	2017	7-18	2018	3-19	201	9-20	202	0-21	202	1-22
State	Policies	Premium	Policies	Premium	Policies	Premium	Policies	Premium	Policies	Premium	Policies	Premium
Arunachal Pradesh	11,116	44.66	12,745	58.71	13,754	66.30	14,396	82.63	14,082	85.72	17,084	112.13
Assam	768,271	1,831.10	818,545	2,147.26	827,645	2,408.91	869,837	2,445.40	874,737	2,695.85	913,556	3,152.70
Manipur	26,469	85.96	31,133	100.41	30,757	109.73	35,720	119.53	35,996	130.63	31,436	156.34
Meghalaya	18,639	84.87	18,808	95.30	22,393	108.72	21,416	109.01	24,439	133.37	23,808	166.06
Mizoram	5,006	19.13	5,209	27.06	6,436	30.69	7,774	45.73	7,968	45.73	7,674	53.65
Nagaland	15,778	51.29	17,558	69.80	18,339	79.05	18,680	88.14	21,121	96.26	20,515	106.81
Sikkim	14,950	50.85	16,236	60.34	15,456	64.63	16,790	70.00	14,742	77.97	12,728	83.85
Tripura	103,512	186.94	105,023	245.34	115,687	312.77	118,156	308.97	124,626	355.63	131,291	401.00
Total - NE Region	9,63,741	2,354.80	10,25,257	2,804.22	10,50,467	3,180.80	11,02,769	3,269.41	11,17,711	3,621.16	11,58,092	4,232.54
Total - India	26,419,617	77,725.73	28,162,617	92,134.78	28,647,745	97,689.71	28,846,645	101,619.31	28,127,425	113,888.95	29,112,861	125,205.11

Source: Handbook on Indian Insurance Statistics, Insurance Regulatory & Development Agency of India (https://irdai.gov.in/handbook-of-indian-insurance)



Table-5.11.15: Group New Business (Life) Underwritten in the NE States

## Lives Covered in Number / Premium in Rs. Crore

State	2016	-17	2017	'-18	2018	3-19	2019	9-20	2020	)-21	2021	-22
	Lives Covered	Premium	Lives Covered	Premium	Lives Covered	Premium	Lives Covered	Premium	Lives Covered	Premium	Lives Covered	Premium
Arunachal Pradesh	5,670	2.37	3,883	1.50	13,606	9.53	7,210	6.46	12,543	13.11	21,306	10.74
Assam	1,443,865	826.43	1,427,342	746.80	1,609,524	999.93	1,422,748	1,432.27	1,289,621	2,314.86	1,458,225	1,982.50
Manipur	10,639	1.19	17,335	3.15	20,575	26.58	470,898	78.73	9,856	1.27	31,169	5.53
Meghalaya	27,245	27.51	11,612	7.84	15,359	6.26	22,687	19.73	38,736	37.40	61,421	28.70
Mizoram	17,699	5.57	17,888	10.11	29,602	15.00	16,177	50.01	29,678	24.58	29,780	16.49
Nagaland	11,760	1.44	3,260	1.47	3,513	0.96	11,200	0.70	19,606	0.71	33,093	2.38
Sikkim	3,708	7.50	1,817	5.36	1,467	7.24	218,881	6.99	11,895	3.93	13,219	8.56
Tripura	40,787	19.70	41,765	37.31	41,868	85.71	114,003	11.96	17,064	54.53	20,629	30.68
Total – NE Region	15,61,373	891.71	15,24,902	813.54	17,35,514	1,151.21	22,83,804	1,606.85	14,28,999	2,450.39	16,68,842	2,085.58
Total - India	179,841,286	97,352.25	188,457,614	101,809.91	224,653,012	116,989.24	227,850,847	157,383.98	179,771,539	164,455.30	215,735,014	189,001.20

Source: Handbook on Indian Insurance Statistics, Insurance Regulatory & Development Agency of India (https://irdai.gov.in/handbook-of-indian-insurance)



# 5.12. Education (School & Higher Education including Technical Education)

Education has a fundamental role for achieving full human potential, which can develop an equitable and just society, and promote national development. Providing universal access to quality education is the key to India's continued ascent, and leadership on the global stage in terms of economic growth, social justice and equality, scientific advancement, national integration, and cultural preservation. Universal high-quality education is the best way forward for developing and maximizing the nation's rich talents and resources for the good of the individual, the society, the country, and the world. India will have the highest population of young people in the world over the next decade, and the country's ability to provide high-quality educational opportunities to them will determine its future.

The global education development agenda is reflected in the Sustainable Development Goal 4 (SDG4) that seeks to 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all' by 2030. Such a lofty goal will require the entire education system to be reconfigured to support and foster learning, so that all of the critical targets and goals (SDGs) of the 2030 Agenda for Sustainable Development can be achieved.

Accordingly, the National Education Policy 2020 has been announced on 29<sup>th</sup> July 2020, after detailed consultations with the stakeholders. It envisions an education system rooted in the Indian ethos that contributes directly to transforming India, that is Bharat, sustainably into an equitable and vibrant knowledge society, by providing high-quality education to all, and thereby making India a global knowledge superpower. The National Education Policy 2020 proposes various reforms in school education as well as higher education including technical education. A number of action points and activities for implementation in school education as well as higher education are mentioned in the National Education Policy 2020.

The Ministry of Education of the Government of India handles the subject of education along with the concerned Departments of the State Governments. It has two Departments, viz. the Department of School Education and Literacy, and the Department of Higher Education. The former handles the Elementary Education (up to Class VIII) and Secondary Education and Vocational Education (Classes IX-XII), along with related subjects, including Adult Literacy. The Department of Higher Education handles education at levels after Class XII (secondary education) and all related subjects, including technical education.

According to the 2011 census, the literacy rates in the states of the NE Region, excluding Arunachal Pradesh and Assam, are higher than the national average. Mizoram tops the list with a literacy rate of 91.33%. Attention is now being devoted to the provision of adequate and quality education at the secondary and higher levels. A study conducted in 2015 had revealed that primary education and secondary education are still areas that require much improvement in the NE Region in terms of quality and outreach. Accordingly, the Ministry of Development of North Eastern Region and the NEC seek to prioritize investments in the development of the human resources of the region.



Table-5.12.1: Highlights of UDISE+ 2020-21 Data for the NE States

	-	Total Number o	f		Indicators	
State	Schools	Enrolments	Teachers	Pupil Teacher Ratio	Teachers Per School	Enrolments Per School
Arunachal Pradesh	3603	354382	23707	15	7	98
Assam	60859	7544960	352944	21	6	124
Manipur	4617	693194	42684	16	9	150
Meghalaya	14600	1169720	55160	21	4	80
Mizoram	3911	309904	23366	13	6	79
Nagaland	2718	443796	31402	14	12	163
Sikkim	1259	135963	13613	10	11	108
Tripura	4929	713862	36433	20	7	145
North East Region	96496	11365781	579309	20	6	118
All-India	1489115	265235830	9507123	28	6	178

Source: 'Report on Unified District Information System for Education Plus, 2020-21 Flash Statistics', Department of School Education & Literacy, Ministry of Education, Government of India (UDISE+) [Table-2 Page No. 27]

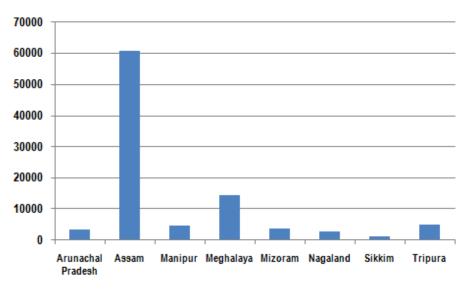
- 1. The above is based on voluntary uploading of data by the schools having active UDISE+ codes in a reference year, with 30<sup>th</sup> September as the reference date. Data is for 2020-21.
- 2. The UDISE+ data covers schools providing different levels of education including pre-primary, primary, upper primary, secondary and higher secondary schools.
- 3. The data for 'Pre-primary' does not include the pre-primary enrolment of the Early Childhood Care and Education (ECCE) system run by the Ministry of Women and Child Welfare, Government of India through the Anganwadi Centres and stand-alone pre-primary education centres run by different kindergartens.



Secondary level students of Tripura at examination time

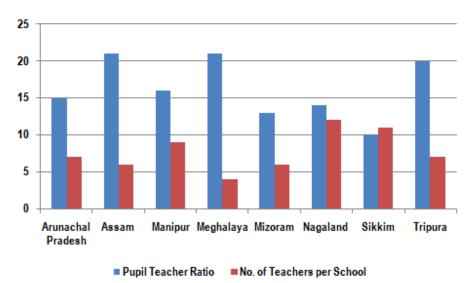


Graph-5.12.1: Numbers of Schools in the NE States (From Primary to Higher Secondary Levels)



Y-axis gives the Numbers of Schools at all levels under all types of management as on 30<sup>th</sup> September 2021

Graph-5.12.2: Pupil Teacher Ratio & Number of Teachers per School in the NE States (From Primary to Higher Secondary Levels)



Y-axis gives the Pupil Teacher Ratio and Number of Teachers per School for Schools at all levels under all types of management (as on 30<sup>th</sup> September 2021)









Table-5.12.2: Numbers of Schools by Level of School Education in the NE States

State	Total	Primary	Upper Primary	Secondary	Higher Secondary
Arunachal Pradesh	3603	1847	1273	319	164
Assam	60859	40482	10672	7290	2415
Manipur	4617	2422	966	958	271
Meghalaya	14600	9223	3529	1462	386
Mizoram	3911	1481	1519	706	205
Nagaland	2718	1157	787	576	198
Sikkim	1259	685	307	150	117
Tripura	4929	2522	1226	702	479
Total - NE Region	96496	59819	20279	12163	4235
Total - India	1489115	760460	435805	150452	142398

Source: 'Report on Unified District Information System for Education Plus, 2020-21 Flash Statistics', Department of School Education & Literacy, Ministry of Education, Government of India (UDISE+) [Table-3.1 Page 31]

- 1. The above is based on voluntary uploading of data by the schools having active UDISE+ codes in a reference year, with 30th September as the reference date. Data is for 2020-21.
- 2. The UDISE+ data covers schools providing different levels of education including pre-primary, primary, upper primary, secondary and higher secondary schools.
- 3. Levels of Education: Primary (Classes I-V), Upper Primary (Classes VI-VIII), Secondary (Classes IX & X), and Higher Secondary (Classes XI & XII). Schools at a particular level can have lower level classes.



Morning assembly at School in Arunachal Pradesh



Table-5.12.3: Numbers of Schools by Category in the NE States

				Num	ber of Schools	s under All Typ	es of Manage	ment			
State	Total	Primary	Upper f	Primary		Secondary			Higher S	econdary	
		Class 1-5	Class 1-8	Class 6-8	Class 1-10	Class 6-10	Class 9-10	Class 1-12	Class 6-12	Class 9-12	Class 11-12
Arunachal Pradesh	3603	1847	1228	45	261	56	2	74	51	39	0
Assam	60859	40482	4596	6076	3363	2226	1701	602	772	173	868
Manipur	4617	2422	926	40	849	83	26	157	38	9	67
Meghalaya	14600	9223	229	3300	165	248	1049	56	51	69	210
Mizoram	3911	1481	438	1081	13	8	685	3	6	0	196
Nagaland	2718	1157	765	22	459	114	3	137	47	1	13
Sikkim	1259	685	307	0	145	5	0	108	9	0	0
Tripura	4929	2522	1224	2	695	7	0	417	62	0	0
Total - NE Region	96496	59819	9713	10566	5950	2747	3466	1554	1036	291	1354
Total - India	1489115	760460	342092	93713	73936	46566	29950	64366	37701	24321	16010

Source: 'Report on Unified District Information System for Education Plus, 2020-21 Flash Statistics', Department of School Education & Literacy, Ministry of Education, Government of India (UDISE+) [Table-3.2 Page 32]

- 1. The above is based on voluntary uploading of data by the schools having active UDISE+ codes in a reference year, with 30th September as the reference date. Data is for 2020-21.
- 2. The UDISE+ data covers schools providing different levels of education including pre-primary, primary, upper primary, secondary and higher secondary schools under all types of management.



Table-5.12.4: Numbers of Schools by Affiliation Board (at Secondary & Higher Secondary Levels) in the NE States

				Affiliat	ion Board a	t Secondary	Level			Affiliation	Board at Hi	gher Secon	dary Level	
State	Total Schools	Schools for which Affiliation Board Not Applicable up to Elementary	Affiliation Board Not Applicable for Secondary & Applicable for Higher Secondary	State Govt. Board	CBSE	Both CBSE & State	ICSE	Others	Affiliation Board Not Applicable for Higher Secondary	State Govt. Board	CBSE	Both CBSE & State	ICSE	Others
Arunachal Pradesh	3603	3120	0	319	8	455	6	13	1	0	160	2	2	0
Assam	60859	51154	868	7290	8353	338	12	4	123	2144	191	4	2	68
Manipur	4617	3388	67	958	1076	77	0	1	8	210	57	0	1	3
Meghalaya	14600	12752	210	1462	1545	28	1	7	57	356	22	0	3	5
Mizoram	3911	3000	196	706	698	17	0	0	0	197	8	0	0	0
Nagaland	2718	1944	13	576	688	36	1	1	35	170	20	0	1	7
Sikkim	1259	992	0	150	0	250	0	9	8	0	106	0	5	6
Tripura	4929	3748	0	702	1058	101	3	4	15	397	73	1	2	6
Total - NE Region	96496	80098	1354	12163	13426	1302	23	39	247	3474	637	7	16	95
Total - India	1489115	1196265	16010	150452	247889	21943	351	2193	3620	123759	14883	207	974	2303

Source: 'Report on Unified District Information System for Education Plus, 2020-21 Flash Statistics', Department of School Education & Literacy, Ministry of Education, Government of India (UDISE+) [Table-3.12 Page 42]

- 1. The above is based on voluntary uploading of data by the schools having active UDISE+ codes in a reference year, with 30th September as the reference date. Data is for 2020-21.
- 2. The UDISE+ data covers schools providing different levels of education including pre-primary, primary, upper primary, secondary and higher secondary schools under all types of management.



Table-5.12.5 (A): Infrastructure & Facilities at Schools in the NE States

	Number of Schools having											
State	Total Schools	Library / Book Bank/ Reading Corner	Playground	Digital Library	Kitchen Garden	Girls' Toilet	Functional Girls' Toilet	Boys' Toilet	Functional Boys' Toilet	Electricity	Functional Electricity	Solar Panel
Arunachal Pradesh	3603	1621	2458	32	746	3287	2475	3313	2423	2402	1938	176
Assam	60859	53168	47737	314	32144	53761	50160	51874	46556	46907	45683	1864
Manipur	4617	1187	4012	45	1311	4012	3475	4019	3453	3071	2516	350
Meghalaya	14600	3468	6376	106	1776	11928	10163	12598	10668	3873	3601	268
Mizoram	3911	3230	3144	5	1391	3636	3396	3682	3402	3297	3114	44
Nagaland	2718	1966	1982	34	1073	2463	2095	2483	2071	2074	1824	227
Sikkim	1259	1132	1078	71	498	1164	1160	1248	1240	1254	1239	84
Tripura	4929	3493	3844	34	1364	4410	3671	4463	3571	2826	2710	114
Total - NE Region	96496	69265	70631	641	40303	84661	76595	83680	73384	65704	62625	3127
Total - India	1489115	1299929	1145967	32762	411677	1439898	1398305	1404342	1353081	1330305	1289245	99678

Source: 'Report on Unified District Information System for Education Plus, 2020-21 Flash Statistics', Department of School Education & Literacy, Ministry of Education, Government of India (UDISE+) [Table-2 Page 28]

- 1. The above is based on voluntary uploading of data by the schools having active UDISE+ codes in a reference year, with 30th September as the reference date. Data is for 2020-21.
- 2. The UDISE+ data covers schools providing different levels of education including pre-primary, primary, upper primary, secondary and higher secondary schools under all types of management.



Table-5.12.5 (B): Infrastructure & Facilities at Schools in the NE States

	Number of Schools having											
State	Total Schools	Computers used for Pedagogical Purposes	Functional Computers used for Pedagogical Purposes	Internet Facility	Drinking Water	Functional Drinking Water	Hand Wash Facility	Rainwater Harvesting Facility	Medical Check-up of Students in Last Academic Year	Ramp	Ramp with handrails	CWSN Toilet Facilities
Arunachal Pradesh	3603	275	263	794	2951	2448	1630	178	1295	884	637	376
Assam	60859	2832	2651	7126	57129	55586	54294	3341	35616	42188	37468	11094
Manipur	4617	203	192	1065	4564	4541	3843	918	923	2291	1681	377
Meghalaya	14600	289	276	2460	7743	6720	5531	1347	4202	4436	3099	382
Mizoram	3911	59	59	307	3587	3528	2845	1745	1210	1732	742	690
Nagaland	2718	309	292	1383	1796	1646	1645	825	439	1029	446	148
Sikkim	1259	405	401	434	1253	1250	1225	143	823	366	254	189
Tripura	4929	474	462	896	4137	3721	4219	143	3097	3105	1739	433
Total - NE Region	96496	4846	4596	14465	83160	79440	75232	8640	47605	56031	46066	13689
Total - India	1489115	156064	148664	504989	1462670	1428553	1394464	312940	812451	1069795	740395	401487

Source: 'Report on Unified District Information System for Education Plus, 2020-21 Flash Statistics', Department of School Education & Literacy, Ministry of Education, Government of India (UDISE+) [Table-2 Page 28]

- 1. The above is based on voluntary uploading of data by the schools having active UDISE+ codes in a reference year, with 30th September as the reference date. Data is for 2020-21.
- 2. The UDISE+ data covers schools providing different levels of education including pre-primary, primary, upper primary, secondary and higher secondary schools under all types of management.



Table-5.12.6: Numbers of School Teachers by School Category in the NE States

				Number of	Teachers for S	Schools under	All Types of N	lanagement			
State	Total	Primary	Upper F	Primary		Secondary			Higher S	econdary	
		Class 1-5	Class 1-8	Class 6-8	Class 1-10	Class 6-10	Class 9-10	Class 1-12	Class 6-12	Class 9-12	Class 11-12
Arunachal Pradesh	23707	4907	9701	350	4028	681	20	1952	1103	965	0
Assam	352944	119902	44048	36154	59730	29056	12903	17912	17251	1279	14709
Manipur	42684	9458	8456	211	14825	727	138	5718	1391	335	1425
Meghalaya	55160	23998	1967	13197	2368	2768	5383	1555	1148	889	1887
Mizoram	23366	6061	4105	6787	170	56	4151	97	107	0	1832
Nagaland	31402	6938	8475	148	7900	1563	36	4630	1485	32	195
Sikkim	13613	3333	3298	0	2740	56	0	4061	125	0	0
Tripura	36433	8214	7027	12	8434	61	0	11351	1334	0	0
Total - NE Region	579309	182811	87077	56859	100195	34968	22631	47276	23944	3500	20048
Total - India	9507123	2433800	2401441	350374	1020928	427045	172028	1534351	735872	261095	170189

Source: 'Report on Unified District Information System for Education Plus, 2020-21 Flash Statistics', Department of School Education & Literacy, Ministry of Education, Government of India (UDISE+) [Table-3.2 Page No. 32]

- 1. The above is based on voluntary uploading of data by the schools having active UDISE+ codes in a reference year, with 30th September as the reference date. Data is for 2020-21.
- 2. The UDISE+ data covers schools providing different levels of education including pre-primary, primary, upper primary, secondary and higher secondary schools under all types of management.



Table-5.12.7: Numbers of School Teachers by Classes Taught in the NE States

			Number of	Teachers by Cla	sses Taught fo	r Schools unde	r All Types of M	lanagement		
State	Total	Pre-Primary Only	Pre-Primary & Primary	Primary Only	Primary & Upper Primary	Upper Primary Only	Upper Primary & Secondary	Secondary Only	Secondary & Higher Secondary	Higher Secondary Only
Arunachal Pradesh	23707	130	413	9406	3882	4602	1291	2275	738	970
Assam	352944	968	7303	143528	20544	74325	37965	42162	7694	18455
Manipur	42684	415	1826	16784	5028	5357	3881	4400	1352	3641
Meghalaya	55160	524	3392	22000	1126	15239	1316	8342	507	2714
Mizoram	23366	115	176	7676	782	8394	64	4239	37	1883
Nagaland	31402	354	959	12160	2602	8074	1513	3767	510	1463
Sikkim	13613	730	227	6172	304	2288	954	1368	276	1294
Tripura	36433	153	477	15671	1068	6556	1574	5585	901	4448
Total - NE Region	579309	3389	14773	233397	35336	124835	48558	72138	12015	34868
Total - India	9507123	110700	368569	3441978	845498	1890705	698308	1096082	394731	660552

Source: 'Report on Unified District Information System for Education Plus, 2020-21 Flash Statistics', Department of School Education & Literacy, Ministry of Education, Government of India (UDISE+) [Table-4.6 Page 49]

- 1. The above is based on voluntary uploading of data by the schools having active UDISE+ codes in a reference year, with 30th September as the reference date. Data is for 2020-21.
- 2. The UDISE+ data covers schools providing different levels of education including pre-primary, primary, upper primary, secondary and higher secondary schools under all types of management.
- 3. **The above data for 'Pre-primary' does not include the pre-**primary enrolment of the Early Childhood Care and Education (ECCE) system run by the Ministry of Women and Child Welfare, Government of India through the Anganwadi Centres and stand-alone pre-primary education centres run by different kindergartens.



Table-5.12.8: Pupil Teacher Ratio by Level of Education in the NE States

		Pupil Teacher Ratio	o (PTR) for Schools	
State	Primary (1-5)	Upper Primary (6-8)	Secondary (9-10)	Higher Secondary (11-12)
Arunachal Pradesh	12	9	11	20
Assam	21	14	11	21
Manipur	13	11	9	16
Meghalaya	20	14	12	20
Mizoram	16	8	9	15
Nagaland	11	8	10	17
Sikkim	7	8	9	11
Tripura	18	20	14	15
NE Region	19	13	11	19
All-India	26	19	18	27

Source: 'Report on Unified District Information System for Education Plus, 2020-21 Flash Statistics', Department of School Education & Literacy, Ministry of Education, Government of India (UDISE+) [Table-4.11 Page No. 54]

- 1. The above is based on voluntary uploading of data by the schools having active UDISE+ codes in a reference year, with 30th September as the reference date. Data is for 2020-21.
- 2. The UDISE+ data covers schools providing different levels of education including pre-primary, primary, upper primary, secondary and higher secondary schools under all types of management.
- 3. Pupil Teacher Ratio: Pupil-Teacher Ratio (PTR) is the average number of pupils (at a specific level of education) per teacher (teaching at that level of education) in a given school-year.



Toilet constructed by school students of Mizoram under the National Social Service (NSS) scheme



Table-5.12.9: Enrolments of Students in Schools in the NE States by Level of School Education

		Enro	lment in Scho	ols under Al	Types of Mana	gement	
State	Total (Pre- primary to Class 12)	Pre- Primary	Primary (Classes 1-5)	Upper Primary (Classes 6-8)	Elementary (Classes 1-8)	Secondary (Classes 9-10)	Higher Secondary (Classes 11-12)
(1)	(2) = (3) + (6) + (7) + (8)	(3)	(4)	(5)	(6) = (4) + (5)	(7)	(8)
Arunachal Pradesh	354382	26076	164061	84930	248991	45455	33860
Assam	7544960	443388	3645363	1905775	5551138	1004682	545752
Manipur	693194	61723	310023	150863	460886	91005	79580
Meghalaya	1169720	214782	530390	244008	774398	117496	63044
Mizoram	309904	32567	136649	71949	208598	40605	28134
Nagaland	443796	76621	177955	96439	274394	58721	34060
Sikkim	135963	19634	45890	29469	75359	23151	17819
Tripura	713862	29683	312398	179559	491957	110536	81686
Total- NE Region	11365781	904474	5322729	2762992	8085721	1491651	883935
Total - India	265235830	9495207	121842250	66790692	188632942	38528631	28579050

Source: 'Report on Unified District Information System for Education Plus, 2020-21 Flash Statistics', Department of School Education & Literacy, Ministry of Education, Government of India (UDISE+) [Table-5.1 Page No. 73]

- 1. The above is based on voluntary uploading of data by the schools having active UDISE+ codes in a reference year, with 30th September as the reference date. Data is for 2020-21.
- 2. The UDISE+ data covers schools providing different levels of education including pre-primary, primary, upper primary, secondary and higher secondary schools under all types of management.
- 3. The above data for 'Pre-primary' does not include the pre-primary enrolment of the Early Childhood Care and Education (ECCE) system run by the Ministry of Women and Child Welfare, Government of India through the Anganwadi Centres and stand-alone pre-primary education centres run by different kindergartens.



Table-5.12.10 (A): Enrolments of Students in Schools in the NE States by Gender & Level of School Education

					Enrolment in	Schools unde	r All Types of	Management				
State		Pre-Primary		Prim	nary (Classes	1-5)	Upper F	Primary (Class	ses 6-8)	Eleme	entary (Classe	es 1-8)
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Arunachal Pradesh	13517	12559	26076	83662	80399	164061	41309	43621	84930	124971	124020	248991
Assam	228797	214591	443388	1844170	1801193	3645363	917373	988402	1905775	2761543	2789595	5551138
Manipur	31759	29964	61723	158618	151405	310023	75988	74875	150863	234606	226280	460886
Meghalaya	109509	105273	214782	267341	263049	530390	115006	129002	244008	382347	392051	774398
Mizoram	16402	16165	32567	70199	66450	136649	36464	35485	71949	106663	101935	208598
Nagaland	39322	37299	76621	90734	87221	177955	47945	48494	96439	138679	135715	274394
Sikkim	10213	9421	19634	24237	21653	45890	14970	14499	29469	39207	36152	75359
Tripura	15708	13975	29683	158968	153430	312398	90154	89405	179559	249122	242835	491957
Total - NE Region	465227	439247	904474	2697929	2624800	5322729	1339209	1423783	2762992	4037138	4048583	8085721
Total - India	5051523	4443684	9495207	63517655	58324595	121842250	34511750	32278942	66790692	98029405	90603537	188632942

Source: 'Report on Unified District Information System for Education Plus, 2020-21 Flash Statistics', Department of School Education & Literacy, Ministry of Education, Government of India (UDISE+) [Table-5.6 Page No. 78]

- 1. The above is based on voluntary uploading of data by the schools having active UDISE+ codes in a reference year, with 30th September as the reference date. Data is for 2020-21.
- 2. The UDISE+ data covers schools providing different levels of education including pre-primary, primary, upper primary, secondary and higher secondary schools under all types of management.
- 3. **The above data for 'Pre-primary' does not include the pre-**primary enrolment of the Early Childhood Care and Education (ECCE) system run by the Ministry of Women and Child Welfare, Government of India through the Anganwadi Centres and stand-alone pre-primary education centres run by different kindergartens.



Table-5.12.10 (B): Enrolments of Students in Schools in the NE States by Gender & Level of School Education (Continued)

					Enrolment i	n Schools un	der All Types o	of Management				
State	Secon	dary (Classes	9-10)	Higher Sec	condary (Clas	ses 11-12)		y to Higher Sec (Classes 1-12)	ondary	(Pre-Prima	Total ry to Higher S	Secondary)
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Arunachal Pradesh	22471	22984	45455	16377	17483	33860	163819	164487	328306	177336	177046	354382
Assam	465492	539190	1004682	264216	281536	545752	3491251	3610321	7101572	3720048	3824912	7544960
Manipur	45649	45356	91005	40185	39395	79580	320440	311031	631471	352199	340995	693194
Meghalaya	53164	64332	117496	27502	35542	63044	463013	491925	954938	572522	597198	1169720
Mizoram	19791	20814	40605	13360	14774	28134	139814	137523	277337	156216	153688	309904
Nagaland	28441	30280	58721	16067	17993	34060	183187	183988	367175	222509	221287	443796
Sikkim	11331	11820	23151	7957	9862	17819	58495	57834	116329	68708	67255	135963
Tripura	54715	55821	110536	39770	41916	81686	343607	340572	684179	359315	354547	713862
Total - NE Region	701054	790597	1491651	425434	458501	883935	5163626	5297681	10461307	5628853	5736928	11365781
Total - India	20071918	18456713	38528631	14747732	13831318	28579050	132849055	122891568	255740623	137900578	127335252	265235830

Source: 'Report on Unified District Information System for Education Plus, 2020-21 Flash Statistics', Department of School Education & Literacy, Ministry of Education, Government of India (UDISE+) [Table-5.6 Page 79]

- 1. The above is based on voluntary uploading of data by the schools having active UDISE+ codes in a reference year, with 30th September as the reference date. Data is for 2020-21.
- 2. The UDISE+ data covers schools providing different levels of education including pre-primary, primary, upper primary, secondary and higher secondary schools under all types of management.
- 3. **The above data for 'Pre-primary' does not include the pre-**primary enrolment of the Early Childhood Care and Education (ECCE) system run by the Ministry of Women and Child Welfare, Government of India through the Anganwadi Centres and stand-alone pre-primary education centres run by different kindergartens.



Table 5.12.11: Gross Enrolment Ratio in the NE States by Gender & Level of School Education

					Gro	ss Enrolme	ent Ratio (G	GER) for Sc	hools - All	Social Gro	ups				
State	Prima	ary (Classe	s 1-5)	Upper Pr	imary (Cla	sses 6-8)	Elemer	ntary (Class	ses 1-8)	Second	ary (Classe	es 9-10)		her Second lasses 11-1	
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Arunachal Pradesh	128.4	130.1	129.2	82.2	88.3	85.2	108.3	111.5	109.9	65.0	68.1	66.5	51.4	56.1	53.7
Assam	116.3	123.3	119.6	90.4	99.7	95.0	106.2	113.8	109.8	67.9	81.3	74.5	38.0	42.2	40.1
Manipur	140.8	146.3	143.4	83.9	87.8	85.8	115.4	119.9	117.6	74.7	77.4	76.0	70.0	69.7	69.9
Meghalaya	184.1	191.5	187.7	105.5	121.8	113.5	150.4	161.2	155.7	76.1	94.4	85.1	39.4	52.7	46.0
Mizoram	158.6	159.2	158.9	108.3	110.8	109.5	136.9	138.2	137.5	89.1	97.9	93.4	57.1	65.7	61.3
Nagaland	99.5	105.0	102.1	65.7	72.5	68.9	84.4	90.5	87.3	57.8	67.1	62.2	33.0	38.8	35.8
Sikkim	109.5	102.8	106.2	77.4	78.0	77.7	94.5	91.2	92.9	86.3	92.0	89.1	56.6	72.0	64.2
Tripura	123.9	128.4	126.1	86.6	90.4	88.4	107.2	111.2	109.1	78.4	84.3	81.3	52.5	60.4	56.3
Avg. – NE Region	122.9	129.4	126.0	89.6	98.3	93.9	109.4	116.5	112.8	69.7	81.6	75.5	41.9	47.1	44.4
Average - India	102.1	104.8	103.4	94.5	94.9	94.7	99.3	101.1	100.1	79.7	79.4	79.6	57.0	58.2	57.6

Source: 'Report on Unified District Information System for Education Plus, 2020NA21 Flash Statistics', Department of School Education & Literacy, Ministry of Education, Government of India (UDISE+) [Table-6.1 Page No. 109]

#### Notes

- 1. The above is based on voluntary uploading of data by the schools having active UDISE+ codes in a reference year, with 30th September as the reference date. Data is for 2020NA21.
- 2. The UDISE+ data covers schools providing different levels of education including pre-primary, primary, upper primary, secondary and higher secondary schools under all types of management.
- 3. Gross Enrolment Ratio (GER)

Total enrolment in a particular level of school education, regardless of age, expressed as a percentage of the Population of the official age-group which corresponds to the given level of school education in a given school year.

## Example:

GER primary = Enrolment in class 1 to 5 ÷ projected population in age group 6-10 years.



Table-5.12.12: Net Enrolment Ratio in the NE States by Gender & Level of School Education

					Ne	et Enrolmei	nt Ratio (N	ER) for Scl	hools <b>–</b> All	Social Gro	oups				
State	Prima	ary (Classe	s 1-5)	Upper Pr	imary (Cla	sses 6-8)	Elemer	itary (Class	ses 1-8)	Second	ary (Classe	es 9-10)		gher Secon Classes 11-	
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Arunachal Pradesh	98.6	100	99.3	55.6	59.6	57.6	91.8	94.8	93.3	36.2	38.5	37.3	29.8	32.6	31.2
Assam	100	100	100	70.1	77.9	73.9	97.4	100	100	43.9	53.5	48.6	25.3	28.3	26.7
Manipur	100	100	100	68.9	72	70.4	100	100	100	59.1	61	60	56.2	56.9	56.5
Meghalaya	100	100	100	69.6	82.1	75.7	100	100	100	42	52.5	47.2	21.6	28	24.8
Mizoram	100	100	100	75.4	78.1	76.7	100	100	100	48.5	55	51.7	32	39.4	35.6
Nagaland	80.4	84.3	82.2	46.3	50.9	48.5	73.9	79	76.4	33.7	39.3	36.4	18.6	23.5	21
Sikkim	85.9	83.5	84.8	52	53.7	52.8	80.5	79.1	79.8	42	46.9	44.4	28.7	35.7	32.2
Tripura	100	100	100	78	81.7	79.8	100	100	100	65.7	70.7	68.1	43.8	50.6	47.1
Avg NE Region	99.0	99.2	99.1	68.8	75.9	72.3	96.5	98.7	98.5	45.5	53.8	49.6	28.2	31.8	29.9
Average - India	87.3	90	88.6	71	71.7	71.3	89.7	91.5	90.5	47.9	48	47.9	33.5	35	34.2

Source: 'Report on Unified District Information System for Education Plus, 2020-21 Flash Statistics', Department of School Education & Literacy, Ministry of Education, Government of India (UDISE+) [Table-6.2 Page 110]

#### Notes

- 1. The above is based on voluntary uploading of data by the schools having active UDISE+ codes in a reference year, with 30th September as the reference date. Data is for 2020-21.
- 2. The UDISE+ data covers schools providing different levels of education including pre-primary, primary, upper primary, secondary and higher secondary schools under all types of management.
- 3. Net Enrolment Ratio (NER)

Total number of pupils enrolled in a particular level of school education who are of the corresponding official age group expressed as a percentage of the population of the official age-group which corresponds to the given level of school education in a given school year.

## Example:

NER primary = Children of age 6-10 years enrolled in class 1 to 5 ÷ projected population in age group 6-10 years



Table-5.12.13: Drop Out Rate in the NE States by Gender & Level of School Education

(In percentage)

				Drop C	ut Rate (%) for S	chools			
State	Pr	imary (Classes 1	-5)	Upper	Primary (Classe	s 6-8)	Seco	ndary (Classes	9-10)
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Arunachal Pradesh	9.3	9.2	9.3	4.8	8.4	6.7	11.2	12.3	11.7
Assam	6.8	5.2	6	10.1	7.6	8.8	19.8	20.7	20.3
Manipur	13.5	13	13.3	6	5.2	5.6	1.4	1.2	1.3
Meghalaya	11.1	8.6	9.8	12	9.4	10.6	23.3	20.4	21.7
Mizoram	7.1	5.6	6.4	3.8	1.6	2.7	13.1	10.8	11.9
Nagaland	5.6	4.5	5	4.6	3.4	4	18.9	16.2	17.5
Sikkim	2.9	0.5	1.8	0	0	0	14.6	9.5	11.9
Tripura	1.2	1	1.1	4.8	4.3	4.5	8.5	8.2	8.3
Average - India	1.6	1.4	1.5	2.7	3.3	3	13	12.3	12.6

Source: 'Report on Unified District Information System for Education Plus, 2020-21 Flash Statistics', Department of School Education & Literacy, Ministry of Education, Government of India (UDISE+) [Table-6.13 Page 121]

#### Notes

- 1. The above is based on voluntary uploading of data by the schools having active UDISE+ codes in a reference year, with 30th September as the reference date. Data is for 2020-21.
- 2. The UDISE+ data covers schools providing different levels of education including pre-primary, primary, upper primary, secondary and higher secondary schools under all types of management.
- 3. Drop Out Ratio

Proportion of pupil from a cohort enrolled in a given level at a given school year who are no longer enrolled at any grade in the following school year.

The following identity is maintained while preparing the estimates of promotion rate, repetition rate and dropout rate:

- Each of Promotion Rate, repetition Rate and Dropout Rate is non-negative and
- Promotion Rate + Repetition Rate + Dropout Rate = 100

Where: Promotion rate is 'Proportion of pupil from a cohort enrolled in a given level at a given school year who are enrolled in the next grade in the following school year' and Repetition Rate is 'Proportion of pupil from a cohort enrolled in a given level at a given school year who are enrolled in the same grade in the following school year



Table-5.12.14: Number of Universities in the NE States by Type of University

State	Central University	Central Open University	Institute of National Importance	State Public University	Institute under State Legislature Act	State Open University	State Private University	State Private Open University	Deemed University - Government	Deemed University – Government Aided	Deemed University - Private	Total
Arunachal Pradesh	1	0	1	0	0	0	6	1	1	0	0	10
Assam	2	0	5	13	0	1	6	0	1	0	0	28
Manipur	3	0	2	3	0	0	1	0	0	0	0	9
Meghalaya	1	0	2	0	0	0	8	0	0	0	0	11
Mizoram	1	0	1	0	0	0	1	0	0	0	0	3
Nagaland	1	0	1	0	0	0	3	0	0	0	0	5
Sikkim	1	0	1	1	0	0	5	0	0	0	0	8
Tripura	1	0	2	1	0	0	1	0	0	0	0	5
Total - NE Region	11	0	15	18	0	1	31	1	2	0	0	79
Total - India	51	1	149	403	5	14	365	1	34	10	80	1113

Source: 'All India Survey on Higher Education 2020-21', Department of Higher Education, Ministry of Education, Government of India (AISHE) [Table-1 Page T-1]

## Note

1. Concepts and Definitions related to the above table are available at Annexure-2 of the source document (particularly at Page Nos. A-5 and A-6)



Table-5.12.15: Number of Universities in the NE States by Specialization (Based on Actual Responses)

Specialization		Numb	er of Universit	ies Located in t	he State for Ind	licated Specializ	zation		Total	Total
	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	NE Region	India
General	7	16	2	5	1	3	5	2	41	615
Agriculture	0	1	1	0	0	0	0	0	2	51
Education	0	0	0	0	0	0	0	0	0	5
Chartered Accountancy	0	0	0	1	1	1	1	1	5	7
Cultural Studies	0	0	1	0	0	0	0	0	1	2
Fine Arts	0	0	0	0	0	0	0	0	0	6
Fisheries	0	0	0	0	0	0	0	0	0	4
Gandhian / Religious Study	0	0	0	0	0	0	0	0	0	2
Journalism & Mass Communication	0	0	0	0	0	0	0	0	0	3
Language	0	0	0	0	0	0	0	0	0	8
Law	0	1	0	0	0	0	0	0	1	26
Management	0	0	0	1	0	0	0	0	1	23
Medical	1	2	0	0	0	0	0	0	3	71
Oriental Learning	0	0	0	0	0	0	0	0	0	3
Rural Development	0	0	0	0	0	0	0	0	0	2
Sanskrit	0	1	0	0	0	0	0	0	1	19
Science	0	0	0	1	0	0	0	0	1	30
Social Science	0	0		0	0	0	0	0	0	7
Sports / Yoga / Physical Education	0	0	1	0	0	0	0	0	1	10
Technical	2	7	3	2	1	1	1	2	19	188
Veterinary	0	0	0	0	0	0	0	0	0	12
Other	0	0	0	0	0	0	0	0	0	5
Total	10	28	8	10	3	5	7	5	76	1099

Source: 'All India Survey on Higher Education 2020-21', Department of Higher Education, Ministry of Education, Government of India (AISHE) [Table-2 Pages T-2 (two pages)]

Notes (At overleaf)

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- 1. Out of 1113 universities, 1084 had responded to the study. By pooling data from the AISHE for the previous two years (2018NA19 and 2019-20), inferences were drawn regarding 1099 universities on the themes of the survey, including the data furnished at above.
- 2. Concepts and Definitions related to the above table are available at Annexure-2 of the source document.

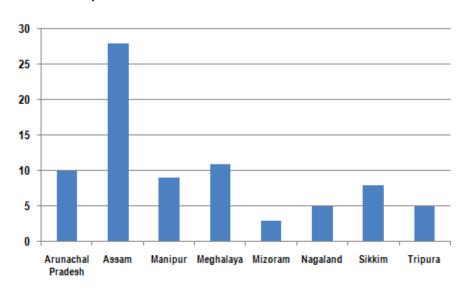


Tezpur University is a Central University located in Assam

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**Graph-5.12.3: Number of Universities in the NE States** 



Y-axis gives the Numbers of Universities based on the 'All India Survey on Higher Education 2020-21'

700
600
500
400
300
200
Arunachal Assam Manipur Meghalaya Mizoram Nagaland Sikkim Tripura Pradesh

**Graph-5.12.4: Number of Colleges in the NE States** 

Y-axis gives the Numbers of Colleges of all types (Government Colleges, Private Colleges-Aided, and Private Colleges- Unaided) based on the 'All India Survey on Higher Education 2020-21'







Table-5.12.16: Number of Colleges in the NE States per Lakh Population (in age group 18-23 years) and Average Enrolment per College

		No. of		Average E	nrolment	
State	No. of Colleges	Colleges per lakh population (in 18-23 years)	All Colleges	Government Colleges	Private Colleges (Unaided)	Private Colleges (Aided)
Arunachal Pradesh	42	27	547	727	358	311
Assam	595	16	795	980	302	206
Manipur	105	33	1090	1552	259	975
Meghalaya	75	23	817	1279	502	1012
Mizoram	39	31	650	778	173	27
Nagaland	68	28	490	554	312	528
Sikkim	23	30	578	811	281	0
Tripura	54	13	1198	1359	543	747
Total- NE Region	1001	19	808	1032	599	323
Total - India	43796	31	646	1097	465	1057

Source: 'All India Survey on Higher Education 2020-21', Department of Higher Education, Ministry of Education, Government of India (AISHE) [Table-4 Page T-4]

## Note

1. Concepts and Definitions related to the above table are available at Annexure-2 of the source document (particularly at Page Nos. A-6 and A-7, read with Page Nos.A-10 and A-11).



Faculty members of Dimapur Government College undergoing an on-line consultative meeting



Table-5.12.17: Number of Government & Private Colleges in the NE States (Based on Actual Response)

State	Private Colleges (Unaided)	Private Colleges (Aided)	Private Colleges Total	Government Colleges	Total Colleges
Arunachal Pradesh	14	4	18	23	41
Assam	83	25	108	452	560
Manipur	28	16	44	59	103
Meghalaya	17	18	35	27	62
Mizoram	7	1	8	31	39
Nagaland	12	35	47	20	67
Sikkim	4	0	4	15	19
Tripura	6	4	10	43	53
Total- NE Region	171	103	274	670	944
Total - India	27039	5658	32697	8903	41600

Source: 'All India Survey on Higher Education 2020-21', Department of Higher Education, Ministry of Education, Government of India (AISHE) [Table-5 Page T-5]

- 1. Out of 43,796 colleges, 40,212 had responded to the study. By pooling data from the AISHE for the previous two years (2018-19 and 2019-20), inferences were drawn regarding 41,600 colleges on the themes of the survey, including the data furnished at above.
- 2. Concepts and Definitions related to the above table are available at Annexure-2 of the source document (particularly at Page Nos. A-6 and A-7, read with Page No.A-10).



Cotton College (now upgraded as an University) was set up as the first college in the NE Region in 1901



Table-5.12.18: Number of Colleges in the NE States by Specialization (Based on Actual Responses)

Specialization		Nur	nber of College	s Located in the	State for Indic	ated Specializa	tion		Total	Total
	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	NE Region	India
General	28	249	14	43	33	53	8	45	473	24543
Agriculture	1	3	3	0	1	0	1	0	9	319
Architecture	0	1	0	0	0	0	0	0	1	165
Education	0	0	0	0	0	0	0	0	0	0
Chartered Accountancy	0	0	0	0	0	0	0	0	0	0
Arts	0	24	1	4	0	2	0	0	31	739
Commerce	0	8	0	1	0	0	0	0	9	279
Computer Application	0	0	0	0	0	0	0	0	0	298
Culture	0	0	0	0	0	0	0	0	0	1
Education / Teacher Education	7	44	74	6	2	5	1	1	140	4058
Engineering / Technology	0	154	2	2	0	1	1	5	165	3022
Fine Arts	0	0	0	0	0	1	0	0	1	85
Fisheries	0	1	0	0	0	0	0	0	1	37
Home Science	0	0	0	0	0	0	0	0	0	23
Hotel & Tourism Management	0	0	0	0	0	0	0	0	0	201
Journalism & Mass Communication	0	0	0	0	0	0	0	0	0	7
Law	1	18	0	2	0	3	0	0	24	768
Management	0	3	0	0	0	0	0	0	3	664
Medical - Allopathy	1	2	0	0	1	0	0	0	4	291
Medical - Ayurveda	0	1	0	0	0	0	0	0	1	251
Medical - Dental	0	0	1	0	0	0	0	0	1	195
Medical - Homeopathy	1	1	0	0	0	0	0	0	2	153
Medical - Others	0	1	1	0	0	0	1	0	3	451

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Specialization		Nur	nber of College	s Located in the	e State for Indic	ated Specializa	ntion		Total	Total
	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region	India
Nursing	2	8	4	2	1	1	2	0	20	1804
Oriental Learning	0	0	0	0	0	0	0	0	0	57
Others	0	4	0	1	0	1	2	1	9	408
Paramedical	0	6	0	0	0	0	0	0	6	215
Pharmacy	0	14	3	0	0	0	1	0	18	1037
Physiotherapy	0	1	0	0	0	0	0	0	1	238
Sanskrit	0	1	0	0	0	0	1	0	2	751
Science	0	3	0	1	0	0	1	0	5	284
Social Work	0	0	0	0	0	0	0	0	0	50
Sports / Yoga / Physical Education	0	0	0	0	0	0	0	0	0	100
Veterinary	0	13	0	0	1	0	0	1	15	80
Total	41	560	103	62	39	67	19	53	944	41600

Source: 'All India Survey on Higher Education 2020-21', Department of Higher Education, Ministry of Education, Government of India (AISHE) [Table-4 Pages T4 (a) (3 pages)]

- 1. Out of 43,796colleges, 40,212 had responded to the study. By pooling data from the AISHE for the previous two years (2018-19 and 2019-20), inferences were drawn regarding 41,600 colleges on the themes of the survey, including the data furnished at above.
- 2. Concepts and Definitions related to the above table are available at Annexure-2 of the source document.



Table-5.12.19: Enrolment in Government & Private Colleges in the NE States (Based on Actual Response)

State	Private Colleges (Unaided)	Private Colleges (Aided)	Private Colleges Total	Government Colleges	Total Colleges
Arunachal Pradesh	5014	1242	6256	16723	22979
Assam	25095	5150	30245	443035	473280
Manipur	7246	15601	22847	91560	114407
Meghalaya	8535	18207	26742	34535	61277
Mizoram	1210	27	1237	24131	25368
Nagaland	3743	18472	22215	11081	33296
Sikkim	1124	NA	1124	12167	13291
Tripura	3257	2987	6244	58421	64665
Total- NE Region	55224	61686	116910	691653	808563
Total - India	12564324	5979206	18543530	9768029	28311559

Source: 'All India Survey on Higher Education 2020-21 ', Department of Higher Education, Ministry of Education, Government of India (AISHE) [Table-5(a) Page T-5]

- 1. Out of 43,796 colleges, 40,212 had responded to the study. By pooling data from the AISHE for the previous two years (2018-19 and 2019-20), inferences were drawn regarding 41,600 colleges on the themes of the survey, including the data furnished at above.
- 2. Concepts and Definitions related to the above table are available at Annexure-2 of the source document (particularly at Page Nos. A-6 and A-7, read with Page Nos.A-10 and A-11).



St. Edmund's College at Shillong started functioning from 1923 under the Calcutta University



Table-5.12.20: Estimated Enrolments in the NE States at various Levels of Higher Education

		Enrolment in the State for Indicated Level of Education (Higher Education)									
Level	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total  NE Region	Total India	
PhD											
<ul> <li>Male</li> </ul>	470	3648	624	469	551	279	115	452	6608	116764	
<ul> <li>Female</li> </ul>	258	2356	569	364	436	314	80	220	4597	95088	
<ul> <li>Total</li> </ul>	728	6004	1193	833	987	593	195	672	11205	211852	
M. Phil											
<ul> <li>Male</li> </ul>	56	126	NA	NA	56	23	34	2	297	6345	
<ul> <li>Female</li> </ul>	74	180	12	NA	59	30	30	10	395	10399	
<ul> <li>Total</li> </ul>	130	306	12	NA	115	53	64	12	692	16744	
Post Graduate											
<ul> <li>Male</li> </ul>	5623	23461	4813	4039	1992	2843	2929	5919	51619	2053794	
<ul> <li>Female</li> </ul>	5814	33328	5649	6124	2478	4252	4001	6287	67933	2662855	
<ul> <li>Total</li> </ul>	11437	56789	10462	10163	4470	7095	6930	12206	119552	4716649	
Under Graduate											
<ul> <li>Male</li> </ul>	22310	297876	61246	36840	15802	17600	12295	38810	502779	16747674	
<ul> <li>Female</li> </ul>	20017	304835	60261	45359	14971	19228	12533	34214	511418	15909835	
<ul> <li>Total</li> </ul>	42327	602711	121507	82199	30773	36828	24828	73024	1014197	32657509	
PG Diploma											
<ul> <li>Male</li> </ul>	97	984	396	177	61	42	32	116	1905	143723	
<ul> <li>Female</li> </ul>	80	946	269	129	42	71	11	133	1681	113464	
<ul> <li>Total</li> </ul>	177	1930	665	306	103	113	43	249	3586	257187	
Diploma											
<ul> <li>Male</li> </ul>	1403	12972	1637	1334	710	859	1088	2243	22246	1873568	
<ul> <li>Female</li> </ul>	1139	9814	2607	2236	1480	1210	1179	2632	22297	1105752	
<ul> <li>Total</li> </ul>	2542	22786	4244	3570	2190	2069	2267	4875	44543	297932	
Certificate											
<ul> <li>Male</li> </ul>	310	459	200	172	NA	98	61	15	1315	83841	
<ul> <li>Female</li> </ul>	162	866	216	214	20	99	11	13	1601	72070	
<ul> <li>Total</li> </ul>	472	1325	416	386	20	197	72	28	2916	155911	
										Continued	

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		Enrolment in the State for Indicated Level of Education (Higher Education)									
Level	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region	Total India	
Integrated											
<ul> <li>Male</li> </ul>	1196	2459	NA	73	29	6	153	871	4787	212201	
<ul> <li>Female</li> </ul>	726	2783	NA	54	23	NA	222	723	4531	173340	
• Total	1922	5242	NA	127	52	6	375	1594	9318	385541	
Grand Total											
<ul> <li>Male</li> </ul>	31465	341985	68916	43104	19201	21750	16707	48428	591556	21237910	
<ul> <li>Female</li> </ul>	28270	355108	69583	54480	19509	25204	18067	44232	614453	20142803	
<ul> <li>Total</li> </ul>	59735	697093	138499	97584	38710	46954	34774	92660	1206009	41380713	

Source: 'All India Survey on Higher Education 2020-21', Department of Higher Education, Ministry of Education, Government of India (AISHE) [Table-6 Page T-6 (three pages)]

## Notes:

1. Concepts and Definitions related to the above table are available at Annexure-2 of the source document (particularly at Page Nos. A-6 and A-7, read with Page Nos.A-10 and A-11).



## **Tripura University**

Tripura University is a Central University, which has its campus just outside the Agartala City limits.

The above university started as a Post Graduate wing of the Calcutta University in 1976, before being upgraded as a State University in 1987. It was subsequently being converted to a Central University in 2007.



Table-5.12.21: Number of Teachers in the NE States at Various Levels of Higher Education (Based on Actual Responses)

Post		Total	Total							
	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region	India
Professor & Equivalent										
Male	167	1220	290	170	118	114	97	120	2296	104469
<ul> <li>Female</li> </ul>	40	379	117	82	34	55	32	30	769	42280
<ul> <li>Total</li> </ul>	207	1599	407	252	152	169	129	150	3065	146749
Reader & Associate Professor										
Male	192	2205	448	213	260	69	137	163	3687	100248
Female	58	1276	322	203	208	100	62	82	2311	60377
<ul> <li>Total</li> </ul>	250	3481	770	416	468	169	199	245	5998	160625
Lecturer & Assistant Professor										
• Male	839	8963	2000	1099	542	814	728	934	15919	601019
<ul> <li>Female</li> </ul>	768	6880	2136	1580	496	1125	550	442	13977	458277
<ul> <li>Total</li> </ul>	1607	15843	4136	2679	1038	1939	1278	1376	29896	1059296
Demonstrator / Tutor										
• Male	17	442	23	34	28	40	25	222	831	29329
Female	37	381	184	111	102	61	75	249	1200	58252
<ul> <li>Total</li> </ul>	54	823	207	145	130	101	100	471	2031	87581
Temporary Teacher										
• Male	17	662	130	42	112	19	6	91	1079	43816
<ul> <li>Female</li> </ul>	20	858	102	68	109	31	7	65	1260	39925
<ul> <li>Total</li> </ul>	37	1520	232	110	221	50	13	156	2339	83741

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		Number of Teachers (Higher Education) in the State									
Post	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region	Total India	
Grand Total											
<ul> <li>Male</li> </ul>	1233	13510	2946	1560	1073	1059	996	1562	23939	886140	
<ul> <li>Female</li> </ul>	926	9792	2873	2052	960	1374	728	900	19605	664930	
• Total	2159	23302	5819	3612	2033	2433	1724	2462	43544	1551070	
Visiting Teacher											
<ul> <li>Male</li> </ul>	1	18	55	2	13	3	3	32	127	7259	
<ul> <li>Female</li> </ul>	3	18	12	8	11	2	2	32	88	5819	
<ul> <li>Total</li> </ul>	4	36	67	10	24	5	5	64	215	13078	

Source: 'All India Survey on Higher Education 2020-21', Department of Higher Education, Ministry of Education, Government of India (AISHE) [Table-22 Page T-22 (three pages)]

- 1. Out of 1113 universities, 1084 had responded to the study. By pooling data from the AISHE for the previous two years (2018-19 and 2019-20), inferences were drawn regarding 1099 universities on the themes of the survey, including the data which has been included at above.
- 2. Similarly, out of 43,796 colleges, 40,212 had responded to the study. Here too, by pooling data from the AISHE for the previous two years (2018-19 and 2019-20), inferences were drawn regarding 41,600 colleges on the themes of the survey, including the data which has been also included at the above table.
- 3. Concepts and Definitions related to the above table are available at Annexure-2 of the source document (particularly at Page Nos. A-8 and A-11).



# 5.13. Health & Family Welfare

The context of healthcare in India has changed in four major ways. First, the health priorities are changing on a nationwide basis. Although maternal and child mortality have rapidly declined, there is a growing burden on account of non-communicable diseases and some infectious diseases. The second important change is the emergence of a robust health care industry estimated to be growing at double digit. The third change is the growing incidences of catastrophic expenditure due to health care costs, which are presently estimated to be one of the major contributors to financial insecurity and poverty. Fourth, a rising economic growth enables enhanced fiscal capacity. Therefore, a new health policy responsive to these contextual changes was felt necessary

In response to the above changes and challenges, the extant National Health Policy had been formulated in 2017. Its primary aim is to inform, clarify, strengthen and prioritize the role of the Government in shaping health systems in all its dimensions; including in areas like investments in health, organization of healthcare services, prevention of diseases and promotion of good health through cross sectoral actions, access to technologies, developing human resources, encouraging medical pluralism, building knowledge base, developing better financial protection strategies, strengthening regulation and health assurance.

In collaboration with the State Governments and other stakeholders, the Ministry of Health and Family Welfare of the Government of India is working to promote the good health and well-being of Indians at all ages. This is being sought to be done through a preventive, curative and promotive health care orientation in all developmental policies and through the universal access to quality healthcare facilities without anyone facing financial hardship. Towards the above end, the Ministry is implementing various schemes, programmes and national initiatives to provide universal access to quality healthcare. The above approach seeks to combine the upgradation of existing infrastructure as well as the creation of new infrastructure in deficient areas.

Keeping in view the healthcare challenges of the NE Region, the Ministry of Development of North Eastern Region has an Inter-Ministerial Committee on Health & Nutrition. This is a forum for the discussions of these issues with the concerned Line Ministry for its needful actions.

The North Eastern Council (NEC) had been instrumental in establishing several regional institutions for augmenting the medical and paramedical manpower in the NE Region. These include the Regional Institute of Medical Sciences in Imphal, Regional Institute for Paramedical and Nursing in Aizawl, Regional Nursing College and Regional Nursing College in Guwahati, LGB Regional Institute of Mental Health in Tezpur, Dr. B Barooah Cancer Institute and Sri Sankaradeva Nethralaya in Guwahati etc. NEC had funded and managed many of these institutions for some time. Subsequently, these institutions had been handed over to the concerned Ministries for their further development and management. In addition, NEC had provided funds for the existing medical colleges in Assam located in Guwahati and Silchar.



Table-5.13.1: Public Health Facilities in the NE States as mapped in the HMIS (As on 31st March 2022)

State	Health Sub Centre	Primary Health Centre	Community Health Centre	Sub District Hospital	District Hospital	Total
Arunachal Pradesh	367	131	58	0	20	576
Assam	4701	1010	202	14	35	5962
Manipur	415	95	17	1	9	537
Meghalaya	460	147	28	2	13	650
Mizoram	367	65	7	2	12	453
Nagaland	452	136	23	0	12	623
Sikkim	153	26	2	0	4	185
Tripura	999	115	23	12	8	1157
Total – NE Region	7914	1725	360	31	113	10143
Total - India	162652	32281	6217	1407	1070	203627

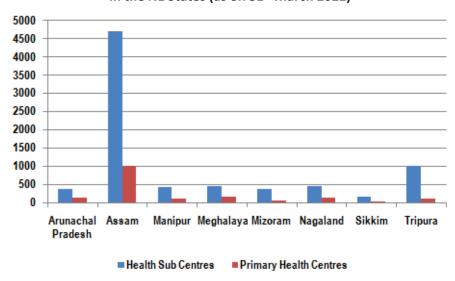
Source: Health Management Information System 2020-21 & 2021-22 (An Analytical Report), Ministry of Health & Family Welfare, Government of India (Annexure 1.1 at Page No. 14)

- 1. Healthcare delivery in India has been envisaged at three levels namely Primary, Secondary and Tertiary. The secondary level of health care essentially includes Community Health Centres (CHCs), constituting the First Referral Units (FRUs) and the Sub-district and District Hospitals. The CHCs were designed to provide referral health care for cases from the Primary Health Centres level and for cases in need of specialist care approaching the Centre directly.
- 2. Health Sub Centre: First point of contact for community in India's Primary Healthcare ecosystem, manned with one female health worker/ auxiliary nurse midwife and one male health worker.
- 3. Primary Health Centre (PHC): 4-6 bedded referral unit for six sub-centres manned with a medical office in-charge and about 14 subordinate paramedical staff.
  - PHC is the first physical point of contact between Patient and the Doctor; therefore OPD services play important role towards the preliminary diagnosis as well the further referral to the higher level of health facilities, wherever required.
- Community Health Centre (CHC): 30 bed hospital/referral unit for about 4 PHCs with specialized services.
  - A CHC is a 30-bedded hospital providing specialist care in Medicine, Obstetrics and Gynaecology, Surgery, Paediatrics, Dental and AYUSH. These centres are however fulfilling the tasks entrusted to them only to a limited extent. CHC in rural area can be First Referral Unit (FRU) or non-FRU; but all urban CHCs have to be FRU.
- 5. Sub District Hospital (SDH): SDH have a mandate to provide secondary care services and acts as Referral Units for the Tehsil/Taluk/Block population in which they are geographically located and SDHs are below the district and above the block level (CHC) hospitals. SDHs form an important link between SCs, PHCs and CHCs on one end and District Hospitals on the other end. They also save travel time for cases needing emergency care and reduce the workload of the district hospitals. Some states of India like Arunachal Pradesh and Nagaland do not have any SDHs.
- 6. District Hospital (DH): As per the defined guidelines every DH should comprehensively function for providing secondary care services along with the critical care services like Emergency, High Dependency Unit (HDU)/Intensive Care Unit (ICU), Operation Theatre (OT), Labour Delivery, Special Newborn Care Unit (SNCU), lab and diagnostic services etc. District Hospital has specialist OPD services in order to cater for the specific need of the population for the respective district.

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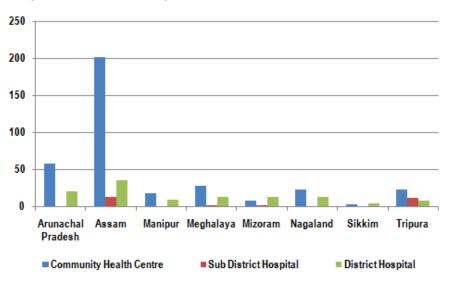
NORTH EASTERN COUNCIL

Graph-5.13.1: Numbers of Health Sub-Centres and Primary Health Centres in the NE States (as on 31<sup>st</sup> March 2022)



Y-axis gives the Numbers of Health Sub-Centres and Primary Health Centres as on 31st March 2022

Graph-5.13.2: Numbers of Community Health Centres, Sub District Hospitals and District Hospitals in the NE States (as on 31<sup>st</sup> March 2022)



Y-axis gives the Numbers of Community Health Centres, Sub District Hospitals and District Hospitals as on 31st March 2022





Table-5.13.2: Private Health Facilities in the NE States as mapped in the HMIS (As on 31st March 2022)

State	Health Sub Centre	Primary Health Centre	Community Health Centre	Sub District Hospital	District Hospital	Total
Arunachal Pradesh	0	0	0	0	4	4
Assam	4	401	150	5	1	561
Manipur	1	1	22	0	0	24
Meghalaya	2	0	2	0	10	14
Mizoram	0	0	0	14	0	14
Nagaland	2	6	8	0	4	20
Sikkim	0	0	0	0	1	1
Tripura	0	8	0	0	2	10
Total - NE Region	9	416	182	19	22	648
Total - India	12	1542	10825	1466	183	14028

Source: Health Management Information System 2020-21 & 2021-22 (An Analytical Report), Ministry of Health & Family Welfare, Government of India (Annexure 1.2 at Page No. 15)

## Notes

Notes under the previous table may be seen for additional details about the above facilities.

Table-5.13.3: Number of Medical Colleges in the NE States

(In numbers)

State ->	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region	Total - India
No. of Medical Colleges (2022)	1	13	4	1	1	1	1	2	24	706
Govt.	1	13	3	1	1	1	0	1	21	380
Other	0	0	1	0	0	0	1	1	3	326
Annual Intake	50	1550	525	50	100	100	150	225	2750	

Source: National Medical Commission (https://www.nmc.org.in/information-desk/for-students-to-study-in-india/list-of-college-teaching-mbbs/)

- 1. The above gives the medical colleges teaching MBBS courses. Annual intake is considering MBBS course only.
- 2. 'Other' includes colleges operated by 'trusts' and private medical colleges.



Table-5.13.4: Number of Beds in the NE States at the Primary Health Centres, Community Health Centres, Sub-District / Sub-Divisional Hospitals, District Hospitals & Medical Colleges

(As on 31<sup>st</sup> March 2022)

State	Primary Health Centre	Community Health Centre	Sub District / Sub Divisional Hospital	District Hospital	Medical College
Arunachal Pradesh	395	602	N Арр	1129	350
Assam	3199	6360	797	4949	8250
Manipur	456	365	10	551	1449
Meghalaya	1145	843	167	2070	594
Mizoram	570	234	100	1117	335
Nagaland	596	325	N Арр	967	NA
Sikkim	257	28	1000	400	0
Tripura	1021	720	800	1260	1155
Total – NE Region	7639	9477	2874	12443	12133
Total - India	134224	184175	109937	162749	224679

Source: Rural Health Statistics 2021-22, Ministry of Health & Family Welfare, Government of India (Table-43 at Page 161)

- 1. The above table gives the position of beds as on 31st March 2022.
- 2. N App means 'Not Applicable'; as some states of India like Arunachal Pradesh and Nagaland do not have any SDHs.
- 3. NA means 'Not Available'
- 4. Additional details about the above facilities have been furnished at a previous table.





Table-5.13.5: Health Indicators in the NE States

(As per indicated unit)

Parameter	Unit	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
Crude Birth Rate (CBR)	Per 1000 Persons	17.3	20.8	13.3	22.9	14.4	12.5	15.6	12.6
Crude Death Rate (CDR)	-Do-	5.7	6.2	4.3	5.3	4.2	3.7	4.1	5.7
Infant Mortality Rate (IMR)	Per 1000 Live Births	21	36	6	29	3	4	5	18
Maternal Mortality Rate (MMR)	-Do-	NA	195	NA	NA	NA	NA	NA	NA
Total Fertility Rate (TFR)	Per 1000 Females in Age Groups 15-19 to 45-49	NA	2.5	NA	NA	NA	NA	NA	NA
Sex Ratio	Females per 1000 Males	938	958	985	989	976	931	890	960
Life Expectancy at Birth - Male	Years	NA	67.3	NA	NA	NA	NA	NA	NA
Life Expectancy at Birth - Female	Years	NA	68.6	NA	NA	NA	NA	NA	NA
Neonatal Mortality Rate (NMR)	Per 1000 Live Births	NA	19	NA	NA	NA	NA	NA	NA
Under 5 Mortality Rate (U5MR)	-Do-	NA	40	NA	NA	NA	NA	NA	NA

Source: 'Quarterly NHM MIS Report (Status as on 31.03.2023)', National Health Mission, Ministry of Health & Family Welfare, Government of India – based on data from (a) the Sample Registration System, Statistical Report 2020 brought out by the Office of the Registrar General & Census Commissioner of India for CBR, CDR, IMR, TFR, NMR and U5MR; (b) SRS Data from 2018-20 for MMR; (c) SRS based Abridged Life table 2016-20 for Life Expectancy at Birth( Male & Female); and (d) 2011 Census of India 2011 for Sex Ratio. [At Page 1 of 7 (not numbered) of: 'Quarterly NHM MIS Report (Status as on 31.03.2023)', National Health Mission for High Focus States – NE / Rows 9 – 17]

- 'NA' means 'Not Available'
- 2. Sample Registration System (SRS) data for parameters like MMR, TFR, Life Expectancy Birth, NMR and U5MR are not available for the NE states (except Assam)
- 3. Concepts: As follows

Crude Birth Rate	It indicates the number of live births occurring during the year, per 1,000 population, with the population being estimated at the midyear point.
Crude Death Rate	It indicates the number of deaths occurring during the year, per 1,000 population, with the population being estimated at the midyear point.
Infant Mortality Rate	Infant Mortality Rate (IMR), is defined as the infant deaths (less than one year) per thousand live births in a given time period and for a given region.
Maternal Mortality Rate	It is the number of maternal deaths during a given time period per 100,000 live births during the same time period



Total Fertility Rate	Total Fertility Rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with age-specific fertility rates of the specified year.
Sex Ratio	The number of females per 1000 male population
Life Expectancy at Birth	Life Expectancy (at birth) is 'the average number of years that a newborn could expect to live, if he or she were to pass through life exposed to the sex- and age-specific death rates prevailing at the time of his or her birth, for a specific year, in a given country, territory, or geographic area'
Neonatal Mortality Rate	It is the number of resident newborns in a specified geographic area dying at less than 28 days of age divided by the number of resident live births for the same geographic area (for a specified time period, usually a calendar year) and multiplied by 1,000.
Under 5 Mortality Rate	It is the number of children who die by the age of 5 years, per 1000 live births





Table-5.13.6: Health Infrastructure in the NE States (up to District Level)

Infrastructure		Total – NE	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
First Referral Unit (FRU)										
	District Hospital	79	13	22	6	8	9	12	3	6
Total Number of Centres operational	Sub-District Hospital	19	0	13	1	0	1	0	0	4
as FRUs	CHC and others	47	1	34	0	1	5	3	0	3
	Total	145	14	69	7	9	15	15	3	13
District Hospital (DH)										
Number of DHs		95	21	21	8	14	9	12	4	6
Number of District level Health Facilities other than District Hospital		23	0	16	1	0	2	3	0	1
Community Health Centre (CHC)										
Number of CHCs		368	58	204	23	28	9	23	2	21
Number of CHCs functioning on 24x7 basis	At start of NHM (31/3/2003)	125	31	93	NA	NA	NA	NA	1	0
Z4X7 DdSIS	As on date	307	53	157	17	27	9	21	2	21
Facilities other than CHC at or above Block level but below District	Functioning on 24x7 basis as on date	33	0	16	1	0	2	0	0	14
level	Functioning with three Staff Nurses	33	0	16	1	0	2	0	0	14
Urban CHC (UCHC)										
Number of UHCs		2	0	2	0	0	0	0	0	0
Total Number of UHCs functioning on 24x7 basis		2	0	2	0	0	0	0	0	0
Operationalization of UHCs		2	0	2	0	0	0	0	0	0
Primary Health Centre (PHC)										
Number of PHCs		1627	146	953	91	115	57	129	24	112
Number of PHCs functioning on 24x7 basis	At start of NHM (31/3/2003)	306	25	229	NA	NA	NA	NA	NA	52
	As on date	690	64	314	66	65	41	33	24	83
Number of PHCs where Staff Nurse has been posted		691	89	301	61	74	44	15	24	83

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Infrastructure		Total – NE	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
Other Health Facilities above Sub- Centre but below Block level (may	Functioning on 24x7 basis as on date	8	0	0	0	0	8	0	0	0
include APHC)	Strengthened with three Staff Nurses	238	0	233	0	0	5	0	0	0
Urban PHC (UPHC)	Under NUHM									
Operationalization of UPHC	In Govt. Building under NUHM	66	6	28	8	1	8	5	2	8
Operationalization of UPHC	In Rented Building under NUHM	49	0	27	1	18	1	2	0	0
Total UPHCs operational under NUHM		115	6	55	9	19	9	7	2	8
UPHCs functional with minimum staffing and service package		80	6	39	9	0	9	7	2	8
Sub-Centre (SC)										
Number of SCs		7998	398	4728	429	460	370	465	148	1000
	In Govt. Building	6825	357	3966	335	445	370	408	147	797
Number of SCs which are	Without ANM	309	25	254	0	0	21	6	3	0
	With Second ANM	4374	102	3107	307	332	157	214	56	99
Number of Health Kiosks		0	0	0	0	0	0	0	0	0
24x7 Services										
Total APHCs, PHCs, CHCs & other Sub District facilities functional as 24X7 basis		1042	116	487	88	92	61	54	26	118
Total UCHCs & Maternity Homes functional as 24X7 basis under NUHM		2	0	2	0	0	0	0	0	0
Total UPHCs functional as 24X7 basis under NUHM		12	0	3	0	0	9	0	0	0

Source: 'Quarterly NHM MIS Report (Status as on 31.03.2023)', National Health Mission, Ministry of Health & Family Welfare, Government of India

Notes - At overleaf

1. Data as reported by NHM may differ from data reported by HMIS as the latter gives the status for 31st March 2022.



2. Data has been sourced from the 'Quarterly NHM MIS Report (Status as on 31.03.2023)', National Health Mission for High Focus States – NE under following rows

Infrastructure	Rows
FRU	71
District Hospital	69-70
Community Health Centres	63-65
Urban Community Health Centres	66-68
Primary Health Centres	55-58
Urban PHC	59-62
Sub-centres	49-51
24x7 Services	52-54





Table-5.13.7: Health Infrastructure in Rural Areas of the NE States (2022)

	Numbers Functioning in Rural Areas (2022)			Space for H	Space for Health Sub-centres (SC)			Space for Primary Health Centres (PHC)			Space for Community Health Centres (CHC)		
State	Sub- Centres	PHCs	CHCs	Government Building	Rented Building	Rent Free Panchayat / Vol. Society Building	Government Building	Rented Building	Rent Free Panchayat / Vol. Society Building	Government Building	Rented Building	Rent Free Panchayat / Vol. Society Building	
Arunachal Pradesh	355	126	57	304	0	51	126	0	0	57	0	0	
Assam	4667	920	172	3904	645	118	909	5	6	172	0	0	
Manipur	393	74	8	310	13	70	69	0	5	8	0	0	
Meghalaya	459	122	28	448	3	8	121	0	1	28	0	0	
Mizoram	300	57	9	288	8	4	57	0	0	9	0	0	
Nagaland	434	129	23	372	1	61	123	1	5	23	0	0	
Sikkim	147	24	2	146	1	0	24	0	0	2	0	0	
Tripura	956	108	21	827	8	121	108	0	0	21	0	0	
Total - NE Region	7711	1560	320	6599	679	433	1537	6	17	320	0	0	
Total - India	157935	24935	5480	109131	21051	27753	22706	644	1585	5312	22	146	

Source: Rural Health Statistics 2021-22, Ministry of Health & Family Welfare, Government of India [Comparative Statements 1-4 at Pages 75-78]

#### Notes

1. Rural Area: All areas, which are not identified as urban, are rural areas. The basic unit for rural areas is revenue village.

In the above connection, an urban areas include: (a) All places with a municipality, corporation, cantonment board or notified town area committee, etc. or (b) All other places satisfying the following three criteria simultaneously: A minimum population of 5,000— At least 75% of male working population engaged in non-agricultural pursuits— A population density of at least 400 per sg. km. The first category of urban units is known as Statutory Towns while the second category of towns is known as Census Towns, identified based on last population Census.



Table-5.13.8: Accredited Social Health Activist (ASHA) in the NE States

Parameter		Total – NE	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
	2019-20	414	0	414	0	0	0	0	0	0
Number of ASHAs selected (Rural)	2020-21	275	202	0	0	73	0	0	0	0
Number of ASHAS selected (Rufal)	2021-22	462	0	0	0	462	0	0	0	0
	2022-23	0	0	0	0	0	0	0	0	0
Number of ASHAs selected (Rural) since inception of programme (from FY 2005-06)	Total	56878	4068	31334	3928	6819	1004	1949	641	7135
Number of ASHAs in Position (Rural)	2021-22	56870	4068	31334	3928	6811	1004	1949	641	7135
	Round-1	51883	3669	31334	0	6151	1004	1949	641	7135
Number of Rural ASHAs who have	Round-2	51716	3472	31334	0	6181	1004	1949	641	7135
received training (6th & 7th Modules)	Round-3	51464	3472	31334	0	5929	1004	1949	641	7135
	Round-4	54902	3032	31334	3878	5929	1004	1949	641	7135
Number of ASHAs (Rural) in Position with drug kit	2021-22	56820	4068	31334	3878	6811	1004	1949	641	7135
	2019-20	2263	42	1336	81	181	79	75	15	454
Number of ASHAs selected (Urban)	2020-21	2158	42	1212	81	200	79	75	15	454
Number of ASHAS Selected (Orban)	2021-22	2357	75	1212	81	260	79	87	35	528
	2022-23	91	27	0	0	5	0	59	0	0
Number of ASHAs selected (Urban) since inception of programme (from FY 2005-06)	Total	2684	102	1336	186	265	87	145	35	528
Number of ASHAs in Position (Urban)	2021-22	2408	102	1166	81	264	87	145	35	528
Total number of Urban ASHAs trained in Induction module		2348	102	1166	81	264	87	87	33	528
Total Number of Urban ASHAs trained on 6 <sup>th</sup> & 7 <sup>th</sup> Modules		2316	102	1166	81	232	87	87	33	528
Number of ASHAs (Urban) in Position with drug kit	2021-22	2186	102	1166	0	181	87	87	35	528



Parameter		Total – NE	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
Number of ASHAs (Urban) in position with Dru inception of the programme (from FY 2005-06 23)		1099	102	0	0	260	87	87	35	528
Number of ASHAs (Urban) in position with HB	SNC kits	2182	102	1166	0	177	87	87	35	528
Number of ASHAs (Urban) in position with HB inception of the programme (from FY 2005-06 23)		1044	102	0	0	205	87	87	35	528

Source: 'Quarterly NHM MIS Report (Status as on 31.03.2023)', National Health Mission, Ministry of Health & Family Welfare, Government of India. [At Page 2 of 7 (not numbered) of: 'Quarterly NHM MIS Report (Status as on 31.03.2023)', National Health Mission for High Focus States – NE / Rows 22.1 to 31.2]

#### Notes

# 1. Accredited Social Health Activist (ASHA)

One of the key components of National Rural Health Mission was to create a band of female health volunteers, appropriately named "Accredited Social Health Activist" (ASHA) in each village within the identified States to act as an interface between the community and the public health system. ASHAs are seen as be health activists in the community who will create awareness on health and its social determinants, counsel mothers on key health behaviours and mobilise the community towards local health planning and increased utilisation and accountability of the existing health services.









Table-5.13.9: Health Worker [Female] / ANM at the Sub centres & Primary Health Centres (PHCs) in Rural Areas of the NE States (2022)

Ctata	Required	Sanctioned	In Position	Vacant	Shortfall
State	(R)	(S)	(P)	(S-P)	(R-P)
Arunachal Pradesh	481	NA	575	NA	*
Assam	5587	8852	8854	*	*
Manipur	467	1055	933	122	*
Meghalaya	581	1127	1131	*	*
Mizoram	357	0	312	*	45
Nagaland	563	1268	1319	*	*
Sikkim	171	302	319	*	*
Tripura	1064	NA	649	NA	415
Total - NE Region	9271	12604	14092	122	460
Total - India	182870	240518	207587	34541	6443

Source: Rural Health Statistics 2021-22, Ministry of Health & Family Welfare, Government of India [Comparative Statement 5 at Page 79]

- 1. The requirement is one per each existing SC and PHC.
- 2. '\*' indicates surplus
- 3. The NE Region figures for Vacancy and Shortfall are computed on the basis of the totals of State-wise Vacancy and Shortfall <u>ignoring</u> surplus in some of the states.
- 4. All India figures for Vacancy and Shortfall are the totals of State-wise Vacancy and Shortfall ignoring surplus in some States / UTs.
- 5. Auxiliary Nurse Midwife (ANM) is a village-level female health worker who is known as the first contact person between the community and the health services. They are considered as the grass-roots workers in the health ecosystem. Their services are considered crucial in providing safe and effective care to village communities.
- 6. Health Worker (Female) is staff posted at sub-centre. She is the key worker for reproductive and child health. The term includes a person working as Auxiliary Nurse Midwife and Family Welfare Worker.





Table-5.13.10: Health Worker [Female] / ANM at the Primary Health Centres (PHCs) in Urban Areas of the NE States (2022)

State	Required	Sanctioned	In Position	Vacant	Shortfall
Sidle	(R)	(S)	(P)	(S-P)	(R-P)
Arunachal Pradesh	25	NA	25	NA	0
Assam	450	310	304	6	146
Manipur	105	29	32	*	73
Meghalaya	125	23	64	*	61
Mizoram	45	0	17	*	28
Nagaland	35	6	19	*	16
Sikkim	10	0	2	*	8
Tripura	45	NA	25	NA	20
Total – NE Region	840	368	488	6	352
Total - India	30590	24160	21501	3228	10864

Source: Rural Health Statistics 2021-22, Ministry of Health & Family Welfare, Government of India [Table- 48 at Page 168] Notes

- 1. The above gives the position as on 31st March 2022. The total figures of ANMs represent ANMs working at PHCs and SCs under the PHC.
- 2. The requirement is 5 per Urban Primary Health Centre as per norms to cater the urban population of 10000 by each Health Worker (female).
- 3. '\*' indicates surplus
- 4. The NE Region figures for Vacancy and Shortfall are computed on the basis of the totals of State-wise Vacancy and Shortfall <u>ignoring</u> surplus in some of the states.
- 5. All India figures for Vacancy and Shortfall are the totals of State-wise Vacancy and Shortfall ignoring surplus in some States / UTs.
- 6. Auxiliary nurse midwife (ANM) and Health Worker (female): defined at previous page.





Table-5.13.11: Doctors at the Primary Health Centres (PHCs) in Rural Areas of the NE States (2022)

State	Required	Sanctioned	In Position	Vacant	Shortfall
State	(R)	(S)	(P)	(S-P)	(R-P)
Arunachal Pradesh	126	NA	129	NA	*
Assam	920	1617	1381	236	*
Manipur	74	343	308	35	*
Meghalaya	122	178	171	7	*
Mizoram	57	0	57	*	0
Nagaland	129	138	130	8	*
Sikkim	24	39	38	1	*
Tripura	108	NA	236	NA	*
Total – NE Region	1560	2315	2450	287	0
Total - India	24935	39669	30640	9451	776

Source: Rural Health Statistics 2021-22, Ministry of Health & Family Welfare, Government of India [Comparative Statement 6 at Page 80]

- 1. Each existing PHC requires one allopathic doctor.
- 2. '\*' indicates surplus
- 3. The NE Region figures for Vacancy and Shortfall are computed on the basis of the totals of State-wise Vacancy and Shortfall <u>ignoring</u> surplus in some of the states.
- 4. All India figures for Vacancy and Shortfall are the totals of State-wise Vacancy and Shortfall ignoring surplus in some States / UTs.





Table-5.13.12: Doctors at the Primary Health Centres (PHCs) in Urban Areas of the NE States (2022)

Ctata	Required	Sanctioned	In Position	Vacant	Shortfall
State	(R)	(S)	(P)	(S-P)	(R-P)
Arunachal Pradesh	5	NA	23	NA	*
Assam	90	164	141	23	*
Manipur	21	17	17	0	4
Meghalaya	25	10	24	*	1
Mizoram	9	0	10	*	*
Nagaland	7	2	7	*	0
Sikkim	2	2	3	*	*
Tripura	9	NA	20	NA	*
Total – NE Region	168	195	245	23	5
Total - India	6118	8915	7315	1680	308

Source: Rural Health Statistics 2021-22, Ministry of Health & Family Welfare, Government of India [Table- 49 at Page 169]

- 1. The above gives the position as on 31st March 2022.
- 2. Each existing PHC requires one allopathic doctor as per IPHS norms.
- 3. '\*' indicates surplus / NA indicates Not Available.
- 4. The NE Region figures for Vacancy and Shortfall are computed on the basis of the totals of State-wise Vacancy and Shortfall <u>ignoring</u> surplus in some of the states.
- 5. All India figures for Vacancy and Shortfall are the totals of State-wise Vacancy and Shortfall ignoring surplus in some States / UTs.





Table-5.13.13: Specialists at the Community Health Centres (CHCs) in Rural Areas of the NE States (2022)

State	Required	Sanctioned	In Position	Vacant	Shortfall
State	(R)	(S)	(P)	(S-P)	(R-P)
Arunachal Pradesh	228	NA	11	NA	217
Assam	688	267	179	88	509
Manipur	32	32	18	14	14
Meghalaya	112	5	5	0	107
Mizoram	36	0	0	0	36
Nagaland	92	NA	9	NA	83
Sikkim	8	0	0	0	8
Tripura	84	NA	3	NA	81
Total – NE Region	1280	304	225	102	1055
Total - India	21920	13787	4485	9343	17435

Source: Rural Health Statistics 2021-22, Ministry of Health & Family Welfare, Government of India [Comparative Statement 7 at Page 81]

#### Notes

**1.** Each existing Community Health Centre (CHC) requires one of the following specialists: Surgeon, OB&GY, Physician, and Paediatrician

# 2. '\*' indicates surplus

- **3.** The NE Region figures for Vacancy and Shortfall are computed on the basis of the totals of State-wise Vacancy and Shortfall <u>ignoring</u> surplus in some of the states.
- **4.** All India figures for Vacancy and Shortfall are the totals of State-wise Vacancy and Shortfall ignoring surplus in some States / UTs.





Table-5.13.14: Specialists at the Community Health Centres (CHCs) in Urban Areas of the NE States (2022)

State	Required	Sanctioned	In Position	Vacant	Shortfall
Sidle	(R)	(S)	(P)	(S-P)	(R-P)
Arunachal Pradesh	0	NA	NA	NA	NA
Assam	116	58	60	*	56
Manipur	36	18	8	10	28
Meghalaya	0	NA	NA	NA	NA
Mizoram	0	NA	NA	NA	NA
Nagaland	0	NA	NA	NA	NA
Sikkim	0	NA	NA	NA	NA
Tripura	8	NA	0	NA	8
Total – NE Region	160	76	68	10	92
Total - India	2336	2034	1278	764	1097

Source: Rural Health Statistics 2021-22, Ministry of Health & Family Welfare, Government of India [Table- 50 at Page 170]

- 1. The above gives the position as on 31st March 2022.
- 2. Each existing CHC requires four specialists as per IPHS norms. These include: Surgeon, OB&GY, Physician, and Paediatrician.
- 3. '\*' indicates surplus / NA indicates Not Available
- **4.** The NE Region figures for Vacancy and Shortfall are computed on the basis of the totals of State-wise Vacancy and Shortfall <u>ignoring</u> surplus in some of the states.
- **5.** All India figures for Vacancy and Shortfall are the totals of State-wise Vacancy and Shortfall ignoring surplus in some States / UTs.





Table-5.13.15: Key Personnel at the SCs, PHCs and CHCs in Rural Areas of the NE States (2021 & 2022)

	ANM at S	SC & PHC	Doctors	at PHC	Total Specialists at CHC		
State	March 2021	March 2022	March 2021	March 2022	March 2021	March 2022	
Arunachal Pradesh	596	575	135	129	19	11	
Assam	8650	8854	1383	1381	174	179	
Manipur	1006	933	308	308	15	18	
Meghalaya	1122	1131	162	171	3	5	
Mizoram	324	312	58	57	0	0	
Nagaland	1008	1319	123	130	7	9	
Sikkim	318	319	38	38	0	0	
Tripura	695	649	230	236	4	3	
Total – NE Region	13719	14092	2437	2450	222	225	
Total - India	214820	207587	31716	30640	4405	4485	

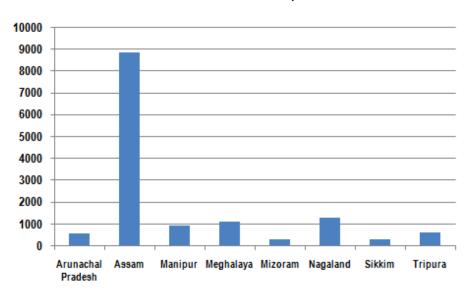
Source: Rural Health Statistics 2021-22, Ministry of Health & Family Welfare, Government of India [Comparative Statement 14 at Page 88]

- 1. The requirement is one ANM for each existing SC and PHC.
- 2. Each existing PHC requires one allopathic doctor.
- **3.** Each existing Community Health Centre (CHC) requires one of the following specialists: Surgeons, OB&GY, Physicians & Paediatricians



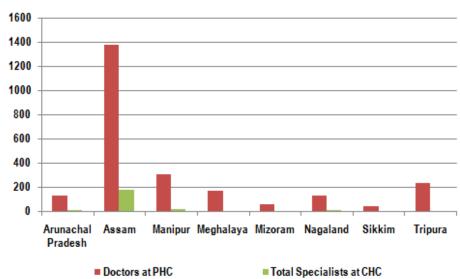


Graph-5.13.3: Key Personnel at the SCs, PHCs and CHCs in Rural Areas of the NE States- ANMs at Health Sub-Centres and Primary Health Centres (as on 31st March 2022)



Y-axis gives the Numbers of Auxiliary Nurse & Midwife (ANMs) in Health Sub-Centres and Primary Health Centres as on 31st March 2022

Graph-5.13.4: Key Personnel at the SCs, PHCs and CHCs in Rural Areas of the NE States- Doctors in Primary Health Centres and Specialists in Community Health Centres (as on 31st March 2022)



Y-axis gives the Numbers of Doctors in Primary Health Centres and Specialists in Community Health Centres as on 31st March 2022



Table-5.13.16: Supporting Staff at the SCs, PHCs and CHCs in Rural Areas of the NE States (2021 & 2022)

State		aphers at HC		icists at & CHC	Lab Technicians at PHC & CHC		Nursing Staff at PHC & CHC	
State	March 2021	March 2022	March 2022	March 2022	March 2021	March 2022	March 2021	March 2022
Arunachal Pradesh	16	18	101	92	129	146	681	692
Assam	122	93	1350	1363	1272	1302	3403	3563
Manipur	7	7	166	163	118	113	424	405
Meghalaya	21	21	178	183	190	198	782	799
Mizoram	7	4	36	33	83	73	230	213
Nagaland	5	2	124	116	141	125	398	423
Sikkim	4	4	21	22	41	47	128	145
Tripura	12	12	166	163	142	150	759	683
Total – NE Region	194	161	2142	2135	2116	2154	6023	6923
Total - India	2418	2448	28537	27135	22723	22772	79044	79933

Source: Rural Health Statistics 2021-22, Ministry of Health & Family Welfare, Government of India [Comparative Statement 15 at Page 89]





Table-5.13.17: Doctors at District Hospitals & Sub District/ Sub Divisional Hospitals of the NE States (As on March 2022)

Stato	District	Hospital	Sub District/ Sub [	Sub District/ Sub Divisional Hospital		
State	Sanctioned	In Position	Sanctioned	In Position		
Arunachal Pradesh	NA	315	N App	N Арр		
Assam	291	789	115	151		
Manipur	284	232	18	18		
Meghalaya	245	316	4	17		
Mizoram	0	221	0	24		
Nagaland	122	251	N App	N Арр		
Sikkim	199	143	0	0		
Tripura	NA	189	NA	127		
Total – NE Region	1141	2456	137	337		
Total - India	35192	29817	23478	18643		

Source: Rural Health Statistics 2021-22, Ministry of Health & Family Welfare, Government of India [Table-35 at Page 150]

Notes

1. N App means Not Applicable; as some states of India like Arunachal Pradesh and Nagaland do not have any SDHs.





Table-5.13.18: Provision of Free Medicines & Free Diagnostics to Pregnant Women in the NE States under JSSK

(Percentage of Pregnant Women Covered)

Ctata	Provision of F	ree Medicines	Provision of Fr	ee Diagnostics	
State	2020-21	2021-22	2020-21	2021-22	
Arunachal Pradesh	56.06	57.00	59.54	59.18	
Assam	89.84	83.60	108.92	102.06	
Manipur	16.50	22.76	38.93	50.99	
Meghalaya	75.59	87.93	86.10	87.47	
Mizoram	16.88	16.09	9.92	8.41	
Nagaland	18.23	22.46	18.04	19.08	
Sikkim	22.82	16.38	19.34	14.79	
Tripura	66.18	65.43	60.50	60.61	
Percentage - India	54.49	53.14	52.59	51.87	

Source: Health Management Information System 2020-21 & 2021-22 (An Analytical Report), Ministry of Health & Family Welfare, Government of India [Annexure 2.2 at Page No. 58 / Annexure 2.3 at Page No 59]

## Notes:

1. Under the Janani Shishu Suraksha Karyakaram (JSSK), pregnant women delivering in public health institutions are entitled to absolutely free / no expense delivery, including caesarean sections. The initiative stipulates free diet drugs, diagnostics and blood, besides free transport from home to institution, or between facilities in case of a referral and drop back home.





Table-5.13.19: Provision of Ante-Natal Care & Tetanus Toxoid Vaccination in the NE States

(In percentage)

State		Provision of ANC (as a % of Estimated Pregnancies)		Provision of Four ANCs (as a % of ANC Registrations)		/Td-1 (as a % of strations)	Provision of TT2+TT Booster (as a % of ANC Registrations)	
	2020-21	2021-22	2020-21	2021-22	2020-21	2021-22	2020-21	2021-22
Arunachal Pradesh	106.21	112.04	29.5	35.68	59.58	60.07	56.88	59.76
Assam	80.98	80.19	80.5	83.22	90.36	92.21	93.28	93.18
Manipur	83.62	86.73	37.1	35.66	56.23	55.71	52.92	52.81
Meghalaya	145.47	135.62	56.1	52.86	52.19	51.89	67.23	65.78
Mizoram	125.85	113.68	58.67	62.57	65.63	70.53	87.46	90.73
Nagaland	110.31	113.75	15.5	18.92	50.07	48.73	40.76	44.4
Sikkim	67.35	63.4	75.44	74.52	87.07	88.25	90.94	92.22
Tripura	106.61	101.88	65.34	79.51	79.85	85.63	77.52	85.1
Percentage - India	91.76	92.06	78.35	81.41	71.16	73.11	86.25	86.56

Source: Health Management Information System 2020-21 & 2021-22 (An Analytical Report), Ministry of Health & Family Welfare, Government of India [Annexure 2.4 to 2.7 at Page Nos. 60-63]

#### Notes:

- 1. Under the Janani Shishu Suraksha Karyakaram (JSSK), entitlements of free medical care have been put in place for ante-natal and post–natal complications during pregnancy and all sick infants accessing public health institutions for treatment.
- 2. ANC: Ante Natal Care
- 3. ANC registration means registering an antenatal or pregnant woman in a hospital. This ensures regular check-up during pregnancy.
- 4. TT: Tetanus Toxoid / Td: Tetanus & Adult Diphtheria

Tetanus is a disease that can be prevented by vaccines containing tetanus-toxoids. Antibodies produced by maternal immunization that pass to the foetus via the placenta protect the baby in terms of tetanus during the neonatal period.



Table-5.13.20: Immunization of Pregnant Women for TT/Td in the NE States

(In Numbers / in %)

State	Total Number of Pregnant Women registered for ANC	TT2 + TT Booster	Total Number of Pregnant Women registered for ANC	TT2 + TT Booster	% of Pregn fully immunis	ant Women sed for TT/Td
	2020-21	2020-21	2021-22	2021-22	2020-21	2021-22
Arunachal Pradesh	31633	17989	32301	19302	56.9	59.8
Assam	658145	613921	655116	610468	93.3	93.2
Manipur	45641	24151	46451	24533	52.9	52.8
Meghalaya	110762	74470	109015	71715	67.2	65.8
Mizoram	23887	20891	21485	19494	87.5	90.7
Nagaland	33105	13493	34272	15216	40.8	44.4
Sikkim	7880	7166	7678	7081	90.9	92.2
Tripura	63626	49313	60110	51151	77.5	85.1
Total - NE Region	974679	821394	966428	818960	84.3	84.7
Total - India	27591287	23798752	27642485	23924815	86.3	86.6

Source: Health Management Information System 2020-21 & 2021-22 (An Analytical Report), Ministry of Health & Family Welfare, Government of India [Annexure 4.1 at Page No. 132]

### Notes:

- 1. The above is based on the immunization of pregnant women reported in the HMIS during the above years.
- 2. ANC registration means registering an antenatal or pregnant woman in a hospital. This ensures regular check-up during pregnancy.
- 3. TT: Tetanus Toxoid / Td: Tetanus & Adult Diphtheria [Td vaccine is administered to pregnant women for protection against maternal and neo-natal tetanus and diphtheria during pregnancy].

Tetanus is a disease that can be prevented by vaccines containing tetanus-toxoids. Antibodies produced by maternal immunization that pass to the foetus via the placenta protect the baby in terms of tetanus during the neonatal period.





Table-5.13.21: Prevalence of Anaemia amongst Pregnant Women (15-49 years old) in the NE States

(In Percentage)

State	NFHS 2 (1998-99)	NFHS 3 (2005-06)	NFHS 4 (2015-16)	NFHS 5 (2019-21)
Arunachal Pradesh	49.2	51.8	37.8	27.9
Assam	62.3	72	44.8	54.2
Manipur	36.7	36.3	26	32.4
Meghalaya	58.6	58.1	53.3	45
Mizoram	45.7	48.3	27	34
Nagaland	38.2	NA	32.7	22.2
Sikkim	47.6	62.1	23.6	40.7
Tripura	NA	NA	48.2	53.2
Percentage - India	49.7	57.9	50.4	52.2

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the above National Family Health Survey (NFHS) findings [Table-19 at Page No. 38]

- 1. Anaemia is identified with Haemoglobin, with levels of less than 11.0 g/dl (grams per decilitre) marking the pregnant woman as anaemic. Prevalence is adjusted for altitude and smoking habits (if known).
- 2. As NFHS uses the capillary blood for estimation of anaemia, the results of NFHS rounds need not be compared with other surveys, which are being carried out using venous blood.
- 3. NA means 'Not Available'.





Table-5.13.22: Institutional Deliveries, Safe Deliveries & Home Deliveries in the NE States

(As a % of reported Deliveries)

Ctata	Institution	al Delivery	Safe D	elivery	Home Delivery	
State	2020-21	2021-22	2020-21	2021-22	2020-21	2021-22
Arunachal Pradesh	91.28	90.66	95.25	94.97	8.72	9.34
Assam	89.52	91.27	92.75	94.43	10.48	8.73
Manipur	79.90	80.30	92.12	92.25	20.04	19.7
Meghalaya	59.40	57.23	61.35	60.24	40.60	42.77
Mizoram	87.08	87.21	89.37	89.97	12.92	12.79
Nagaland	76.09	78.39	90.39	90.88	23.91	21.61
Sikkim	99.14	99.45	99.51	99.70	0.86	0.55
Tripura	92.42	94.52	92.45	94.63	7.58	5.48
Percentage - India	94.78	95.51	95.74	96.41	5.22	4.49

Source: Health Management Information System 2020-21 & 2021-22 (An Analytical Report), Ministry of Health & Family Welfare, Government of India [Annexure 2.9 at Page No. 65]

#### Notes

- 1. Safe Deliveries include Institutional Deliveries and Home Deliveries by a Skilled Birth Attendant (SBA). In order to be called an SBA, the health workers like Auxiliary Nurse Midwives (ANMs), Lady Health Visitors (LHVs) and Staff Nurses (SNs) must possess technical competence related to routine care provision including identification and immediate management of complications arising during pregnancy and childbirth.
- 2. Home birth is a birth that takes place in a residence rather than in a hospital or a birthing centre. In such case, a large proportion of births are assisted by unskilled persons, which can lead to life threatening obstetric complications during intra partum and immediate post-partum period.

100
80
60
40
20
Arunachal Assam Manipur Meghalaya Mizoram Nagaland Sikkim Tripura
Pradesh

Graph-5.13.5: Safe Deliveries in the NE States (2021-22)

Y-axis gives the percentage of safe deliveries in the NE states during 2021-22



Table-5.13.23: Reported Total Births in the NE States (2021-22)

State	Total Live Births	Still Births	Total Births (Live + Still)
Arunachal Pradesh	20201	242	20443
Assam	565794	11511	577305
Manipur	29262	202	29464
Meghalaya	81463	2323	83786
Mizoram	19122	196	19318
Nagaland	16367	237	16604
Sikkim	6715	90	6805
Tripura	49625	864	50489
Total - NE Region	788549	15665	804214
Total - India	20338078	242584	20580662

Source: Health Management Information System 2020-21 & 2021-22 (An Analytical Report), Ministry of Health & Family Welfare, Government of India [Annexure 3.5 at Page No. 107]

# Notes:

1. The above data is as per the total births reported in the HMIS during 2021-22.





# Table-5.13.24: Sex Ratio at Birth in the NE States (2021-22) (Based on Live Births)

(In Numbers/ Sex Ratio is Females per 1000 males)

State	Live Births - Male	Live Births - Female	Sex Ratio at Birth
Arunachal Pradesh	10379	9822	946
Assam	291467	274327	941
Manipur	15045	14217	945
Meghalaya	41840	39623	947
Mizoram	9592	9530	994
Nagaland	8507	7860	924
Sikkim	3390	3325	981
Tripura	25449	24176	950
Sex Ratio - NE Region	405669	382880	944
Sex Ratio - India	10516844	9821234	934

Source: Health Management Information System 2020-21 & 2021-22 (An Analytical Report), Ministry of Health & Family Welfare, Government of India [Annexure 3.6 at Page No. 108]

## Notes:

- 1. The above data is as per the live births reported in the HMIS during 2021-22.
- 2. Sex Ratio at Birth

Sex Ratio of (Registered) Births is arrived at after deducting figures of delayed Registration of more than 1 year from the respective Total Registered Births.

Sex Ratio of Registered Birth

SRB (Registered) = [Number of Female Births registered during the Year] / [Number of Male Births registered during the Year] x 1000

The delayed Registered Birth events of more than one year have been duly deducted for arriving at the sex ratio of Registered Births.











Table-5.13.25: Status of Early-neonatal, Neonatal, Infant and Child Mortality Rates in the NE States (SRS Statistical Report 2020)

(Per 1000 live births)

State	Early-neonatal Mortality Rate	Neonatal Mortality Rate	Infant Mortality Rate	Child Mortality Rate
	ENMR	NMR	IMR	U5MR
Arunachal Pradesh	NA	NA	21	NA
Assam	14	19	36	40
Manipur	NA	NA	6	NA
Meghalaya	NA	NA	29	NA
Mizoram	NA	NA	3	NA
Nagaland	NA	NA	4	NA
Sikkim	NA	NA	5	NA
Tripura	NA	NA	18	NA
All-India Rate	15	20	28	32

Source: Annual Report 2022-23 of the Ministry of Health & Family Welfare, Government of India – based on data from the Sample Registration System, Statistical Report 2020 brought out by the Office of the Registrar General & Census Commissioner of India [Table-1.4.2 Page Nos. 73-74]

## Notes

# 1. 'NA' means 'Not Available'

2. Sample Registration System (SRS) data for parameters like ENMR, NMR and U5MR are not available for the NE states (except Assam).



Table-5.13.26: Number of Infant Deaths in the NE States with Causes (2021-22)

State	Infant Deaths within 24 hours	Infant Deaths up to 4 weeks due to Asphyxia	Infant Deaths up to 4 weeks due to Sepsis	Infant Deaths up to 4 weeks due to Other Causes		Infant Deaths (1-12 months) due to Pneumonia	Infant Deaths (1-12 months) due to Diarrhoea	Infant Deaths (1-12 months) due to Fever Related	Infant Deaths (1-12 months) due to Measles	Infant Deaths (1-12 months) due to Other Causes	
Arunachal Pradesh	32	13	3	16	32	6	0	3	0	17	26
Assam	1688	2341	723	2897	5961	571	29	308	6	2002	2916
Manipur	25	22	4	27	53	12	2	1	0	19	34
Meghalaya	426	201	159	632	992	560	57	194	0	835	1646
Mizoram	71	21	39	107	167	66	5	21	1	110	203
Nagaland	31	12	17	35	64	7	0	6	0	28	41
Sikkim	16	2	1	12	15	3	0	2	0	44	49
Tripura	188	131	72	152	355	62	1	7	0	347	417
Total - NE Region	2477	2743	1018	3878	7639	1287	94	542	7	3402	5332
Total - India	39019	18894	25804	72941	117639	7983	1185	2672	133	38492	50465

Source: Health Management Information System 2020-21 & 2021-22 (An Analytical Report), Ministry of Health & Family Welfare, Government of India [Annexure 3.9 / Page Nos. 111-112] Notes:

1. The above data is as per the infant deaths reported in the HMIS during 2021-22.



Table-5.13.27: Status of Facility Based New-born Care in the NE States

State	Total Number of SNCUs / NICUs Functional	New-born Stabilization Units (NBSU)	New Born Care Corners
Arunachal Pradesh	7	22	169
Assam	32	165	1086
Manipur	5	10	69
Meghalaya	5	17	148
Mizoram	5	6	124
Nagaland	4	16	156
Sikkim	2	2	44
Tripura	7	16	125
Total – NE Region	67	254	1921
Total-India	979	3139	21483

Source: Annual Report 2022-23 of the Ministry of Health & Family Welfare, Government of India – based on data from the Sample Registration System, Statistical Report 2020 brought out by the Office of the Registrar General & Census Commissioner of India [Table-1.4.4 Page Nos. 77]

- 1. SNCU stands for Special New-born Care Unit; and NICU stands for Neonatal Intensive Care Unit.
- 2. The above are facilities set up in District Hospitals and Medical Colleges to provide round-the-clock services to sick new-borns.





Table-5.13.28: Utilization of New Born Stabilisation Units (NBSUs) in the NE States (2021-22)

State	Total Live Births	Number of Pre-term Newborns	Number of Admissions into NBSUs
Arunachal Pradesh	20201	608	309
Assam	565794	23343	7616
Manipur	29262	316	243
Meghalaya	81463	2616	2549
Mizoram	19122	392	1329
Nagaland	16367	186	3109
Sikkim	6715	83	75
Tripura	49625	1994	2791
Total – NE Region	788549	29538	18021
Total-India	20338078	767513	651097

Source: Health Management Information System 2020-21 & 2021-22 (An Analytical Report), Ministry of Health & Family Welfare, Government of India [Annexure 3.2 at Page No. 104]

- 1. The above data is as per NBSU admissions / Pre-term Newborns reported in the HMIS during 2021-22.
- 2. Pre-term Newborns are those with less than 37 weeks of pregnancy.





Table-5.13.29: Utilization of Special New-born Care Units (SNCUs) in the NE States (2021-22)

State	Total Live Births	Total Admissions into SNCUs	SNCU Admissions referred by ASHA	No. of Deaths occurring at SNCUs
Arunachal Pradesh	20201	969	3	53
Assam	565794	53879	2996	4170
Manipur	29262	505	1	41
Meghalaya	81463	4390	22	266
Mizoram	19122	1688	1	166
Nagaland	16367	1133	0	87
Sikkim	6715	125	0	0
Tripura	49625	4988	108	414
Total – NE Region	788549	67677	3131	5197
Total-India	20338078	1255875	71231	89770

Source: Health Management Information System 2020-21 & 2021-22 (An Analytical Report), Ministry of Health & Family Welfare, Government of India [Annexure 3.3 at Page No. 105]

## Notes:

1. The above data is as per SNCU admissions and deaths reported in the HMIS during 2021-22.





Table-5.13.30: Infant & Child Deaths in the NE States (2021-22)

State	Total Infant Deaths	Total Child Deaths (under 5 years)
Arunachal Pradesh	90	78
Assam	10565	8469
Manipur	112	101
Meghalaya	3064	1923
Mizoram	441	301
Nagaland	136	114
Sikkim	80	39
Tripura	960	599
Total – NE Region	15448	11624
Total - India	207123	182352

Source: Health Management Information System 2020-21 & 2021-22 (An Analytical Report), Ministry of Health & Family Welfare, Government of India [Annexure 3.10 at Page No. 113]

## Notes

1. The above data is as per the above type of deaths reported in the HMIS during 2021-22.

12000
10000
8000
4000
2000
Arunachal Assam Manipur Meghalaya Mizoram Nagaland Sikkim Tripura Pradesh

Total Infant Deaths Total Child Deaths (under 5 years)

Graph-5.13.6: Infant & Child Deaths in the NE States (2021-22)

Y-axis gives the Numbers of Infant & Child Deaths in the NE States during 2021-22



Table-5.13.31: Full Immunization of Children (9-11 months) in the NE States (2020-21 & 2021-22)

(In Numbers / In %)

State	Estimated Number of Children	Children between 9 and 11 months Fully Immunised	Estimated Number of Children	Children between 9 and 11 months Fully Immunised	% of Children	between 9 and Ily Immunised
	2020-21	2020-21	2021-22	2021-22	2020-21	2021-22
Arunachal Pradesh	26310	19361	26310	19685	73.6	74.8
Assam	705940	598627	710420	606444	84.8	85.4
Manipur	44530	33616	42800	31228	75.5	73.0
Meghalaya	69920	78353	74100	70050	112.1	94.5
Mizoram	17820	18746	17650	17101	100.0	96.9
Nagaland	28040	15897	27900	16019	56.7	57.4
Sikkim	10890	7305	11160	7145	67.1	64
Tripura	51240	46307	51250	48754	90.4	95.1
Total – NE Region	954690	818212	961590	816426	85.7	84.9
Total-India	26451880	23389853	26024160	23342778	88.4	89.7

Source: Health Management Information System 2020-21 & 2021-22 (An Analytical Report), Ministry of Health & Family Welfare, Government of India [Annexure 4.2 at Page No. 133]

# Notes:

1. The above data is as per immunization of children (9-11 months) reported in the HMIS during 2020-21 and 2021-22.





Table-5.13.32: Immunization of Children (9-11 months) in the NE States – Measles & Rubella (2020-21 & 2021-22)

(In Numbers / In %)

State	Estimated Number of Children	Child Immunisation (9-11 months)— Measles & Rubella (1st Dose) & Measles (1st dose)	Estimated Number of Children	Child Immunisation (9-11 months)– Measles & Rubella (1st Dose) & Measles (1st dose)	Measles & Ruk	ths) <b>-</b>
	2020-21	2020-21	2021-22	2021-22	2020-21	2021-22
Arunachal Pradesh	26310	19543	26310	19660	74.3	74.7
Assam	705940	607215	710420	607788	86.0	85.6
Manipur	44530	34091	42800	32368	76.6	75.6
Meghalaya	69920	78779	74100	70206	112.7	94.7
Mizoram	17820	18796	17650	17156	105.5	97.2
Nagaland	28040	16942	27900	16593	60.4	59.5
Sikkim	10890	7265	11160	7108	66.7	63.7
Tripura	51240	46474	51250	48927	90.7	95.5
Total - NE Region	954690	829105	961590	819806	86.9	85.3
Total-India	26451880	23600682	26024160	23517038	89.2	90.4

Source: Health Management Information System 2020-21 & 2021-22 (An Analytical Report), Ministry of Health & Family Welfare, Government of India [Annexure 4.3 at Page No. 134]

- 1. The above data is as per immunization of children (9-11 months) reported in the HMIS during 2020-21 and 2021-22 against measles and rubella.
- 2. It gives the numbers and percentage of children who have received 1st dose of Measles and Rubella (MR) and 1st dose of measles.





Table-5.13.33: Child Immunization in the NE States – Oral Polio Vaccine & Hepatitis Vaccine (Birth Doses) (2020-21 & 2021-22)

(In Numbers / In %)

State	Live	Births		unization <b>–</b> irth Dose)			% Child Immunization – OPV 0 (Birth Dose)		% Child Immunization – Hepatitis-B 0 (Birth Dose)	
	2020-21	2020-21	2020-21	2020-21	2020-21	2020-21	2021-22	2021-22	2020-21	2021-22
Arunachal Pradesh	19861	20201	17020	17145	15455	15750	85.7	84.9	77.8	78.0
Assam	571882	565794	366989	381311	339389	352638	64.2	67.4	59.3	62.3
Manipur	31125	29175	20844	20332	21393	20889	67.0	69.7	68.7	71.6
Meghalaya	82636	81463	51878	49065	44334	41627	62.8	60.2	53.6	51.1
Mizoram	20051	19122	14362	13551	14191	13332	71.6	70.9	70.8	69.7
Nagaland	16254	16367	11796	12089	9949	10488	72.6	73.9	61.2	64.1
Sikkim	7205	6715	6511	6288	6091	6012	90.4	93.6	84.5	89.5
Tripura	49479	49625	41122	43618	39570	42388	83.1	87.9	80.0	85.4
Total – NE Region	798493	788462	530522	543399	490372	503124	66.4	68.9	61.4	63.8
Total - India	20196514	20328553	17427847	17706901	14553688	15400988	86.3	87.1	72.1	75.8

Source: Health Management Information System 2020-21 & 2021-22 (An Analytical Report), Ministry of Health & Family Welfare, Government of India [Annexure 4.4 at Page No. 135-136]

- 1. The above data is as per immunization of children reported in the HMIS during 2020-21 and 2021-22 against polio and hepatitis-B.
- 2. It gives the numbers and percentage of children who have received Birth dose of Oral Polio Hepatitis-B vaccines.



Table-5.13.34: Prevalence of Anaemia amongst Children (6-59 months old) in the NE States

(In Percentage)

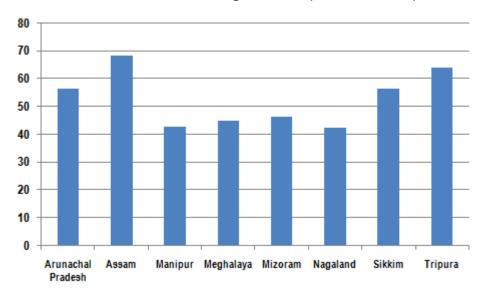
State	NFHS 3 (2005-06)	NFHS 4 (2015-16)	NFHS 5 (2019-21)
Arunachal Pradesh	56.9	54.2	56.6
Assam	69.4	35.7	68.4
Manipur	41.1	23.9	42.8
Meghalaya	63.8	48.0	45.1
Mizoram	43.8	19.3	46.4
Nagaland	NA	26.4	42.7
Sikkim	58.1	55.1	56.4
Tripura	62.9	48.3	64.3
Percentage - India	69.4	58.6	67.1

Source: Reserve Bank of India, 'Handbook of Statistics on Indian States', 2021-22 – based on data from the above National Family Health Survey (NFHS) findings [Table-18 at Page No. 37]

#### Notes:

- **1.** Anaemia is identified with Haemoglobin, with levels of less than 11.0 g/dl (grams per decilitre) marking the child as anaemic. Prevalence is adjusted for altitude.
- 2. As NFHS uses the capillary blood for estimation of anaemia, the results of NFHS rounds need not be compared with other surveys, which are being carried out using venous blood.
- 3. NA means 'Not Available'.

Graph-5.13.7: Prevalence of Anaemia amongst Children (6-59 months old) in the NE States



Y-axis gives the Percentage of Anaemic Children (6-59 months old) in the NE States as per NFHS-5



# Table-5.13.35: Nutritional Status of Children in the NE States (Aged below 5 years)

(In Percentage)

State		en who are St			en who are Wa			who are Unde	0	Children who are Overweight <sup>2</sup>		
	(	Height for Age	<u>;</u> )	(Weight for Age)			(Weight for Age)			(Weight for Height)		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Arunachal Pradesh	28.4	27.9	28.0	10.1	13.6	13.1	13.1	15.8	15.4	9.6	9.7	9.7
Assam	29.8	36.0	35.3	19.1	22.1	21.7	25.9	33.6	32.8	8.0	4.5	4.9
Manipur	20.1	25.1	23.4	9.8	10.0	9.9	12.9	13.5	13.3	2.9	3.6	3.4
Meghalaya	35.1	48.2	46.5	13.0	12.0	12.1	22.2	27.3	26.6	4.2	4.0	4.0
Mizoram	25.5	31.9	28.9	8.3	11.2	9.8	9.3	15.8	12.7	12.1	8.1	10.0
Nagaland	27.1	34.7	32.7	21.7	18.2	19.1	24.5	27.7	26.9	4.8	4.9	4.9
Sikkim	15.1	25.6	22.3	13.2	13.9	13.7	9.0	14.9	13.1	3.5	12.2	9.6
Tripura	27.1	33.9	32.3	17.1	18.6	18.2	16.4	28.3	25.6	9.3	7.8	8.2
All-India	30.1	37.3	35.5	18.5	19.5	19.3	27.3	33.8	32.1	4.2	3.2	3.4

Source: National Family Health Survey-5 (2019-21), Ministry of Health & Family Welfare, Government of India [Rows 81-82, and 84-85 (83 not included) in State Factsheets (6th Page) / India Fact Sheet is located on the 25th Page (out of 116)]

- 1. Below 2 standard deviations, based on the WHO standard.
- 2. Above + 2 standard deviations, based on the WHO standard.
- 3. The above findings are based on the National Family Health Survey-5<sup>th</sup> Round, which was completed in the period 2019-21. These report the percentage of the sample covered by the above survey in the state.



# Table-5.13.36: Nutritional Status of Women in the NE States (Aged 15-49 years)

(In Percentage)

Ctoto	Women wh	nose BMI is below	Normal <sup>1 &amp; 2</sup>	Women wh	nose BMI is above	Normal <sup>1 &amp; 2</sup>	Women with High Risk Waist to Hip Ratio <sup>3</sup>			
State	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	
Arunachal Pradesh	5.6	5.7	5.7	28.9	22.9	23.9	66.6	69.4	68.9	
Assam	13.9	18.3	17.6	23.8	13.6	15.2	66.6	67.3	67.2	
Manipur	6.1	7.9	7.2	39.0	31.0	34.1	69.7	63.1	65.7	
Meghalaya	10.2	11.0	10.8	17.9	9.7	11.5	55.7	61.9	60.6	
Mizoram	4.2	6.8	5.3	29.7	16.9	24.2	47.8	47.3	47.6	
Nagaland	11.6	10.8	11.1	17.1	13.0	14.4	59.6	63.4	62.0	
Sikkim	6.1	5.6	5.8	41.0	30.8	34.7	71.9	78.0	75.6	
Tripura	14.6	16.9	16.2	29.2	18.4	21.5	67.7	60.4	62.5	
All-India	13.2	21.2	18.7	33.2	19.7	24.0	59.9	55.2	56.7	

Source: National Family Health Survey-5 (2019-21), Ministry of Health & Family Welfare, Government of India [Rows 86, 88 & 90 in State Factsheets (6th Page) / India Fact Sheet is located on the 25th Page (out of 116)]

- 1. Excludes pregnant women and women with a birth in the preceding 2 months.
- 2. Normal BMI for women is 18.5 kg per m<sup>2</sup> (weight in kg divided by square of height in m).
- 3. Waist to Hip ratio of over 0.85 (for women).
- 4. The above findings are based on the National Family Health Survey-5<sup>th</sup> Round, which was completed in the period 2019-21. These report the percentage of the sample covered by the above survey in the state.



Table-5.13.37: Nutritional Status of Men in the NE States (Aged 15-49 years)

State	Men wh	nose BMI is below	Normal <sup>1</sup>	Men wh	ose BMI is above	Normal <sup>1</sup>	Men with High Risk Waist to Hip Ratio <sup>3</sup>			
State	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	
Arunachal Pradesh	6.4	4.6	4.9	32.4	26.6	27.6	47.9	45.7	46.1	
Assam	11.3	13.8	13.4	25.4	14.5	16.2	54.2	43.2	44.9	
Manipur	7.6	8.3	8.0	33.4	27.9	30.3	53.4	45.2	48.7	
Meghalaya	8.6	9.1	9.0	30.2	10.6	13.9	28.5	24.0	24.7	
Mizoram	2.6	8.0	5.1	38.3	24.2	31.9	30.1	25.6	28.1	
Nagaland	7.4	7.5	7.5	31.0	19.8	23.9	32.7	27.5	29.4	
Sikkim	5.8	4.4	4.9	40.1	33.9	36.3	36.6	69.3	56.7	
Tripura	13.2	12.1	12.4	28.3	21.4	23.4	46.3	40.2	42.0	
All-India	13.0	17.8	16.2	29.8	19.3	22.9	50.1	46.4	47.7	

Source: National Family Health Survey-5 (2019-21), Ministry of Health & Family Welfare, Government of India [Rows 87, 89 & 91 in State Factsheets (6<sup>th</sup> Page) / India fact Sheet is located on the 25<sup>th</sup> Page (out of 116)]

- 1. Normal BMI for men is 25 kg per m² (weight in kg divided by square of height in m).
- 2. Waist to Hip ratio of over 0.90 (for men).
- 3. The above findings are based on the National Family Health Survey-5<sup>th</sup> Round, which was completed in the period 2019-21. These report the percentage of the sample covered by the above survey in the state.



Table-5.13.38: Prevalence of Anaemia amongst Adults in the NE States

		Prevale	nce of Anaen	nia among Wo	men <sup>1 &amp; 2</sup>			Prev	alence of Ana	aemia among	Men <sup>1</sup>		
State	А	Age Group 15-49			Age Group 15-19			Age Group 15-49			Age Group 15-19		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	
Arunachal Pradesh	36.5	41.0	40.3	43.5	49.6	48.5	21.4	21.5	21.4	21.9	25.6	24.9	
Assam	65.2	66.0	65.9	67.4	67.0	67.0	27.6	37.5	36.0	34.6	40.4	39.6	
Manipur	30.5	28.8	29.4	30.4	26.7	27.9	5.3	6.5	6.0	(8.5)	7.4	7.8	
Meghalaya	51.8	54.3	53.8	44.6	54.6	52.5	16.1	27.4	25.5	(7.4)	35.0	30.1	
Mizoram	30.8	39.9	34.8	30.3	40.8	34.9	13.3	18.3	15.6	23.8	18.9	21.5	
Nagaland	27.3	29.8	28.9	34.0	33.9	33.9	10.8	9.5	10.0	(15.5)	21.6	19.6	
Sikkim	42.4	41.9	42.1	(53.0)	43.7	46.7	15.0	21.0	18.7	*	(23.1)	17.6	
Tripura	66.1	67.6	67.2	61.7	69.8	67.9	41.7	34.9	36.9	*	24.7	27.2	
All-India	53.8	58.5	57.0	56.5	60.2	59.1	20.4	27.4	25.0	25.0	33.9	31.1	

Source: National Family Health Survey-5 (2019-21), Ministry of Health & Family Welfare, Government of India [Rows 95-98 in State Factsheets (6<sup>th</sup> Page) / India fact Sheet is located on the 25<sup>th</sup> Page (out of 116)]

- 1. Anaemia is identified with Haemoglobin, with its levels for marking the individual as anaemic being as follows: (a) less than 11.0 g/dl (grams per decilitre) for pregnant women; (b) less than 12.0 g/dl (grams per decilitre) for non-pregnant women; and (c) less than 13.0 g/dl (grams per decilitre) for men. Prevalence is adjusted for altitude and smoking habits (if known).
  - As NFHS uses the capillary blood for estimation of anaemia, the results of NFHS rounds need not be compared with other surveys, which are being carried out using venous blood
- 2. Including pregnant women and non-women.
- 3. The above findings are based on the National Family Health Survey-5th Round, which was completed in the period 2019-21. These report the percentage of the sample covered by the above survey in the state
- 4. Figures within brackets () refer to un-weighted cases in age group 25-49
- 5. "\*' is used when Percentage not shown; based on fewer than 25 un-weighted cases.



# 5.14. Water Supply & Sanitation

The provision of safe drinking water and the availability of proper sanitation facilities are the twin facets of a developed society. These are also closely entwined with the good-health of the population, since unsafe water and improper sanitation can lead to the outbreak of many diseases, and place a huge burden upon the healthcare system. Water supply and sanitation including solid waste management is a State subject; and the State Governments and Union Territories, along with the Urban Local Bodies, are responsible for providing the services through planning, design, implementation, operation and maintenance. The Government of India provides support to the states for water supply and sanitation in the rural and urban areas.

The Department of Drinking Water and Sanitation of the Government of India is the nodal Department for overall policy, planning, funding and coordination of two flagship programmes of the Government of India namely the Swachh Bharat Mission (Grameen) for rural sanitation and the Jal Jeevan Mission (JJM) for rural drinking water supply. Similarly, the Ministry of Housing and Urban Affairs is responsible for formulation of broad policies and programmes and assists State Governments and Union Territories in providing technical guidelines and financial support with respect to urban water supply and sanitation including municipal solid waste sectors.

The Swachh Bharat Mission (Grameen) was launched on 2<sup>nd</sup> October, 2014 with the aim of ridding India of open defecation and achieving an Open Defecation Free (ODF) status of the country by 2<sup>nd</sup> October, 2019, as a fitting tribute to Mahatma Gandhi on his 150<sup>th</sup> birth anniversary. Having achieved the ODF status of the nation, Government of India approved the continuation of SBM (G) on 19<sup>th</sup> February 2020. The Phase-II of SBM (G), which will operate up to 2024-25, focuses upon creating Open Defecation Free (ODF) Plus villages that include sustainability of ODF status and Solid and Liquid Waste Management (SLWM) in the rural areas of the country. Furthermore, several measures have been taken under the Jal Jeevan Mission (JJM) to ensure that every rural household of the country has drinking water supply in adequate quantities and to the prescribed quality. This is envisaged to be done on a regular and long-term basis at affordable service delivery charges leading to improvement in the living standards of rural communities.

The second phase of Swachh Bharat Mission - Urban (SBM-U) is being implemented by the Ministry of Housing and Urban Affairs since 1<sup>st</sup> October 2021 for 5 years. The construction of toilets, used water management, and SWM are eligible components for funding under the Mission. In addition, the second phase of AMRUT 2.0 was launched by the Hon'ble Prime Minister of India on 1<sup>st</sup> October 2021. This mission will be in force for 5 years till 2026. The major components of the Mission are: (i) Universal coverage of water supply; (ii) Sewerage, septage management, and recycling and reuse of treated used water; and (iii) Rejuvenation of water bodies (including urban wetland) and creation of green spaces. One of the important components is to provide universal piped water supply with household water tap connection. Projects for water supply on a '24x7' basis, along with 'drink from tap' facility may be taken up in 500 AMRUT cities.

The following pages give the status of water supply and sanitation in the rural and urban areas of the NE states, based on the data available in the public domain from Government sources.



Table-5.14.1: Coverage of Rural Households with Tap Water Supply in the NE States (As on 31<sup>st</sup> December 2022)

(In Lakh / %)

State	Total Rural Households (in Lakh)	Total Households Connections reported on 31.12.2022 (in Lakh)	Rural Households Connected (in %)
Arunachal Pradesh	2.29	1.57	68.55
Assam	65.70	27.98	42.60
Manipur	4.52	3.41	75.48
Meghalaya	6.30	2.81	44.50
Mizoram	1.34	0.97	72.43
Nagaland	3.77	2.18	57.86
Sikkim	1.32	0.98	74.50
Tripura	7.42	4.26	57.36
Total - NE Region	92.66	44.16	47.65
Total - India	19,36.31	10,86.31	56.10

Source: 'Annual Report 2022-23', Department of Drinking Water & Sanitation, Ministry of Jal Shakti, Government of India [Source: Page Nos. 38-39]

#### Notes

#### 1. Household

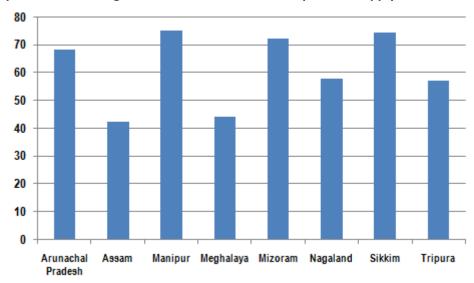
A household is usually a group of persons who normally live together and take their meals from a common kitchen / common cooking unless the exigencies of work prevent any of them from doing so.

2. Urban areas are: (a) All places with a municipality, corporation, cantonment board or notified town area committee, etc. or (b) All other places satisfying the following three criteria simultaneously: A minimum population of 5,000— At least 75% of male working population engaged in non-agricultural pursuits— A population density of at least 400 per sq. km.

The first category of urban units is known as Statutory Towns while the second category of towns is known as Census Towns, identified based on last population Census.

Rural Area: All areas, which are not identified as urban, are rural areas. The basic unit for rural areas is revenue village.

Graph-5.14.1: Coverage of Rural Households with Tap Water Supply in the NE States



Y-axis gives the Percentage of Rural Households connected with Tap Water Supply in the NE States



Table-5.14.2: Physical Progress of National Water Quality Sub-Mission in the NE States (As on 31<sup>st</sup> December 2022)

(In Lakh / %)

State	Nos. of Targeted Habitations (On 18.08.2016)	Nos. of Habitations Covered	Nos. of Habitations Covered with State Schemes or Quality Improved	Nos. of Remaining Habitations
Arunachal Pradesh	NA	NA	NA	NA
Assam	3,881	2,607	1,274	NA
Manipur	NA	NA	NA	NA
Meghalaya	NA	NA	NA	NA
Mizoram	NA	NA	NA	NA
Nagaland	NA	NA	NA	NA
Sikkim	NA	NA	NA	NA
Tripura	NA	NA	NA	NA
Total - NE Region	3881	2607	1274	0
Total - India	27,544	19,249	8,269	26

Source: 'Annual Report 2022-23', Department of Drinking Water & Sanitation, Ministry of Jal Shakti, Government of India [Page No. 78]

## Notes

The Department had launched National Water Quality Sub-Mission (NWQSM) on 22nd March, 2017 as a part of National Rural Drinking Water Programme (NRDWP), which was subsequently subsumed under Jal Jeevan Mission, to provide safe drinking water to 27,544 Arsenic/ Fluoride affected rural habitations in the country. The NWQSM has been closed on 31st March, 2022.



Jal Jeevan Mission has brought tap water to households living in remote villages in Arunachal Pradesh



Table-5.14.3: Open Defecation Free Plus declared Villages in the NE States (As on 31<sup>st</sup> December 2022)

(In numbers)

State	Total Villages		ODF Plus	Villages	
State	Total Villages	Aspiring	Rising	Model	Total
Arunachal Pradesh	5301	28	19	42	89
Assam	25165	328	13	5	346
Manipur	2491	4	0	13	17
Meghalaya	5766	80	222	234	536
Mizoram	628	26	35	157	218
Nagaland	1326	68	72	167	307
Sikkim	403	17	26	159	202
Tripura	1175	79	15	0	94
Total - NE Region	42255	630	402	777	1809
Total - India	596015	94879	20646	43309	158834

Source: 'Annual Report 2022-23', Department of Drinking Water & Sanitation, Ministry of Jal Shakti, Government of India based on data from Integrated Mission Information System of Swachh Bharat Mission (Grameen) [Page 18 under 2.2.2 (c) / Annexure –II at Page No. 105]

- 1. Some villages were under Directory update on IMIS.
- 2. Open Defecation Free (ODF) Plus villages are those which include the sustainability of their ODF status and have Solid and Liquid Waste Management (SLWM).
- 3. Criteria for Aspiring, Rising and Model ODF Plus Villages are available at Page No. 7 of the 'Annual Report 2022-23', Department of Drinking Water & Sanitation, Ministry of Jal Shakti, Government of India.



Rangsapara - an ODF Plus Model Village in Assam



Table-5.14.4: Villages covered with Solid & Liquid Waste Management in the NE States (As on 31<sup>st</sup> December 2022)

(In numbers)

Ctato	Total Villagas	Coverage	of Villages
State	Total Villages	Solid Waste Management	Solid Waste Management
Arunachal Pradesh	5301	155	159
Assam	25165	320	97
Manipur	2491	17	23
Meghalaya	5766	732	642
Mizoram	628	258	222
Nagaland	1326	407	372
Sikkim	403	243	231
Tripura	1175	38	80
Total - NE Region	42255	2170	1826
Total - India	596015	130426	121548

Source: 'Annual Report 2022-23', Department of Drinking Water & Sanitation, Ministry of Jal Shakti, Government of India based on data from Integrated Mission Information System of Swachh Bharat Mission (Grameen) [: Page 18 under 2.2.2 (d) / Annexure –III at Page No. 106]

## Notes

Some villages were under Directory update on IMIS



Village cleanliness drive in Mizoram



Table-5.14.5: Principal Source of Drinking Water in Urban Households in the NE States

(As a Percent)

State	Bottled	Piped	Piped	Piped	Public	Tube	Hand	W	ell	Tanker	Truck	Spi	ing	Rain	Surfac	e Water	Other
	Water	Water	Water	Water into	Tap or	Well	Pump	Protected	Un-	Public	Private	Protected		Water	Tank /	Other	
		into		Neighbour	Stand				protected				protected	Collected	Pond	Surface	
		Dwelling	or Plot		Pipe											Water	
Arunachal Pradesh	0.0	36.4	28.4	2.1	3.9	16.9	4.7	6.4	0.3	0.2	0.0	0.0	0.2	0.0	0.0	0.8	0.0
Assam	0.3	5.3	4.5	0.3	1.7	32.8	39.4	6.8	4.7	0.0	0.0	0.2	0.4	0.1	2.6	1.0	0.0
Manipur	1.7	5.8	28.1	2.0	10.9	1.2	2.4	2.6	0.0	0.3	8.9	11.0	0.6	0.0	4.6	5.0	14.9
Meghalaya	0.0	14.0	8.7	0.9	21.3	3.7	2.4	14.4	1.2	0.1	1.5	24.0	4.4	0.0	2.3	1.3	0.0
Mizoram	0.0	61.8	1.2	0.1	28.3	0.0	0.0	0.0	0.0	0.0	0.1	3.3	2.5	1.4	0.5	0.6	0.1
Nagaland	0.0	15.7	14.9	1.3	9.1	4.6	2.9	17.3	1.5	0.0	0.0	13.6	1.3	5.1	12.2	0.5	0.0
Sikkim	0.0	70.5	14.9	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	13.1	0.0	0.0	0.0	0.0	0.0
Tripura	0.1	6.4	14.8	1.3	14.9	17.0	28.9	4.3	10.9	0.1	0.0	0.0	0.5	0.0	0.5	0.3	0.0
India	6.8	21.4	12.3	1.0	9.2	10.7	30.5	2.5	3.7	0.3	0.4	0.2	0.2	0.2	0.3	0.2	0.2

**Source:** 'NSS Report No. 584: Drinking Water, Sanitation, Hygiene and Housing Conditions in India', National Statistical Office, Ministry of Statistics & Programme Implementation, Government of India – based on the NSS 76th Round (July 2018 – December 2018) [Table-3.1 at Page No 67]

- 1. A group of persons who normally lived together and took food from a common kitchen constitutes a household. Dwelling unit is defined as the accommodation availed of by a household for its residential purpose.
- 2. Bottled drinking water includes drinking water packaged in bottles, jars, pouches, and similar containers.
- 3. Piped water into dwelling and piped water to yard/plot: Piped water into dwelling was defined as a piped water connection (from any source like corporation, municipality, other local authorities or any other public or private agency) to one or more taps to the dwelling unit (e.g., in the kitchen). Piped water to yard/plot was defined as a piped water connection to a tap placed outside the dwelling unit of the household but in the yard or plot within the household premises.
- 4. Piped water from neighbour is an arrangement was made by the household to avail drinking water from the piped water of the neighbour household supplied by any source.
- 5. Public tap or standpipe is a water point for community use in which water is supplied through pipe by corporation/municipality or other local authorities or any private or public agency.
- 6. Tube well and hand pump are bore well used for extracting ground water for drinking purpose. A well is considered as protected if it has generally some protective measures to lower the risk of contamination.
- 7. 'Public tanker-truck' includes such tanker trucks operated by any government agencies (central/state/local bodies etc.) while 'tanker-trucks' operated by private agencies (NGOs, trusts etc.) are considered as 'private tanker-truck



Table-5.14.6: Distance to the Principal Source of Drinking Water for Urban Households in the NE States

(As a Percent)

		Outside		Outside Pr	remises at a [	Distance of	
State	Within Dwelling	Dwelling but within Premises	Less than 0.2 km	0.2-0.5 km	0.5 km-1.0 km	1.0 km-1.5 km	1.5 km or more
Arunachal Pradesh	80.4	17.6	1.6	0.4	0.0	0.0	0.0
Assam	46.2	49.4	2.9	1.2	0.0	0.1	0.1
Manipur	11.3	47.7	27.8	7.7	0.8	2.1	2.5
Meghalaya	46.7	20.3	21.3	11.2	0.4	0.0	0.0
Mizoram	95.2	1.0	3.8	0.0	0.0	0.0	0.0
Nagaland	31.1	60.4	6.4	1.6	0.2	0.0	0.3
Sikkim	82.1	10.6	0.0	0.0	1.6	2.9	2.8
Tripura	22.7	66.0	10.5	0.7	0.1	0.0	0.0
India	56.1	24.6	13.8	3.2	1.2	0.5	0.6

**Source:** 'NSS Report No. 584: Drinking Water, Sanitation, Hygiene and Housing Conditions in India', National statistical Office, Ministry of Statistics & Programme Implementation, Government of India – based on the NSS 76<sup>th</sup> Round (July 2018 – December 2018) [Table-4.1 at Page No 70]

#### Notes

1. A group of persons who normally lived together and took food from a common kitchen constitutes a household. Dwelling unit is defined as the accommodation availed of by a household for its residential purpose.



Stand-post outside dwelling unit in Meghalaya



Table-5.14.7: Access to Toilets for Urban Households in the NE States

(As a Percent)

State	Exclusive Use of the Household	Common Use of the Households in the Building	Public or Community Toilet without payment	Public or Community Toilet with payment	Others	No Toilet
Arunachal Pradesh	85.6	13.5	0.0	0.0	0.9	0.0
Assam	86.4	12.5	0.0	0.0	0.4	0.6
Manipur	83.5	15.4	0.0	0.0	1.1	0.0
Meghalaya	78.6	21.2	0.0	0.0	0.2	0.0
Mizoram	99.1	0.6	0.0	0.0	0.3	0.0
Nagaland	82.8	17.0	0.3	0.0	0.0	0.0
Sikkim	84.1	15.9	0.0	0.0	0.0	0.0
Tripura	83.6	15.2	0.4	0.1	0.7	0.1
India	77.6	15.6	1.5	1.2	0.4	3.8

**Source:** 'NSS Report No. 584: Drinking Water, Sanitation, Hygiene and Housing Conditions in India', National statistical Office, Ministry of Statistics & Programme Implementation, Government of India – based on the NSS 76<sup>th</sup> Round (July 2018 – December 2018) [Table-12.1 at Page No 100]

Notes

Concepts and Definitions related to 'Household' and 'Urban Area' have been covered previously.



Modern public toilets can be operated on a payment basis in the urban areas



Table-5.14.8: Sewage Generation in the NE States (Class-I Cities & Class-II Towns)

		Class-I Cities			Class-II Towns	
State	No. of Class-I Cities	Sewage Generation (in MLD)	Sewage Treatment Facility (in MLD)	No. of Class-I Cities	Sewage Generation (in MLD)	Sewage Treatment Facility (in MLD)
Arunachal Pradesh	-	-	-	-	-	-
Assam	13	386.60	-	8	6.46	-
Manipur	1	26.74	-	-	-	-
Meghalaya	2	32.09	-	1	11.25	-
Mizoram	1	5.71	-	-	-	-
Nagaland	2	14.98	-	1	1.36	-
Sikkim	=	ī	-	-	-	ı
Tripura	1	24.00	-	-	-	-
Total - NE Region	20	490.12	0	10	19.07	0
Total - India	908	38,254.82	11,787.38	410	2,696.70	233.7

Source: 'EnviStats; Volume-I Environmental Statistics 2023', National Statistical Office, Ministry of Statistics & Programme Implementation, Government of India based on data from Central Pollution Control Board, Ministry of Environment, Forest & Climate Change

- 1. MLD: Million Litres per Day
- 2. '---': Not Available / Not applicable / Nil
- 3. The above data pertains to the year 2015



Modern sewage treatment plants are needed in the NE Region



Table-5.14.9: Municipal Solid Waste Generation in the NE States

State	Quantity Generated (TPD)	Collected (TPD)	Treated (TPD)	Land-filled (TPD)	Nos. of Compost Plants	Nos. of Landfills
Arunachal Pradesh	236.5	202.1	0.0	27.5	-	1
Assam	1199.0	1091.0	41.4	0.0	4	0
Manipur	282.3	190.3	108.6	81.7	7	5
Meghalaya	107.0	93.0	9.6	83.4	1	0
Mizoram	345.5	275.9	269.7	0.0	1	1
Nagaland	330.5	285.5	122.0	7.5	1	1
Sikkim	71.9	71.9	20.4	51.6	3	3
Tripura	333.9	317.7	214.1	12.9	1	4
Total - NE Region	2906.6	2527.4	785.8	264.6	18	15
Total - India	160038.9	152749.4	79956.3	29427.2	3121	341

Source: 'EnviStats; Volume-I Environmental Statistics 2023', National Statistical Office, Ministry of Statistics & Programme Implementation, Government of India based on data from Central Pollution Control Board, Ministry of Environment, Forest & Climate Change (as per Annual Report 2020-21 of Solid Waste Management, received by the 35 States/UTs.)

- 1. TPD: Metric Tons per Day
- 2. The above data pertains to the year 2020-21.



Solid waste management has been modernised in some cities of the NE Region



# 5.15. Rural Development

The NE Region of India is marked by significant linguistic, ethnic and cultural diversity, not only among the people of different states but also within each state in the region. This is an important feature that needs to be taken into account in designing policies and programmes for the region. Each of the states has its own history; and the tribal groups in the states have their own culture, tradition and governance systems. The region is a treasure house of exceptional natural beauty, floral and faunal biodiversity and abundant mineral, water and forests resources. The key to the holistic development of this diverse region lies in the development of its rural areas. As Mahatma Gandhi had remarked, 'India lives in her villages'. He was convinced that if villages perish, India will perish too. He insisted on village industries, primary education through handicrafts, eradication of untouchability and communal harmony.

Keeping the vision of the Father of the Nation in mind, the Government has been focussing upon the rural development of the NE Region, along with the rest of India. Emphasis has been placed upon rural employment for creation of village level assets, rural livelihoods based on farm and non-farm based options, rural all-weather road based connectivity, rural housing, skill development etc. Other aspects like the provision of electricity to all villages and gas connections to rural households had been addressed. In the NE states, the Government has been making special provisions and extending special support to the states to address challenges in the sphere of rural development.

The Ministry of Development of North Eastern Region and NEC have been supporting the efforts to strengthen rural livelihoods. The North Eastern Region Community Resource Management Society (NERCRMS) is a registered society under the aegis of North Eastern Council, Ministry of Development of North Eastern Region. The society is dedicated towards the transformation of far flung rural areas of region through different livelihood initiatives. The society, so far has covered four states here, viz. Arunachal Pradesh, Assam, Manipur, and Meghalaya.

The following pages give some data on the present status of many aspects of rural development covered by the Ministry of Rural Development, Government of India with the close cooperation of the State Governments of the NE Region.





Table-5.15.1: Progress of MG-NREGA for Rural Employment in the NE States (Status as on 31st December 2022)

State	Cumulative	No. of Hous	eholds issued	d Job Cards	Emp	loyment Prov	vided
	SC	ST	Other	Total	Households	Persons	Total
							Person- days
Arunachal Pradesh	35	288287	16386	304708	236131	246766	8451466
Assam	317737	885001	4928700	6131438	20053376	3033228	63511780
Manipur	15639	257507	321033	594179	219546	228916	3360424
Meghalaya	4096	596253	46300	646649	415185	521137	16251739
Mizoram	41	212169	1958	214168	214683	217533	15238402
Nagaland	0	450560	5863	456423	418853	485697	18046217
Sikkim	4743	35850	46706	87299	55639	63968	2345185
Tripura	113629	279632	280670	673931	538403	769905	27137677
Total - NE Region	455920	3005259	5647616	9108795	22151816	5567150	154342890
Total – India	32647374	20949441	113819376	167416194	55411463	77303389	2246772740

Source: Annual Report 2022-23 of the Ministry of Rural Development, Government of India [Annexure-III at Page No 379]

## Notes

1. MG-NREGA stands for Mahatma Gandhi National Rural Employment Guarantee Act, which had the mandate to provide at least 100 days of guaranteed wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work.

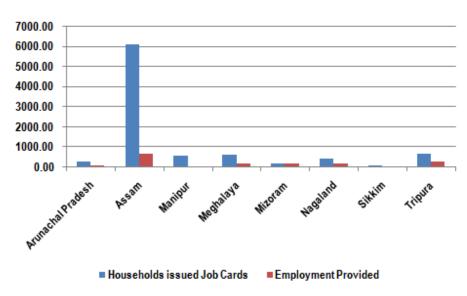


Women job-card holders obtain engagement under MG-NREGA

#### The NEC Yearbook 2024

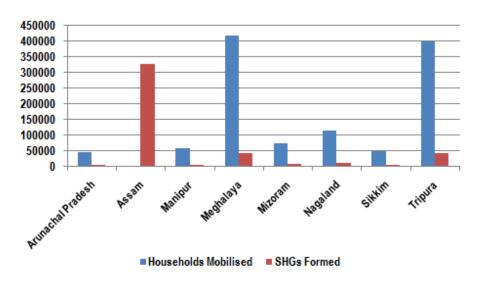
NORTH EASTERN COUNCIL GOVT OF INDIA

Graph-5.15.1 Progress of MG-NREGA for Rural Employment in the NE States (as in December 2022)



Y-axis gives the Numbers of Households provided with Job Cards (in Thousands) and the Employment provided (in Lakh of person-days)

Graph-5.15.2: Progress of DAY-NRLM in the NE States (as in December 2022)



Y-axis gives the Numbers of Households Mobilised and SHGs formed as on  $31^{\rm st}$  March 2022

Note: 3628224 Households have been mobilised in Assam under DAY-NRLM. These have not been indicated in the above graph, as the scale gets lopsided.



Table-5.15.2: Progress of DAY-NRLM in the NE States (Till December 2022)

(In Numbers)

State	Districts	Intensive Blocks	Households Mobilised	SHGs Formed	Village Organizations	Cluster level Federations
Arunachal Pradesh	25	85	45547	5533	526	15
Assam	35	219	3628224	327247	18789	733
Manipur	16	55	59441	5574	340	12
Meghalaya	11	46	420276	43161	4407	47
Mizoram	11	26	73765	9054	661	40
Nagaland	11	74	114480	13196	1128	53
Sikkim	6	33	50779	5417	483	33
Tripura	8	58	399872	44431	1842	82
Total - NE Region	123	596	4792384	453613	28176	1015
Total – India	723	6893	87534005	8124006	473938	30862

Source: Annual Report 2022-23 of the Ministry of Rural Development, Government of India [Annexure-VIII at Page No 384] Notes:

1. DAY-NRLM stands for Deendayal Antodaya Yojana – National Rural Livelihoods Mission, which seeks to alleviate rural poverty through building sustainable community institutions of the poor. It aims to mobilize 10 crore households into SHGs and link them to sustainable livelihoods opportunities by building their skills and enabling them to access formal sources of finance, entitlements and services from both public and private sectors.



**DAY-NRLM** meeting in Manipur



Table-5.15.3: Connectivity Status of Eligible Unconnected Habitations in the NE States (As on 31st December 2022)

(In Numbers)

State	Total Eligible Unconnected Habitations	Sanctioned under PMGSY	Connected Habitations through PMGSY
Arunachal Pradesh	642	641	592
Assam	15,321	13,721	13,704
Manipur	667	652	616
Meghalaya	771	602	486
Mizoram	256	232	231
Nagaland	116	109	98
Sikkim	359	350	346
Tripura	2,071	2,005	1,962
Total - NE Region	20,203	18,312	18,035
Total – India	1,78,184	1,57,283	1,56,374

Source: Annual Report 2022-23 of the Ministry of Rural Development, Government of India [Annexure-XIII at Page No 389]

- 1. PMGSY (PM Gram Sadak Yojana) aims to assist the States in providing all-weather road connectivity to eligible unconnected habitations. Such eligible habitations are those with a population of 500 or more persons in plain areas, and 250 or more persons in NE states, other mountainous or hilly states, desert states, tribal areas and other backward areas, provided that these habitations lack all-weather connectivity.
- 2. In India, 16086 habitations have been provided connectivity by states out of their own resources, and 4815 habitations have either been dropped or been found not to be feasible for connectivity.



**PMGSY Road in Meghalaya** 



Table-5.15.4: Status of Implementation of PMGSY-I in the NE States (Status as on 31st December 2022)

(Road length in km / Roads & Bridges in Numbers)

		Sanctioned			Completed			Balance	
State	Number of Roads	Road Length	Number of Bridges	Number of Roads	Road Length	Number of Bridges	Number of Roads	Road Length	Number of Bridges
Arunachal Pradesh	1308	13833	230	1183	12650	166	125	1152	64
Assam	8365	26943	1333	8257	26719	1254	108	83	79
Manipur	1858	11348	208	1665	10288	119	193	1053	89
Meghalaya	1080	4265	100	923	3668	68	157	578	32
Mizoram	345	4288	0	296	4178	0	49	94	0
Nagaland	343	4154	48	321	4069	41	22	86	7
Sikkim	961	4795	99	868	4468	50	93	267	49
Tripura	1361	4931	63	1310	4572	52	51	188	11
Total - NE Region	15621	74557	2081	14823	70612	1750	798	3501	331
Total – India	164721	645394	7486	162078	621033	6618	2643	9066	868

Source: Annual Report 2022-23 of the Ministry of Rural Development, Government of India [Annexure-XV at Page No 391]

- 1. PMGSY (PM Gram Sadak Yojana) seeks to provide all-weather connectivity to habitations with a population of 500 or more persons in plain areas, and 250 or more persons in NE states, other mountainous or hilly states, desert states, tribal areas and other backward areas.
- 2. In India, 16086 habitations have been provided connectivity by states out of their own resources, and 4815 habitations have either been dropped or been found not to be feasible for connectivity.



Table-5.15.5: Status of Implementation of PMGSY-II in the NE States (Status as on 31st December 2022)

(Road length in km / Roads & Bridges in Numbers)

		Sanctioned			Completed			Balance	
State	Number of Roads	Road Length	Number of Bridges	Number of Roads	Road Length	Number of Bridges	Number of Roads	Road Length	Number of Bridges
Arunachal Pradesh	80	551	7	75	509	7	5	38	0
Assam	250	1721	65	220	1714	47	30	7	18
Manipur	55	325	3	30	240	1	25	85	2
Meghalaya	94	490	12	57	385	1	37	102	11
Mizoram	6	194	0	1	63	0	5	131	0
Nagaland	13	228	5	2	89	4	11	139	1
Sikkim	34	121	0	20	110	0	14	11	0
Tripura	42	307	1	23	218	0	19	87	1
Total - NE Region	574	3937	93	428	3088	60	146	600	33
Total – India	6695	49873	763	6340	48347	675	355	1017	88

Source: Annual Report 2022-23 of the Ministry of Rural Development, Government of India [Annexure-XVI at Page No 392]

## Notes

1. As the PMGSY programme unfolded, a need was felt to consolidate the existing Rural Road network to improve its efficiency, not only as a provider of transportation services, but also as a vehicle of social and economic development. Accordingly, PMGSY-II (PM Gram Sadak Yojana-II) was launched in 2013 to upgrade selected Through Routes and Major Rural Links. It has a target of improving 50,000 km of such roads in various States and UTs.



Table-5.15.6: Status of Implementation of PMAY (G) in the NE States (Cumulative Status as on 31st December 2022)

(In Numbers / In Rs. Lakh)

State	Physical Prog	ress (in Units)	Financial Progre	ess (Rs. in Lakh)
State	Target	Completion	Funds Allocated	Funds Released
Arunachal Pradesh	38,384	10,089	55,339	17,142
Assam	2,084,070	713,281	2548044	1621394
Manipur	46,166	19,126	87269	39785
Meghalaya	80,848	34,493	131733	65997
Mizoram	20,518	6,171	31586	12645
Nagaland	24,775	5,235	55696	14240
Sikkim	1,409	1,093	1262	1313
Tripura	282,238	199,709	406375	299030
Total - NE Region	2578408	989197	3317304	2071546
Total – India	NA	NA	NA	NA

Source: Annual Report 2022-23 of the Ministry of Rural Development, Government of India [Page Nos. 111-114]

#### Notes

1. PMAY-G (PM Awaas Yojana- Grameen) is one of the Government of India's flagships schemes to provide 'Housing for All' by 2024. The aim of PMAY-G is to provide a pucca house with the basic amenities to all homeless and to households living in kutcha / dilapidated houses in the rural areas of India.



House constructed under PMAY (G) in Tripura



# 5.16. Science & Technology

Science Technology and Innovation (STI), is a key to the developmental process of any nation. The last decades have witnessed how India has been steadily climbing the summit of these areas, by marching ahead in developing science-based technology solutions such as AI (Artificial Intelligence), cloud mobility, green technology and health technology, to name a few. In addition, the digital revolution has opened the doors for new opportunities around mission-driven research, innovation and technology development along with exploration of new talent creation.

The Government has been working to strengthen science, technology and innovation by identifying gap areas in the science and technology (S&T) sector, making planning and policy to meet the societal needs, promoting new areas of S&T in view of future demands. The Government is also connecting the S&T sector with different governance related departments and agencies, academia, R&D labs and institutions, and industries.

India achieved the 40<sup>th</sup> position among innovative economies globally, as per the Global Innovation Index (GII), 2022. The country remains among the top three countries in terms of scientific publications in the SCI Journal (an international, peer-reviewed, open access journal) as per the NSF database, number of PhDs in science and engineering, size of Higher Education System and number of Start-ups. Further, India is considered as the third most attractive destination for technology investment. This has enhanced confidence in the Indian R&D to develop and deliver products for the global, regional and local markets. The attention towards the Indian tech ecosystem is now highlighting the technical finesse that lays down the foundation of future technology development. Nearly 0.7% of the GDP was spent every year on research and development, including strengthening of science and technology infrastructure, during 2014-15 to 2018-19.

The Ministry of DoNER, in close collaboration with the Office of the Principal Scientific Adviser to the Government of India, had initiated the Science & Technology Interventions in the NE Region (STINER) in 2017-18 in order to develop synergies between technology developers and potential users in the region. This project was officially transferred to the NEC along with budget provision. STINER hub has been developed at the North Eastern Institute of Science and Technology (NEIST) Jorhat, and spokes have been planned for each of the states. The project has been making considerable progress as per its mandate.

The North Eastern Council has been also stressing upon the science and technology sector. As per the NEC's Vision 2020 recommendations special emphasis has been given on the S&T programmes encompassing Remote Sensing Application Programmes, Disaster Management related programmes, IT Applications, S&T Applications, Awareness including R&D and IT education. A good information technology base is essential for the development of every sector in the economy. Considering the importance of IT infrastructure for the development of virtually every sector in the economy of the NE Region, this should be accorded top priority. Other areas for promotion of Science and Technology and its applications include rural technologies, eco-preservation etc.



Table-5.16.1: Institutional infrastructure to Support Basic Sciences

State	Central Govt. Institutes pertaining to Basic Science	State Government Institutes pertaining to Basic Science	Private Sector Institutes	
Arunachal Pradesh	7	2	6	
Assam	2	11	6	
Manipur	12	7	3	
Mizoram	3	5	0	

**Source:** 'Compendium on State Level STI Eco-**system**', brought out by the Department of Science & Technology, Government of India

#### Notes

- 1. The institutional infrastructure in the other North Eastern states is not given in the above source document.
- 2. STI: Science, Technology & Innovation

Table-5.16.2: Institutions Engaged in Education & Spread of Traditional Knowledge

State	Central Govt. Institutes pertaining to Basic Science	State Government Institutes pertaining to Basic Science	Private Sector Institutes	Non Governmental Organizations
Arunachal Pradesh	2	NA	NA	NA
Assam	3	8	NA	1
Manipur	NA	NA	NA	1
Mizoram	2	1	NA	NA

**Source:** 'Compendium on State Level STI Eco-system', brought out by the Department of Science & Technology, Government of India

- 1. NA: Not Available
- 2. The details of Institutions engaged in education and spread of traditional knowledge in the other North Eastern states is not given in the above source document.
- 3. STI: Science, Technology & Innovation



Table-5.16.3: Indian Patent filed by Indian Applicant – NE States

(In Numbers)

State	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region
Patents Filed	NA	102	NA	NA	NA	NA	NA	NA	102

Source: 'Compendium on State Level STI Eco-system', brought out by the Department of Science & Technology, Government of India

## Notes

- 1. NA: The details of patents filed in India by applicants from these North Eastern states is not available
- 2. STI: Science, Technology & Innovation

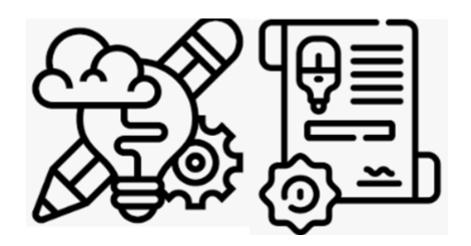


Table-5.16.4: Design Application filed & Registered – NE States

(In Numbers)

State	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region
Patents Filed	NA	4	4	NA	NA	NA	2	NA	10

Source: Compendium on State Level STI Eco-system', brought out by the Department of Science & Technology, Government of India

- 1. NA: The details of design applications filed / registered by applicants from these North Eastern states is not available
- 2. STI: Science, Technology & Innovation



# Table-5.16.5: Expenditure by the NE States on Research & Development (2017-18 to 2020-21)

(As a Percentage of All States & UTs in India / Rs in Crore)

	201	7-18	2018	8-19	201	9-20	202	0-21
State	Rs. Crore	%	Rs. Crore	%	Rs. Crore	%	Rs. Crore	%
Arunachal Pradesh	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0
Assam	455.13	6.3	299.37	3.7	390.59	4.6	355.45	4.2
Manipur	102.00	1.4	29.90	0.4	10.91	0.1	13.58	0.2
Meghalaya	9.01	0.1	7.53	0.1	7.10	0.1	7.47	0.1
Mizoram	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0
Nagaland	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0
Sikkim	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0
Tripura	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0
Total – NE Region	566.14	7.8	336.80	4.2	408.60	4.8	376.50	4.4
Total-India	7264.81	100.0	8029.21	100.0	8554.79	100.0	8476.35	100.0

Source: Research & Development Statistics 2019-20, Department of Science & Technology, Government of India (for data of 2017-18) / S&T Indicator Tables, March 2023, Department of Science & Technology, Government of India (for data of the other years) – based on data collected and compiled by the NSTMIS Division

- 1. All percentage figures are rounded off.
- 2. The above table gives the expenditure incurred by the State Government of the NE States on Research & Development in terms of Rs. in Crore. 'States having no expenditure are not shown' in the tables prepared in the above source documents.
- 3. It also gives the above expenditure as a percentage of the total expenditures incurred by all State Governments / UT Governments across India, based on responses received. Such expenditures include expenditure on basic research, experimental research, and applied research.
- 4. It is reported that the expenditures by State Governments / UT Governments across India accounted for 6.4% of the national R&D expenditure in 2017-18.
- 5. The information for 2017-18 was compiled on the basis of a nation-wide survey carried out by the Department of Science & Technology in 2017-18.



# Table-5.16.6: Support to Extra-Mural Projects by Government of India in the NE States (2016-17)

(Projects are in Numbers / Approved Cost is in Rs. Crore)

State	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region
Projects	21	185	40	42	22	13	16	17	356
Cost	5.62	67.94	12.31	13.14	6.38	7.64	6.00	7.07	126.10

Source: Research & Development Statistics 2019-20, Department of Science & Technology, Government of India based on data from NSTMIS Division

- 1. The purpose of the extramural research and development (R&D) project funding is to build general research capability in the country and to provide special encouragement to scientists to pursue a research career.
- 2. Central Government Departments/Agencies operate a number of extramural research (EMR) Schemes under which they invite time bound projects from individual scientists in Universities/Colleges, Institutes of National Importance, National Laboratories, state level institutions, Public Sector Undertakings and other registered bodies.
- 3. The National Science and Technology Management Information System (NSTMIS) division of the Department of Science and Technology has been maintaining a database on all extramural R&D projects funded by various Central Government Departments/ Agencies.





Table-5.16.7: Research Output from the NE States (2001-20)

State	Total Publications (TP) (2001-2020)	As a % of TP of all Indian States & UTs	TP (2001)	TP (2020)	GSDP (Rs. billion)	Ratio of TP to GSDP (No. per Rs Billion)
Arunachal Pradesh	1,281	0.15	23	185	179.16	1.03
Assam	23,670	2.83	194	2,790	2378.44	1.17
Manipur	1,497	0.18	13	185	206.73	0.89
Meghalaya	3,644	0.44	60	411	251.9	1.63
Mizoram	957	0.11	1	200	180.34	1.11
Nagaland	577	0.07	6	92	181.21	0.51
Sikkim	869	0.10	1	166	197	0.84
Tripura	1,735	0.21	10	288	402.07	0.72
Total - NE Region	34,230	4.09	308	4317	3976.85	1.09

Source: Kanaujia et al, 'Mapping the research output from Indian states' [CURRENT SCIENCE, VOL. 124, NO. 11, 10 JUNE 2023]

- 1. Research output data for the country for the last 20 years (2001–20) were obtained from the Web of Science database, and publications were tagged to different states based on the location of the affiliating institution of the publication.
- 2. The total number of publications from India in the 20-year period was 835,795 records. Researchers from institutions located in the NE states accounted for 4.09% of the above number of publications.
- 3. The ratio between TP and GSDP reflects the correlation between economic status and research output of the states. It indicates the research output for the given status of economic development.





## **5.17. Sports**

As the Annual Report of the Ministry of Youth Affairs & Sports (2022-23) states, 'the role of sports in the nation has transformed from being a platform for the nation to excel on the international stage to a multi-faceted component for the nation's holistic growth. Sports in recent times have been significantly contributing to creating a healthy nation, key economic activity, and community engagement platform in addition to the platform it creates for the nation to excel on the international stage'.

The National Youth Policy of 2014 has a holistic 'vision' for the youth of India, which is 'to empower youth of the country to achieve their full potential, and through them enable India to find its rightful place in the community of nations'. The area of 'sports' has been identified as a priority area under the National Youth Policy of 2014 for meeting the objective titled 'Develop a strong and healthy generation equipped to take on future challenges'. The suggested interventions for 'sports' include: (a) increase access to sports facilities and training; (b) promotion of sports culture among youth; and (c) support and development for talented sportspersons. The role of sports is all the more important in the NE Region of India, where the youth have enormous latent talents in the area of sports which are now coming to the forefront in various international competitions.

In order to develop the nation's sporting ecosystem to be on par with major sporting nations, the Department of Sports' scope of activities has been expanded through various key initiatives. These include the flagship 'Khelo India Scheme', the establishment of the National Sports University, National Centre for Sports Science and Research, etc.

### **Khelo India Scheme**

The Khelo India Scheme aims to infuse sports culture and achieve sporting excellence in the country and also to encourage sports all over the country thus allowing the population to harness the power of sports through its cross-cutting influence, namely, holistic development of children & youth, community development, social integration, gender equality, healthy lifestyle, national pride and economic opportunities related to sports development. The five components of revised Khelo India Scheme are: (a) Creation and Upgradation of Sports Infrastructure; (b) Sports Competition and Talent Development; (c) Khelo India Centres and Sports Academies; (d) Fit India Movement; and (e) Promotion of inclusiveness through Sports. These components are being implemented in the NE Region of India along with other parts of the country.

## Creation and Upgradation of Sports Infrastructure in the NE Region under 'Khelo India'

The progress regarding the above in the NE states of India has been tabulated at the end of the discussion.

### The Presence of Sports' Institutions in the NE Region

## 1. Sports Authority of India

The Sports Authority of India (SAI) was set up as a Society registered under the Societies Registration Act 1860 in pursuance of Resolution No. 1-1/83/SAI dated 25th January, 1984 to carry forward the



legacy of the 9<sup>th</sup> Asian Games held in New Delhi in 1982, under the Ministry of Youth Affairs and Sports (MYAS). SAI has been entrusted with twin objectives of promoting sports and achieving sporting excellence at the National and International level. The following are the Regional Centres of SAI in the NE Region:

- (a) **SAI Netaji Subhas North-East Regional Centre, Imphal**: Considering the talents available in North Eastern States of India in the field of Sports, Netaji Subhas National Institute of Sports Regional Centre for the North East Region was established at Takyel, Imphal in 15<sup>th</sup> September 1986, to provide sports facilities to conduct training camps and diploma courses. The Centre is responsible for implementing and monitoring SAI Sports Promotional Schemes in the States of Manipur, Mizoram and Nagaland.
- (b) SAI Regional Centre, Guwahati: With a view to promote the Games and Sports in the North East the Sports Authority of India had set up its Sub Centre at Guwahati in 1987 under the SAI North East Regional Centre, Imphal. The foundation stone of the SAI Regional Sub Centre, Guwahati was laid in the year 1987. The Centre is located in the heart of the Guwahati City comprising 9.3 acres of land. The plot of land was handed over by the State Govt. of Assam to the SAI on lease for 99 years @ Re. 1.00 per year. In the year January 2013 Sub Centre Guwahati is upgraded to Regional Centre, Guwahati. Various SAI Promotional Schemes are operating in the four North Eastern States, namely, in Assam, Meghalaya, Arunachal Pradesh & Sikkim.

## 2. Lakshmibai National Institute of Physical Education, Gwalior (Deemed to be University)

North East Regional Centre: The establishment of North East Regional Centre at Guwahati was approved by the Ministry of Youth Affairs & Sports in the year 2009 and the first batch during academic session 2009-10 functioned from Gwalior as off-campus. Thereafter, upon taking over Tepesia Sports Complex from the Government of Assam in May, 2010, the NERC commenced physical functioning from the academic session 2011-12, where many facilities like Indoor Multipurpose Hall, Football ground, Hockey ground, Velodrome and Volleyball Courts were already in place and thereafter, the Institute created the infrastructure required for academic purposes. The Institute is now running BPEd as well as MPEd there in a full-fledged and regular manner. Recognizing the need of regular man-power for the NERC, Guwahati, the Government of India, Ministry of Finance has sanctioned a total of 11 posts during the year 2011-12 and most of the appointments against these posts have since been made. Other works are under progress such as the Laying of Hockey turf, Track and Field (Synthetic), Auditorium, Library and Quarters for faculty and staff.

## 3. National Sports University, Manipur

The National Sports University (NSU) was established in 2017 under the Manipur Societies Registration Act, 1989. It started functioning in a temporary campus at Khuman Lampak Sports Complex, Imphal in 2018 with two courses undergraduate programmes, namely Bachelor of Physical Education and Sports and Bachelor of Science in Sports Coaching. On 17th August, 2018 NSU was enacted by an Act of Parliament and the University is the first of its kind in India. The University has completed four successful years and is currently offering 3 Post Graduate programmes and 2 Undergraduate Programmes.



Table-5.17.1: Status of Sports Infrastructure under 'Khelo India' Scheme in the NE States

(In numbers)

State	Completed	Under Progress	To be Started	Total
Arunachal Pradesh	5	16	0	21
Assam	5	2	0	7
Manipur	4	4	0	8
Meghalaya	0	5	1	6
Mizoram	4	2	0	6
Nagaland	2	5	0	7
Sikkim	2	3	0	5
Tripura	2	5	0	7
Total – NE Region	24	42	1	67
Total India	155	126	16	297

Source: Khelo India website (https://mdsd.kheloindia.gov.in/fund-requests-progress-pie-chart)

- 1. Types of infrastructure created have been tabulated at the next page in state-wise manner.
- 2. Website was accessed in October 2023, and reflects the progress as reported at this month.







Table-5.17.2: Types of Sports Infrastructure under 'Khelo India' Scheme in the NE States

(In numbers)

State	Swimming Pool	Multi-purpose Hall	Hockey Field	Athletic Track	Others	Football Field	Total
Arunachal Pradesh	0	19	0	1	1	0	21
Assam	0	0	2	2	3	0	7
Manipur	1	1	0	0	3	3	8
Meghalaya	0	4	0	0	0	2	6
Mizoram	0	0	1	0	0	5	6
Nagaland	0	3	0	1	1	2	7
Sikkim	0	1	0	1	2	1	5
Tripura	1	0	1	2	0	3	7
Total – NE Region	2	28	4	7	10	16	67
Total India	15	108	25	49	80	20	297

Source: Khelo India website https://mdsd.kheloindia.gov.in/infrastructure-wise-pie-chart

- 1. Multi-purpose Halls are facilities constructed across the country to meet the sports and recreation needs of citiens.
- 2. Other Sports Infrastructure includes:

Arunachal Pradesh	(1) 120 bedded hostel and Integrated Sports Complex at SAI National Centre of Excellence (Itanagar District)
Assam	(1) Renovation of Cycling Velodrome at Laxmibai National Institute of Physical Education (2) Sports Infrastructure at Stadium (3) Complex Renovation and upgrade of various sports complexes
Manipur	(1) Miscellaneous works at SAI Regional Centre (2) 300 bedded hostel at SAI Regional Centre (3) Sports Infrastructure at 8 Blocks
Nagaland	(1) Indoor Badminton Hall
Sikkim	(1) Playground and Archery Ground (2) Indoor Stadium Gymnasium Hall



# 5.18. Labour & Employment

The matter of providing meaningful employment to people in the working age group is one of the biggest challenges facing policymakers and other public stakeholders across the world. In India, the proportion of people in the working age is growing as a part of its overall demographic profile. The ability of the nation to engage the working age people in meaningful work will determine whether India will be able to reap a 'demographic dividend' from its young population.

Employment is one of the key economic variables determining the direction of various policies of the Government. It is a key pillar of economic growth and overall development. Economic growth is not a means to an end, since it is designed to serve people, promote development and reduce poverty. Accordingly, the Government's policies and schemes, like the push for 'self-reliance', increased infrastructure spending, industrial and other incentives etc., are aimed at ensuring employment for the people of the country. NEC too has been supporting the development of human resources in the NE Region in order to improve the employment prospects of the region's youth.

Reliable data on the labour and employment are a valuable means for understanding the labour position and the effects of the Government's initiatives. They can shape the future direction of economic policymaking to ensure that inclusive growth does not elude any section of the society. Such data needs to cover both the supply of labour from the population profile, as well as the levels of employment and unemployment. The following pages furnish some pertinent data in the above regard for the states of the NE Region of India.

One important table relates to the recent initiative of the Government for the National of Unorganized Workers (NDUW), popularly known as 'e-Shram'. This enables any worker, who is a home-based worker, self-employed worker or a wage worker working in the unorganized sector and not a member of ESIC or EPFO, to register on the above database in order to look for employment. Data on e-Shram for the NE states has been furnished, as it enables a determination of the profile of the unorganized workforce looking for work in the various states of the region.





Table-5.18.1: Distribution of Population in the Working Age (15-59) in the NE States (2011)

	Percentage of the Population by Age Group											
State	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	Total 15-59		
Arunachal Pradesh	11.3	9.5	8.9	7.3	6.8	5.7	4.6	3.3	2.2	59.6		
Assam	9.8	9.3	9.0	7.5	7.2	5.9	5.1	3.8	2.7	60.3		
Manipur	9.7	9.6	9.5	7.8	7.1	6.1	5.2	4.3	3.2	62.5		
Meghalaya	11	9.6	8.5	6.4	5.9	4.9	4.1	3.0	2.0	55.4		
Mizoram	10.1	10.2	9.3	8.1	6.6	5.3	4.8	4.0	2.8	61.2		
Nagaland	11.6	10.3	8.9	7.6	6.5	5.5	4.4	3.3	2.2	60.3		
Sikkim	11.0	11.0	10.6	8.6	7.1	6.0	4.8	4.0	2.9	66		
Tripura	9.7	10.2	9.4	7.8	7.6	6.5	5.6	4.4	3.2	64.4		
Total – NER	10.0	9.5	9.1	7.5	7.1	5.9	5.0	3.8	2.7	60.5		
Total – India	10.0	9.2	8.4	7.3	7.0	6.0	5.1	4.1	3.2	60.3		

Source: 'Health and Family Welfare Statistics in India 2019-20', brought out by the Ministry of Health & Family Welfare, Government of India based on data from the Census of India 2011 [Table-B.15 Page No 54]

- 1. Excludes persons who have not furnished their ages.
- 2. Working age is generally considered to be 15-below 60 years in India, whereas in several other countries it is taken from 15-64 (including as per the definition of OECD). As per the International Labour Organization, 'The working-age population is commonly defined as persons aged 15 years and older, but this varies from country to country'.





Table-5.18.2: Labour Force Participation Rate in the NE States for Age 15 & Above (Rural + Urban)
(At Usual Status)

Stato	2017-18		2018-19			2019-20			2020-21			
State	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons
Arunachal Pradesh	69.8	14.7	45.0	66.2	17.1	44.3	68.8	22.9	47.5	73	27.6	51.4
Assam	80.3	12.7	47.5	77.6	12.7	46.5	77.0	16.4	46.9	79.2	24.6	52.7
Manipur	71.3	23.5	48.1	72.0	26.3	48.9	70.9	29.9	50.3	65.4	21.4	43.4
Meghalaya	76.4	51.2	63.2	76.2	51.2	63.5	75.3	45.7	60.2	75.4	51.6	63.1
Mizoram	73.6	30.0	51.6	68.7	29.2	49.0	69.8	37.0	53.8	70.3	41.7	56.5
Nagaland	64.8	16.7	41.8	69.1	22.7	46.1	76.0	43.0	60.3	74.1	47.6	61.3
Sikkim	76.0	43.9	60.9	73.9	50.3	63.0	79.8	59.4	70.4	82.5	61.1	72.1
Tripura	75.0	12.5	45.1	75.6	16.6	46.6	78.1	24.2	51.2	80.6	30.8	55.6
All-India	75.8	23.3	49.8	75.5	24.5	50.2	76.8	30.0	53.5	77.0	32.5	54.9

Source: 'Labour & Employment Statistics 2022', Ministry of Labour & Employment, Government of India – based on Periodic Labour Force Surveys (PLFS) Annual Reports brought out by the Ministry of Statistics & Programme Implementation, Government of India [Table No-1 / Page Nos. 120 & 121]

- 1. Persons who are either 'working' (or employed) or 'seeking or available for work' (or unemployed) constitute the labour force. The Labour Force Participation Rate (LFPR) is defined as the percentage of the population persons who are in the labour force. LFPR (in %) = [(No. of Employed Persons + Nos. seeking work) / Total Population] x 100%
- 2. The usual activity status relates to the activity status of a person during the reference period of 365 days preceding the date of survey. The activity status on which a person spent relatively long time (major time criterion) during the 365 days preceding the date of survey was considered the usual principal activity status of the person. Usual status = Usual Principal Status + Usual Subsidiary Status; where the former refers to 'the persons who either worked or were seeking/available for work for a relatively long part of the 365 days preceding the date of survey', and the latter refers to 'those persons from among the remaining population who had worked at least for 30 days during the reference period of 365 days preceding the date of survey'.



Table-5.18.3: Worker Population Ratio in the NE States for Age 15 & Above (Rural + Urban)
(At Usual Status)

State	2017-18			2018-19			2019-20			2020-21		
State	Male	Female	Persons									
Arunachal Pradesh	66.4	13.0	42.3	62.0	14.6	40.9	64.7	20.8	44.3	69.7	25.1	48.5
Assam	74.7	11.0	43.7	72.5	11.7	43.4	71.8	14.2	43.2	76.6	22.9	50.5
Manipur	64.0	19.8	42.5	66.1	22.9	44.3	64.5	26.8	45.5	61.7	20.1	41.0
Meghalaya	75.4	50.2	62.3	74.4	49.6	61.8	73.8	44.1	58.6	74.3	50.5	62.0
Mizoram	67.1	26.0	46.4	64.9	26.2	45.6	65.7	34.9	50.7	67.9	40.2	54.5
Nagaland	52.9	11.0	32.8	58.9	16.8	38.1	57.2	31.1	44.8	59.9	38.5	49.5
Sikkim	74.0	41.6	58.7	71.5	48.9	61.1	77.8	58.5	68.8	81.5	60.6	71.3
Tripura	70.5	11.1	42.0	71.0	11.9	41.9	75.5	23.5	49.6	77.9	29.9	53.8
All-India	71.2	22.0	46.8	71.0	23.3	47.3	73.0	28.7	50.9	73.5	31.4	52.6

Source: 'Labour & Employment Statistics 2022', Ministry of Labour & Employment, Government of India – based on Periodic Labour Force Surveys (PLFS) Annual Reports brought out by the Ministry of Statistics & Programme Implementation, Government of India [Table No-2/ Page Nos. 122 & 123]

- 1. Persons who are either 'working' (or employed) or 'seeking or available for work' (or unemployed) constitute the labour force. The Worker Population Ratio (WPR) is defined as the defined as the percentage of employed persons in the population. WPR (in %) = (No. of Employed Persons / Total Population) x 100%
- 2. The usual activity status relates to the activity status of a person during the reference period of 365 days preceding the date of survey. The activity status on which a person spent relatively long time (major time criterion) during the 365 days preceding the date of survey was considered the usual principal activity status of the person. Usual status = Usual Principal Status + Usual Subsidiary Status; where the former refers to 'the persons who either worked or were seeking/available for work for a relatively long part of the 365 days preceding the date of survey', and the latter refers to 'those persons from among the remaining population who had worked at least for 30 days during the reference period of 365 days preceding the date of survey'.



Table-5.18.4: Details of Employees in the NE States Contributing to the Employee Provident Fund on Regular Basis (July 2022- June 2023)

(In Numbers)

State →	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region	Total India
Number of Contributing Employees	11,587	365,918	18,084	43,008	4,465	11,713	33,445	33,639	521,859	68,545,747

Source: Annexure Referred to in Reply To Parts (b) & (c) of RAJYA SABHA Un-starred Question No. 95 (dated 20.07.2023)

#### Notes

- 1. **The Employees' Provident Fund (EPF) Scheme**, 1952 is one of the three schemes framed under **the Employees' Provident Funds and Miscellaneous Provisions (EPF & MP) Act, 1952.**The EPF Scheme, 1952 aims at providing social security to employees employed in an EPF covered establishment. Under the EPF, Scheme, 1952, an employee of any covered establishment drawing monthly wages up to Rs. 15,000 is statutorily required to join the fund and to contribute 12% of wages, which includes basic wages, dearness allowance and retaining allowance, if any.
- 2. **The Employees' Provident Fund and Miscellaneous Provision**s Act 1952 applies to the Factories engaged in Industries specified in Schedule I of the Act or to other establishments notified and engaging 20 or more employees. Government employees are eligible for General Provident Fund.
- 3. The above table gives the figures of employees (Universal Account Numbers) contributing in EPF on regular basis. Such workers have contributed at least once during the FY 2022-23 and not exited from the scheme.
- 4. Further, the **Employees' State Insurance Scheme of India (ESIC)**, is being operated as a multidimensional social security system tailored to provide socio-economic protection to worker population and their dependants covered under the scheme. There are 300,020 members of ESIC in the NE state (excluding Sikkim), and 33,445 members in Sikkim (as per information furnished in Reply To Parts (b) & (c) of RAJYA SABHA Un-starred Question No. 95 (dated 20.07.2023).
- 5. In addition, the Assam Tea Employees Provident Fund Organization provides social security to tea garden workers and factory workers working on tea gardens covering area of 25 acres or more and employing twenty or more labourers, provided that their monthly wages are up to Rs. 15,000. There were 984,455 members of the scheme (in 2017).
- 6. The number of regular employees of the Government of India is reported to be about 31.69 lakh (in March 2022). As per the Census of Central Employees (which gives the data for 31st March 2011), about 2.48% of the Central Government employees had been posted in the NE states (with data for Arunachal Pradesh and Sikkim not reported).
- 7. The numbers of State Government employees is not readily available. Compilation of various press reports has been done by a NGO (satp.org) which reports the following numbers of State Government employees (in 2017). [Employee numbers are in thousands]

Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region
70	420	80	90	42	125	37	150	1014

 $Source: https://www.satp.org/satporgtp/countries/india/database/State\_Government\_Employees\_in\_India.pdf$ 



Table-5.18.5: e-Shram Registrations of Unorganized Workers in the NE States (Total Registrations as in mid-September 2023)

(In Numbers)

Occupation Sector	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total NE Region	Total India
TOTAL REGISTRATION	143,336	7,042,869	408,432	306,454	61,643	220,302	34,825	855,196	9,073,057	290,897,739
MAJOR SECTORS (INDIA)										
Agriculture	104,145	3,816,645	144,858	189,810	42,542	136,447	13,491	451,650	4,899,588	152,507,586
Domestic & Household Work	2,500	578,776	6,921	21,743	857	8,101	4,752	69,599	693,249	28,170,241
Construction	6,484	538,548	48,117	33,237	3,639	26,061	3,311	95,130	754,527	26,264,447
Apparel	659	313,925	18,080	4,759	1,235	5,055	299	18,905	362,917	18,159,997
Miscellaneous	4,491	394,361	18,400	15,714	4,369	10,685	4,577	50,027	502,624	12,514,667
Automobile & Transportation	2,574	263,659	13,341	7,374	1,978	6,303	2,173	41,433	338,835	8,140,723
Capital Goods & Manufacturing	732	106,656	4,758	2,020	450	2,381	294	27,703	144,994	6,844,651
Leather	967	67,087	1,289	2,114	1,695	239	584	4,252	78,227	5,727,375
Education	2,601	94,680	11,123	3,231	658	5,356	1,020	18,719	137,388	4,912,450
Electronics & Hardware	769	103,143	2,317	1,868	312	1,717	251	6,857	117,234	4,797,796
Tourism & Hospitality	1,406	147,587	4,833	1,972	356	1,289	569	10.017	158,022	3,860,502
SOME OTHER SECTORS (NER)										
Handicrafts & Carpets	1,199	165,779	95,683	1,930	838	6,756	52	4,609	276,846	2,187,845
Retail	1,523	144,857	8,042	6,813	975	3,154	929	12,994	179,287	2,263,829
Healthcare	9,396	82,363	22,073	8,488	272	1,982	868	18,564	144,006	3,143,319
Professionals	1,345	55,002	596	898	81	778	211	3,667	62,578	767,949
Office & Facility Management	1,216	35,562	1,937	1,380	262	651	858	2,679	44,545	2,289,601
Beauty & Wellness	492	33,129	1,164	782	345	1,195	213	4,629	41,949	1,926,862

Source: e-Shram Dashboard (https://eshram.gov.in/dashboard) of the Ministry of Labour & Employment, Government of India (accessed on 14th September 2023)

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#### Notes

- 1. e-Shram is the National Database of Unorganized Workers (NDUW). It will be seeded with Aadhaar, and ill have details of name, occupation, address, occupation type, educational qualification, skill types etc. for optimum realization of their employability and extend the benefits of the social security schemes to them.
- 2. Any worker, who is a home-based worker, self-employed worker or a wage worker working in the unorganized sector and not a member of ESIC or EPFO, is called an unorganized worker.
- 3. Data is entered on daily basis through various means like State Sewa Kendras (SSK) registration, Common Service Centre (CSC) registration, self-registration, and registration by Unified Mobile Application for New-age Governance (UMANG).

#### About e-Shram

The Ministry of Labour & Employment which is one of the oldest and important Ministries of the Government of India, is continuously working on improving life and dignity of labour force of country by protecting & safeguarding the interest of workers, promotion of welfare and providing social security to the Labour force both in Organized and Unorganized Sectors by enactment and implementation of various Labour Laws, which regulate the terms and conditions of service and employment of workers.

Accordingly, Ministry of Labour & Employment has developed eShram portal for creating a National Database of Unorganized Workers (NDUW), which will be seeded with Aadhaar. It will have details of name, occupation, address, occupation type, educational qualification, skill types etc. for optimum realization of their employability and extend the benefits of the social security schemes to them. It is the first-ever national database of unorganised workers including migrant workers, construction workers, gig and platform workers, etc.

[https://eshram.gov.in/e-shram-portal]

# Now by enrolling on eShram, you may seamlessly opt for the following









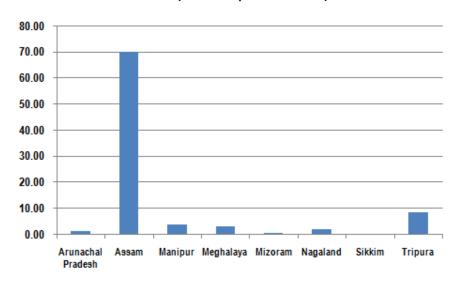




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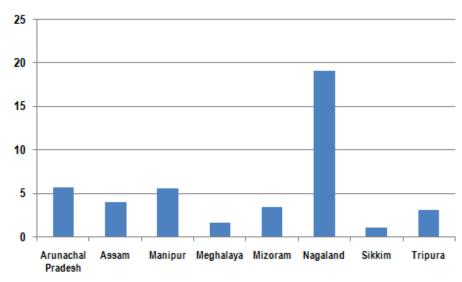
NORTH EASTERN COUNCIL

Graph-5.18.1 e-Shram Registrations of Unorganized Workers in the NE States (in mid-September 2023)



Y-axis gives the Numbers of Unorganized Workers registered on the National Database of Unorganized Workers (in lakhs) in mid-September 2023

Graph-5.18.2: Unemployment Rate in the NE States for Age 15 & Above (Rural + Urban) in 2020-21



Y-axis gives the Unemployment Rate as a Percentage of the Persons in the Labour Force (as in 2020-21)





Table-5.18.6: Unemployment Rate in the NE States for Age 15 & Above (Rural + Urban)
(At Usual Status)

(In Percentage)

State		2017-18			2018-19			2019-20			2020-21	
State	Male	Female	Persons									
Arunachal Pradesh	4.9	11.5	5.8	6.3	14.8	7.7	5.9	9.5	6.7	4.5	9.3	5.7
Assam	7.1	13.6	7.9	6.5	7.8	6.7	6.7	13.6	7.9	3.3	6.8	4.1
Manipur	10.2	15.7	11.5	8.1	13.0	9.4	9.1	10.4	9.5	5.6	5.8	5.6
Meghalaya	1.3	1.9	1.6	2.3	3.3	2.7	2.1	3.6	2.7	1.5	2.0	1.7
Mizoram	8.8	13.3	10.1	5.5	10.3	7.0	5.8	5.6	5.7	3.4	3.6	3.5
Nagaland	18.3	34.3	21.4	14.7	25.9	17.4	24.8	27.6	25.7	19.2	19.2	19.2
Sikkim	2.6	5.2	3.5	3.2	2.8	3.1	2.5	1.7	2.2	1.3	0.9	1.1
Tripura	6.1	11.6	6.8	6.0	28.8	10.0	3.3	2.8	3.2	3.4	2.9	3.2
All-India	6.1	5.6	6.0	6.0	5.1	5.8	5.0	4.2	4.8	4.5	3.5	4.2

Source: 'Labour & Employment Statistics 2022', Ministry of Labour & Employment, Government of India – based on Periodic Labour Force Surveys (PLFS) Annual Reports brought out by the Ministry of Statistics & Programme Implementation, Government of India [Table No-3/ Page Nos. 124 &125]

## Notes

- 1. Persons who are either 'working' (or employed) or 'seeking or available for work' (or unemployed) constitute the labour force. The Unemployment Rate (UR) is defined as the defined as the as the percentage of persons unemployed among the persons in the labour force. UR (in %) = [No. of Unemployed Persons / (No. of Employed Persons + No. of Unemployed Persons)] x 100%.
- 2. The usual activity status relates to the activity status of a person during the reference period of 365 days preceding the date of survey. The activity status on which a person spent relatively long time (major time criterion) during the 365 days preceding the date of survey was considered the usual principal activity status of the person. Usual status = Usual Principal Status + Usual Subsidiary Status; where the former refers to 'the persons who either worked or were seeking/available for work for a relatively long part of the 365 days preceding the date of survey', and the latter refers to 'those persons from among the remaining population who had worked at least for 30 days during the reference period of 365 days preceding the date of survey'.



Table-5.18.7: Employment Exchange Statistics of Job-seekers in the NE States (2022)

State	Employment Exchanges / UEIGBs	Registration (in '000s)	Vacancies Notified (in '000s)	Submission (in '000s)	Placement (in '000s)	LR (in '000s)	% of LR to Total LR	% of Placement to Submission
Arunachal Pradesh	12	59.0	0.0	0.0	0.0	120.6	0.3	6.5
Assam	52	202.6	0.0	0.0	0.0	2030.4	4.4	0.0
Manipur	11	30.0	3.6	76.1	0.0	327.5	0.7	0.0
Meghalaya	12	3.1	0.9	2.2	0.0	19.6	0.0	0.0
Mizoram	3	8.8	0.5	1.6	0.0	40.7	0.1	0.0
Nagaland	8	6.6	0.0	0.0	0.5	92.1	0.2	0.0
Sikkim	NA	NA	NA	NA	NA	NA	NA	NA
Tripura	6	0.0	0.0	0.0	0.0	190.9	0.4	0.0
NE Region	104	310.1	5.0	79.9	0.5	2821.8		0.6
All-India	1005	3996.7	1367.6	2637.6	644.6	45717.7	100.0	24.4

Source: 'Employment Exchange Statistics 2023', Ministry of Labour & Employment, Government of India [Table No-2 / Page No. 30]

## Notes

1. UEIGB: University Employment & Information Guidance Bureau

2. LR: Live Register

3. Above figures reflect the status at the end of the year.



Table-5.18.8: Age Profile of Job-seekers on Live Register in the NE States (2022)

(In Thousands)

State			Age Group	o (in Years)			Total
State	Up to 19	20-29	30-39	40-49	50-59	60 and above	TULAT
Arunachal Pradesh	24.5	81.0	11.1	2.5	1.0	0.7	120.6
Assam	472.5	939.2	463.2	137.1	17.3	1.1	2030.4
Manipur	56.2	146.2	89.6	33.2	2.3	0.0	327.5
Meghalaya	2.8	12.2	3.9	0.7	0.0	0.0	19.6
Mizoram	10.6	20.8	8.4	0.9	0.0	0.0	40.7
Nagaland	24.3	46.1	19.8	1.9	0.0	0.0	92.1
Sikkim	NA	NA	NA	NA	NA	NA	NA
Tripura	37.4	63.7	46.9	35.4	7.0	0.4	190.9
Total – NE Region	628.3	1309.2	642.9	211.7	27.6	2.2	2821.8
Total - India	8005.8	21208.7	11889.3	3836.0	648.8	129.1	45717.7

Source: 'Employment Exchange Statistics 2023', Ministry of Labour & Employment, Government of India [Table No-4 / Page No. 32]

## Notes

1. Above figures reflect the status at the end of the year.



Table-5.18.9: Employment Exchange Statistics of Women Job-seekers in the NE States (2022)

State	Employment Exchanges / UEIGBs	Registration (in '000s)	Placement (in '000s)	Live Register (in '000s)	% of Placement to Registration
Arunachal Pradesh	12	27.1	0.00	27.1	0.0
Assam	52	0.0	0.0	674.9	0.0
Manipur	11	8.7	0.0	103.7	0.1
Meghalaya	12	1.8	0.0	11.4	0.0
Mizoram	3	4.2	0.0	110.5	0.0
Nagaland	8	4.4	0.2	29.2	4.4
Sikkim	NA	NA	NA	NA	NA
Tripura	6	2.1	0.0	72.4	0.0
All-India	1005	1500.4	122.7	16297.3	8.2

Source: 'Employment Exchange Statistics 2023', Ministry of Labour & Employment, Government of India [Table No-8 / Page No. 36]

## Notes

- 1. UEIGB: University Employment & Information Guidance Bureau
- 2. Above figures reflect the status at the end of the year.





# 6. Scenario of Exports and Imports of the North Eastern Region

This chapter explores the exports and imports taking place through the Land Customs Stations (LCSs) located in the NE Region of India. The following countries are located along the international borders of India situated in the above region: Bangladesh, Bhutan, China, Myanmar and Nepal. In addition, the chapter has details of state-wise exports from the NE Region.

The flow of goods ('trade') is as old as human history, being rooted in the ability of one of the parties (individuals, organizations or nations) to produce some goods or services that are required by the other party. When such flows cross the borders of any country and reach another one, they are termed as 'international trade'. The terms of such trade between nations are determined by the Governments concerned within the framework of international agreements. In this exercise for ensuring smooth international trade, Governments are guided by their national trade policies and various international commitments. The World Trade Organization (WTO) deals with the global rules of trade between nations. Its main function is to ensure that trade flows as smoothly, predictably and freely as possible.

In India, the subject of 'trade and commerce with foreign countries, import and export across customs frontiers, definition of customs frontiers' is vested with the Government of India. India has signed a number of bilateral and multi-lateral trade agreements. In the context of the bordering countries of the NE Region, such agreements include the following:

- Agreement on South Asian Free Trade Area (SAFTA), which covers Bangladesh, Bhutan, and Nepal (which was preceded by the South Asian Preferential Trade Agreement);
- Bilateral Trade Agreement between Bangladesh and India;
- Revised Indo-Nepal Treaty of Trade; Treaty of Transit; and Revised Agreement of Cooperation between the Government of India and the Government of Nepal to control unauthorized trade;
- India Bhutan Agreement on Trade Commerce and Transit; and
- India—ASEAN Trade in Goods Agreement, which covers Myanmar and other ASEAN nations; and the Border Trade Agreement between India and Myanmar, signed in 1994.

Of the above, the following are multilateral trade agreements: Agreement on South Asian Free Trade Area (SAFTA) and the India—ASEAN Trade in Goods Agreement.

India's foreign trade takes place through elaborate processes involving several stakeholders, including the Directorate General of Foreign Trade, traders, banks, transporters, customs brokers, and various Government Agencies. Amongst the latter, the role of the customs, immigration, and border guarding forces is prominent.



# 6.1. Land Customs Stations in the NE Region

Governments usually impose taxes on international trade, generally upon imports, but also upon exports in some cases. These are called 'tariffs' or 'customs duties'. The Government uses such taxes to raise revenues, safeguard domestic industries, and regulate movement of goods. In India, customs duty is defined under the Customs Act, 1962, and all matters related to the subject are dealt with by the Central Board of Indirect Taxes & Customs (CBIC) with functions under the administrative control of the Department of Revenue of the Ministry of Finance. The items and the rates of duties levied upon imports and exports are specified in two Schedules to the Customs Tariff Act, 1975. The First Schedule specifies the rates of import duties, while the Second Schedule incorporates items that are subject to exports duties and the rates of duties. The goods are categorized in accordance the 'Harmonized System of Commodity Classification', an international classification scheme.

Accordingly, powers have been given to the CBIC (under Section 7 of the Customs Act, 1962) to notify places as Land Customs Stations (LCS) for clearance of goods imported or exported by land or by inland water. There are 38 notified Land Custom Stations in the North East Region (including Sikkim). The list of LCS in the study geography is given at overleaf, along with their counterpart LCSs in the nearby country. The following table summarizes their numbers.

Table-6.1.1: Number of Land Customs Stations on Different Borders in the NE Region

State →	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Total
Bangladesh Border									
Functional		6		8	0			7	21
Non-Functional		5		2	1			1	9
Sub-Total		11		10	1			8	30
Bhutan Border									
Functional	0	3					0		3
Non-Functional	0	1					0		1
Sub-Total	0	4					0		4
Myanmar Border									
Functional	0		1		1				2
Non-Functional	1		0		0				1
Sub-Total	1		1		1				3
China Border									
Functional							1		1
Non-Functional							0		0
Sub-Total							1		1
TOTAL	1	15	1	10	2	0	1	8	38

Source: Analysis of CBIC and related websites

Note

- 1. '---' indicates that there is no border with the indicated country located on the state concerned.
- 2. Land Customs Stations that have not seen any trade for an extended period of time are categorized as 'non-functional'.



Table- 6.1.2: List of Land Customs Stations in the NE Region

	Land Customs Station (LCS)	State	Status	Counterpart Customs Facility
	INDIA-MYANMAR BORDER			
1	MOREH	Manipur	Functional	TAMU
2	ZOKHAWTHAR	Mizoram	Functional	RIH
3	NAMPONG	Arunachal Pradesh	Non-functional	PAN SAUNG
	INDIA-BANGLADESH BORDER			
4	DEMAGIRI	Mizoram	Non-functional	THEGAMUKH
5	SABROOM	Tripura	Non-functional	RAMGARH
6	MUHURIGHAT	Tripura	Functional	BELONIA
7	SRIMANTAPUR	Tripura	Functional	BIBIR BAZAR
8	AGARTALA	Tripura	Functional	AKHAURA
9	KHOWAIGHAT	Tripura	Functional	BALLA
10	DHALAIGHAT (PASSENGER MOVEMENT ONLY)	Tripura	Functional	KURMA
11	MANU	Tripura	Functional	CHATLAPUR
12	OLD RAGNABAZAR	Tripura	Functional	BETULI (FULTOLA)
13	MAHISASAN RAILWAY STATION	Assam	Non-functional	SHAHBAZPUR
14	SUTARKANDI	Assam	Functional	SHEOLA
15	KARIMGANJ STEAMERGHAT AND FERRY STATION	Assam	Functional	ZAKIGANJ
16	SILCHAR RMS	Assam	Non-functional	
17	BADARPUR	Assam	Non-functional	
18	MANKACHAR	Assam	Functional	ROWMARI
19	DHUBRI STEAMERGHAT	Assam	Functional	CHILMARI
20	GOLAKGANJ	Assam	Functional	SONAHAT
21	GUWAHATI STEAMERGHAT	Assam	Functional	CHILMARI
22	SILGHAT STEAMERGHAT	Assam	Non-functional	CHILMARI
23	JOGIGHOPA	Assam	Non-functional	CHILMARI
24	DAWKI	Meghalaya	Functional	TAMABIL
25	SHELLABAZAR	Meghalaya	Functional	NOARAI (CONVEYOR BELT) / CHELLA (RIVER) / ICHAMATI
				(RIVER)
26	BHOLAGANJ	Meghalaya	Functional	CHATTAK (ROPEWAY) / BHOLAGANJ (BANGLADESH)
27	RYNGKU	Meghalaya	Non-functional	KALIBARI
28	BALAT	Meghalaya	Non-functional	DOLURA

## The NEC Yearbook 2024



	Land Customs Station (LCS)	State	Status	Counterpart Customs Facility
29	BORSORA	Meghalaya	Functional	BOROCHARA (BANGLADESH) / CHARRAGAON / BAGLI
30	BAGHMARA	Meghalaya	Functional	BIJOYPUR
31	GHASUAPARA	Meghalaya	Functional	GOBRAKURA / KOROITOLI
32	DALU	Meghalaya	Functional	NAKUGAON
33	MAHENDRAGANJ	Meghalaya	Functional	DHANUA KAMALPUR
	INDIA-BHUTAN BORDER			
34	ULTAPANI	Assam	Non-functional	SARPANG
35	HATTISAR	Assam	Functional	GELEPHU
36	DARRANGA	Assam	Functional	SAMDRUP JONKHAR
37	KAMARDWISA (RANGAPANI)	Assam	Functional	NGANGLAM
	INDIA CHINA BORDER			
38	SHERATHANG	Sikkim	Functional	RINCHENGANG

Sources: Website of the Office of Commissioner of Customs (Preventive), NE Region for LCSs in NE Region (excluding Sikkim) / other websites for LCSs in Sikkim & Counterpart LCS Notes

- 1. **Land Customs Station in India refers to** 'any place notified as such by the Central Government under clause (b) of sub-section (1) of section 7 of the Customs Act, 1962 (52 of 1962) for the clearance of goods imported or to be exported by land or inland water'.
- 2. All Land Customs Stations (except for Sherathang LCS) are under the jurisdiction of the Office of Commissioner of Customs (Preventive), NE Region.



# 6.2. Integrated Check Posts in the NE Region

The movement of goods and peoples across international borders is usually regulated by bilateral agreements between the concerned countries. In the case of trade, there could also be multilateral agreements, to which both the countries are parties. The movements of passengers and trade are permitted through specified crossing points, where facilities for customs, immigration, security etc. are established for the above purposes. In India, Land Customs Stations (LCSs) and Immigration Check Posts (ImCPs) are the basic facilities for the movement of goods and passengers respectively. In the past decade, consolidated facilities have been progressively developed at various border locations in India to provide infrastructure for trade, passenger movements and security under one roof. Such establishments, which are globally called as 'Land Ports', have been termed as 'Integrated Check Posts (ICPs) in India.

The Land Ports Authority of India or LPAI was established on 1<sup>st</sup> March 2012. It is a statutory body (created through the Land Ports Authority of India Act, 2010) working under the Department of Border Management, Ministry of Home Affairs. It is responsible for building land ports on India's borders and providing state-of-the-art infrastructure to facilitate seamless and efficient movement of cargo and passengers. The LPAI has developed several Integrated Check Posts (ICPs) on the land borders of India.

The major partner agencies of LPAI include the Indian Customs (under the Central Board of Indirect Taxes & Customs), Immigration Police (either the Bureau of Immigration or the State Police as delegated by the Bureau), and Border Guarding Forces (like Border Security Force, Indo-Tibetan Border Police, Sashastra Seema Bal and Assam Rifles).

In addition, organizations involved in international trade and passenger movements such as plant and animal quarantine facilities, food testing laboratories, custodians acting for the Indian Customs, customs broker, banks and money changers, health services etc. are co-located within the ICPs. Various government agencies are responsible for the above services in India. These include: (a) Food Standards and Safety Authority of India (FSSAI) under the Ministry of Health and Family Welfare; (b) Directorate of Plant Protection, Quarantine & Storage of the Ministry of Agriculture and Farmers Welfare; (c) Animal Quarantine and Certification Services under the Department of Animal Husbandry & Dairying (DAHD), Ministry of Fisheries, Animal Husbandry and Dairying; and (d) Port Health Unit of the Ministry of Health and Family Welfare.

The LPAI establishes ICPs and operates them along with the Partner Agencies mentioned at above in order to enable seamless movements of goods and people across the borders. At each ICP, the LPAI provides infrastructure like: (a) Passenger Terminal Building (intended for use by immigration authorities and customs for baggage check and passenger formalities, banking and health facilities etc.); (b) Cargo Terminal (to house customs, plant and animal quarantine, food testing, custodian's office etc.); and (c) Other Facilities like warehouses, weighbridges, parking yard, passenger pick-up and drop facilities, utilities, security etc.

The list of ICPs in the NE Region is given at the next page in a tabular manner.



Table-6.2.1: Integrated Check Posts (ICPs) in the NE Region

Location	State	Border	Date of Start of Operation
Operational ICPs			
AGARTALA	Tripura	India-Bangladesh	17 <sup>th</sup> November 2013
MOREH	Manipur	India-Myanmar	15 <sup>th</sup> March 2018
SUTARKANDI	Assam	India-Bangladesh	7 <sup>th</sup> September 2019
SRIMANTAPUR	Tripura	India-Bangladesh	5 <sup>th</sup> September 2020
DAWKI	Meghalaya	India-Bangladesh	4 <sup>th</sup> May 2023
Under Development			
SABROOM	Tripura	India-Bangladesh	
Identified			
KAWRPUICHHUAH	Mizoram	India-Bangladesh	

Source: Website and Annual Reports of the Land Ports Authority of India

## Notes

## Brown-field ICPs

In the past decades, Border Trade Centres (BTCs) or Integrated Development Complexes (IDC) had been established by some of the NE states with Government of India funding under the Assistance to States for Infrastructure Development of Exports (ASIDE) scheme and the Trade Infrastructure for Export Scheme (TIES). The ICPs at Agartala and Srimantapur in Tripura have been started as 'brown-field' ventures by using and developing the pre-existing IDCs at these locations. The ICP Sutarkandi in Assam is also a 'brown-field' project as it has been located at the pre-existing BTC.

## 2. Green-field ICPs

In the NE Region, the ICPs at Moreh and Dawki have been developed as 'green-field' infrastructures, as these have been built-up from scratch. The ICP at Sabroom (now under construction) is a similar development.



**Integrated Check Post at Agartala** 



# 6.3. Volumes of Trade through the Land Customs Stations in NE Region

There are several factors that can serve to enhance the levels of bilateral trade between India and its neighbouring countries like Bangladesh, Bhutan, and Myanmar. These include geographic location, economic development of India and its most of its neighbouring countries, growing bilateral cooperation, and improved connectivity. A significant part of such trade can be done through the international borders located in the North Eastern Region. In order to enhance such foreign trade across the land borders (termed as 'border trade' in this discussion), the Government of India has set up 38 Land Customs Stations (LCSs) in NE Region to foster border trade.

India has extant agreements for border trade between its NE Region and neighbouring countries through LCSs notified under Section-7 of the Customs Act, 1962. The cross-border trade through LCSs, situated on the Bangladesh and Bhutan borders, is governed by Free Trade Agreement (FTA) on South Asia Free Trade Area (SAFTA), as well as bilateral agreements; while cross-border trade with Myanmar is governed by a Border Trade Agreement (BTA) as well as provisions of the Free Trade Agreement between India and ASEAN nations.

It may be noted that there are 38 Land Customs Stations (LCSs) in the North East Region. Of these, 30 LCSs are intended for the India-Bangladesh trade (including 6 LCSs located in inland steamerghats and 2 in inland railway stations); while 3 LCSs are located on the India-Myanmar Border and 4 LCSs on the India-Bhutan Border. Border trade is being carried out between the states of the NE Region and the nearby countries (viz. Bangladesh, Bhutan, and Myanmar) through the above LCSs. It may be noted that there is no LCS on the India-Nepal border in Sikkim, the only NE state with a border with this country. However, there is an LCS located on the India-China border that carries out trade on a restricted list of items.

Despite the existence of numerous LCSs and other trade arrangements, the border trade between North Eastern India and neighbouring countries is highly subdued. This is due to several reasons such as low surpluses of tradable commodities, trade restrictions, and instability along the international border with Myanmar. The following table gives the volumes of border trade between the North Eastern Region and the neighbouring countries that take place through the LCSs located in the region.

The table at the following page gives the trading volumes in 2022-23 through the active LCSs located in the NE Region. It indicates the relative standing of the different LCSs on the matter of the volumes of border trade.

## Note

The volume of trade through an LCS gives the quantitative and monetary values of the flow of goods taking place through it as per the official procedures. These may originate from any state of India (for exports) or be destined to any state (for imports), not necessarily the state where the LCS is located. Thus, the trade volumes given at the following table may not always depict the volumes of exports and imports of the state where the LCS is located.



Table-6.3.1: Goods Traded through the Land Customs Stations located in the NE Region (FY 2022-23)

	Land Customs Station	State	Neighbouring Country	Rs cror	e in FY 2022-23 (April to M	arch)
				Export	Import	Total
1	Darranga	Assam	Bhutan	771.72	373.17	1144.89
2	Hatisar	Assam	Bhutan	760.94	75.20	836.14
3	Agartala	Tripura	Bangladesh	99.31	339.51	438.82
4	Sutarkandi	Assam	Bangladesh	201.83	208.81	410.64
5	Golakganj	Assam	Bangladesh	196.39	182.53	378.92
6	Shella Bazaar	Meghalaya	Bangladesh	311.20	0.00	311.20
7	Kamardwisa	Assam	Bhutan	146.80	101.92	248.72
8	Borsora	Meghalaya	Bangladesh	189.70	0.00	189.70
9	Srimantapur	Tripura	Bangladesh	20.61	151.62	172.23
10	Dawki	Meghalaya	Bangladesh	126.25	9.59	135.84
11	Mankachar	Assam	Bangladesh	89.40	28.52	117.92
12	Manu	Tripura	Bangladesh	0.01	86.72	86.73
13	Bholaganj	Meghalaya	Bangladesh	78.02	0.00	78.02
14	Ghasuapara	Meghalaya	Bangladesh	57.81	0.00	57.81
15	Mahendraganj	Meghalaya	Bangladesh	15.54	7.19	22.73
16	Dalu	Meghalaya	Bangladesh	13.55	0.00	13.55
17	Old Ragna Bazaar	Tripura	Bangladesh	0.93	11.16	12.09
18	Dhubri Steamerghat	Assam	Bangladesh	7.12	0.53	7.65
19	Muhurighat	Tripura	Bangladesh	0.53	5.17	5.70
20	Karimganj Steamerghat	Assam	Zakiganj	4.07	0.00	4.07
21	Khowai	Tripura	Bangladesh	0.00	1.65	1.65
22	Moreh	Manipur	Myanmar	0.00	0.00	0.00
23	Zokhawthar	Mizoram	Myanmar	0.00	0.00	0.00

Source: Data received from the Office of Commissioner of Customs (Preventive), NE Region

## Note

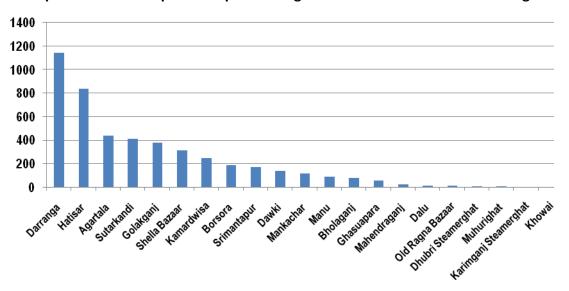
The following 'functional' LCSs have not been listed at above, in view of the reasons mentioned below:

- (a) Baghmara LCS: No trade since 2016-17, when exports of Rs 13.55 lakh took place through it;

- (b) Dhalaighat LCS: Only functioning for the movement of passengers;
  (c) Guwahati Steamerghat LCS: There is no active trade here at present, and only facilitation of transit cargos is being done;
  (d) Sherathang LCS: Data not available for this LCS, which is not under the jurisdiction of the Office of Commissioner of Customs (Preventive), NE Region.



**Graph-6.3.1: Total Export & Import through Land Customs Stations in NE Region** 



Y-axis gives the value of exports and imports in Rs. Crore for the Financial Year 2022-23





# **Import & Export Data (Land Customs Stations)**

As follows for the active Land Customs Stations (LCSs) located in the states of the NE Region

# **DHUBRI CUSTOMS DIVISION**

Listed as follows separately for LCSs located (a) North of River Brahmaputra and (b) South of River Brahmaputra (in Assam and Meghalaya)

Table-6.3.2: Goods Traded through the LCSs of the Dhubri Division (North of River Brahmaputra)

LCS	FY	Imports (Rs. in lakh)	Exports (Rs. in lakh)
Hatisar	2016-17	2714.00	51427.79
	2017-18	1925.78	27969.40
	2018-19	1103.31	23000.49
	2019-20	3538.94	23005.51
	2020-21	3755.47	37974.95
	2021-22	6899.23	72361.86
	2022-23	7520.11	76093.89
	Main Commodities	Extra Neutral Alcohol	HS Diesel
		Plywood	LP Gas
		Crushed Stone	Hardware Goods
		Big Cardamom	Boulder Stone
		Animal Feeds	Broken Rice
Golakganj	2016-17	0.00	768.69
	2017-18	0.00	1161.24
	2018-19	0.00	3094.09
	2019-20	2286.08	1821.53
	2020-21	8206.00	4985.00
	2021-22	19825.62	16509.17
	2022-23	18252.78	19638.60
	Main Commodities	Plywood	Coal
		Synthetic Net	Boulder
		Garments	Crushed Stone
		Plastic Articles	Maize
		Cotton Waste	Wheat
Dhubri	2016-17	0.00	0.00
Steamerghat	2017-18	0.00	0.00
	2018-19	0.00	0.00
	2019-20	0.00	0.00
	2020-21	0.00	8.70
	2021-22	0.00	179.63
	2022-23	52.88	711.60
	Main Commodities	Waste cotton, raw jute	Boulder
			Crushed Stone





Table-6.3.3: Goods Traded through the LCSs of the Dhubri Division (South of River Brahmaputra)

LCS	FY	Imports (Rs. in lakh)	Exports (Rs. in lakh)
Dalu	2016-17	172.69	789.13
	2017-18	55.45	457.53
	2018-19	133.82	223.19
	2019-20	138.32	498.54
	2020-21	0.00	903.00
	2021-22	0.00	1752.71
	2022-23	0.00	1354.66
	Main Commodities	PVC Door Plastic Articles	Coal Boulder Stone
		Synthetic Net Cement Palmolein Oil	
Mahendraganj	2016-17	963.26	505.38
<u> </u>	2017-18	1770.24	363.76
	2018-19	2085.14	273.54
	2019-20	1498.71	627.95
	2020-21	681.00	1255.00
	2021-22	289.36	1165.19
	2022-23	719.34	1553.98
	Main Commodities	PVC Door	Boulder Stone
		Plastic Articles Synthetic Net Big Cardamom	Ginger Crushed Stone Betel Nut
Mankaahar	2017 17	Cotton Waste	100.05
Mankachar	2016-17	106.63	198.05
	2017-18	584.06	97.73
	2018-19	1629.18	1238.6
	2019-20	2445.79	113.59
	2020-21	1903.00	590.00
	2021-22	1835.00	607.00
	2022-23	2851.78	894.05
	Main Commodities	PVC Door Plastic Furniture Melamine Synthetic Net	Boulder Stone Crushed Stone Ginger
		Cotton Waste	
Ghasuapara	2016-17	0.00	13361.00
	2017-18	0.00	11043.86
	2018-19	0.00	7020.29
	2019-20	0.00	416.34
	2020-21	0.00	1746.09
	2021-22	0.00	12186.31
	2022-23	0.00	5780.92
	Main Commodities		Coal Crushed Stone Ginger

# NOTE:

No trade has happened through the LCS at Baghmara since 2016-17, when exports of Rs 13.55 lakh were recorded.



# **SHILLONG CUSTOMS DIVISION**

Table-6.3.4: Goods Traded through the LCSs of the Shillong Division

LCS	FY	Imports (Rs. in lakh)	Exports (Rs. in lakh)
Dawki	2017-18	307.77	10545.00
	2018-19	708.61	8014.55
	2019-20	963.81	8004.09
	2020-21	736.16	6673.26
	2021-22	1212.80	9217.08
	2022-23	959.29	12625.00
	Main Commodities	Edible Food	Limestone
		Plastic Articles	Boulder Stone
			Coal
Bholaganj	2017-18	0.00	2415.53
	2018-19	0.00	6670.29
	2019-20	0.00	6244.48
	2020-21	0.00	4581.92
	2021-22	0.00	7347.17
	2022-23	0.00	7802.32
	Main Commodities		Limestone
			Boulder Stone
Shella Bazaar	2016-17	0.00	
	2017-18	0.00	21856.30
	2018-19	0.00	20607.25
	2019-20	0.00	21378.92
	2020-21	0.00	18202.66
	2021-22	0.00	20964.00
	2022-23	0.00	31119.90
	Main Commodities		Limestone
Borsora	2017-18	0.00	24747.80
	2018-19	0.00	10126.84
	2019-20	0.00	8850.98
	2020-21	0.00	8726.88
	2021-22	0.00	22077.50
	2022-23	0.00	18970.00
	Main Commodities		Limestone
			Coal

NOTE:

The LCSs at Rynku Bazaar and Balat are 'non-functional' as no trade has happened through them for many years.





# **GUWAHATI CUSTOMS DIVISION**

Table-6.3.5: Goods Traded through the LCSs of the Guwahati Division

LCS	FY	Imports (Rs. in lakh)	Exports (Rs. in lakh)
Darranga	2017-18	12373.00	15302.00
	2018-19	12450.00	18871.00
	2019-20	22891.00	42827.00
	2020-21	15238.72	37779.00
	2021-22	29066.70	55392.00
	2022-23	37317.31	77172.00
	Main Commodities	Ferro-silicon, Gypsum, Plasters, Potato	HS Diesel, Plant & Machinery, Low Ash Metallurgical Coke, Steel
Kamardwisa	2017-18	5723.94	2729.44
	2018-19	10885.54	7959.17
	2019-20	11976.38	9227.61
	2020-21	11576.90	8637.11
	2021-22	10030.57	14751.61
	2022-23	10191.53	14680.00
	Main Commodities	Cement & Clinker	Fuel, Fly Ash, Coal, Bricks, PP Granules, Tyre, Oxygen Gas



# KARIMGANJ CUSTOMS DIVISION

Table-6.3.6: Goods Traded through the LCSs of the Karimganj Division

LCS	FY	Imports (Rs. in lakh)	Exports (Rs. in lakh)
Sutarkandi	2017-18	10626.08	5590.48
	2018-19	10797.60	3597.38
	2019-20	26273.88	6702.11
	2020-21	18840.58	4934.00
	2021-22	38945.29	10857.92
	2022-23	20881.36	20182.71
	Main Commodities	Cement	Limestone
		Food Items	Non Basmati Rice
		Drinks	Coal
		Waste Cotton	Fresh Ginger
		Cement	Pre-stressed Concrete Sleepers
		PP Woven Sacks	·
			Continued



LCS	FY	Imports (Rs. in lakh)	Exports (Rs. in lakh)	
Karimganj	2017-18	0.00	1494.00	
Steamerghat &	2018-19	0.00	1697.00	
Ferry Station	2019-20	0.00	1233.00	
	2020-21	6.90	169.00	
	2021-22	0.00	818.52	
	2022-23	0.00	406.69	
	Main Commodities	Cement	Ginger, Citrus, Orange	
Old Ragna Bazaar	2017-18	327.12	101.47	
	2018-19	924.30	408.00	
	2019-20	1014.52	810.65	
	2020-21	605.23	486.30	
	2021-22	1065.40	195.70	
	2022-23	1115.59	92.96	
	Main Commodities	Plastic Furniture, Plastic Articles, PVC Door, PVC Pipe & Fittings	Citrus, Ginger	
Manu	2017-18	1042.05	524.87	
	2018-19	1458.76	1005.08	
	2019-20	2305.56	2147.61	
	2020-21	2429.19	277.89	
	2021-22	2881.86	2.01	
	2022-23	8672.11	0.74	
	Main Commodities	Cement, Plastic Furniture, Plastic Articles, Misc. Food Items, Fish, Fresh Drinks	Fresh Fruits, China Clay Powder	



# **AIZAWL CUSTOMS DIVISION**

Table-6.3.7: Goods Traded through the LCS of the Aizawl Division

LCS	FY	Imports (Rs. in lakh)	Exports (Rs. in lakh)
Zokhawthar	2017-18	204.36	0.00
	2018-19	0.00	0.00
	2019-20	82.64	326.35
	2020-21	0.00	0.00
	2021-22	37.22	0.00
	2022-23	0.00	0.00
	Main Commodities	Betel Nut, Black Pepper	Men's Wallets



# **IMPHAL CUSTOMS DIVISION**

Table-6.3.8: Goods Traded through the LCS of the Imphal Division

LCS	FY	Imports (Rs. in lakh)	Exports (Rs. in lakh)
Moreh	2017-18	0.00	43.71
	2018-19	0.00	307.19
	2019-20	61.58	35490.61
	2020-21	0.00	1172.41
	2021-22	0.00	527.77
	2022-23	0.00	0.00
	Main Commodities	Cement	Items needed for Road Construction in Myanmar, Mules

# **AGARTALA CUSTOMS DIVISION**

Table-6.3.9: Goods Traded through the LCSs of the Agartala Division

LCS	FY	Imports (Rs. in lakh)	Exports (Rs. in lakh)	
Agartala	2017-18	23524.00	27.63	
	2018-19	35511.00	57.79	
	2019-20	58561.00	38.00	
	2020-21	58591.00	146.18	
	2021-22	64225.00	19844.00	
	2022-23	33951.00	9931.00	
	Main Commodities	Food items, cement, plastic items, fish, MS rod, sheet steel	Wheat, maize, broken stone	
Srimantapur	2017-18	9318.00	25.00	
	2018-19	9593.00	47.00	
	2019-20	10093.00	40.00	
	2020-21	7352.00	730.00	
	2021-22	6825.83	10468.19	
	2022-23	15162.01	2061.05	
	Main Commodities	Cement, LPG, fruit drinks,	Wheat, cumin seeds, vegetable	
		readymade garments	seeds	
Muhurighat	2017-18	4006.57	0.00	
	2018-19	4542.00	0.00	
	2019-20	3027.00	0.00	
	2020-21	3559.00	0.00	
	2021-22	4759.62	0.00	
	2022-23	517.15	52.80	
	Main Commodities	Cement, crushed stone, kitchen rack, roofing nail	Onion, wood apple, fresh ginger	
Khowaighat	2017-18	252.60	4.33	
-	2018-19	172.80	25.80	
	2019-20	52.40	0.00	
	2020-21	192.37	0.00	
	2021-22	360.91	1.23	
	2022-23	165.25	0.09	
	Main Commodities	Cement, plastic pot, fresh fish	Fish fry	

Source (for Tables-6.3.2 to 6.3.9): Office of Commissioner of Customs (Preventive), NE Region

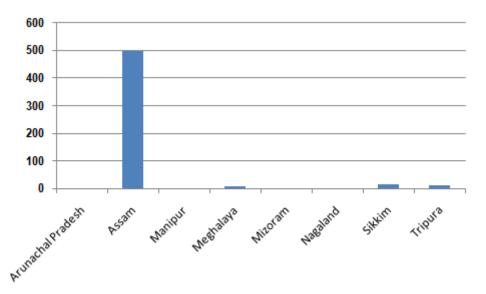


# 6.4. Exports from the States of the NE Region

The table at the next page gives the total quantum of exports from the different NE states. All figures are US\$ in millions. From this table, the following have been inferred regarding the exports from the NE States.

- NE states are very insignificant in the export scenario of India, and they have accounted for between 0.12% and 0.21% of the total exports from India in the past seven years from FY 2015-16 onward (in monetary terms).
- Further, the share of exports from the NE states in the total national exports has been declining since 2017-18 (when they accounted for 0.21% of the national exports). In FY 2021-22, the NE states contributed to just 0.12% of the nation's exports. In 2022-23, the exports from the NE states remained at just 0.12% of the national exports.
- In addition, the exports have also been stagnating in absolute terms in the above period. In FY 2017-18, exports were US\$ 626.17 million. After four years, the NE states could export only US\$ 492.64 million. This represents a decline of over 21% in the above period. However, in 2022-23, such exports increased to US\$ 547.56 million, barely higher in nominal terms than the region's exports in 2016-17.
- Assam accounts for a major share of the exports from the NE states about 91% in the financial
  years FY 2020-21 and 2021-22. In FY 2022-23, its exports were again nearly 91% of the regional
  exports. The exports from Meghalaya have declined markedly during the period from FY 2015-16
  to FY 2021-22.

In addition, the major commodity exports from the NE states (for FY 21-22) have been listed at the following page.



Graph-6.4.1: Exports from the NE States of India

Y-axis gives the Exports from the States in US\$ million for 2022-23.



# **Exports from the North Eastern States of India**

Table-6.4.1: Exports from the NE States of India (in US\$ million)

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Arunachal Pradesh	4.93	5.32	2.23	1.55	0.50	1.70	4.55
Assam	430.02	382.35	369.76	436.70	415.62	450.52	497.08
Manipur	1.06	133.00	2.66	0.93	0.95	0.93	0.69
Meghalaya	102.14	85.13	51.09	44.26	10.87	8.64	10.12
Mizoram	0.03	1.07	1.33	0.58	0.69	3.83	0.04
Nagaland	0.74	3.92	2.78	5.71	6.06	1.14	1.36
Sikkim	4.91	13.96	7.91	9.88	9.36	18.91	19.08
Tripura	1.26	1.42	2.36	1.75	11.19	12.19	14.64
Total - NE Region	545.09	626.17	440.12	501.36	455.24	497.86	547.56
Indian Exports	275,852.43	303,526.16	330,078.09	313,361.04	291,808.48	422004.42	450958.43
NER as % of India	0.20	0.21	0.13	0.16	0.16	0.12	0.12

Source: Collated from the India Brand Equity Foundation (IBEF) presentations on the above states, which have been based on data from Directorate General of Commercial Intelligence and Statistics, Ministry of Commerce and Industry, supplemented by data from different Trade Bulletins brought out by Directorate General of Foreign Trade.

Table-6.4.2: Major Exports of NE States (in 2021-22)

Arunachal Pradesh	Iron & Steel (79%), Plywood Products (2%)
Assam (*)	Tea (68%), Petroleum Products (10%) Coal, Coke & Briquettes (6%)
Manipur	Cotton Fabrics (44%), Iron & Steel Products (12%), RM Cotton Garments (9%)
Meghalaya	Coal, Coke & Briquettes (40%), Processed Minerals (23%), Cement & Clinker (2%)
Mizoram (*)	Fresh Fruits (54%), Hand Tools & Cutting Metal Tools (28%), Marine Products (16%)
Nagaland	Ceramic & Allied Products (24%), Electric Machines & Equipment (16%), Electronic Components (14%), Human Hair (6%)
Sikkim	Drug Formulations (67%), Medical & Scientific Instruments (10%)
Tripura	Electrical Machinery (87%)

(\*) based on data from FY 20-21

Source: Collated from the India Brand Equity Foundation (IBEF) presentations on the above states



# 7. Ranking of the North Eastern States on Various Indices

NITI Aayog has been constituted to work towards an over-arching goal of 'cooperative federalism' in India. Besides, it strives to promote good governance in the country. NITI Aayog believes that 'strong states make a strong nation'. Hence, it works to provide a platform where the Government of India and the State Governments can come together and work as a 'Team India' for achieving the national development agenda.

Further, competitive federalism can supplement cooperative federalism. Hence, NITI Aayog has been promoting competitive federalism in India to facilitate the improved performance of the States and Union Territories of the country. In this connection, it encourages healthy competition among States and UTs through transparent rankings in various sectors, with such rankings having been arrived at through a data-driven and transparent exercise.

Some of the indices of competitive federalism, launched by NITI Aayog, have been covered in the following pages for the NE States. The coverage gives the ranks and scores of these states for the following: (a) Sustainable Development Goals (SDG) Index, (b) India Innovation Index, (c) Export Preparedness Index, (d) State Health Index, and (e) School Education Quality Index. In addition, the methodology and component-wise scores have been furnished in brief for each of these indices, as made available in the different ranking-related reports released in the public domain.

The ranking of States in various social sectors is done based on quantitative objective criteria with the intent to encourage them (and even their districts) to improve their performance. In carrying out such ranking exercises, the NITI Aayog works closely with all stakeholders, including the Governments of States and Union Territories, as well as the concerned Ministries and Departments of the Government of India. Such collaboration encompasses the development of indicator frameworks and review mechanisms, conduct of reviews, and various capacity-building exercises.

In addition, this chapter covers a few of the other ranking-oriented initiatives of Government of India Departments. Such coverage includes the following for the NE states: (a) LEADS Index brought out by the Commerce Department of the Ministry of Commerce and Industry for the Logistics Sector; (b) Business Reforms Action Plan (BRAP) of the Department for Promotion of Industry and Internal Trade (DPIIT) for improving the Ease Of Doing Business; and (c) Swachh Survekshan Ranking of the Department of Water Supply and Sanitation, Ministry of Jal Shakti.



## 7.1. SDG India Index

The 2030 Agenda for Sustainable Development was adopted by the Member States of the United Nations in 2015. It provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which represents an urgent call for action by all countries in a global partnership.

India is firmly committed to playing its internationally recognised role in determining the success or failure of the SDGs. The nation's achievements of the different SDGs will largely depend upon the initiatives of the Governments of the States and Union Territories (UTs). In addition, the focus of the SDGs on equality, justice and the core principle of 'Leave No One Behind' make the participation and contribution of States and UTs crucial in the pursuit of the SDGs. NITI Aayog is the nodal institution for achieving SDGs in the country, leading the 2030 Agenda with the spirit of cooperative and competitive federalism. It monitors the national and sub-national levels progress through various mechanisms like the SDG India Index. This index is the world's first Government-led sub-national measure of SDG progress. The first edition of the index was launched in December 2018; the second came out on 30 December 2019; and the third edition was launched in June 2021.

NITI Aayog has taken several steps to drive partnerships with different stakeholders in order to accelerate the progress on SDGs. Such partnerships with Union Ministries and State Governments have been instrumental in expanding the localisation of SDGs. The partnerships between NITI Aayog and the State Governments, as well as between the State Governments and their respective district administrations, are deemed to be essential for the success of such localisation of the SDG related initiatives.

The first edition of the SDG India Index was launched in December 2018, using 62 indicators from 39 targets across 13 SDGs. In this exercise, Goals 12, 13, 14, and 17 had to be left out owing to the lack of indicators for which state-wise data was available. The second edition of the Index was launched in December 2019. It was broader in its coverage, encompassing all the 17 Goals and 54 targets. It had 100 indicators; of which 68 were completely aligned with the National Indicator Framework (NIF), 20 were refined, and 12 were from other official government sources. The third and current edition (SDG Index 3.0) marks an improvement over the edition of 2019-20, with a wider coverage of targets.

As per NITI Aayog, the results of the SDG India Index have been widely publicised, which has raised its awareness at many levels, including the Government. State Governments have taken action for the review of their progress on the SDGs. Some have constituted high-level committees, while others have pushed the localization of SDGs by taking up the monitoring at district levels. This has raised the healthy competition amongst states and their districts.

The following page gives the ranking snapshot of the NE States, based on their composite scores in the SDG India Index 3.0.



Table-7.1.1: Rank and SDG Scores of the NE States as per the SDG India Index 3.0 (2020-21)

SDG	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
Rank	22	26	16	22	12	19	8	15
Composite Score	60	57	64	60	68	61	71	65
SDG-1	54	51	60	77	80	73	80	82
SDG-2	66	41	64	37	72	64	69	52
SDG-3	64	59	68	70	79	61	62	67
SDG-4	41	43	63	48	60	39	58	42
SDG-5	37	25	41	51	54	48	58	39
SDG-6	67	64	87	75	85	87	89	82
SDG-7	85	98	96	50	100	69	100	83
SDG-8	50	50	36	63	51	48	71	57
SDG-9	31	39	35	25	32	30	52	35
SDG-10	69	65	70	88	64	46	61	85
SDG-11	39	55	65	51	61	48	85	67
SDG-12	77	66	89	73	89	91	76	99
SDG-13	58	53	57	62	66	69	65	41
SDG-14								
SDG-15	93	78	60	64	48	63	73	69
SDG-16	64	62	69	72	81	79	72	80

Source: 'SDG India Index & Dashboard 2020-21: Partnerships in the Decade of Action' brought out by the NITI Aayog in 2021

## Notes

## 1. About SDG India Index 3.0

The third and current edition (Index 3.0) of the SDG India Index is based on the framework of 17 SDGs and 169 targets. The Index estimation is based on data on indicators for the first 16 goals while a qualitative assessment has been made for Goal 17. It is constructed using 115 indicators which cover 70 targets from 16 Goals. While most of the indicators are directly taken from the NIF, some NIF indicators have been modified owing to data availability across all States/UTs. The respective ministries/departments, and States/ UTs have been consulted extensively on the usage of the indicators and data availability. The methodology was developed in 2019 in close association with the Ministry of Statistics and Programme Implementation (MoSPI); with the Data and Methodology Committee, chaired by MoSPI, leading the efforts; and is largely based on the methodology used by the Sustainable Development Solutions Network, a global initiative under the auspices of the UN Secretary General.

The Committee had members from NITI Aayog, MoSPI, UN agencies, and key Union ministries. The Committee took the leadership role in examining various methodologies and arriving at the most suitable one, development of the Index, identification of indicators, and determining data gaps.

[Source: Chapter-7, 'SDG India Index Overview & Methodology' of 'SDG India Index & Dashboard 2020-21: Partnerships in the Decade of Action' brought out by the NITI Aayog in 2021]

## 2. Methodological Steps

Chapter-7 of the source document gives the methodology adopted in bringing out the SDG India Index 3.0. This chapter may be referred to for the pertinent details. (The source documents is 'SDG India Index Overview & Methodology' of 'SDG India Index & Dashboard 2020-21: Partnerships in the Decade of Action' brought out by the NITI Aayog in 2021).

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## Scores

Scores on different SDGs have been assigned, based on a multi-stage process, involving: (a) selection of the indicators; (b) stakeholders' consultations for data; (c) target setting; (d) normalization of scores; and (e) computation of state score

The state scores on each SDG are the arithmetic mean of the normalised values of all indicators under the Goal, with equal weight being assigned to each indicator.

## 4. Composite Score

A composite score has been calculated, which ranked all the States/ UTs based on their overall performance across the multiple Goals. It is computed as the arithmetic mean of all SDG scores; with each SDG score having equal weight.

## 5. Ranking

Ranking of each state is given out of the 28 states in India, based on the Composite Score of the state. The following link of Press Information Bureau may be seen: https://pib.gov.in/PressReleasePage.aspx?PRID=1911165.

## 6. Categorisation of the States and UTs

The States have been classified into four categories based on their scores ('distance from target') as follows:

- (a) Achiever: Any State with a score of 100 is called an Achiever, since the State has achieved all the targets outlined by the SDG;
- (b) Front Runner: Any State with a 'progress' (i.e. score) of 65 or more (but below 100) is classified as a Front Runner, since such States are nearing the target as compared with the others;
- (c) Performers: States with score of above 50 but below 65 are termed as 'Performers'; and
- (d) Aspirants: States with score of below 50.

When looking at the distribution of the States in terms of the aggregate SDG score across the 4 classifications, one can observe that no State is a 100 on all 17 goals. While 15 out of the 28 States are in the Front Runner category and 13 States in the Performer category, among the UTs 1 falls in the Performer and 7 in the Front Runner categories.

## 7. SDG 14

Indicators related to SDG 14 were not included as they relate only to the 9 coastal States. None of the NE States is a Coastal State.

## 8. SDG 17

The Index does not measure indicators of SDG 17 owing to the unavailability of suitable data at the State/UT level. However, a qualitative assessment of the progress under SDG 17 has been included.































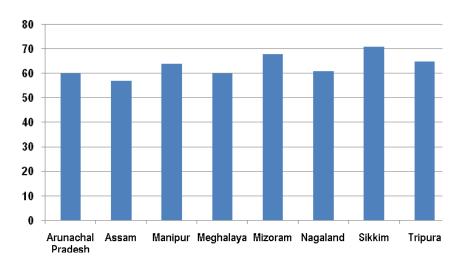








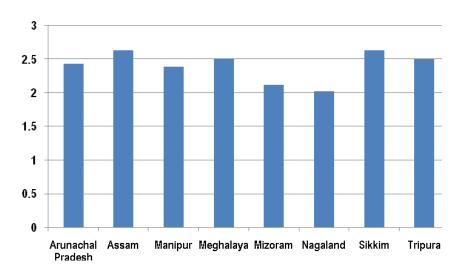
Graph-7.1.1: SDG Scores of the NE States as per SDG India Index 3.0 on Progress towards the 'Sustainable Development Goals'



Y-axis gives the SDG related 'Composite Scores' of the NE States on a scale from 0 to 100, where 100 denotes 'Full Achievement' of all targets. The above scores are as per the 3<sup>rd</sup> Edition of the SDG India Index (2020-21) brought out by NITI Aayog.

[Note: Highest placed state (Kerala) had a score of 75, while the national average for India is 66.]

Graph-7.2.1: Final Scores of the NE States as per LEADS 2021 Study on 'Logistics Ease Across States'



Y-axis gives the 'Final Scores' on a scale from 1 to 5, where '5' is the best score. The above scores are as per the LEADS 2021 Study undertaken for the Department of Commerce, Ministry of Commerce and Industry.

[Note: Highest placed state (Gujarat) had a score of 3.66.]



# 7.2. Logistics Ease Among Different States (LEADS) Index

Competitiveness is an important factor that can boost the performance of India on the socio-economic front, and help the country to become an US\$ 5 trillion economy by 2025. It has been realized that the nation's competitiveness depends to a significant degree upon the effectiveness and efficiency of its logistics system. The Government of India has been taking many initiatives to improve the logistics ecosystem of the country. These encompass the physical improvements as well as various regulatory and process improvements, including through the use of digital technology.

In parallel, the role of the Governments of the States and Union Territories has assumed salience in view of the federal nature of the country. Since 2018, the Ministry of Commerce and Industry of the Government of India has been periodically bringing out the results of studies related to the 'Logistics Ease Across Different States (LEADS)'. These cover the pertinent areas like infrastructure, services, and operating & regulatory environment. The intent is to highlight the prevailing conditions of the logistics operations at the ground level, and to sensitise the Governments of the States and Union Territories regarding the need for greater development of the sector.

LEADS 2021 focussed upon both foreign-trade related logistics and the internal systems for domestic trade. The study had been undertaken with two specific measures: (a) the use of both objective and perception based indicators; and (b) use of 'updated' statistical methodologies. The objective parameters have been analysed based on data obtained by administering survey instruments, apart from analysing available data-sets. In addition, a wide range of perception-based data had been collected to develop perception-related indicators.

The results of the LEADS 2021 exercise for the NE states, based on their 'final scores' have been summarized at the following table. The states' scores on the various parameters have been provided separately. It may be noted that the North Eastern states, these (apart from Assam) have been categorised separately, along with Jammu and Kashmir (Himalayan UTs). However, Assam has been placed in the category of other Indian states.

Table-7.2.1: Rank and Scores of the NE States as per the LEADS 2021 Study

State	LEADS 20	021 Index	(*) Remarks				
State	Rank (*)	Final Score	() Kelliaiks				
Assam	21	2.63	Assam has been ranked with 21 Indian states except 'NE States and Himalayan UTs, and Delhi and Chandigarh'				
Arunachal Pradesh	5	2.43					
Manipur	6	2.39					
Meghalaya	3	2.51	Included in a separate category of eight states /				
Mizoram	7	2.12	UT (seven NE states and Jammu Kashmir (lumped				
Nagaland	8	2.02	together) as a Himalayan UT'				
Sikkim	2	2.63					
Tripura	4	2.50					

Source: 'LEADS 2021, Logistics Ease Across Different States', Department of Commerce, Ministry of Commerce and Industry



Notes

- 1. Assam has been ranked with other Indian states, as 'it was also considered reasonable to take Assam out of the NER mix, because of its special characteristics'.
- 2. The NE Hill States (including Tripura) have been categorized along with Jammu and Kashmir (Himalayan UTs). This has been done on the following grounds.

'Limited access points, mostly via the inefficient ecosystems in West Bengal (as perceived in LEADS 2021 study) and centred primarily around (*sic*) Assam within the NER, only increase time and cost of cargo movement to/from the region. Lack of major industries and production centres across the entire region discourage logistics infrastructure development and the States' difficult terrain makes operation and management of logistics challenging. The NE Region is a consumption-based economy with little to offer for return cargo. This fact itself makes the region a high-cost logistics territory. The entire region encounters similar kinds of challenges and it appears as though it is one large homogeneous territory with its centre in Assam. Though efforts are underway to develop connectivity and build infrastructure in States other than Assam, it will take time for the focus to shift'.

- 3. The states' scores on the various parameters that have been taken up by the LEADS 2021 study have been provided separately in the next table.
- 4. Approach & Methodology

As given in the 'LEADS 2021, Logistics Ease Across Different States', especially at Page Nos. 17-27

Scores

Scores have been furnished on a scale from 1 to 5.

Infrastructure Score: 'Each of the 11 objective parameters used for statistical analysis was normalised either using Gross State Value Addition (GSVA) for Industry and Agriculture or the State's Geographical Area. Annexure 3 illustrates the usage of parameters and its normalisation factor. After normalisation, a total score was generated, which was categorised using a class interval of 1-5. This objective score was considered a measure of the quality of infrastructure data to be included in the Infrastructure construct'.

Final Scores

Final Scores have been taken as furnished in the Study Report (at Page No. 29).

7. Dependence upon Perceptions of Respondents

As mentioned in the Study Report

'Overall, combining 17 perception indicators and 4 objective indicators, a total of 21 indicators have been used for Statistical analysis. LEADS 2021 continues to remain predominantly a perception-based Index on which States/UTs are ranked, despite the introduction of objective parameters.

Beginnings made in the introduction of Objective parameters have been encouraging and it is hoped that more of them would progressively be used in subsequent LEADS exercise. Much will depend on better quality consistent and comprehensive data points being available in the future which would be amenable to normalization across State/UTs for effective comparison. Perception based indices are generally universally used for such rankings. And yet, perception basis will always have its weaknesses in respect of lack of evidence, recent event bias and the general subjectivity of opinions' (Page No.23)





Table-7.2.2: Scores of the NE States on various Parameters used for developing the LEADS 2021 Index

Parameter used in the LEADS 2021 Study	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
Perception-based Indicators								
Quality of Road Infrastructure	2.21	2.64	1.96	2.06	1.93	2.21	2.30	2.37
Quality of Rail Infrastructure	2.25	2.69	1.50	1.89	1.87	1.83	1.82	1.98
Quality of Multimodal Terminal Infrastructure	2.21	2.46	1.79	1.76	1.53	2.13	2.12	1.80
Quality of Uni-modal Terminal Infrastructure	2.29	2.44	2.04	1.94	2.13	2.00	2.33	2.20
Quality of Warehousing Infrastructure	2.33	2.45	2.08	2.29	2.00	1.92	2.30	2.24
Quality of Logistics Services	2.17	2.65	1.87	2.19	2.07	1.87	2.18	2.08
Capability of Logistics Service Providers	2.17	2.85	2.22	2.34	2.13	1.78	2.33	2.26
Reasonableness of Road Freight Rates	1.83	1.97	1.35	1.60	1.27	1.35	1.58	1.44
Reasonableness of Prices of Terminal Services	1.83	2.15	1.43	1.71	1.53	1.52	1.88	1.72
Timeliness of Cargo Delivery (Transportation)	2.21	2.48	1.87	2.07	2.07	2.04	2.55	2.15
Timeliness of Cargo Delivery (Terminal Services)	2.33	2.69	2.04	2.13	1.87	2.22	2.21	2.13
Availability of Mobile / Internet Connectivity	2.00	2.66	2.09	2.11	2.07	2.09	2.36	2.51
Safety and Security during Transportation	2.46	2.74	2.17	2.43	2.07	2.13	2.52	2.56
Safety and Security at Terminals	2.50	2.86	2.39	2.71	2.00	2.48	2.76	2.90
Extent of Facilitation	2.18	2.37	2.14	1.84	1.93	2.05	2.24	1.92
Ease of Obtaining all Approvals	2.14	2.26	1.82	1.84	2.13	1.95	2.21	2.03
Efficiency of Regulatory Services	2.18	2.35	1.68	2.04	2.13	2.05	2.45	2.32
Objective Indicators								
Range scaled EODB Ranks	1.00	3.00	1.00	1.00	2.00	1.00	1.00	1.00
TIES Outlay	1.00	3.00	3.00	1.00	1.00	1.00	3.00	3.00
States' Logistics Enabling Initiatives	2.00	4.00	3.00	2.00	3.00	1.00	1.00	3.00
Assessment of Variables of Logistics Ease	2.56	3.67	2.44	2.67	2.67	2.56	2.33	3.33
FINAL SCORE	2.43	2.63	2.39	2.51	2.12	2.02	2.63	2.50

Source: 'LEADS 2021, Logistics Ease Across Different States', Department of Commerce, Ministry of Commerce and Industry (Page Nos. 28-29)



# 7.3. India Innovation Index

The NITI Aayog and the Institute for Competitiveness are collaborating in order to release the 'India Innovation Index' every year. The exercise for developing this Index seeks to develop a rigorous and inclusive framework for the continual assessment of the innovation environment in all the States and Union Territories of India. NITI Aayog had released the second edition of the 'India Innovation Index' on 20<sup>th</sup> January 2021, which also includes the ranks of the States and UTs. It is also supporting the latter in improving their rankings in the Index; as such improvements will in turn result in the improvement of India's ranking in the Global Innovation Index in the subsequent years.

The 'India Innovation Index 2021' presents an in-depth analysis of the status of innovation in the Indian economy. It has been developed based on 'extensive research and critical analyses' of the States and Union Territories. The latest framework of the Index has been mapped from the Global Innovation Index (GII), published annually by the World Intellectual Property Organization. The new framework presents a more nuanced and comprehensible outlook for measuring innovation performance in India, with the introduction of 66 unique indicators.

There are 7 pillars in the Index; five 'Enabler' pillars that measure inputs (viz. Human Capital, Investment, Knowledge Workers, Business Environment, and Safety & Legal Environment'), and two 'Performance' pillars to measure the output (i.e. 'Knowledge Output' and 'Knowledge Diffusion'). New indicators have been included in the framework to further strengthen the index. In the previous edition, there were 36 indicators; while India Innovation Index 2021' has 66 indicators, of which 50 relate to 'Enablers' and the remaining 16 to 'Performers'. Each pillar has several indicators; for example 'Human Capital' has 8 indicators related to 'School Education' and 8 other indicators related to 'Tertiary & Higher Education'. Additional details regarding the above pillars and their indicators are available at Page Nos. 80-83 of the Study Report.

The States and UTs have been segregated into three categories, i.e. 'Major States', 'North East & Hill States' and 'Union Territories & City States'. Along with Himachal Pradesh and Uttarakhand; the NE States are in the second category, which has ten states. The ranking and scores of the NE States have been summarized below for the 'India Innovation Index 2021'.

Table-7.3.1: Rank and Scores of the NE States as per the India Innovation Index 2021

State	India Innovati	on Index 2021			
	Rank (out of 10	Overall	Remarks		
	NE & Hill States)	Innovation Score			
Arunachal Pradesh	4	15.46			
Assam	9	11.29	All eight NE States have been grouped along with		
Manipur	1	19.37	two Himalayan states (Himachal Pradesh and		
Meghalaya	3	16.00	Uttarakhand) under the category of 'North East & Hill		
Mizoram	7	13.41	States', which has ten states in all.		
Nagaland	10	11.00	Ranks of NE states are out of ten states in the		
Sikkim	6	13.85	above category		
Tripura	8	11.43			

Source: 'India Innovation Index 2021', NITI Aayog and Institute for Competitiveness

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## Notes

- 1. The Indicators used in the development of the India Innovation Index 2021 have been defined at Appendix-A of the **report on 'India Innovation Index 2021'**, brought out by the NITI Aayog and Institute for Competitiveness (at Page Nos. 296-300). In addition, the definitions of the different indicators have also been given at Appendix-A.
- 2. Data sources are given at Appendix-B at Page Nos. 301-304.
- 3. Appendix-D (at Page Nos.308-310) gives the range of scores for the Indicators for best cases ('utopia') and worst cases ('dystopia).
- 4. Enablers' Score: These input pillars will measure the elements of the state that enable innovative activities with the support of the five pillars.
- 5. Performance Score: The performance pillar indicates the output of the innovation activities undertaken by the states. Even though this dimension only has two pillars, it has the same weightage in the calculation of the overall innovation scores as the Enablers' dimension.
- 6. The Overall Innovation Score: The overall innovation score is the simple average of the two dimensions, i.e. Enablers' Score and the Performance Score.
- 7. Innovation Efficiency Ratio: This is the ratio of the two scores. It indicates the state's ability to efficiently leverage its investments and infrastructure to produce successful innovation outputs.
- 8. Data Normalization

All the indicators in the final set are modified so that a greater value means a higher score for the state. For instance, the pendency of court cases will have an adverse impact on the index. Therefore, transformations are applied to make its impact positive.

As all the indicators are measured in different units, it is important to standardize them so they become comparable. Otherwise, a variable that has relatively less variance but is measured on a larger scale as compared to other variables may appear to have much greater variation than it actually does. Standardization helps to solve this problem by making all the indicators unit-less as it rescales using a mean of zero and a standard deviation of one.

Indicators are normalized using either GDP or population to enable relative state comparison. This implies that changes in individual indicators may either be driven by the numerator or normalization factor. Moreover, assessing year-on-year performance relies on consistent data collection over time that is not collected for all indicators. Therefore, a change in definition or old variable data could create movements in the rankings unrelated to performance.

## 9. Dimension Score

Each dimension score is taken to be a simple average of its pillars. The rationale is that the absence of any theoretical or empirical proof to weigh any of the pillars higher than the others.

## 10. Innovation Index Score

The two dimensions (i.e., Enablers and Performance) are believed to reflect equally important aspects of innovation. Therefore, while calculating the index no priority has been given to any dimension. Equal weights have been assigned to each of them to highlight their roles.

The table at the following page gives the pillar and dimension scores of the NE states, as computed for the India Innovation Index 2021.



Table-7.3.2: Scores of the NE States on various Pillars & Dimensions used for formulating the India Innovation Index 2021

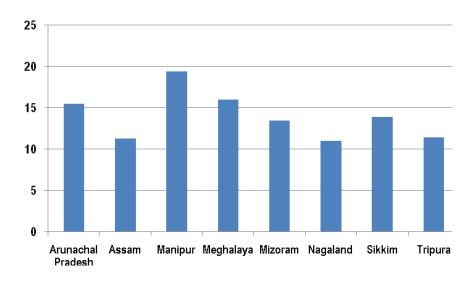
		Pillar: Enabler						Pillar: Performance		
State	Human Capital	Business Environment	Investment	Knowledge Workers	Safety & Legal Environment	Pillar Score	Knowledge Output	Knowledge Diffusion	Pillar Score	Innovation Index 2021
Arunachal Pradesh	25.36	17.85	17.12	3.16	45.32	21.76	7.98	10.34	9.16	15.46
Assam	24.44	20.28	5.01	1.93	26.26	15.59	10.55	3.45	7.00	11.29
Manipur	25.32	21.11	11.44	12.78	72.13	28.55	11.71	8.66	10.19	19.37
Meghalaya	27.68	17.00	1.54	4.10	64.44	22.95	12.40	5.71	9.06	16.00
Mizoram	35.23	20.47	4.58	0.53	39.84	20.13	7.95	5.41	6.68	13.41
Nagaland	24.55	18.82	2.15	3.02	49.93	19.69	3.01	1.61	2.31	11.00
Sikkim	28.83	21.32	5.88	2.53	45.60	20.83	8.12	5.62	6.87	13.85
Tripura	26.43	25.42	1.32	2.36	42.37	19.58	5.47	1.07	3.27	11.43

Source: 'India Innovation Index 2021', NITI Aayog and Institute for Competitiveness (Page No. 312)





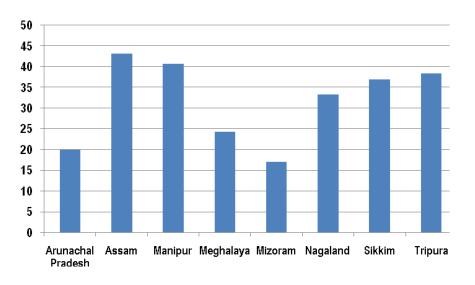
Graph-7.3.1: Scores of the NE States as per the India Innovation Index 2021



Y-axis gives the 'Overall Innovation Scores' of the NE States as per the India Innovation Index on a scale from 0 ('Dystopia') to 100 ('Utopia'). The above scores are as per the Second Edition of the India Innovation Index brought out in 2021 by NITI Aayog and Institute for Competitiveness

[Note: Highest placed 'Major State' (Karnataka) had a score of 18.01, while Manipur is the highest placed among the 'North East & Hill States' with a score of 19.37.]

**Graph-7.4.1: Scores of NE States as per Export Preparedness Index 2022** 



Y-axis gives the Scores as per the Export Preparedness Index on a scale from 0 to 100 (highest possible score). The above scores are as per the Export Preparedness Index 2022 prepared by the NITI Aayog and Institute for Competitiveness

[Note: Highest placed state (Tamil Nadu) had a score of 80.89]



## 7.4. Export Preparedness Index

In August 2020; NITI Aayog, along with the Institute for Competitiveness, launched the Export Preparedness Index (EPI). This is a ranking of the States and Union Territories of India based on their export readiness and performance. The intent of the exercise is to sensitise the States and Union Territories to develop better policy mechanisms to foster export-led growth at the sub-national level, after considering their performance against their peers and analyzing the potential challenges of the sector. In the subsequent years (i.e. 2021 and 2022), the updated versions of the EPI have been released. The present analysis is based on the work carried out for bringing out the EPI in 2022.

The 2022 edition of the EPI continues identify opportunities and challenges for each State and Union Territory in boosting their exports. In addition, it recommends specific strategies to resolve the regional variations prevailing in the country. The index is divided into four dynamic pillars and subpillars, providing a detailed assessment of each state's export preparedness. These pillars are 'Policy', 'Business Eco-system', 'Export Eco-system', and 'Export Performance' having weights of 20%, 40%, 20% and 20% respectively. Each pillar has a set of sub-pillars across which the above weights have been apportioned.

Considering the heterogeneity of India, the states have been classified on a two-stage basis. At the outset, the States/UTs have been distinguished based on their geographical area into Major and Minor/Small States. Next, within each of the above categories, they have been segregated according to their geographical outreach as follows. Major states have been classified as Coastal and Landlocked states (including Assam), while Minor states have been divided as Himalayan states (which includes all NE states except Assam) and Union Territory / Small states. Seven states of NE India, excluding Assam, have been considered under the category of 'Himalayan states' on account of their 'geographical resemblance' to the other states in this category, viz. Himachal Pradesh and Uttarakhand.

Based on the analysis carried out, the Export Preparedness Index 2022 has ranked the NE States as summarized below.

Table-7.4.1: Rank and Scores of the NE States as per the Export Preparedness Index 2022

Stato	Export Prepared	lness Index 2022	Domarko		
State	Rank	Score	Remarks		
Arunachal Pradesh	33	19.92			
Assam	21	43.19			
Manipur	23	40.77	The indicated rank gives the Export Preparedness of the NE State in comparison to the 36 States and		
Meghalaya	32	24.24	Union Territories of India		
Mizoram	35	16.96	Scores have been worked out on the basis of the		
Nagaland	28	33.33	methodology given in the source document.		
Sikkim	27	36.86			
Tripura	26	38.30			

Source: 'Export Preparedness Index 2022', NITI Aayog and Institute for Competitiveness

Notes: at next page



#### 1. Pillars and Sub-pillars & their Weights

As described previously, the index is divided into four dynamic pillars and sub-pillars, providing a detailed assessment of each state's export preparedness. These pillars are 'Policy', 'Business Eco-system', 'Export Eco-system', and 'Export Performance' having weights of 20%, 40%, 20% and 20% respectively. Each pillar has a set of sub-pillars across which the above weights have been apportioned.

The sub-pillars under each pillar and their weights have been listed in the following table.

Pillar	Weight (%)	Sub-Pillar	Weight (%)
Policy	20	Export Promotion Policy	10
		Institutional Framework	10
Business Ecosystem	40	Business Environment	15
		Infrastructure	10
		Transport Connectivity	15
Export Ecosystem	20	Export Infrastructure	5
		Trade Support	10
		R & D Infrastructure	5
Export Performance	20	Growth & Orientation	10
		Export Diversification	10

#### 2. Indicators

The indicators for the index have been cautiously chosen under their respective pillar and sub-pillar, given the rationale and the conceptual linkage between the two. They were approved after detailed discussions with Experts, NITI Aayog and State Governments. The State Governments provided data for the majority of the indicators along with supporting documents. For remaining indicators, data was either collected from publicly available government sources. Source and Definition of each indicator are mentioned in Appendix - I & II of the source document, i.e. 'Export Preparedness Index 2022', NITI Aayog and Institute for Competitiveness.

#### 3. Data Transformation

The indicators are measured in several units of measurement, such as binary, score, ratio, or percentage, making comparison challenging. For example, in the first pillar named Policy, all the indicators are binary variables. This means that the indicators can take only a value of 1 or 0. Value 1 was assigned to the states if the policy has been implemented in the state, otherwise 0. If the particular policy has been 'formulated', 'notified' or is 'in progress' in the state but not implemented, 0 value was given.

Standardisation renders the indicator without units by rescaling it with a mean of zero and a standard deviation of 1. Standardising the data makes data points comparable, which is essential for accurate analysis, particularly when the scale of the indicator varies significantly. Skipping the standardisation procedure can lead to inconsistent results. For instance, suppose an indicator has less variance than other indicators but is measured on a larger scale. In such a scenario, the data may disclose increased variation, resulting in imprecise analysis. In addition, negative indicators such as power costs have been inverted to positive values. This was done to standardise all of the indicators so that a higher value indicates a higher score for the states.

#### 4. Aggregation

Scores have been aggregated as per the steps shown at Page No. 100 of the source document (i.e. 'Export Preparedness Index 2022', NITI Aayog and Institute for Competitiveness). Overall score of the state is the sum of all the weighted scores of the sub-pillars. Score of each sub-pillar is obtained out of 100.

The table at the next page shows the scores of the different NE states for the various pillars and subpillars constituting the Export Preparedness Index 2022.



Table-7.4.2: Scores of the NE States on various Pillars & Sub-pillars used for developing the Export Preparedness Index 2021

	Pol	licy	Ві	Business Ecosystem			Export Ecosystem			Export Performance	
State	Export Promotion Policy	Institutional Framework	Business Environment	Infrastructure	Transport Connectivity	Export Infrastructure	Trade Support	R & D Infrastructure	Growth & Orientation	Export Diversification	
Arunachal Pradesh	15.61	31.70	54.04	37.33	11.75	5.55	8.87	17.13	17.74	0.40	
Assam	92.66	90.73	54.98	21.59	37.23	77.57	0.45	13.84	29.95	12.96	
Manipur	73.63	61.44	59.70	29.66	14.79	54.70	44.70	61.97	7.48	0.28	
Meghalaya	57.09	35.01	50.62	20.04	11.38	44.89	0.06	21.55	2.13	0.98	
Mizoram	26.77	0.00	18.95	46.66	11.40	2.54	17.74	15.98	30.50	0.12	
Nagaland	41.86	54.17	52.84	28.41	14.71	0.00	26.76	100.00	13.99	0.56	
Sikkim	96.11	49.22	17.22	53.30	0.00	62.98	37.08	14.24	31.04	7.03	
Tripura	39.55	80.86	61.87	15.50	3.53	88.78	0.84	19.89	72.37	0.56	

Source: 'Export Preparedness Index 2022', NITI Aayog and Institute for Competitiveness





## 7.5. Business Reforms Action Plan 2020 Categorization

'Ease of Doing Business' is a concept that seeks to understand the ease with which companies and other business entities can carry out business in an economy, considering the applicable regulations. Such regulations can affect all areas of the life of a business from starting a business to winding up a loss-making business, and anything in between. The gamut of regulations can cover 'dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, resolving insolvency, employing workers, and contracting with the government (for government contractors and suppliers)'.

The World Bank had been publishing a series of annual studies under the title of 'Doing Business', which investigated the 'ease of doing business' in the economies of the world. These studies covered the regulations that enhance business activity and those that constrain it; and presented quantitative indicators on business regulations and the protection of property rights that could be compared across 190 economies in the world. Now, The World Bank is bringing out a new annual series called 'Business Ready', the pilot edition of which is being released in the spring of 2024, covering 54 economies in Asia, Latin America, Europe, the Middle East and Sub-Saharan Africa.

In India, the Department for Promotion of Industry and Internal Trade (DPIIT) has been working as the institutional anchor for the 'Ease of Doing Business' program. In order to enhance 'Ease of Doing Business' in India, systematic and targeted efforts are being made to reduce the number of processes and the average times taken; rationalize costs and (by all means) to make it easier to do business in India. While the 'Doing Business' report of The World Bank assessed only the cities of Delhi and Mumbai, the DPIIT has been carrying out the Business Reforms Action Plan (BRAP) in order to assess the 'ease of doing business' at the sub-national level. All States and UTs are being ranked on the basis of reforms implemented by them on designated parameters.

The fifth edition of BRAP (BRAP 2020) was released on 30th June 2022. As per the study, the States and UTs are placed into four categories: Top Achievers, Achievers, Aspirers and Emerging Business Ecosystems. In India, 7 states are categorized as 'Top Achievers' and 6 others are classified as 'Achievers'. No state from the NE Region has been placed in the above two categories. The following table may be perused regarding the categorisation of the NE States under BRAP 2020.

Table-7.5.1: Categorisation of the NE States as per the BRAP 2020

State	Category	Remarks
Arunachal Pradesh		Feedback could not be obtained - Insufficient user data
Assam	Aspirer	
Manipur	Emerging Business Ecosystem	
Meghalaya	-Do-	
Mizoram		Feedback could not be obtained - Insufficient user data
Nagaland	Emerging Business Ecosystem	
Sikkim		Feedback could not be obtained - Insufficient user data
Tripura	Emerging Business Ecosystem	

Source: PIB (https://static.pib.gov.in/WriteReadData/specificdocs/documents/2022/nov/doc20221123133801.pdf)



#### Notes

- 1. The BRAP 2020 included 301 reform points covering 15 business regulatory areas such as Access to Information, Single Window System, Labour, Environment, Land Administration & Transfer of Land and Property, Utility Permits and others. 118 new reforms were included to further augment the reform process. Sectoral reforms with 72 action points spread across 9 sectors namely Trade License, Healthcare, Legal Metrology, Cinema Halls, Hospitality, Fire NOC, Telecom, Movie Shooting and Tourism were introduced for the first time to expand the scope of reform agenda.
- 2. The Implementation Status for the NE States has been tabulated below for BRAP-2020, based on data from DPIIT website (https://eodb.dpiit.gov.in/Home?year=2020)

Table-7.5.1 (A): Im	plementation Status of	f Business Reforms i	in NE States as	per BRAP 2020
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State	Implementatio	Implementation Status of 301 Reform Points Covered by BRAP 2020					
	Yes	No	NA1	NA2			
Arunachal Pradesh	22	278	0	1			
Assam	195	59	0	47			
Manipur	30	253	16	2			
Meghalaya	112	159	0	30			
Mizoram	28	256	17	0			
Nagaland	31	236	17	17			
Sikkim	10	290	0	1			
Tripura	182	67	5	47			

Source: https://eodb.dpiit.gov.in/Home?year=2020

- 3. **Reform is marked as 'Yes' if** it is **approved as 'Yes'** by DPIIT, based on supporting documentation submitted, such as notifications etc.
- 4. Reform point is considered as NA1 provided that supporting documentation such as notification is provided as evidence. Reform is considered as NA2 if it is to be taken out of the evaluation exercise for all States/UTs.
- 5. BRAP 2022 dashboard for the States and UTs is available at: https://eodb.dpiit.gov.in/. However, the results of BRAP 2022 have not been formally released till date.





## 7.6. Health Index

NITI Aayog has been bringing out the Health Index since 2017 in partnership with the Ministry of Health and Family Welfare, and with the technical assistance from The World Bank. The index is based on factors like health outcomes, governance and processes. It tracks the overall performance and incremental performance at the sub-national level. The aim of the work is to nudge States and UTs towards transformative action in the health sector. The Health Index Report for Round IV (2019-20) was released in December 2021.

The Health Index is based on select indicators from three domains: (a) Health Outcomes; (b) Governance and Information; and (c) Key Inputs and Processes. In the 4<sup>th</sup> Round, the Index had incorporated 24 indicators from the above domains, with these being selected based on their relevance and availability (on a reliable basis) at least on an annual frequency from existing data sources covering the health domain - like the Sample Registration System (SRS), Civil Registration System (CRS) and Health Management Information Systems (HMIS). The Health Index is developed as a weighted average of the selected indicators, with those in the realm of 'Health Outcomes' being assigned the highest weights.

The States and UTs have been grouped into three categories (Larger States, Smaller States and UTs), in order to ensure comparability while ranking them. The 4<sup>th</sup> Round covered all states and UTs except for West Bengal and Ladakh, the latter on account of non-availability of data. Further, the Health Index Round IV (2019-20) does not capture the impact of COVID-19 on health outcomes or any other indicators. This is due to the fact that the Index Performance relates to the Base Year (2018-19) and Reference Year (2019-20), largely in the pre-COVID-19 period.

Regarding the NE States, Assam has been included amongst the 20 'Larger States' (including West Bengal), while the other seven states form the 8 'Smaller States' along with Goa. The performance of the NE States in the 4<sup>th</sup> Round has been tabulated below.

Table-7.6.1: Rank and Scores of the NE States as per the Health Index Round IV (2019-20)

	Health Index	k (4th Round)		
State	Overall Reference Year Rank (*)	Overall Reference Year Index Score	(*) Remarks	
Assam	12	47.74	Assam has been ranked with 20 'Larger States', which include all states except NE States & Goa ('Smaller States'). Such 'Larger States' include West Bengal, which was not covered in Round IV.	
Arunachal Pradesh	7	33.91		
Manipur	6	34.26		
Meghalaya	5	43.05	Included in a concrete setement of sight (Concluse	
Mizoram	1	75.77	Included in a separate category of eight 'Smaller States' along with Goa	
Nagaland	8	27.00	States along with God	
Sikkim	3	55.53		
Tripura	2	70.16		

Source: 'Healthy States Progressive India: A Report on Ranks of States and Union Territories' Health Index Round IV (2019-20), brought out by NITI Aayog



#### Notes

#### 1. Performance in 4th Round

Amongst 'Larger States', Assam made the maximum improvement by moving up 3 ranks (from 15 to 12) in the 4<sup>th</sup> Round (Reference Year 2019-20) as compared to the previous round (Base Year 2018-19).

In case of Smaller States, Mizoram was at the top with Index Score of 75.77 and Nagaland at the bottom with Index Score of 27.00. Amongst 'Smaller States', Meghalaya recorded the highest progress from Base Year (2018-19).

#### 2. Indicators and Data Sources

These have been given at Annexure A of the 'Healthy States Progressive India: A Report on Ranks of States and Union Territories' Health Index Round IV (2019-20); along with definitions and the base year and reference year of the indicators.

## 3. Methodology

The methodology for computation of index scores and ranks has been furnished at Annexure B of 'Healthy States Progressive India: A Report on Ranks of States and Union Territories' Health Index Round IV (2019-20). The indicator values have been scaled.

The scaled value for each indicator lies between the range of '0-100'. Thus, for a positive indicator such as institutional deliveries, the state/UT with the lowest institutional deliveries will get a scaled value of 0, while the state/UT with the highest institutional deliveries will get a scaled value of 100. Similarly, for a negative indicator such as NMR, the state/UT with the highest NMR will get a scaled value of 0, while the state/UT with the lowest NMR will get a scaled value of 100.

## 4. Composite Index & Overall Performance Ranks

Composite Index Score was then calculated for the Base Year (2018-19) and Reference Year (2019-20) after application of the weights using the following formula:

Composite Index =  $[\Sigma W_i S_i / [\Sigma W]]$ , where  $W_i$  is the weight for the i-th indicator and S is its score

The Composite Index Score provides the Overall Performance and domain-wise performance for each state/ UT and has been used for generating Overall Performance ranks.

The table at the following page gives a list of the indicators used in computing the Overall Reference Year Index Score for Health Index (4<sup>th</sup> Round). The scaled values of the indicators used for the States and UTs have not been furnished with the Study Report that is readily available in the public domain.





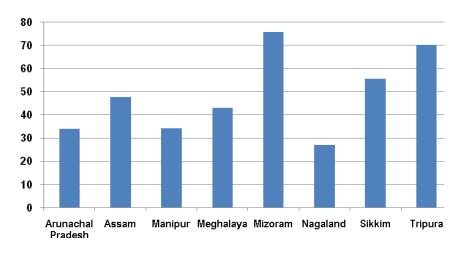
# Table-7.6.2: List of the Indicators of Health Index 4<sup>th</sup> Round

(Used in computing the Overall Reference Year Index Score)

1	HEALTH OUTCOMES
1.1	Key Outcomes (Weight – Larger States: 400, Smaller States & UTs: 0)
1.1.1	Neonatal Mortality Rates (NMR)
1.1.2	Under-5 Mortality Rates (U5MR)
1.1.3	Sex Ratio at Birth (SRB)
1.1.4	Maternal Mortality Rates (MMR)
1.2	Intermediate Outcomes (Weight - Larger States: 400, Smaller States & UTs: 0)
1.2.1	Modern Contraceptive Prevalence Rate
1.2.2	Full Immunization Coverage
1.2.3	Proportion of Antenatal Care (ANC) registered within first trimester against total registrations
1.2.4	Proportional of Institutional Deliveries
1.2.5	Total Case Notification of TB (%)
1.2.6	TB Treatment Success Rate
1.2.7	Proportion of People Living with HIV (PLHIV) on Anti-Retroviral Therapy (ART)
2	GOVERNANCE & INFORMATION
2.1	Health Monitoring and Data Integrity (Weight - Larger States: 50, Smaller States & UTs: 0)
2.1.1	Average occupancy of an officer (in months), combined for three key posts at state level for last three years
2.1.2	Average occupancy of a full-time officer (in months) for all the districts in last three years - District CMOs or equivalent post (heading District Health Services)
2.1.3	Number of days for transfer of Central NHM fund from state treasury to implementation agency (Department/ Society) based on the largest tranche of the last financial year
3	KEY INPUTS AND PROCESSES
3.1	Health Systems/Service Delivery (Weight - Larger States: 180, Smaller States & UTs: 160)
3.1.1	Proportion of shortfall of health care providers (regular + contractual) against required number of health care providers in public health facilities
3.1.2	Proportion of total staff (regular + contractual) covered under a functional IT enabled integrated HRMIS
3.1.3	a. Proportion of specified type of facilities functioning as First Referral Units (FRUs)
	b. Proportion of public health facilities with Kayakalp score of >70% against total number of public health facilities
3.1.4	Proportion of functional Health and Wellness Centres
3.1.5	Proportion of District Hospitals with Functional Cardiac Care Units (CCUs)
3.1.6	a. Level of registration of births (%)
	b. Level of registration of deaths (%)
3.1.7	Completeness of IDSP reporting of P and L Form (%)
3.1.8	a. Proportion of public health facilities with accreditation certificates by a standard quality assurance programme (NQAS/NABH)
	b. Proportion of DHs and CHCs certified under LaQshya
3.1.9	Proportion of State Government health expenditure to total state expenditure



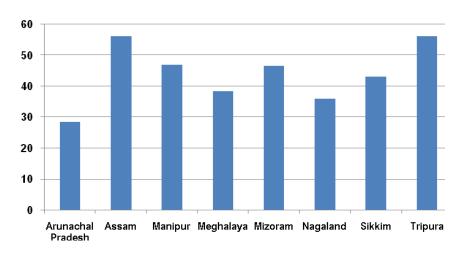
Graph-7.6.1: Scores of the NE States as per the Health Index Round IV



Y-axis gives the Scores ('Overall Reference Year Index Score') of the NE States as per the Health Index on a scale from 0 ('lowest value') to 100 ('highest value'). The above scores are as per Round IV (2019-20) of the Health Index brought out by NITI Aayog in partnership with the Ministry of Health & Family Welfare and with technical support from The World Bank

[Note: Highest placed state (Kerala) had a score of 82.20]

Graph-7.7.1: Scores of NE States as per the 1st School Education Quality Index (SEQI)



Y-axis gives the 'Overall Performance Scores' in Percentage Points. The above scores are as per the 1<sup>st</sup> School Education Quality Index brought out by the NITI Aayog in 2019

[Note: Highest placed state (Kerala) had a score of 82.20]

[The highest placed state (Kerala in each case) had identical scores of 82.20 as per both the above exercises related to health and education.]



## 7.7. School Education Quality Index

The School Education Quality Index (SEQI) has been developed in order to provide insights and data-based feedback on the success of school education across India, in order to promote evidence-based policy making at the level of States and UTs, apart from possible course-corrections in the education sector. The index seeks to institutionalise a focus on improving education outcomes with respect to learning, access, equity and governance in India. In September 2019, NITI Aayog had released the first SEQI. The indicators have been revised based upon feedback from stakeholders. The next version of SEQI is planned to be released after the data from the National Achievement Survey 2021 is available. Such data has been released only a few months back.

The SEQI consists of 30 critical indicators that assess the delivery of quality education. These indicators fall within the following domains within two categories: Category-1 'Outcomes' (a) Learning Outcomes, (b) Access Outcomes, (c) Infrastructure & Facilities for Outcomes, and (d) Equity Outcomes; and Category-2 'Governance Processes Aiding Outcomes'.

In order to facilitate comparisons of similar sized entities, States and UTs have been grouped as Large States, Small States and UTs. Within each of these groups, the indicator values have been appropriately scaled, normalized and weighted to generate an overall performance score and ranking for each State and UT. States and UTs are ranked on their overall performance in the reference year 2016-17, as well as on the change in their performance between the reference year and base year (2015-16). The rankings present incredible insights on the status of school education across States/UTs and their relative progress over time.

In the first SEQI, Assam was within the 21 'Large States' (including West Bengal and the erstwhile Jammu & Kashmir), while the other seven NE states were amongst the 8 'Small States' along with Goa. The performance of the NE States in the first SEQI has been tabulated below.

Table-7.7.1: Rank and Scores of the NE States as per the 1st School Education Quality Index (2019)

	SEQI	2019			
State	Rank (*)  Overall  Performance (%)		(*) Remarks		
Assam	10	56.1	Assam has been ranked with 21 'Large States', which include all states except NE States & Goa ('Smaller States'). Such 'Large States' include West Bengal, which was not covered in SEQI, as well as the erstwhile state of Jammu & Kashmir		
Arunachal Pradesh	8	28.4			
Manipur	3	46.9			
Meghalaya	6	38.4	Included in a concrete actorion, of sight (Cocall		
Mizoram	4	46.5	Included in a separate category of eight 'Small States' along with Goa		
Nagaland	7	35.9	Oldico diong with God		
Sikkim	5	43.0			
Tripura	1	56.1			

Source: 'The Success of Our Schools: School Education Quality Index', brought out by NITI Aayog in 2019



Notes

#### 1. Performance

Amongst 'Large States', Assam made the second most improvement (after Haryana) between 2015-16 and 2016-17 by showing an improvement of 16 percentage points. Its rank was 10<sup>th</sup> amongst 20 Large States covered by SEQI, including the erstwhile Jammu and Kashmir, but excluding West Bengal (which was not covered).

In case of 'Small States', Meghalaya and Nagaland stood out, with gains of 14.1 and 13.5 percentage points respectively. Tripura had the best overall performance amongst this category of 'Small States'.

#### 2. Categories and Domains

The following table summarises the Index Categories and Domains, along with the numbers of their indicators.

Table-7.7.1 (A): SEQI 2019: Index Categories and Domains

Category	Domain	Number of Indicators	Total Weight
Outcomes	Learning Outcomes	3	360
	Access Outcomes	3	100
	Infrastructure & Facilities for Outcomes	3	25
	Equity Outcomes	7	200
Governance Processes Aiding Outcomes	Covering student & teacher attendance, teacher availability, administrative adequacy, training, accountability and transparency	14	280
TOTAL		30	965

Source: 'The Success of Our Schools: School Education Quality Index', Page No 12

#### 3. Indicators and Data Sources

These have been furnished at Page Nos. 12-20 in the source document, i.e. 'The Success of Our Schools: School Education Quality Index', brought out by NITI Aayog in 2019. The weights assigned to different indicators have been given in the above pages.

## 4. Methodology

The methodology for computation of index scores and ranks has been furnished Page No. 18 (Scoring Methodology), and Page Nos. 19-22, which discusses the performance of the different methodological steps undertaken in connection with the 1st SEQI exercise.

It may be noted that the indicator values have been scaled. The minimum and maximum values of each indicator were ascertained based on the values for that indicator across States or UTs within the relevant group (Large States, Small States and UTs). The resultant scaled value for each indicator lies between 0 and 1, with the best performing State or UT receiving a score of 1.

## 5. Composite Index & Overall Performance Ranks

Overall Performance Score was then calculated for the Base Year (2015-16) and Reference Year (2016-17) after application of the weights using the following formula:

Overall Performance Score =  $[\sum W_i S_{ii}/[\sum W]]$ , where  $W_i$  is the weight for the i-th indicator and S is its score for a given year

The States/UTs' overall performance scores for a given year have been used to arrive at their ranking for that year. The difference between the scores for reference and base years has been used to compute the change in performance over time. Therefore, the index presents two types of ranking: (i) overall performance (reference year ranking) and (ii) incremental performance (difference in overall performance between reference and base years).

The incremental performance of the NE states between the Reference Year (2016-17) and the Base Year (2015-16) has been tabulated below for the different domains.



Table-7.7.2: Performance Scores for Different Domains of the NE States in Reference Year & Base Year as per SEQI (2019)

	Reference				Performance	e Scores (%)			
	Year (RY) Base Year (BY)	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura
OUTCOMES	RY	42.2	47.0	61.6	38.1	45.3	23.2	40.3	80.4
	BY	49.9	32.8	65.4	32.9	61.8	22.8	43.1	80.4
Learning Outcomes	RY								
(Note below may be seen)	BY								
Access Outcomes	RY	51.8	63.7	65.6	43.1	66.3	11.3	37.3	87.6
	BY	72.0	38.1	61.5	39.6	75.4	15.8	44.4	86.6
Infrastructure & Facilities for	RY	15.1	9.4	31.8	6.6	38.5	28.7	26.4	14.3
Outcomes	BY	17.5	5.1	26.6	10.9	32.4	31.0	48.7	9.9
Equity Outcomes	RY	38.8	37.9	66.0	41.6	21.1	36.4	48.3	92.1
	BY	32.5	34.9	82.3	31.4	54.0	29.1	39.7	94.7
Governance Processes	RY	18.3	62.8	36.0	38.7	47.5	45.2	45.0	38.3
Aiding Outcomes	BY	16.1	44.0	30.5	18.1	37.4	22.1	44.5	25.1

Source: 'The Success of Our Schools: School Education Quality Index', Page Nos. 36-48

Note

RY: Reference Year (2016-17) / BY: Base Year (2015-16)

The analysis of States'/UTs' incremental performance excludes data on Learning Outcomes. This is because Learning Outcomes data from the latest round of National Achievement Survey (NAS) 2017 is not comparable with that from previous cycles, due to changes in test items, coverage and reporting scales.





## 7.8. Swachh Survekshan Grameen Ranking

The Department of Drinking Water and Sanitation (DDWS) of the Ministry of Jal Shakti has been carrying out the Swachh Survekshan Grameen (SSG) since 2018. The SSG exercise has been evolving and gaining strength with each passing year. In 2022, the SSG was taken up with several objectives: (a) foster a spirit of healthy competition, (b) engage and solicit feedback from the citizen, (c) evaluate implementation of solid and liquid waste management (SLWM), (d) encourage large-scale citien participation, (e) ascertain progress of swachhata of ground, (f) rank districts and states, and (g) compare performance of districts and states.

The SSG survey works for 2022 began with a National launch in September 2021, followed by statewise programmes. The ground level surveys commenced in December 2021 and were completed by April 2022. The focus areas of SSG 2022 included implementation of ODF Plus, SLWM Arrangements in the villages and MHM Awareness and MHM Disposal Arrangements.

Data was collected from multiple sources such as self-reporting by Districts, data from SBM-G IMIS, District-level surveys of public places like Schools, Anganwadis, PHCs, Haat/bazaars, Panchayat Bhawan, Key informants, survey of households and village level sanitation infrastructures and citizens perception of Swachhata and their recommendations for improvement of the programme.

The ranking exercise was based on: (a) service level progress, based on self-reporting by Districts, data from SBM-G IMIS (350 marks); (b) citizen feedback, including key informant interviews and online feedback apart from face-to-face interviews (350 marks); and (c) direct observations at public places, villages and households (300 marks). States and UTs were grouped as Large States (with population over 30 lakh) and Small States (population below 30 lakh) / UT. However, all states and UTs were ranked together. The exercise covered 33 states and UTs.

The following table gives the ranks and scores of the NE States derived from the SSG 2022 exercise.

Table-7.8.1: Rank and Scores of the NE States as per Swachh Survekshan Grameen (SSG) 2022

State	Swachh Surveksh	nan Grameen 2022	Remarks				
State	Overall Rank	Total Score	Remarks				
Arunachal Pradesh	29	438.72	Danks have been essigned based an esserce (sut of				
Assam	33	360.14	Ranks have been assigned based on scores (out of 1000) for 33 States and Union Territories				
Manipur	28	441.93	Scores have been given based on (a) service level				
Meghalaya	23	539.31	progress, based on self-reporting by Districts, data				
Mizoram	17	713.22	from SBM-G IMIS (350 marks); (b) citizen feedback, including key informant interviews and on-line				
Nagaland	27	443.05	feedback apart from face-to-face interviews (350				
Sikkim	6	843.73	marks); and (c) direct observations at public places, villages and households (300 marks)				
Tripura	30	416.27	villages and nouseriolas (500 marks)				

Source: 'Swachh Survekshan Grameen 2022', Department of Drinking Water and Sanitation (DDWS), Ministry of Jal Shakti

Notes: at next page

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- 1. The Report on Swachh Survekshan Grameen 2022 gives the survey design, assessment and ranking methodology, survey implementation process and survey results at Chapters 3, 4, 6 and 5 respectively. The details may be obtained from the above references. The above report is available at the following link:
  - https://swachhbharatmission.gov.in/sbmcms/writereaddata/Portal/Images/pdf/SSG-2022-report.pdf
- 2. The survey covered 33 states and 709 districts. Chandigarh and Lakshadweep were not covered.
- 3. In each district, between 21 and 33 villages were selected for the survey, with larger number of villages being sampled in the more populous districts. The details are given at Page No. 33 of the Report. Villages were selected as per the Probability Proportional to Size (PPS) method. In all, 17559 villages were sampled across India.
- 4. In each village, 10 households were sampled, with adequate representation to SC, ST and OBC households. The SSG 2022 survey covered 175,521 households.
- 5. The numbers of other data sources like key informants, online feedback, citizen feedback on face-to-face basis, public places observed etc. are given at Page No. 34 of the Report.
- 6. The component-wise scores of the NE States as reported by SSG 2022 have been tabulated below.

Table-7.8.1 (A): Component-wise Scores of the NE States as per Swachh Survekshan Grameen (SSG) 2022

State	Total Score	Average Service Level Progress	Average Direct Observation	Average Citizen Feedback
	1000 marks	350 marks	300 marks	350 marks
Arunachal Pradesh	438.72	148.80	145.90	144.02
Assam	360.14	99.97	126.46	133.72
Manipur	441.93	163.31	150.27	128.36
Meghalaya	539.31	254.45	155.79	129.07
Mizoram	713.22	251.38	218.69	243.16
Nagaland	443.05	157.45	131.07	154.52
Sikkim	843.73	311.25	226.81	305.67
Tripura	416.27	112.75	149.65	153.87

Source: 'Swachh Survekshan Grameen 2022', Page Nos. 77-78





# 8. Investment Scenario and Opportunities

For a long period of time, the North Eastern Region of India has been viewed through the lens of challenges when it comes to economic and industrial growth. Of late, the position may be changing. The global investment community has started to consider the Sustainable Development Goals (SDG) driven agenda, where the role of the Environmental, Social and Governance (ESG) parameters has assumed greater prominence. This can open opportunities for the region if it leverages ESG-led transformation of industry and investment in India, keeping in mind the SDG agenda of development and the 'Aatmanirbhar Bharat' goals of the country's on-going economic transformation.

In the last decade, the region has witnessed considerable growth in terms of infrastructure and connectivity. Mega Infrastructure projects that can catalyse investment in the region have been commenced. Their swift progress of implementation has contributed to emergence of a 'New North East' for the investors who look for sustainable growth and development. Air and road connectivity, railway network and exploration of waterways for economic development have reduced the geographical barriers faced by this landlocked region. Similarly, improvement in telecommunication network and internet has facilitated access to the global market.

The NE Region of India is fast adapting to the technological changes. In fact, in some cases the region's transformation has been faster than the rest of the country. For instance, as per report published by Phone Pe in February 2023, the NE Region has been the driver of the digital transactions in the country. It took lead in digital transactions during between January-March 2023 with Assam leading the chart followed by Tripura, Meghalaya, Arunachal Pradesh, Nagaland, Sikkim, and Mizoram. The human capital of the region is one of its key strengths, followed by the natural endowments of fertile land, unique agro-climatic conditions, biodiversity, minerals, hydropower, tourism, craft & culture, and natural heritage.

Efforts have been made by the Government of India, as well as the State Governments of the NE states, to catalyse the industrial and economic growth of the region and attract private investment. Peace and stability have largely prevailed in the region; and the present focus in many of the states is upon setting the stage for an investor friendly ecosystem. This includes the development of policies for the ease of doing business (EODB), creation of infrastructure at different scales, facilitating capital investment, capacity building, marketing support, and access to low-cost credit.

This chapter gives a glimpse of the current investment scenario of the region followed by some initiatives in areas that can incubate the 'North East Advantage'. These include reforms undertaken by the State Governments to facilitate the ease of doing business, implementation of single window system and, status of industrial infrastructure aimed to boost private investment including land bank etc. The chapter also covers the outcomes of such efforts till now through a discussion on the startup ecosystem, followed by a coverage of the identified areas of opportunities, with specific reference to some 'seed projects'.



## 8.1 Investment Readiness

The Department for Promotion of Industry and Internal Trade (DPIIT), Government of India launched the Business Reform Action Plan (BRAP) for monitoring of progress of the states in terms achievement of enabling ease of business and citizen service reforms. As per the methodology of BRAP-2022 exercise, total 352 nos. of reforms out of which 261 reforms relating to Business while 91 reforms relating to Citizens. These reforms are categorized into two main groups<sup>1</sup>:

**General Reforms:** General reforms are those reforms, wherein there is no specific user. For example, Information wizard, digitization of land records, etc.

**Specific Reforms:** Specific reforms are those wherein there is a clear identifiable user. For example, electricity connection, trade license, etc.

For assessment purposes, the regions are categorized into two groups: Category X comprises the North-Eastern States (excluding Assam) and Union Territories (excluding Delhi), while Category Y encompasses States and Union Territories with well-established Business and Citizen-centric Systems.

Each state has a varying number of prescribed parameters for assessment, and for the North Eastern states, the broad identified categories and the number of identified reforms are specified.

Table-8.1.1: Reform Count (Area Wise) in North Eastern Region

Categories	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim
Certificates (Department of Registration and Stamp)	26	16	27	27	27	27	45
Construction Permit Enablers	57	49	57	57	51	57	56
Healthcare (Citizens)	96	89	96	96	96	94	76
Land Administration and Transfer of Land and Property (Business)	47	43	47	47	47	47	47
Obtaining Utility Permits (business)	52	45	52	51	52	52	51
Paying Taxes	32	27	32	32	32	30	31

Source: https://eodb.dpiit.gov.in/ReformReport/Index?year=2022&state=24&status=no accessed on 15th November 2023

With respect to the above identified reform areas, the achievement of the North Eastern states under the BRAP-2022 is mentioned in the table.

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<sup>&</sup>lt;sup>1</sup> BRAP- 2022 Assessment and Evaluation Methodology- 2022



Table-8.1.2: State-wise status of the Reforms under BRAP-2022 (as on 15<sup>th</sup> November 2023)

STATES	REFORM COUNT	YES	NO	NA 1	NA 2
Arunachal Pradesh	352	34	309	4	5
Assam	352	287	22	0	43
Manipur	352	30	300	18	4
Meghalaya	352	205	142	0	5
Mizoram	352	56	268	18	10
Nagaland	352	37	293	14	8
Sikkim	352	25	300	0	27
Tripura	352	226	122	0	4

#### Note

Yes: Nos. of reforms the States have been able to achieve

No: Nos. of reforms the States have not been able to achieve

NA 1: No. of general reforms which are not applicable to a particular state

NA 2: No. of specific reforms which are not applicable to a particular state

State-wise details of reforms achieved till 2022 are graphically presented below.

Figure-8.1.1: Performance Specific Report of Arunachal Pradesh

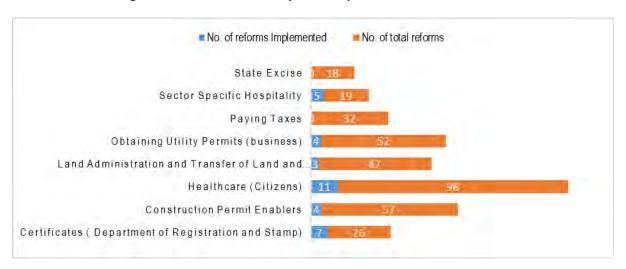




Figure-8.1.2: Performance Specific Report of Assam

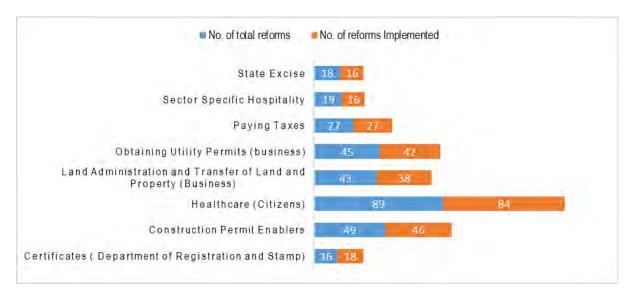


Figure-8.1.3: Performance Specific Report of Manipur

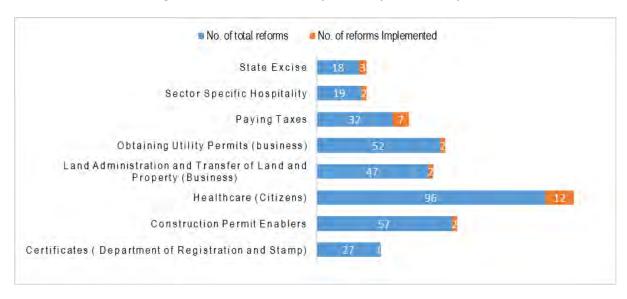
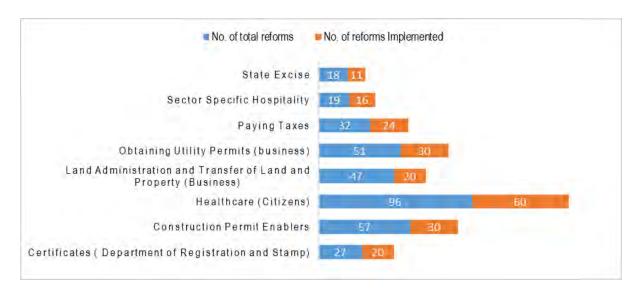




Figure-8.1.4: Performance Specific Report of Meghalaya



State Excise

Sector Specific Hospitality

Paying Taxes

Obtaining Utility Permits (business)

Land Administration and Transfer of Land and Property (Business)

Healthcare (Citizens)

Construction Permit Enablers

Certificates (Department of Registration and Stamp)

No. of reforms Implemented

18 2

19 1

10

47 2

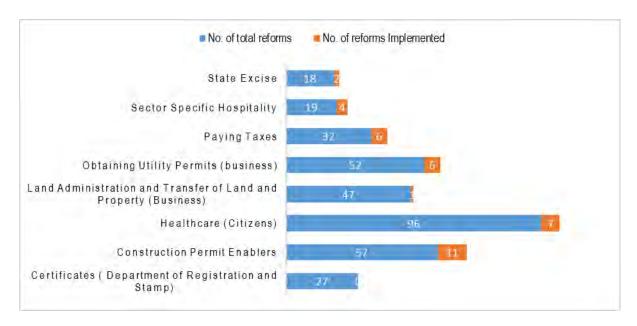
11

Certificates (Department of Registration and Stamp)

Figure-8.1.5: Performance Specific Report of Mizoram



Figure-8.1.6: Performance Specific Report of Nagaland



State Excise
Sector Specific Hospitality
Paying Taxes

Obtaining Utility Permits (business)

Land Administration and Transfer of Land and Property (Business)

Healthcare (Citizens)

Construction Permit Enablers

Certificates (Department of Registration and Stamp)

Figure-8.1.7: Performance Specific Report of Sikkim



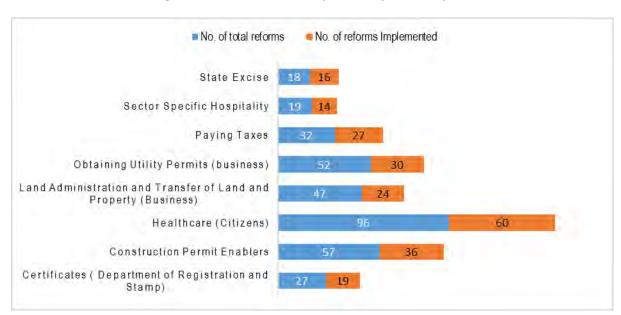


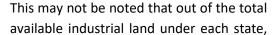
Figure-8.1.8: Performance Specific Report of Tripura

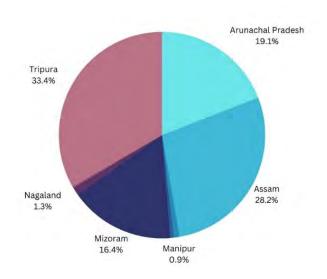




# 8.2 Industrial Land Availability

The Government of India has digitized the industrial land available for setting up various industries. The initiative has been taken up under the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce, Govt of India. As per the digitized land record, the total available industrial land in North East is- 1465.45 distributed over 119 nos. of industrial parks Ha as on 10<sup>th</sup> November, 2023.





industry specific allotment is also done by the government. For example- specific industrial land allotted for metal-based industries, food processing industries, electronic & hardware, etc. Statewise breakup of industrial land as on 9<sup>th</sup> November, 2023 as per the India Industrial Land Bank is mentioned below.

ARUNACHAL PRADESH								
	Total Available Land (Ha)							
Total No. of Parks			Total No. of	No. of				
TOTAL NO. OF PAIKS	Mixed	Total	Plots	Vacant				
	William	rotar		Plots				
19	279.72	279.72	457	154				

Source: Official Website of India Industrial Land Bank (https://iis.ncog.gov.in/) as on 9th November, 2023

ASSAM								
	-	Total Avai	lable Land (Ha)		Total No. of	Total No. of		
Total No. of Parks	Metals	Mixed	Electronics Hardware	Total	Plots	Vacant Plots		
54	380.85	19.30	13.46	413.61	2117	231		

Source: Official Website of India Industrial Land Bank (https://lis.ncoq.gov.in/) as on 9th November, 2023

MANIPUR							
	Total Available Land (Ha)			Total No. of	Total No.		
Total No. of Parks	Mixed	Food Processing	Total	Plots	of Vacant Plots		
7	12	0.8	12.8	90	37		

Source: Official Website of India Industrial Land Bank (https://lis.ncog.gov.in/) as on 9th November, 2023



MEGHALAYA							
Total No. of Parks	Total Available Land (Ha)		Total No. of Plots	Total No. of			
Total No. of Larks	Mixed	Total		Vacant Plots			
10	7.99	7.99	183	40			

Source: Official Website of India Industrial Land Bank (https://lis.ncog.gov.in/) as on 9th November, 2023

		MIZORAM		
Total No. of Dayles	Total Available Land (Ha)		Total No. of Diota	Total No. of
Total No. of Parks	Mixed	Total	Total No. of Plots	Vacant Plots
8	240.51	240.51	327	46

Source: Official Website of India Industrial Land Bank (https://lis.ncog.gov.in/) as on 9th November, 2023

NAGALAND						
Total No. of Parks	Total Available Land (Ha)		Total No. of Plots	Total No. of		
Total No. of Faires	Mixed	Total	10(a) 110.011 10(3	Vacant Plots		
6	19	19	124	9		

Source: Official Website of India Industrial Land Bank (https://lis.ncog.gov.in/) as on 9th November, 2023

		SIKKIM		
	Total	Available Land (Ha)		Total No. of
Total No. of Parks	Mixed	Total	Total No. of Plots	Vacant Plots
5	3.00	3.00	9	0

Source: Official Website of India Industrial Land Bank (https://lis.ncog.gov.in/) as on 9th November, 2023

	TRIPURA								
Total	Total Available Land (Ha)							of	o. of Plots
No. of Parks	Mixed	Metals	Automobiles	Engineering	Chemicals	Electronics Hardware	Total	Total No.	Total No.
19	217.82	204	50.28	7.36	7.28	2.08	488. 82	9	0

Source: Official Website of India Industrial Land Bank (https://lis.ncog.gov.in/) as on 9th November, 2023



# 8.3 Single Window Clearance

Single Window Clearance is a digital initiative that aims to provides support digital support to the investors through dissemination of information on industrial policies and incentives, availability of infrastructure, guides the investors through various processes of getting clearances and also act as an aggregator platform of various line departments who has implemented online application process and approval system for clearances required in various stages of business.

All the North Eastern states have implemented Single Window Portal in their respective states for facilitating ease of doing business. Accordingly, each state has onboarded various line departments who have offered multiple clearances for setting up industries. Summary of such aggregation and total nos. of clearances offered by the Departments are given below-

Key benefits of Single Window Clearance Portal are mentioned below-

- Centralized system to monitor applications with the minimum paperwork
- Single window for interaction between investors and Government departments
- Accessibility of the portal from across the globe
- Simplified application process for investors to make it user-friendly, cutting the time for processing the application
- Increased departmental ownership through file-tracking
- System to check the status of applications by State authorities and investors
- Handholding support to the investor fraternity across all districts in the State

300
250
200
150
100
50
0
No. of Clearences Provided by Single Clearance System

No. of Departments which provide clearences

Figure-8.3.1: Summary of State-wise Single Window Clearance System

Source: Respective State EODB Portals accessed on 9th November, 2023



State-wise and department-wise nos. of clearances offered through Single Window Clearance system are mentioned below. List of clearance offered are enclosed as Annexure.

Table-8.3.1: Department-wise Numbers of Clearances in Arunachal Pradesh

SI. No.	Department/ Commissionerate/ Controller Under Single Window Clearance	Total Number of Clearance given under Departments/ Commissionerate/ Controller
1	Trade and Commerce	7
2	Cooperative Societies	3
3	Arunachal Pradesh State Pollution Control Board	3
4	Department of Industries	5
5	Legal Metrology	7
6	Health	7
7	Fire and Emergency Services	4
8	Land Management	4
9	Labour and Employment	8
10	Apply for Inner Line Permit	1
11	Agriculture	2
12	Transport	4
13	Law and Justice	1
14	Environment and Forest	1
15	Food and Civil Supplies	4
16	Administration	7
17	Public Works Department (PWD)	2
18	Tax and Excise	5
19	Public Health Engineering Department (PHED)	2
20	Geology and Mining	2

Source: https://eodb.arunachal.gov.in/services accessed on 9th November, 2023

Table-8.3.2: Department-wise Numbers of Clearances in Assam

		Total Number of
SI.	Department/ Commissionerate/ Controller Under Single Window	Clearance given under
No.	Clearance	Departments/
		Commissionerate/ Controller
1	Commissionerate of Labour	16
2	Inspectorate of Factories	8
3	Inspectorate of Boilers	7
4	Directorate of Ayush	5
5	State Drugs Control Administration	37
6	Directorate of Medical Education	3
7	Pre – Conception and Pre – Natal Diagnostic Techniques	5
8	Single Window Agency	2
9	Commissioner ate of Industries and Commerce	3

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SI. No.	Department/ Commissionerate/ Controller Under Single Window Clearance	Total Number of Clearance given under Departments/ Commissionerate/ Controller
10	Inspectorate of Electricity	14
11	Assam Power Distribution Company Ltd (APDCL)	5
12	Guwahati Jal Board	2
13	Guwahati Municipal Corporation	2
14	Directorate of Tourism	4
15	Department of Fire and Emergency Services	13
16	Controller of Legal Metrology	14
17	Directorate of Food, Civil Supplies & Consumer Affairs	22
18	Registrar of Firms & Societies	16
19	Commissionerate of Taxes	1
20	Registrar of Co-operative Societies	2
21	Directorate of Agriculture	25
22	Public Works Road	5
23	Pollution Control Board of Assam	7
24	Environment and Forest	7
25	Directorate of Geology and Mining	2
26	Directorate of Municipal Administration	8
27	Assam Urban Water Supply & Sewerage Board	1
28	Commissionerate of Excise	5
29	Transport	5
30	General Administration	2
31	Directorate of Elementary Education	3
32	Directorate of Secondary Education	3
33	Directorate of Higher Education	3
34	Directorate of Information Technology, Electronics and Communication	1
35	Assam Industrial Development Corporation (AIDC) Ltd	2
36	Assam Industrial Infrastructure Development Corporation (AIIDC)	1
37	Assam Small Industries Development Corporation (ASIDC) Ltd	2
38	Ministry of Petroleum and Natural Gas	1

Source: https://eodb.assam.gov.in/ accessed on 9th November, 2023



Table-8.3.3: Department-wise Numbers of Clearances in Manipur

SI. No.	Department/Commissionerate/ Controller Under Single Window Clearance	Total Number of Clearance given under Departments/Commissionerate/ Controller
1	Commerce and Industries	4
2	CAF & PD (Weight & Measures)	7
3	Public Works Department (PWD)	3
4	Education Department	2
5	Water Resources	1
6	Home Department	1
7	Department of Health & Services, Manipur	NA
8	Manipur Drugs Control	4
9	PC & PNDT	NA
10	Revenue	11
11	Forest	NA
12	Transport	16
13	Labour	4
14	Hospital and Clinic Registration	NA
15	Co-operative Society	NA

Source: https://eodbmanipur.mn.gov.in/Services accessed on 9th November, 2023

Table-8.3.4: Department-wise Numbers of Clearances in Meghalaya

SI. No.	Department/ Commissionerate/ Controller Under Single Window Clearance	Total Number of Clearance given under Departments/ Commissionerate/ Controller
1	Chief Inspector of Boilers & Factories	7
2	Commisionerate of Food Safety	1
3	Department of Industries & Commerce Online Services	3
4	Department of Social Welfare	4
5	Deputy Commissioner Office	21
6	Directorate of Commerce and Industries	1
7	Education Department	2
8	Excise registration Taxation Stamps Department	7
9	Fire and Emergency Service	2
10	Forest Department	9
11	Health and family Welfare Department	13
12	Inspectorate of Electricity	1



SI. No.	Department/ Commissionerate/ Controller Under Single Window Clearance	Total Number of Clearance given under Departments/ Commissionerate/ Controller
13	Labour Department	13
14	Legal Metrology Department	7
15	Meghalaya State Pollution Control Board	10
16	Power	2
17	Printing & Stationery Department	3
18	Public Health Engineering Department	2
19	Public Works Department	2
20	Registrar of Companies	1
21	Registrar of Cooperative Societies	3
22	Registrar of Firms	1
23	State Environment Impact Assessment Authority	2
24	Tourism Department	2
25	Transport Department	2
26	Urban Affairs Department	7
27	Water Resources Department	1

Source: https://investmeghalaya.gov.in/resources/homePage/17/megeodb/services.html accessed on 9th November, 2023

Table-8.3.5: Department-wise Numbers of Clearances in Mizoram

SI. No.	Department/Commissionerate/ Controller Under Single Window Clearance	Total Number of Clearance given under Departments/Commissionerate/ Controller
1	Commerce & Industries Department	11
2	Land Revenue & Settlement Department	8
3	Environment, Forest & Climate Change Department	2
4	Mizoram Pollution Control Board	25
5	Fire & Emergency Services	1
6	Taxation Department	1
7	Public Work Department	2
8	Aizawl Municipal Corporation	2
9	Law& Judicial Department	NA
10	Legal Metrology	11
11	Excise & Narcotics Department	NA
12	Power & Electricity Department	9
13	Public Health Engineering Department	6
14	Geology & Mineral Resources	1
15	Food & Drug Administration, H&FW Department	5
16	Urban Development & Poverty Alleviation	NA



		Total Number of
SI.	Department/Commissionerate/	Clearance given under
No.	Controller Under Single Window Clearance	Departments/Commissionerate/ Controller
17	Labour, Employment Skill Development & Entrepreneurship	8

Source: https://eodbmizoram.gov.in/ accessed on 9th November, 2023

Table-8.3.6: Department-wise Numbers of Clearances in Nagaland

SI. No.	Department/ Commissionerate/ Controller Under Single Window Clearance	Total Number of Clearance given under Departments/ Commissionerate/ Controller
1	Department of Industries and Commerce	2
2	Commissionerate of Taxes	1
3	Nagaland Pollution Control Board	5
4	Department of Labour and Employment	3
5	Department of Power	1
6	Department of Information Technology	2
7	Commissionerate of Taxes	1
8	Nagaland Pollution Control Board	5
9	Department of Labour and Employment	3
10	Department of Power	1
11	Department of Information Technology	1

Source: https://ebiz.nagaland.gov.in/online-services/ accessed on 9th November, 2023

Table-8.3.7: Department-wise Numbers of Clearances in Sikkim

SI. No.	Department/Commissionerate/ Controller Under Single Window Clearance	Total Number of Clearance given under Departments/Commissionerate/ Controller
1	State Quota Education Department	1
2	Social Justice & Welfare Scholarships	1
3	Education Department Scholarships	1
4	Private Institute Registration System	1
5	Fishing License Issuing Application	1
6	Fish Shop NOC	1
7	Firm Registration Certificate	1
8	Scheduled Tribe Certificate	1
9	Grievance Redressal System – RDD	1
10	Online Sanitation Certificate System	1
11	Land Stability Reports	1
12	Right of Way	1
13	Teacher Eligibility Test	1
14	Pension Scheme Registration	1
15	Fisheries Beneficiary Registration	1
16	Employment Card	1



SI. No.	Department/Commissionerate/ Controller Under Single Window Clearance	Total Number of Clearance given under Departments/Commissionerate/ Controller
17	IT Vendor Online Registration	1
18	Recruitment Processing Application, SPSC	1
19	Issuance of Manufacturer License from Legal Metrology Unit	1
20	NOC for Availing Housing Loan on Mortgage of Lease Deed from UDD	1
21	Issuance of MgMarg Permissions for Non-Profitable Events	1
22	Issuance of Permission for Mega Events	1
23	Allotment of Temporary Permission for Mega Events from UDD	1
24	Issuance of Dealer License from Legal Metrology Unit	1
25	Renewal of Independent Individual Worker & Registration of Worker by Principal Employer/Service Provider/ Sub service provider/ Owner of Establishment	1
26	Allotment of Shop Rooms/Public Space/Housing Unit for Business Purposes from UDD	1
27	Issuance of Permission for Banner Placement	1
28	Issuance of Repairer License from Legal Metrology Unit	1
29	NOC for Registration of Lands which are Adjacent to UDD owned lands	1
30	Gangtok Municipal Corporation – Grievance Redressal	1
31	Issuance of Permit for Restricted Area/Protected Area for Government Officials & Locals of Sikkim	1
32	e-pass for Covid 19 Curfew	1
33	Issuance of MgMarg Permission for Profitable Events	1
34	Registration of Independent Individual Worker & Registration of Worker by Principal Employer/Service Provider/Sub service provider/Owner of Establishment	1
35	Issue of Unmarried Certificate	1
36	Issue of Senior Citizen Certificate	1
37	Issue of Property Certificate	1
38	Commerce and Industries service-Provisional registration of Enterprise	1
39	Application for Certificate of Establishment/Shops	1
40	Online Building Permission System	1
41	Scheduled Caste Certificate	1
42	OBC Certificate	1
43	Primitive Tribe Certificate	1
44	Income Certificate	1
	Total	44

Source: https://sso.sikkim.gov.in/services accessed on 9th November, 2023



Table-8.3.8: Department-wise Numbers of Clearances in Tripura

SI. No.	Department/Commissionerate/ Controller Under Single Window Clearance	Total Number of Clearance given under Departments/Commissionerate/ Controller
1	Factories & Boilers Organisation	9
2	Directorate of Labour	10
3	Drugs Control Administration	5
4	PWD (Drinking water and Sanitation)	2
5	Excise Department	3
6	Tripura State Pollution Control Board	3
7	Electrical Inspectorate	2
8	Directorate of Fire Service	2
9	Urban Development Department	1
10	Tripura State Electricity Corporation Ltd	3
11	Legal Metrology	5
12	Taxes Organization	2
13	Co-Operative Registrar	1
14	Partnership Firm Registration (I & C)	1
15	Tripura Industrial Development Corporation Limited	1
16	Industries & Commerce (Incentive)	1

Source: https://sso.tripura.gov.in/services accessed on 9th November, 2023





Creating
Soft infrastructure today
for businesses
of tomorrow



## 8.4 Seed Project

This section focuses on identifying and promoting sector-specific seed projects for international collaboration, assessing factors like market readiness, infrastructure, and investment potential. The sectors include Food Processing, Bamboo, Tourism, Floriculture, Handloom, Handicrafts and Fashion Design, Piggery, Wellness and Traditional Medicinal Systems, Plantation: Palm Oil. The Seed projects in following sectors are proposed keeping in mind the collaborative projects actually happening at the ground level between local entrepreneurs and enterprises in the neighbouring South East Asian countries The idea is to attract investment and other forms of ventures from various investors /enterprises/ entrepreneurial units from the South East Asian countries to NER of India.

## A. Food Processing

The identified seed projects in food processing sector are setting up of an oleoresin (Ginger) extraction plant as well as a curcumin (Turmeric) extraction plant. The rationale for setting up of oleoresin plant is the demand for spice oils and oleoresins which is increasing day by day. The ginger from NER from which oleoresin is extracted, especially the variety from Karbi Anglong has been given the Geographical Indication (GI) tags due to its high pungency and oleoresin content. Based on application, the oleoresin market is segmented into pharmaceutical, food, cosmetics, and fragrances. Ginger oleoresin is an important condiment in these industries due to its antioxidant and poly-phenolic compounds. Oleoresins have large domestic as well as export markets. The use of spice is being rapidly replaced with oleoresins and exports of these products instead of raw spices results in considerable value addition. India enjoys the distinction of being the single largest supplier of spice oleoresins to the world.

It is proposed to set up a ginger oleoresin extraction plant in Karbi Anglong district as it is the only district whose Ginger has got the geographical indication (GI) tag in the entire NER. The extraction plant will have a production capacity of 6 MT oleoresins per year and the estimated quantum of investment is approximately Rs 10.10 crores. The basis for choosing this location is that ginger-producing clusters abound in and around the region, which makes it cost as well as logistically efficient to source raw materials. India is also one of the largest producers and exporters of spice oleoresins. About 400 tons/year of spice oils, oleoresins, and blended seasonings are being sold in the Indian market today, which is about 8% of the total production. The presence of multinational and transnational players in the foods area has brought in huge investments and the resultant market expansion provides a lot of growth opportunities for India's spice oleoresin industry.

The rising demand for ginger oleoresins in pharmaceutical and healthcare sector owing to its therapeutic benefits has bolstered the market growth and growing use of spice oleoresins for coloring and flavoring is projected to drive the market growth. Rapid growth of the packaged and processed food, as well as the nutraceutical industries, is expected to be the key factor further driving the growth of the oleoresin industry. Improvement in extraction technology as well as rising investment in research and development for developing new oleoresin products and its blends for meeting specific requirements of the clients is further expected to propel the growth of the industry. Increasing consumer consciousness toward the consumption of natural ingredients in food products, cosmetics, and medicines is expected to help Asian market players to exploit lucrative opportunities in this sector.



Similarly, Turmeric powder is an essential ingredient in the Indian kitchen and as a result, the domestic consumption itself is very high. The turmeric from the region, especially the lakadong variety from Jaintia hills in Meghalaya have a curcumin content above 7, due to which it is in high demand with buyers across the world. However, there is no curcumin extraction unit present in the region. Apart from that, the turmeric from the region is valued for its higher quality and 'organic by default' production practices. The processing of turmeric into curcumin extract provides a much better option and after processing the products can be exported resulting in higher gains to the producers and others along the value chain.

Based on application, curcumin market is segmented into pharmaceutical, food, cosmetics, and others which includes cyanide detection and dye. Among these, pharmaceuticals accounted for a larger share of the global curcumin market in 2019 on account of increasing demand for curcumin-based supplements and is expected to rise further. The pharmaceutical industry is further anticipated to generate high demand for curcumin in the near future as well.

India is the largest manufacturer of curcumin with production exceeding 80 percent of the global market. And even though NER produces almost 7 percent of the country's total production of Turmeric amounting to 81.42 thousand MT, very little value addition is being done in the region. Most of the processing units are smaller ones run by individuals or Self-Help Group producing mainly powder and dry turmeric fingers & slices. It is proposed to set up a curcumin extraction plant in East Jaintia Hills as it is the highest producing district of Lakadong variety of Turmeric in the entire NER, and sourcing of raw materials would be both cheaper and logistically efficient. The quantum of investment required for setting up the plant with a capacity of 350 kg/day production of curcumin and 350 kg of Turmeric Oil is approximately Rs.10 crores.

Global Curcumin market is expected to witness high growth on account of its increasing demand in food, cosmetics, and pharmaceuticals. According to an estimate by Global market insights (2017), the curcumin industry is set to reach 100 million USD in revenue by 2024. In addition, increasing consumer consciousness toward the consumption of natural ingredients in food products, cosmetics, and medicines is expected to help Asian market players to exploit lucrative opportunities in the Curcumin market.

#### B. Bamboo

India is the second richest country, after China, in terms of bamboo diversity with 136 species (125 indigenous and 11 exotic). According to reports of Forest Survey of India (FSI), bamboo is grown across approximately 14 million hectares of forest area which is about 12% of total forest cover. The NER accounts for more than 22 % of the bamboo resources of the country and harbors nearly 90 species of bamboos, 41 of which are endemic to the region.

The Global Industry Report valued the global bamboo market at USD 72.10 billion in 2019 which is expected to reach over USD 98.75 billion by 2026, growing annually at around 5.5% during the period from 2020 to 2026. Although India has 30% of the world's bamboo resources with the world's largest growing area of more than 15.69 million hectares, the country taps only one-tenth of its bamboo potential contributing to only 4% share of the global market for bamboo products. According to reports of Ministry of Agriculture and Farmers Welfare, the bamboo and rattan industry of India in 2019 was worth Rs. 28,005 crore. But the export of bamboo & bamboo products



in 2015-16 & 2016-17 was only Rs. 0.11 crore and Rs.0.32 crore respectively as compared to import of Rs 148.63 crore and Rs 213.65 crore during the same period.

Bamboo being a priority sector of the Govt. of India, a lot of emphasis has been given on its development and National Bamboo Mission has been envisaged for promoting holistic growth of bamboo sector by adopting area-based, regionally differentiated strategy and to increase the area under bamboo cultivation and marketing. There are vast untapped resources of bamboo that can open several avenues for utilization for many productive works apart from employment creation and livelihood generation.

A seed project that is firmed up about the potential of bamboo plants as a resource for making textile fabrics. Bamboo fiber is a unique biodegradable textile material. As a natural cellulose fiber, it can be 100% biodegraded in soil by micro-organisms and sunshine. It is commended as the natural, green and eco-friendly new-type textile raw material of the 21st century. Bamboo is 40% more absorbent than even the finest organic cotton, wicking moisture away from the skin much faster and keeping the body dry and comfortable easier. This leads to a great potential for bamboo fiber in the textile industry in coming years.

The study provides a brief on the process of conversion of raw bamboo to fiber by mechanical as well as chemical procedure. It also gives a gist of the various utilities of bamboo fiber viz intimate apparels, non-woven fabric, sanitary material, bathroom, and decorating series.

Currently no bamboo fibre production plant is established in NER, and hence the sector is still unexplored and is in the initial stage. Foreign collaboration with established players from CLMVT and Japan can be explored in terms of technology transfer and seed investment for the establishment of a manufacturing unit in NER. The initial investment for the project of 10MT daily production capacity is approximately INRs 12 crores and expected rate of return is 29% which serves as a lucrative opportunity for joint venture investment of an Indian enterprise with a foreign collaborator for the project.

In the 2nd seed project, the potential of bamboo based high end building construction is explored. Bamboo as a building material, with its high compressive strength and low weight, has been one of the most used building materials in support of concrete. Bamboo, like wood, is a natural composite material with a high strength-to-weight ratio useful for structures.

Today, sustainable architecture is not just a trend but an architectural style that has become a"revolution." Utilizing locally available natural material is a key element in any Green Architecture approach. Bamboo, which is an extremely fast-growing species of giant grass, grows abundantly, quickly, and cheaply in India has potential to be utilized as a building material for scaffolding, bridges, bridges, pavilions, outdoor structures, houses and buildings.

The report gives a brief of the bamboo tiles and false ceiling market and its use in construction industry. Taking the example of firms in Thailand and Vietnam it also shows the potential of bamboo based high end construction in different parts of the world and its scope to replicate the same in NER. The seed project suggests setting up of a pilot bamboo infrastructure showcasing the potential of the bamboo sector in urban architecture which can be scaled to multiple residential projects. The



project can be developed in joint venture modes between a foreign and a local partner with technology and design being provided from abroad and project execution done by the local entrepreneur.

#### C. Tourism

Under the tourism sector, 4 different types of seed projects including river cruise tourism, religious tourism, war tourism and traditional medicine tourism have been explored and studied.

**River Cruise Tourism** - River cruise is a voyage along the inland waterways, which constitutes of multiple ports among the waterways. It is among the fastest growing sectors of the global travel industry. Over the last decade, cruise industry revenue grew to 37 billion US dollars, marking it the most successful and perhaps most transformative period in the industry's history. In the year 2019, the average passenger capacity of the global cruise market reached an all-time high. The Global Cruise Tourism Market is expected to grow at a CAGR of 10% during the forecasted period (2020-2027).

There are 5 major ports in India – Mumbai, Cochin, Goa, New Mangalore, and Chennai, where most of the international cruise vessels use it as port of call. There are 111 National Waterways (NWs) declared under the National Waterways Act 2016, 13 NWs are operational for shipping and navigation and cargo/passenger vessels are moving on them. National Waterways 1 & 2, i.e., Brahmaputra and Ganga, are the only waterways where domestic operators offer River cruises.

India is amazingly becoming an epicenter for luxury travel and luxury cruises. Luxury River Cruises in India is the most remarkable experiences for the tourists because the travelers cash the opportunity of exploring the scenic beauty and amazing geography of the country. These river cruises are spectacular in India because the country has long coastline surrounded by three water bodies, which are Indian Ocean, Bay of Bengal and Arabian Sea.

There are 20 National waterways in NER, out of which only 4 are operational. Among those, the National Waterway 2, which stretches on Brahmaputra River from Sadiya to Dhubri is the most important waterway from economy perspective. It has a total length of 891 km. Brahmaputra, considered as the longest river in India, is an ideal introduction to the river cruise in the country.

It is one of the most thrilling experiences for river journey. It runs through the exotica of Arunachal Pradesh and Assam. Travellers can have the glimpse of the incredible scenic beauty i.e., wildlife safaris, village walks, tea gardens and other attractions.

There are few existing routes in the Brahmaputra River, which has been discovered by tour operators. This study gives one such river cruise circuit from Dibrugarh/Jorhat to Guwahati, which is a 4 days-3 nights tour. It covers some of the other sub-sectors of tourism like, religion tourism, Buddhist tourism, Handicraft tourism, wildlife/nature tourism, tribal and Village tourism.

This study found that 80% of the cruise companies build their cruise in Kolkata, which is a big investment for the companies. Hence, the proposed seed project also displays upon developing infrastructure to build ship/cruises in Assam. At present, there are very few players in the ship building sector in Assam. The cruise vessels sailing in Brahmaputra have a capacity of about 12 to 40 people. These cruises are mostly made of wood, steel or composite. Most of the cruises are made in



Kolkata, except 2 or 3. According to an entrepreneur, the vessel made of wood, with a capacity of 15 people can cost around Rs. 25 lakhs. Another vessel made of composite, which has a capacity of about 40, cost around Rs. 1.3 cr.

There has been lot of effort given by government in the river cruise industry. Government has initiated promotion in investment in "Luxury cruise vessel cruising between Guwahati and Dibrugarh on the Brahmaputra River". It has also been seen that there is an average employment generation on a cruise ship is 1 job for 3-4 passengers. With India having the potential to cater to 700 cruise ships per year as against 158 handled this year, the cruise industry can generate more than 2.5 lakh jobs for ten lakh cruise passengers, giving a big boost to the country's economy.

Religious Tourism - The Buddhist circuit is a globally important route for over 500 million Buddhists along with the life of Buddha across Nepal and India, from Lumbini, where he was born; Bodh Gaya where he attained enlightenment; Sarnath where Buddha gave his first preaching to five monks to Kushinagar, where Buddha achieved salvation. There are about 450 to 480 million Buddhists across the world. The Asia Pacific region has demonstrated itself to be a firm favorite for international travelers, with 170.6 million international tourist arrivals in the Northeast Asian region alone in 2019. The Southeast Asian region followed in close second with just under 139 million international tourist arrivals. It is estimated that out of the 600 million religious and spiritual voyages undertaken worldwide, 50 percent were to Asia.

Tourism in India, especially Buddhist tourism has the potential to deliver socio-economic benefits in developing states. There is an existing Buddhist circuit starting from Lumbini in Nepal, where Buddha was born, to the sites in India he traversed, including Bodh Gaya, Sarnath, Kushinagar, Rajgir, Vaishali, Sravasti and Sankasia (in UP and Bihar). There are 11 Buddhist destinations in India, which contribute a considerable share (6.46 percent) in the nationwide foreign tourist visits. This inbound flow also features prominently in Uttar Pradesh's 35.56 million annual foreign tourist visits and Bihar's 10.82 million, making these states the third highest and ninth highest, respectively, in numbers of foreign tourist visits in the country in 2017.

The Indian Railway Catering and Tourism Corporation Limited (IRCTC) have developed a Buddhist circuit covering the main hotspots of Buddhist sites in Bihar, Uttar Pradesh and Nepal.

The Buddhist tourist train takes to these places: where Buddha was born (Lumbini), gained enlightenment (Bodhgaya), first taught (Sarnath), and attained Nirvana (Kushinagar). It is an 8 day-7-night tour, which starts from Delhi Safdarjung Railway station.

North-East India is an abode of vibrant ethnic communities having distinct cultural pattern and way of life. Among the ethnic communities of the region the Sherpas, Monpas, Sherdukpens, Khambas, Membas, Nahs, Meyors, Zakhrings etc are followers of Mahayana form of Buddhism while the Tai-Khamtis, Tai-Phakeys, Tai-Khamyangs, Tai-Turungs, Tai-Aitons, Singphos, Tikhak-Tangsas, Chakmas, Moghs, Boruahs etc are followers of Theravada form of Buddhism. The Tai-Khamtis are one of the significant ethnic communities of North-East India professing Theravada form of Buddhism. Some of the prominent Buddhist related institutions are Soka Gakkai, North-East India Buddhist Sangha Council and International Buddhist Confederation (IBC). Most traces of the great Mahayana



Buddhism are now erased from modern Assam - what remains are just some relics, legends, and historical analysis.

There is a most potential Buddhist circuit from Nepal to Mandalay in Myanmar. The circuits can enroute from Limbini in Nepal to Mandalay in Myanmar, covering 3 countries, 7 states (amidst India) and 11 Buddhist sites. This circuit touches Bihar, West Bengal, Sikkim, Bhutan, Assam, Arunachal Pradesh, and Manipur.

The opportunities for Buddhist tourism can be in the form of investment in development of connectivity route, as North-East landscape constituents of the region – hills (60%), plateaus (12%) and plains (28%) along with river systems contribute substantially in enriching its scenic component. Investment in publicity or advertisement is another opportunity, as the world still needs to know about the existence of North-east India and its beauty. One of the major problems in North-East India is lack of infrastructure/amenities near the tourist sites. There are less than five number of 5-star hotel in North-east India. This shows the condition of infrastructure. Government of Assam has initiated a scheme known as 'Aamaar Aalohi' - Rural Homestay Scheme, which gives a new dimension and thrust to the Rural Homestay Facilities in the State of Assam and creation of self-employment opportunities for educated youths in rural and semi-urban areas of tourism potential and importance.

**War Tourism** - War tourism gained its popularity over the last decade in the Western Countries and has attracted a growing number of curious, adventurous and well-off tourists to areas afflicted by violent clashes. War tourism, in its benign form, has always existed. Thousands of tourists agglomerate in areas that have such a past; thousands of curious people routinely visit places such as the war cemeteries to commemorate their ancestors, heroes, family and countrymen.

India is a country, rich on its cultural and historical front. The wars and battles taken place in the country has left its mark all over the nation like a shadow. The valour displayed by Indian soldiers on battlefields around the world is legend. Indians have fought with honour and glory in the two world wars and in numerous wars and conflicts since Independence. They have served in France and Flanders, Gallipoli and Mesopotamia in the First World War, and in Dunkirk, North Africa, and Myanmar in the second. In WW-II, the strength of the Indian army rose to 2.5 million men making it the largest volunteer army in the history of human conflict.

Till date, Manipur and Nagaland feature in the World War tourism map and a large number of tourists, particularly from Japan visit the Imphal War Cemetery in Manipur and the Kohima War Cemetery in Nagaland every year. There are eight major war cemeteries in North-East India, which are taken care and maintained by "The Commonwealth War Grave Commission". The CWGC cares for cemeteries and memorials at 23,000 locations in 154 countries.

War tourism localizes the global by bringing different countries together, it also explores the unknown geographies, connects cities, and provide a platform for exchanging and understanding of different cultures.

The likely location for the war tourism is the Myanmar-Manipur-Nagaland war cemetery circuit, which can be linked to Myanmar, through Moreh situated in Manipur. This circuit has a potential to



attract investment in development of infrastructure, connectivity, venturing on publicity and advertisement companies in North-east India to create awareness of the existing cemeteries. There are very few travel agencies who are specifically working on war tourism. The lack of physical infrastructure like hotels and other amenities near to the existing war sites further offer investment opportunity. War tourism has lot of scope in North-East India.

The war memories of World War II and the India-China war can boost the nostalgic tourism in the NER if those border areas are promoted as tourist spots in the borderland. The famous Steelwel Road connecting India-Myanmar and China built during the Second World War could be one of the most attractive ventures of war tourism-based adventure activities. Some of the fiercest battles of the Second World War were fought in the proposed BCIM (Bangladesh, China, India and Myanmar) Corridor. This shows the scope of collaboration between India and the ASEAN countries.

#### D. Floriculture

The NER is a region that abounds in a phenomenal variety of flower species. Various types of orchids, rhododendrons, anthuriums, primulas, lilies, etc., are widely produced both at the community level and commercial level across the eight states. However, there has been very little organized farming of flowers or production of other value-added products derived from the flowers industry. Despite the diversity in the region, commercial cultivation of flowers in the NER is negligible. Currently, the main flowers being commercially cultivated are Anthurium, Cymbidium orchids, Gerbera, and Lilium.

The NER – especially Arunachal Pradesh, Meghalaya, and Sikkim – provides a natural habitat to more than 500 varieties of chiefly epiphytic orchids. Out of these, cymbidium and dendrobium orchids are popular varieties that have huge commercial potential. Orchids are climate-specific crops and require constant monitoring for temperature, humidity, air, water, and nutritional requirements. Orchids grow best in the evergreen and semi-evergreen forests and to some extent in moist deciduous forests.

Currently, the only value addition that is being done in the NER is in the form of bouquets, corsages, and other arrangements that are used for decoration purposes. Flowers are sought for interior as well as outdoor decorations as cut flowers and potted plants. Cut flowers for decoration purpose for special occasion or festivals, offices and potted plants for its aesthetic values in houses and gardens.

Cymbidium has been considered as the top commercial orchids in Europe for many years. They fetch the highest price in the international markets of which major Asian markets are Singapore and Japan or the Dutch market. In India, Arunachal hills, Sikkim, and Darjeeling hills with cool summer night and monsoonal summer rain are ideal for cymbidium cultivation. The growth of orchid exports from the north-eastern hill region especially Sikkim would provide opportunities for employment and also for development of supporting industries like packaging, cold storage and transportation. East Sikkim has been declared as Agri Export Zone exclusively for production of cymbidium orchids. In Sikkim, more than 350 hybrids of cymbidium orchids are commercially cultivated in an around 25 ha of land and about 5 lakhs spikes are produced annually.

The identified seed project for floriculture is 'Integrated nursery and post-harvest management of flowers to increase vase life longevity of cut flowers' with a focus on Orchids. Orchids account for a



large share of global floriculture trade and are estimated around 10% of international fresh cut flower trade. They have taken a significant position in cut flower industry due to its attractiveness, diversity in forms, shape, and color, high productivity, right season of bloom, and easy packing and transportation. Postharvest life of orchid cut flowers is influenced by pre-harvest factors like varietal or species differences, light intensity, sugar level of flowers, temperature and water loss. It is also affected by harvest factors such as time and stage of harvest and postharvest factors viz. ethylene production, precooling, pulsing, use of preservatives, packaging and storage.

It is proposed to set up a nursery along with an integrated post-harvesting facility in Ziro in lower Subansiri district of Arunachal Pradesh with an approximate investment of Rs 14.25 crores. The basis for choosing this location is that Arunachal Pradesh is home to more than 50 percent of the Orchid species variety found in India i.e. 612 species of orchids are found in Arunachal Pradesh out of 1256 orchids recorded in India. In a book titled 'Orchids of Ziro' by Naresh swami, he reports that his findings reveal that Ziro is the place with the largest concentration of various orchid species in India, if not on Earth. In addition, Orchid Research Center (ORC) is located at Tipi, near Ziro. The ORC is a beautiful research center for the rare orchids of Arunachal Pradesh. Such investments could be profitably done in Sikkim and other states also.

Thailand is among the world's largest exporters of cut flowers and orchids with deep expertise and technical know-how in providing end-to-end cold supply chain logistics and management for cut flowers to import destinations. Their technology, expertise and experience could be harnessed by the flower growers of NER through a transfer of technology, knowledge, management and shared resources. It could also be in the form of direct investment in setting up orchid export hub which entails setting up the entire cold supply chain in the identified location, and providing training and technical know-how to the local entrepreneurs.

The exports of orchids from India is very low at a measly 2.54 MT valued at Rs.4.89 lakhs rupees in comparison to imports especially from Thailand. It can also be observed that while exports has not seen any real rise during the years, imports has also gradually steeped downwards in absolute value terms from a high of Rs 34.26 crore to 11.94 crore i.e. almost 60 percent from its high of 2013-14. This dwindling imports is attributed to larger number of entrepreneurs entering the floriculture industry sector in India, as well as increased government support to the sunrise sectors. The flowers grown in NER have an international appeal and can be marketed regionally, domestically or internationally. The main regional markets are in Aizawl, Guwahati and Shillong in the NER. Main inter-state markets are located in Kolkata, Delhi, Mumbai and Pune. Some sporadic exports have been undertaken by a few entrepreneurs to Bangladesh, Bhutan and UAE. However, these have been in low volumes.

#### E. Handloom, Handicrafts And Fashion Design

**Sitalpati Craft** - The handicrafts sector of India is one of the largest employment generating sectors in the country. The state and regional handicraft clusters contribute significantly to handicrafts export. But the Indian handicrafts industry is fragmented with more than seven million regional artisans and over 67,000 exporters/export houses promoting regional art and craftsmanship in the domestic and global markets.



The NER is rich in traditional arts and crafts. The handicraft items produced in the region are both eco-friendly and unique in design and utility. There are more than 19 varieties of crafts in the North-East which are developed in various cluster areas i.e. Bell Metal Industry of Sarthebari, Brass metal, Fireworks Craft in Barpeta, Craft on Jute, Bamboo & Cane, Sitalpati Craft, Water Hyacinth, Areca Nut Leaf, Pottery Craft, Wood carving, Decorative Candle, Thangka Painting, Carpet Craft, Black Pottery, Manipuri Jewelry, Nagaland Beads, Kauna Craft, and Assamese Jewelry Terracotta Craft.

Sitalpati is one of the handicrafts of NER which is produced in Assam. The name 'sitalpati' is an amalgamation of 'sital' or cool and 'pati' or mat. The 'sitalpati' or cool-mat is essentially a mat that is created by interlacing fine slivers of the Maranta dichotomacane. Sitalpati is made from cane or murta plants, known in different places as mostak, patipata, patibet, and paitara. The murta plant grows around water bodies in Sylhet, Sunamganj, Barishal, Tangail, Comilla, Noakhali, Feni, and Chittagong.

The production of sitalpati is a household industry in Assam. Generally, men prepare the cane slips, while women do the weaving work. People from Goalpara and Cachar district of Assam are mainly involved in this craft. The villages of Assam famous for the production of sitalpati are Dubapara, Katakhal, Kaliganj, Basigram, Karimpur, and Sridurgapur.

The sleeping or sitting mat is the main product. Other than this there are some other products like ladies' handbags, Sling bags, Airbags, file folders, hats, mobile cover, table mats, coaster, lampshades, panels, and other home décor items. The sitalpati products are marketed through exhibition, trade fair, Govt. Emporium which has helped to create a niche market in Urban India, where more people are attached to the cool comfort of this mat. The products are mostly marketed through exhibitions in metropolitan cities like Delhi, Bangalore, Mumbai, Chennai, Bangalore, etc.

The products that are being developed in the production cluster area are traditional and outdated. Hence technology upgradation of Sitalpati clusters craft is proposed with an estimated investment of Rs. 2.7 crores. Sitalpati is a natural product, and it is biodegradable. Raw materials are always available as cultivation is done in the cluster area. Sitalpati bag is a good alternative to rexine bags. Sitalpati is eco-friendly, chemical-free, non-toxic, and odor-free. It also has water resistance properties. There is an increasing demand in the fashion world as lots of good designers around the world are coming forward to use sitalpati in bags and accessories.

Technology upgradation and design intervention are very much needed in this sector which can create a new market for sitalpati product. The setup may be in the production cluster area of Dubapara, Goalpara, Assam. There are more than 500 active sitalpati artisans. The mat braiding has been practiced for decades, but till now weaving of sitalpati in handloom has not yet started. There is a good potential of creating a new variety of home furnishing range from weaving process like-curtain, cushion cover, runner, etc.

For technology up-gradation, it could be achieved with a four-step strategy:

- i) Technical up-gradation of the cluster with the Design firm of Thailand (CLMVT).
- ii) Setting up of Sitalpati Craft Center Hub.
- iii) Linking cluster with Emporiums and Design House in big metros/cities.
- iv) Linking cluster with the export market.



**Banana Fibre:** There is an increasing demand in the global market for banana fiber due to its high strength and stiffness and being environmentally sustainable compared to textiles and leathers. The fiber is extracted from the banana stem by banana fiber extraction machine. The fiber is than converted into yarn by various fabrication method. Banana fiber is widely used as blending material in the textile sector. There is a good demand in countries like United States of America, Malaysia, Korea, European Union and Philippines. Japan's currency, the Yen, is made out of banana fiber. So, exporting banana fiber will bring substantial foreign exchange to India. A proper coordination with manufacturing units and exporting countries needs to be established.

Many value-added products are developed from banana fiber. Handloom products like Fabric, Saree, runners, and mats are developed from banana fiber. Lots of Handicraft items like coasters, mats, planters, light shades, handbags etc. are developed from banana fiber in different parts of the country. In North-east very little number of products are developed with banana fiber. Recently some steps have been taken by ICAR- National Research Centre for Banana, Tamil Nadu to develop banana fiber products in Nagaland and Manipur.

Banana fiber is biodegradable, it has very high value in the market and gradually its demand is increasing in the fashion world. A range of good designers around the world are coming forward to use the fiber and the banana fabric. Banana fiber is a good alternative to all the synthetic and natural fibres, and instead is eco-friendly, chemical-free, non-toxic, and odour-free. The natural coolant and medicinal property of banana fibers helps in the health of its user and is 100 per cent safe as no harmful chemicals and colours are used. Fabric made from banana fiber can be termed as the next green apparel of the future. The banana fabric can be cheaper than cotton and linen if it is produced in large scale.

It is proposed to set up the banana fiber to yarn plant in Darrangiri, which is the largest banana market of Asia, and is located at Goalpara district of Assam. The quantum of investment required to convert banana stems to yarn and then onto fabric is approximately Rs 10 crores. Some of the advantages of setting up the plant in the area is that diverse varieties and good quality of Banana species are found in the region which enables to produce good quality yarn. In addition, manpower is also easily available in the village area. The Darrangiri village is surrounded by highly skilled weavers and a range of community-based ventures in banana fibre production and its conversion into fabrics. There is not a single banana fiber extraction plant in the entire North-East. Darrangiri can be raw material bank, and investors and technical experts from CLMVT countries can be partnered to set up the banana fiber plant. Vietnam produces various products from Banana fiber likeHandicraft products, Fabrics and Papers. So, Vietnam could be a major investor country to develop products from the fiber.

Ethnic Design Hub: North-east India occupies a unique and important place in the indigenous textile culture of India. Traditional dress of an ethnic group plays a major role in showcasing the ethnic identity. Each ethnic group has its own designs and colour combination. Different motifs and designs of textiles have relationship with the rituals and religious life of the people of Northeast India. The method of weaving also varies according to region and ethnic groups. The materials used for textiles has a varied range - cotton, wool, Endi, Muga, animal hair which are used by different ethnic group.



As there is a growing competitiveness in the textile industry both in the national and international markets, a growing need is felt to facilitate handloom weavers to meet the challenges of a globalized environment. There exists a huge variety of designs, motifs and colours across different tribes of North- East. These designs can be commercially marketed to the global audience in the form of contemporary products. Some of the designs have Geographical Indication registration, and these designs of the tribes hold tremendous social significance and usage of each design and garment is governed strictly by the tribe rules. Adapting these designs to contemporary forms will require indepth research so as not to misuse and offend any long-held cultural sentiments. There are design and training centres set up by the state governments under the textile departments. However, there is not much design intervention being done at the local entrepreneur level and the focus has remained on using traditional colours and motifs only. Assam is the leading state accounting for 46.8% of the total number of handlooms in the country. And Guwahati is the fashion center of Assam with five to six Fashion Institute. So, the design hub may be set up in Guwahati. Hence Commercialization of the traditional motifs and designs will create a new market which can be technically developed and marketed by the CLMVT Countries.

#### F. Piggery

Pig farming is one of the most sustainable industries in India. Pigs are very hardy and thrive under extreme conditions. The pig's ability to digest a broad range of food sources makes it so unique. Improved germplasm, productivity enhancement with good healthcare and nutritional management, strengthening market linkage and supportive policies by the government all contribute towards a great prospect in coming days for the piggery sector.

Among the meat producing animals, pigs occupy a unique position as pig keeping is socioculturally intermingled with the livelihood of tribal people of the region. Compared to the other states of India, Assam and other NER states are performing well in pig production. As per the 2019 Animal census Pig population of NER is 5.6 million out of 9.06 million total pig population of India. The estimated meat production from pig in NER for 2018 -19 is 81.5'000 tonnes.

The pig population in NER is comprised preponderantly of non-descript local varieties and genetically graded pigs and hybrids. Local pig breeds are highly adaptable to the harsh management conditions but these animals are not profitable as they are small sized with low prolificacy. Crossbreds and graded pigs are, therefore, slowly gaining popularity among the pig farmers of the region.

In India, majority of the exotic high yielding breeds of pig are raised in the North and Eastern States like Punjab, U.P and West Bengal but are sold directly to the North East region of the country. This shows the potential of piggery sector in the region which provides a direct market for it. The second segment of the pork market deals with high-value processed products. These products include cured meats such as sausages, ham, bacon and canned meat products as well as small quantities of frozen meat. The Indian market for treated pork products is niche, and the majority of this market is accounted for by imports. In year 2018-19 pork meat worth 2.28 USD million has been imported by India.

With the emergence of African swine flu and imposition of restrictions on the import and export of pork the domestic market provides a good opportunity to develop the pork processing sector in NER. In the piggery sector, 2 (two) seed projects have been identified i.e. 1st seed project is the setting up



of Pig breeding and rearing units with 1000+ Sow and 50+ boars. The project is designed with the primary objective of increasing the animal productivity and also reducing the cost of production by implementing scientific rearing practices like artificial insemination and precision feeding. The suggested location for these units are also based on its distance from veterinary support, pig feed supply, availability of man power and primary market of pork meat.

The initial quantum of investment is estimated to be Rs 11-12 crore approximately. With the projected output in terms of sales of piglets, breeding stock, meat stock and prevailing market rate of these outputs the project provides a lucrative investment opportunity in the Piggery Sector. The project can be executed as a tri- party joint venture where a foreign collaborator can contribute in terms of technology knowhow and initial seed investment, the local entrepreneur can contribute in terms of manpower requirement as well as livestock requirement and the government can contribute by providing the required land and infrastructure for the project on lease which would lessen the initial fund capital requirement.

In the 2nd Seed Project, it is proposed to setting up of a Pig processing and packaging unit in NER. In India and specifically NER, there are very few modern state-of-the-art mechanized abattoir cum meat processing plants. To meet the increased requirement, we need more scientifically designed abattoirs and meat processing plants are required. A number of points is taken into consideration while suggesting the location for the processing unit which includes, availability of raw materials i.e. livestock for slaughter or cut meat, distance from the market (retail outlet where processed meats are sold), logistic facilities available for transportation from production unit to market (including cold storage transfer) and availability of infrastructure, power, manpower in a competitive cost. Initial investment for a green field project in pork processed meat unit would be approximately Rs 3.5 Crore (exclusive of land cost).

With the projected output in terms of sales of end products like sausage, bacon, frankfurter, salami and prevailing market rate of these outputs the project provided a lucrative investment opportunity in the Piggery Sector. The project can be executed as a Tri party joint venture wherein a foreign collaborator can contribute in terms of technology knowhow and initial seed investment. The local entrepreneur can contribute in terms of trained manpower as well as raw materials requirement. The government can contribute by providing the required land and infrastructure for the project on lease which would lessen the initial fund capital requirement.

### **G.** Wellness And Traditional Medicinal Systems

According to the International Union for Conservation of Nature (IUCN) and the World Wildlife Fund (WWF), there are between 50,000 and 80,000 flowering plant species used for medicinal purposes worldwide. Traditional medicines (TM) based on medicinal and aromatic plants (MAP) are age old and practiced by using old methods and the medicines are extracted from natural elements and also focus on overall wellness. TM can be considered to belong to three main categories. These are (i) codified medical systems, (ii) folk medicine, and (iii) allied forms of health knowledge.

Codified medical systems include great traditions, which have evolved over 3-4 millennia and include Ayurveda, Siddha, and Unani in the Indian subcontinent and traditional Chinese medicine and acupuncture in China. These medicines are not only used by the rural masses for their primary health care in developing countries but are also used in developed countries where modern



medicines dominate. The Indian sub-continent is a vast repository of medicinal plants that are used in traditional medical treatments.

Ayurveda, yoga, naturopathy, Unani, Siddha, and homeopathy (AYUSH) are a system of alternative medicines in India. Given its ancient scientific knowledge, India is a hub for alternative medicines like Unani, Ayurveda, Siddha, and homeopathy. India's domestic herbal industry is representing by 8610 licensed herbal units spread across the country.

The major commonality of the Indian classical and the folk health care traditions is their dependence upon the raw material derived from a large diversity of plant species, which is estimated to be about 6,500. India ratified the Nagoya Protocol (2002) on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity (NP) in October 2012. This Protocol also aims at ensuring access to and transfer of technologies, recognizing the role of traditional knowledge with informed participation of local and indigenous communities in decision making processes.

A number of NER states have started repositioning themselves in this huge commercial space. There has been rush from the United States, Slovenia, Germany, and other countries to avail of these herbal medicines and treatments. The NER shelters over 50% of the country's total biodiversity. It has 130 major indigenous communities and has been a home to a number of archaic indigenous societies like Abor, Khasi, Mishing, Rabha, Naga, Apatani etc. The traditional communities of North East living here for thousands of years have built a precious knowledge base about the use of the rich bio resources of the region. There is a vast variety of medicinal herbs and plants in the hills and forests of Assam. About 300 types of medicinal herbs and plants are known to exist in abundance in the state. However, only about 5-10% of the plants and herbs are commercially cultivated for extraction purposes.

At present, the raw material produced (unprocessed medicinal plant parts) from the region is traded mainly in the markets of Delhi, West Bengal, and Bihar (Shankar and Rawat, 2013). Pseudobulbs of Dendrobiumdenudans (Bare Dendrobium), D. eriaflorum, D. transparens (Translucent Dendrobium) and D. devonianum (Devon's Dendrobium) orchid are exported from Manipur and Mizoram to Myanmar. Root of Paris polyphylla (Himalayan Paris) are collected from Manipur, Nagaland, Arunachal Pradesh and Meghalaya and exported to Myanmar (Mao et al., 2009). The medicinal plant sector has great potential to boost the economy of Northeast India.

In case of traditional medicine, this study found that cultivation of traditional medicine and value addition into it has a large scope in the NER, which can be attractive investing project for CLMVT. There is a large scope of setting up a manufacturing unit setup in NER with the help of foreign collaboration from the CLMVT countries. The Indian partner suitable for the joint venture would be the existing herbal products manufacturer which could provide land and building required for the unit, active participation of the local faith healers and documentation of their traditional knowledge would play a crucial role in this setup. The research institute of the region can provide the required laboratory facility and technical knowhow for herbal drug documentation and validation. The foreign collaborator can contribute in terms of initial investment, machinery support and transfer of technology in terms of best industrial practices.



#### H. Plantation: Palm Oil

Oil Palm is a species of palm that best grows in the humid tropical areas of the world. It yields fruits in bunches, called the Fresh Fruit Bunches (FFBs) in industry parlance. Palm oil can be obtained from the oily layer that encloses the kernel. Originally found as scattered groves in the wilds of western and central Africa, oil palm has been adapted for growing as a plantation crop. The specialty of oil palm is that it gives the highest yield of edible oil per hectare of crop as compared to other oil crops. Apart from this, derivatives from oil palm find a wide range of uses; cooking and other food uses, along with many non-food applications.

This seed project covers the establishment of a small sized Palm Oil Mill (with capacity of 5 MT per Hour) along with development of about 1,500 hectares of oil palm plantations around the mill under the 'Smallholder Model'. It may be noted that this model is being practiced in India for the development of oil palm. Under this model, the crop is grown on small-sized holdings and sold to companies for processing in their Palm Oil Mills.

The global production of palm oil had reached 73.02 million MT in 2019-20. Indonesia and Malaysia dominate the global output of palm oil, accounting for 84%-85% of the world production in the recent years. The top consuming nations include Indonesia, India, European Union, China, Malaysia, Pakistan and Thailand. These countries account for over three-fifths of palm oil consumption across the globe.

India is the second largest consumer of palm oil. It consumes about 12% of the global output of palm oil. In addition, the country is the largest importer of palm oil. India has to import almost 97% of its requirements of palm oil, as it produces very little (below 0.30 million MT) in comparison to its requirements. It has been reported that 350,000 hectares were under oil palm in India, as on 31st March 2019. About four-fifths of the planted area in the country is located in the South Indian states, especially Andhra Pradesh which accounts for almost half the area under oil palm in India.

The Northeastern Region of India includes the eight eastern-most states of the country. These states are: Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. They include an area of 262,179 sq. km and have a total population of 45.77 million persons (as per the Census of 2011). The region covers almost 8% of India's area but has less than 4% of its population. The North Eastern (NE) Region offers large scope for the cultivation of oil palm, as the crop can provide a steady source of income for the small landholders. In addition, fallow lands and wasteland can be used for this purpose. 149 All states of the NE Region, excluding Sikkim, have been identified as having potential area for growing oil palm. As per an assessment made in 2012; 218,000 hectares had been identified in the region as being 'potential area' suitable for its cultivation in the region. About 17.60% of this area has been covered under oil palm as per the latest reports. However, till 2018- 19, only Mizoram has reported the production of Crude Palm Oil (CPO). No Palm Oil Mill has been established in any other state of the region till date.

*Investment Opportunit*y: A small sized Palm Oil Mill of capacity 5 Metric Ton (MT) per Hour will need about 22,000 MT of FFB if it is to operate at 50% of capacity. Higher utilization will require additional amounts of FFB. Assuming 15 MT per Ha as the average yield, the area under Palm Oil needed to support the above unit is about 1,500 hectares. Hence, the seed project consists of: (1) Palm Oil Mill



of capacity of 5MTPH (MT per Hour), and (b) associated area under oil palm of 1,500 hectare or more. The Report may be examined for the pertinent details in the above connection.

Suitable locations for Palm Oil Mill in the NE Region include (a) Dudhnoi in Assam, about 110 km west of Guwahati, (b) Dimapur in Nagaland, and (c) Pasighat in Arunachal Pradesh. Each location has a sizeable growing belt around it, where oil palm has been established.

The approximate investment in a Palm Oil Mill of capacity 5 MT per Hour is around Rs. 100 million (\$ 1.35 million). This includes investment in building, plant and machinery (including installation and commissioning), and other fixed assets. Land costs are extra and can vary depending upon the location and type of land title. In addition, working capital requirements will be needed. These can about Rs. 8 -10 million (about \$\$110,000-130,000\$) extra for a three-month cycle.

Further, there will be additional investments in areas like awareness creation amongst growers, cost of establishment of nursery, purchase of germinated seeds, extension support to growers (to ensure the adoption of proper growing practices), support to growers for some of the common infrastructure costs etc. These costs can be properly quantified based upon a study of the ground position at the selected location(s).

#### 8.5 Border Haat

#### **Background**

Border Haats are special market places located exactly on the international border, with approximately equal areas from either country. The citizens of the two countries, belonging to nearby areas (within 5 km of the facility), can visit these facilities on the market days (usually 1-2 per week). They can purchase locally produced goods from traders, who are equally represented from either country. The transactions in the border haats are free from customs duties, but the buyers can buy limited quantities for self-consumption only. The sale of tobacco products or products containing tobacco or alcohol is not permitted in these facilities.

These are intended to replicate and promote the traditional system of marketing local produce to local people in the spirit of traditional market-places. Thus, they represent an initiative to promote people-to-people connectivity and thereby to facilitate economic uplift of the inhabitants of remote areas, as well as better understanding at the ground level. Border haats have been initially established on the India-Bangladesh border at some locations in Meghalaya and Tripura.

### **Permitted Operations**

Items of Sale: Locally produced vegetables, food items, fruits and spices; minor local forest products (non-timber) like bamboo, bamboo grass, and broomstick; cottage industry items like gamcha, lungi, sari, and locally produced handloom products; small locally produced agriculture household implements like plough, machete, axe, spade, chisel etc.; locally made garments, melamine products, processed food items, fruit juice, toiletries, cosmetics, plastic products, aluminium



products, cookeries, and stationery (all being exempt from Customs duties), where 'locally produced' means produced in the border district.

Sellers: Maximum 50 vendors – from within 5 km of the location

**Buyers** from within 5 km – permitted to buy only \$200 of goods per visit using currency of their country. There is a limit on the number of buyers allowed on a particular market day.

#### Locations

Initially two Haats were established in Meghalaya (as per the MoU in October 2010), and later on two more were set up in Tripura. There are now seven such facilities as tabulated below.

Table-8.5.1: Border Haats on the India-Bangladesh Border

Indian Side		Bangladeshi Side		Remarks
Location	District	Location	District	
Kalaichar (*)	West Garo Hills	Baliamari	Kurigram	Notified on 14th July 2011
Balat (*)	East Khasi Hills	Lauwaghar (Dalora)	Sunamganj	-Do-
Srinagar (#)	South Tripura	Chhagalnaiya	Feni	Notified on 6 <sup>th</sup> January 2015
Kamalasagar (#)	Sepahijala	Tarapur	Brahmanbaria	Notified on 4 <sup>th</sup> June 2015
Bholaganj (*)	East Khasi Hills	Bholaganj	Sylhet	Notified on 11th December 2020
Nalikata (*)	South West Khasi Hills	Saydabad	Sunamganj	-Do-
Ryngku (*)	East Khasi Hills	Bagan Bari	Sunamganj	-Do-

(\*) In Meghalaya State (#) in Tripura State

Source: Consultant's Analysis based on Customs Notifications

Further; proposals for additional Border Haats are being considered by the Government, based on factors such as the inter-dependence of the populations across the borders, traditions of commerce, availability of site etc.

### **Trade Volumes through Border Haats**

# Tripura

Financial	Value of Transactions in Rs. Crore					
Year	Sr	inagar Border Ha	at	Kamalasagar Border Haat		aat
	Sale by Indian	Sale by BD	Total	Sale by Indian	Sale by BD	Total
	Traders	Traders		Traders	Traders	
2014-15	0.18	0.09	0.27			0.00
2015-16	1.81	0.70	2.51	2.96	0.55	3.51
2016-17	7.39	3.81	11.20	5.88	0.59	6.49
2017-18	4.28	3.29	7.57	4.25	1.21	5.46
2018-19	0.94	0.63	1.57	3.17	0.91	4.08
2019-20	0.83	4.61	5.44	8.39	0.98	9.37
2020-21			0.00			0.00
2021-22			0.00			0.00



Note: The Border haats were closed in March 2020 due to the COVID pandemic, and remained closed throughout the Financial Years 2020-21 and 2021-22. Srinagar Border Haat was reopened in May 2022.

Source: 'Economic Review of Tripura 2021-2022', Directorate of Economic & Statistics, Government of Tripura

#### Meghalaya

	Kalaichar Border Haat	Balat Border Haat	Bholaganj Border Haat	Ryngku Border Haat
2020-21	0.00	0.00	0.00	0.00
2021-22	0.00	0.00	0.00	0.00
2022-23	2.01	9.57	0.00	1.87

Note: The Border haats were closed in March 2020 due to the COVID pandemic, and remained closed throughout the Financial Years 2020-21 and 2021-22. Border Haat was reopened as follows: Balat Border Haat on 26<sup>th</sup> April 2022, Ryngku Border Haat on 12<sup>th</sup> May 2022, Kalaichar Border Haat on 30<sup>th</sup> November 2022, Bholaganj Border Haat (inaugurated on 6<sup>th</sup> May 2023) and Nalikata Border Haat on 23<sup>rd</sup> May 2023.

Source: Answer to Starred Question No: \*98 in Rajya Sabha on 28/07/2023 (based on data from Department of Commerce, Ministry of Commerce & Industry, Government of India)

The India-Bangladesh Border Haats are examples of hope and collaboration. India-Bangladesh Border Haats are not just marketplaces; they are symbols of cooperation, economic growth, and cultural exchange. The India-Bangladesh Border Haats hold immense importance as they are not only economic hubs but also bridges of cultural understanding and diplomacy between the two nations. These unique markets facilitate cross-border trade, nurture economic growth, and create livelihood opportunities for local communities. Moreover, they encourage people-to-people connectivity, strengthen diplomatic relations and preserve indigenous cultures. By formalizing trade and reducing informal activities, Border Haats contribute to regional stability and poverty alleviation while showcasing the shared heritage of India and Bangladesh. These markets exemplify the power of cooperation and friendship across borders, promoting harmony and prosperity in the border region.





# 8.6 Status of Startup Ecosystem in North East India

The North East India is an early stage startup ecosyetem which has witnessed a surge in the startup ecosystem in the last decade with a new emerging breed of young entrepreneurs who have come forwarded with sustainable and social business models capitalizing on the inherent potential of the region. As per the official website of the Startup India under DPIIT, total numbers of recognized startups in the North Eastern region are 1367 nos. as on November, 2023. State-wise nos. of startups are mentioned below.

Table 8.6.1: No. of Startups in NER as per Startup India, 2023

SI. No.	State	Number
1	Arunachal Pradesh	29
2	Assam	1030
3	Manipur	107
4	Meghalaya	40
5	Mizoram	21
6	Nagaland	44
7	Sikkim	9
8	Tripura	87
	Total	1367

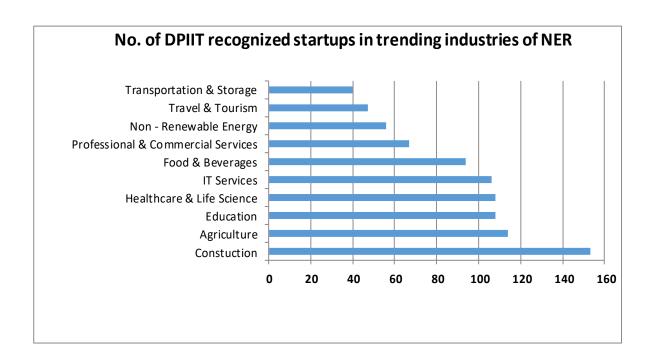




Table 8.6.2: State - wise Stage-wise distribution of Startups

States	Ideation	Validation	Early Traction	Scaling
Arunachal Pradesh	9	11	7	2
Assam	373	336	243	78
Manipur	26	44	23	14
Meghalaya	13	14	11	2
Mizoram	7	6	6	2
Nagaland	7	16	17	4
Sikkim	2	4	2	1
Tripura	33	25	20	9
Total	470	456	329	112

Table 8.6.3: Sector-wise Total Number of Start-ups in Arunachal Pradesh

SI. No.	Sectors	Total Number of Start-ups
1	Agriculture	8
2	Construction	4
3	Education	1
4	Human Resources	1
5	Food and Beverages	1
6	Automotive	1
7	IT Services	2
8	Events	1
9	Telecommunication and Networking	1
10	Professional & Commercial Services	2
11	Healthcare & Life sciences	1
12	Social Impact	1
13	Marketing	1
14	Travel and Tourism	3
15	Non - Renewable Energy	1
16	Total	29

Table 8.6.4: Sector-wise Total Number of Startups in Assam

SI. No.	Sector	Total no. of Start - up
1	Education	80
2	Others	21
3	Food & Beverages	72
4	Agriculture	94
5	Real Estate	6
6	Fashion	8



SI. No.	Sector	Total no. of Start - up
7	Healthcare & Lifesciences	87
8	IT Services	68
9	Non- Renewable Energy	42
10	Green Technology	16
11	Construction	126
12	Travel & Tourism	40
13	Marketing	16
14	Media & Entertainment	12
15	Toys and Games	2
16	Aeronautics Aerospace & Defense	6
17	Human Resources	11
18	Architecture Interior Design	4
19	Professional & Commercial Services	51
20	Technology Hardware	12
21	Enterprise Software	8
22	Other Specialty Retailers	8
23	Security Solutions	9
24	Retail	28
25	Advertising	9
26	Waste Management	6
27	Analytics	6
28	Textiles & Apparel	16
29	Biotechnology	5
30	03	22
	Transportation and Storage	
31	Computer Vision	2
32	Indic Language Startups	3
33	House-Hold Services	7
34	Internet of Things	3
35	Nanotechnology	2
36	Events	4
37	Pets & Animals	4
38	Robotics	1
39	Safety	2
40	Social Impact	13
41	Computer Vision	2
42	Renewable Energy	11
43	Sports	3
44	Logistics	2
45	Passenger Experience	1
46	Chemicals	13
47	Telecommunications and Networking	8
48	Automotive	15
49	Social Network	2
50	Finance Technology	10
51	Design	4
52	Al	4
53	Undefined	23
	Total	1030



Table 8.6.5: Sector Sector-wise Distribution of startups in Manipur

SI. No	Sectors	Total no of Startups
1	Food & Beverages	11
2	IT Services	12
3	Automotive	3
4	Biotechnology	2
5	Professional & Commercial Services	6
6	Healthcare & Lifesciences	8
7	Agriculture	7
8	Enterprise Software	1
9	Construction	10
10	Education	6
11	Waste Management	1
12	Media & Entertainment	3
13	Chemicals	1
14	Events	1
15	Finance Technology	1
16	Technology Hardware	2
17	Renewable Energy	4
18	Non-Renewable Energy	6
19	Travel & Tourism	3
20	Logistics	1
21	Transportation & Storage	12
22	Internet of Things	1
23	AR & VR (Augmented + Virtual Reality)	1
24	Household Services	1
25	Textiles & Apparel	1
26	Real Estate	1
27	Advertising	1
	Total	107

Table 8.6.6: Sector Sector-wise Distribution of startups in Meghalaya

SI. No.	Sectors	Total no of Startups
1	Food & Beverages	2
2	Professional & Commercial Services	3
3	Education	2
4	Textiles & Apparel	2
5	Agriculture	4
7	Travel & Tourism	2
8	Telecommunication & Networking	1
9	Social Impact	1
10	AR & VR (Augmented + Virtual Reality)	1



SI. No.	Sectors	Total no of Startups
11	Construction	1
12	Retail	2
13	Others	3
14	Enterprise Software	3
15	IT Services	6
16	Social Network	1
17	Al	1
18	Transportation & Storage	1
19	Healthcare & life sciences	1
20	Green Technology	1
21	Non-Renewable Energy	1
22	Advertising	1
	Total	40

Table 8.6.7: Sector Sector-wise Distribution of startups in Mizoram

SI. No.	Sectors	Total Number of Start-ups
1	Agriculture	4
2	Healthcare and Life sciences	3
3	Textiles & Apparel	2
4	Construction	2
5	Food and Beverages	2
6	Fashion	2
7	Media and Entertainment	1
8	Marketing	1
9	IT Services	2
10	Transportation and Storage	1
11	Telecommunication and Networking	1
	Total	21

Table 8.6.8: Sector Sector-wise Distribution of startups in Nagaland

SI. No.	Sector	Total No. of Start - up
1	Food and Beverages	4
2	Healthcare and Life sciences	2
3	Fashion	1
4	Agriculture	2
5	Finance Technology	1
6	Automotive	1
7	IT Services	5



SI. No.	Sector	Total No. of Start - up
8	Human Resources	3
9	Professional and Commercial Services	2
10	Waste Management	1
11	Retail	3
12	Marketing	2
13	Education	3
14	Transportation and Storage	1
15	Construction	2
16	Renewable Energy	2
17	Art and Photography	1
18	Green Technology	1
19	Non - renewable Energy	1
20	Travel and Tourism	2
21	Architecture Interior Design	1
22	Media & Entertainment	1
23	Undefined	2
	Total	44

Table 8.6.9: Sector-wise Distribution of Startups in Sikkim

SI. No.	Sectors	Total no. of Startups
1	Telecommunication & Networking	1
2	Food &Beverages	1
3	Construction	2
4	Non-Renewable Energy	1
5	Green Technology	1
6	Education	1
7	Social Network	1
8	IT Services	1
	Total	9

Table 8.6.10: Sector-wise Distribution of Startups in Tripura

SI. No.	Sectors	Total no. of Startups
1	Agriculture	3
2	Al	1
3	IT Services	12
4	Renewable Energy	2
5	Fashion	1
6	Finance Technology	1
7	Education	16
8	Healthcare & Lifesciences	7



SI. No.	Sectors	Total no. of Startups
9	Construction	10
10	Human Resources	2
11	Green Technology	1
12	Media & Entertainment	1
13	Non-Renewable Energy	5
14	Logistics	1
15	Professional & Commercial Services	5
16	Retail	5
17	Social Impact	2
18	Food & Beverages	2
19	Chemicals	2
20	Technology Hardware	2
21	Transportation & Storage	3
22	Other Specialty Retailers	2
23	Social Network	1
	Total	87

### **Status of Startup Ecosystem Enablers in NER**

In the North Eastern Region a supportive environment for startups has been built with clear startup policies, helping new businesses find their way. Further Incubators and Funding Agencies act as enablers of startup nurturing and growth. These combined efforts create a dynamic environment, propelling NER towards innovation and economic vibrancy.

### **Summary of Startup Ecosystem Enablers in NER**

8	33	11	3
STATE WITH SPECIFIC AND ACTIVE STARTUP POLICY	INCUBATORS	GOVT FUNDING AGENCIES	STATE SPECIFIC VENTURE FUND
3 Lakhs+ Sq.ft.	>800+	Rs. 190 Cr.+	671
TOTAL INCUBATION SPACE	PHYSICAL CAPACITY OF INCUBATORS	FUNDING	ATAL TINKERING LABS
12	4		
PRIVATE VENTURE CAPITAL FIRMS	ATAL INCUBATION CENTRES		



#### **States with Startup Policies**

State-specific startup policies are crucial for fostering entrepreneurship and economic growth at the regional level. Such policies can be tailored to address the unique economic needs and strengths of each state. This can lead to targeted development and growth in specific industries that are well-suited to the state's resources and expertise. State-specific policies can encourage the establishment and growth of startups, resulting in increased employment opportunities within the state. The policies are implemented to incentivize and support innovation in key sectors by providing funding, grants, and other resources. The status of state-specific startup policies along with details of nodal implementing agencies are mentioned below-

Table 8.6.11: State with Nodal Agency for Implementation of Startup Policies

S.N.	State	Start - up Policy	Nodal Agency for Implementation
1	Arunachal Pradesh	Arunachal Pradesh State Startup Policy 2022- 23	Department of Planning and Investment
2	Assam	Assam Startup Policy 2017-2022	Department of Industries & Commerce
3	Manipur	Manipur Startup Scheme 2.0 Policy 2022	Planning Department, Govt. of Manipur
4	Meghalaya	Meghalaya Startup Policy 2018-2023	Department of Planning & Finance
5	Mizoram	Mizoram Entrepreneurship & Startup Policy, 2019	Entrepreneurship Development Centre, Planning & Programme Implementation Department, Government of Mizoram
6	Nagaland	Nagaland Startup Policy 2019	Department of Industries & Commerce, Government of Nagaland
7	Sikkim	Chief Ministers Startup Scheme (CMSS)	Department of Commerce & Industries
8	Tripura	IT Startup Scheme 2019	Directorate of Information Technology, Gov. of Tripura

Source: www.startupindia.gov.in accessed on 14th November, 2023 and NEDFi research

## **Startup Incubators**

Incubators play a crucial role in supporting the growth and success of early-stage startups. The incubators provide access to mentors, networking opportunity, investors connect, access to low cost infrastructure and support services. In NER, there are 30+ incubators which are either sector-specific or sector agnostic. The sector specific incubators are mainly in the field of Agriculture & Allied sector, Biotechnology etc.



Table 8.6.12: State-wise Status of Incubators

SI. No.	State	No. of	Total Space (n	Physical Capacity	Total Incubations till
31.110.	State	incubators	Sq. ft)	(in nos.)	date
1	Arunachal Pradesh	3	65,500	42	150
2	Assam	13	1,60,400	250	662
3	Manipur	4	25,000	155	505
4	Meghalaya	3	22,378	166	266
5	Mizoram	3	13,008	60	121
6	Nagaland	5	4,429	48	178
7	Sikkim	1	16,000	78	150
8	Tripura	2	5,600	40	31
	Total	33	3,12,315	839	2063

Source: NEDFi Research data as on November, 2023

### **Funding**

Fund support to the startups of North East are provided in the form of grant, soft loan, interest subvention and in equty and equity related instruments. Fund support is offered by state government departments and central government agencies including PSUs. Summary of funding agencies currently offering support to the startups of NER is mentioned below-

Table 8.6.13: Govt Funding Agencies for Start-up

Area Of Operation	Name of Agency
	NEDFi through NEDFi Venture Capital Limited (NVCL)
	North Eastern Council (NEC)
North Eastern Region	Numaligarh Refinery Limited (Grant & Equity)
	North East Agriculture Technology Entrepreneurs Hub under Assam Agriculture University (AAU)
	Oil India Limited (Oil)
Arunachal Pradesh	Arunachal Pradesh Innovation & Investment Park (APIIP)
Assam	Assam Startup the Nest
Manipur	Planning Department, Manipur
Meghalaya	Promotion and Incubation of Market Driven Enterprises (PRIME)
Mizoram	Mizoram Development Monitoring Committee (MEDMOC)
Tripura	Directorate of Information Technology, Govt of Tripura & SIDBI



Table 8.6.14: Summary of Funding: (Figures since Inception of respective organization upto November, 2023)

SI. No	Name of the Agencies & Funds	Quantum of Fund Support (in Cr.)	Nos. of Startups
1	NEDFi through its subsidiary NVCL North East Venture Fund	98	67
2	NRL Ideation Angel Fund (NEDFi & NRL)	2	1
3	NRL Ideation Fund	12	45
4	Assam Startup	5	54
5	Government of Manipur	58	5848
6	APIIP- Arunachal Pradesh	2.92	68
7	NEATIHUB under the Assam Agriculture University (AAU)	4.58	42
8	North Eastern Council	2.55	270
9	PRIME Meghalaya	1.2	397
10	MADMOC Mizoram	3.14	69
11	AIC SMUTBI	2.1	14
12	Educentre School of Business	0.8	5
13	OCTANE under STPI & MeitY, Govt of India	0.5	10
	Total	192.79	6890

Source: NEDFi Research data as on November, 2023

### **State-Specific Venture Fund**

Backed by the success of North East Venture Fund (NEVF), various state government of NER are coming forward to create state-specific venture funds for providing investment support at the initial critical stage of the startups from the respective states. These funds are targeted to be registered with SEBI as Alternate Investment Fund (AIF).

Table 8.6.15: State-Specific Venture Fund (as on November, 2023)

SI. No.	Name of Fund	Target Fund Corpus	Partner Organization	Fund
31. 110.		rarget runu corpus		Manager
1	Assam Start-up Venture Capital Fund	Rs. 200 Cr.	SIDBI	SIDBI Venture
				NEDFi
2	Manipur Venture Fund	Rs. 40 Cr.	NEDFi	Venture
				Capital Limited
3	Tripura Startup Venture Capital Fund	Rs. 50 Cr.	SIDBI	SIDBI Venture

Source: NEDFi Research data as on November, 2023

### **Govt Startup Funding Agencies**

### 1. Planning Department, Manipur

Under the Startup Manipur initiative, fund support is provided to startups at both idea and revenue stage. The idea stage startups are provided with seed fund of Rs. 3 Lakhs. For revenue stage



startups, the department provides 30% as subsidy and 65% from Partner Bank as collateral free loan under CGTSME (remaining amount as promoter contribution).

#### 2. Mizoram State Entrepreneurship Development & Monitoring Committee (MADMOC)

Constituted under the Planning & Programme Implementation Department, MADMOC is the implementing agency of Entrepreneurship Development Scheme under New Economic Development Policy of the State. The Committee organizes micro startup competition in the state titled "MIZORAM RAHBI" and the winners are provided with 50% of the project cost up to an extent of maximum Rs. 5 Lakhs as seed funding in the form of grant.

#### 3. North Eastern Development Finance Corporation Limited (NEDFi)

NEDFi is presently supporting and investing in (through its subsidiary NEDFi Venture Capital Limited) startups through North East Venture Fund and NRL Ideation Angel Fund. The North East Venture Fund (NEVF) has been registered under SEBI as a category 1 Alternative Investment Fund with a corpus of Rs. 100 Cr with support from the Ministry of DoNER, Govt of India and SIDBI and till date provided investment commitment of Rs. 98.17 Crore to 67 nos. of Startups. The prime focus of the fund is to act as an enabler to stipulate enterprise building in the North Eastern Region and thereby contributing towards creation of the eco system required for nurturing and development of enterprises in North Eastern Region. The fund is sector agnostic and the funded startups till now belong to sectors such as food processing, healthcare, MedTech, tourism, education, agri, consumer-oriented businesses, aggregation of services, IT & ITES, mobile, cloud, IoT, analytics and other upcoming technologies.

Investment under the North East Venture Fund (NEVF) typically targets start-ups, early stage and growth stage companies with new products and technologies or innovative business model. The investment ranges between Rs. 25 lakh and Rs. 10.00 crore per venture, which is long term in nature with investment horizon of 4-5 years.

Further, NVCL is presently managing another fund titled NRL Ideation Angel Fund with a corpus of Rs. 40 cr. where Numaligarh Refinery Limited (NRL) has contributed Rs. 30 Cr and NEDFi has contributed Rs. 10 Cr and remaining fund will be sourced from others. Under this fund, Rs. 2 Cr has already been sanctioned to one number of startup.

Further NEDFi has entered into an MoU with the Government of Manipur for contributing equally for creating and managing a state specific venture fund for the state of Manipur. The fund is at advance stage of registration with SEBI.

#### 4. PRIME Meghalaya

The Meghalaya government launched the PRIME programme with the goal of putting the ideas mentioned in the Meghalaya Startup Policy into action. Its vison is to encourage youths in the State to pursue entrepreneurship by building a vibrant, cooperative ecosystem that facilitates simple access to high leverage markets, applicable technology, skill development, mentorship, and financing. Through the PRIME Programme, Government of Meghalaya has focused on modernising the current Enterprise Facilitation Centres, serves as the focal points for enterprise promotion in



each district and block headquarters. The PRIME HUBS serves as the hubs for skill development, innovation, knowledge exchange, and incubators. Within a period of 5 years it aims to create 10,000 micro and nano enterprises in the state. PRIME has also introduced special financing windows, interest-subvention plans, and First Loan Default Guarantee (FLDG) programmes to improve credit through the establishment of lending facilities for all three types of entrepreneurs.

#### **5. NEATEHUB**

The AIC-AAU incubator (North East Agriculture Technology Entrepreneurs Hub - NEATEHUB) is an Agri Technology Incubator for startup companies and was registered as a not-for-profit Section-8 company in September 2018 under the aegis of Assam Agricultural University (AAU), Jorhat, Assam. Currently, the incubator is supported and funded by the Atal Innovation Mission of NITI Aayog, Govt. of India, as well as RKVY-RAFTAAR of Dept. of Agri & Farmers Welfare, Govt. of India.

This incubator aims to nurture entrepreneurs across the North East Region, who may be at various stages of their entrepreneurial journey. Most entrepreneurs are founders of their agri-based startups with small teams. They are supported by NEATEHUB through a host of services such as business mentoring, seed funding, marketing support, access to technical experts, physical co-working spaces, So far, the incubator has facilitated over 200 startup entrepreneurs and, soon it aims to increase the number manifold. As of October 2023, the incubator has been able to fund 42 startups with grant funding support of about Rs.4.58 Crores. Furthermore, 6 of these startups have able to raise additional funding from the market to the tune of about Rs.9 Cr. Most of these startups are working in the post-harvest technologies space including processed/ value added agro products, speciality teas, honey, waste-to-wealth technologies, farm mechanisation, drones and UAVs, climate smart agri devices, bamboo for home décor and construction, logistics and supply chain, etc. NEATEHUB has developed its own structured incubation programme which teaches students, startup entrepreneurs various nuances of setting up enterprises and running a business. The programme is recognised by the Bill & Melinda Gates Foundation and Wadhwani Foundation. NEATEHUB is spread over 16,000 sq. ft of physical space in AAU Jorhat, and offers co-working areas, laboratories, robotics lab, pilot production facilities, connect with back-end producers for sourcing raw materials, validation, technology transfer, IPR, networking, mentoring and funding support.

NEATEHUB is also the Knowledge Partner for establishing and handholding three other Agri Incubators in the North East Region under the RKVY-RAFTAAR programme, viz., College of Horticulture and Agro-Forestry, Pasighat, Arunachal Pradesh; College of Veterinary Sciences, Aizawl, Mizoram and College of Fisheries, Agartala, Tripura.

#### 6. Numaligarh Refinery Limited (NRL)

Numaligarh Refinery Limited (NRL) has two funds- namely- NRL Ideation Fund which a corpus of Rs. 10 Crore and NRL Ideation Angel Fund which is a venture fund in partnership with NEDFi. Both the funds caters to specifically NER based startups through seed, early stage funding and growth stage funding. NRL Ideation fund was launched in the year 2017 and as on November, 2023 total 45 Startups were provided grant support of Rs. 12 Cr. As already mentioned, under the NRL Ideation Angel fund 1 no. of startup has been invested with Rs. 2 Cr so far.



#### 7. North East Entrepreneurship Development Programme (NEEDP) under the North Easten Council

The North East Entrepreneurship Development Program (NEEDP) was initiated by The North Eastern Council (NEC) in partnership with IIM Calcutta Innovation Park in the year 2022. The objective of the program is to create an inclusive entrepreneurial ecosystem in the North East region by providing entrepreneurs with the support and guidance that will help them scale up their businesses. The program started in September 2022 and will run until the end of 2023. A total number of 270 entrepreneurs from all 8 North Eastern states were selected for incubation under this initiative. Under Incubation support Rs. 3 lakhs commercialization grant is given to the eligible startups & additional Rs.7 lakhs for top 20 performers. For Pre-Incubation Support Rs. 1 lakh prototype grant is given to the eligible startups & additional Rs.4 lakhs for Top 25 performers

#### **Program Impact**

- Catered to 119 nos. of women led startups; generated 3000+ employments, livelihood impact of 4 Lakhs+.
- Generated cohort revenue of Rs. 43 Cr between Jan-Sept, 2023 and external fund raised by the cohort is Rs. 19 Cr.
- 22 entrepreneurs started to generate revenue post-induction into the program and 53 entrepreneurs witnessed more than 50% growth in revenue in QI of FY 23-24 as compared with the previous quarter Q4 FY 22-23.
- More than 1200 hours of mentoring have been done by 58 mentors with the entrepreneurs.

#### 8. Arunachal Pradesh Innovation and Industrial Park

The first state-owned flagship incubator, the Arunachal Pradesh Innovation and Industrial Park (APIIP), was founded in August 2021 and is a key component of the state's startup policy. With the goal of transforming Arunachal Pradesh into a global hub for innovation and entrepreneurship, APPIP is collaborating with IIM Calcutta Innovation Part (IIMCIP) as a knowledge partner. To accomplish this, APPIP is offering comprehensive support to local startups through proactive policy intervention and the establishment of a network of important ecosystem stakeholders.

In Arunachal Pradesh, APIIP is the first of its kind to provide working infrastructure to startups. It has co-working spaces, an investor meeting room, a multipurpose conference hall, mentor's and classroom facilities, office space, and separate areas for consultants and the incubation team.

#### 9. Assam Startup- The Nest

The state-owned incubator of Assam "The Nest," serves as the hub and other existing incubators around the state as its spokes, is the focal point of all entrepreneurship-related initiatives undertaken by the state government, with Ernst & Young (E&Y) serving as its operating partner. With the exclusive goal of making Assam the regional startup hub, the state incubator would assist startups in a variety of industries. Amongst other, the Nest provides grant support to the startups and also connects them with other funding agencies.



#### Private Venture Capital Firms and Angels Networks who have invested in NER Startup

Some of the private venture funds who have invested in startups of the North Eastern region are Dholakia ventures, Chennai Angels, IIT-IIM Angels, Hyderabad Angels, AccelNest, Mumbai Angels, ICCO Cooperation, Ankur Capital, Omnivore, Ennovent, Upaya Social ventures & apital 4 Development Partners India.

#### **Atal Tinkering Labs**

Atal Tinkering Labs (ATLs) are part of a flagship initiative by the Government of India aimed at fostering a culture of innovation and entrepreneurship among school children. These labs are designed to provide a dedicated space for students to explore and experiment with various technologies and tools. ATLs provide students with hands-on experience in practical problem, introduces to innovative Tools and Equipment, connects with mentors and encourages Project-Based Learning and inculcates entrepreneurial mindset.

**Table 8.6.16: State-wise Numbers of Atal Tinkering Labs** 

SI. NO.	State	Total
1	Arunachal Pradesh	32
2	Assam	354
3	Manipur	121
4	Meghalaya	13
5	Mizoram	28
6	Nagaland	26
7	Sikkim	59
8	Tripura	38
	TOTAL	671

Source: aim.gov.in/atl.php

Table 8.6.17: Details of Incubators in Arunachal Pradesh

SI. No.	Name of Incubator	Address	Total Space (in sq ft)	Physical Capacity of Incubator	Total Incuba tions till date
1	RABI, College of Horticulture and Forestry, Pasighat	Pasighat, Arunachal Pradesh 791102	60000	41	80
2	Prakousol, NIT, Arunachal Pradesh	NIT Arunachal Pradesh, Jote, Dist. Papum Pare, Arunachal Pradesh, PIN 791113	4000	1	5
3	Arunachal Pradesh Innovation and Industrial Park	2 <sup>nd</sup> Floor, OT Building, NiTiVhar, Itanagar, 791111	1500	NA	65



Table 8.6.18: Details of Incubators in Assam

SI. No.	Name of Incubator	Address	Total Space (in sq ft)	Physical Capacity of Incubator	Total Incuba tions till date
1	The NEST	Assam Emporium, GNB Road, Ambari, Guwahati, Assam 781001	10500	52	258
2	IIT Ghy, TIDF BioNEST	Centre for Nanotechnology, Indian Institute of Technology Guwahati,Guwahati- 781039, Assam, India	10000	22	5
3	BIONEST IASST (ISVEC)	Vigyan Path, Paschim Boragaon, Garchuk, Guwahati, Assam - 781035	6000	40	40
4	Down town Venture Labs Foundation	Assam down town University, Sankar Madhab Path, Gandhi Nagar, Panikhaiti, Guwahati, Assam, PIN - 781026	5500	32	40
5	Guwahati Biotech Park Technology Incubation Centre	Near SP Office, Amin gaon, Guwahati, Namati Jalah, Assam 781031	100000	14	40
6	IIT Ghy Technology Incubation Centre	IITG Technology Incubation Centre, Technology Complex, IIT Guwahati, Guwahati- 781039 Assam	4000	14	44
7	North East Agriculture Technology Incubation Centre	North East Agriculture Technology Entrepreneurs Hub (NEATeHub), 2nd Floor, Old Dean Building, Assam Agricultural University (AAU) Campus, Jorhat - 785013	12000	24	178
8	National Institute of Pharmaceutical Education & Research (NIPER)	National Institute of Pharmaceutical Education and Research Guwahati (NIPER-G), Sila Katamur (Halugurisuk), P.O.: Changsari, Dist: Kamrup, Assam, Pin: 781101	10000	32	37
9	National Institute of Technology, Silchar	National Institute of Technology Silchar, Cachar, Assam, Pin	NA	NA	NA



SI. No.	Name of Incubator	Address	Total Space (in sq ft)	Physical Capacity of Incubator	Total Incuba tions till date
		Code: 788010.			
10	Tezpur University : Centre for Innovation Incubation and Entrepreneurship	Office CIIE at Mechanical Department Building, School of Engineering, Tezpur University, Napaam-784028, Assam	NA	NA	NA
11	Dibrugarh University Institute of Engineering & Technology, Dibrugarh	Dibrugarh University, Dibrugarh- 786004,Assam, India	NA	NA	NA
12	Assam Don Bosco University EDIC	Tapesia Gardens, Kamarkuchi, Sonapur – 782 402, Assam	500	10	10
13	Incubation Centre, Kaziranga University	The Assam Kaziranga University, Koraikhowa, NH-37, Jorhat 785006, Assam	1900	10	10

Source: NEDFi Research data as on November, 2023



The Nest, Ambari, Guwahati

Table 8.6.19: Details of Incubators in Manipur

SI. No.	Name of Incubator	Address	Total Space (in sq ft)	Physical Capacity of Incubator	Total Incuba tions till date
1	Centre for Entrepreneur and Skill Development, Manipur University	Manipur University, Indo-Myanmar Road, Canchipur - 795003, Imphal, Manipur, India	10,000	85	450



SI. No.	Name of Incubator	Address	Total Space (in sq ft) Physical Capacity of Incubator		Total Incuba tions till date
2	Manipur Technical University	Manipur Technical University, Government Polytechnic Campus, Takyelpat, Imphal West, Manipur – 795004	5000 20		20
3	Centre for Innovation Incubation and Entrepreneurship, NIT Imphal	Langol, Imphal- 795004, Manipur (INDIA)	10,000	50	35
4	Institute of Bioresources and Sustainable Development (IBSD)	Takyelpat, Imphal, Manipur - 795001 (India)	NA	NA	NA

Source: NEDFi Research data as on November, 2023

Table 8.6.20: Details of Incubators in Meghalaya

SI. No.	Name of Incubator	Address	Total Space (in sq ft)	Physical Capacity of Incubator	Total Incuba tions till date
1	Agribusiness Incubation Centre, ICAR RC NEH	ICAR RC - NEH Region. Umroi Road, Umiam, Meghalaya. Pin - 793103	NA	6	19
2	PRIME	Jawaharlal Nehru Stadium, Polo, Golf Links, Shillong 793001, Meghalaya	12700	150	240
3	IIM Shillong Foundation for Incubation and & Enterprises	IIM Shillong, Shillong - 793014, India	9678	10	7





# **PRIME Meghalaya**

Table 8.6.21: Details of Incubators in Mizoram

SI.			Total	Physical	Total	
No.	Name of Incubator	Address	Space (in	Capacity of	Incubations till	
INO.			sq ft)	Incubator	date	
		2nd Floor, MV119 JL Building,				
1	TiLi Incubator	Khamphei, Mission Veng,	2886.2	11	11	
		Aizawl, Mizoram 796005				
		RAFTAAR AGRIBUSINESS				
		INCUBATOR (R-ABI), College				
		of Veterinary Sciences &				
2	R-ABI Mizoram	Animal Husbandry, Central	122	9	92	
		Agricultural University(I),				
		Selesih, Aizawl, Mizoram,				
		India, Pin Code: 796014				
3	Mizoram University	Mizoram University, Tanhril,	10000	40	18	
3	BioNEST	Aizawl, Mizoram	10000	40	18	

Table 8.6.22: Details of Incubators in Nagaland

SI.	Name of		Total	Physical	
No.	Incubator	Address	Space (in	Capacity of	Total Incubations till date
110.	medbator		sq ft)	Incubator	
1	Youth Net Incubation Centre	YouthNet Office Dimapur, 4th Mile, Near Agri Expo 797115	3529	30	160



SI. No.	Name of Incubator	Address	Total Space (in sq ft)	Physical Capacity of Incubator	Total Incubations till date
2	Nagaland Mini Tool Room Training Centre New Industrial Estate	Kacharigaon, Dimapur, Nagaland 797112	900	18	18
3	Educentre School of Business	Educentre School of Business, 2nd Floor Morung Express Building, Duncan, Tajen Ao Rd, Dimapur,	NA	NA	NA
4	National Institute of Electronics & Information Technology (NIELIT)	Meriema, New High Court Road, Kohima - 797001, Nagaland.	NA	NA	NA
5	Nagabots Incubation Centre	Flat No. 103, 1st Floor Mabel Tanquist Memorial Building, Kenuozou Hill/Neituo Road. Kohima, Nagaland	NA	NA	2

Source: NEDFi Research data as on November, 2023



# Youth Net Incubator, Nagaland

Table 8.6.23: Details of Incubators in Sikkim

SI. No.	Name of Incubator	Address	Total Space (in sq ft)	Physical Capacity of Incubator	Total Incubations till date
1	AIC SMU technology business incubation foundation	SMIT, Rangpo, Sikkim	16000	78	150



Table 8.6.24: Details of Incubators in Tripura

SI. No.	Name of Incubator	Address	Total Space (in sq ft)	Physical Capacity of Incubator	Total Incubations till date
1	COF, RABI	College of Fisheries, CAU (I), Lembucherra, Agartala - 799 210, Tripura, India	4000	35	23
2	Space Technology Incubation Centre	National Institute of Technology Agartala, Jirania, West Tripura, Pin - 799046	1600	5	8

Source: NEDFi Research data as on November, 2023

Table 8.6.25: Atal Incubation Centres in NER

SI. No.	State	Total AICs	Name of AIC	Address
1			AIC NIPER	National Institute of Pharmaceutical Education and Research Guwahati (NIPER-G), Sila Katamur (Halugurisuk), P.O.: Changsari, Dist: Kamrup, Assam, Pin: 781101
2	Assam	3	AIC SELCO Foundation	PNGB Rd, Nambari Railway Officers Colony, Gotanagar, Maligaon, Guwahati, Assam 781011
3			NEATeHub	North East Agriculture Technology Entrepreneurs Hub (NEATeHub) 2nd Floor, Old Dean Building, Assam Agricultural University (AAU) Campus, Jorhat - 785013 Assam, India
4	Sikkim	1	AIC SMU Technology Incubation Foundation	SMIT, Rangpo, Sikkim

Source: https://aim.gov.in/atal-incubation-centres.php

### **The OCTANE Incubation Programme**

OCTANE is a group of eight internetworked Centre of Entrepreneurship (CoE) to support technology led innovation in the North Eastern India under the Ministry of Electronics and Information Technology, Govt of India and the Software Technology Parks of India (STPI). The objective of the programme is to-

- To incubate start-ups in new and emerging technologies in the areas of electronics and IT,
- To provide a robust platform for start-ups, with single umbrella support services like mentorship, cloud computing subsidy, seed capital assistance, marketing support (incl. IPR protection) etc.,



- To create employment opportunities in new innovative start-ups,
- To develop a tinkering and innovation culture amongst students and professionals by establishing innovation zones for start-ups,
- To facilitate E-Commerce activities and applications.

OCTANE is expected to create direct employment for over 1,250 local youth (in-house units only). Further, direct employment in graduated units is expected to reach over 4,000 by Year-15 on conservative basis. In addition, the local start-ups will be able to avail of good quality incubation facility to start operations - without investing capital for the same.

Under the programme 50 startups of NER have been incubated so far out of which 10 nos. of startups have received fund support of Rs. 50 Lakhs and remaining startups are at various stages of progress.

#### Startup Success Stories of North East who have received Venture Fund

ERC Eye Care Pvt Ltd, Assam provides affordable eye care in the hinterlands of the NER. The company has an innovative hub and spoke model with mobile units and vision centres attached with hub hospitals in Assam, West Bengal and Bihar. They are also into eyewear (https://erclens.com/) and work both in online and physical model.



**Symbiotic Foods Private Limited, Guwahati, Assam** is one of the largest quality commercial pig breeder in the Northeast India region. It provides complete solutions for setting up commercial piggery, quality feeds, vet etc. The company is presently working with more than 5000+ farmers out of which more than 50% are women farmers.





Atvi Infotainment Private Limited is a Guwahati, Assam based new age content generation and



aggregation company engaged with promoting North East through its infotainment platform which is broadcasted through internet videos, articles, news from NER through its reporters on the ground and its studios located in NER.



Etash Delivery Technologies Pvt. Ltd is a Guwahati based startup providing last-mile and mid- mile delivery solutions to e-com business. On an average it is delivering 8,000 shipments in a day over 55 Pincodes in NER & North

Bengal.

Olatus Systems Private Limited, Guwahati, Assam is engaged in home security and home automation devices along with industrial IOT projects. The company has also designed a sensorbased home security device, which will alert the user of an intruder via mobile.



Taret Foods Pvt Ltd is an innovative company that focuses on black rice products by helping the farmers and producers. The company provides a healthier option for breakfast, superfood and exotic new food products. The company is impacting livelihoods of 100+ farmers.

AAHARAN EDUSMART Private Limited, Agartala, Tripura aims at guiding students to learn easily and memorize smartly through a learning app for 10th Standard Bengali Medium students of Tripura Board of Secondary Education. This app aims at guiding students to understand better, using attractive and effective multimedia techniques. The startup has been selected as one of the 3 Social Innovations by NETFLIX and Ministry of Information Broadcasting, GOI as phase I 3<sup>rd</sup> Edition of Azadi Ki Amrit Kahaniyan to be launched in 54<sup>th</sup> roll out of International Film Festival.



QWK PRO Consultancy Pvt Ltd is a Healthcare Start Up that provides complete healthcare solution. www.quickobook.com shares the largest healthcare network across the east India with 10000 plus doctor, 500+ Hospitals, 2 million + Lives touched. Incubated in Start Up Assam, NASSCOM, IIM Calcutta, Bengal Chamber of Commerce and got selected for Shark Tank India audition round season- 2.



Zerund Manufacturing Pvt Ltd, Guwahati, Assam, manufactures and sale "Zerund Bricks", a Plastic Embedded Lightweight Brick. The brick is having high heat and water resistant properties. The Company is operating across NER and Western part of India.

KraftInn Home Decore India Pvt Ltd, Jorhat, Assam: KraftInn is working through artisan cluster model in the Handicraft space, mainly manufacturing lamps, bags and other decorative item and is selling through e-com platforms.

My3dselfie Pvt Ltd, Guwahati, Assam: It is a start up working in the 3D design space. It customizes 3D designs and manufactures items like home décor, memoribilia etc and sells through a e-com



platform. The company has devised a unique process by which it can generate a 3D image/product using any picture.

**Esha Tea, Assam** is trying to create a brand around tea focusing on specialized teas. It is also working on an AI & IOT based platform, which will help to scale and bring quality controls in its products. The venture also has a social angel as it is trying to become an aggregator of specialized tea produced by small farmers.



**Encamp Adventures** is a purpose-driven travel enterprise offering sustainable alternative accommodations and experiences to travelers in the bio-diverse Northeastern region of India since September 2018.

Encamp is now focused on reimagining the future of travel by developing a responsible travel tech platform for sustainable travel itinerary planning. It also provides revenue generation and management services to local/rural partners across homestay/campsites and adventure activities in offbeat locations of Northeast India

and Nepal.

**Eri Weave** is a startup specializing in hand-spun Eri silk yarn and handwoven fabric. Established in 2019, the brand officially launched in March 2022 and later incorporated as a Private Limited company in July 2022. Reviving the rich tradition of Eri culture and handloom weaving in Meghalaya's Ribhoi District, Eri Weave recognized the market demand for Eri silk fabric. In 2019, they initiated awareness programs and provided training to women, empowering them to spin and weave Eri silk yarn and fabric. This not only increased production but also improved the livelihoods of many families.

**Avgarde Systems Pvt Ltd,** Assam, is a Wireless and Radio Frequency (RF) focused deep technology start-up developing disruptive products and intelligent solutions for diverse market segments, including Anti Done Tech, 5G & Communications, Aerospace & Defence, RF Cyber Security, Critical Infrastructure Protection and Academic Research Applications.

**Binbag**<sup>®</sup> is a fully integrated platform for businesses to manage and recycle their electronic waste. Binbag provides a one-stop solution for managing and recycling of e-waste by integrating (i) SaaS based front-end interface, (ii) own recycling units, and (iii) a managed marketplace that helps SMBs and Corporates in meeting their compliance, reduce turnaround time, automate manual processes, and eventually save cost.



**Image 3D Conversion Pvt. Ltd.** is a Guwahati based company incorporated in May 2023 which is dealing in digital dentistry applications. With a team of expert CAD/CAM professionals and Orthodontists, they are



solving some of the most complicated cases in both implantology and orthodontics. They provide a range of services such as implant planning, 3D printing of surgical guides, training of dental practitioners on digital dentistry methodologies. The company is launching their 'i3D Liner' brand of clear aligners which will be rendered with the help of dentists using 3D software. The product will be more accurate and discreet as compared to metal braces.

Respirit Healthcare Private Limited Pvt. Ltd. is an integrated respiratory healthcare provider based in Guwahati, Assam. The company aims to improve the lives of those suffering from lung diseases via data-driven insights, guided self-management, and high-touch care services. The company is having a digital plus physical service delivery approach by integrating physical clinics using Hub & Spoke model (Breathe Clinics), App and Device to provide quality service under one roof. Respirit is developing India's first ultrasonic spirometer for home-based use in collaboration with IIT Guwahati. Patent filing is in process.

Jome Foods Pvt Ltd is a D2C food startup based out of Dimapur, Nagaland and founded by Medoneizo Putsure and Sonam Dolma Putsure. The company under its brand name "GALHO" launched its first products a year ago with its range of organic wild forest honey from North East India. The company provides accessibility to pure and unique organic honey by innovations through new methods and technology in production and supply chains.

**TuiBon Natural Pvt Ltd** is a D2C beverage startup based out of Aizwal, Mizoram with 10 HL capacity and founded by Zomawii Khiangte and Sangkhumi. The company was founded in 2017, it was the first North East craft brewery in India. The company has "Local All Natural Soda" is a RTD carbonated beverage in 3 flavours: Local All Natural Soda — Ginger, Pomelo & Orange.

**Ilandlo Services Private Limited** is one of the 1<sup>st</sup> e-commerce platform from Northeast India started in 2013 & incorporated on 28 Oct, 2016 in Dimapur, Nagaland. The goal of the company is to become one of the largest service provider platform in the Northeast region for craftsmen, artisans and MSMEs. Ilandlo has 3 retail store and 2 warehouse.

**91Skylineworks Pvt Ltd** is a construction tech (contech) startup based in Guwahati, Assam. The company provides extensive health diagnostics for buildings, followed by corrective measures, if necessary, to make them safer and more energy-efficient. The company provides end-to-end solutions, cutting-edge technology, and innovative approaches aimed to revolutionize the post-construction industry.



**TGG Technologies Pvt. Ltd**. is an e-commerce company based in Guwahati. The company caters to the HORECA segment of the market by offering hassle free ordering experience using their B2B platform – 'Chfmart' which makes managing orders, communication, invoices, and payments seamless and convenient.

**Primary Healthtech Private Limited** is a healthcare technology company that develops and manufactures affordable, accessible, and predictive diagnostic devices. The company was founded in 2018 by a team of alumni from IIT Guwahati, and it is headquartered in Guwahati, Assam.



# Lists of Annexures



# Chapter 8

Table 8.3.1 Department-wise Numbers of Clearances in Arunachal Pradesh

# > Trade and Commerce

- 1. Application for New Trade License
- 2. Application for Auto Renewal of Trade License
- 3. Application for Addition of Items in Trade License
- 4. Application For Auto Deletion Of Items In Trade License
- 5. Application For Scrap License
- 6. Application For Auto Renewal Of Scrap License
- 7. Application For Registration under Shops & Establishment

# Cooperative Societies

- 1. Updation of Cooperative Societies Registration Certificate
- 2. Registration of Cooperative societies
- 3. Renewal Of Cooperative Societies Registration Certificate

#### Arunachal Pradesh State Pollution Control Board

- 1. Application for Consent to Establish/ Operate under State Pollution Control Board
- 2. Renewal Of Application For Consent To Establish/operate Under State Pollution Control Board
- 3. Apply For Authorization Of The Hazardous Wastes Under Arunachal Pradesh State Pollution Control Board

# Department of Industries

- 1. Application For Registration And Grant Of Factory License And Notice Of Occupation
- 2. Application For Renewal Of Registration And Grant Of Factory License And Notice Of Occupation
- 3. Application Form For Renewal Of Boilers License, Under The Boilers Act 1923
- 4. Application Form For Registration Of Boilers License, Under The Boilers Act 1923
- 5. Approval Of Plan And Permission To Construct/extend or Take Into Use Any Building As a Factory

# > Legal Metrology

- 1. Application For Registration As Packer
- 2. Apply Form For Auto Renewal Of License As Dealer Of Weights And Measures
- 3. Apply Form For Auto Renewal For Manufacturers Of Weights And Measures
- 4. Application From For Renewal For Repairer Of Weights And Measures
- 5. Application Form For Repairer Of Weights And Measures
- 6. Application For License Of Manufacturer Of Weights And Measures
- 7. Application For Fresh License As Dealers Of Weights And Measures

# > Health

- 1. Application For Drug License Selling & Storage (manufacturer/ retailer/ wholesaler) License
- 2. Application For Auto Renewal Drug License Selling & Storage (manufacturer/retailer/ wholesaler) License
- 3. Application For Auto Renewal for Under PC & PNDT Act, 1994 (Amended, 2003)
- 4. Apply For Registration Under PC & PNDT Act, 1994 (Amended, 2003)
- 5. Apply For Registration for provisional/ permanent certificate for clinical establishment under Clinical Establishments
- 6. Registration For Chief Minister Arogya Arunachal Yojana



- 7. Registration For Food Certification
- > Fire and Emergency Services
- 1. Application For Fire Safety Certificate
- 2. Application For NOC From Fire Department (prior To Commencement Of Construction Activities)
- 3. Apply For NOC Required For Explosive Licensee.
- 4. Application For Renewal Of Fire Safety Certificate
- > Land Management
- 1. Application For Non-Encumbrance And Mortgage Certificate For LPC
- 2. Application For Land Possession Certificate (Rural)
- 3. Application For Change/Transfer Of Land Utility Certificate For LPC/LAC
- 4. Application For Land Allotment Certificate (Urban)
- ➤ Labour and Employment
- 1. Registration/Renewal under The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996
- 2. Registration/Renewal of principal employer's establishment under provision of The Contracts Labour (Regulation and Abolition) Act, 1970
- 3. Registration of Establishment Employing Migrant Workmen under Rule 3(i).
- 4. License for Employment of Contract Labour under Rule 21(1).
- 5. License for Employment of Migrant Workmen under Rule 7(2).
- 6. Renewal of License for Employment of Contract Labour under Rule 21(1).
- 7. Renewal of License for Employment of Migrant Workmen under Rule 7(2).
- 8. License/ Renewals for contractors under provision of The Contracts Labour (Regulation and Abolition)
  Act. 1970
- > Apply for Inner Line Permit
- 1. Apply for Inner Line Permit
- > Agriculture
- 1. Apply For Grant Of License Under Insecticide Act, 1968 For Manufacture, Storage And Sale of Insecticides And Pesticides and Its Renewal
- 2. Apply For Licenses/authorizations Required For Sale/ Storage Of Fertilizers Under Essential Commodities Act, 1955 (in accordance with Fertilizer Control Order)
- > Transport
- 1. Parivahan Sewa (Vehicle Related Services)
- 2. Apply For Transfer Of Vehicle Registration
- 3. Apply For Goods Carriage Permit
- 4. Apply For Issuing Vehicle Fitness Certificate
- > Law and Justice
- 1. Apply For Resolution of grievances
- > Environment and Forest
- 1. NOC for Obtaining LPC/certificate of Non-forest Land
- ➤ Food and Civil Supplies
- 1. Application For License For Purchase Sale And Storage Of MS/HSD
- 2. Application For License For Purchase Storage And Sale Of Cooking Gas LPG
- 3. Application For Grant Of License For 'fair Price Shops' Under The Relevant Act And Its Renewal (District Level)
- 4. Application For Purchase Sale And Storage For Sale Of Kerosene
- > Administration
- 1. License for Sale of Crackers



- 2. Income Certificate
- 3. Apply For Licensing For Auditorium/ Places Of Public Amusement / Performance For Public Amusement (as Applicable)
- 4. Issuance Of Schedule Tribe Certificate
- 5. Issuance Of Permanent Residence Certificate (PRC)
- 6. Issuance Of Marriage Certificate
- 7. Issuance Of Temporary Residence Certificate (TRC)
- Public Works Department (PWD)
- 1. Application For Enlistment As Contractor
- 2. Application For Revalidation Of Enlistment
- Tax and Excise
- 1. Apply For Wholesale Vendor Licenses
- 2. Apply For Import Permits
- 3. Apply For License for Retail Sale
- 4. Apply For License for Setting up Distilleries
- 5. Apply For License for Setting up Bottling Plant
- Public Health Engineering Department (PHED)
- 1. Application Form For New Commercial Water Connection /sewer Connection
- 2. NOC for Construction Of Bore well/ Dug-well/ Surface Water
- Geology and Mining
- 1. Issue of letter of intent in case of fresh lease (for environmental clearance category B2- Less than 5 acres)
- 2. NOC for soil excavation /filling

# Table 8.3.2: Department-wise Numbers of Clearances in Assam

- ➤ Commissionerate of Labour
- 1. Single Integrated Annual Return
- 2. Registration in (Form I) under Rule 4 of the Assam Motor Transport Workers Rules, 1962
- 3. Application form for obtaining of 365 days opening license under the Assam Shop and Establishment
- 4. License of a Contractor (s) for Employment of migrant workmen in Form V under Section 8 (1) (b) of the Interstate Migrant Workmen (R.E. & C.S.) Act, 1979 and Rule 7 (2) of the Assam Rules.
- 5. License of a Contractor (s) for recruitment of migrant workmen in Form IV under Section 8 (1) (a) of the Interstate Migrant Workmen (R.E. & C.S.) Act, 1979 and Rule 7 (1) of the Assam Rules.
- 6. License of a Contractor(s) in Form IV under Section 12 of the Contract Labour (R & A) Act, 1970 and Rule 21 (1) of the Assam Rules.
- 7. Registration of Establishment as the Principal Employer in Form I under Contract Labour (Regulation and Abolition) Act 1970 and Rule 17 (1) of the Assam Rules, 1971.
- 8. Registration of Establishment as the Principal Employer in Form I under Section 4 of the Interstate Migrant Workmen (R.E. & C.S.) Act, 1979 and Rule 3 (1) of the Assam Rules, 1981.
- 9. Registration of Establishment in Form I under Section 7 of the Buildings & Other Construction Workers (R.E & C.S) act, 1996 and Rule 23 (1) of the Assam Rules, 2007
- 10. Auto Renewal of the Certificate of Registration in (Form I) under Rule 8 of the Assam Motor Transport Workers Rules, 1962
- 11. Registration of Plantations in Form 13 under Section 2-A of the Plantations labour Rules 1956.



- 12. Auto Renewal form for obtaining of 365 days opening license under the Assam Shop and Establishment Act
- 13. Auto Renewal form for obtaining of 365 days opening license under the Assam Shop and Establishment Act
- 14. Auto Renewal of License for Recruitment & Employment in Form IX under Rule 15 (2) of the Interstate Migrant Workmen (R.E & C.S.) Assam Rules, 1981
- 15. Common Application for Trade License cum Registration of Establishment under the Assam Shops and Establishment Act 1971
- 16. Application for Auto Renewal of License in Form VII under Rule 29 (2) of the Contract Labour (R & A) Rules, 1971

# > Inspectorate of Factories

- 1. Amendment to Factory License
- 2. Transfer of Factory License
- 3. Application for Site Appraisal Form for Hazardous Category of Industry
- 4. Application for Auto Renewal of Factory License Form No 2
- 5. Factory Registration and Licensing
- 6. Factory Plan Approval
- 7. Half Yearly Return Form 22
- 8. Annual Return Form 21

# Inspectorate of Boilers

- 1. Application for grant of recognition as manufacturer of Boilers and Boiler Components under IBR 1950
- 2. Application for grant of Approval/ Renewal as Boiler Erector/ Repairer and Steam/ Feed Water Pope Line Fabricator/ Erector under IBR
- 3. Registration and Certification of Package Boiler/ Economizer Form 1
- 4. Application for Registration of Steam Feed Blow Down Line under IBR 1950
- 5. Application for Renewal of Approval as Boiler Erector Repairer and Steam Feed Water Pipe Line fabricator Erector under IBR 1950
- 6. Renewal of Recognition as Manufacturer of Boiler and Boiler Components under IBP 1950
- 7. Application for Renewal of Certificate of Boiler/ Economizer Form II
- Directorate of Ayush
- 1. Application A for the grant of No Objection Certificate NOC to manufacture for sale of Ayurveda/ Siddha or Unani drug
- 2. Application B for License to manufacture for sale Ayurvedic (including Siddha) or Unani drugs, Drug License
- 3. Application D for Certificate of Good Manufacturing Practices (GMP) to manufacturer of Ayurveda/ Siddha or Unani drugs
- 4. Application for renewal of License to manufacture for sale, Ayurvedic (including Siddha or Unani) Drugs
- 5. Application for renewal of Certificate of Good Manufacturing Practices (GMP) to manufacture Ayurveda/ Siddha/ Unani Drugs

# State Drugs Control Administration

 Grant of a license to sell, stock or exhibit or offer for sale by Retailer or distribute drugs from a motor vehicle – Form 19AA and additional information



- 2. Grant of a License to manufacture for sale or for distribution of drugs specific in Schedule X and not specified in Schedule C and C (1) Form 24 F
- 3. Grant of a License to manufacture for sale or for distribution of drugs specified in Schedules C, C (1) and X. Form 27 B
- 4. Application for grant of a loan license to manufacture for sale or for distribution of drugs other than those specified in Schedule C, C (1) and X (Additional Items) Form 24 A
- 5. Grant of a license to sell, stock or exhibit or offer for sale by wholesaler or distribute drugs from a motor vehicle -Form 19AA and additional information
- 6. Grant of a license to sell, stock, exhibit or offer for sale, or distribute drugs other than those specified in Schedule X Form 19 and additional information (retail)
- 7. Grant of a license to sell, stock, exhibit or offer for sale, or distribute drugs other than those specified in Schedule X Form 19 and additional information (wholesale)
- 8. Grant of a loan License to manufacture cosmetics for sale or for distribution Form 31 A
- 9. Grant of a loan Licence to manufacture for sale or for distribution of drugs other than those specified in Schedule C, C (1) and X Form 24 A
- 10. Grant of a loan Licence to manufacture for sale or for distribution of drugs specified in Schedule C and C (1) excluding those specified in part XB and Schedule X Form 27 A
- 11. Grant of Licence for the operation of a Blood Bank for processing of whole blood and / or preparation of blood components. Form 27 C
- 12. Grant of Licence to manufacture Blood products for sale or distribution Form 27 E
- 13. Licence to manufacture drugs for purpose of examination, test or analysis Form 30
- 14. Grant of a License to manufacture cosmetics for sale or for distribution Form 31
- 15. Grant of a License to manufacture for sale or for distribution of drugs other than those specified in Schedule C, C (1) and X Form 24
- 16. Application for Renewal of license for the operation of a Blood Bank for processing of whole blood and / or preparation of blood components. Form 27 C
- 17. Application for Renewal of license to manufacture Blood products for sale or distribution Form 27 E
- 18. Application for grant of a license to manufacture for sale or for distribution of drugs specified in Schedule C and C (1) excluding those specified in part XB and Schedule X Form 27
- 19. Application for grant of a license to sell, stock, exhibit or offer for sale, or distribute drugs specified in Schedule X Form 19C and additional information wholesale
- 20. Application for license to sell, stock or exhibit or offer for sale, or distribute Homeopathic Medicines Form 19 B and additional information Retail
- 21. Application for license to sell, stock or exhibit or offer for sale, or distribute Homoeopathic Medicines Form 19 B and additional information Wholesale
- 22. Application for Retention of license to sell stock or exhibit or offer for sale or distribute Homeopathic Medicines Form 19 B and additional information Retail
- 23. Application for Retention of license to sell, stock or exhibit or offer for sale, or distribute Homeopathic Medicines (Wholesale) -Form 19 B
- 24. Application for the grant of a license to manufacture for sale or for distribution of Homoeopathic medicines or a license to manufacture potentised preparations from back potencies by licensees holding license in Form 20-C- Form 24 C
- 25. Application for grant of a license to sell stock exhibit or offer for sale or distribute specified in Schedule X Form 19 C additional information
- 26. Application for grant of a license to manufacture for sale or for distribution of drugs specified in Schedule X and not specified in Schedule C and C(1) (Additional Items)- Form 24 F



- 27. Application for grant of a loan license to manufacture for sale or for distribution of drugs specified in Schedule C and C 1 excluding those specified in part XB and Schedule X Additional Items 27A
- 28. Application for the grant of a licence to manufacture for sale or for distribution of drugs other than those specified in Schedule C C 1 and X (Additional Items) Form 24
- 29. Application for grant of a licence to manufacture for sale or for distribution of drugs specified in Schedule C and C (1) excluding those specified in part XB and Schedule X Addl items- Form 27
- 30. Application for grant of a licence to manufacture for sale or for distribution of drugs specified in Schedules C, C (1) and X (Additional Items) Form 27 B
- 31. Application for manufacturer of additional products of Cosmetics for sale or distribution Form 31
- 32. Application for grant of a loan licence to manufacture cosmetics for sale or for distribution (Additional Items) Form 31 A
- 33. Application for grant of registration certificate to Sell, Stock, Exhibit or offer for sale or distribution a medical device including in Vitro Diagnostic Medical Device
- 34. Application for grant of a license to manufacture cosmetics for sale or for distribution-COS-05
- 35. Application for grant of a license to manufacture cosmetics for sale or for distribution-COS-05 Additional products
- 36. Application for grant of a loan license to manufacture cosmetics for sale or for distribution-COS-06
- 37. Application for grant of a loan license to manufacture cosmetics for sale or for distribution COS-06 Additional products
- > Directorate of Medical Education
- 1. Essentiality Certificate to be issued by Govt. of Assam as per Form 2 of the Medical Council of India guidelines (Medical College)
- 2. Essentiality Certificate to be issued by the Govt. of Assam as per Form 4 of the Dental Council of India guidelines (Dental College)
- 3. Essentiality Certificate to be issued by the Govt. of Assam as per the Nursing Council of India guidelines (Nursing College)
- ➤ Pre Conception and Pre Natal Diagnostic Techniques
- 1. Application for Registration of A Genetic Counseling centre/ genetic laboratory/ genetic clinic/ ultrasound clinic/ Imaging centre Form A
- 2. Form for Maintenance of Records by the Genetic Counseling Center Form D
- 3. Form for Maintenance of Records in case of Pre Natal Diagnostic test/ Procedure by Genetic Clinic/ Ultrasound Clinic/ Imaging Centre Form F
- 4. Application form for renewal of Registration of a Genetic Counseling Center/ Genetic Laboratory/ Genetic Clinic/ Ultrasound Clinic/ Imaging Center Form A
- 5. Form for maintenance of records by Genetic Laboratory Form E
- Single Window Agency
- 1. Common Application Form
- 2. Add Unit of Common Application Form
- > Commissionerate of Industries and Commerce
- 1. Application for submission of claim for Central Interest Subsidy scheme on working capital under NEIIPP 2007
- 2. Application for submission of claim for Central Comprehensive Insurance Subsidy scheme under NEIPP 2007
- 3. Application for Pre Registration under Assam Logistics and Warehousing Policy 2022
- > Inspectorate of Electricity

#### The NEC Year Book 2024



- 1. Cinema operator license
- 2. Electrical contractors license
- 3. License for operating a lift installed before the commencement of the act
- 4. License for operating a Lift/ Escalator
- 5. License for operating an escalator installed before the commencement of the act
- 6. Obtaining authorization for erection of lifts or escalator
- 7. Renewal of Electrical Contractor license
- 8. Application for renewal of license of escalators/lift
- 9. Approval for commencement of power supply in the electrical installations of multi-storied building
- 10. Seeking approval for Commissioning of Electrical Generating units
- 11. Seeking approval to commence power supply in overhead line exceeding 650 volts
- 12. Seeking approval to commence power supply in sub station exceeding 650 volts
- 13. Application for permission to install a lift to make additions or alterations to the installed life
- 14. Permission for installation/ alteration/ addition of Escalators

# ➤ 11. Assam Power Distribution Company Ltd (APCDL)

- 1. Application form for new High Tension (HT) connection
- 2. Application form for new High Tension HT connection for Telecom Tower Above 10 KW
- 3. Application form for new Low Tension (LT) connection
- 4. Application form for new Low Tension LT connection for Telecom Tower Below 10 KW
- 5. Application form for temporary service connection Both LT & HT

#### Guwahati Jal Board

- 1. Application for Domestic and Non Domestic Water Connection (both Temporary and Permanent)
- 2. Online e payment of Bills

#### > Guwahati Municipal Corporation

- 1. Application for Road Cutting Permission
- 2. Application for Obtaining Water Connection
- 3. Directorate of Tourism
- 4. License as Tour Operator
- 5. Renewal of License of Tour Operator
- 6. License as Tourist Guide
- 7. Renewal of License as Tourist Guide

# Department of Fire and Emergency Services

- 1. Fire NOC for one storied / multi-storied / high rise building under Assam Fire Service Rule 1989 Form No I
- 2. Fire NOC for storage and handling of LPG / CNG/ Oxygen / Hydrogen / Methane/Propane / Butane / Chlorine / Ammonia etc under Assam Fire Service Rule 1989 Form No II
- 3. Fire NOC in respect of fire safety measures in Cinema Theatres / Multiplex etc under Assam Fire Service Rule 1989Form No IV
- 4. Application for Fire NOC in respect of fire safety measures in erecting temporary structures / circus / movable theatre / exhibitions under Assam Fire Service Rule 1989 Form No VI
- 5. Fire NOC in respect of fire safety measures in Function Halls / Vivah Bhavan / Building below 15 mtrs under Assam Fire Service Rule 1989 Form No V



- 6. Application for Fire NOC in respect of fire safety measures in storage and handling of petroleum products / industry Class A B & C under Assam Fire Service Rule 1989 Form No VII
- 7. Fire NOC in respect of fire safety measures in the storage and handling of chemicals under Assam Fire Service Rule 1989 Form No VIII
- 8. Application for Fire NOC in respect of fire safety measures in the storage and handling of explosives under Assam Fire Service Rule 1989 Form No IX
- 9. Fire NOC in respect of fire safety measures in the storage and handling of pharmaceutical products chemical industries / storage of solvents etc under Assam Fire Service Rule 1989 Form No X
- 10. Fire NOC in respect of fire safety measures in transport godowns and other godowns under Assam Fire Service Rule 1989 Form No III
- 11. Submission of Compliance Report in respect of Fire Safety Measure suggested under Assam Fire Service Rule 1989 Form No XI
- 12. Application for Renewal of Fire NOC under Assam Fire Service Rule 1989 Form No XII
- 13. Application for Fire attendance / special service attendance certificate under Assam Fire Service Rule 1989 (Form No XIII).

# ➤ Controller of Legal Metrology

- 1. Appeal against an order of a legal Metrology Officer/ Controller of Legal Metrology (Form-4)
- 2. License as Dealer of Weights & Measures (Form LD I)
- 3. License as Manufacturer of Weights and measures (Form LM I)
- 4. License as Repairer of Weights & Measures (Form-LR-I).
- 5. Nomination of the Director by the Company under Sub- Section (2) of the Legal Metrology Act, 2009
- 6. Registration as Importer of Pre-packed commodities (Form-2)
- 7. Registration as Manufacturer/ Packer of pre-packed commodities (Form-I)
- 8. Verification and Stamping of New dispensing Pumps of Petrol/ Diesel (Form-5)
- 9. Verification and Stamping of New Weighbridge (Form-6)
- 10. Application for Re-verification and Stamping of Weighbridge
- 11. Application for Re-verification and Stamping of New dispensing Pumps of Petrol or Diesel
- 12. Auto Renewal of License as Dealer of weighs & measures (Form-LD-II)
- 13. Auto Renewal of License as Manufacturer of weighs & measures (Form-LM-II)
- 14. Auto Renewal of License as Repairer of weighs & measures (Form-LR-II)

# > Directorate of Food, Civil Supplies & Consumer Affairs

- 1. Auto Renewal of License as Repairer of weighs & measures (Form-LR-II)
- 2. Application for Import License for Cloth
- 3. Application for import License of Salt
- 4. Application for Kerosene Depot
- 5. Application for LPG Distributor (Retail License)
- 6. Application for M.S. & H.S.D for retail outlet (Petrol Pump)
- 7. Application for Retail License for Cloth
- 8. Application for Retail License for Salt
- 9. Application for RF Mill and Chakki Mill
- 10. Application for Whole Sale License for Salt
- 11. Application for Wholesale License for Cloth
- 12. Application for renewal of MS and HSD for retail outlet Petrol Pump
- 13. Application for renewal of Retail License for Cloth
- 14. Application for renewal of Whole Sale License for Salt



- 15. Application for renewal of RF Mill and Chakki Mill
- 16. Application for renewal of Import License of Salt
- 17. Application for renewal of LPG Distributor Retail License
- 18. Application for renewal of Import License for Cloth
- 19. Application for renewal of Kerosene Depot
- 20. Application for renewal of Fair Price Shop
- 21. Application for renewal of Whole license for Cloth
- 22. Application for renewal of retail License for Salt

# Registrar of Firms & Societies

- 1. Obtaining Certified copy of the Society registered under Section 19 of the S.R. Act XXI of 1860
- 2. Registration of Societies under the Societies Registration Act XXI of 1860
- 3. Registrations of Partnership firms under Indian Partnership Act, 1932 Section 58 & Rules 4(2) of I.P. Act 1932
- 4. Recording dissolution of a Firm registered under section 63(1) and rule 4(6) of I.P. Act, 1932
- 5. Renewal of Registration of Society
- 6. Filing changes in the Managing body, Constitution, Submission of Balance sheet and Auditors report of the Society under Section 4, 4(A) & 4(B) of the S.R. Act XXI of 1860
- 7. Filing change in the Address of the Society
- 8. Recording of changes in the constitution of a Firm registered under section 63(1) and rule 4(6) of I.P. Act, 1932
- 9. Issue of duplicate registration certificate of the society
- 10. Notice of alteration in the name of the Firm or in the location of the principal place of business thereof under section 60 and rules 4(3) of I.P. Act, 1932
- 11. Filing changes in the Name of the Society u/s 12A read with Section 12B and 12C of the Assam State Amendment etc vide Assam Act 14 of 1943 Section 2
- 12. Changes in the rules and regulations of the society under Section 12 of S.R Act, XXI of 1860
- 13. Application for issue of duplicate registration certificate of a firm registered under Indian Partnership Act, 1932
- 14. Withdrawal from or remaining in a partnership to be given under section 63(2) and rules 4(7) of the Act by a minor on attaining majority
- 15. Filing changes in the Name and Address of the Partner of the Firm under section 62 and rules 4(5) of I.P. Act. 1932
- 16. Closing and opening place of business other than the principal place of business under section 61 and rules 4(4) of I.P. Act, 1932

#### Commissionerate of Taxes

I. Application for a Certificate of Enrollment / Amendment of Certificate of Enrollment under The Assam Professions, Trades, Callings and Employments Taxation Act, 1947 - Form II

# > Registrar of Co-operative Societies

- 1. Registration of Cooperative Society with Limited Liability under the Assam Cooperative Societies Act 2007
- 2. Initial Application for formation of Cooperative Society

#### Directorate of Agriculture

1. Application for Amendment/Endorsement of Fertilizer License – Wholesale



- 2. Application for Amendment in Dealer's License Seeds Retail
- 3. Application for NOC for Plant Protection Chemicals Manufacturing
- 4. Application for Pest Control Operation License Anti Termite
- 5. Application for Amendment in Plant Protection Chemicals Wholesale
- 6. Application for Endorsement in Plant Protection Chemicals Wholesale
- 7. Application for Dealers License Seeds Retail
- 8. Application for Fertilizer License Manufacturing
- 9. Application for License of Plant Protection Chemicals Manufacturing
- 10. Application for Fertilizer License Retail
- 11. Application for License of Plant Protection Chemicals Retail
- 12. Application for Fertilizer License Wholesale
- 13. Application for License of Plant Protection Chemicals Wholesale
- 14. Application for Renewal of Dealers License Seeds Wholesale
- 15. Application for Renewal of Fertilizer License Wholesale
- 16. Application for Endorsement in Plant Protection Chemicals Manufacturing
- 17. Application for Endorsement in the License of Seeds Wholesale
- 18. Application for Amendment in Dealer's License Seeds Wholesale
- 19. Application for Endorsement in the License of Seeds Retail
- 20. Application for Renewal of Pest Control Operation License Anti Termite
- 21. Application for Renewal of Fertilizer License Manufacturing
- 22. Application for Dealers License Seeds Wholesale
- 23. Application for Amendment of Fertilizer License Retail
- 24. Application for Renewal of Dealers License Seeds Retail
- 25. Application for Renewal of Fertilizer License Retail

# > Public Works Road

- 1. Grant of Right of Way permission (RoW)
- 2. Road Cutting Permission under PWD
- 3. Application for Registration of Contractor (Class I A / B / C)
- 4. Application for Registration of Contractor (Class II)
- 5. Application for Registration of Contractor (Class III)

# > Pollution Control Board of Assam

- 1. Application for Authorization under the Bio Medical Waste Management and Handling Rules, 2016
- 2. Application for Consent to Establish under the Air (prevention and control of pollution act, 1981) & Water (prevention and control of pollution act, 1974)
- 3. Application for Consent to Operate under the Water (prevention and control of pollution act, 1974) & Air (prevention and control of pollution act, 1981)
- 4. Application form for Authorization under The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016
- 5. Application for Authorization under Solid Waste Management (Processing/recycling/treatment and disposal of solid waste) under the Solid Waste Management Rules, 2016
- 6. Application for Renewal under the E-Waste (Management and Handling Rules, 2011 under chapter-III) effective from may 2012
- 7. Application for Renewal under the Plastic Waste Management and Handling Rules, 2011.



- > Environment and Forest
- 1. Application for grant of License for Wood based Industry
- 2. Application for obtaining NOC for Tree Felling on acquired Government / Private Patta Land / Non-Forest Land
- 3. Application for Registration of Tree Plantation under The Assam Rules, 2002
- 4. Application for Tree Transit Permit / Pass
- 5. Application for obtaining Certificate of Non-Forest Land
- 6. Application for obtaining letter of Distance
- 7. Application for the grant of permit for extraction of ordinary clay / earth
- Directorate of Geology and Mining
- 1. Application for Registration of Mineral Dealer license
- 2. Application for Renewal of Mineral Dealer license
- > Directorate of Municipal Administration
- 1. Auto Renewal of Signage License for advertisement
- 2. Signage License for advertisement
- 3. Application for Trade License
- 4. Application for Auto Renewal of Trade License
- 5. Application for permission for Cinematographic exhibition / dramatic performance / movie shooting
- 6. Online Building Permission System
- 7. Road Cutting Permission
- 8. Application for permission to deposit any movable property/construction materials
- Assam Urban Water Supply & Sewarage Board
- I. Application for Non-Domestic Water Connection (both Temporary and Permanent)
- > Commissionerate of Excise
- 1. Application for Brand Registration
- 2. Application for Transport Permit
- 3. Application for Transit-Pass
- 4. Application for Import Permit
- 5. Application for Export Permit
- > Transport
- 1. Application for Transfer of Vehicle Registration
- 2. Application for Goods Carriage Permit
- 3. Application for Issue of Vehicle Fitness
- > General Administration
- 1. Cinema License
- 2. Renewal of Cinema License
- Directorate of Elementary Education
- 1. Application for Registration Elementary Education
- 2. Application for Administrative Recognition Elementary Education
- 3. Application for Prior Permission to establish and run Private Educational Institutions Elementary Education



- Directorate of Secondary Education
- 1. Application for Administrative Recognition under section 5 and 6 of the Assam Non-Govt. Educational Institutions Secondary Education
- 2. Application for Registration under section 6 of the Assam Non-Govt. Educational Institutions Secondary Education
- 3. Application for Prior Permission to establish and run Private Educational Institutions Secondary Education
- > Directorate of Higher Education
- 1. Application for Prior Permission to establish and run Private Educational Institutions Higher Education
- 2. Application for Administrative Recognition Higher Education
- 3. Application for Registration- Higher Education
- > Directorate of Information Technology, Electronics and Communication
- 1. Application for Mobile Tower Approval
- > Assam Industrial Development Corporation (AIDC) Ltd
- 1. Land Allotment in various Industrial Estates AIDC
- 2. Shed Allotment in various Industrial Estates AIDC
- > Assam Industrial Infrastructure Development Corporation (AIIDC)
- 1. Land/Shed Allotment In Various Industrial Estates AIIDC
- > Assam Small Industries Development Corporation (ASIDC) Ltd
- 1. Application for Land Allotment in various Industrial Estates ASIDC
- 2. Application for Shed Allotment in various Industrial Estates ASIDC
- Ministry of Petroleum and Natural Gas
- 1. Application for LPG Connection

# Table 8.3.3: Department-wise Numbers of Clearances in Manipur

- Commerce and Industries:
- 1. Factory Permit
- 2. Factory License
- 3. Mining Lease
- 4. Mining Permit
- > CAF & PD (Weight & Measures):
- 1. Registration of Manufacturer/Packer/Importer
- 2. License of Manufacture
- 3. License of Dealer
- 4. Repairer License of Weight & measurer
- 5. Balance and Weight verification
- 6. Verification of Retail outlet LPG dealer/Oil pump
- 7. Calibrations Tank Lorry
- ➤ Public Works Department (PWD):
- 1. Registration of I, II, III, & IV Class contractor

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- 2. Registration of Special Class contractor
- 3. Road cutting permission
- > Education Department:
- A. Register for School recognition
- B. Register for Hostel
- > Water Resources:
- 1. Register for Non Availability of Water
- ➤ Home Department:
- 1. Fire Safety Certificate
- > Department of Health & Services, Manipur Drugs Control
- 1. Competent Person/ Pharmacist
- 2. Area of Pharmacy Shop
- 3. Storage Facility of Drugs
- 4. Inspection by Drug Inspector
- ➤ PC & PNDT Revenue
- 1. Hindu Marriage Certificate
- 2. Non Encumbrance Certificate
- 3. Special Marriage Act
- 4. Domicile Certificate
- 5. Income Certificate
- 6. Other Backward Classes (OBC) Certificate
- 7. Permanent Resident Certificate
- 8. Land Valuation Certificate
- 9. Scheduled Caste (SC) Certificate
- 10. Scheduled Tribe (ST) Certificate
- 11. Land Ownership Certificate (Jamabandi)
- > Forest Transport:
- License related services
- 1. Drivers/ Learners License
- 2. Driving School
- 3. Online Test/ Appointment
- 4. Other Services
- Vehicle related services
- 1. Vehicle Registration
- 2. Fancy Number Allocation
- 3. National Permit
- 4. Other Services
- Manufacturer Related Services
- 1. VLTD Maker
- 2. SLD Maker
- 3. CNG Maker
- 4. Homologation



- Other Products & Services
- 1. mParivahan
- 2. PUCC
- 3. eChallan System
- 4. Vahan Green Sewa

#### > Labour:

- 1. Labour Regulation Enabler
- 2. License for contractors under provision of The Contracts Labour (Regulation and Abolition) Act, 1970
- 3. Renewal of license for contractors under provision of The Contracts Labour (Regulation and Abolition)

  Act. 1970
- 4. Registration under The Shops and Establishment Act (including 365 days license)

# Table 8.3.4: Department-wise Numbers of Clearances in Meghalaya

- ➤ Chief Inspector of Boilers & Factories
- 1. License to work as a Factory/Factory license
- 2. Application for permission to construct, extend or take into use any building as a factory
- 3. Registration of Boilers under The Boilers Act, 1923
- 4. Renewal of Certificate for use of Boiler, under The Boilers Act, 1923
- 5. Renewal of Certificate for use of Boiler, under The Boilers Act, 1923
- 6. Auto Renewal Factories License
- 7. Registration of Boiler Manufacture under The Boilers Act, 1923
- Commisionerate of Food Safety
- 1. Apply for New/ Renewal/ Modification License/ Registration (FSSAI)
- > Department of Industries & Commerce Online Services
- 1. Udyog Aadhar Memorandum (UAM)
- 2. Approval by Single Window Agency
- 3. Registration under the Meghalaya Procurement Preference Policy for Micro and Small Enterprises
- Department of Social Welfare
- 1. Approval for Supply under Supplementary Nutrition Programme (SNP) by SHG
- 2. Registration of NGO as Service Providers under Section 10-1 of the Protection of Women from Domestic Violence Act 2005
- 3. Registration/Recognition for Organization/NGO under the Juvenile Act 2006
- 4. Registration of Institutions for Persons with Disabilities under Section 50 and 51 of the Right of Persons with Disabilities Act, 2016
- Deputy Commissioner Office
- 1. NOC required for setting up of Explosives manufacturing, storage, sale, transport
- 2. NOC required for setting up of Petroleum, Diesel & Naphtha manufacturing, storage, sale, transport
- 3. Cinematograph License & License for Screening a Films as applicable
- 4. Change of Land Use
- 5. Measurement / Demarcation of Land
- 6. Grant of License for Fair Price Shop
- 7. License for Sale of Crackers
- 8. Application for Booking an Appointment with SRO
- 9. NOC required for setting up of Explosives manufacturing, storage, sale, transport



- 10. NOC required for setting up of Petroleum, Diesel & Naphtha manufacturing, storage, sale, transport
- 11. Cinematograph License & License for Screening a Films as applicable
- 12. Non Encumbrance Certificate
- 13. Permission for movie shooting in the District Issued by Deputy Commissioner
- Application Form for Temporary License for Possession and Sale of Fire Crackers during Festivals Rule No 84 of Explosives Rules 2008
- 15. Income Certificate
- 16. Marriage Certificate
- 17. Permanent Residential Certificate
- 18. Registration of Societies
- 19. Residential Certificate
- 20. Schedule Tribe Certificate
- 21. Ration Card Claim/Correction/Deletion/Change/Transfer
- Directorate of Commerce and Industries
- 1. Application for Allotment of Land/ Industrial Shed
- ➤ Education Department
- 1. Registration of schools under Right to Education
- 2. NOC for setting up CBSE School
- > Excise registration Taxation Stamps Department
- 1. Grant of Excise License for Wholesale/ Retail/ Distillery/ Bottling Plant
- 2. State Excise Dashboard
- 3. License for local sale, Import and export permit of Spirit and Indian-made foreign liquor (IMFL)
- 4. Registration of societies having area of operation in more that one District or covering whole of Meghalaya / North East
- 5. Brand and Label Registration
- 6. Property Registration Dashboard
- 7. Property Registration
- ➤ Fire and Emergency Service
- 1. Grant of Fire Safety Certificate
- 2. Provisional Fire Safety Certificate

# > Forest Department

- 1. Permission for felling of Isolated trees in Non-Forest areas like from Homestead/ Farm Etc, as per the provisions of the Meghalaya Tree Felling (Non Forest Areas) Rules, 2006
- 2. Certificate of Non-Forest land
- 3. Letter of Intent For Mining Lease / Mining Lease
- 4. Letter of Intent For Quarry Permit / Quarry Permit
- 5. Tree felling in forest land (Government or private)
- 6. Wildlife clearance through the National Board for Wildlife
- 7. NOC for field survey and investigation work for Hydro project
- 8. Environmental clearance for cement plant of 1.00 million tonnes per annum production capacityand above
- 9. Environmental clearance for Thermal Power Plants of 500 MW or more (coal/lignite/naphta & gas based) and of 50 MW or more for Pet Coke Diesel and all other fuels.



- > Health and family Welfare Department
- 1. Registration under PC&PNDT Act, 1994 (Amended subsequently) (For 5 years) & its Renewal
- 2. Registration of clinical establishments under the Meghalaya Nursing Homes (Licensing and Registration) Act 1993
- 3. Licence for Retail and Wholesale Drug licence
- 4. Change of Constitution of Licence for Retail and Wholesale Drug Licence
- 5. Application For The Grant / Renewal Of License To Manufacture For Sale Or For Distribution Of Large Volume Parenterals/ Sera And Vaccines Excluding Those Specified In Schedule X
- 6. Application For The Grant /Renewal Of License To Repack For Sale Or For Distribution Of Drugs Other Than That Specified In Schedule C, C(1) Excluding Those Specified In Schedule X
- 7. Application For The Grant Of Loan License To Manufacture For Sale Or For Distribution Of Drugs Specified In Schedule C, C (1) Excluding Those Specified In Part Xb & Schedule X
- 8. Application For The Grant/Renewal Of License To Manufacture Drugs For Purpose Of Examination, Test or Analysis
- 9. Application For The Grant /Renewal Of License To Manufacture For Sale Or For Distribution Of Drugs Other Than That Specified In Schedule C, C1, X
- 10. Auto retention for Drugs
- 11. Birth Certificate
- 12. Death Certificate
- 13. Registration for Health Card

# Inspectorate of Electricity

1. NOC for installation of DG set

# > Labour Department

- 1. Registration of Employment Exchange
- 2. Licenses for Contractors under the Contract Labour Act 1970
- 3. Registration of Shops and Establishment Form A
- 4. Application for Registration of establishments/ Principal Employer Employing Contract Labour Act 1970
- 5. Registration of Establishments employing Building Workers under the Building and Other Construction Work Act 1996
- 6. Registration of Establishment under the Inter State Migrant Workmen (RE&CS) Act, 1979
- 7. Registration of Migrant Workers Under the Meghalaya Identification, Registration(Safety & Security) of Migrant Workers Rules, 2020
- 8. Certificate of Registration to work as Motor Transport Undertaking
- 9. License for contractors under the interstate migrant workmen act 1979
- 10. Migrant Worker 2020-Renewal
- 11. Annual Filing of single integrated return under all the labour laws
- 12. Half Yearly Filing of single integrated return under all the labour laws
- 13. Shops and Establishment 2003 Auto Renewal.

# ➤ Legal Metrology Department

- 1. License as Dealers in Weights & Measures under the Legal Metrology Act, 2009
- 2. License as Repairers of Weights & Measures under the Legal Metrology Act, 2009
- 3. License as Manufacturer of weights & measures under the Legal Metrology Act, 2009
- 4. Certificate for Verification and Stamping of Weights & Measures
- 5. License as Dealers in Weights & Measures-Auto Renewal



- 6. License as Manufacturer of Weights & Measures-Auto Renewal
- 7. License as Repairers of Weights & Measures-Auto Renewal
- Meghalaya State Pollution Control Board
- 1. Consent to Establish" under the Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981/"NOC"
- 2. Consent to Operate" under the Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981
- 3. Registration / Renewal under the E-waste (Management and Handling) Rules, 2011
- 4. Registration / Renewal under Plastic Waste (Management and Handling) Rules, 2011
- 5. Registration for dealers under the Batteries (Management & Handling) Rules, 2001
- 6. Authorization for management and handling of e-waste
- 7. Authorization under the Hazardous and Other Waste (Management and Transboundary Movement) Rules 2016
- 8. Application for obtaining authorization for Construction and Demolition Waste Management
- 9. Authorization Under Bio-Medical Waste Management (Management & Handling) Rules, 2016
- 10. Application for obtaining authorization under solid waste management rules for processing or recycling or treatment and disposal of solid waste.
- Power
- 1. Meghalaya Energy Corporation Limited (MeECL) Payment of bill
- 2. Meghalaya Energy Corporation Limited (MeECL) New Connection
- Printing & Stationery Department
- 1. Printing Request from Printing & Stationery Department
- 2. Demand Request for issue of Stationery Articles or Schedule Forms or Service Books from Printing and Stationery Department
- 3. Annual subscription for complete Gazette with extraordinary from Printing and Stationery Department.
- > Public Health Engineering Department
- 1. Certificate for non-availability of Water Supply from Water Supply Agency
- 2. Grant of Water Connection to Non Municipal Urban Areas
- ➤ Public Works Department
- 1. Registration of Contractors for Works and Services by Public Works Department
- 2. Permission for Road Cutting
- Registrar of Companies
- 1. Certificate of Incorporation
- > Registrar of Cooperative Societies
- 1. Registration of Cooperative Society
- 2. Online Amendment of Bye law of Cooperative Society
- Registrar of Firms
- 1. Registration of partnership firm
- > State Environment Impact Assessment Authority
- 1. Environmental clearance for cement plant of less than 1.00 million tons per annum production capacity



- 2. Environmental clearance for Thermal Power Plants of 50 MW and above but less than 500 MW (coal/lignite/naphta & gas based) and of 5 MW or more but less than 50 MW for Pet coke diesel and all other fuels.
- > Tourism Department
- 1. Application Form for Recognition as Provisional / Approved Meghalaya State Tour Operator
- 2. Certificate on classification of Hotels (Heritage/4 Star/5 Star
- > Transport Department
- 1. Issuance of Learner's Driving License
- 2. Issuance of Driving License
- Urban Affairs Department
- 1. Water Connection for the Municipal Area
- 2. Business License issued by Municipal Board
- 3. Property Tax Payment under Municipal Board
- 4. Permission of Movie Shooting- Municipal Board\
- 5. Permission of Movie Shooting- MUDA
- 6. Application form for Cess Pool
- 7. Application for Fresh Registration of Plumbing License Under Urban Local Bodies
- > Water Resources Department
- 1. NOC for Ground Water Abstraction for Commercial Connection

# Table 8.3.5: Department-wise Numbers of Clearances in Mizoram

- > Commerce & Industries Department:
- 1. Application For Allotment of Industrial Plot
- 2. Application for Claiming Interest Subsidy
- 3. Application form for Claiming Central Capital Investment Subsidy Scheme
- 4. Application for Claim of Subsidy on Rent of Factory Shed
- 5. Application for Claiming Power Subsidy
- 6. Application For Subsidy on Power Generating Set
- 7. Application For Subsidy on Power Line
- 8. Application For Subsidy on Cost of Project Report
- 9. Application For Claim of Interest Subsidy
- 10. Application For State Transportation Subsidy on Plant & Machineries
- 11. Application For Grant of Land Subsidy
- ➤ Land Revenue & Settlement Department:
- 1. Application for periodic patta (periodic pattadilna)
- 2. Application for allotment of land for house site
- 3. Application for allotment of land for shop/stall
- 4. Application for residential land settlement certificate inhuman/land settlement certificate turadilna
- 5. Diversion Of Land Use/Change of Land
- 6. Application for transfer of ownership of land holding
- 7. Application for partition of lsc
- 8. Application for the Allotment of Land to the Government Department/Corporation/Boards etc. On Land Lease/Limited Lease
- > Environment, Forest & Climate Change Department:



- 1. Application for Bamboo plantation in Non-forest Area
- 2. Application for Permission to fell tress/ tree plantation in non-forest area.
- Mizoram Pollution Control Board:
- 1. Application for Consent to Establishment Industries Etc.
- 2. Accident Reporting for Bio-Medical Wastes
- 3. Submission of Annual report for Bio-Medical Wastes
- 4. Accident Report for Hazardous Waste
- 5. Submission of Annual Report for Hazardous Waste
- 6. Accident Report Due To Solid Waste
- 7. Application For Authorization Under Solid Waste Management Rules For Processing/Recycling/Treatment And Disposal Of Solid Waste
- 8. Format Of Annual Report To Be Submitted By The Operator Of Facility To The Local Body
- 9. Application for renewal of authorization under Solid Waste Management
- 10. Application For Registration As Producers Or Brand Owners Under Plastic Waste Management
- 11. Application For Registration of Units Engaged in Processing or Recycling of Plastic Waste
- 12. Application For Registration For Manufacturers Of Plastic Raw Materials
- 13. Submission Of Annual Report By Operator Of Plastic Waste Processing Or Recycling Facility To The Local Body
- 14. Submission For Annual Report On Plastic Waste Management To Be Submitted By The Local Body
- 15. Application Form For Registration Of Batteries Dealers
- 16. Application For Registration Of Importer Of New Lead Acid Batteries / Primary Lead Under Batteries Management & Handling Waste
- 17. Application For Obtaining Authorization Under Construction & Demolition Waste
- 18. Form For Filing Returns By Auctioneer Of Used Batteries Under Batteries (Management & Handling)
  Waste
- 19. Application for Authorization (Hazardous and Other Wastes)
- 20. Form For Filing Returns Of Sale Of New Batteries And Collection Of Old Batteries Under Batteries (Management & Handling) Rules
- 21. Application For Obtaining Authorization For Generation Or Storage Or Treatment Or Disposal Of E-Waste By Manufacturer Or Refurbished Under e-Waste (Management) Rules
- 22. Application For Authorization Of Facilities Possessing Environmentally Sound Management Practice For Dismantling Or Recycling Of E-Waste
- 23. Application for Authorization (Bio Medical Waste)
- 24. Application for Authorization (e-Waste Management)
- 25. Application for Approval & Notification of sites
- > Fire & Emergency Services:
- 1. Fire NOC
- > Taxation Department:
- 1. e-Way Bill
- > Public Work Department:
  - 1. Issue of Road Cutting Permission on (Scheduled Roads Under PWD
- 2. Issue of No Objection Certificate for Right of Way (Along scheduled Roads under PWD & PWD Land) [(Excluding NH)]



- > H. Aizawl Municipal Corporation:
- 1. Approval Inspection Payments
- 2. Licensing
- ➤ Law& Judicial Department:
- ➤ Legal Metrology:
- 1. Licensing of Manufacturer of Weights & Measures
- 2. Renewal of Manufacturer of Weights & Measures
- 3. Renewal of Dealer in Weight & Measures
- 4. License of Repairer of Weights & Measures
- 5. License of Dealers in Weights & Measures
- 6. Registration of Manufacturer/Packer
- 7. Registration of Importer/Packer
- 8. Renewal of License of Repairer of Weights & Measures
- 9. License of Importers of Weights & Measures
- 10. Verification of Weights & Measures
- 11. Re-verification of Weights & Measures
- > Excise & Narcotics Department:
- > Power & Electricity Department:
- 1. Application form New Connection (Low Tension Service)
- 2. Application Form New Connection (High Tension / Extra High-Tension Service)
- 3. Application For Changing The Name of Registered Consumer
- 4. Transfer of Ownership to Legal Heir
- 5. Conversion of Services / Change of Consumer Category / Shifting of Connection
- 6. Load Enhancement / Load Reduction
- 7. Procedure for Determination of Connected Load
- 8. Meter Related Complaints / Request for Testing of Meter
- 9. Request for Permanent Disconnection & Termination of Agreement
- N. Public Health Engineering Department:
- 1. Application for New Water Connection (Domestic)
- 2. Application for New Water Connection (Commercial)
- 3. Application for Transfer Of House Water Connection
- 4. Application for Change of Ownership of Consumer
- 5. Application for Re-Connection of Temporary Disconnected Water Connection
- 6. Application for Disconnection of Water Connection
- ➤ Geology & Mineral Resources:
- 1. Mining lease/Composite License/ Non-exclusive Reconnaissance Permit
- > Food & Drug Administration, H&FW Department:
- 1. Application for General (Retail) License Form 19
- 2. Application for Restricted (Retail) License Form 19A
- 3. Application for Wholesale License Form 19
- 4. Application for License to sell drugs by wholesale or distribute from motor vehicle Form 19AA
- 5. Application for Homoeopathic Retail License Form 19B



- ➤ Urban Development & Poverty Alleviation:
- ➤ Labour, Employment Skill Development & Entrepreneurship:
- 1. Application for Certificate of Registration under Shops & Establishment
- 2. Application for registration of license for the year and notice of occupation specified in section 6&7 of the Factories Act, 1948
- 3. Application for Registration of Establishment Employing Contract Labour (Contract labour Act Principal Employer Registration)
- 4. Application for License for Engaging Contract Labour under The Mizoram Contract Labour (R & A) Rules 2004
- 5. Application for Registration of establishment Employing Migrant Workmen (Interstate Migrant Workers Principal Employer Registration)
- 6. Application for permission to Construct, Extend or take into use any building as a factory under Factories Act, 1948
- 7. Application for Renewal of License for engaging Contract Labour under The Mizoram Contract Labour (R & A) Rules 2004
- 8. Application for Registration of establishments employing building workers under The Mizoram Building & Other Construction Workers (RE&CS) Rules 2015
- ➤ Department-wise Numbers of Clearances in Nagaland
- > Department of Industries and Commerce
- 1. Udyog Aadhar Registration
- 2. Incentives
- Commissionerate of Taxes
- 1. Registration for VAT/ CST/ Professional Tax/ Luxury Tax (as applicable)
- > Nagaland Pollution Control Board
- 1. Bio Medical Waste Form
- 2. Hazardous Waste Form
- 3. Municipal Solid Waste
- 4. Common Consent/ Authorization Form
- 5. National Green Corps Forms
- > Department of Labour and Employment
- 1. Application for permission to construct, extend or take into use any building as a factory
- 2. Application for registration and grant of/renewal of license
- 3. Site appraisal form
- Department of Power
- 1. New Power Connection
- > Department of Information Technology
- 1. Application for IT Empanelment
- 2. Udyog Aadhaar Registration
- ➤ Commissionerate of Taxes
- 1. Registration for VAT/CST/Professional Tax/Luxury Tax (as applicable)
- > H. Nagaland Pollution Control Board
- 1. Bio Medical Waste Form
- 2. Hazardous Waste Form
- 3. Municipal Solid Waste



- 4. Common Consent/ Authorization Form
- 5. National Green Corps Forms
- > Department of Labour and Employment
- 1. Application for permission to construct, extend or take into use any building as a factory
- 2. Application for registration and grant of/renewal of license
- 3. Site Appraisal Form
- > Department of Power
- 1. New Power Connection
- > Department of Information Technology
- 1. Application for IT Empanelment

# Table 8.3.6: Department-wise Numbers of Clearances in Nagaland

- Department of Industries and Commerce
- 1. Udyog Aadhar Registration
- 2. Incentives
- Commissionerate of Taxes
- 1. Registration for VAT/ CST/ Professional Tax/ Luxury Tax (as applicable)
- > Nagaland Pollution Control Board
- 1. Bio Medical Waste Form
- 2. Hazardous Waste Form
- 3. Municipal Solid Waste
- 4. Common Consent/ Authorization Form
- 5. National Green Corps Forms
- Department of Labour and Employment
- 1. Application for permission to construct, extend or take into use any building as a factory
- 2. Application for registration and grant of/renewal of license
- 3. Site appraisal form
- > Department of Power
- 1. New Power Connection
- > Department of Information Technology
- 1. Application for IT Empanelment
- 2. Udyog Aadhaar Registration
- Commissionerate of Taxes
- 1. Registration for VAT/CST/Professional Tax/Luxury Tax (as applicable)
- > Nagaland Pollution Control Board
- 1. Bio Medical Waste Form
- 2. Hazardous Waste Form
- 3. Municipal Solid Waste
- 4. Common Consent/ Authorization Form
- 5. National Green Corps Forms
- > Department of Labour and Employment
- 4. Application for permission to construct, extend or take into use any building as a factory
- 5. Application for registration and grant of/renewal of license
- 6. Site Appraisal Form
- Department of Power
- 1. New Power Connection



- > Department of Information Technology
- 1. Application for IT Empanelment

# Table 8.3.7: Department-wise Numbers of Clearances in Sikkim

- > State Quota Education Department:
- 1 Education Department State Quota Seat Allotment Service
- ➤ Social Justice & Welfare Scholarships:
- 1 Student Scholarship Services for Social Justice & Welfare Department
- > Education Department Scholarships:
  - 1 Student Scholarship Services for Education Department
- ➤ Private Institute Registration System:
  - 1 Private Institution Registration in the state of Sikkim
- > Fishing License Issuing Application:
  - 1 Issue of Fishing license
- > Fish Shop NOC:
  - 1 Issue of NOC for Fish Shops
- > Firm Registration Certificate:
  - 1 Issue of Firm Registration Certificate
- Scheduled Tribe Certificate:
  - 1 Issue of Scheduled Tribe Certificate
- ➤ Grievance Redressal System RDD:
  - 1 Grievance Redressal System for various schemes under Rural Development Department
- Online Sanitation Certificate System:
- 1 Sanitation Certification System
- Land Stability Reports:
- 1 Land Stability Reports
- Right of Way:
- 1. Right of Way (ROW)
- > Teacher Eligibility Test:
- 1 Teacher Eligibility Test Sikkim
- Pension Scheme Registration:
  - 1 Pension Scheme Registration
- > Fisheries Beneficiary Registration:
- 1 Fisheries Beneficiary Registration
- > Employment Card:
- 1 Issue of Employment Card
- > IT Vendor Online Registration:
  - 1 IT Vendor Empanelment System
- Recruitment Processing Application, SPSC:
  - 1 Recruitment Processing Application, Sikkim
- ➤ Issuance of Manufacturer License from Legal Metrology Unit:
- 1 Issuance of Manufacturer License from Legal Metrology Unit
- ➤ NOC for Availing Housing Loan on Mortgage of Lease Deed from UDD:
- 1 NOC for Availing Housing Loan on Mortgage of Lease Deed from UDD
- ➤ Issuance of Mg Marg Permissions for Non-Profitable Events:



- 1 Issuance of Mg Marg Permissions for Non-Profitable Events
- Issuance of Permission for Mega Events:
- 1 Issuance of Permission for Mega Events
- > Allotment of Temporary Permission for Mega Events from UDD:
  - 1 Allotment of Temporary Permission for Mega Events from UDD
- ➤ Issuance of Dealer License from Legal Metrology Unit:
  - 1 Issuance of Dealer License from Legal Metrology Unit
- ➤ Renewal of Independent Individual Worker & Registration of Worker by Principal Employer/Service Provider/ Sub service provider/ Owner of Establishment:
- 1 Renewal of Independent Individual Worker & Registration of Worker by Principal Employer/Service Provider/ Sub service provider/ Owner of Establishment
- Allotment of Shop Rooms/Public Space/Housing Unit for Business Purposes from UDD:
  - 1 Allotment of Shop Rooms/Public Space/Housing Unit for Business Purposes from UDD
- ➤ Issuance of Permission for Banner Placement:
- 1 Issuance of Permission for Banner Placement
- ➤ Issuance of Repairer License from Legal Metrology Unit:
  - 1 Issuance of Repairer License from Legal Metrology Unit
- NOC for Registration of Lands which are Adjacent to UDD owned lands:
  - 1 NOC for Registration of Lands which are Adjacent to UDD owned lands
- ➤ Gangtok Municipal Corporation Grievance Redressal:
- 1 Gangtok Municipal Corporation Grievance Redressal
- ➤ Issuance of Permit for Restricted Area/Protected Area for Government Officials & Locals of Sikkim:
- 1 Issuance of Permit for Restricted Area/Protected Area for Government Officials & Locals of Sikkim
- > e-pass for Covid 19 Curfew:
  - 1 e-pass for Covid 19 Curfew
- ➤ Issuance of Mg Marg Permission for Profitable Events:
  - 1 Issuance of Mg Marg Permission for Profitable Events
- ➤ Registration of Independent Individual Worker & Registration of Worker by Principal Employer/Service Provider/Sub service provider/Owner of Establishment:
- 1 Registration of Independent Individual Worker & Registration of Worker by Principal Employer/Service Provider/Sub service provider/Owner of Establishment
- > Issue of Unmarried Certificate:
  - 1 Issue of Unmarried Certificate
- ➤ Issue of Senior Citizen Certificate:
- 1 Issue of Senior Citizen Certificate
- ➤ Issue of Property Certificate:
- 1 Issue of Property Certificate
- ➤ Commerce and Industries service-Provisional registration of Enterprise:
  - 1 Commerce and Industries service-Provisional registration of Enterprise
- Application for Certificate of Establishment/Shops:
- 1 Application for Certificate of Establishment/Shops
- > Online Building Permission System:
- 1 An Online Building Permission System is a digital platform to streamline and automate the process of granting building permits and approvals for construction projects
- > Scheduled Caste Certificate:



- 1 Issue of Scheduled Caste Certificate
- ➤ OBC Certificate:
- 1 Issue of OBC Certificate
- Primitive Tribe Certificate:
- 1 Issue of Primitive Tribe Certificate
- > Income Certificate:

# Table 8.3.8 Department-wise Numbers of Clearances in Tripura

- > Factories & Boilers Organization:
  - 1. New Factory Plan Drawing Approval
- 2. Registration and Grant or Renewal of Factory License
- 3. Renewal of Boiler Certificate
- 4. Approval for Steam Pipeline Erection
- 5. IBR Welder Certificate Endorsement
- 6. Endorsement of Boiler Erector / Repairer
- 7. Approval of New Boiler Registration
- 8. Approval for Revised Plan Drawing of existing Factory
- 9. Factory License Amendment
- > Directorate of Labour:
- 1. Principal employer registration under Contract Labour Act
- 2. Principal employer registration under ISMW Act
- 3. Principal employer registration under Building & Other Construction Workers Act
- 4. License under Beedi & Cigar
- 5. Registration under Plantation Labour Act
- 6. Amendment of Principal employer registration under Contract Labour Act
- 7. Amendment of Principal employer registration under ISMW Act
- 8. Amendment of Principal employer registration under Building & Other Construction Workers Act
- 9. Amendment of License under Beedi & Cigar
- 10. Amendment of Registration under Plantation Labour Act
- > Drugs Control Administration:
- 1. Building Plan Drawing Approval
- 2. Application for the grant of a license to manufacture for Sale of drugs
- 3. Application for Grant of License to Manufacture for Sale and Distribution of Class A or Class B medical device
- 4. Retails License
- 5. Wholesale & Motor Vehicle License
- > PWD (Drinking water and Sanitation):
- 1. Application for Feasibility & Estimation of Water Connection
- 2. Application for Water Connection
- > Excise Department:
- 1. Application for Excise LOI



- 2. Application for Approval of License
- 3. Application for License
- > Tripura State Pollution Control Board:
- 1. Application for NOC for Establishment
- 2. Application for NOC for Operation
- Application required for grant/renewal of authorization for generation or collection or storage or transport
  or reception or recycling or reuse or recovery or pre-processing or co-processing or utilization or
  treatment or disposal of hazardous and other waste
- > Electrical Inspectorate:
- 1. Application for Building Plan Approval
- 2. Application for NOC from Electrical Inspectorate
- Directorate of Fire Service:
- 1. Application for Provisional NOC
- 2. Occupancy Certificate/No objection Certificate
- ➤ Urban Development Department:
- 1. Application for building approval from ULB
- > Tripura State Electricity Corporation Ltd:
- 1. Application for Estimation of Connectivity
- 2. Application for Temporary Power Connection
- 3. Application for Permanent Power Connection
- ➤ Legal Metrology:
- 1. Application for License as manufacturer of weights and measures
- 2. Application for Registration of Packing of commodities
- 3. Application for Dealer License
- 4. Application for Repairer License
- 5. Registration as Importer of Packaged Commodities
- > Taxes Organization:
- 1. Application for Certificate of Registration
- 2. Profession Tax Return Filing
- > Co-Operative Registrar:
- 1. Co-Operative Society Registration
- ➤ Partnership Firm Registration (I & C):
- 1. Partnership Firm Registration
- > Tripura Industrial Development Corporation Limited:
- 1. Industrial Estate Land Allotment
- ➤ Industries & Commerce (Incentive):
- 1. State Incentives





# NEC YEARBOK 2024

**January 2024** 

