IT & ITES-
Sector Profile of
North East Region

G20 भारत 2023 INDIA

MINISTRY OF DEVELOPMENT OF
NORTH EASTERN REGION

**Northeast
Global Investors
Summit**
THE NEW FRONTIER OF INDIA'S GROWTH

North East Overview

The North-eastern Region (NER), which includes the eight States of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura, is the easternmost region of India. Since each state has a border with at least one of the five nations to the east of the country, this area serves as a gateway to Southeast Asia and is of great strategic importance.
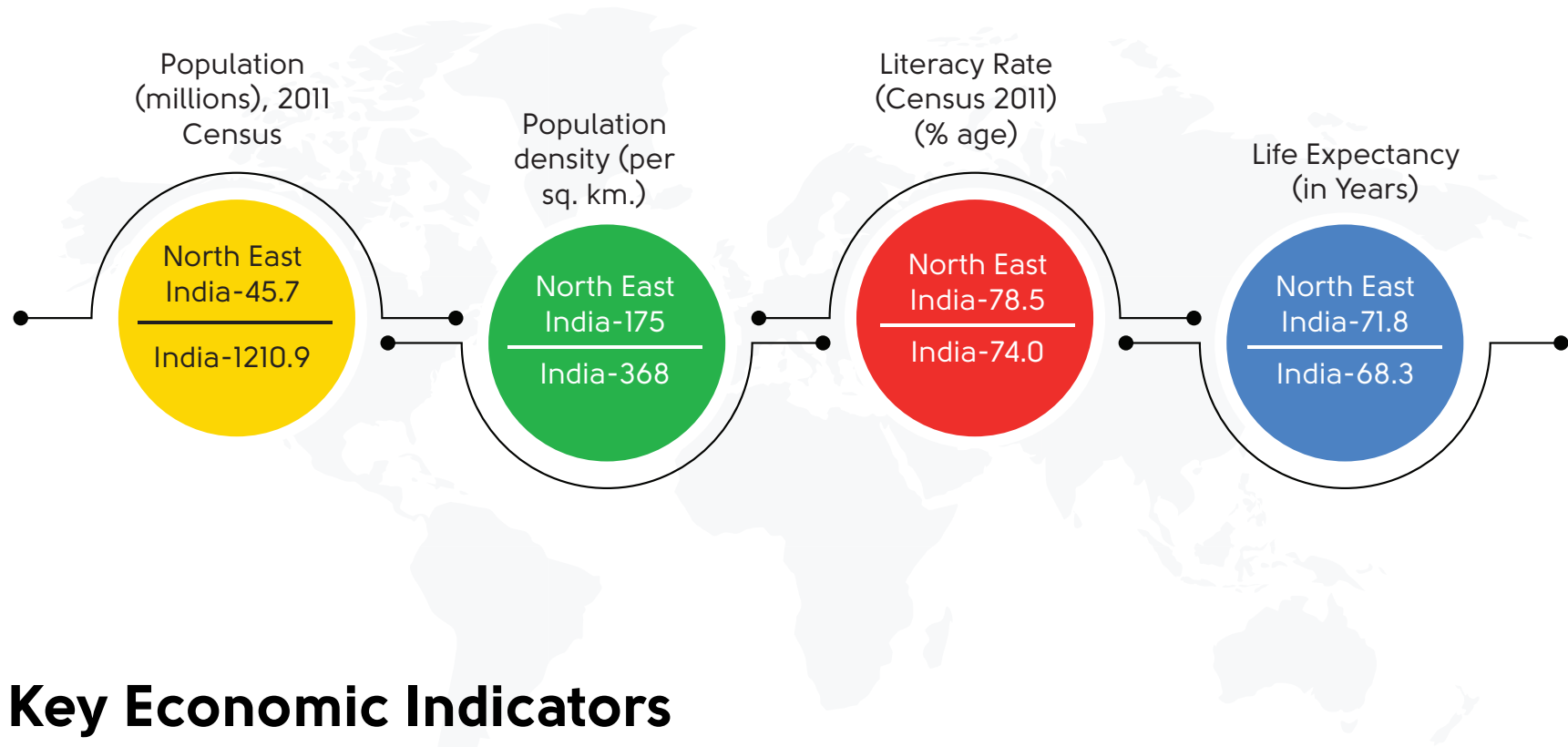
Furthermore, the NER is widely recognized as one of the most diverse regions in Asia, characterized by a rich tapestry of ethnicities and languages. Each state within NER boasts a unique blend of distinct cultures and traditions.

The Northeast region of India is a well-known biodiversity hotspot that is also home to a rich mix of cultures. In addition, the region is blessed with abundant natural resources that are yet to be fully explored and exploited. The region also holds a significant stake in the country's 'Act East Policy,' which is aimed at promoting economic, political, and cultural ties with Southeast Asia. With a wealth of natural resources, human resources, and potential for agriculture and horticulture, the region is rapidly emerging as a hub for sustainable manufacturing and service industries. Additionally, the region's rich ethnic, religious, linguistic, and cultural diversity makes it a highly attractive destination for tourists, offering significant potential for growth and development in the tourism sector.

With an area of 2.6 lakh sq. km, the NER accounts for about 7.98 per cent of the total geographical area of India while being home to 3.78 per cent of India's total population. The region is characterised by a mixed topography of hills and plains, with hills occupying 70 per cent of the land area. With a significant tribal population accounting for around 54 percent of its total population, especially in the hilly areas, the Northeast region of India is unique in its diversity. The region is home to approximately 135 Scheduled Tribe groups out of a total of approximately 705 across India.

With plentiful natural resources, agro-horticultural and forest resources, hydroelectric potential, oil and natural gas and mineral deposits, the northeast region is well poised for investment and economic growth.

Demographic Indicators

Population (millions), 2011 Census

North East India-45.7

India-1210.9

Population density (per sq. km.)

North East India-175

India-368

Literacy Rate (Census 2011) (% age)

North East India-78.5

India-74.0

Life Expectancy (in Years)

North East India-71.8

India-68.3

Snapshot of NER

States/Parameters	Airports	State Highways (Km)[1]	National Highways (Km) (2019)[2]	Waterways (Km)	Railway (Km)	Inter-national Border (Km)	GSDP 2020-21 (lakh cr)	Per Capita 2019-20*	Population (2011)	Literacy rate (%)	Area (Sq. Km)	Availability of Power (Crore Units)
Arunachal Pradesh	4	13500	2537	311	12	2170	0.31	154652	1,383,727	65.38	83,743	55
Assam	7	2530	3909	1938	2519	800	3.40	81034	31,205,576	72.2	78,438	570
Manipur	1	781	1750	44	13	398	0.34	84746	2,855,794	76.9	22,327	50
Meghalaya	1	768	1156	90	9	400	0.34	87170	3,366,755	74.4	22,429	145
Mizoram	1	170	1423	155	2	860	0.18	187327	1,097,206	91.33	22,081	36
Nagaland	1	650	1548	276	11	215	0.30	120518	1,978,502	79.55	16,579	51
Sikkim	1	663	463	-	0	319	0.31	403376	610,577	81.24	7,098	38
Tripura	1	1057	854	-	193	400	0.54	125675	3,673,917	87.8	10,486	90
Total	17	20119	13640	2814	2759	5562	5.74	155562-	46,172,054	-	263181	1035

*At current price base 2011-12

Key Economic Indicators

- The Region's GSDP at current prices is INR 5.75 lakh crore in FY 2021-22
- Compounded Annual Growth Rate (CAGR) of GSDP of North-eastern States grew at 8.17% from FY2015 to FY2022.
- Per capita income: The per capita income for the North-eastern region was Rs. 1,55,562 in the financial year 2019-20.
- Infrastructure: The region has a total of 13640 km of national highways.
- Infrastructure: 20119 Km of state highways, and 2,657 Km of major district roads
- The average road density per 1000 Sq Km of area is 2258.5 Km against the national average of 1926.02 Km

Advantage North East

- Gateway to Southeast Asia: A strategic location that offers easy access to ASEAN markets.
- Abundant Natural Resources: An abundance of oil, gas, coal, minerals, timber, medicinal plants, bamboo and other forest products, and an abundance of water for industries to exploit.
- India's Green Hub: Home to lush forests and rich biodiversity, it is an ideal destination for ecotourism and agro-based industries.
- Diverse Cultural Heritage: A region with unique ethnic communities and traditions that offer investment opportunities in tourism and handicrafts.
- Government Incentives: A range of incentives, including tax holidays, subsidies, and reimbursements to support business growth.
- Low-cost Manufacturing Hub: Low labour costs compared to other parts of India and the world.
- Skilled Workforce: A young, educated, and skilled workforce that is proficient in English.
- Growing Infrastructure: Rapidly developing infrastructure, including new industrial parks, and technology parks.
- Stable Business Environment: A favourable business climate with a low crime rate, stable political environment, and supportive government policies.
- Emerging Consumer Market: A growing consumer market with rising incomes and increased urbanization that offers immense potential for businesses.
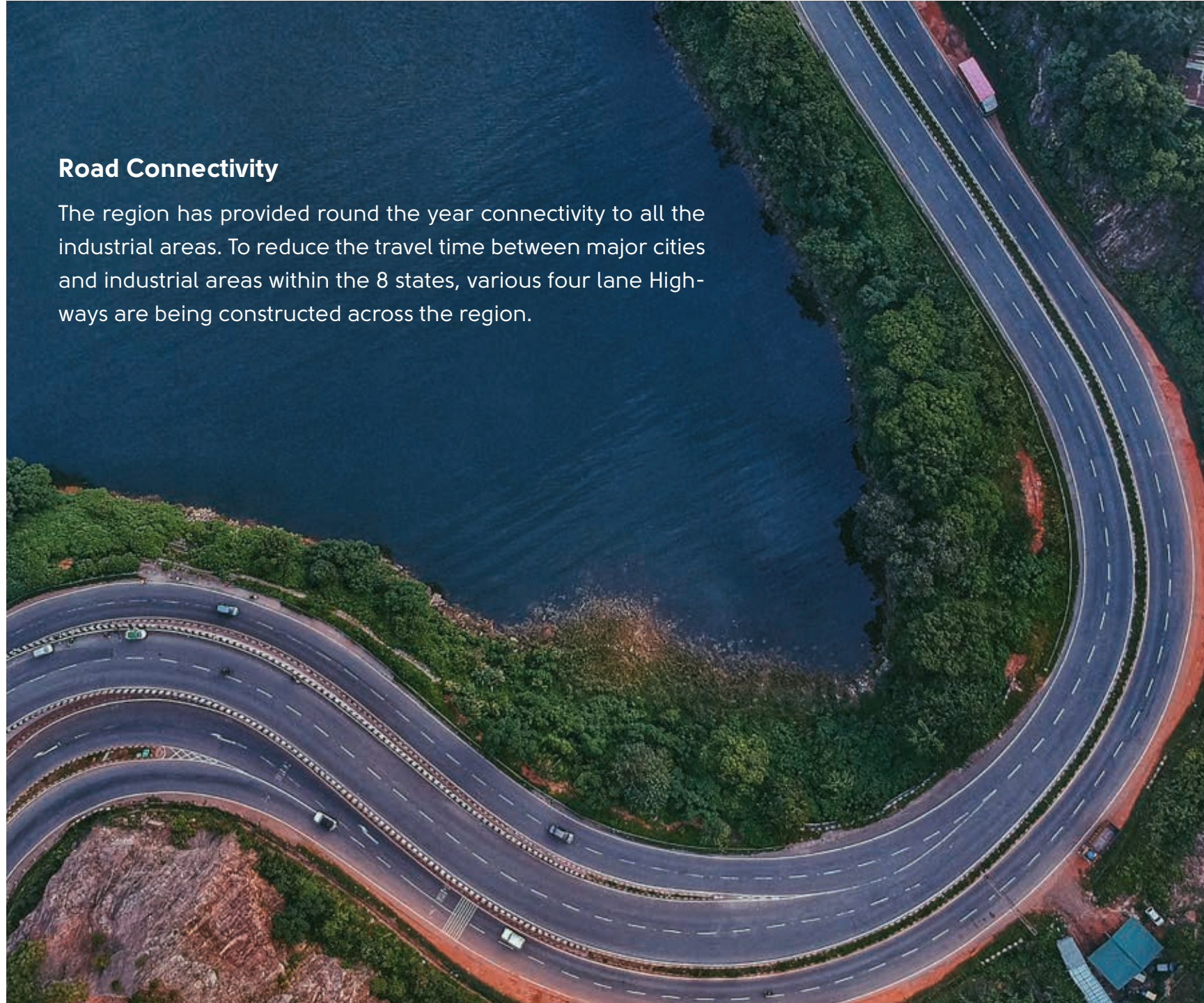
Connected North East

Accessibility

The region has a good network of road, rail and air connectivity which provides seamless access to each corner of the region.

Road Connectivity

The region has provided round the year connectivity to all the industrial areas. To reduce the travel time between major cities and industrial areas within the 8 states, various four lane Highways are being constructed across the region.
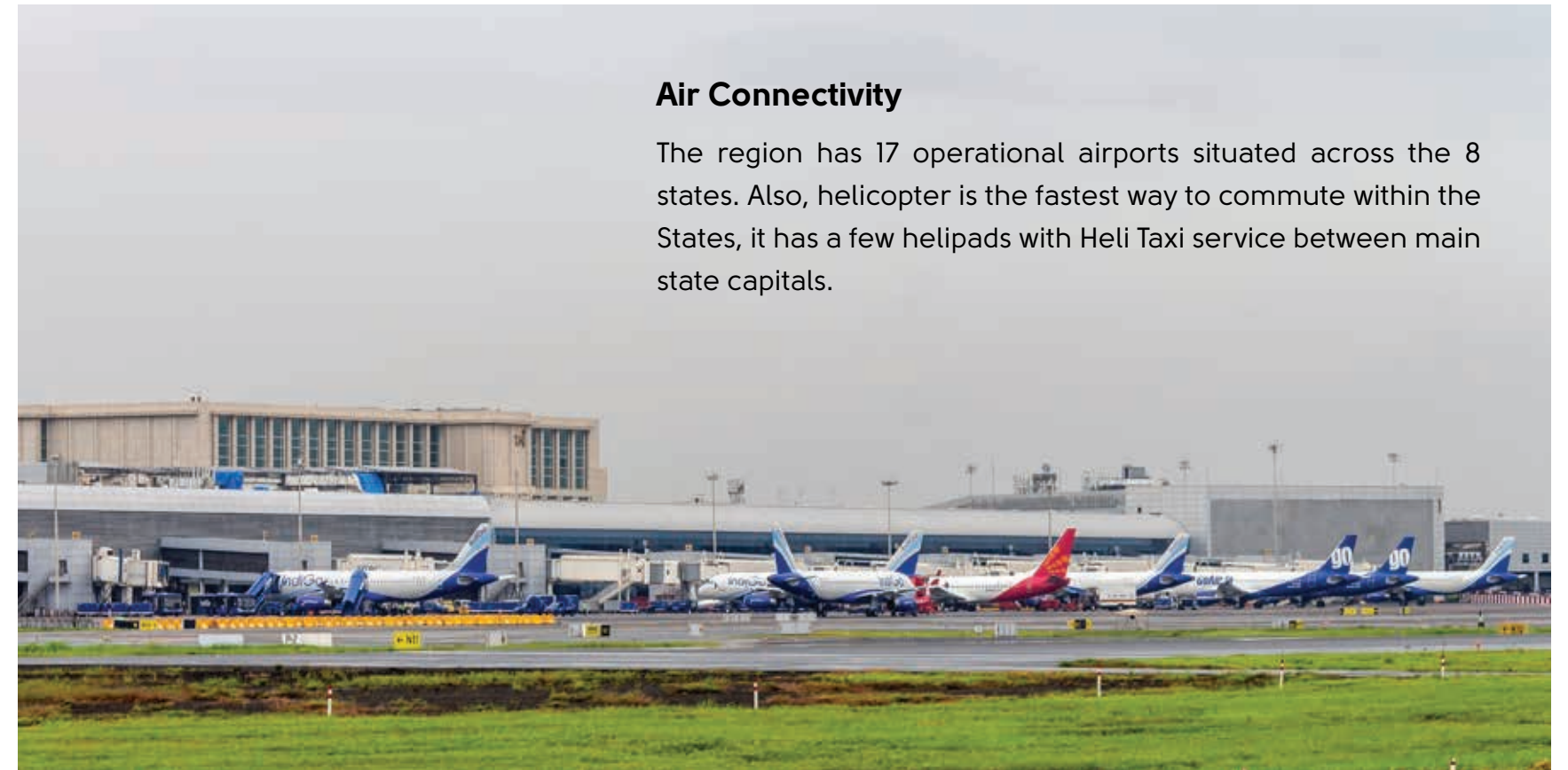

Rail Connectivity

The region has also connected with rail connectivity. To reduce the travel time between major cities and industrial areas within the 8 states, various rail tracks are being constructed across the region.

Air Connectivity

The region has 17 operational airports situated across the 8 states. Also, helicopter is the fastest way to commute within the States, it has a few helipads with Heli Taxi service between main state capitals.

IT & ITES in India – Industry Overview

- As per National Association of Software and Services Companies (NASSCOM), Indian Information Technology (IT) Industry directly employs around 51 lakh persons as on FY 2021-22, most of which are IT skilled.
- Technology industry contributed 51% to overall services exports in FY22.
- Indian IT & ITES industry share in India's GDP is 7.4%
- Indian IT & ITES industry Share more than 51% global outsourcing market
- Indian IT & ITES industry Share more than 45% of Indian Service Exports
- Indian IT & ITES industry growth in Indian Export Revenue is 8.1%

The total revenue of Indian IT sector for the last three years is as under:

Financial Year	Revenue (USD in billion)
FY 2019-20	190
FY 2020-21	196
FY 2021-22 E	227

E: estimated, Source: NASSCOM

By 2025–2026, India is expected to have a trillion-dollar digital economy and support 60–65 million employment that require digital skills, according to a Ministry of Electronics & IT research titled "India's trillion-dollar digital opportunity." Additionally, according to NASSCOM, the Indian IT industry will need approximately 95 lakh workers by the year 2026 to maintain the sector's growth momentum, of which 55 lakh will be digitally skilled across important digital technologies like cloud computing, artificial intelligence, big data analytics, and the Internet of Things (IoT), among others.

Some of the steps taken by industry include increased fresher hiring, expanding operations to tier-II/III cities. Some of the measures taken by industry for manpower planning and skill development training include alliances with academia for training the employee base, innovation, and research & development across areas of emerging technologies, internal re-skilling programs and platforms, collaborations with other education technology companies.

Additional industry initiatives for manpower planning and skill development training include partnerships with academic institutions for employee training, innovation and research & development in areas of emerging technologies, internal re-skilling programmes and platforms, and partnerships with other education technology companies.

IT & ITES Sector in North East

- North-Eastern regions provide ample opportunities in IT & ITES sector
- The 8 State Governments of the North-eastern region have various incentives to offer for investing companies along with a strong EoDB support ecosystem to enable them to easily setup and operate from the region.
- The basic IT infrastructure in the region has already been developed such as a 100-acre IT Park/Tech City in Assam, Centre for Invention, Innovation, Incubation and Training in Manipur, Tech Park in Meghalaya Software Technology Park (STP) cum IT Complex at Indranagar, Agartala etc.
- Along with an Innovation Hub which was inaugurated in 2021 at Mantripukhri, Imphal, various other facilities at the IT SEZ are also under development in what is thought to be the North-East India's First IT SEZ
- The Central Government has enacted multiple Schemes for the development of enterprises in the North East region. This includes the North East BPO Promotion Scheme (NEBPS).
- Act East Policy will enable seamless access to markets in South East Asia and the ASEAN
- High Quality Technical Education setup in the region provides ready access to quality manpower for the IT ITES Sector
- Large number of professionals from the region are working in the IT & ITES sector across the country.

State wise BPOs under NEBPS

SN	State Name	No of BPOs
1	Arunachal Pradesh	1
2	Assam	9
3	Manipur	5
4	Meghalaya	2
5	Nagaland	1
6	Tripura	2

Major IT & ITES companies in North East

1. TCS
2. Zaloni
3. Vantage Circle
4. Datagen
5. Web Infotech
6. Web.com India Pvt Ltd
7. Bohniman Systems
8. Amtron
9. Geekworks Technologies
10. Chillibreeze

Competitive Advantage for IT & ITES sector in North East

The North East region of India has significant potential for growth in the IT-ITES (Information Technology-Information Technology Enabled Services) sector. With a skilled workforce and a growing pool of talent in the field of engineering and computer science, the region is poised to emerge as a hub for the IT-ITES industry. Moreover, the region's favourable government policies and incentives, including tax exemptions and subsidies, are attracting many IT-ITES companies to set up their operations in the North East. The region's strategic location and proximity to Southeast Asian countries also provide an excellent opportunity for expanding the IT-ITES sector's global reach. With sustained effort by the Government, the North East is poised to realise its full potential and emerge as a major contributor to India's rapidly growing IT industry in the coming times.

Advantage North East

- Investor friendly Climate
- Cordial Industrial Relations
- Available land bank and built-up infrastructure
- Availability of Skilled Human Resource for education sector
- Proximity & easy access to Southeast Asian countries like Nepal, Bhutan, Myanmar & Bangladesh
- Proactive administration
- Single Window Clearance Mechanism
- Time Bound Approvals
- Online Application and Approval

Highlights of EoDB in the States of NER

Implementation of single window clearance portal in all the states of North East for providing G2B services in a seamless timebound manner

- As a measure to provide a conducive business eco system, the states of North East India have implemented one stop single window system for all G2B permits and permissions required for any business activity
- Among many other features of the single window systems, a notable functionality in the system is Centralised Inspection Module which helps in random allocation of inspection inspectors and joint site inspection thereby reducing the time, procedure and cost of many G2B services

Integration with NSWS

- The North Eastern states have onboarded or are in the process of onboarding their G2B services in the National Single Window Portal. This will enable investors to easily apply for business clearances for their investments in the region.

Industrial Policy for attracting investment in the region

- To attract investment in the NER, the states have proactively implemented Industrial Policies which offer state specific incentives

Preferential land allotment policy through creating of Industrial Land Banks

- Each state in the North East has developed industrial land banks for ease of land allocation
- Sector specific Industrial Zones like Plastic Park, Textile Parks and IT Parks have been developed in the region

Reducing Compliance Burden

- NE States have undertaken an exercise to reduce compliance burden through a process of rationalisation and decriminalizing minor offences.

A robust feedback and grievance redressal mechanism

- The states have put in place robust feedback and grievance redressal mechanisms to further improve ease of doing business.

Data centres in North East

Data centres are part of the key infrastructure for a knowledge-based economy and play a pivotal role in the development of information and telecommunication. North East India has vast potential for developing data centres due to its strategic location, availability of skilled manpower, lower costs of operation, and a favourable business environment. Data centres are facilities that store and manage computer systems, servers, and other digital equipment that help in storing, processing, and managing large amounts of data.

In April 2022, CtrlS, Asia's Largest Rated-4 Hyperscale Data Center, announced the opening of its data centre in Assam, powering the north-eastern part of the country. covering 1 million sqft., the facility will hold around 1,000 racks and is built to power small enterprises.

Further to this, the foundation stone of first National Data Centre for the North-eastern Region (NEDC) was laid by Hon'ble Prime Minister at Guwahati, Assam through video conferencing in February 2021. When ready, will have state-of-the-art network and Security Operating Centres, and the advanced facility to catalyse the digital empowerment of the region. The Network Operating Centre will monitor and manage the critical ICT infrastructure, ensuring 24×7 availability of services. Thus, development of data centres in North East India has enormous potential, given the availability of skilled manpower, lower costs of operation, and favourable business environment. Combining with the right infrastructure and incentives from the government, the region has the potential to emerge as a significant player in the data centre industry, generating employment opportunities and contributing to the overall economic growth of the region.

> **NER – The Third International Gateway**
>
> Signalling the escalating development of the North-eastern states, Agartala hosts India's third international internet gateway link, after Mumbai and Chennai, through Bangladesh extending to the rest of the Southeast Asian Countries
>
> A 10GBPS Internet Gateway at Agartala linking Agartala and Cox Bazar in Bangladesh has been operational since 2021. Besides the boost in the bilateral relationship between the countries this easing of bandwidth has enabled the state of Tripura consistent net connectivity and as well as increase in the internet speed across the North-East Region.

Opportunities for Data Centre Infrastructure

Name	Description	Types of Companies
Core Data Centre infrastructure	With a boom in Digital devices for consumers and services being increasingly delivered online, there is an exponential increase in the potential for Data Centres in India. With huge amount of data being generated from multiple devices, it is important to create data centres with larger capacities. With improved internet connectivity infrastructure in the region there is a huge opportunity to invest in core data centre infrastructure in the region.	Medium to large Data Centre Companies, Micro Data Centre companies, Colocation Data Centres
Software defined data centers	Excellent opportunities also lie in software-defined data centers where storage, networking, security, and even the data center layer itself should be delivered as a service. There is a potential for such data centre services to be provided from the NER which can cater to companies across North East as well as rest of India.	Medium to large Data Centre Companies,
Disaster Risk Enabled Data Centres	SDCs can be made Disaster Risk enabled through a concerted government and private initiative for development of Disaster Risk Enabled Data Centres. As the region is prone to natural disasters, all the NER states' SDCs can be transformed into Disaster Risk Enabled Centres with support from private data centres which specialises in the same.	Specialized Data Centre Companies
Investment in data centric companies	The North-eastern states' strategy should be to meet the needs of the data-centric companies which can transform the banking sector, telecom, hospital, public utilities etc. by providing data processing capabilities to already operational companies in the U.S., Europe etc. which may be based of places like Bangalore, Hyderabad etc	Large, medium, and small-scale tech companies providing data analytics, mining, and data processing support
Green Data Centers	Investments in green data centers is another upcoming area which investors can look into.	Data center companies showing tendency to favour renewable sources of energy such as wind and power to generate energy for their technology while keeping the cost of running the data centers down.

Potential for ISPs in North East Region

With improving broadband and telecom infrastructure, BPO companies are now increasingly setting bases up in Tier-II/III cities whereas previously they used to prefer Tier I cities. This trend is catching up in the NER where reduced man-power expenses, improving infrastructure and upgraded lifestyle of people coupled with incentivisation from Government is essentially, making operations more cost-effective and feasible. The easy availability of an English-speaking workforce across the NER is another reason why companies should consider the region as their next investment destination. In this, having an enabling broadband network which is reliable is a pre-requisite for companies in NER.

Average download & upload speed License Service Area (LSA) wise across North East for mobile broadband for 6 months (Jan 22 – June 22)

Sl.	LSA	AIRTEL (Mbps)		RJIO (Mbps)		Vi India (Mbps)	
		Down	Up	Down	Up	Down	Up
1	Assam	10.4	3	11.2	5.3	13.5	13.1
2	North East	9.2	2.9	14.7	4.3	N/A	N/A
Sl.	LSA	AIRTEL (Mbps)		RJIO (Mbps)		Vi India (Mbps)	
		Down	Up	Down	Up	Down	Up
1	Assam	10.4	3	11.2	5.3	13.5	13.1
2	North East	9.2	2.9	14.7	4.3	N/A	N/A

The private sector has an important role to play in the Digital India initiative of North-East. This includes providing support for reliable electricity or power back-up within the NER and utilising private sector capacity and global industry experience in order to complete the projects on time whilst using the latest technology.

Given the increasing demand for high-speed internet even in remote locations of the region, the region has the opportunity to add several more ISPs to strengthen access to broadband network. With an estimated population growth of more than 16 per cent in 2021 over 2011 and with many of the states like Mizoram (17.56%), Tripura (14.66%), Sikkim (14.56%), Nagaland (12.27%), Arunachal Pradesh (12.26%), Assam (11.99%), Manipur (11.73%) having an average growth of Gross State Domestic Product (GSDP at Current Prices) between 2012-2019 higher than India (11.72%) , North-eastern markets could provide a vibrant opportunity for effective return on investment for ISPs. Thus, Private ISPs have a strong business case to venture in NER for expansion of business.

Opportunity for KPO, BPO and ITES in North East

The North East region of India also has a vast potential for establishing greenfield IT and ITES including KPO and BPO facilities. The region has been actively developing its IT infrastructure to attract investments from the IT and ITES sectors and has special schemes for the BPO sector particularly.

The North East BPO Promotion Scheme (NEBPS) was envisaged under Digital India Programme, with the aim of creating employment opportunities and dispersal of the Information Technology and Information Technology Enabled Services (ITES) industry in small cities and towns in NER by incentivising the setting up of Business Process Outsourcing (BPO) and ITES operations by providing financial support of up to Rs 1 lakh per seat in the form of viability gap funding towards capital and operational expenditures. This scheme has been helping in capacity building in the region in terms of infra & manpower and set up the basis for next wave of IT/ITES led growth.

State-wise details of units set up and direct employment generated under NEBPS

Sr. No.	State	No. of Units	Direct Employment Generated
1	Arunachal Pradesh	1	37
2	Assam	8	193
3	Manipur	5	191
4	Meghalaya	2	256
5	Nagaland	1	130
6	Tripura	2	14
	Total	**19**	**821**

The table shows that while several BPOs have started their operation in NER after the launch of the NEBPS, there is further potential to expand the number of seats or number of personnel engaged in the BPO sector in the North East Region with its brand-new IT infrastructure, policy incentivisation and a good living style for employees at a reasonable cost.

States like Assam, Meghalaya, Manipur, and Tripura have established specialized IT Parks, SEZs etc. Infact, all the states also have specialised infrastructure developed by STPI including the OctaNE CoEs which plan to catapult the potential of the region and boost start-ups and techpreneurs. The ever developing ICT infrastructure and proactive governance in the NER states makes ample case for business to setup up base in NER for IT and ITES industry to cater to entire India.

Industry 4.0 in North East

Industry 4.0 refers to the fourth industrial revolution, which is characterized by the integration of advanced technologies such as the Internet of Things (IoT), Artificial Intelligence (AI), and robotics in the manufacturing sector. This revolution has the potential to transform the way manufacturing is done by making it more efficient, flexible, and customizable.

The North East region of India has significant potential to leverage Industry 4.0 to drive its economic growth. The region is rich in natural resources and has a diverse range of industries such as agriculture, textiles, handicrafts, and tourism. By adopting Industry 4.0 technologies, these industries can become more competitive and efficient, and thus, contribute more to the region's economic growth.

Potential areas for Industry 4.0 in the North East region

Agriculture: The North East region of India has a significant agricultural sector, which could benefit from the adoption of advanced technologies. Precision agriculture, enabled by IoT and big data analytics, could help farmers optimize their crop yields while minimizing the use of resources such as water and fertilizers. Autonomous drones and robots could be used for crop monitoring, irrigation, and spraying. This could help to increase productivity, reduce waste, and improve the quality of crops.

Textiles: The region's textile industry is a significant employer and contributor to the economy. The adoption of Industry 4.0 technologies such as automation, robotics, and advanced analytics could enhance productivity and quality. For example, the use of automated weaving machines and robots for fabric cutting and stitching could increase efficiency and reduce the reliance on manual labour. Advanced analytics could also help to optimize production processes and improve the quality of finished products.

Handicrafts: The North East region of India has a rich tradition of handicrafts, which could benefit from the adoption of advanced technologies. For example, 3D printing, and additive manufacturing could be used to create intricate designs and prototypes, reducing the time and cost involved in traditional methods. Augmented reality (AR) and virtual reality (VR) could also be used to showcase products and provide immersive experiences to customers.

Healthcare: The adoption of Industry 4.0 technologies could improve the quality and accessibility of healthcare in the region. For example, telemedicine, enabled by IoT and advanced analytics, could help to overcome the challenges of distance and connectivity in remote areas. Wearable devices and sensors could be used for remote patient monitoring, enabling early detection and intervention. AI and robotics could also be used to enhance diagnosis and treatment, reducing errors, and improving outcomes.

Energy: The North East region of India has abundant natural resources such as oil, natural gas, and coal. The adoption of Industry 4.0 technologies such as IoT and big data analytics could help to optimize the extraction and utilization of these resources, reducing waste and increasing efficiency. Renewable energy sources such as solar and wind could also benefit from the adoption of advanced technologies such as smart grids and energy storage systems.

Overall, Industry 4.0 has the potential to transform the North East region of India into a hub of innovation and technology-driven growth. However, to realize this potential, the region needs to invest in building the necessary infrastructure, developing a skilled workforce, and creating a conducive policy environment that encourages innovation and entrepreneurship.

Tech accelerator programs and training and research infrastructure can play a vital role in promoting the adoption of Industry 4.0 technologies in the North East region of India.

Tech accelerator programs: Tech accelerator programs are designed to help startups and entrepreneurs develop and scale their businesses. These programs typically provide mentorship, funding, and networking opportunities to help startups overcome the challenges of starting and growing a business. In the context of Industry 4.0, tech accelerator programs can help to identify promising startups working on innovative technologies and provide them with the support they need to bring their ideas to market.

Training infrastructure: The adoption of Industry 4.0 technologies requires a skilled workforce with expertise in fields such as data analytics, robotics, and artificial intelligence (AI). Developing training infrastructure such as vocational training centres, technical institutes, and universities can help to provide the necessary skills and knowledge to the workforce. Such infrastructure can also help to bridge the gap between academia and industry by providing opportunities for students to work on real-world projects.

Research infrastructure: The development of Industry 4.0 technologies requires significant research and development (R&D) efforts. Developing research infrastructure such as R&D centres, innovation hubs, and technology parks can help to foster innovation and encourage the development of new technologies. Such infrastructure can also help to promote collaboration between industry and academia by providing opportunities for researchers and entrepreneurs to work together.

NER states can benefit from the development of such programs. Some of the states have already set some of the requisite infrastructure to attract private collaborators, partners, and investors to create a suitable ecosystem for Industry 4.0 in North East, while other states are in process of doing the same.

World class infrastructure for IT-ITES in North East

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Shillong Technology Park, Meghalaya

As part of Meghalaya's Golden Jubilee year in 2022, the first phase of the Shillong Technology Park was inaugurated in 2022 with a super built-up area of about 1 lakh square feet. It provides a platform with opportunities for IT professionals belonging to Meghalaya from across the world to contribute back to their home State. The first phase building of the Technology Park provides employment to more than 1500 people directly and estimated to generate three times as many jobs indirectly. The Technology Park will support Incubation centers in collaboration with industry, academia and government stakeholders. The entire space of the first phase building at Shillong Technology Park has already been booked by leading corporates and MNCs and is operational. Companies operating from Shillong Technology Park include Medusind, 24/7 AI, HDFC Bank, Tech Digital.

The Government of Meghalaya is committed to continue providing increased impetus to the Information Technology sector in Meghalaya and is planning for the 2nd phase of the Tech Park. Towards this objective, Tendering process for the Second Phase has been successfully completed and the works have been started by the successful bidder. On completion of the 2nd phase, the Tech Parkmore than 3000 youths will be employed directly, and estimated to generate three times as many jobs indirectly.

Tech City –Assam

A 100-acre Tech City in Bongora, Kamrup, Assam has been developed by Assam Electronics Development Corporation Limited (AMTRON), the nodal agency of Department of Information Technology, Govt. of Assam as one-of-a-kind Electronics & IT hub for entire North-East India and ASEAN. The park facilitating state of the art IT infrastructure space, R&D centres, testing labs, training centres, data centres and incubation hubs, along with various other welfare facilities like employee hostel & mess, hospital, bank, nurseries/ creche, local shopping centre, restaurants, playground and other recreational facilities. This IT Park facilitating various national as well as international electronics & IT players to set up their units and generate business in and outside the state of Assam. This IT Park contributing significantly towards generation of employment and GDP of the state on a broader perspective.

- Cutting edge R&D centres
- Manufacturing units of global leaders in electronics industry
- World-class convention centre and auditoriums
- Incubation centres for IT and electronics Start-ups
- Training facilities and skill development centre
- State-of-the-art Data centre
- Container bay
- Clean artificial water body & Green zone
- Rainwater Harvesting
- Warehousing facility Built up Plug and Play area of around 3,00,000 sq. ft for new units
- Proximity to institutions of higher learnings such as IIT, Guwahati and IIIT, Guwahati

IIT Guwahati

Tie ups in Industry 4.0 applications

- Focusing on India's Industry 4.0 strategy, a Drone School has been established in the Tech City premises which is involved in Training and Capacity building as well as Drone manufacturing and R&D.
- A 3D printing Centre of Excellence is also being established in Tech City initially targeting printing of devices using 3D Printing Technology especially Medical Devices / Assistive Devices.
- To provide next generation solutions in surveillance and defense front, Assam Electronics Development Corporation Ltd (AMTRON), which is a Government of Assam company, has entered into an exclusive partnership with an Israel based company for providing the best facial recognition technology solutions and is also setting up a Facial recognition Centre of Excellence at Tech City.
- Technology sourcing in Industry 4.0 applications is presently the major focus of AMTRON.

IT Infrastructure in Manipur

- **Centre for Invention, Innovation, Incubation and Training (CIIIT):** Tata Technologies signed an MOU with the Government of Manipur in September 2021, for development of CIIIT and invest approximately Rs. 200 Crores in the development and operation of the same.

- **Manipur Technology Incubation-Hub (MTI-HUB):** The MOU for the MTI-HUB was signed between KIIT and DIT Manipur in January 2022.This project is estimated to be worth Rs 12.5 Crores and is operating in partnership between KIIT Incubation Hub, Manipur Institute of Technology and IIIT Manipur.

- **Mantripukhri IT Park:** The IT Park, Mantripukhri was set up with the aid STPI. It has existing businesses in BPO and Application Software. The State Government consulted IIM Ahmedabad and IT SEZ has been focused on promotion of IT in the State.

STPI Agartala Incubation Facility

A state-of-the-art STPI Agartala Indranagar incubation facility in Tripura offers plug a play facility to startups & MSMEs of Tripura to promote IT software and services and create employment opportunity in the region along with a growth of IT and ITES exports. The facility has a built-up space of 38265 square feet with high-speed internet, uninterrupted power supply and plug and play incubation facility

STPI - The Growth Booster in North-East India

In the case of newly founded SMEs, STPI has played a significant role in the expansion of the IT industry. STP system is the driver The STP programme is a wholly export-oriented programme for the creation and export of computer software, including the export of expert services delivered by physical or electronic medium. This plan is distinct in that it concentrates on a single good or industry, namely computer software. The plan combines the government's notion of 100% export-oriented units (EOUs) and export processing zones (EPZs) with the idea of science parks and technology parks as they are known to exist elsewhere in the globe.

STPI-Guwahati is one of the 11 STPI jurisdictions having its main centre in Guwahati, Assam. STPI–Guwahati centre was established in 2000 to fulfil the objective of organisation like implementing STP/EHTP Schemes, setting up & managing infrastructure facilities, and providing other services like technology assessment and project management consultancy in North East Region.

Presently STPI-Guwahati has 6 sub-centres in Agartala, Aizawl, Gangtok, Imphal, Shillong, and Kohima. In FY 2021-22, STPI-registered units under STPI-Guwahati jurisdiction contributed Rs. 52.39 crore software exports.

New Initiatives

OctaNE at 8 Capital Cities of North East:

OctaNE is a network of eight online Centers of Entrepreneurship (CoEs) that promote technology-driven innovation in India's North East. In addition to facilitating physical infrastructure and support services for prototyping, developing, testing, and marketing to incubating businesses, OctaNE offers a comprehensive ecosystem for fostering R&D, innovation, and entrepreneurship in the relevant technology sector. In 5 years, OctaNE intends to support 367 businesses. By developing innovation zones for start-ups, these CoEs will support E-Commerce operations and applications, offer employment possibilities in new innovative startup units, and foster a culture of experimentation and creativity among students and professionals.

List of CoEs include:

- IoT in Agriculture CoE/SIZ at Guwahati,
- Emerging Tech (AR/VR) CoE/SIZ at Imphal,
- Gaming & Animation CoE/SIZ at Shillong,
- Data Analytics & AI CoE/SIZ at Agartala,
- IT Applications in Graphics Design CoE/SIZ at Kohima,
- IT Application in Healthcare & AgriTech CoE/SIZ at Gangtok,
- Gaming & Entertainment CoE/SIZ at Aizwal &
- GIS Applications (including Drone Technology) CoE/SIZ at Itanagar.