Emerging Trend in Growth & Future Perspective of Industrialisation and Economic Development in North-East India: A Critical Review

Dibyendu Banik¹, Sourav Shil²

¹Assistant Professor, Department of Commerce, M.B.B College, Agartala, India
²Guest Lecturer

Abstract
Industrialization is a key factor for economic growth in emerging or undeveloped economies. The North-East region has abundant natural resources such as forests, coal, crude oil supplies, etc. However, the economic growth of the region is lagging behind, making it difficult to generate industrial impacts. One of the best ways to reduce regional disparities and promote better growth in the region is through the use of regional planning. Given the similar geographical location and socio-economic structure of the region, national planning might not be able to work effectively. However, when combined with regional planning, it might prove to be one of the most effective tools for growth in the region. In this report, we will analyse the challenges and opportunities of industrialization in the northeast region. We will also provide some suggestions for advancing the industrial sector of the region through regional planning. Despite having abundant natural resources, North-East India is lagging behind in terms of economic growth. Based on the region’s energy and economic resources, this paper examines the development conundrum faced by North-East India and provides an overview of the policies implemented by India to promote industrial and economic development in the region with a view to unlocking local economic potential, advancing energy development, and developing a more rational industrial structure.

Keywords: Economic Growth, Social Development, Industrialization, Regional Planning, Natural Resources.

Literature Type: A Critical Review

INTRODUCTION
North-East India's economy has developed a distinct identity because of its distinct geographical, economic, and sociocultural traits. The region's economy is still underdeveloped despite having enormous development potential because of poverty, unused labour, and undeveloped natural resources. Regarding their degree of industrialization, endowment of natural resources, and infrastructure, the eight states in the Northeast region differ from one another. The NER is still the most industrially underdeveloped area in the nation. The region's industrialization had not progressed at a satisfactory rate. The region's industrial sector was concentrated on a few key industries, including coal, tea, oil, jute, and forests. The process of
assessing a region's potential and developing it for the benefit of the country as a whole is known as regional planning. If regional planning is not effectively connected with national economic and social growth, it will not be able to contribute positively to the economy. Therefore, both regional and national planning are the appropriate ways to speed up expansion in the industry sector in the North-Eastern area of India in order to attract and encourage conductive investment environment. The process of assessing a region's potential and developing it for the benefit of the country as a whole is known as regional planning. If regional planning is not effectively connected with national economic and social growth, it cannot have a good economic impact. Therefore, both regional and national planning are the appropriate ways to speed up the expansion of the industry sector in the North-Eastern area of India in order to attract and encourage a conducive investment climate. The Northeast has experienced satisfactory economic growth during the past 20 years, with yearly growth rates above 8%. A sense of profound uneasiness among the local people has been brought about by asymmetric migration into the Northeast in recent decades, which has directly affected important development discussions. As a result, and this should come as no surprise, observers discover that the Northeastern states have a great deal of unrealized potential. Since the area needs to profit from the expansion of the national economy, this cannot be interpreted as a complement. The Northeastern region urgently needs to support inclusive growth, and in order for that to happen, the developmental discourses must become more democratic while maintaining participatory government as a role model that should be widely followed. The Northeast's industrialization methods in post-independence India have been influenced by a preference for heavy industry. Because of this, the Micro, Small, and Medium Enterprises (MSMEs) sector was given less weight until it became apparent how much it was contributing to the Northeastern region's industrial development and the overall growth of the Indian economy. Small and medium-sized enterprises (SMEs) account for more than 90 percent of the total enterprises in most economies and account for the highest levels of employment growth and a significant portion of industrial output and exports, according to the latest CII report, Creating Competitive Small and Medium Enterprises. SMEs are essential to the nation of India's industrial sector as a whole. Small and Medium Enterprises (SMEs) play an important role in achieving the national goals of growth with equality and inclusion. Over the past two decades, the Northeast has seen satisfactory economic growth, with an average annual growth rate of more than 8 percent. The spectacular growth of the service sector has contributed to the region's high growth. However, agriculture has suffered greatly over the years due to unseasonal monsoons and inadequate mechanization offers. This has led to manufacturing being dominated by small and medium enterprises (SMEs). Assam outperforms the rest of the NE states when it comes to entrepreneurship development. With its high-end market and good connectivity to the road and rail networks, the state is well-positioned to lead the way in terms of business development and attracting large-scale investment. However, the other six states also offer a good environment for small and medium enterprises (SMEs), as the local population is very concerned about environmental degradation. The local population prefers light industries, which are less polluting than heavy and heavy industries, which lead to a lot of disputes between the stakeholders of these industries and damage the ecosystem. A couple of years ago, the FICCI (Federation of Indian Commerce and Industry) and KAF conducted a study titled ‘State level Reforms: increasing investments in the northeast. With the promising opportunities in the Northeast on the horizon, industry chambers like the PHDCCI, CII and FICCI have been increasingly focusing on this region in order to score well. This is due to the infusion of energy in small and medium enterprises, backed by local entrepreneurship skills.
OBJECTIVES OF THE STUDY
1. To examine how far east India's industrial development has advanced.
2. Researching the different industrial policies for the Northeast.
3. To talk about the different reasons why the industrial sector is lagging behind and offer some recommendations for how to get the northeastern area more industrialized.

METHODOLOGY
The suggested study is analytical and descriptive in nature, with a primary focus on secondary data. Secondary sources such as books, magazines, research journals, reports, and relevant websites have been used to gather data. To keep the study straightforward, only pertinent secondary data are collected for it. In the Northeast right now, industrialization is still in its infancy. The only significant industries currently operating in the area are those of tea, coal, petroleum, paper, and cement. The tea industry also employs a sizable labor force. With the establishment of tea plantations and the oil industry in the upper Assam region during the nineteenth century, the region's industrial development on the modern line began more than a century ago. Regrettfully, the region was unable to attain the intended level of industrial development in the ensuing periods, even with its rich natural resources and historical background. As a result, even after completing so many decades of planning, NER still lagged behind many other states in the nation in the development of this sector. Furthermore, the primary causes of this region's industrial backwardness are its geographic isolation and the lack of significant industrial investment during the previous plans. Due to the high risk associated with investment, there is very little private industrial investment in the NE region as a whole. These risks include market risk as well as political risk due to the region's status as a border region. Natural risks come from disasters like floods, droughts, landslides, earthquakes, and political unrest. The region's geographical isolation deters private investment from other parts of the nation, a situation that is made worse by traffic jams. Infrastructure development and industrial development are closely related, and the region's infrastructure development status is also not good. But recently, efforts have been made to ramp up all industrial activities in order to build a solid industrial base and job opportunities by offering a variety of growth factors, including things other than simply removing the inadequate infrastructure that currently exists. These should supply the missing pieces needed to propel the region's industrial growth to a significant degree in the near future.

There are many different resources available in the Northeast. The industries of the Northeast can be broadly categorized under:
1. Agro Based Industries: Include the tea, textile, and grain mill products (rice, oil, and flour) industries, as well as the food processing industry, based on the resources that are available in the region.
2. Mineral-Based Industries: The northeastern region's mineral-based industries include the steel, aluminum, and railroad workshops. Additionally, the industries based on natural gas and petroleum oil are non-metal based.
3. Forest-Based Industries: Include the sawmill, paper, plywood, and hard board industries.
4. Other industries: Comprise the chemical, fertilizer, and power generation industries.

Despite the Northeast's lack of development, some large and medium-sized industries have emerged there, mainly in Assam and Meghalaya. Nevertheless, these industries are extremely rare. The state of small-scale, cottage, and village industries in this area is not up to par. In this region, there are approximately 41,309 small industrial units and roughly 178 large and medium industrial units. In this region, the most
developed industries are those that produce tea, petroleum, fertilizer, paper, cement, etc. Assam is home to the majority of the large-scale industries in this region.

Small-scale industries are crucial in an underdeveloped area like North-East India. These northeastern states offer a wealth of opportunities for the growth of small-scale industries. In addition to utilizing available resources, the growth of small-scale industries is bringing in more money and providing sufficient job opportunities for the local populace. The North-Eastern states' agrarian economy greatly depends on cottage and small-scale industries. These kinds of rural agricultural families are obtaining secondary employment from these village industries because they can be operated by rural families with little capital and common tools and equipment.

We note that the share of the Northeast in the total GDP of India decreased steadily from 1993-94 to 2019-20 (Fig 1). The share of NE (except Mizoram in 1993-94) in the GDP of India decreased from 3.7% to 2.8% in the current year (2019-20). There were some signs of a rise in this share in the year 1998-99 but it soon started declining and seems to plateau in the year 2007-08 (Fig 1). In fact, it can be said that the falling share of Northeast in India's total GDP is due to the falling share of Assam in the same year (Fig 1). The almost parallel difference over the years indicates that the Northeast missed out on the growth of India's economy after 2003-04.

![Economy of the Seven NE States & Assam as Percentage of All Indian States](image)

**Fig. 1: Economy of North-East States in comparison to all Indian States.**

[Source: The Print]

However, it is important to note that the percentage ratio between the rest of the Northeastern States’ Gross State Domestic Product (GSDP) and that of Assam has been increasing over the years (Fig. 2). For example, in 1993-94, all six Northeastern states combined accounted for 35 per cent of the total Assam economy. This percentage has steadily increased over the years to now more than two thirds (67 per cent). The sudden dip in 2015-16 is due to the increase in the Assamese GSDP, rather than a decrease in the other six Northeastern states. Looking at sector-level data, we can see that the sudden dip is mainly attributed
to the industrial sector, which saw a sudden increase from 29 per cent in 2014-15 to 35 per cent in 2015-16. The industrial sector’s share rose from 10.9 percent to 13.2 percent. Further research is required to understand the sudden change in this one-year period.

![Economy of six North-East States combined as percentage of that of Assam](image1)

**Fig. 2:** Economy of six North-East States in comparison to Assam.

*Source: The Print*

The above discussion provides an insight into the economic contribution of the Northeast to India as well as the contribution of the Northeast states to the GDP of Assam as a whole. We have divided the Gross State Domestic Product (GSDP) by the population of each state to get the Per Capita Income (PPI). Then, we plot this over a 4-decade period as a percent of the GDP of all India. In the 1980’s, six out of the seven northeastern states (excluding Tripura) had a Per Capita Income that was higher than the national average. In recent years, the Per Capita Income has been steadily declining for Assam and Nagaland. In addition, the Per Capita Income of Mizoram and Manipur has been steadily increasing over the same period. It is worth noting that both Mizoram and Tripura, two of the northeastern states, are the gatekeepers of trade and road transportation with Bangladesh under the Look East Policy of India.

![Per Capita Income of all North-East States (In Percentage)](image2)

**Fig. 3:** Per Capita Income of all North-East States (In Percentage)

*Source: The Print*
Within the northeast states, we use Assam (as in the above GSDP exercise) for a better regional view. In the early 80s, the smaller northeastern states had less per capita income than Assam. After that, per capita income increased significantly in subsequent years. Let’s look at the performance of two of them (Tripura, Mizoram). In 1980-81, Tripura’s per capita income was 48.7 per cent less than Assam’s. Over the past four decades, it has increased by about one-and-a-half times to 145 per cent.

VARIOUS INDUSTRIAL POLICIES TAKEN BY GOVT. OF INDIA

1. Assamese industrialization has been somewhat impacted by the New Industrial Policy, 1997 for the NER. Despite the controversy surrounding the excise duty exemption, the new policy has led to the establishment of 461 units with a Rs. 977 crore investment, creating jobs for 33,763 people in the entire Northeast Region. Assam received the largest investment of Rs. 874 crore out of all the money made after the new policy was announced. As a result, 400 medium- and large-sized units were established in Assam, offering plenty of job opportunities to 30,464 workers.

2. Sikkim was incorporated into the first New Industrial Policy in 2007, which will enable this tiny Himalayan state to benefit from the policy's industrialization provisions.

3. The CENVAT paid under NEIIPP, 2007 is greater than the excise duties due on the finished products because it is paid on the raw materials and intermediate products used in the production of finished goods.

4. The NEIIPP, 2007 has been instrumental in advancing key industries such as information technology, services, biotechnology, and power.

5. Nevertheless, sufficient incentives have been provided by the NEIIPP to support the micro and small-scale industries within the NER.

CHALLENGES FACED BY NORTH-EAST REGION OF INDIA IN INDUSTRIALISATION AND ECONOMIC DEVELOPMENT

1. **Insufficient capital formation:** The rate of capital formation in the area is extremely low. The volume and rate of savings in this region are extremely low due to the extremely low level of per capita income. It is possible that the rural sector has significant accruals of extra income. However, there are obstacles that come with implementing these incremental rural incomes. Therefore, a major obstacle to the region's industrialization is the lack of capital formation.

2. **Capital Shyness:** This slow rate of industrialization in the area is also due to capital shyness. Investors are unwilling to put their money into NER, whether they are local or foreign. Private investment from other regions is hindered by the region's high production costs and further geographical isolation.

3. **Inadequate economic and basic infrastructure:** The region still lacks adequate development when it comes to the economic and basic infrastructure, which includes things like power, transportation, and communication. The NER's infrastructure development is not as advanced as that of other states. For instance, Sikkim and Tripura are still behind Maharashtra despite having progressively caught up and exceeded the national average. The main cause of the divide between the Northeast and the rest of the nation is this disparity in infrastructure development. Inadequate infrastructure and a dearth of investment exacerbate one another and impede regional economic growth. The lack of these prerequisites, which are essential to improve trade and spur growth and development in the region, prevents economic ties from advancing even in the face of organic cultural ties with Southeast Asia.
4. Lack of entrepreneurial motivation: The locals in the area lack motivation to pursue their own business ventures. The level of local initiative and enterprise is not keeping up with what is required for the region to successfully industrialize. The region's industrial development would not be complete without the active entrepreneurial motivation of the local population.

5. Absence of credit facilities: This is one of the main reasons the region's industry is lagging behind. The issue is more intricate, especially for the region's small and medium-sized businesses. By providing credit on lenient terms, banks and other financial institutions in the area are not assisting in the establishment of small and medium-sized industrial projects. It is one of the primary causes of the Northeastern region's inadequate industrialization.

6. Excessive cost structure: Compared to other Indian states, the region's production cost structure is extremely high. Industry profit outlooks are always negatively impacted by high cost structures. The primary cause of this is the region's higher price level when compared to other states. Higher unit cost transportation further exacerbates this by acting as a deterrent to outside private investment in the state.

7. Investment Risk: Because the area is bordered, there is a significant risk associated with investments due to political unrest and natural disasters. Regrettably, NER is among the few states that occasionally experience natural disasters like floods and droughts. Furthermore, the region's law and order situation is frequently disturbed rather than stable due to a variety of sociopolitical factors. The issue of insecurity for the new industrial projects in the area was brought up by these reasons.

8. Lack of market: The region does not yet have a developed market for the marketing of goods produced by NER industries. The industries find it difficult to market their goods as a result. As a result, these large and medium-sized businesses were dependent on external markets. Additionally, there is a deficiency in effective administrative frameworks for industrialization.
POTENTIALITY OF INDUSTRIAL DEVELOPMENT IN NORTH-EAST REGION

With nearly 40% of India's hydropower potential and about 34% of the nation's water resources, the North-East region is rich in natural resources. Even though the process of economic liberalization had little effect on the industrial development of Northeastern Region, the region continues to have promising opportunities for the growth of various industries, including the tea, tourism, and sericulture sectors.

1. Border Trade: With borders shared by Bangladesh, Bhutan, China, Myanmar, and Nepal, India's North-East Region (NER) enjoys a geostrategic location that facilitates international trade. Natural resources and biodiversity abound in the area. Nonetheless, the NER still faces obstacles to its growth, including ethnic conflicts, cross-border migration, armed insurgencies, and movements calling for the creation of independent federal states and autonomous regions. The central government has launched a number of initiatives in an effort to bring the NER back into line with the nation's mainstream political and economic objectives. The Act East Policy (AEP) is the most prominent of these. Thus, it's critical to comprehend how these programs and policies have supported NER's economic growth. The Northeastern states are strategically located to connect India to the burgeoning Southeast Asian markets. The region is home to a number of highly influential input market catalysts, including social capital (diversity, cultural richness), physical capital (potential energy supply hubs), human capital (cheap, skilled labor), and natural capital (minerals, forests). The NER is at the center of the AEP, which focuses on building India's land bridge to Southeast Asia so that the local economies can take advantage of the production networks. In this sense, improving trade and connectivity between the NER and India's neighboring countries can be greatly aided by subregional forums like the Association of Southeast Asian Nations (ASEAN) and the BIMSTEC initiative for multisectoral technical and economic cooperation. 95% of India's trade with its neighbors in East and Southeast Asia, according to NITI Aayog, consists of goods from non-NER regions. In terms of India's international trade with its neighbors, not a single state in the Northeast plays a major role. This needs some thought. Given its ideal soil and other agroclimatic factors, the NER has enormous potential in agricultural trade, for instance. According to estimates, there is a sufficient marketable surplus of different agricultural products for exports. In addition, FDI inflow into the Northeast Region is incredibly low when compared to other states. This reflects the unevenness of India's improvement in indices like the Logistics Performance Index and the Ease of Doing Business. The Indian business economy is dominated by a small number of states, including Delhi, Gujarat, Karnataka, and Maharashtra, as well as a few major corporations. The NER is consequently bound to be in a "low-level equilibrium" trap relative to the rest of the nation.

In order to assess the export potential of the Northeastern states and give the people living in this area affordable access to high-quality goods from overseas markets, it is important to carefully examine the 2010 ASEAN-India Free Trade Agreement and the recently proposed BIMSTEC Free Trade Agreement. India's two biggest trading partners among the BIMSTEC countries are Bangladesh and Thailand. Estimates of the NER's state-by-state trade with Bangladesh are shown in Fig. 5. It demonstrates that Meghalaya is a net exporter of goods to Bangladesh, whereas Tripura is a net importer of goods. These approximations pertain to the official trade, which has been recorded at the different Land Customs Stations (LCS). Nonetheless, a number of studies indicate that the NER and its neighbors, including Myanmar, engage in a sizable amount of informal trade. With less than 1% of all land-based trade taking place in Myanmar, India has a very small share compared to China and Thailand, which control the
majority of the country's land-based border trade. In terms of land-based trade, even Bangladesh has a bigger share than India.

Fig. 5: BOT with Bangladesh (In INR millions)
[Source: Intensity and Pattern of Border Trade in India’s Northeast, Foreign Trade Review 51 (2016).]

2. Tourism: Among the industries in which the region excels is tourism. There is fierce competition in this market, where travellers have many options and seek out value for their money. This area has the potential to develop into a hub for ecotourism and adventure travel due to its abundant natural beauty, healthy climate, and incredibly rich cultural heritage. The tourism industry encompasses a wide range of commercial endeavours associated with drawing in, welcoming, housing, overseeing, and providing for visitors. Hotels, eateries, transportation companies, and a number of other associated businesses are among them. The growth of this sector would foster international understanding and national integration, create jobs and income, and offer potential consumers for locally produced goods, particularly handloom and handicraft items, which are primarily dyed due to limited market access. More jobs can be created by the tourism industry per rupee spent than by any other industry. It can provide jobs for unskilled to highly specialized skilled workers in the most remote locations, aiding in the achievement of plan objectives. Additionally, it would increase the market for goods produced locally. However, none of this would be feasible without a strong sense of regional participation as well as well-developed transportation and communication infrastructure. Numerous wildlife sanctuaries can be found in Northeastern India, including the one-horned rhinoceros-rich Kazi Ranga National Park, Manas National Park, Nameri, Orang, Dibru Saikhowa in Assam, Namdapha in Arunachal Pradesh, Balpakram in Meghalaya, Keibul Lamjao in Manipur, Intanki in Nagaland, and Khangchendzonga in Sikkim. Northeastern tribes have distinct cultures. Popular celebrations include Sikkim's Pang Lhabsol and Nagaland's Hornbill Festival.

3. Sericulture: In the Northeast, sericulture is a significant cottage industry. Since the beginning of time, sericulture has been a significant labour-intensive and agricultural sector in the Northeast. Assam takes pride in its long history of producing mulberries, Muga, and eri. Since Assam produces more than 97% of the world's Muga (Golden silk) silk, the state holds a monopoly in this regard. Around 11411 villages employ 2.8 lakh families currently through sericulture activities. Thus, the government ought to give sericulture's continued development more priority.
REMEDIAL MEASURES AND GOVT. ACTION TO PROMOTE INDUSTRIALISATION IN NORTH-EAST REGION

1. **Rail, Road, and Air Connectivity:** Plans are underway to build 4,000 km of roads, 20 2,011 km railway projects, and 15 air connectivity projects.

2. **Improved Connectivity through National Waterways:** To improve connectivity, National Waterways NW-1 on the Ganges, NW-2 on Brahmaputra, and NW-16 on Barak rivers are being developed. India's and Bangladesh's riverine systems can be used for all kinds of transportation since water travel is the least expensive compared to air, road, and rail networks.

   - There are now ten "Indo-Bangladesh Protocol Routes," up from eight previously.
   - The entire stretch of Assam between Sadiya and Dhubri is being developed alongside the Brahmaputra River in order to improve connectivity.
   - A multimodal hub is being built in Guwahati that will have eleven floating terminals on the Brahmaputra, four tourist jetties, and a ship repair port at Pandu.

3. **Eastern Waterways Connectivity Transport Grid:** It will provide 5,000 km of navigable waterways to link the northeast and the rest of India.

4. **The North Eastern Region Power System Improvement Project,** or a significant step toward the region's economic development by fortifying its intra-state distribution and transmission networks. Projects pertaining to broadband connectivity, 5G, mobile networks, and power transmission and distribution are also receiving priority from the government.

5. **The PM-DevINE, or Prime Minister's Initiative for North-East Development:** It was declared in the 2022–2023 Union Budget. This will support social development initiatives based on the perceived needs of the Northeast and infrastructure in the spirit of PM Gati Shakti.

GOVT. SCHEMES AND INITIATIVES

1. The Department of Development of the North-Eastern Region (DoNER): was founded in 2001 it is the Ministry of Development of the North-Eastern Region (DoNER). In 2004, it was promoted to full ministry status.

2. **Initiatives Concerning Infrastructure:** Bharatmala Pariyojana (BMP), which focuses on road infrastructure. The Regional Connectivity Scheme (RCS)-UDAN aims to lower the cost of flying.

3. **Water connectivity:** will be developed through the Kaladan Multi-Modal Transit Project in Myanmar. BCIM (Bangladesh-Myanmar-China-India-Myanmar) Corridor. Thailand, Myanmar, and India Trilateral Highway.

4. **Promote Tourism:** The Ministry of Tourism's Swadesh Darshan Scheme promotes travel.

5. **North-East Industrial Development Scheme (NEIDS):** The government is mainly encouraging the MSME Sector through this scheme in order to promote employment in the North-East States.

6. **Bamboo Mission:** For the Northeast, the National Bamboo Mission holds particular importance.

7. **North-Eastern Region Vision 2020:** Under this document, various Ministries, including the Ministry of DoNER, have launched a variety of initiatives, with the overall goal of bringing the North-East region up to speed with other developed regions.

8. **The Digital North-East Vision 2022:** places a strong emphasis on using digital technologies to improve living conditions and change people's lives in the northeast.
CONCLUSION

There is little doubt that India's Northeast region has enormous potential for both cultural and economic exchange. Good diplomatic relations, especially with neighboring countries, require both of these elements. Bangladesh and Myanmar, India's closest neighbors, have been instrumental in fostering and growing trade with the Northeastern states. Due to its geographic isolation from the rest of the nation, the area suffers from logistical issues that impede trade with its neighbors. These issues can be largely resolved by taking advantage of the chances presented by India's membership in several important subregional economic forums, like BIMSTEC and ASEAN, as well as by making use of the region's social, physical, human, and natural capital. Cooperation with foreign investors—like Japan—can also contribute to the region's economic expansion. Tripura's role in fostering better relations with other countries cannot be overlooked, particularly in light of Bangladesh's emergence as one of India's most significant trading partners. The state has made significant progress in the economy by creating SEZs and building necessary infrastructure. Lastly, authorities should make sure that regional social cohesion and the environment are not sacrificed in the name of economic growth. Obtaining the consent of the local population is crucial, as is putting policies into place that take their needs and welfare into account. As the world economies struggle to recover from the global recession caused by the pandemic, India should address the supply-chain challenges and contain China's aggressive growth in the region. The NER can act as a driving force in shaping India's foreign policy towards its Southeast Asian neighbours. However, this will require addressing the socio-economic, political and security issues that go hand-in-hand with the NER's distinct geostrategic character.

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