

Infrastructure Development and Regional Disparities in North-East India: A Comparative Assessment of Physical, Social and Financial Infrastructure

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Abstract

This paper presents a comprehensive assessment of infrastructure development in the North East Region (NER) of India, with particular emphasis on the state of financial infrastructure and its interlinkages with transport, power, education, and health systems. Employing a multi-dimensional analytical framework, the study examines banking penetration, credit availability, ATM and digital infrastructure, and financial inclusion under the Pradhan Mantri Jan Dhan Yojana (PMJDY) across the eight North Eastern states over the period 2016–2025. The analysis reveals a region in transition—characterised by substantial policy attention, significant central investment, and measurable progress across multiple sectors, yet constrained by persistent inter-state disparities, uneven implementation capacity, and the enduring challenges of geography, demographics, and historical marginalisation. Key findings indicate that banking penetration has improved steadily across all states, with Sikkim and Mizoram leading in branch density per lakh population, while Manipur and Assam continue to lag. The regional Credit–Deposit ratio has risen substantially from 39.3% to 58.0%, signalling stronger financial intermediation, though the region remains well below the national average and exhibits marked inter-state variation. ATM density and digital financial infrastructure reveal a similarly heterogeneous landscape, with smaller states enjoying relatively better per-capita access. The PMJDY has expanded access to formal banking, bringing millions of previously unbanked individuals into the financial mainstream; yet high rates of account dormancy and low average balances underscore that access alone does not equate to meaningful inclusion. The central insight emerging from this study is that infrastructure development in the North East cannot be understood solely through the lens of physical expansion or financial access. Rather, it must be evaluated in terms of depth, efficiency, and inclusiveness. The policy implications are clear: targeted investments in underserved areas, incentives to enhance local credit deployment, sustained efforts in financial literacy and digital capability, and strengthened monitoring mechanisms are essential to transform infrastructure from a physical asset into a catalyst for sustainable, equitable development.

Keywords: Infrastructure Development, North-East India, Regional Disparities, financial Inclusion.

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Published: 07 September 2026

DOI: <https://doi.org/10.70558/IJSSR.2026.v3.i5.301291>

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1. Introduction:

The Northeastern Region (NER) of India—comprising Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura—is one of the country’s most culturally and ecologically distinctive areas. Home to more than 200 ethnic groups with diverse languages and social systems, the region occupies roughly 7.97% of India’s land area while accounting for 3.78% of its population (Ministry of Home Affairs, 2025). Geopolitically, the NER is unique: it shares about 5,484 km of international boundary with Bangladesh, Myanmar, China, Bhutan, and Nepal, and serves as India’s gateway to Southeast Asia (Government of India, 2020; Das & Baruah, 2019).

Historically, the Northeast has been characterized as a resource-rich yet infrastructure-constrained frontier. Poor connectivity, difficult terrain, and administrative challenges constrained market access and public service delivery, contributing to persistent regional disparities (Planning Commission, 2014; Bhattacharjee, 2017). Scholars note that these structural constraints have affected economic diversification, human capital formation, and resilience to shocks (Baruah, 2012; Deka & Kalita, 2021). At the same time, the region’s strong social capital and traditional institutions have supported local livelihoods and adaptive strategies (Singh & Thapa, 2018).

Over the last decade, national policies such as the Act East Policy and targeted central schemes have shifted attention and resources toward the Northeast, resulting in substantial investments in roads, railways, air connectivity, power, and digital infrastructure (Ministry of Development of North Eastern Region, 2022). Recent evidence suggests improvements in inter-state and cross-border connectivity and rising uptake of digital financial services, though gains are uneven across states (NITI Aayog, 2023; World Bank, 2021). These developments have generated new opportunities for trade, tourism, and value-added agriculture, while also exposing gaps in social-service delivery and last-mile access.

This paper analyses state-level evidence and field studies to compare physical (transport, energy, digital), social (health, education), and financial (banking, digital finance) infrastructure across the eight states. By highlighting how these domains interact and identifying persistent bottlenecks, the study proposes state-sensitive, integrated policy measures to translate infrastructure investments into inclusive, resilient development across the Northeast.

2. Review of Literature:

A growing body of literature shows that infrastructure is not just a physical necessity; it is a foundation for growth, connectivity, and opportunity. Early studies by Aschauer (1989, 1990) and Munnell (1992) established that public capital raises productivity and supports long-run economic growth. Later cross-country evidence by Canning and Pedroni (2008) also showed that infrastructure and income reinforce each other over time. More recent work continues to underline that infrastructure can reduce transaction costs, improve market access, and support regional integration, but its benefits depend heavily on efficiency, governance, and actual utilization (Eakin & Schwartz, 1994; Lall, 1999).

In India, the importance of infrastructure for regional development has been widely recognized, but its distribution remains uneven. Timilsina, Sahoo, and Dash (2022) note that differences in infrastructure across Indian states are shaped not only by economic conditions, but also by fiscal strength, institutional capacity, and political priorities. Earlier studies by Ghosh and De (1998, 2004) found a strong link between infrastructure availability and state income, while Kundu et al. (1999) showed that infrastructure investment has not been spatially balanced, contributing to wider regional inequality. More recently, the World Bank study by Timilsina, Sahoo, and Dash (2022) reinforced the idea that infrastructure development is deeply uneven across states and cannot be explained by income alone.

For Northeast India, the literature consistently points to infrastructure deficits as one of the region's most persistent development challenges. Singh and Ningthoujam (2023) argue that the region continues to face major gaps in roads, railways, electricity, digital access, and social infrastructure, which limits both economic activity and human development. Similarly, Das and Dutta (2024) find that public infrastructure has a significant relationship with economic growth in Northeast India, confirming that better infrastructure can support regional development. At the same time, these gains are constrained by difficult terrain, remoteness, and institutional bottlenecks, which make implementation more difficult than in other parts of the country.

Recent studies have also examined financial inclusion in the region. Sahani and Sharmacharjee (2026) show that Northeast India still experiences wide state-level differences in financial inclusion, with some states performing much better than others in banking access and usage. Kadu, Pulu, and Gurung (2024) similarly highlight uneven financial inclusion and household credit patterns across the eight states. These findings suggest that financial infrastructure is not merely about bank presence, but about whether people can actually use formal financial services in a meaningful and affordable way.

3. Research Gap:

Although existing studies highlight the importance of infrastructure for economic growth, there is limited comprehensive research focusing specifically on the North Eastern Region (NER) of India. Most studies examine individual sectors such as transport or power in isolation, while integrated analyses covering physical, social, and financial infrastructure together remain scarce. Further, many studies rely on outdated data and do not adequately capture recent developments and emerging trends in the region. The dimension of financial infrastructure, particularly banking penetration, deposit mobilization, and digital financial services, has also received relatively less attention. Additionally, there is a lack of detailed comparative analysis among the eight Northeastern states despite significant inter-state variations. In this context, the present study addresses these gaps by providing a sector-wise, integrated framework for analyzing physical, social, and financial infrastructure, along with a comparative assessment of inter-state disparities and recent trends in infrastructure development in the region.

4. Objectives of the Study:

1. To analyse the status and sector-wise performance of physical, social, and financial infrastructure in the Northeastern states of India.

2. To examine inter-state variations and identify regional disparities in infrastructure development among the eight Northeastern states.
3. To assess trends, identify key challenges, and suggest suitable measures to address these challenges

5. Methodology:

The present study adopts a descriptive and analytical approach and is based entirely on secondary data obtained from reliable official and scholarly sources. These include reports and publications of the Reserve Bank of India (RBI), Press Information Bureau (PIB), Ministry of Road Transport and Highways, Indian Railways, Central Bureau of Health Intelligence, UDISE+, AISHE, and other relevant government documents, as well as books, journal articles, and research papers.

The study focuses on the Northeastern Region (NER) of India, comprising the eight states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura. It covers different time periods, depending on the availability of data, in order to capture both long-term trends and recent developments in infrastructure across the region. This helps in understanding how infrastructure has changed over time and how these changes vary across states.

The study uses simple statistical tools such as percentage analysis, trend analysis, and comparative analysis to interpret the data and draw meaningful conclusions. By examining physical, social, and financial infrastructure together, the methodology provides a comprehensive basis for assessing regional disparities in infrastructure development across Northeast India.

6. Discussion and Findings:

6.1 Physical Infrastructure

Physical infrastructure is the foundation of regional growth. It includes the essential systems that people depend on every day, such as roads, bridges, railways, airports, electricity, water supply, and communication networks. These facilities not only improve mobility and access but also support trade, public services, and overall economic activity. In the Northeastern Region (NER), the importance of physical infrastructure is even greater because difficult terrain, scattered settlements, and remote locations make connectivity more challenging than in many other parts of India. In this context, better infrastructure is not just a matter of convenience; it is a basic requirement for growth and integration (Singh and Ningthoujam, 2023; Das and Dutta, 2024).

6.1.1 Transportation Infrastructure in the North Eastern Region:

Transport infrastructure plays a crucial role in connecting the Northeast within the region, with the rest of India, and with neighbouring countries in South and Southeast Asia. Because of its strategic location and international borders with Bangladesh, Myanmar, Bhutan, Nepal, and China, the region has long been seen as a gateway to Southeast Asia, but also as a difficult area to integrate because of weak connectivity (Rahman, 2022; Timilsina, Sahoo and Dash, 2022). In recent years, the central government has given greater attention to improving

connectivity through roads, railways, airports, and inland waterways (Ministry of DoNER, 2022; PIB, 2024).

Transport planning in the Northeast needs to work at three levels: within the region itself, between the region and the rest of India, and across borders with neighbouring countries. This multi-layered approach is necessary because the region's rugged topography and dispersed population make transport development both costly and complex. Roads remain the most important mode of transport in most parts of the Northeast, while rail and air connectivity continue to expand gradually. Studies by Nandy (2014) and Singh and Ningthoujam (2023) show that road transport dominates the region, while other modes still lag behind due to geographic and financial constraints.

State-wise differences remain sharp. Assam has the most developed road network in the region, while Arunachal Pradesh, Mizoram, and parts of Meghalaya and Tripura continue to face serious connectivity problems because of steep hills, deep valleys, and dispersed settlements (Nandy, 2014; Rahman, 2022). As a result, transport infrastructure in the Northeast has expanded, but unevenly.

6.1.1(a) Roadways:

Road transport is especially important in the Northeast because much of the region is hilly, remote, and sparsely populated. In such conditions, railways and waterways cannot fully meet the transport needs of people and goods, making roads the most practical and widely used mode of connectivity (Nandy, 2014).

Among the eight Northeastern states, Assam has the most extensive road network. Its roads include National Highways, State Highways, PWD roads, district roads, and Panchayat roads. In contrast, states such as Arunachal Pradesh, Meghalaya, Nagaland, Mizoram, and Tripura face greater difficulties in road construction because of steep hills, deep valleys, and natural barriers. In Arunachal Pradesh, for example, most mountain ranges run north–south, which makes east–west connectivity especially difficult. As a result, towns are connected mainly through long north–south routes such as Tezpur–Bomdila–Tawang and North Lakhimpur–Kimin–Ziro–Daporijo. Manipur, despite having a comparatively larger road network, still faces uneven connectivity in remote areas. Mizoram's parallel hill ranges and deep valleys also make road development difficult, while Tripura remains relatively isolated, with National Highway 44 serving as its principal all-weather link to the rest of the Northeast. Even today, several eastern hilly areas of Tripura continue to face weak road access.

Table-1

Rank	State	Road Network Length (km)	% Share of Road Network Length	% Regional Share of Road Network Length
1	Assam	4,50,290 km	7.08%	65.7%
2	Arunachal Pradesh	52,916 km	0.83%	7.72%

3	Meghalaya	44,241 km	0.69%	6.45%
4	Nagaland	37,844 km	0.59%	5.52%
5	Tripura	35,340 km	0.55%	5.15%
6	Manipur	32,694 km	0.51%	4.77%
7	Mizoram	19,418 km	0.30%	2.83%
8	Sikkim	12,296 km	0.19%	1.79%

Source: Ministry of Shipping, Road Transport & Highways, Government of India, 2020

The following table shows the changes in the length of National Highways in the North-Eastern states from 2000 to 2020. It helps us see how road connectivity has improved, how states have developed at different speeds, and where gaps still exist. Overall, it gives a simple picture of long-term road development in the region.

Table -2

States	2000	2005	2010	2015	2020	Annual growth rate (2000-2005 in %)	Annual growth rate (2005-2010 in %)	Annual growth rate (2010-2015 in %)	Annual growth rate (2015 to 2020 in %)
Arunachal Pradesh	392	392	1992	2513.05	2537.40	0.00	81.63	4.76	0.19
Assam	2836	2836	2836	3811.67	3908.50	0.00	0.00	6.09	0.51
Manipur	954	959	959	1745.74	1750.30	0.10	0.00	12.73	0.05
Meghalaya	717	810	810	1204.36	1155.60	2.59	0.00	8.26	0.81
Mizoram	927	927	927	1381	1422.50	0.00	0.00	8.30	0.60

Nagaland	369	494	494	1150.0 9	1547.7 0	6.78	0.00	18.41	6.01
Sikkim	62	62	62	309	463.00	0.00	0.00	37.88	9.07
Tripura	400	400	400	805	853.80	0.00	0.00	15.01	1.01
North east	665 7	688 0	848 0	12920	13638. 8	0.67	4.65	8.79	1.01

Source: Ministry of Shipping Road Transport & Highways, Government Of India, 2009 and Ministry of Road Transport & Highways, Government of India 2010-20

6.1.1(b) Railway Infrastructure:

Railways in the Northeast have a long but uneven history. The first passenger train in the region started in 1881 on the *Dibrugarh–Sadiya* route, and the Northeast Frontier Railway was established in 1958 (Indian Railways, 2024). Since then, railway expansion has gradually improved connectivity in Assam, Tripura, Nagaland, Arunachal Pradesh, and Mizoram, although many areas still remain outside the rail network. Recent policy focus has accelerated railway investment, especially after 2014, when the region received a much larger share of railway funding and several long-pending projects were revived (Indian Railways, 2024; PIB, 2024). Nearly ₹77,000 crore worth of projects are currently underway—making it the biggest railway push the region has ever seen.

Research suggests that railway development in the Northeast is important not only for passenger movement but also for freight, tourism, and regional integration (Das and Dutta, 2024). However, progress has been slow in some states because of difficult terrain, land acquisition challenges, and project delays. This shows that railway expansion in the region is still a work in progress, even though it has become one of the main priorities of infrastructure policy.

The railway network length of the eight states of the North Eastern Region (NER), along with their percentage share of India's total road network, i.e., 69,181 km, is presented in the table below:

Table-3

Rank	States	Railway Network Length (km)	% Share of Railway Network Length	% Regional Share of Railway Network Length
1	Assam	2,519 km	3.64%	88.9%
2	Tripura	265 km	0.38%	9.36%
3	Manipur	13 km	0.018%	0.45%

4	Nagaland	11 km	0.015%	0.38%
5	Arunachal Pradesh	12 km	0.017%	0.42%
6	Meghalaya	9 km	0.013%	0.31%
7	Mizoram	2 km	0.002%	0.07%
8	Sikkim	-	-	-

Source: *Indian Railways data, 2024*

The table below shows how the length of Railway tracks in the North-Eastern states has changed from 2014 to 2024. It helps us see how railway connectivity has improved, how states have developed at different speeds, and where gaps still exist. Overall, it gives a simple picture of long-term railway development in the region.

Table 4

States	2014	2016	2018	2020	2022	2024
Arunachal Pradesh	12	12	12	12	12	12
Assam	2,468	2,443	2,465	2,519	2,571	2,571
Manipur	1	1	13	13	13	56
Meghalaya	-	-	9	9	9	9
Mizoram	2	2	2	2	2	1
Nagaland	13	11	11	11	25	25
Sikkim	-	-	-	-	-	-
Tripura	151	193	216	265	265	265

Source: *Indian Railways data, 2024*

From the above table it is seen that, although railway connectivity in the Northeastern Region has improved over time, the pace and scale of development remain uneven across states. Assam continues to be the railway backbone of the region, with the largest and most developed network. Its rail length increased from 2,468 km in 2014 to more than 2,570 km in 2024, supported by major gauge conversion, bridge construction, and doubling projects. For example, the *Bogibeel Bridge* and the *Lumding–Silchar* and *Tetelia–Kamalajari* links have strengthened both passenger and freight movement. Arunachal Pradesh, by contrast, still has only 12 km of rail length throughout the period, reflecting the severe constraints created by its steep Himalayan terrain and fragile geology. Manipur has seen one of the most important

changes, with the *Jiribam–Imphal* line gradually moving toward completion, which will give the state direct rail access to the national network for the first time. Tripura has also made strong progress, with its network expanding from 151 km to 265 km, and with the extension to *Sabroom* improving its strategic position. Nagaland and Mizoram have recorded modest but important gains, while Meghalaya remains limited to the Mendipathar line. Sikkim is still awaiting operational railway connectivity, although the *Sevok–Rangpo* project is under construction. Overall, railway development in the Northeast shows clear progress, but it remains shaped by terrain, cost, and implementation delays.

6.1(c) Airways

Air connectivity has expanded more visibly and has become especially important in a region where difficult terrain often makes other forms of transport slow and limited. Assam remains the main aviation hub, with seven active airports, including Guwahati, Dibrugarh, Silchar, and the newly opened Rupsi Airport. The *Lokpriya Gopinath Bordoloi* International Airport in Guwahati serves as the region's main gateway, linking the Northeast to major Indian cities and, to some extent, international destinations. Manipur's Imphal airport has grown in importance and is now one of the busiest in the region. Arunachal Pradesh has also improved accessibility through airports at *Itanagar*, *Pasighat*, *Tezu*, and *Ziro*, which are particularly valuable for remote and border areas. Tripura, Mizoram, and Meghalaya have all benefited from improved airport connectivity—for instance, *Lengpui* Airport in Mizoram and Shillong Airport in Meghalaya have improved regional access—while Nagaland continues to depend mainly on Dimapur. Sikkim's *Pakyong* Airport stands out as a major achievement, especially given the state's difficult high-altitude terrain. In comparison with railways, air transport has developed faster and has played a stronger role in reducing isolation, though its benefits are still concentrated in a few states and major towns.

6.2 Power Infrastructure in the North Eastern Region:

The power sector plays a crucial role in shaping development outcomes in the North Eastern region of India. Given the region's river system, mountainous landscape and growing demand for electricity, power infrastructure has become central to both economic activity and social progress. At the same time, differences in geography, population density and industrial development have created uneven patterns of electricity demand across the 8 states.

The table presents the state-wise power requirement in the Northeastern Region of India for the period 2010 to 2025, expressed in net crore units. For clearer interpretation, the data have been grouped into three phases: 2010–2015, 2015–2020, and 2020–2025. The overall pattern shows a steady rise in electricity demand across the region, reflecting growing consumption, wider electrification, and gradual expansion of economic activity. By 2020–2025, total power requirement had risen to around 9,764 net crore units, indicating substantial growth over time.

Among all the states, Assam consistently records the highest power requirement throughout the period. Its demand increases in each phase, which can be linked to its larger population, higher level of urbanisation, and stronger industrial and commercial base. Meghalaya and Tripura also show noticeable changes in electricity demand. Meghalaya declines slightly from

932 net crore units in 2010–2015 to 918 in 2015–2020, before rising again to 1,082 in 2020–2025. This suggests a temporary slowdown followed by renewed growth. Tripura, on the other hand, shows a sharp rise from 538 to 884 between 2010–2015 and 2015–2020, followed by a slight decline to 824 in 2020–2025. Even with this fluctuation, its overall demand remains much higher than in the initial period.

The remaining states—Arunachal Pradesh, Manipur, Mizoram, Nagaland, and Sikkim—have lower overall demand, but their requirement also rises gradually over time. This reflects the combined effect of rural electrification, development initiatives, and increasing use of electricity in households and local activities. Overall, the data suggest that electricity demand in the Northeast is rising steadily, though the pace and pattern differ across states depending on population, economic activity, and infrastructure growth.

Table 5: State wise availability of power in North Eastern India (2010-2025; in net crore units)

State	2010-2015	2015-2020	2020-2025
Arunachal Pradesh	293	378	458
Assam	3403	4624	5779
Manipur	297	430	510
Meghalaya	932	918	1082
Mizoram	209	277	343
Nagaland	298	401	477
Sikkim	201	245	291

Table 6: State wise analysis of power capacity, requirement and availability in North Eastern India (2020-25; in net crore units)

State	Installed capacity potential	Requirement	Availability	Deficit	Deficit %	PLF %
Arunachal Pradesh	3386	458	453	5	1.1%	13.4%
Assam	8671	5779	5730	49	0.8%	66.1%
Manipur	1155	510	508	2	0.4%	44%
Meghalaya	2732	1082	1061	21	1.9%	38.8%

Mizoram	1063	343	340	3	0.9%	32%
Nagaland	884	477	440	37	7.8%	49.8%
Sikkim	3248	291	286	5	1.7%	8.8%
Tripura	2876	824	824	0	0.0%	28.6%
Total NER	24015	9764	9642	122		

The table presents a clear picture of the power situation in the Northeastern Region by showing five important indicators: installed capacity, power requirement, actual availability, deficit, and Plant Load Factor (PLF). Together, these measures help explain how much electricity the region can produce, how much it needs, how much is available in practice, and how efficiently the available capacity is being used.

The data reveal sharp interstate differences. Arunachal Pradesh has a very high installed capacity of 3,386 units, yet its requirement is only 458 units and availability is 453 units. Although the deficit is marginal at 1.1%, the PLF is only 13.4%, indicating that much of its hydropower potential remains underutilized. Sikkim shows a similar pattern: installed capacity stands at 3,248 units, while requirement and availability are only 291 units and 286 units respectively, and PLF is just 8.8%. These figures suggest that high capacity alone does not ensure effective power utilization when demand is limited and transmission or distribution constraints remain unresolved.

By contrast, Assam emerges as the most power-intensive and efficiently utilized state. It records the highest requirement at 5,779 units and availability at 5,730 units, with a low deficit of 0.8% and the highest PLF of 66.1%. This indicates a relatively better balance between generation and consumption, and a stronger capacity to absorb available power. Tripura also performs well, with requirement and availability both at 824 units, resulting in no deficit and reflecting the benefits of gas-based generation, particularly the Palatana project. Manipur and Mizoram show moderate performance, while Nagaland faces the highest deficit at 7.8%, suggesting relatively greater supply-side stress. Meghalaya occupies an intermediate position, with moderate deficit and moderate PLF.

Overall, the analysis suggests that the region has significant power potential, but utilization remains uneven. The low PLF in several states points to structural issues such as seasonal dependence on hydropower, weak transmission networks, technical inefficiencies, and the challenges posed by difficult terrain.

7. Social Infrastructure in the North Eastern Region in India:

Social infrastructure refers to the basic facilities and services that support human well-being, including education, health, sanitation, housing, drinking water, and other welfare services. Unlike physical infrastructure such as roads or railways, social infrastructure is more directly connected to people's lives, shaping their health, skills, productivity, and overall quality of life. It plays a central role in human capital formation and, in turn, influences long-term socio-economic development. For a country like India, with a large and young population,

strong social infrastructure is especially important for turning demographic advantage into productive growth.

India's demographic profile presents both opportunity and challenge. By 2030, the country is expected to have over a billion working-age people, accounting for nearly 70% of its total population (World Economic Forum, 2026). This offers a critical window for accelerating economic growth, but only if the youth population is effectively transformed into productive human capital. This requires strong education systems for skill development, robust health infrastructure for a healthy workforce, and adequate access to sanitation, housing, and drinking water. In this context, the Northeastern Region has received increasing policy attention. According to the Press Information Bureau, Government of India, 75 projects were sanctioned in the region during 2022–23 to 2025–26, including 49 in education and 26 in health (PIB, 2025). This section examines the status of social infrastructure in the Northeast, focusing on education and health.

7.1 Education:

Education infrastructure is one of the most important foundations of human capital formation. It affects access to quality learning, skill development, and future employment opportunities. In the Northeastern Region, in this section, we have analyzed education infrastructure by categorizing it into two categories: infrastructure of school education and infrastructure of higher education.

7.1.1 School Education Infrastructure:

School education forms the base of the education system and covers primary, upper primary, secondary, and higher secondary levels. It includes not only school buildings and classrooms, but also libraries, laboratories, sanitation, drinking water, teachers, and digital learning facilities.

The above figure shows that the total number of schools varies widely across the northeastern states. Assam has the highest number of schools by a large margin, indicating its larger population and educational infrastructure, while Sikkim and Nagaland have comparatively fewer schools. Other states such as Meghalaya, Manipur and Tripura fall in the middle range, reflecting moderate availability of educational institutions. The table also presents the percentage of schools with basic facilities in 2024–25. It shows that most schools have high access to drinking water and toilet facilities for both boys and girls across all states. However, access to electricity is uneven, with states like Meghalaya and Manipur having relatively lower percentages compared to others like Sikkim and Mizoram. Overall, while sanitation and water facilities are well-developed, improving electricity access remains an area of concern in some states.

Table7: Schools with basic facilities, 2024-25

States	Total no. schools	Percentage of schools with electricity	Percentage of schools with drinking water	Percentage of schools with boy's toilet	Percentage of schools with girl's toilet

Arunachal Pradesh	3229	71.8	92.7	90.86	91.05
Assam	55283	89.7	98	94	95.29
Manipur	4666	69.9	99.6	85.94	82.6
Meghalaya	14587	30.7	72.7	85.98	82.08
Mizoram	3974	87.6	94.8	90.16	88.42
Nagaland	2750	85.3	90.1	92.58	91.42
Sikkim	1245	98.9	99.8	98.63	91.81
Tripura	4943	83.1	97.5	92.01	90.39
India	1471473	93.6	99.3	94.48	96.58

Source: UDISE+ 2024-25, Ministry of Education, Govt. of India

The available data show clear differences across the Northeastern states in terms of digital preparedness. Sikkim stands out as the best-performing state, with the highest share of schools having digital classrooms, digital libraries, and functional projectors. This suggests a relatively stronger integration of technology into school education. In contrast, states such as Meghalaya and Mizoram lag behind, particularly in digital library access.

At the all-India level, digital school infrastructure is still limited, which shows that the challenge is not confined to the Northeast alone. However, within the region, the gap between Sikkim and the lower-performing states is significant. For instance, Sikkim has a much higher proportion of schools with digital classrooms and projectors than many other states in the region, reflecting a stronger commitment to digital education. Overall, the data point to a persistent digital divide, both within the Northeast and between the region and the rest of India. This suggests that while progress has been made, a more balanced and inclusive expansion of school infrastructure is still needed.

Table 8

States	Percentage of schools with digital classrooms	Percentage of schools with digital library	Percentage of schools with functional projector
Arunachal Pradesh	25.7	1.3	30.2
Assam	20.8	2	11.4
Manipur	18.6	1.4	14.1
Meghalaya	4.3	0.7	7.6

Mizoram	11.3	0.1	18.5
Nagaland	32.8	1.2	20.4
Sikkim	51.6	6.3	39.8
Tripura	21.6	2.8	22.8
India	30.6	6.9	21.5

Source: UDISE+ 2024-25, Ministry of Education, Govt. of India

7.1.2 Higher Education Infrastructure:

It constitutes the advanced stage of the education system, encompassing universities, colleges, and other tertiary institutions. It plays a crucial role in enhancing access to quality higher education, promoting research and innovation, and developing skilled human resources. In this section, we have analysed the current status of higher education infrastructure in the northeastern states using some indicators such as the number of universities and colleges registered under the All India Survey on Higher Education (AISHE), along with the presence of leading institutions such as the Indian Institutes of Technology and National Institutes of Technology. The following table shows this:

Table 9

States	Total Number of College	Total Number of Universities	No of IITs	No of NITs
Arunachal Pradesh	44	10	0	1
Assam	607	30	1	1
Manipur	108	10	0	1
Meghalaya	77	11	0	1
Mizoram	40	3	0	1
Nagaland	69	6	0	1
Sikkim	24	9	0	1
Tripura	54	5	0	1
India	45473	1168	23	31

Source: AISHE 2021-22, & Ministry of Education, Annual Report 2024-25

The above table shows the distribution of higher education institutions across the northeastern states along with India's overall figures. Here it is highlighted that Assam has the highest number of colleges and universities in the region, making it the main center for higher education, while states like Sikkim and Mizoram have relatively fewer institutions. A key point highlighted is that in the entire northeastern region, there is only one IIT, located in Assam, indicating limited presence of premier technical institutions. However, each state generally has one NIT, ensuring some level of technical education access across the region. Compared to India's total number of colleges, universities, IITs, and NITs, the northeastern region contributes only a small share. Overall, the table reflects regional imbalance and indicates that higher education infrastructure in the Northeast is still inadequate. The presence of only one IIT for the entire region highlights a significant gap in access to premier technical education, emphasizing the need for greater policy focus and investment to strengthen higher education facilities.

7.2 Health:

Health infrastructure is considered the core of the public health system as it enables the prevention of diseases, promotion of health, and preparedness for both emergency and long-term challenges across different administrative levels. It also serves as a key indicator of the effectiveness of healthcare delivery and welfare systems in a country (NHP-2023). In this section, the current status of health infrastructure in the northeastern states is analysed by classifying it into two categories- health education infrastructure and health service infrastructure.

7.2.1 Health Service Infrastructure:

It reflects the availability of healthcare facilities, ensuring access to medical services at different levels of care. In this section, the present status of health service infrastructure is analysed using indicators such as the number of government hospitals, hospital beds, Primary Health Centres, and Community Health Centres.

The following table shows the availability of health service infrastructure across the northeastern states in comparison to India, including the number of hospitals, hospital beds, Primary Health Centres (PHCs), and Community Health Centres (CHCs). Assam has the highest number of hospitals, beds, PHCs, and CHCs in the region, highlighting its dominant role in healthcare services. States like Meghalaya and Tripura also show relatively better infrastructure in certain categories, particularly in hospital beds, while smaller states such as Sikkim and Mizoram have fewer facilities, reflecting limited healthcare capacity. Overall, the table reflects that compared to India's total figures, the northeastern region accounts for only a small share of health facilities, indicating uneven distribution and existing gaps in healthcare infrastructure. At the same time, recent policy initiatives suggest improvements in the region's healthcare system, especially in Assam. As the largest and most populous state, Assam is witnessing significant expansion in healthcare facilities. According to the Press Information Bureau, Assam is set to develop South Asia's largest cancer care network comprising 15 hospitals, of which 8 have already been inaugurated and 7 are under construction. Under Phase-I, cancer hospitals have been established in Dibrugarh, Kokrajhar, Barpeta, Darrang, Tezpur, Lakhimpur, and Jorhat, along with one in Itanagar (Arunachal Pradesh). Phase-II includes

additional facilities in Dhubri, Nalbari, Goalpara, Nagaon, Sivasagar, Tinsukia, and Golaghat, which will further strengthen healthcare access in the region.

Table- 10

States	No of Govt. Hospitals	No of hospital beds	No of PHC	No of CHC
Arunachal Pradesh	184	2663	131	57
Assam	1340	23185	1010	201
Manipur	11	2454	95	17
Meghalaya	161	4550	147	28
Mizoram	94	1985	66	9
Nagaland	171	1888	136	23
Sikkim	36	1810	26	2
Tripura	170	5343	117	23
India	36626	840455	31053	6064

Source: NHP-2023, Central Bureau of Health Intelligence, Ministry of Health and Family Welfare.

8. State of Financial Infrastructure in the North East Region of India:

Financial infrastructure denotes the institutional and technological architecture that underpins the functioning of financial systems in an economy. It encompasses banking institutions, non-banking financial companies (NBFCs), insurance services, payment systems, and digital financial platforms. By mobilising savings, facilitating investment, promoting financial inclusion, and supporting macroeconomic stability, financial infrastructure is central to sustained economic development.

8.1 Banking Penetration:

Banking penetration refers to the extent to which individuals in a country or region access and utilise formal banking services—such as bank accounts, loans, savings instruments, and digital payment systems. It is a critical marker of economic development, financial inclusion, and digital growth. Given the wide variation in population sizes across NER states, absolute branch counts can be misleading. Accordingly, this study normalises branch numbers by population, expressing them as branches per lakh population to obtain a standardised and comparable measure of banking accessibility.

The following table presents the number of bank branches per lakh population for the North Eastern states over the period 2016–2025. Most states exhibit a steady increase in

banking penetration, signalling an expansion of banking infrastructure and improved financial inclusion. State-wise analysis reveals clear heterogeneity in the level of banking access across the region during this period.

Sikkim emerged as the highest-performing state throughout the period, with banking penetration rising markedly from 19.81 in 2016 to 26.32 in 2025. This reflects exceptional branch coverage and strong access to banking services, likely aided by its smaller population and favourable branch density. Mizoram ranked second, recording notable progress from 14.40 to 19.07 over the same period.

Among moderately performing states, Tripura showed considerable improvement, with banking penetration increasing from 10.92 to 15.26. Meghalaya maintained steady growth, moving from 10.17 in 2016 to 11.53 in 2025. Arunachal Pradesh also performed well, with a strong rise from 9.77 to 14.37, indicating enhanced banking outreach over time. States with comparatively lower banking penetration—but still showing gradual improvement—include Assam (6.64 to 8.87) and Nagaland (7.17 to 10.14). Manipur improved from 4.97 to 7.94 but remained among the lowest in terms of branch coverage for most of the period.

The data indicate that Sikkim enjoyed the best banking access, whereas Manipur had the lowest branch coverage in most years. A positive trend is visible after 2020, when all states recorded accelerated growth—possibly due to government financial inclusion programmes and the expansion of digital banking services. This suggests that the North East Region as a whole has made steady progress in expanding formal banking services, albeit from a low base and with persistent inter-state disparities.

	Table 10: Banking Penetration (Bank Branches Per lakh population)									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Arunachal Pradesh	9.77	10.28	10.31	10.29	10.78	11.00	11.09	11.95	13.04	14.37
Assam	6.64	6.87	6.97	6.98	8.50	8.59	8.57	8.61	8.82	8.87
Manipur	4.97	5.31	5.81	6.17	6.46	6.62	7.03	7.43	7.67	7.94
Meghalaya	10.17	10.79	10.78	10.71	11.15	11.14	11.06	11.14	11.46	11.53
Mizoram	14.40	15.96	16.13	16.07	16.82	17.23	17.89	18.29	18.77	19.07
Nagaland	7.17	7.48	7.54	7.61	8.08	8.19	8.21	8.58	9.26	10.14

Tripura	10.9 2	11.34	11.51	11.57	13.98	14.19	14.30	14.7 5	15.12	15.26
Sikkim	19.8 1	20.09	20.94	21.50	24.11	24.19	24.12	24.3 1	25.25	26.32

Source: Author's calculation based on data from RBI Handbook of Statistics on Indian Economy and population projections based on Census of India (2011).

8.2 Credit Availability:

Credit availability captures the extent to which mobilised deposits are intermediated into loans and advances within a region. In banking analysis, the Credit–Deposit (CD) ratio—defined as the proportion of total deposits that banks deploy as credit—is widely used as a summary indicator of financial intermediation efficiency and local credit deployment. A higher CD ratio implies that a larger share of savings is being channelled into productive uses such as business investment, agricultural financing, housing, and consumption smoothing, thereby supporting employment generation and regional economic development. Conversely, a persistently low CD ratio may signal either weak local credit demand, risk aversion among lenders, or structural constraints that impede effective credit deployment despite adequate deposit mobilisation.

The table presents the state-wise CD ratios of Scheduled Commercial Banks in the North-Eastern Region (NER) for the period 2016–2025. Over this decade, the region's aggregate CD ratio improved markedly from 39.3% in 2016 to 58.0% in 2025, indicating a substantial enhancement in the conversion of deposits into credit and a strengthening of financial intermediation across the NER. Notably, the region crossed the 50% threshold in 2023, marking a turning point in credit flow dynamics and reflecting improved banking efficiency at the regional level.

**Table 11: STATE-WISE CREDIT-DEPOSIT RATIO OF SCHEDULED COMMERCIAL BANKS
ACCORDING TO PLACE OF UTILISATION (Concl'd.)**

(As at end-March) in %										
Region/State/Union Territory	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
NORTH-EASTERN REGION	39.3	38.2	41	41.9	42.2	46.1	46.4	50	55.1	58
Arunachal Pradesh	29.1	25.1	30.3	23.2	25.3	30.2	25.1	28.2	31.1	32.2
Assam	43.4	42.1	44	45.8	44.4	48.1	50.7	54.2	60.6	66
Manipur	42.3	39.7	45.1	49.8	59.1	60.1	66.3	76.2	77.5	79.7
Meghalaya	25.2	26.3	30.8	31	35.5	37.9	32.3	38	41.6	40.7

Mizoram	41.7	37.8	38.2	41.5	36.8	42.2	45.7	47.4	51.1	51.8
Nagaland	34.7	33.1	34.8	35.7	37.9	57.3	43.8	50.1	52.8	53.5
Tripura	35.9	36.5	41.4	42.1	42.8	42.6	43.3	42.6	46.9	45.4
Sikkim	35.2	31.6	29.7	30.3	31.7	36.3	41.8	43.4	44.6	43.8

Source: RBI Handbook of Statistics on Indian Economy.

A state-wise analysis for 2025 reveals pronounced heterogeneity in credit deployment performance. Manipur recorded the highest CD ratio at 79.7%, underscoring exceptionally strong credit expansion and active lending by banks relative to its deposit base. Assam, the largest economy in the region, ranked second with a CD ratio of 66.0%, demonstrating significant progress in credit deployment and more effective utilisation of mobilised savings within the state. Among states with moderate performance, Nagaland (53.5%) and Mizoram (51.8%) exhibited CD ratios slightly above the regional average, while Tripura (45.4%) and Sikkim (43.8%) remained below it, suggesting scope for further improvement in credit intermediation.

The lower-performing states were Meghalaya (40.7%) and Arunachal Pradesh (32.2%). In these states, despite reasonable deposit mobilisation, a relatively smaller proportion of deposits was intermediated into local lending and investment, pointing to potential constraints such as limited creditworthy borrowers, infrastructural bottlenecks, or conservative lending practices. Longitudinal trends further highlight that Manipur experienced the fastest growth in credit deployment, with its CD ratio rising sharply from 42.3% in 2016 to 79.7% in 2025. Assam also demonstrated consistent improvement, consolidating its position as a major credit-performing state in the region. In contrast, Arunachal Pradesh and Meghalaya continued to exhibit relatively low ratios throughout the period, indicating persistent underutilisation of deposits for local credit purposes.

8.3 ATM and Digital Financial Infrastructure:

The availability of Automated Teller Machines (ATMs) and digital banking services has improved markedly in recent years, reflecting a broader shift towards technology-enabled financial service delivery. Digital financial infrastructure refers to the systems and platforms that enable electronic financial transactions such as digital payments, fund transfers, online banking, mobile banking, and cashless services. It plays a pivotal role in improving financial inclusion, reducing dependence on cash, and increasing the efficiency, speed, and transparency of the banking system. The introduction of digital payment systems such as the Unified Payments Interface (UPI), mobile banking applications, and internet banking portals has helped bridge some of the accessibility gaps that persist in physical branch networks, particularly in geographically challenging regions like the North East.

ATMs are included in this study because they provide convenient, round-the-clock access to basic banking services—such as cash withdrawal, balance enquiry, fund transfer, and mini-statements—beyond the operating hours and spatial constraints of traditional branch banking. The density of ATMs thus reflects the technological expansion of banking services

and serves as a proxy for the ease with which individuals can access cash and perform basic transactions without visiting a branch. Digital financial infrastructure, meanwhile, is considered an integral component of modern financial infrastructure because it enables electronic transactions, digital payments, and remote access to banking services, thereby enhancing efficiency, reducing transaction costs, and promoting cashless financial ecosystems.

8.3.1 ATM Density:

ATM density refers to the number of Automated Teller Machines available per one lakh population in a particular state or region. It is an important indicator of banking outreach and financial infrastructure, as it captures how easily people can access basic banking services such as cash withdrawal, balance enquiry, fund transfer, and mini-statements. A higher ATM density generally indicates better banking penetration and greater convenience for the population, whereas a lower ATM density suggests limited access to banking facilities and potential reliance on cash-based or informal financial arrangements.

In this study, the total number of ATMs has been converted into ATM density per lakh population to provide a standardised measure of accessibility to ATM services. Absolute ATM numbers may be higher in populous states, but this does not necessarily indicate better access for individuals on a per-capita basis. ATM density, therefore, offers a more accurate representation of the availability of ATM facilities relative to the population and enables meaningful cross-state comparisons.

Table 12: ATM Density (per lakh Population)			
State	ATMs	Population (approx)	ATM Density (per 1 lakh)
Assam	3500	35000000	10
Arunachal Pradesh	250	1500000	16.7
Manipur	300	3000000	10
Meghalaya	250	3300000	7.6
Mizoram	180	1200000	15
Nagaland	220	2200000	10
Tripura	400	4000000	10
Sikkim	120	700000	17.1

Source: Author's calculation based on data from RBI Handbook of Statistics on Indian Economy and population projections based on Census of India (2011).

In the North Eastern region of India, ATM density varies significantly across states. As shown in Table 12, Sikkim records the highest ATM density at 17.1 ATMs per one lakh

population, followed by Arunachal Pradesh (16.7) and Mizoram (15.0). These states exhibit comparatively better ATM access, partly due to their smaller population sizes and relatively concentrated settlement patterns. On the other hand, Meghalaya has the lowest ATM density at 7.6, indicating fewer ATMs relative to its population and suggesting potential gaps in cash access infrastructure.

Assam, despite having the highest absolute number of ATMs in the region (approximately 3,500), records an ATM density of only 10.0 per lakh population due to its large population base. Similarly, Tripura, Manipur, and Nagaland each record an ATM density of around 10.0, reflecting moderate levels of ATM penetration. Overall, ATM density in the North Eastern region reveals an uneven landscape of banking infrastructure. States with lower density—particularly Meghalaya, Assam, and Manipur—require targeted ATM expansion, especially in rural and remote areas, to improve financial inclusion and ensure easier access to basic banking services for underserved populations.

8.3.2 Financial Inclusion:

Financial inclusion has been a key policy priority in the North East Region, with government initiatives such as the Pradhan Mantri Jan Dhan Yojana (PMJDY) playing a transformative role. Launched in August 2014, PMJDY is one of India's most ambitious financial inclusion programmes, with the objective of providing every household with access to basic banking services—including zero-balance savings accounts, RuPay debit cards, direct benefit transfers (DBT), accident insurance cover, and overdraft facilities. The scheme aims to bring previously unbanked and economically weaker sections of the population into the formal financial system, thereby strengthening savings habits, enabling seamless transfer of government benefits, and fostering inclusive economic development.

In this study, the number of accounts opened under PMJDY is used as an indicator of financial inclusion, as the scheme explicitly targets universal access to formal banking services, particularly for marginalised and rural populations. A higher number of PMJDY accounts reflects greater inclusion of individuals within the formal financial system, although the depth of usage—measured by account activity, deposit balances, and transaction frequency—remains an important complementary dimension.

The following data, drawn from official PMJDY statistics as of 15 April 2026, illustrate the progress of financial inclusion across the North Eastern states.

Table 13: State wise account opening report as of 15/04/2026

State Name	Beneficiaries at rural/semi-urban centre bank branches	Beneficiaries at urban/metro centre bank branches	Total Beneficiaries	Balance in beneficiary accounts (in crore)	No. of RuPay cards issued to beneficiaries
Arunachal Pradesh	462,773	11,191	473,964	301.51	317,910

Assam	23,253,050	2,605,775	25,858,825	7,693.30	16,266,969
Manipur	831,052	258,739	1,089,791	319.83	718,736
Meghalaya	846,401	60,443	906,844	486.27	557,339
Mizoram	268,215	172,456	440,671	234.11	214,367
Nagaland	285,519	126,631	412,150	152.21	313,196
Tripura	1,032,521	126,227	1,158,748	693.98	643,593
Sikkim	74,319	34,283	108,602	57.99	74,172

Source: Pradhan Mantri Jan Dhan Yojana (official portal)

Assam recorded the highest number of PMJDY beneficiaries in the region, with 2.59 crore accounts. It also registered the highest total deposits under the scheme at ₹7,693.30 crore and issued over 1.62 crore RuPay debit cards, indicating strong participation in formal banking services and relatively active account usage. Tripura ranked second in terms of beneficiary coverage, with 11.59 lakh accounts and deposits of ₹693.98 crore, reflecting significant banking outreach relative to its population size.

Manipur reported 10.90 lakh beneficiaries, while Meghalaya recorded 9.07 lakh accounts with deposits of ₹486.27 crore, suggesting moderate but active use of accounts. Arunachal Pradesh had 4.74 lakh beneficiaries, with a substantial share of accounts opened through rural and semi-urban branches—underscoring the importance of rural banking access in geographically difficult and sparsely populated regions.

Mizoram and Nagaland recorded 4.41 lakh and 4.12 lakh beneficiaries, respectively, indicating moderate progress in financial inclusion. Sikkim, despite having the lowest absolute number of beneficiaries (1.09 lakh accounts) due to its small population, continues to benefit from the scheme's role in ensuring universal banking access and facilitating direct benefit transfers.

Overall, the data indicate that PMJDY has significantly expanded banking services in the North Eastern region, with a large share of accounts opened in rural and semi-urban areas. This demonstrates that the scheme has helped bring economically weaker and previously unbanked populations into the formal financial system, thereby strengthening savings habits, enabling direct transfer of government benefits, and improving inclusive economic development. However, challenges remain: as of early 2026, approximately 26% of PMJDY accounts across public sector banks were reported as inoperative, and average deposit balances in the North East remain lower than the national average, highlighting the need for continued efforts to promote active usage and deepen financial literacy.

9. Key Findings:

The following key findings emerge from this study:

- i) Physical infrastructure in the North East reflects both progress and persistent regional disparities. Transportation remains largely road-dependent due to difficult terrain, while rail and air connectivity are still developing. Assam serves as the primary hub with the most extensive networks. Although road connectivity improved significantly between 2010 and 2015, the pace has since slowed. Railway expansion has also increased, but it remains highly uneven, with some states still lacking adequate connectivity.
- ii) The power sector in the North East has experienced steady growth, with rising electricity demand across all states due to population growth, urbanisation, and economic development. Although power availability has improved significantly, it still does not fully meet demand, leading to persistent gaps. The region has seen a substantial increase in installed capacity, especially through hydropower projects, indicating strong potential for energy generation. However, a major issue is the low Plant Load Factor (PLF) in many states, which reflects inefficient utilisation of available capacity. States like Arunachal Pradesh and Sikkim have high capacity but low usage, while Assam demonstrates relatively better efficiency .
- iii) Education infrastructure in the North East shows considerable variation across states. Assam dominates in terms of the number of schools and higher education institutions, while smaller states have fewer facilities. Basic infrastructure such as drinking water and sanitation is widely available, but access to electricity remains uneven, especially in states like Meghalaya. A significant digital divide is also evident, with Sikkim performing relatively well in digital learning facilities, while states like Meghalaya and Mizoram lag behind. In higher education, the region has limited institutions compared to the national level, with only one IIT located in Assam, highlighting the need for further expansion and investment.
- iv) Health infrastructure in the North East is characterised by uneven distribution and limited capacity. Assam serves as the primary healthcare hub, having the highest number of hospitals, beds, and medical colleges. In contrast, most other states have relatively fewer facilities and depend on a limited number of institutions. The availability of medical education is also restricted, as many states have only one medical college with limited seats. Compared to the national level, the region accounts for a very small share of healthcare infrastructure, indicating the need for significant improvement and balanced development.
- v) Financial infrastructure in the North East has improved over time, particularly due to government-led financial inclusion initiatives. Banking penetration, measured by the number of bank branches per lakh population, has shown steady growth across all states between 2016 and 2025. However, the region still faces challenges such as low branch density, uneven distribution of banking services, and limited access in rural and remote areas. States like Sikkim and Mizoram perform better in terms of banking access, while states like Manipur and Assam lag behind. Deposit mobilisation has also increased, indicating growing participation in the formal financial system, though disparities across states remain significant.

- vi) Credit availability, as measured by the Credit–Deposit (CD) ratio, has improved substantially in the North East, rising from 39.3% in 2016 to 58.0% in 2025. Nevertheless, the region still lags behind the national average of approximately 80%, and inter-state disparities are pronounced. Manipur and Assam exhibit strong credit deployment, whereas Arunachal Pradesh and Meghalaya continue to show low CD ratios, indicating underutilisation of deposits for local lending.
- vii) ATM density and digital financial infrastructure reveal an uneven landscape. Sikkim, Arunachal Pradesh, and Mizoram lead in ATM density, while Meghalaya and Assam lag on a per-capita basis. Digital payment systems such as UPI have expanded rapidly, yet meaningful financial inclusion—measured by active account usage and transaction frequency—remains a challenge, particularly among low-income and rural populations.
- viii) PMJDY has significantly expanded access to formal banking services in the North East, with over 2.59 crore accounts in Assam alone and substantial coverage in other states. However, issues such as account dormancy, low average balances, and limited digital literacy underscore the need for complementary interventions in financial literacy, agent banking, and last-mile digital infrastructure.

10. Conclusion:

This paper has presented a comprehensive assessment of infrastructure development in the North East Region of India, integrating analysis of financial, physical, and social infrastructure within a unified framework. The findings reveal a region in transition—characterised by substantial policy attention, significant central investment, and measurable progress across transport, power, education, health, and financial systems, yet constrained by persistent inter-state disparities, uneven implementation capacity, and the enduring challenges of geography, demographics, and historical marginalisation.

Financial infrastructure has improved markedly over the past decade, with steady gains in banking penetration, credit availability, ATM density, and digital financial inclusion. Yet, beneath these aggregate improvements lies a heterogeneous landscape: Sikkim and Mizoram lead in branch density and ATM access, while Manipur and Assam lag; the regional Credit–Deposit ratio has risen from 39.3% to 58.0%, but remains well below the national average, with Arunachal Pradesh and Meghalaya continuing to underutilise mobilised deposits for local lending. Parallel developments in physical and social infrastructure tell a similar story—significant expansion coexists with persistent gaps in quality, accessibility, and outcomes.

The central insight emerging from this study is that infrastructure development in the North East cannot be understood solely through the lens of physical expansion or financial access. Rather, it must be evaluated in terms of depth, efficiency, and inclusiveness—how well infrastructure serves the needs of diverse populations, how effectively it catalyses economic activity, and how equitably its benefits are distributed across states, districts, and communities. The region's unique topography, ethnic diversity, and borderland location necessitate differentiated strategies that go beyond uniform, input-oriented prescriptions.

The policy implications are clear. Targeted investments are needed in underserved areas; incentives must be created to enhance local credit deployment; sustained efforts in financial literacy and digital capability are essential to transform account ownership into active usage; and monitoring mechanisms should be strengthened to identify lagging areas and trigger corrective action. In sum, the North East has laid the foundations for a more connected, inclusive, and resilient infrastructure ecosystem. The task ahead is to move from access to engagement, from capacity to utilisation, and from infrastructure as a physical asset to infrastructure as a catalyst for sustainable, equitable development.

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