



Border Area Prosperity through Improved Connectivity The Case of Northeast India



Joining Dots • Connecting People • Shared Prosperity

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This Briefing Paper aims to understand the linkages between connectivity and prosperity in the Northeast Border Region of India. Connectivity aids the region's development and paves the way for the improvement of social infrastructure.

The Paper analyses the cross-border infrastructure projects and Government of India's (GoI) schemes, such as Border Area Development Programme (BADP), North East Special Infrastructure Development Scheme (NESIDS), and Non-Lapsable Central Pool of Resources (NLCPR) schemes.

It identifies the challenges and concludes by highlighting paths to prosperity, through improved connectivity that requires a concerted effort and is imperative for any development strategy, leading to shared prosperity.

Introduction

India has a 15,106.7 km (kilometre) long land border and a coastline of 7516.6 km, including the island territories. The North-Eastern Region (NER) of India, comprising of eight states – Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura, and Sikkim alone shares an international border of 5,182 kms (about 99 per cent of its total geographical boundary) with several neighbouring countries.

They are: 1,395 kms with Tibet Autonomous Region, China in the north, 1,640 kms with Myanmar in the east, 1,596 kms with Bangladesh in the south-west, 97 kms with Nepal in the west, and 455 kms with Bhutan in the north-west. This makes the NER a key strategic location for the Indian subcontinent.

The region is permeated with difficult terrains, limited connectivity, inaccessible areas, and border disruptions. One of the major hindrances is the narrow Siliguri Corridor (also referred to as

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Chicken's Neck), a strategic geo-economic corridor connecting NER to India. It is an isthmus bordering Nepal, Bhutan, and Bangladesh that is 22 km wide at its narrowest. Furthermore, the harsh topography of the region also makes the infrastructure developed vulnerable to damage as the region is permeated with landslides and natural disasters (Panda, 2013).

Hence, the region has not received its due importance in India's connectivity and development landscape for several decades. This has been reflected in various economic and social indicators.

According to the handbook of statistics on the Indian states (2019-2020), the average Gross State Domestic Product (GSDP) at constant prices (base 2011-12) of the NER was ₹49.701 thousand crores and was only one-tenth of the average GSDP of all India at ₹4.48 lakh crores.

Similarly, the average poverty in the NER region (21.9 per cent) was higher than the average poverty rate in India (18.5 per cent). Additionally, the NER's average state-wise social sector expenditure was significantly lower at ₹1.20 lakh crore than the all-India average at ₹51.78 thousand crores.

Various studies have showcased the distressing situation of the border areas in education, healthcare, and other social sectors. Skinder et al. (2021), in their study, described the dire situation of border areas situated near the India-Pakistan border. They concluded that low education levels and gender disparity at the border areas are prevalent and recommended female-focused literacy programmes.

An event report by the Observer Research Foundation (Nayak, 2018) on health issues at Indian border areas showcased that communicable diseases at the border areas are significantly higher, making border areas vulnerable and hampers trade. These issues are of major concern as these border areas are involved in trade and commerce with the bordering countries.

CUTS International's (2021) study on the border haats in Indo-Bangladesh border areas concluded that border haats had played an important role in formalising informal trade and generating additional income and livelihood opportunities for rural communities living in remote villages along the India-Bangladesh border, especially in Northeast India.



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However, the functionality of these structures will depend on the extent to which they are complemented by appropriate regulatory support to encourage the involvement of marginalised groups and the participation of the residents.

In the context of the NER, Kathuria & Mathur (2020) concluded that enhancing connectivity of NER within the region and with its neighbouring countries would require investments in interoperable infrastructures, regulatory reforms, and incentives to private stakeholders to provide high-quality services.

Some of the reforms highlighted by the study were the development of logistical hubs and corridors, plugging gaps in the transport networks, improving trade facilitation, modernising private sector logistic practices through the transit system, tapping the potential of low-cost inland waterways, and expanding air connectivity.

Programme and Initiatives

As of late, the GoI is constantly working on developing these border areas. The enhanced interest of GoI in North-eastern India is due to two main factors; first, to ensure border security in the remote areas and second, to ensure connectivity and increased economic activity in the region. Additionally, the border areas are where the majority of physical trade happens.

Physical trade refers to goods crossing the tangible borderlines through land customs stations, integrated check posts, and direct cross-border transactions. Hence, it becomes imperative for India to develop its

border areas to facilitate trade and connectivity. Furthermore, facilitating trade in this region will open India's door to South Asian and Southeast Asian supply chains while adhering to its 'Act East' policy.

The GoI is undertaking various connectivity and development projects to boost growth, prosperity and stability in the border areas. The push for improving land border management in the border region began as early as the 2000s in India, an aftermath of the Kargil War (1999) (Sinha, 2021).

The Department of Border Management was created in January 2004 under the Ministry of Home Affairs, keeping the country's security in mind. The need for holistic development and management of the border beyond the armed security approach was realised.

Several Immigration Check Posts (ImCPs), Land Custom Stations (LCSs), and Integrated Check Posts (ICPs) were identified to be set up to check and aid the security measures in the country while improving connectivity to increase economic constituencies in the border areas.

The development of ICPs at the border areas remains a key focus in the countries to improve connectivity. Presently, as per the Land Port Authority of India, three of the nine operational ICPs are in the NER at Agartala (Tripura), Moreh (Manipur), and Sutarkandi (Assam). Besides, there are several ICPs planned to be developed in the NER.

Over the years, these check posts have played an important and pivotal role in boosting regional connectivity and providing employment opportunities to the residents while integrating the Indian economy in the South Asian supply chain.

One of the landmark initiatives undertaken by the Indian government to address the issue of connectivity in the border regions is the BADP. It is a centrally-sponsored scheme launched in 1993-94 as an initiative under the Ministry of Home Affairs, Government of India.

The programme was initially developed to aid the deployment of the Border Security Force and undertake a comprehensive approach to border management in collaboration with the Central and state governments (Border Area Development Programme, 2021).

However, it has evolved to include the socio-economic dimension throughout its implementation. It focuses on the Indian population living under 50 km of the international borders and presently covers 456 blocks in 16 states and two union territories.

Several agencies, such as the Ministry of Development of North Eastern Region (MDoNER), Border Road Organisation (BRO), National Projects Construction Corporation Limited (NPCC), National Highways and Infrastructure Development Corporation Limited (NHIDCL), and Indian Railway Construction Limited (IRCON) are also providing support in the border infrastructure development.

Many connectivity projects are being undertaken in India to aid the connectivity and, hence, the development of the border region.

Two flagship schemes under the M-DoNER are the NESIDS and NLCPR. The government has approved the NESIDS of India as a new Central Sector Scheme.

Under the Scheme guidelines of NESIDS, 100 per cent central funding is provided to the state governments of the NER for physical infrastructure projects relating to water supply, power, and connectivity, enhancing tourism and social infrastructure relating to primary and secondary sectors of education and health.

So far, a total of 22 projects costing ₹885.44 crore have been selected for funding under the New Scheme of NESIDS for different States of the NER.

The objective of the NLCPR Scheme is to fill up the gap in the infrastructure sector of the NER through sanctioning the projects prioritised by the state governments. The Ministry gets Annual Budgetary Allocation from the Ministry of Finance to fund the NLCPR Scheme projects.

Other flagship initiatives include the North Eastern Road Sector Development Scheme (NERSDS). This scheme was launched in the year 2015-16. The project objective was to rehabilitate, construct, and upgrade the roads.

Under the scheme, inter-state roads, which are vital from the connectivity perspective, were undertaken. The scheme also contributed to the development of roads in socio-politically neglected pockets.

In addition, roads required from security or strategic viewpoint and roads necessary from the market access for agri-produce which were not covered in any other programmes also received adequate attention.

The roads and other infrastructure developed under various government schemes are strategic and economically significant. They are linked with the international borders, which are important for the movement of military and essential goods and services at the time of need.



Infrastructural Development and Its Impact

The positive impact of these programmes on the infrastructure development in the NER is exemplary. The clear evidence is the expansion of roadways, inland waterways, railways, power, and energy infrastructure in the NER region.

According to the databank of North Eastern Development Finance Corporation Ltd (NEDFi), the state-wise length of road has increased almost 50 per cent in the last decade, from 378,819 kms in 2011-12 to 573,982 kms in 2018-19.

Similarly, the length of national highways in the NER has increased by 64 per cent, from 8,480 Kms in 2011-12 to 13,640 kms in 2018-19. According to the handbook of Indian states published by RBI (2021), the state-wise railway route in the NER has also risen significantly, from 2602 Km in 2011 to 2821 kms in 2020.

These developments have also led to trade promotion in the NER through inland waterways. Two inland waterways routes are running through the

NER. The first one is the National Waterways – 1 (NW-1), which runs through Ganga-Bhagirathi-Hooghly River; and the second one is the National Waterways – 2 (NW-2) routes through the Brahmaputra River.

According to the Annual Report published by the Inland Waterways Authority of India (IWAI), the cargo movement of NW-1 has increased from 3.31 million tonnes in 2011-12 to 6.79 million tonnes in 2018-19. Many projects on National Waterways are under development, such as National Waterways – 16 (NW-16) on river Barak (the second largest river in NER), which originates from Kohima, Nagaland. Recently, the cargo movement in NW-16 started with 4,418 metric tonnes of cargo moved in 2020.

According to the Handbook of Indian States, NER also witnessed increased per-capita availability of power. The state-wise per-capita availability of power in the NER rose from 442.3 Kilowatt-Hour in 2011-12 to 532.8 Kilowatt-Hour in 2018-19.

The positive impact on the telecommunication sector of the NER can be observed through the steady rise in Wireless Connections in the NER.

According to Telecom Statistics India, published by the Department of Telecommunications, Ministry of Communications, GoI (2017), there has been a steady rise in wireless connections in NER from 18.85 million connections to 29.63 million connections in 2015-16, a record high of 57.17 per cent.

Finally, the NER has surpassed the national average in the education sector. According to the All India Survey on Higher Education (2020), published by the Ministry of Education, the NER has performed relatively well in Average Enrolment per College. The NER average in the State-wise Number of Colleges per Lakh Population (18-23 Years), Average Enrolment per College, for 2019-20 was 807.38 against the national average of 680 enrolment per year college.

Therefore, it can be observed that the increasing number of infrastructural projects in the region has a causal relationship with the improved status of social and economic indicators in the NER. The sheer number of infrastructure projects such as promoting multi-modal connectivity, enhancing social and physical infrastructure, and border area development are having positive impacts and, hence, are aiding in augmenting the region's prosperity.

Challenges

However, despite these projects, the population at the border areas faces difficulties. Umdor & Panda (2007), in their study, concluded that there is a

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general improvement in the NER. However, much needs to be done to bring NER closer to the national averages.

In another study conducted by the Programme Evaluation Organisation (PEO) (2015) under Niti Aayog for the evaluation of BADP, it was observed that in most of the North-Eastern states, the population neither felt satisfied nor secured from BADP. Issues in getting project approval by BADP for small villages have led to discouragement in Panchayats. Additionally, the report indicates that the BADP could not secure satisfactory women's participation in its projects.

Similarly, the NERSDS project is also facing challenges in its implementation. The two hundred and twenty-fifth (225) report published by the Rajya Sabha Secretariat (2020) on the department-related Parliamentary Standing Committee on Home Affairs revealed too much delay in projects that should have been completed are still commencing now.

Furthermore, the Committee observed a steep fall in the release of the funds required. The state government should undertake a serious review in consultation with the Ministry to expedite the projects.

Reports also indicate a steady decline in cargo movement in the main inland waterway for the NER, that is, NW-2. The cargo movement has declined from 2.41 million tonnes in 2011-12 to 0.5 million tonnes in 2018-19.

Dwindling goods demand, inadequate infrastructure, low preference for transportation of cargoes through waterways emerging from a sparse population, and unstable political environment in the NER are some of the major factors impacting cargo movement through waterways.

These challenges also make it difficult for the government to implement and execute development programmes in the region successfully. However, the development and operationalisation of NW-16 is expected to raise the usage of inland waterways in the NER.

According to Kikhi (2009), corruption is one of the major issues in the NER. The corruption has raised the transportation cost in the region. For example: 'A moving truckload of goods from Moreh to Dimapur, a distance of 316 km, costs ₹50,000... Traders claim that to move a truck from Imphal to Guwahati (487 km) costs ₹35,000.' Other institutional issues like lack of inter-agencies coordination, delays in the projects, non-revision of cost, and other linkages issues have plagued the north-eastern infrastructure landscape.

The lack of inter-state coordination has plagued the NER for several decades. Das (2021) in his study, stated that the inter-state border conflict emerged after the states of Arunachal Pradesh, Meghalaya, Mizoram, and Nagaland were carved out of undivided Assam. These conflicts reflect the deep-rooted consequences of Britishers creating and re-creating borders for administrative convenience.

Another major issue in the infrastructural development landscape of NER is the land acquisition issue. The delay in land acquisitions has been cited as one of the major reasons for the cost escalation of the infrastructural projects. Gupta (2019) reported that the 110-km long broad gauge link connecting Jiribam to Imphal in Manipur was sanctioned in 2003-2004, but is yet to be completed.

The overall project cost has gone up a staggering 19 per cent — from ₹727 crore to ₹13,809 crore. Until March 2019, the railways had spent ₹8,487 crore on it.

Some Recent Initiatives

In view of challenges faced by NER in terms of infrastructure and project implementation, earmarking of ₹68,020 crore for the NER under 10 per cent Gross Budgetary Support (GBS) by the Gol is a welcome step [Press Release, Public Information Bureau (PIB Delhi, 2021)].

Eleven projects amounting to ₹313.98 crore have been sanctioned by the Ministry of DoNER under the NESIDS for strengthening the health infrastructure of North Eastern States, especially for fighting the COVID-19 pandemic.

The Ministry of Development of North Eastern Region has also been coordinating with the Central Ministries/Departments to resolve issues related to medical supplies, creation of testing infrastructure, etc.



Furthermore, the government has increased the budgetary allocation for the Border Road Organisation by 40 per cent in the year 2022-23, that is, the GoI in its Union Budget for FY 2022-23 has increased the capital outlay for the Border Roads Organisation (BRO) to ₹3,500 crore as compared to ₹2,500 crore in FY 2021-22.

Recently, several infrastructural projects have been completed in the NER, such as Pakyong Airport in Sikkim, Rupsi Airport in Assam, 300 MW Kameng and 110 MW Pare hydropower projects in Arunachal Pradesh.

In addition, the government has launched Prime Minister's Development Initiative for Northeast Region (PM-DevINE) to fund infrastructure and social development projects in the NER. An initial allocation of ₹1,500 crore was made to enable livelihood activities for youth and women under the scheme.

To prevent border thinning, the government has started a Vibrant Villages Programme (VVP) to develop Border villages with a sparse population, limited connectivity, and infrastructure on the northern border.

The VVP would aim at holistic development of the border area villages and incorporate several schemes, including PM *Awas Yojana*, *Gramin Sadak Yojana*, *Jal Jeevan Mission*, North East connectivity,

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and broadband connectivity of villages. The primary activities proposed under the programmes include the construction of village infrastructure, housing, tourist centres, and improved road connectivity.

Furthermore, direct access to Doordarshan and other educational channels would be provided to generate skills and subsequent creation of livelihood opportunities.

From the above, it is observed that the GoI, with support from state governments is undertaking various programmes to enhance connectivity and infrastructure development in the region. The positive impact of these programmes is reflected through various social and economic indicators.

It is expected that slowly but surely, the NER is advancing towards a holistic development coupled with seamless connectivity – interstate and cross border – which will lead to enhanced trade with neighbouring countries, and shared prosperity among all the states in the NER.

Conclusion and Recommendations

Holistic development of the NER can serve as a 'Gateway to ASEAN Economies' and integrate India with Asian and global supply chains. It can also help India secure its border from hostile neighbours. Infrastructure projects have a big role to play in achieving both objectives. Several connectivity initiatives have been undertaken in the NER to connect NER to other parts of India and Asian economies.

Given the causal relationship between infrastructure projects and prosperity reflected by increased employment, higher per capita state GDP, improved communication, improved standard of living through improved education, and healthcare, it can be expected that connectivity projects in the NER would lead to prosperity. Using these indicators, one can argue that NER has made significant progress over the last one-decade period.

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Initiatives such as the completion of various hydro-power projects, road development and connectivity schemes, operationalisation of NW-16 (Barak river), and other initiatives to strengthen border infrastructure in the region undertaken by Central and state governments have positively impacted the region impacted the NER.

Finally, it needs to be mentioned that the path to prosperity through improved connectivity requires a concerted effort and is imperative for any development strategy to lead to shared prosperity. Bringing major infrastructure projects under the Gati Shakti Master Plan would be a good way forward. Adapting through previous learning and building upon previous progress is the key to moving ahead and succeeding.

In view of the challenges faced by the NER, some suggestions are recommended to make NER achieve its strategic potential as a hub for regional trade, particularly with southeast Asian countries.

Timely Implementation: One of the key challenges in the NER is its failure in the timely execution of the development projects, including those related to infrastructure. These often result in cost overruns.

The Ministry of Statistics and Programme report indicates that more than 439 infrastructure projects with an investment of ₹150 crore or more had cost overrun of ₹4.38 lakh crore. These cost overruns are often caused by lack of inter-agencies coordination, inadequate planning, delays in the projects, non-revision of cost, lack of infrastructure support, and other linkages issues.

It is suggested that all major projects of over ₹500 crore and above under implementation in the NER now should be considered to be brought under the umbrella of the recently launched PM Gati Shakti Master Plan to ensure timely completion of the projects.

The Plan, which brings on board 16 ministries at a single platform for coordinated implementation of infrastructure and other projects, seeks to address various issues that hamper the timely completion of projects. These include lack of coordination between different government departments and streamlining the project approval process to ensure timely completion of infrastructure and other projects.

Community Engagement: Several projects in the NER are delayed due to land acquisition issues. This showcases poor planning and a lack of community engagement, bringing negative externalities to the project. Community engagement is one of the key enablers for the success of any project.

Stakeholder consultation, as well as incorporating their feedback into the project, is vital for its success. Through active community engagement, enhanced participation of the residents in the project needs to be ensured.

Environmental Analysis: A thorough and apt environmental analysis is imperative during the project's inception. An environmental analysis showcasing negative and positive externalities arising out of the project is necessary. Several infrastructure projects in Arunachal Pradesh, Manipur, and Mizoram are delayed due to a delay in environmental clearance from the Ministry of Forest in these states.

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