Beyond the Coastline
India’s Land Connectivity Options around the Bay of Bengal

Riya Sinha
Constantino Xavier
Beyond the Coastline
India’s Land Connectivity Options around the Bay of Bengal

Riya Sinha
Associate Fellow
Centre for Social and Economic Progress
New Delhi, India

Constantino Xavier
Fellow
Centre for Social and Economic Progress
New Delhi, India

The authors would like to thank Nitika Nayar, Anahad Kaur (Research Analysts), Ritikaa Kaila, Keya Gupta and Mahesh Kushwaha (Research Interns) for their research support. We are grateful to Dr. Laveesh Bhandari, Dr. Amitendu Palit, Dr. Swati Singh, Dr. Priyadarshini Singh, Dr. Rajesh Chadha and Ms. Meru Gokhale for their comments on different parts of this paper. Some parts of this paper have been used in a research report as part of a collaborative publication being brought out jointly by the Confederation of Indian Industry (CII), New Delhi, and Institute for South Asian Studies, National University of Singapore. This joint publication, titled ‘Trade, Connectivity, and Institutions: A Study of Upcoming Prospects from Asia,’ emerged as part of a comprehensive project supported by the UK Foreign and Commonwealth Development Office.
Table of Contents

Abbreviations ................................................................. 6
Abstract ............................................................................. 7
1. Introduction ................................................................. 8
2. Beyond Coastal Connectivity: The Bay of Bengal's Missing Land Bridges ......................... 9
   a. Persistent Problems: Gaps in Hinterland Transportation Infrastructure ..................... 9
   b. Continued Causes: Economic, Political, and Geostrategic Obstacles ......................... 10
   c. Costly Effects: The Unrealised Potential of Missing Land Bridges ....................... 13
   d. Imbalanced Response: Maritime Connectivity with the Indo-Pacific .................... 15
3. Land Transportation Infrastructure: Potential, Challenges, and Solutions .................... 16
   a. Build Cross-Border Road Connectivity ................................................................. 17
   b. Advance Sub-Regional Rail Links ........................................................................... 19
   c. Expand Integrated Check Posts ............................................................................ 20
   d. Develop Inland Container Depots and Multimodal Logistics Parks ...................... 21
   a. Enhance Domestic Coordination and Institutional Capacity .................................... 24
   b. Support Cross-Border Political Stability and Security ............................................. 25
   c. Explore New Regional and International Partnerships .......................................... 27
   d. Collaborate on Norms and Standards ..................................................................... 29
   e. Improve Private Sector Participation ..................................................................... 29
5. Conclusion ........................................................................ 31
References ........................................................................... 32

List of Tables
Table 1: Share of Myanmar's Land-based Trade with Neighbouring Countries vis-à-vis its Overall Bilateral Trade (Percentage) ................................................................. 10
Table 2: Cross-Border Agreements on Passenger Movement ............................................. 19
Table 3: List of ICDs and MMLPs in India's Northeast Region ........................................ 23
Table 4: Diplomatic Missions in the Bay of Bengal Region ............................................... 25

List of Figures
Figure 1: Mode of India's EXIM Movement with Bangladesh ........................................ 17
Figure 2: India's Integrated Check Posts with Bangladesh and Myanmar ......................... 22
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCSQ</td>
<td>ASEAN Consultative Committee for Standards and Quality</td>
</tr>
<tr>
<td>ACMECS</td>
<td>Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy</td>
</tr>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
</tr>
<tr>
<td>AH</td>
<td>Asian Highway</td>
</tr>
<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
</tr>
<tr>
<td>BBIN</td>
<td>Bangladesh, Bhutan, India and Nepal</td>
</tr>
<tr>
<td>BBIN-MVA</td>
<td>Bangladesh, Bhutan, India, Nepal Motor Vehicles Agreement</td>
</tr>
<tr>
<td>BIMSTEC</td>
<td>Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation</td>
</tr>
<tr>
<td>BSF</td>
<td>Border Security Forces</td>
</tr>
<tr>
<td>CFS</td>
<td>Concessional Financing Scheme</td>
</tr>
<tr>
<td>CLMV</td>
<td>Cambodia, Laos, Myanmar and Vietnam</td>
</tr>
<tr>
<td>CUTS</td>
<td>Consumer Unity and Trust Society</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development</td>
</tr>
<tr>
<td>DPA</td>
<td>Development Partnership Administration</td>
</tr>
<tr>
<td>EIB</td>
<td>European Investment Bank</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GoI</td>
<td>Government of India</td>
</tr>
<tr>
<td>ICP</td>
<td>Integrated Check Posts</td>
</tr>
<tr>
<td>ICD</td>
<td>Inland Container Depots</td>
</tr>
<tr>
<td>IMT</td>
<td>India-Myanmar-Thailand</td>
</tr>
<tr>
<td>IPOI</td>
<td>Indo-Pacific Oceans Initiative</td>
</tr>
<tr>
<td>JICA</td>
<td>Japan International Cooperation Agency</td>
</tr>
<tr>
<td>KMTTP</td>
<td>Kaladan Multimodal Transit Transport Project</td>
</tr>
<tr>
<td>LDC</td>
<td>Least Developed Countries</td>
</tr>
<tr>
<td>MDoNER</td>
<td>Ministry of Development of North Eastern Region</td>
</tr>
<tr>
<td>MEA</td>
<td>Ministry of External Affairs</td>
</tr>
<tr>
<td>MGC</td>
<td>Mekong Ganga Cooperation</td>
</tr>
<tr>
<td>MMLP</td>
<td>Multimodal Logistics Parks</td>
</tr>
<tr>
<td>MoRTH</td>
<td>Ministry of Road Transport and Highways</td>
</tr>
<tr>
<td>MRA</td>
<td>Mutual Recognition Agreement</td>
</tr>
<tr>
<td>MVA</td>
<td>Motor Vehicles Agreement</td>
</tr>
<tr>
<td>NADI</td>
<td>Natural Allies in Development and Interdependence</td>
</tr>
<tr>
<td>NEDA</td>
<td>Neighbouring Countries Economic Development Cooperation Agency</td>
</tr>
<tr>
<td>NER</td>
<td>North Eastern Region</td>
</tr>
<tr>
<td>NHIDCL</td>
<td>National Highways &amp; Infrastructure Development Corporation Ltd.</td>
</tr>
<tr>
<td>NTB</td>
<td>Non-Tariff Barriers</td>
</tr>
<tr>
<td>OSBP</td>
<td>One Stop Border Posts</td>
</tr>
<tr>
<td>PAT</td>
<td>Port Authority of Thailand</td>
</tr>
<tr>
<td>PPP</td>
<td>Public-Private Partnership</td>
</tr>
<tr>
<td>PSU</td>
<td>Public Sector Undertakings</td>
</tr>
<tr>
<td>SAGAR</td>
<td>Security and Growth for All in the Region</td>
</tr>
<tr>
<td>SASEC</td>
<td>South Asia Subregional Economic Cooperation</td>
</tr>
<tr>
<td>TEU</td>
<td>Twenty-Foot Equivalent Units</td>
</tr>
<tr>
<td>TICA</td>
<td>Thailand International Cooperation Agency</td>
</tr>
<tr>
<td>UNESCAP</td>
<td>United Nations Economic and Social Commission for Asia and the Pacific</td>
</tr>
<tr>
<td>USAID</td>
<td>U.S. Agency for International Development</td>
</tr>
<tr>
<td>USD</td>
<td>United States dollar</td>
</tr>
<tr>
<td>WTO-TFA</td>
<td>World Trade Organisation’s Trade Facilitation Agreement</td>
</tr>
</tbody>
</table>
Abstract

Under the ‘Neighbourhood First’ and ‘Act East’ policies, India’s regional connectivity strategy has predominantly focused on maritime domains, including new ports and shipping links. While this has helped deepen economic linkages between South Asia and Southeast Asia, inland connectivity initiatives have lagged, with persistent delays and obstacles affecting transportation infrastructure and economic integration beyond coastal areas around the Bay of Bengal. India’s Northeast region, which is yet to be effectively linked to the sub-region formed by Bangladesh, Bhutan, India, and Nepal, continues to lack any significant economic land bridge or corridor with Southeast Asia. For instance, the Bangladesh-China-India-Myanmar corridor has failed to materialise, and initiatives such as the Kaladan Multimodal Transit Transport Project or the India-Myanmar-Thailand Trilateral Highway remain bogged down by delays. While the rest of Asia’s hinterland economies are now rapidly connecting via rail, there is still no progress on a rail link between South and Southeast Asia.

This paper argues that India must prioritise the development of multimodal transportation infrastructure beyond coastal areas to bridge the current gap between maritime and land-based initiatives around the Bay of Bengal and spur the creation of sub-regional, regional, and inter-regional economic corridors. We assess the challenges and opportunities for policymakers to pursue the hard and soft dimensions of connectivity, which can accelerate the much-delayed regional integration in the Bay of Bengal hinterland. The hard transportation and logistics dimension includes four sectors: road linkages, rail connectivity, and both land and dry ports to facilitate mobility, including trade in goods. Beyond transportation infrastructure, on the softer side, there are five additional domains warranting attention: institutional capacity for coordinating connectivity initiatives between central and state levels; instruments to support cross-border stability and security; new international partnerships, especially with regional organisations and multilateral institutions; closer regional collaboration on infrastructure norms and standards; and increased engagement with the private sector.

Keywords: Land connectivity, Bay of Bengal, Southeast Asia, India, Indo-Pacific
1. Introduction

India’s approach to the Indo-Pacific has, until now, predominantly revolved around its maritime interests. While traditionally emphasising continental security until the 2000s, New Delhi has recently sought to augment its geostrategic reach by adopting a more outward-looking, economically driven, and ocean-centric perspective. This shift is also evident in India’s connectivity initiatives aimed at enhancing regional interdependence in South Asia and the Bay of Bengal region. In these areas, New Delhi has made significantly faster progress in the maritime domain than in land connectivity. This includes developments in port infrastructure, maritime shipping agreements, new naval exercises, information sharing, and harnessing the blue economy. For example, the Sagarmala initiative, implemented in 2015, reflects a new urgency to invest in ports to enhance India’s trade prospects and is being developed as part of India’s new maritime doctrine, the Security and Growth for All in the Region (SAGAR), unveiled in the same year.

However, this strategic outlook and efforts in recent years have also led to a maritime-continental imbalance in India’s regional infrastructure initiatives. We argue that while the maritime initiatives in India’s Indo-Pacific approach are playing an important role in accelerating the geoeconomic convergence between South Asia and Southeast Asia, these investments along the coastline will have limited utility unless India also invests more efforts inland to develop multimodal connectivity around and beyond the Bay of Bengal littoral. Speaking at the 7th Indian Ocean Conference, in Perth (2024), India’s External Affairs Minister S. Jaishankar underscored the importance of adding a land dimension to maritime connectivity:

“As regards connectivity...let me highlight the need for lateral land-based connectivity across the Indian Ocean region. These are essential to supplement and complement the maritime flows. That is why, the IMEC Corridor to India’s West and the Trilateral Highway to India’s East are so significant” (MEA, 2024).

This paper surveys the persistent problems, causes, and effects of decades of neglect towards hinterland economies that remain landlocked and disconnected from each other, as well as from major ports and other coastal connectivity hubs. The almost complete lack of transportation and infrastructure linkages between India’s Northeast region (NER), eastern Bangladesh, and northern Myanmar best exemplifies how inland connectivity gaps are hindering the growth potential of this sub-region at the heart of India’s Indo-Pacific strategy.

Our paper suggests options for India to complement its Indo-Pacific oceanic outlook with a greater focus on land-based connectivity strategy around the Bay of Bengal region, especially in the Bangladesh, Bhutan, India, Nepal (BBIN) sub-region, and overland transportation linkages with Myanmar and Thailand. We assess nine domains with challenges and opportunities to do so both in the hard and soft dimensions of connectivity. The hard transportation and logistics dimension includes four sectors: road linkages, rail connectivity, and both land ports and dry ports to facilitate mobility, including trade in goods. Beyond transportation infrastructure, on the softer side, there are five additional domains warranting attention: institutional capacity to coordinate connectivity initiatives between central and state levels; instruments to support cross-border stability and security; new international partnerships, especially with regional organisations and multilateral institutions; closer regional collaboration on infrastructure norms and standards; and increased engagement with the private sector.

Methodology

This paper builds on the authors’ previous research findings and methodologies concerning various dimensions of land connectivity in South Asia. It employs a mixed-methods approach, which includes an extensive review of secondary literature, primary sources from key Indian ministries, regional and multilateral institutions, fieldwork, and site visits to transportation infrastructure at the India-Nepal and India-Bangladesh borderlands. This study also

---

comprises of closed-door policy consultations and stakeholder interviews in New Delhi, Bangladesh, Nepal, and Thailand. Furthermore, the paper draws on quantitative data to measure the extent of land connectivity in India's regional integration initiatives. Most of the data used in this study is sourced from the Directorate General of Commercial Intelligence and Statistics, Ministry of Commerce and Industry, India, and the Land Ports Authority of India. For assessing Myanmar's trade share with India and other Southeast Asian countries, data was obtained from Myanmar’s Ministry of Commerce.

Paper Structure

This paper is organised as follows. Section 2 explains the gaps in India’s land connectivity toward the East and elucidates the political, economic, and geostrategic causes that continue to delay hinterland connectivity. It also presents the costly effects of this neglect, impeding the development of India’s NER and overland economic linkages between South and Southeast Asia. We end this section by discussing how India's response in recent years has only been partially successful in correcting the Bay of Bengal connectivity gaps: having prioritised maritime connectivity over land linkages, it must now complement this coastal approach with multimodal, inland connectivity initiatives.

Section 3 deep-dives into four hard infrastructure dimensions of land connectivity initiatives in the Bay of Bengal region (road, rail, integrated check posts, and land/dry ports) and discusses the challenges faced in their development. While overland transport remains the dominant form of cross-border transportation, it has not been the priority area for connectivity development. This section also suggests ways of overcoming some of the challenges at the operational level.

Section 4 focuses on five soft policy dimensions required for India to improve land connectivity in the region. This includes enhancing internal coordination, including inter-agency cooperation in New Delhi and centre-state coordination, and leveraging expertise to improve cross-border linkages; ensuring political stability and security, both internally and in neighbouring countries' borderlands; exploring new regional and international partnerships through coordination with like-minded partners and multilateral institutions; collaborating on regulatory norms and standards, such as testing requirements, quality of infrastructure; and engaging the private sector, for example in logistics or inland port/terminal operations.

2. Beyond Coastal Connectivity: The Bay of Bengal’s Missing Land Bridges

While the focus on maritime connectivity is an important aspect of India’s strategic vision, it is also important to focus on understanding the causes of India's missing land bridges around the Bay of Bengal. Without adequate inland and multimodal connectivity, it will be difficult to achieve the full potential of regional integration between South and Southeast Asia. Building overland linkages to the Association of Southeast Asian Nations (ASEAN) markets is therefore an important angle for India to successfully implement its Act East policy.

In order to develop this, significant action is required to bridge these gaps and establish efficient land routes that connect coastal and inland regions. Investment in infrastructure development, such as roads and railways, is paramount to establishing a comprehensive multimodal transportation network. The development of land bridges would not only enhance trade and economic activities but also foster people-to-people connectivity, cultural exchanges, and regional integration. It would also spur economic corridors with the potential to stimulate growth and development in and around the Bay of Bengal region. This section focuses on the current gaps in transportation infrastructure in the region, traces their causes, and highlights the growth potential in the region if these challenges are overcome.

a. Persistent Problems: Gaps in Hinterland Transportation Infrastructure

In contrast to maritime connectivity developments, the land connectivity dimension in India's regional engagement strategy continues to lag. For instance, despite numerous efforts, the India-Myanmar-Thailand (IMT) Highway has been in development for over twenty years, marked by successive delays. While China’s Tibetan plateau is now mostly connected via high-speed railway to Southeast Asia, there are still only ambiguous plans for a railway link between India’s state of Manipur and Mandalay in Myanmar. The ambition to substantially link India and Bangladesh to the economies of Cambodia, Laos,
Beyond the Coastline: India’s Land Connectivity
Options around the Bay of Bengal

Myanmar, and Vietnam (CLMV), as well as with the regional manufacturing hub in Thailand, will hinge on the development of this missing rail link.

Furthermore, between India and Myanmar, the Kaladan Multimodal Transit Transport Project (KMTTP) has been partially operationalised through a maritime link between Sittwe and Kolkata ports, but there remains a missing land connection with Mizoram, with road building bogged down by repeated delays. While the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is ready to implement a new maritime cooperation agreement, many road and rail linkages identified in the BIMSTEC Transport Infrastructure and Logistics Study (Asian Development Bank [ADB], 2018) under its 2014-20 work plan continue to languish.

At a sub-regional level, the Bangladesh, Bhutan, India, Nepal Motor Vehicles Agreement (BBIN-MVA), despite being signed in 2015, has yet to be implemented due to delays in the finalisation of passenger and cargo protocols. Other sub-regional initiatives, such as the Bangladesh-China-India-Myanmar (BCIM) corridor, have also seen little progress, mainly due to the ongoing conflict between India and China. Instead, China is promoting the China-Myanmar Economic Corridor (CMEC) and is exploring its expansion to Sri Lanka (Srinivasan, 2023).

On the regulatory front, persistent challenges such as the lack of standardised testing requirements, disparities in the presence of regulatory agencies, variations in documentary requirements across different land border crossings, differences in the state of trade facilitation in all countries, limitations in truck movement protocols across borders etc., continue to hinder progress in land connectivity.

The land gap is also apparent in the almost negligible share of land-based trade with Myanmar, about 1 per cent of the total bilateral trade volume of less than USD 2 billion in recent years through the single border crossing point at Moreh (India) – Tamu (Myanmar). In contrast, approximately 90 per cent of Thailand-Myanmar’s total trade of approximately USD 5 billion is conducted overland through four border points (Table 1).

b. Continued Causes: Economic, Political, and Geostrategic Obstacles

The failures and delays of multiple regional economic, transportation, and connectivity initiatives such as those surveyed in the preceding section, are the legacy of a long history of disintegration in and around the Bay of Bengal. Marked by deep economic, security, and geopolitical divides, this region remains one of the world’s least integrated, with connectivity levels that pale in comparison to those in Europe and Southeast Asia, as well as in less developed regions in South America and West Africa.

<table>
<thead>
<tr>
<th>Year</th>
<th>India</th>
<th>Bangladesh</th>
<th>Thailand</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019 – 2020</td>
<td>7</td>
<td>42</td>
<td>76</td>
<td>48</td>
</tr>
<tr>
<td>2020 – 2021</td>
<td>14</td>
<td>22</td>
<td>80</td>
<td>48</td>
</tr>
<tr>
<td>2021 – 2022*</td>
<td>1</td>
<td>13</td>
<td>87</td>
<td>19</td>
</tr>
<tr>
<td>2022 – 2023</td>
<td>1</td>
<td>18</td>
<td>89</td>
<td>33</td>
</tr>
<tr>
<td>2023 – 2024**</td>
<td>1</td>
<td>20</td>
<td>90</td>
<td>43</td>
</tr>
</tbody>
</table>


*As reported in Mini Budget (October – March)
**Till June 2023

This was not always the reality. The East South Asia region, including Eastern Nepal, India’s West Bengal, and the NER, along with Bhutan and Bangladesh (also known as the BBIN sub-region), used to have strong links to Burma and Southeast Asia, including Thailand, Malaysia, and Indonesia until the 1960s. Whether it was trade, transportation, or education, the Bay of Bengal was a largely integrated space where cities like Kolkata or Yangon played an important role as regional hubs. In many regards, the hinterland connectivity—in terms of roads, air connections, or trade ties—between the Brahmaputra (India) and Irrawaddy (Burma) river valleys was better in the 1950s than it is today (Xavier, 2018; & Amrith, 2013).

During much of the 20th century, post-independence India neglected and even dismantled the connectivity linkages of the Bay of Bengal and the wider Eastern Indian Ocean region. Instead of serving as a bridge between the South and Southeast Asia regions, the Bay of Bengal became a divider due to low connectivity levels and the absence of cooperative frameworks. Intra-regional trade shares plummeted from the 1960s, now languishing at about 5 per cent (Kathuria, 2018). By most measures of connectivity—transportation links, and the free flow of people, goods, capital, and ideas—the region remains one of the world’s most divided regions, riddled with formidable barriers that impede development via cross-border connectivity and economic synergies (Xavier & Sinha, 2020).

While other regions of the world further integrated, often building on the foundations of economic cooperation to add a political, security, and cultural dimension, South Asia continued to lag. Delayed attempts to institute top-down political initiatives like the South Asian Association for Regional Cooperation (SAARC) in the mid-1980s saw some progress in the 2000s but eventually failed to develop a regional economic space. The same applies to more recent initiatives like BIMSTEC, established in 1997, which has been unable to implement its lofty vision that included a free trade area.

Why has this Bay of Bengal space fragmented over the last five decades, whereas regions in other parts of the world have coalesced? And why are current efforts to correct this connectivity gap encountering so many obstacles and delays? The answer to the second question is partially provided by the first question: half a century of political, economic, and geostrategic partitions in South Asia have created formidable structural challenges and path dependencies—both material and cognitive—that continue to impede the logics of economy, geography, demography, and history from unleashing their forces in and around the region. But beyond these historical legacies and structural causes, there are also more contemporary reasons that are delaying the realisation of hinterland connectivity, as surveyed in this paper. Three major sets of such past and contemporary causes stand out: economic, political and security, and geostrategic.

The first set of causes relates to the historical and present policies of protectionism and the lack of comparative advantage in regional economies. Historically, South Asian countries have embraced versions of a developmental model premised on the principle of autarky or self-reliance. Import substitution and the dominance of the public sector not only impeded growth but also discouraged trade, including exchanges with neighbouring countries and regions. India’s trade with Myanmar, for example, stagnated during the 1960s and saw only limited growth after the 2000s (Taneja et al., 2018).

Market reforms that swept through the region in the 1990s saw the South Asian and Bay of Bengal economies gradually open up, albeit hesitantly. Today, countries like India or Bangladesh continue to impose ad hoc restrictions on trade. The South Asian Free Trade Agreement (SAFTA), in principle, has largely liberalised trade by reducing import duties; however, countries maintain lists of negative and sensitive items not covered by the agreement. Additional non-tariff barriers, such as poor infrastructure, continue to indirectly support protectionism by upholding high logistics costs and complex trade procedures.

India and Sri Lanka have repeatedly failed, since the 2000s, to finalise an Economic and Technology Cooperation Agreement (ETCA). With Bangladesh, the prospects for a Comprehensive Economic Partnership Agreement (CEPA) hinge on a deadline: in 2026, Bangladesh will transition to a middle-income economy, forfeiting several duty exemptions in India and other major markets. While Myanmar has elected to join the Regional Comprehensive Economic Partnership (RCEP) and Bangladesh has shown interest, India has opted out, reflecting its concerns about long-term competitiveness through integration with the rest of Asia.

Economic similarity has further aggravated protectionist impulses. Many countries in the region specialise in textiles, readymade garments, and
agricultural products. As a result, they resort to import duties, non-tariff barriers, and lack of trade facilitation reforms to discourage closer economic integration (Banik & Gilbert, 2008). Trade asymmetries between India and its neighbouring countries have also acted as a hindrance to improving connectivity. India’s exports to its neighbouring countries have consistently exceeded its imports, often by a factor of five or six. For instance, in 2022-23, India’s exports to South Asia were USD 28 billion, against imports of USD 5.5 billion. This trade deficit is often used as a political issue in smaller South Asian countries to reinforce the narrative about India’s growing economic and geostrategic dominance.

The second set of causes relates to India’s past and present security impulses to manage borderlands through political, military, and other non-economic instruments. With the economic logic receding after transportation and other road, rail, and river transportation links were cut, the Bay of Bengal regional hinterlands gradually stagnated after the 1960s. For example, India’s NER became landlocked and deprived of access from both the Northern (trans-Himalaya, Tibet, and China) economic corridors, as well as from the southern coastal access to the Bay of Bengal and sea lines of communication. The region saw rising levels of political violence, including a variety of ethnic and ideological insurgencies. While political violence has significantly declined in the last two decades, this region remains one of the most unstable and conflict-ridden in the world, as most recently witnessed in Manipur (2023) and the ongoing conflicts in Myanmar since the 2021 military coup. This makes any developmental effort, especially large infrastructure and cross-border transportation links, both a high risk and costly affair. These are borderlands where central state authorities, with their entire political, security, and military apparatus, often find their capacity to exercise authority severely challenged (Hazarika, 2018). Not surprisingly, contrasting with the growing involvement of the private sector in India’s coastal, maritime, or digital connectivity initiatives, the economic infrastructure efforts in the NER and inland border areas usually remain in the far less efficient hands of public sector-controlled companies (Press Information Bureau [PIB], 2022).

Yet the causes for the delay in cross-border, regional connectivity projects are also immaterial, reflecting an old yet still persistent cognitive bias that restricts the free flow of people or goods in the borderlands. In India, this is perhaps best reflected institutionally by the organisational location of two critical agencies for border and infrastructure connectivity: the Land Ports Authority of India (LPAI), which falls under the Ministry of Home Affairs, and the Border Roads Organization (BRO) placed under the Ministry of Defence. While both the LPAI and BRO have contributed significantly to improving borderland and hinterland connectivity, their staffing and organisational profile indicate the predominance of security and military approaches that tend to focus on control and restriction. Former Foreign Secretary, Shyam Saran, alerted to this in a seminal 2006 address on connectivity and other cross-border economic initiatives:

“India must start looking at national boundaries not as impenetrable walls which somehow protect us from the outside world, but as “connectors” bringing India closer to its neighbours. This needs a mindset change” (MEA, 2006).

This is far from being a challenge exclusive to India. From the neighbouring country’s perspective, there are similar factors at play that complicate connectivity initiatives. Domestic apprehensions about excessive dependence on India shape most of their economic policies, whether on free trade or connectivity and transportation linkages. Bhutan, for example, chose to remain out of a BBIN Motor Vehicles Agreement (MVA) due to concerns about a massive influx of Indian trucks and taxi operators. In Nepal, there are growing demands to fence and restrict the open border with India. And in Bangladesh, there is cyclical political opposition to growing energy interdependence with India or allowing Indian waterway or railway transit rights to and from the NER. These are the political challenges to proximity. One should therefore not be surprised that despite significant material benefits in terms of win-win development, cross-border infrastructure links and economic initiatives are often opposed or resented by India’s neighbours, where key constituencies mobilise against connectivity as a threat to sovereignty.

---

4 Export-Import Data Bank, Ministry of Commerce and Industry, Government of India.
The third set of causes relates to historical and present geopolitical factors that perpetuate economic and infrastructure connectivity gaps in and around the Bay of Bengal region. After 1947, India and Pakistan drifted into opposite geopolitical camps, which crystallised after 1971 and the independence of Bangladesh: Islamabad aligned with the United States and China, while India pivoted towards the Soviet Union. The 1962 war between India and China, following the annexation of Tibet, further deepened the geopolitical divide between the Indian subcontinent and the rest of Asia: while countries to the East joined the Sino-American economic détente that eventually gave birth to ASEAN and other growth-oriented regional integration processes in East Asia, India and its South Asian neighbours remained non-aligned, insulated both geopolitically and economically (Menon, 2021).

The 1990s and 2000 saw a geopolitical thaw that allowed for some progress. India and China normalised their relations and began discussing initiatives of trilateral connectivity, such as the BCIM economic corridor between Kolkata and Kunming. This was to link the Bay of Bengal coastal cities of West Bengal and Bangladesh to the hinterland of India’s NER, Myanmar’s Sagaing, Mandalay and Shan states, and China’s Yunnan province (Überoi, 2016). This period also saw the emergence of BIMS-TEC, in 1997, as a sub-regional bloc to integrate the Bay of Bengal markets as a link between South and Southeast Asian economies.

Yet geopolitics have made a hard comeback in recent years to further complicate connectivity initiatives around the Bay of Bengal region. Since 2014, and especially after the lethal military skirmish in 2020, India-China relations have tanked. Their continued geopolitical divergence has had various connectivity ramifications; initiatives like BCIM have stalled, proposals for a trans-Himalayan economic corridor failed to materialise; India opted to stay out of RCEP; and it also rejects joining any connectivity initiative under China’s BRI in neighbouring countries such as Nepal, Bangladesh, or Myanmar (Jacob, 2017).

Taken together, these historical and present economic, political, and geopolitical factors continue to hinder and delay the correction of deep connectivity gaps in India’s eastern, inland periphery. Persistent economic protectionism; limited state capacity with the predominance of security instruments and mind-sets; asymmetric threat perceptions, political conflicts and instability; geopolitical friction between India and China; and an excessive focus on maritime connectivity must all be factored in to explain the missing land bridges and connectivity infrastructure that are critical to spur economic regionalism in an around the Bay of Bengal.

c. Costly Effects: The Unrealised Potential of Missing Land Bridges

For India, doubling down on the land connectivity initiatives to complement its maritime linkages towards the East and across the Indo-Pacific is important for two structural reasons. First, developing port infrastructure along the Bay of Bengal littoral will be ineffectual unless complemented with multimodal linkages to the hinterland economies through facilitated corridors and infrastructure, especially between different sub-regional economic clusters. This approach aligns with global trends, where shipping companies globally are increasingly evaluating ports based on their connectivity to the hinterlands (Jiang et al., 2020). Therefore, integrating both land and sea infrastructure is imperative to ensure that the expansion of port facilities in the Bay of Bengal region also contributes to a seamless and efficient hinterland transportation network, stimulating economic growth and trade competitiveness.

Second, rather than just a hub and spoke system between the Bay of Bengal and different hinterland clusters, India’s geoeconomic objectives also require significant efforts to focus on a networked approach for land-based connectivity. This means deepening hinterland linkages between the different sub-regional spokes, for example between the NER and Northern Myanmar. This multimodal, inland dimension to connectivity requires growing attention and investment to catch up with the more developed and rapidly expanding maritime and coastal dimension.

Several studies have emphasised the importance of improving land transportation in the region based on the logic of a linear link between increased connectivity and economic growth. For instance, a recent study by the World Bank highlights that poor transportation and logistics infrastructure affects the free flow of goods and services across borders (Kathuria, 2018). However, as concluded by another study (CUTS, 2023), multimodal connectivity in the region can increase regional trade, force regional value chains, and make the land-locked countries in the region more competitive to participate in global
value chains. Notably, another study underscores that by improving connectivity with Myanmar—a process currently limited to a single land port at Moreh in Manipur for all of India’s northeast—India’s export potential could experience a substantial upswing, estimated at 20-30 per cent (LPAI, 2022). Such a transformation would not only expand economic opportunities but also have positive spillover effects on the overall economic development of India’s NER.

Recent studies conducted by the United Nation’s Economic and Social Commission for Asia and the Pacific (ESCAP) have also emphasised the importance of connectivity-driven integration in the Bay of Bengal region as being important for overcoming the emergencies related to challenges such as those faced during Covid-19 (De, 2021). Considering the economic slowdown and supply chain challenges encountered during Covid-19, some studies suggest that enhanced regional connectivity may pave the way for a more robust economic recovery (ADB, 2023). Additionally, the World Bank estimates that a South Asia–Southeast Asia regional integration agenda that combines the liberalisation of tariffs, Non-Tariff Barriers (NTBs), trade facilitation, and Foreign Direct Investment (FDI) barriers could boost Gross Domestic Product (GDP) by 0.4 to 10.6 per cent for South Asia and by 0.1 to 0.4 per cent for Southeast Asia (The World Bank, 2022).

Enhancing regional economic integration demands a comprehensive approach. Successful integration necessitates the harmonious coordination of both the hard and soft facets of regional connectivity. For instance, the plan for a BIMSTEC Free Trade Area adopts a dual strategy. It not only aims to eliminate tariff barriers within the region but also places a strong emphasis on bolstering trade facilitation efforts among member countries. This holistic approach proves critical for bridging the connectivity gap in one of the world’s least integrated region (ADB, 2022a).

In this context, it becomes paramount to address not only tariff barriers but also to facilitate trade processes. Trade facilitation encompasses measures like simplifying customs procedures, reducing logistical bottlenecks, and streamlining regulatory frameworks, all of which are pivotal in ensuring that the benefits of tariff reductions can be fully realised. One study has highlighted that the development of transportation hubs has a positive impact on the market potential function, wherein the demands for goods produced in a region would increase with better transportation (Fujita, M., et al. 2001). This is particularly relevant for the Bay of Bengal region. By adopting this multifaceted approach, regions like the Bay of Bengal can foster more robust and sustainable economic integration, ultimately driving economic growth and development.

The Bay of Bengal is not the only region to emphasise connectivity via land. For instance, in Southeast Asia, countries like Malaysia and Thailand have demonstrated the practical benefits of cross-border rail freight services to complement their well-established shipping connectivity. Their collaborative effort, known as the ‘land bridge service,’ was launched in 1999 as a strategic move to enhance cost-efficiency and streamline the movement of goods (Guina, 2023). This innovative service plays a pivotal role in facilitating the seamless transportation of cargo via block container trains, connecting major ports with strategically positioned inland container depots (ICDs) across both nations. The success of this initiative exemplifies the advantages of diversified transportation options and underscores the region’s commitment to optimising logistics and trade facilitation.

Similarly, China has established two railway lines with Vietnam, representing Vietnam’s sole international rail link. China’s railway connection with Russia, the Zabaykalsky (Russia) – Manzhouli (China) line, stands as one of the largest cross-border rail freight corridors in the Asia-Pacific region, both in terms of volume (accounting for 65 per cent of the total land-based trade) and its capacity to process 40 freight trains per week (Wu, 2015).

In Africa, the need for improved infrastructure for land transportation was recognised and implemented in the 2000s. Several One-Stop Border Posts (OSBPs) were constructed, alongside the implementation of an Integration Border Management system, aimed at streamlining cross-border trade and transit. Notable examples include the Chirundu OSBP, established in 2009 between Zimbabwe and Zambia, and the Busia OSBP, which was completed in 2012 between Eastern Uganda and Western Kenya (Organisation for Economic and Co-operation Development [OECD], 2017). Key development agencies, both country-specific and multilateral, such as the United States Agency for International Development (USAID), Canada, and the World Bank, played pivotal roles in the development of this infrastructure. It is due to
such early interventions that the share of intra-regional trade in Sub-Saharan African countries is at 22 per cent, compared to 5 per cent for the Bay of Bengal region (Kathuria, 2018).

The countries of central and east Africa also signed the Northern Corridor Transit and Transport Agreement (NCTTA, n.d) in 1985, which was revised in 2007. This initiative aims to facilitate interstate and transit trade between the member countries, through connectivity between maritime ports, transport of goods by rail, road, and inland waterways, as well as streamlined regulatory and operational protocols such as customs control and documentation.

In Southeast Asia, a study of the impact of the Second Mekong International Bridge between Thailand and Laos on transport cost reductions showed that both in the short and long-term, there was a bi-directional increase in trade volume. Over the longer period, the economic benefits to both Thailand and Laos were much larger, as new investments in the region increased (Warr, Menon and Yusuf, 2009).

In South Asia, given the ongoing progress on infrastructure development, several simulation exercises have been conducted to assess the impact. One simulation exercise conducted for Bhutan to assess the impact of road infrastructure investment predicts a likely increase in regional accessibility. This, in turn, is likely to lead to an increase in real wages for most of Bhutan (Kumagai, Isono & Tsubota, 2018). Similarly, for Nepal, a simulation exercise conducted to assess the impact of ongoing infrastructure projects in Nepal confirmed that there are substantial economic gains from improved connectivity with India, especially for Kathmandu and eastern Nepal, where most of the projects are located. Furthermore, with the increasing number of railway connections, there will be a likely shift in the mode of trade from road to rail, which is further expected to move to inland waterways once made operational (Hayashi, Kumagai, Das, et al., 2023).

While the potential is immense, land connectivity remains the hardest challenge for India to implement its regional connectivity strategy to the East. Hinterland transportation infrastructure represents a litmus test for India’s capacity to overcome some of the most structural impediments to regional connectivity and overturn decades of continental introversion. For any geo-economic transformation of its eastern periphery, India will have to concentrate more efforts to build the Bay of Bengal’s missing land bridges.

d. Imbalanced Response: Maritime Connectivity with the Indo-Pacific

India’s former National Security Advisor, Shivshankar Menon, cautioned that “it seems that India now risks overcompensating for its sea-blindness in the early years after independence” (2020, p. 18). Indeed, especially in terms of transportation connectivity, there are clear indicators of this maritime overcompensation in India’s Eastern periphery.

Under the Neighbourhood First and Act East policies, New Delhi has made significant investments to develop infrastructure and multimodal transportation linkages. This seeks to enhance economic exchanges with its land and maritime neighbours to the North and East, particularly with Nepal, Bhutan, Bangladesh, Sri Lanka, Myanmar, Thailand, and Indonesia. In line with the larger Indo-Pacific vision that now shapes most of its foreign and economic policies, India’s connectivity initiatives in the Bay of Bengal region have predominantly focused on the maritime dimension (Chaudhury, Basu & Bose, 2019). This has also been evident to the West, as India-Pakistan tensions have impeded any progress on the many regional land connectivity initiatives developed in the 2000s between South and Central Asia (Malhotra et al., 2013). Since then, India has focused more on building maritime linkages with the Gulf region, most recently expressed through plans for an India-Middle East-Europe Economic Corridor (IMEC) via the Arabian Sea.

There are two dimensions to the maritime-inland imbalance in India’s response—an internal and an external one. Internally, it reflects an economic driver, given that about 95 per cent of India’s international trade by volume moves by sea transport (Ministry of Ports, Shipping and Inland Waterways 2020, p. 5). Externally, there are also rising expectations about India’s growing maritime outlook towards the oceans as zones of connectivity and partnership.

For example, Japan’s late Prime Minister, Shinzo Abe, first developed this Indo-Pacific outlook in 2007, while speaking in India, referring to the “confluence of the two seas of the Indian and Pacific Oceans” with India in a central position as part of a “broader Asia” that “will allow people, goods, capital, and knowledge to flow freely” (Ministry of Foreign Affairs of Japan, 2007). In her speech in Chennai, on the Bay of Bengal region, the then United States Secretary of State, Hillary Clinton (US Department of State, 2011), referred to India as “straddling the waters from the
Indian to the Pacific Ocean” and as a “steward of these waterways … invested in shaping the future of the region that they connect.” And the Association of Southeast Asian Nations’ (ASEAN, 2019) outlook on the Indo-Pacific also emphasizes the “importance of the maritime domain and perspective in the evolving regional architecture” and identifies maritime cooperation as the first of four key pillars.

Such Japanese, American, and Southeast Asian expectations are matched by India's own maritime-centric outlook on the Indo-Pacific. In his address at the Shangri-La Dialogue, in Singapore, Prime Minister Narendra Modi (2018) emphasised that the Act East Policy would seek to “join India, especially her East and North-East, with our land and maritime partners to the East”. Most of his address, however, focused on the maritime and oceanic dimensions of Indo-Pacific connectivity. This makes sense, given that for much of the 20th century, India had persistently neglected, and even dismantled the connectivity linkages of the Bay of Bengal and the wider Eastern Indian Ocean. India's former Foreign Secretary, Vijay Gokhale, thus referred to the Bay of Bengal as a “subset of the growth region that we call the Indo-Pacific” (MEA, 2018).

This new focus on the Bay of Bengal as a maritime springboard to the Indo-Pacific and global economy is not exclusive to India. Bangladesh recently adopted a new Indo-Pacific policy outlook. Sri Lanka’s President, Ranil Wickremesinghe, has repeatedly articulated the ambition of his island country serving as a “gateway to India and onto the Bay of Bengal” and referred to BIMSTEC as an institution that “gives us a reach to the Bay of Bengal and maybe, at some later stage, to some maritime issues in the region” (Gokhale, 2021).

Both Thailand and Indonesia have also privileged the maritime dimension in their Western engagements with the Indian subcontinent. In 2019, in line with the strategy of using its ports as gateways to Southeast Asia, India signed three Memorandums of Understanding (MoUs) on port connectivity between the Port Authority of Thailand’s (PAT) Ranong Port and its southern and eastern ports of Chennai, Vishakhapatnam and Kolkata (Chaudhury, 2019). India and Indonesia have also agreed to push maritime connectivity initiatives between the Andaman and Nicobar Islands and Sabang Port in the island of Aceh in Indonesia (Chaudhury, 2022). Similarly, Bangladesh’s Chattogram Port and PAT’s Ranong Port had also signed an MoU on direct shipping. These Indo-Pacific geoeconomic visions have translated into slow but significant progress in bridging the Bay of Bengal region with a particular focus on the maritime dimension. Through the Asian Development Bank's South Asia Subregional Economic Cooperation (SASEC) Operational Plan 2016-2025, India is upgrading its eastern ports. This initiative aims to provide facilitated access to Southeast and East Asian markets for its hinterland's industrial and manufacturing sectors. The coastal shipping agreement with Bangladesh offers new opportunities for direct trade. And the Indo-Pacific Oceans Initiative (IPOI), announced by Prime Minister Modi at the 14th East Asia Summit in Bangkok, in 2018, has seven pillars of cooperation, four of which have a maritime focus.

India has concentrated on maritime connectivity initiatives under its Indo-Pacific policies, mainly in response to the continental and Eurasian dimensions of China’s BRI. This growing maritime connectivity focus did not cause the many inland connectivity gaps and challenges surveyed in the previous section, for example in the NER or between Bangladesh, India, and Myanmar. Yet, by diverting attention and resources towards the coastal and oceanic dimensions of connectivity, this maritime focus has helped perpetuate the relative neglect of inland connectivity. The following two sections of this paper respectively survey the hard and soft dimensions of these connectivity infrastructure gaps, as well as possible options to bridge them.

3. Land Transportation Infrastructure: Potential, Challenges, and Solutions

Despite many challenges, there have been several catalysts in the last two decades for increasing the land connectivity linkages in the region. These include the conclusion of pending agreements such as the Land Boundary Agreement (2015) with Bangladesh to demarcate the boundary, revisions in the India-Nepal Treaty of Trade and Transit (2009 and 2023), and implementation of the Free Movement Regime between India and Myanmar in 2018.

The improvement in political relations has been complemented by advancements on the economic front and the expansion of cross-border infrastructure. Notably, since 2012, nine Integrated Check Posts (ICPs) have become operational along India’s eastern borders. Several railway lines connecting Bangladesh and Nepal have been constructed.
and revitalised, effectively linking land customs stations and connecting seaports to the hinterland. Furthermore, pipelines have been established to facilitate the cross-border movement of petroleum. Moreover, India and Bangladesh have initiated negotiations for a Comprehensive Economic Partnership Agreement. Such initiatives have also been complemented by the increasing investments from the private sector, albeit at a slower pace.

This section highlights the importance of the various land infrastructure and transportation modes, the current status, challenges that persist, and the way forward in four sectors.

**a. Build Cross-Border Road Connectivity**

Even though overland transport remains the dominant form of cross-border movement (trade and passenger) in most countries in the Bay of Bengal region (approximately 70 per cent), there has been limited focus on its development (Sinha & Sharma, 2020; Kumar & George, 2020). After the suspension of other modes of connectivity such as railways and inland waterways in the 1960s and 1970s, road has remained the dominant mode, albeit with its own challenges that have kept logistics cost high. Road connectivity is easier to develop (compared to other modes), involves lesser infrastructure costs, and enables movement of smaller volumes of cargo as well as last-mile connectivity.

India’s focus on road development has been at two levels: key national arterial routes within India leading to the sea and land borders, and the development of roads and highways in the neighbouring countries.

Between 2010 and 2019, India took up several border roads upgradation projects. However, challenges persisted leading to delays in upgradation of border roads. These included, for instance, lack of coordination between the Centre and the State governments, including in signing of MoU, financial management, resource allocation, land acquisition, etc. For example, the India-Nepal Border Roads Project (INBRP) was delayed by approximately five years due to issues in centre-state coordination (Ministry of Home Affairs, 2021). Furthermore, many of the border roads projects, including with Nepal and Bhutan, were taken up only by the Border Management Division of the Ministry of Home Affairs, which relied on the bordering state governments to provide expertise and hire contractors on road development (ibid.). Additionally, the objective of the upgradation was to connect the border roads to Border Outposts, to make movement easy for the border guarding forces such as the Sashtra Seema Bal and the Border Security Forces (BSF). It did not consider the road-wear-and-tear that would be caused by the

![Figure 1: Mode of India’s EXIM Movement with Bangladesh](source: DGCI&S, Ministry of Commerce and Industry.)
movement of trucks on the India-Nepal border. For instance, approximately 12,000 trucks carry the Indo-Nepal cargo through the ICP at Raxaul.5 As a result, many roads leading up to the borders, including the approach road to the ICP on both Indian and Nepali sides, needs upgradation.6 With Bangladesh, the Petrapole-Benapole land port remains the busiest in terms of trade and passenger movement. However, the approach road towards the port remains a narrow two-lane road, even though demands for its upgradation have been ongoing for decades. Earlier in February 2023, the Supreme Court allowed the felling of 300 trees to widen the National Highway in West Bengal leading to Petrapole. However, ongoing delays in the process have led to persistent congestion on the approach road.7

Since 2014, India has taken initiatives at both institutional and programmatic levels. At the institutional level, for instance, India formed the National Highways & Infrastructure Development Corporation Ltd. (NHIDCL), under the Ministry of Road Transport and Highways in 2014 to develop national highways and strategic roads in the country, especially in India’s Northeast Region (NER) and areas that share boundaries with the neighbouring countries (NHIDCL, 2022). The NHIDCL has also been involved in international cooperation. For instance, it completed the construction of a bridge over Feni River in Sabroom to connect Tripura and Bangladesh and the Imphal-Moreh bypass road leading to the ICP with Myanmar. It also implemented 2-laning of NH54 from Aizawl to Tuipang in Mizoram, which can potentially increase cross-border trade through Mizoram with Myanmar and constructed the 6-lane Mechi bridge on Asian Highway (AH-02) to improve cross trade through West Bengal with Nepal (NHIDCL, 2022a). To improve the movement of freight traffic through roads, the Government of India is also implementing the Bharatmala Pariyojna (2015) to develop economic corridors and feeder routes for connectivity with the land border and coastal areas.

These initiatives are, however, only taking place on the Indian side. India has also been developing several roads in the neighbouring countries as part of its development cooperation for regional connectivity. In Nepal, the NHIDCL developed the India-funded Postal Roads project and in Myanmar, for instance, work is ongoing on the road from Zorinpui towards Paletwa (109 km), as a part of India’s KMTTP. India has also been involved in the IMT Highway project. However, all these projects have missed several deadlines and do not fall on the important trade and transit routes between India and the neighbouring countries.

Additionally, while cross border passenger movement protocols have been established (Table 2), the same is still lacking for cargo movement. At the regional level, countries have not been able to implement the BBIN-MVA.

---
5 Calculated by author using data from LPAI.
6 Findings from author’s fieldwork in August 2023
7 Findings from author’s fieldwork in July 2023
### Table 2: Cross-Border Agreements on Passenger Movement

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Countries</th>
<th>Name of Agreement</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>India and Myanmar</td>
<td>Agreement on Land Border Crossing</td>
<td>May 11, 2018</td>
</tr>
</tbody>
</table>

Source: Ministry of Road Transport and Highways.

Other challenges in establishing seamless and robust road connectivity include the absence of targeted development of routes along the economic trade corridors, and a deficiency in information exchange mechanisms. This lack of coordination between India and its neighbouring countries hinders the prioritisation of trade and economic corridors in road project development.

Efficient road connectivity can be achieved through a range of policy and operational interventions. These encompass enhanced coordination between central and state authorities in identifying and developing vital roads within economic corridors, particularly those connecting to ICPs. Additionally, fostering stronger cross-border collaboration in road infrastructure development is crucial to maintain consistent standards on both sides of the border. To facilitate this, inter-ministerial consultations or established mechanisms like Joint Consultation Committees or the High-Level Task Force between India and Nepal should be leveraged. Moreover, for the effective execution of road projects by Indian PSUs in neighbouring countries, establishing a local technical presence beyond diplomatic missions is essential to expedite project completion.

### b. Advance Sub-Regional Rail Links

Rail is another transportation mode that has attracted investments from New Delhi to revive the old and construct new linkages across South Asia and Southeast Asia. It helps overcome challenges associated with transportation through roads, such as congestion and occasional closures by state governments, especially during times of crisis like the Covid-19 pandemic. One railway rake carrying 60 Twenty-Foot Equivalent Units (TEUs) is equivalent to approximately 120-150 trucks, reducing road congestion significantly (Hellenic Shipping News, 2020). Second, enhancing rail connectivity results in lower logistics costs and reduced transit time. Rail transportation offers economies of scale, allowing for the movement of large volumes of goods in a cost-effective manner (Rodrigue, 2020).
New Delhi's expansion of rail connectivity in the region reflects a commitment to regional integration, fostering closer ties, and promoting economic cooperation. However, the governments across the region have not been able to fully exploit its potential.

In the mid-2000s, only one railway line existed with Bangladesh, and no passenger railway line with Nepal. Today, in the case of India-Bangladesh connectivity, six rail lines have been revived (after their closing in 1965), including the Petrapole-Benapole, Gede-Darshana, Singabad-Rohanpur, Radhikapur-Birol, Agartala-Akhaura, and Haldibari-Chilahati lines. India's rail network with Nepal comprises of two lines on the Raxaul-Sirsiya and Jaynagar-Kurtha routes. The latter is the first passenger train between India and Nepal, inaugurated in 2022.

India also has plans to expand rail connectivity further towards the east, with Bhutan and Myanmar. Towards this, India has also been developing several rail routes in the NER, including the Jiribam-Imphal railway in Manipur, which is planned to further connect to Moreh and Tamu in Myanmar. While the feasibility study was completed in 2005, the idea was initially rejected by the Indian Railways due to the difficulty in implementation and financial unviability of the project (PIB, 2016). The project was taken up again in 2019, and the survey was completed in 2022. India is also constructing the 51 km Bairabi-Sairang line in Mizoram. Recently, the government also gave a nod to a location survey for the extension of this line to Hbicchuah, close to the border with Myanmar and connecting onwards to Sittwe Port (Directorate of Information and Public Relations, 2023). In Sikkim, New Delhi is building the Sevoke-Rangpo rail line, close to the border with Bhutan. The compulsions of land connectivity, as discussed in the previous section, have put India’s NER on India’s rail connectivity map for the first time.

Despite this, the share of rail in cross-border cargo movement has not been able to increase more than 4 per cent (Figure 1). In fact, although inaugurated in 2021, container trains have not operated between India and Bangladesh since January 2023.8

There are several challenges in railway connectivity that need to be addressed. First, there is a significant difference in the quality and standard of railway infrastructure in the neighbouring countries. Myanmar, for instance, needs urgent upgradation of its railway infrastructure for both domestic and cross-border transportation (ADB, 2018a). Second, there is a lack of last-mile connectivity. Transhipment costs incurred due to the absence of seamless rail connectivity from ports to hinterlands hamper the efficiency of the overall logistics chain. Third, the irregular availability of rakes disrupts the flow of trade and hampers the reliability of rail services. Finally, the absence of well-equipped container handling facilities and a lack of modern container terminals and facilities on both sides of the border contributes to inefficiency in cargo handling and affects seamless trade operations.

Enhancing rail connectivity necessitates an elevation of railway and cargo handling infrastructure standards on both sides of the border. This includes not only the upgrading of tracks and signalling systems but also the essential rail yards dedicated to handling goods efficiently. To facilitate the seamless flow of goods, it is of paramount importance to equip these rail yards with cutting-edge container handling equipment, including conveyer belts, forklifts, and cargo scanners. Furthermore, to ensure sustained commitment and successful implementation, the improvement of cross-border rail connectivity should be seamlessly integrated into the National Trade Facilitation Action Plan (NTFAP) of each respective country. Encouraging private sector involvement also becomes pivotal for the sustainable development and operation of cross-border rail infrastructure, as exemplified by the case of Nepal.

c. Expand Integrated Check Posts

India’s Integrated Check Posts (ICPs) play a vital role as points of entry and exit on the country's land borders, serving as centralised zones that house various facilities, including customs, immigration, and border security. The ICPs were planned in the mid-2000s and have been operational since 2012. They serve as key infrastructural elements at the border to streamline cross-border trade and passenger flows, promoting seamless connectivity and trade facilitation. These checkpoints help to reduce duplication of processes and minimise delays, ultimately improving the efficiency of cross-border transactions. Moreover, the ICPs offer enhanced ease in customs procedures. This efficiency is important for the competitiveness of businesses engaged in cross-border trade and contributes to improved land connectivity around the Bay of Bengal.

8 Findings from author’s fieldwork in July 2023.
Globally, such border check posts have reduced processing times and managed to achieve efficiency in border operations. For instance, the Chirundu One Stop Border Post between Zimbabwe and Zambia, established under the North-South Transport Corridor with the help of DFID, World Bank, and JICA in 2009, played a significant role in reducing cross-border transit times and in improving the competitiveness of goods in the region (Ministry of Industry and Commerce, Republic of Zimbabwe, 2011).

In the fiscal year 2019-20, approximately 40 per cent of India’s trade with neighbouring countries, including Bangladesh, Nepal, Myanmar, and Pakistan, was conducted through the six strategically located ICPs (Sinha, 2021). These ICPs are situated in Agartala, Petrapole, Raxaul, Jogbani, Moreh, and Attari, facilitating trade and fostering economic cooperation between India and its neighbouring nations. Currently, there are 10 ICPs operational along India’s land borders; the Land Port Authority of India plans to operate a total of 23 ICPs by 2025 at key border checkpoints (Sinha, 2021a).

However, the development of ICPs on the Indian side is not matched by similar infrastructure in the neighbouring countries. For instance, both Bangladesh and Myanmar do not have comparable infrastructure on their side of the border; this restricts the volume of cargo that the countries can handle. Additionally, limitations in public-private partnerships and ground-level issues pose challenges for the ICPs. Insufficient warehousing space, narrow approach roads, and the lack of digitisation can hamper the effectiveness of these checkpoints. Beyond this, there is a lack of a clear vision for the expansion of ICPs in alignment with other regional connectivity initiatives to complement existing and planned economic corridors and supply-chain routes. Currently, only one planned ICP at Srimantapur is multimodal, integrating road and inland waterways. At the other ICPs, transhipment costs continue to be high. To facilitate transportation by land, there is an urgent need to integrate the ICPs with other regional initiatives to maximise their impact and improve cross-border land connectivity.

To enhance trade and logistics efficiency via the ICPs, a comprehensive strategy is required. Primarily, there is an imperative need for infrastructure enhancements, particularly concerning the approach roads and bridges, especially those in India’s NER connecting with Myanmar. These upgrades are essential to facilitate the smooth movement of goods across borders.

Furthermore, it is vital to establish the necessary facilities, such as testing agencies, at strategic locations to ensure compliance and quality assurance in the trading process. Additionally, digitisation plays a crucial role in expediting cargo clearance within the ICPs to mitigate congestion issues. The urgent implementation of digital solutions can streamline documentation, enhance transparency, and facilitate faster cargo processing, ultimately contributing to improved trade facilitation and cross-border efficiency.

d. Develop Inland Container Depots and Multimodal Logistics Parks

India’s dry ports or Inland Container Depots (ICDs) play a significant role in the country’s logistics infrastructure by offering handling and temporary storage services for containers, general and bulk cargo, as well as multimodal transportation facilities including through road, rail, inland waterways, or airports, making it an essential part of India’s supply chain management system. Dry ports also offer inspection facilities and customs clearance at inland locations and are, therefore, a vital component of India’s trade ecosystem, supporting both domestic and international trade.

Southeast Asian countries are among the top sources of India’s imports through the ICDs. In 2016-17, Thailand, Malaysia, and Indonesia were in the top 10 sources of India’s imports through ICDs. Sri Lanka and Vietnam are among the top 10 export countries from the South and Southeast Asian regions (Comptroller and Auditor General of India, 2018). Consolidation of textiles and clothing, chemicals, fertilisers, etc., takes place through ICDs, which also form an essential part of the cargo profile with neighbouring countries. However, a major share of the transportation from the ICDs takes place to India’s sea ports than land ports.
Beyond the Coastline: India’s Land Connectivity
Options around the Bay of Bengal

Figure 2: India’s Integrated Check Posts with Bangladesh and Myanmar


mapbox © Mapbox, © OpenStreetMap
Table 3: List of ICDs and MMLPs in India's Northeast Region

<table>
<thead>
<tr>
<th>S. No.</th>
<th>State</th>
<th>Zone</th>
<th>Name of Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Assam</td>
<td>Guwahati</td>
<td>CONCOR, ICD Amingaon, Guwahati</td>
</tr>
<tr>
<td>2.</td>
<td>West Bengal</td>
<td>Kolkata</td>
<td>Allied ICD Services Ltd Epip Banskopa Durgapur</td>
</tr>
<tr>
<td>MMLPs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Assam</td>
<td>Jogighopa</td>
<td>–</td>
</tr>
<tr>
<td>2.</td>
<td>West Bengal</td>
<td>Kolkata</td>
<td>–</td>
</tr>
<tr>
<td>3.</td>
<td>Assam</td>
<td>Guwahati</td>
<td>–</td>
</tr>
</tbody>
</table>

Source: Press Information Bureau (PIB), 2023.

Additionally, Multimodal Logistics Parks (MMLPs) are another strategic infrastructure for cross-border connectivity. The COVID-19 pandemic has highlighted the need for greater regionalisation of the supply chain. MMLPs can provide much-needed last-mile connectivity, reduce congestion, act as bonded warehouses, and shift capacity constraints at sea and land ports to an inland location, closer to the delivery centres.

The Ministry of Road Transport and Highways (MoRTH, n.d.) estimates that logistics parks would drive about 10 per cent reduction in transportation costs for the top 15 nodes by enabling freight movement on higher-sized trucks and rail, which will also result in lower carbon dioxide emissions and less congestion in cities in 2017, under the Bharatmala Pariyojana, the Government of India launched a program to develop 35 MMLPs across the country (PIB, 2021). The Asian Development Bank (ADB) also supported the pre-feasibility study for an MMLP in Jogighopa, Assam (about 150 km from Guwahati), which incorporates rail, road, and inland waterway connectivity, especially for facilitating South-South-east trade (Mitra et al, 2020).

However, much of this is still at a planning stage. A lack of a cross-border agreement on dry ports and MMLPs, limits the role that this infrastructure can play in cross-border movement through land. With mutual recognition of the dry ports and MMLPs, the countries in the region will be able to capture business and investment opportunities. Another significant challenge is the need for more dry ports and MMLPs in NER, as there is only one ICD at Amingaon, Assam, catering to the entire Northeast (Table 3), and one planned MMLP in Assam. To develop the NER as a gateway for land transportation around the Bay of Bengal, more infrastructure is needed for cargo consolidation and movement.

Improving connectivity though ICDs and MMLPS holds significant potential for enhancing regional trade, efficiency, and economic growth. First, investing in the expansion and modernisation of ICDs is crucial. By improving the infrastructure, including storage facilities, customs processes, and transportation links to major sea and land ports, the countries in the region can reduce transit times and costs. Second, regional cooperation is paramount. Collaboration between neighbouring countries can lead to the development of interconnected ICD networks, allowing for more efficient cross-border trade. Harmonising customs procedures and regulatory frameworks can further expedite cargo movement, reducing delays and bureaucratic hurdles. Moreover, investing in skilled human resources and capacity-building programs is essential to ensure that ICD operations are conducted efficiently and in compliance with international standards.


India's efforts to correct the land-based connectivity gap with Southeast Asia requires more than just financial and technical efforts. To effectively develop the much-needed land bridges in the Bay of Bengal, New Delhi will also have to address regulatory and policy challenges. To develop the sub regional hinterlands in line with the Indo-Pacific vision of free, open, and sustainable infrastructure, India can concentrate efforts on five key fronts.
### a. Enhance Domestic Coordination and Institutional Capacity

India’s Indo-Pacific connectivity initiatives largely involve central ministries and organisations that focus on either the maritime or the digital component. This is also reflected in decisions regarding internal organisation. The new nodal division for the Indo-Pacific at the Ministry of External Affairs, for example, has a predominantly maritime mandate while leaving the periphery and land-based connectivity initiatives to two different territorial divisions (the Northern division covering Nepal and Bhutan and the Bangladesh-Myanmar division).

To pursue its land-based connectivity initiatives to the East, especially with Bangladesh and Myanmar, India will have to continue investing in greater coordination to rope in ministries that have been relative laggards when it comes to connectivity efforts. The ministries of Ports, Shipping and Waterways, and of Electronics and Information Technology have played an important role in various regional connectivity initiatives, especially with ASEAN and with India’s two maritime neighbours, Indonesia and Thailand. India also has bilateral maritime cooperation arrangements with Singapore, Vietnam, Bangladesh, Sri Lanka, and the Maldives (Ministry of Ports, Shipping and Inland Waterways, 2022). In contrast, the three ministries of Road Transport and Highways, Civil Aviation, and Railways have been far less proactive in implementing India’s regional connectivity initiatives to the East. These are three among various important domestic stakeholders that must intensify cooperation also with the nodal Ministry of Development of North Eastern Region (MDoNER) to focus on the inland dimension of connectivity in the BBIN region and with Myanmar.

Beyond the central level, with any land-based connectivity initiative to the East, the states of the NER will also have to play a more important, and sometimes even leading role. This reflects the need for the principle of “cooperative federalism” to also apply to India’s external engagements, especially in the South and Southeast Asian regions (Jacob, 2016). The states of Assam, Meghalaya, Tripura, Nagaland, Manipur, and Mizoram must be engaged more closely, beyond just land acquisition, to ensure the success of various cross-border connectivity initiatives with Bangladesh and Myanmar. There are positive indications on this front. For example, in 2022 the state of Assam has hosted the third Natural Allies in Development and Interdependence (NADI) conference to promote cooperation in the Bay of Bengal and the Southeast Asian region (The Print, 2022). Similar regional connectivity conferences have been held in recent years in Meghalaya and Tripura, showing how NER states are developing their paradiplomacy towards neighbouring countries (Hazarika, 2021).

Domestically, there are several developments that have been taking place for inter-ministerial coordination in cross-border connectivity projects. These include the four working groups under the National Trade Facilitation Committee set up in 2016, and the Prime Minister’s Gatshakti National Masterplan for Multimodal Connectivity, launched in 2021. However, most of the projects under these programs are geared towards connectivity with India’s sea ports. To overcome this, the National Trade Facilitation Action Plan could include more projects for enhancing land connectivity. Additionally, India’s apex economic planning body NITI Aayog is also particularly well placed to enhance these coordination efforts between central ministries and regulatory authorities and state-level decision-making bodies for building land bridges in the Bay of Bengal region.

Beyond coordination, the NITI Aayog can also address the rising demand to invest in decision-making bodies with greater technical expertise about various dimensions of land-based transportation connectivity. This is even more important for efforts to implement grant- and loan-based or Indian private sector-led infrastructure projects across the border, for example in Bangladesh or Myanmar, which brings up additional challenges. There is a growing demand for technical expertise for detailed project reports, land acquisition, environmental and social impact assessment or project monitoring and implementation in neighbouring countries. The Ministry of External Affairs’ Development Partnership Administration will have to significantly expand the human and financial resources to develop technical preparedness and competence on these fronts, as well as support Indian private sector investments in geopolitically important infrastructure projects.

Finally, in terms of regional linkages, India’s land-based connectivity initiatives can also benefit from a wider sub-national diplomatic presence in the Eastern neighbourhood. India’s consulates in Sylhet and Chittagong (Bangladesh), Mandalay (Myanmar), and Chiang Mai (Thailand) all offer an important outreach mechanism to accelerate the implementation
Table 4: Diplomatic Missions in the Bay of Bengal Region

<table>
<thead>
<tr>
<th>Country</th>
<th>India</th>
<th>Bangladesh</th>
<th>Nepal</th>
<th>Bhutan</th>
<th>Myanmar</th>
<th>Thailand</th>
<th>Sri Lanka</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td></td>
<td>Dhaka, Chittagong, Khulna, Rajshahi, Sylhet</td>
<td>Kathmandu, Birgunj</td>
<td>Thimpu, Phuentsholing</td>
<td>Yangon, Mandalay, Sittwe</td>
<td>Bangkok, Chiang Mai</td>
<td>Colombo, Kandy, Jaffna, Hambantota</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>New Delhi, Agartala, Kolkata, Chennai, Guwahati, Mumbai</td>
<td>Kathmandu</td>
<td>Thimpu</td>
<td>Yangon, Sittwe</td>
<td>Bangkok</td>
<td>Colombo</td>
<td></td>
</tr>
<tr>
<td>Nepal</td>
<td>New Delhi, Kolkata</td>
<td>Dhaka</td>
<td>(through mission in New Delhi)</td>
<td>Yangon</td>
<td>Bangkok</td>
<td>Colombo</td>
<td></td>
</tr>
<tr>
<td>Bhutan</td>
<td>New Delhi, Kolkata, Guwahati</td>
<td>Dhaka</td>
<td>(through mission in New Delhi)</td>
<td>(through mission in Bangkok)</td>
<td>Bangkok</td>
<td>(through mission in Dhaka)</td>
<td></td>
</tr>
<tr>
<td>Myanmar</td>
<td>New Delhi, Chennai, Kolkata</td>
<td>Dhaka</td>
<td>Kathmandu</td>
<td>(through mission in New Delhi)</td>
<td>Bangkok, Chiang Mai</td>
<td>Colombo</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>New Delhi, Chennai, Kolkata, Guwahati</td>
<td>Dhaka</td>
<td>Kathmandu</td>
<td>Thimpu</td>
<td>Yangon</td>
<td>Colombo</td>
<td></td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>New Delhi, Chennai</td>
<td>Dhaka</td>
<td>Kathmandu</td>
<td>(through mission in Dhaka)</td>
<td>Yangon</td>
<td>Bangkok</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ compilation based on information from the websites of foreign ministries of the respective countries.

of connectivity projects through India’s various economic assistance mechanisms (Table 4). These diplomatic missions need to be strengthened with adequate resources, including technical experts on deputation from other ministries and expert consultants. Similarly, India may continue to welcome a greater number of foreign diplomatic missions in the NER. Following the opening in Guwahati (Assam) of a Bangladesh Assistant High Commission in 2017, and of a Bhutan Consulate in 2018, there may be opportunities for Myanmar and Thailand to open up a representation in the NER to focus on enhancing connectivity initiatives.

b. Support Cross-Border Political Stability and Security

Land-based infrastructure connectivity projects to India’s East face some of the world’s most politically volatile geographies. The arch between Northeast India, Bangladesh, Myanmar, and Thailand harbours a variety of active military conflicts, displaced people, and criminal networks, including the trafficking of weapons, narcotics, and people. This frequently stimulates debates on whether India should first invest in improving the political and security environment or alternatively go ahead with economic and infrastructure initiatives to reduce
conflict. Both dimensions are naturally interrelated and indivisible. Any cross-border connectivity initiative requires some form of buy-in from a favourable political regime and friendly constituencies in the neighbouring country. And vice-versa, there is ample evidence that infrastructure investments enhance developmental prospects, increase economic linkages, and decrease levels of political violence in the long term (Jones & Howarth, 2012).

This connectivity-security nexus has become one of the core principles in India’s connectivity strategy, especially towards the landlocked NER. It is reflected even in the military establishment, which plays an important role in ensuring the basic conditions of order and peace that have allowed various infrastructure projects to progress towards India’s Eastern borderlands, including the new roads and railway linkages in Manipur and Mizoram. In 2021, India’s former Chief of Army Service, Gen. Manoj Naravane, thus emphasised that “regional [and] internal connectivity is acutely linked to security, and it is central to unleashing the potential of the Northeast”. He further referred to the NER as a “centre of gravity for sub-regional connectivity [and] the launch pad for Act East initiatives” (Singh, 2021).

In recent years, India has thus pragmatically chosen to push through with a variety of connectivity initiatives in the NER, as well as with Bangladesh and Myanmar, despite political volatility and uncertainty (Box 1). Yet there will also be continued opposition to connectivity initiatives, especially in borderlands or landlocked sub-regional hinterland economies. This will naturally lead to disruption, with political economy ‘losers’ bound to mobilise against connectivity initiatives that disrupt their beneficial comfort of stagnation and insulation. In other cases, this will also manifest as competitive identity politics, with economic change affecting traditional structures or aggravating small state or minority concerns, as seen in the case of Africa (Magwedere & Marozva, 2023). Even in the case of Bhutan, a country where India enjoys a relatively bigger influence through its development cooperation, the political environment led the national legislature to opt out of the BBIN motor vehicles agreement (Box 2).

Box 1: Impact of Domestic Conflict on the Completion of KMTTP

In 2008, the Ministry of External Affairs entered into a Framework Agreement with the Government of Myanmar to implement the Kaladan Multimodal Transit Transport Project (KMTTP) (MDoNER, 2014). The project consists of four different parts: Sittwe port (which was inaugurated in May 2023), Inland Water Transport from Sittwe to Paletwa, a road from Paletwa to the Indo-Myanmar border and another road from the border to NH 54 in Lawngtlai, India; along with a number of bridges. India’s Ministry of Commerce & Industry (MoCI, 2008) estimated the project cost to be Rs. 540 crore and the project were expected to be completed by 2012. The amount was later revised, at a Revised Cost Estimate of Rs. 2904 crore (MEA, 2015). Except for the Sittwe port, the rest of the project is still under construction.

The volatile political and security environment in Myanmar is one of the reasons for the delay of the KMTTP. Much of Northern Myanmar remains under the control of Ethnic Armed Organisations (EAOs), where the Myanmar Army and central authorities have limited capacity to operate, enforce the rule of law, and ensure the security of Indian nationals working on the KMTTP (Ramachandran, 2023). In 2019, the Arakan Army moved its operations to the Rakhine and Chin state (where parts of the KMTTP were undergoing construction), attacking and targeting the shipment of materials for the infrastructure project or attacking troops providing security to the project. In the same year, five Indian and Myanmar nationals each (including a Member of Myanmar Parliament) were kidnapped by the Arakan Army (PIB, 2019). The Government of India has stressed that the development of the KMTTP is almost unpredictable due to these factors. In addition, the 2017-18 Rohingya crisis further delayed the completion of the project. The Sittwe Port is located in the Rakhine state from where the refugee crisis started. Finally, the 2021 military coup in Myanmar also created uncertainties about India’s engagement and the completion of the project (Banerjee, 2023).
Box 2: Bhutan’s Opposition to the BBIN MVA

On June 15, 2015, transport ministers on behalf of Bangladesh, Bhutan, India, and Nepal (BBIN) signed the Motor Vehicles Agreement (MVA) for the Regulation of Passenger, Personal and Cargo Vehicular Traffic. The purpose outlined behind the agreement was to “enable the exchange of traffic rights and ease cross-border movement of goods, vehicles, and people… (expanding) people-to-people contact, trade, and economic exchanges” (Ministry of Foreign Affairs and External Trade, Royal Government of Bhutan, 2017). Although the countries convened in Thimphu, Bhutan, did not ratify the agreement and instead acted as an observer owing to domestic opposition over concerns of excessive pollution, and environmental degradation (Business Bhutan, 2017).

In particular, many truckers and bus drivers feared they would lose business to competition from India. Furthermore, Pema Gyamtsho, leader of the opposition in Bhutan, raised concerns about increased pollution. Other concerns raised included an increase in drug and human trafficking crimes, erosion of Bhutan’s traditions, religion and culture, and infiltration of anti-India elements (Gyelmo, 2016). A joint committee was formulated to resolve differences between the National Council, the opposition, and the government, which proposed a 15-point resolution (Kuensel, 2017). However, the National Council voted against the BBIN agreement, and the committee was later dissolved (Firstpost, 2016). As a result, the remaining three countries, BIN, went ahead with the discussion on the next steps for the operationalisation of the MVA (MEA, 2022).

For India to continue its successful land-based connectivity strategy to the East, it will have to invest in mechanisms of consultation and ensure that its efforts find maximum political and social buy-in. Unlike with maritime- or digital-based connectivity initiatives, there is a far higher political risk to any infrastructure investments seeking to revitalise these historical hinterland corridors, for example between Kolkata, Dhaka, Imphal and Mandalay, or between Agartala and Chittagong. Much-needed investments in connectivity infrastructure, especially from the private sector, will only flow if the Indian state deploys its military, security, and diplomatic resources to pave the way and serve as a sovereign guarantee.

Since it requires capabilities to shape the political and security environment beyond its borders, this poses a difficult challenge for India. Yet this is something India has done in the past and continues to do so today through its diplomatic missions in neighbouring countries, as well as a variety of political, military, and security partnerships. For example, in Afghanistan in the late 2000s, Indian engineers built some of the country’s most important road network under dire circumstances, which was only possible through a combination of diplomatic, military, political, and intelligence resources deployed there (Adhikari, 2018). For India to succeed in its various connectivity and infrastructure projects in other neighbouring countries, especially in conflict, politically volatile or other high-risk areas, it will have to continue investing in expert resources that can support conflict resolution, mediation, and peacebuilding.

c. Explore New Regional and International Partnerships

India’s land-based connectivity with Southeast Asia will also hinge on its ability to complement the bilateral level with trilateral and other international partnerships. Coordinating and cooperating with key stakeholders in the region—including neighbour countries, regional, and multilateral organisations—will help reduce the delivery deficit, accelerate project implementation, develop comparative advantages, and avoid overlaps and redundancy of efforts (Chakrabarty & Prabhu, 2023). As geopolitical competition intensifies in the Bay of Bengal region, with a rising number of rival infrastructure and connectivity initiatives, there is a growing need to establish coordination and cooperation mechanisms (Xavier & Palit, 2023).

In recent years, India has engaged in a flurry of regional connectivity and infrastructure partnerships. This includes the ADB’s SASEC program for multimodal transportation connectivity focused along India’s Eastern coast and the BBIN region.
The United States has supported power grid connectivity in South Asia, most recently through a major grant for Nepal-India transmission lines. Meanwhile, Japan has emerged as India’s preferred partner in the NER and in collaborations with Bangladesh. Other connectivity partners include the World Bank, the European Union, and Australia. Yet almost all of these have focused on the Western and Central parts of the Bay of Bengal region. The missing Eastern land bridge between India, Myanmar, and Thailand remains untouched for a variety of economic, political, and geostrategic reasons. Myanmar thus remains a significant challenge for India to develop new connectivity partnerships in its periphery.

Correcting this gap will require particular focus on aligning India’s investments in Myanmar’s transportation infrastructure, including on roads, railways, and the ports sector, with the more advanced efforts of other development partners. After the 2021 military coup, American, European, and other economic cooperation agencies have largely withdrawn from the country, but Thailand and other actors remained engaged. India should thus deepen consultation with key Thai connectivity policy stakeholders involved in Myanmar. This includes the Thailand International Cooperation Agency (TICA) and the Neighbouring Countries Economic Development Cooperation Agency (NEDA), both of which with significant experience and expertise in developing cross-border connectivity corridors with Central and Southern Myanmar. Projects such as the IMT trilateral highway, and its proposed extension to Cambodia, Laos, and Vietnam, depend on Delhi’s closer engagement with these two organisations.

Japan has also been an important development partner of Myanmar. The Japan International Cooperation Agency (JICA) developed projects such as the Yangon-Mandalay Railway and the East-West Economic Corridor Highway, both of which align with India’s land-based strategy to connect with Southeast Asia. These initiatives may have stalled for now, but Japan continues to have tremendous experience and expertise on infrastructure development in Myanmar which India should tap into.

The US has stalled its activities in Myanmar for political reasons, but remains an important development partner in Indochina, where it is testing the possibilities of triangular development cooperation with India. While mostly focused on the softer dimensions of connectivity, the USAID-DPA partnership is an important model for capacity building and technical assistance that can help exchange best practices on planning, financing, implementing, and sustaining connectivity infrastructure (The Asia Foundation, 2021).

BIMSTEC is another important player for India to synergise efforts. This is the only platform that has the potential to bridge two inland connectivity poles: the BBIN sub-region in South Asia and the Mekong sub-region in Southeast Asia. Myanmar is the missing link between both these sub-regional focal points and its geoeconomic space reflects a persistent divide between both.

With Bangladesh taking up the BIMSTEC chairmanship and an Indian official as the Secretary-General, the organisation is well placed to take a lead in implementing the BIMSTEC Master Plan for Transport Connectivity, including 141 flagship projects at an estimated cost of USD 47 billion until 2028 (ADB, 2022). As the lead country for the connectivity pillar, Thailand has an important role to play together with India, Myanmar, and Bangladesh. India should also support and facilitate BIMSTEC’s engagement with external stakeholders in land connectivity in the Bay of Bengal region, such as UNESCAP, the ADB, or the European Investment Bank (EIB).

Building on the relative success of the BBIN sub-regional initiative, anchored in informal coordination focused on four connectivity sectors, India should also explore a similar quadrilateral consultative mechanism together with Bangladesh, Myanmar, and Thailand. Dhaka’s reported interest in joining an extended India-Myanmar-Thailand highway reflects the potential for a Bangladesh-India-Myanmar-Thailand framework that can also work as an informal sub-group through BIMSTEC focused on land connectivity.

Finally, even as Myanmar’s internal situation continues to pose a hurdle for India’s connectivity efforts, New Delhi must continue to make efforts on the other side of the land bridge, with the Indochina countries of Thailand, Laos, Cambodia, and Vietnam. This requires further investment in the Mekong Ganga Cooperation (MGC) initiative, which has transport and communication as one of its four foundational areas. India has also recently joined the Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy (ACMECS) as a development partner, offering further avenues to coordinate and align on land connectivity initiatives.
d. Collaborate on Norms and Standards

The Bay of Bengal region has long been plagued by a lack of common norms and standards when it comes to regional connectivity. The physical infrastructure connectivity efforts will only see limited success without harmonisation or even mutual recognition of norms, standards, and technical regulations. This lack of mutual recognition is rooted in bilateral disputes and domestic political tensions. Conflicting interests and security concerns often overshadow the potential benefits of improved connectivity, resulting in a slow progress towards establishing comprehensive norms.

The absence of a common or mutually recognised regulatory framework has further contributed to the lack of coherence in regional connectivity efforts. Each country in the region has its own set of rules and regulations, creating a fragmented and complex environment for trade and transportation. This is evident on several fronts, for instance, in data sharing and systems harmonisation, testing requirements, cross-border movement of trucks, running of empty rakes, or infrastructure standardisation.

The region currently faces significant obstacles in achieving real-time data sharing for truck and rake movement, primarily due to a heavy reliance on paper-based documentation and redundant paperwork. This has led to duplication of processes. For instance, at the Petrapole land port, a manual ‘car pass’ is issued for trucks in triplicate to hand over to various authorities as it moves towards Benapole in Bangladesh. Goods are also subjected to double-checking by security agencies across the land ports, as well as double weighment due to a lack of provision for data sharing.  

Moreover, goods originating from Myanmar and Bangladesh undergo extensive testing requirements, encompassing plant and animal quarantine as well as food standards, due to the lack of a mutual recognition agreement (MRA) on testing standards. India has an MRA on testing with Bangladesh, Bhutan, and Sri Lanka, albeit for a limited range of goods. Furthermore, these MRAs are not recognised at all ports, leading to differences in clearing mechanisms, especially at the land ports.  

The return of empty Indian containers through rakes from Bangladesh poses a challenge to cross-border rail connectivity, due to a lack of cargo consolidation centres and customs inspection points at the interchanges in Bangladesh. Furthermore, the absence of an agreement/MoU to establish mirror/similar infrastructure on both sides of the border leads to discrepancies in cargo handling facilities and gauge systems, resulting in increased logistics costs and time delays.

Among the countries in the South Asian region, only India has implemented its commitments under the World Trade Organisation’s Trade Facilitation Agreement (WTO-TFA) to 100 per cent of its commitments. The TFA also calls for the harmonisation of norms and standards. As Bangladesh and Nepal graduate from their LDC status in 2026, they will also accelerate the implementation of the TFA. Through this, cooperation on sub-regional norms and standards for facilitating connectivity will become easier and India can share its best practices with countries in the region. Meanwhile, India, through its bilateral and trilateral cooperation efforts, can support capacity building in the neighbouring countries for creating common norms and standards.

Cooperation on standards within the Bay of Bengal region can also be pursued through regional institutions like BIMSTEC and ASEAN. Drawing from ASEAN’s experience in connectivity norms and standards, the Bay of Bengal region stands to benefit greatly. The ASEAN Consultative Committee for Standards and Quality (ACCSQ) offers a valuable model for addressing various aspects, including product specifications, safety and quality regulations, and compliance requirements. Furthermore, incorporating digital trade standards and conformity is a vital component of the harmonisation process.

Involving national and regional industry associations will play a pivotal role in achieving these objectives.

e. Improve Private Sector Participation

To unlock the full potential of cross-border trade and foster economic growth, India and other countries in the Bay of Bengal region need to effectively engage with the private sector. By leveraging their expertise, resources, and innovation, private enterprises can
Beyond the Coastline: India's Land Connectivity
Options around the Bay of Bengal

play a crucial role in facilitating seamless trade operations and driving regional connectivity. India can adopt several measures to encourage private sector participation in land-based regional trade.

First, India needs to fully utilise the Concessional Financing Scheme (CFS) to incentivise private sector investments in cross-border trade infrastructure (PIB, 2018). By providing favourable financial terms, such as low-interest loans or grants, the CFS encourages private enterprises to invest in projects that enhance connectivity and facilitate trade with neighbouring countries. The scheme needs to be more responsive to the private sector, rather than a mere subsidy mainly for India’s public sector undertakings (PSUs) and other government-controlled entities. For instance, the case of the operationalisation of Sittwe Port (Box 3) shows that while different private sector firms are willing to develop and operate connectivity projects, there needs to be a supportive and concessional treatment by the Indian government towards such players.

Second, India should actively promote the participation of private logistics operators in cross-border trade. For instance, the allowance for private container train operators to ply on the India-Nepal route can be expanded to include all neighbouring countries, including Bangladesh and Myanmar. By encouraging private sector involvement in transportation and logistics, India can enhance the efficiency and reliability of trade routes, reduce the monopoly of the Container Corporation of India, thereby making land-based trade more competitive. In the case of Myanmar, having such regulations streamlined prior to the operationalisation of the railways will also help in creating business trust and reduce delays in movement.

Third, India should operationalise MMLPs, other dry ports, and the ICPs in collaboration with the private sector under a Public-Private Partnership (PPP) model. This would necessitate the government incentivising private sector participation through operational concessions, including tax incentives. The trade chamber and associations in the Bay of Bengal countries, such as the Federation of Indian Chamber of Commerce and Industry, Federation of Bangladesh Chamber of Commerce and Industry, and the Union of Myanmar Federation of Chambers of Commerce and Industry should encourage businesses to mutually recognise and utilise the MMLPs.

Fourth, it is crucial to address political reservations regarding private sector involvement in cross-border land initiatives. The Indian government’s security-centric approach to border management has traditionally limited the participation of private sector

Box 3: Private Sector Participation in the Development of Sittwe Port

Sittwe Port is one of the four projects of the Kaladan Multimodal Transit Transport Project (KMTTP) between the Government of India and the Government of Myanmar (Box 1), funded through India’s grant-in-aid mechanism at approx. USD 500 million (Hindustan Times, 2023). The deep-sea port was inaugurated in May 2023 after several years of delay. By building a connection through Myanmar, it seeks to reduce the time and cost of transportation of goods between India and the states in the Northeast Region. The problems the Myanmar private sector faced were just one of several factors that contributed to the port’s construction being delayed. In 2010, the GoI awarded the contract to ESSAR to build, operate and maintain the port. It was expected to be completed by 2013 (Ramesh, 2013).

However, ESSAR faced several issues including the delay in land acquisition by the Myanmar government, engagement of local subcontractors, and security issues including kidnapping of Indian construction workers by the Arakan Army in 2019. Political instability in Myanmar was another cause of the delay (see Box 1). In February 2020, ESSAR resigned from the contract of operating and maintaining the port terminal and A to Z EXIM Limited, a unit of Bharat Freight Group, was awarded the contract. Furthermore, the contract for the completion of the leftover construction work was awarded to Land Marine Engineering and Port Solutions LLP, another unit of the Bharat Freight Group. During the same time, the contract for dredging was awarded to Knowledge Marine & Engineering Works Ltd (KMTTP, n.d.). The Sittwe port was the first part of the KMTTP and was inaugurated on May 23, 2023, a decade after its planned completion date.
sector entities in terminal management and equipment handling at land border ports. Additionally, several of India’s Line of Credit (LoC) projects in neighbouring countries are being executed by Indian Public Sector Undertakings (PSUs) such as RITES, IRCON, and Water and Power Consultancy Services Limited (WAPOS) (PIB, 2015).

In regions like ASEAN, the private sector has taken a more active role in resolving various cross-border challenges. This includes developing protocols for truck movement, establishing regional insurance schemes, and forming sector-specific cross-border associations, among other initiatives. By looking to successful examples in ASEAN and other regions, countries in the Bay of Bengal region can learn from private sector involvement, adapt relevant strategies, and overcome hesitations to harness the expertise and resources of private enterprises for the benefit of cross-border land initiatives. This shift in perspective has the potential to accelerate development and improve efficiency in trade and connectivity within the region.

To facilitate private sector engagement effectively, the Indian government should create a more conducive policy and regulatory environment. This includes providing transparent and predictable investment frameworks, simplifying bureaucratic processes, ensuring fair competition, and safeguarding intellectual property rights. Additionally, establishing robust mechanisms for public-private dialogue and consultation will enable effective collaboration and address any challenges or concerns that may arise, especially at a regional and inter-regional level. Devising mechanism to address this through BIMSTEC will, in particular, lead to further private sector collaborations in the region.

5. Conclusion

India’s Indo-Pacific approach to connectivity in recent years has predominantly focused on maritime initiatives to foster regional interdependence in South Asia and the Bay of Bengal regions. However, for a more comprehensive impact, India must invest in multimodal transportation connectivity, specifically through land bridges, to facilitate geo-economic convergence between South Asia and Southeast Asia. New Delhi will have to find new ways to mobilise financial, political, and diplomatic resources to connect the coastal and hinterland economies in Northeast India, Bangladesh, Myanmar, and Thailand.

To effectively implement a land-based connectivity strategy in the Bay of Bengal region, it is essential to address the persistent challenges that continue to hinder India’s efforts to develop multimodal transportation infrastructure in and around the NER. The Bay of Bengal region presents complex operational environments with competing interests among different state, economic, and civil society actors. These historically neglected hinterland areas require proactive, transparent, and expert-led processes.

The development of cross-border roads, railways, ICPs, dry ports, and multimodal logistics parks should not only focus on hard infrastructure but also utilise various policy instruments to foster comprehensive, efficient, and sustainable connectivity. This includes enhancing coordination and leveraging expertise at different levels within India (central, state, and local) as well as with neighbouring countries in the Bay of Bengal region. Ensuring political stability is crucial in this regard to de-risk the infrastructure sector and attract private, as well as external, investments. India will have to focus more on a collaborative approach with partners such as Japan’s JICA, the European Union’s EIB, the US Development Finance Corporation, and regional entities like BIMSTEC, ASEAN, ACMECS, as well as multilaterals such as ESCAP, ADB, or the World Bank, which can contribute to correcting the connectivity gaps around the Bay of Bengal. It is important to prioritise existing initiatives such as the BIMSTEC Masterplan for Connectivity, rather than reinventing the wheel. Finally, enhancing private sector participation and cooperation on norms and standards will play a pivotal role in solidifying efficient land connectivity in the region.
References


Business Bhutan. (2017, October 18). BBIN issue was politicized heavily – PM. Retrieved from https://businessbhutan.bt/bbin-issue-was-politicized-heavily-pm/


Beyond the Coastline: India's Land Connectivity
Options around the Bay of Bengal

---


---


Keynote_address_by_EAM_Dr_S_Jaishankar_at_the_7th_Indian_Ocean_Conference_2024


Beyond the Coastline: India's Land Connectivity
Options around the Bay of Bengal


Beyond the Coastline: India’s Land Connectivity
Options around the Bay of Bengal

About the authors

**Riya Sinha** is an Associate Fellow in Foreign Policy and Security Studies at CSEP. She coordinates the Sambandh Regional Connectivity Initiative, focused on conducting data-driven research to map India’s links with its neighbouring countries. She also manages the Sambandh Policy Dialogue, a track 1.5 format, off-the-record forum for experts to exchange perspectives on geo-economic relations between India, South and Southeast Asia, and the larger Indo-Pacific regions. Focused on enhancing regional economic connectivity, her research interest covers trade, logistics, infrastructure, and border management in the Bay of Bengal region. In 2022, Riya was a Visiting Fellow at the Stimson Centre in Washington DC and at the Asian Forum on Global Governance.

**Constantino Xavier** is a Fellow in Foreign Policy and Security Studies at the Centre for Social and Economic Progress (CSEP) in New Delhi. At CSEP he leads the Sambandh Initiative on regional connectivity. He is also a non-resident fellow in the Foreign Policy program at the Brookings Institution, in Washington DC. His research expertise is on India’s role as a regional power and the intersecting dimensions of security, connectivity and democracy across South Asia and the Indian Ocean. He also works on India’s relations with the European Union and other democratic powers in the Indo-Pacific and has published widely in academic books and journals on India’s foreign and security policies with a focus on state capacity, regional institutions, economic and infrastructure diplomacy and soft power.