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## **Roll East: A Proposal for India-Myanmar-Thailand Railway Connectivity**

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### **Abstract**

Railways have become an important geo-strategic infrastructure in South Asia. In the last decade, India has focussed on expanding its rail connectivity in the neighbourhood with the revival and inauguration of railway lines with Bangladesh and Pakistan, and the commencement of the first India-Nepal passenger rail service in 2022. However, a railway line connecting India and Myanmar is yet to be developed, despite various steps taken in the past. Beyond domestic and regional needs, the increasing emphasis on expanding rail connectivity also comes in the backdrop of China's increasing investment in the development of pan-Asian railway connectivity in Southeast Asia within which infrastructure linkages between Myanmar and Thailand are crucial. This policy brief makes a case that the India-Myanmar railway is both geo-strategically and economically important for India. Furthermore, this rail connectivity will only be beneficial if it is a part of an economic corridor between South and Southeast Asia, and is connected further with Thailand. The brief also highlights several challenges in the implementation of rail projects between India, Myanmar, and Thailand and charts out various policy options for the governments in the region.

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## Expanding rail links to Myanmar and Thailand

India's emphasis on increasing connectivity with its neighbouring countries through investments in strategic infrastructure stands at the heart of its neighbourhood policy today. The focus on increasing linkages through rail, road, and waterways reflects the need to correct decades of regional insularity by diversifying the transport links to increase cross-border commerce and strengthen people-to-people connectivity. In the last two decades, India has operationalised nine Integrated Check Posts with the neighbouring countries for cross-border movement of trade and passengers, moved goods to Northeast India via Bangladesh using the India-Bangladesh Inland Waterways Protocol route, and built South Asia's first petroleum pipeline with Nepal, with a second one under construction with Bangladesh.

The railway sector has seen significant progress including the revival of five railway lines with Bangladesh and the inauguration of the first India-Nepal passenger rail service in April 2022. From having a dense network of railways in the 19th and early 20th centuries (developed during the colonial period), South Asia today lags in rail connectivity. Between 1996 and 2016, the rail density within South Asia (India, Bangladesh, Pakistan, and Sri Lanka) has only grown by 5% (The World Bank).<sup>1</sup> Furthermore, cross-border movement by rail (freight and passenger) is among the lowest in the South Asian sub-region. This is also reflected in the trade figures. In 1948, intra-regional trade in South Asia was 18%, which dropped to 6-7% in 2010. Today, trade stands at a mere 5% (The World Bank, 2018). The logistics cost in the region is among the highest in the world at 14% (Logistics Performance Index). For passengers, road and air are the predominant modes of cross-border travel (Sinha & Sharma, 2020).

In the last decade, India has revived the old (and developed new) cross-border railway

links with Nepal, Bangladesh, and Pakistan. However, a railway line connecting India and Myanmar is yet to be developed. In December 2020, the former Indian Foreign Secretary, Harsh Shringla, while delivering an address at the Northeast Festival, highlighted that it is possible to think about railways linking India to Myanmar and further to Thailand and other Southeast Asian countries in the future (Das, 2021). In his Independence Day speech in 2021, Prime Minister Narendra Modi announced that all state capitals in India's Northeast Region (NER) will be connected with rail service, and under India's Act East Policy, the NER, Myanmar, and other Southeast Asian countries will also be connected (Modi, 2021).

The India-Myanmar rail link is important for two reasons—first, it is a crucial link in India's Act East Policy to strengthen inter-regional connectivity between South and Southeast Asia. Second, it is also important for the economic development of NER, connecting it to the key seaports of the region and developing commerce and people-to-people linkages.

In Myanmar, there is also a dire need for the upgradation of rail infrastructure. The country is surrounded by three economic giants, including India, China, and the ASEAN countries. Yet it has not been able to reap many benefits from the economic rise of its neighbours. The Asian Development Bank (ADB), in its 'Myanmar Transport Policy Note' (2016) estimated transport investments worth approximately US\$ 60 billion (2016-2030). It also highlighted that the abysmal condition of roads, railways and highways has left almost 20 million people without basic access. A bilateral railway link between India and Myanmar may not be enough to exploit the untapped potential of the region. There is also a need to consider expanding the link to Thailand and other Southeast Asian countries to increase access to the markets. Several regional value chains with high trade potential have already

<sup>1</sup> Calculated by the author using data from the Rail Lines Data, The World Bank, <https://data.worldbank.org/indicator/IS.RRS.TOTL.KM>.

been identified by the Government of India (GoI) in the sectors including the textile and garment sector, pharmaceuticals, gems and jewellery, automobiles, processed foods, etc. (Das, 2016).

In Thailand, facilitating connectivity and acting as a link between the Indian subcontinent and Southeast Asia, especially through the institutional mechanism of the Bay of Bengal Multi-Sectoral Initiative for Economic Cooperation (BIMSTEC), is a priority. At the BIMSTEC Summit (2018), General Prayut Chan-o-cha, Prime Minister of Thailand, emphasised that both South and Southeast Asia are the 'strategic link' between the two major oceans of the world—the Indian Ocean and the Pacific—and better infrastructure connectivity between both corresponds with Thailand's Look West and India's Act East policies. Thailand is interested in developing a high-speed railway line along its North-South and East-West economic corridors. The latter links the Andaman Sea to Vietnam, which is of importance to India's connectivity plans in the Indo-Pacific and requires investments for development.

For India, expanding the railway line to Thailand will also make economic sense. Currently, India-Myanmar trade is limited, comprising only 0.20% of India's global trade, and 2% of its total trade with the ASEAN countries. India's trade with ASEAN is approximately 10% (2021–22) of its global trade, the majority of which is with Singapore (26%), Indonesia (20%), Vietnam (16%), and Thailand (14%) (Export Import Data Bank, Government of India). Myanmar is an important gateway for the movement of goods to these Southeast Asian economies. Therefore, the India-Myanmar railway will only be beneficial if it is a part of an economic corridor between South and Southeast Asia. In terms of the logistics cost, transportation of a full container (twenty-foot equivalent unit) from Kolkata Port to Bangkok takes between 10–20 days and the average cost is US\$ 2,000 per

container. Seamless rail connectivity is likely to reduce the time and cost of transportation between India and Thailand. However, according to a former Indian Ambassador to Myanmar, if rail connectivity is built between India and Myanmar, India will have to take the lead and responsibility for its construction.<sup>2</sup>

Beyond domestic and regional needs, the increasing emphasis on expanding rail connectivity also comes in the backdrop of China's increasing investment in the development of a pan-Asian railway connectivity in Southeast Asia within which infrastructure linkages between Myanmar and Thailand are crucial. In August 2021, China inaugurated the high-speed railway line from the Chinese commercial hub of Chengdu to the Myanmar border, which further links China to the Indian Ocean by road. This is a rail-road-sea link China-Myanmar transit corridor (Krishnan, 2021). This link is a part of the China-Myanmar Economic Corridor (CMEC) under the Belt and Road Initiative (BRI). China also has plans to develop a seaport in Kyaukphyu in the Rakhine state in Myanmar and extend it by rail to the Yunnan province. As part of the Kunming-Singapore rail connectivity plan, China has already laid out a plan to connect Yangon with Bangkok and then onwards to Singapore. In Thailand, China is invested in the North-South Corridor, constructing a high-speed railway line that connects Bangkok with the Nong Khai province. It is a crucial link in Beijing's plan to connect Kunming to Singapore by rail, providing the country access to land routes that can be used as an alternative to the maritime route (Takahashi, 2022).

India has come a long way from a policy of regional insulation to being actively involved in building strategic infrastructure with its neighbouring countries. This is also in line with the Government of India's assessment in the 2000s that there is a need to complement hard security with other connectivity initiatives for a holistic approach to border management.

<sup>2</sup> Interview with a former Indian Ambassador to Myanmar conducted through email.

Rail connectivity provides a faster and more viable alternative to road transportation. Several routes, at the international, regional, and bilateral levels have been planned.

## Planned routes

Historically, no railway line existed between India and Myanmar (or colonial Burma before 1948). After the second Anglo-Burmese war in 1852, the British conducted a survey for a railway line from India to Yunnan via Burma. Plans were also made for an Assam-Burma railway project but it remained only on paper. A preliminary survey had been completed in 1896 (Yhome, 2015).

In the last two decades, several multilateral and bilateral plans have been devised to connect India and Myanmar via rail. The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) planned a project, the Trans-Asian Rail Network, to create an integrated freight railway network connecting Europe and Asia. Its overall goal is to see the development of an international, integrated, intermodal transport and logistics system for the region. An Intergovernmental Agreement on the Trans-Asian Railway Network drafted by the UNESCAP was adopted in April 2006 and came into force on 11 June 2009. Several countries in the region (South Asia and the Bay of Bengal), including Bangladesh, India, Myanmar, Nepal, Pakistan, Sri Lanka, and Thailand are signatories to the agreement (United National Treaty Collection, n.d.).

*At the bilateral level*, establishing rail connectivity with Myanmar is an important part of India's Act East Policy to facilitate trade and people-to-people connectivity. The India Transport Report (2014) had suggested that new railway lines with Myanmar, including one from Sittwe in Myanmar to Tirap in Arunachal Pradesh, may be important to improve regional transportation. Over the last two decades, the Indian Railways has been planning a railway link connecting Jiribam in Manipur to Mandalay in Myanmar. A feasibility study for this was conducted by Rail India Technical and

Economic Service Limited (RITES) in 2005. This divided the length of railway connectivity in two sections—Section I is the link in India from Jiribam-Imphal-Moreh (236 Km) and section II includes the link in Myanmar from Tamu to Kalay (128 km) (Press Information Bureau (PIB), 2016). The project was rejected in 2008 because it was regarded as financially unviable. However, the project was taken up again in 2019. Construction is ongoing on the Jiribam-Imphal railway line and is expected to be completed by 2024. Former Minister of Railways, Piyush Goyal, stated in a reply to a Lok Sabha question that the anticipated cost of the project is INR 12,264 crores, approximately 90% of which was incurred till March 2020. An additional outlay of INR 800 crore was provided in the budget 2020–21 (PIB, 2020). This exemplifies the renewed focus and allocation of resources on the project since its introduction in 2003–04 and several delays thereafter.

In 2022, India's Railway Board also approved and started work on the location survey of the Imphal-Moreh railway line, citing it as a 'strategic line' (Dash, 2022). The government of India also envisages connecting this line to Thailand to exploit its full economic potential, also as a part of the Trans-Asian Railway Network.

Beyond the focus on cross-border railway links, India has also expanded the construction of railway lines in the Northeast region. This is a significant part of India's Act East Policy, which also focuses on the development of India's Northeast region as an essential prerequisite to connectivity with Southeast Asia. This includes plans to develop the 44 km Sivok-Rangpo line in Sikkim and the 51.38 km Bairabi-Sairang line in Mizoram. In a significant achievement, earlier in January 2022, a passenger train arrived from Silchar in Assam to Vangaichungpao railway station in Manipur, and later in the same month, a goods train reached the Rani Gaidinlu station in Manipur (Laithangbam, 2022). Since 2014, several rail development projects have been commissioned in the region including 270 km

of new lines, 972 km of Gauge Conversion, and 114 km of doubling at an average rate of 193.71 km per year—94% more than the average commissioning during 2009–14 (Deol, 2021).

*On the regional front*, however, there is a different take on expanding rail connectivity. In BIMSTEC, for example, there is a recognition that railways have become less important for intra-regional transport. Instead, the BIMSTEC Masterplan on Transport Connectivity (April 2022) emphasises on developing railway connectivity between ports, dry ports, and borders, and their hinterlands. There is less emphasis on developing a regional railway network due to technical difficulties.

### Decline in regional rail connectivity

There are several reasons for the decline in rail connectivity in the region through the decades, and these pose challenges to its revival as well. First, the partition in the subcontinent and the India-Pakistan wars fragmented many railway connections. The railway lines, developed during the colonial period, were stopped post-independence and subsequent wars between India and Pakistan led to a further decline in rail linkages, especially with Bangladesh (or East Pakistan before 1971). With Myanmar, while a cross-border railway did not exist, the hilly terrain and lack of feeder roads make building rail connection difficult. The resultant issues in the transportation of raw materials for construction make this a very time-consuming and costly infrastructure. Therefore, in India's NER and Myanmar, there is a need for holistic development of infrastructure.

Second, there is heterogeneity in rail gauge systems in the region. Over the last 165 years, Indian railways were built on a multi-gauge system. The GoI decided to change this system in 1991 to a uni-gauge system. Myanmar operates on narrow gauge networks (DLCA, n.d.). Additionally, according to a report, about 60% of Myanmar's railway is in a poor condition which restricts the operating speed of freight train, and the lines and bridges are in a poor condition (DLCA, n.d.). Thailand,

on the other hand, operates on a standard gauge system. The governments have to navigate different gauge systems. While the Indian freight railways operate on a broad-gauge railway line, Myanmar railways run on a narrow gauge. It varies further in South-east Asia; for instance, Thailand operates rail on a standard gauge. Therefore, the construction and expansion of inter-regional railways with Myanmar and Thailand will require significant investment and needs to take into account other factors such as the international gauge systems (for inter-regional linkages) and the financial viability of the project. China, for instance, has been developing gauge-changing high-speed trains since 2016 to connect with the neighbouring countries in Central Asia that use the Russian gauge system (Shang-su, 2020).

Third, in both India and Myanmar, high freight costs, infrastructure gaps, and limitations in the standard operating procedures (SOPs) of rail services have contributed to the decline in the popularity of rail as a mode of transport. The cumulative cost of transportation through rail (first and last-mile logistics along with the rail freight) is one of the highest in the region. In Myanmar, freight transportation is mostly done in the northern division (out of 11) from Yangon via Nay Pyi Taw to Myitkyina, in Kachin State, only because it is less costly than road transportation. In other divisions, road transportation is preferred (DLCA, n.d.).

Fourth, there is a need to update the feasibility study conducted on the Moreh (India)-Kalay (Myanmar) rail line by RITES in 2004–05. The Government of Myanmar had requested the Government of India to conduct another feasibility study from Tamu to Mandalay through Monywa, Segyi Kalay with a new alignment (Ministry of Transport and Communications, 2021). However, this is still pending. There is a need for a greater presence of Indian public sector units such as RITES in Myanmar to expedite the railway project.

Fifth, though railways are a faster mode of transportation, the lack of integrated connectivity reduces the chances for a modal

shift. For instance, transportation by road includes first and last-mile connectivity, however, transportation by rail includes the time taken for modal shift from road to rail, rake loading time, long haul, etc.

Finally, the 2021 military coup in Myanmar had led to the suspension of several official development assistance loans for development of Myanmar's critical infrastructure. For instance, the Japan International Cooperation Agency (JICA) was financing the construction of the Yangon-Mandalay railway line, Korea was preparing a project to improve the Mandalay-Myitkina line, and the Ministry of Transport and Communications had approached Asian Development Bank to improve the Yangon-Pyay line (ADB, 2018). These projects were revived six months after their suspension in February 2021, albeit at a slower pace (The Irrawaddy, 2022). The coup has also restricted the Myanmar junta's ability to secure foreign aid and loans.

## Policy options

From initial assessments, building a railway link from India to Thailand via Myanmar requires high investments—both in terms of political will and financial resources. However, the strategic nature of this infrastructure makes it essential to construct, especially for India to push forward its Act East Policy. Building rail connectivity with Myanmar (and onwards to Thailand) will require several interventions, both in terms of policy and technical assessments.

First, there is a need to create a focussed sub-group on India-Myanmar-Thailand infrastructure connectivity under the Ministry of External Affairs-led Inter-Ministerial Coordination Group (IMCG) on neighbouring countries. The first meeting of the IMCG was convened and led by former Foreign Secretary Harsh Shringla in April 2022 with participation from various Indian ministries including Ministries of Defence, Railways, Economic Affairs, Commerce, the National Security Council etc. Within the IMCG, a focussed sub-

group on the IMT Infrastructure project will enable detailed discussions and track progress. The sub-group should also hold regular consultations with the relevant ministries/departments in the partner countries. While the IMCG is an inclusive group, it must also learn from the failure of the previous Inter-ministerial group which met only six times between 2010-12. (Ministry for the Development of the North-Eastern Region, 2010).

Second, the proceedings and developments of the IMCG must be included in India's Gati Shakti platform for the exchange of project-related information and developments with all stakeholders. In a press release, the Ministry of Railways emphasised that 'completion of any railway project depends on various factors like quick land acquisition by the State Government, forest clearance by officials of the forest department, shifting of infringing utilities, statutory clearances from various authorities, geological and topographical conditions in the area, law and order situation in the area of the project site, number of working months in a year for a particular project site due to climatic conditions etc., and all these factors differ from project to project and affect the completion time' (PIB, 2020). The Gati Shakti platform would enable transparency and accountability for the timely completion of the projects. For Indian PSUs engaged in the neighbouring countries, this platform can also facilitate tracking the progress of India's external development projects. Additionally, in India's Union Budget 2022-23, it was announced that four multi-modal logistics parks will be developed in the next three years as part of the Gati Shakti plan (Simhan, 2022). The Government of India should focus on developing one of these parks in the NER to facilitate the multi-modal cross-border movement of cargo.

Third, beyond policy issues, there are several infrastructure and regulatory barriers that also need to be addressed. The lack of accessibility to freight wagons, mirror infrastructure on both sides of the border, cargo handling infrastructure, and mechanisation of processes are some of the barriers faced

in rail transportation currently. There is a need to address these on a priority basis to ensure efficient use of the rail connectivity infrastructure by the trade.

Fourth, in the initial phases, there is a need to incentivise a modal shift from roads to railways. More cargo moving through rail would attract competition and price concessions. Additionally, given the risks involved in road cargo transportation in hilly terrain such as the one at the India-Myanmar border, there needs to be increasing engagements by the governments on both sides with the local trading bodies and chambers to

communicate the benefits of using rail as the preferred mode of transportation.

Finally, the role of international financial institutions such as the World Bank, Asian Development Bank, European Investment Bank, and the Asian Infrastructure Investment Bank will be key in the construction of the railway line from India- to Thailand via Myanmar. This is a cost-intensive project and requires it to be built around international standards to enable quality connectivity. This is important also in light of China's investments in developing rail connectivity in Myanmar and Thailand.

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