

## SOLUTIONS IN (DIA) MOTION: INDIA'S TRANSPORT AND LOGISTICS SECTOR

by

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With the changing geopolitical landscape, India's transport and logistics sector stands at a critical juncture. The reason being that the sector not only has to respond to the call of moving goods from the point of production to the point of consumption domestically, but also has to answer the call of moving India's domestic production for global consumption. While moving goods from point A to point B, domestically or internationally, the challenge remains in ensuring that the movement is cost-effective and efficient, resilient to global setbacks and shocks, and sustainable and climate-friendly.

Accordingly, over the years, the Indian government has taken several initiatives to consolidate India's transport and logistics sector to new growth drivers and potentials. For example, by [widening](#) the transport category to include logistics, the Indian government in 2017 [granted](#) infrastructure status to the newly defined transport and logistics sector. Moreover, to holistically develop the logistics ecosystem in the country, the government has introduced sector-specific policies such as the [National Logistics Policy](#) whose transformational capacities are being supported and aligned with overarching policies such as the [PM Gati Shakti National Master Plan](#). Besides, the Indian government has also been actively [opening](#) up the T&L sector to foreign direct investment (FDI). In the majority of India's transport infrastructure development, foreign firms can now set up wholly owned shops in India without government approval (through automatic route).

### **FDI in the Transport and Logistics Segment**

Efforts are not only being directed through Indian stakeholders, encouraging public and private participants, but are also being directed through domestic sector internationalization with FDI. Apart from providing the sector with necessary capital investment, FDI also benefits the sector

with presumably advanced foreign technology, management techniques and know-how which are not easily available and accessible to domestic firms in India's T&L sector. While direct transfers can be channelized through say technological handovers, indirect transfers or spillovers can be channelized through several modes.

For example, entry of foreign firms in the domestic T&L sector could foster competition with Indian T&L firms. This would encourage domestic firms to adopt efficient operational methods or introduce new technologies which would otherwise either not have been implemented or are now implemented earlier than usual. Alternatively, Indian T&L firms could internalize organizational systems by watching and imitating the operations of foreign T&L firms in the Indian market. Likewise, Indian T&L firms could benefit from employing labor who previously worked and hence were trained at a foreign T&L firm. These spillover benefits need not necessarily operate at intra-T&L sectoral level. In fact, benefits from a foreign T&L could also spill over inter-sectorally. For example, Indian firms in the food industry could capitalize on their T&L efficiency by hiring labor previously trained at a foreign T&L firm. Besides, using the knowledge acquired by working at a foreign T&L firm, an employee can either start his own venture in the same industry or in a different vertical. Alternatively, vertical industries could also benefit from hiring foreign T&L firms thereby improving their T&L operational efficiencies. Of course, the underlying assumption for indirect spillovers being that: (1) presumably advanced technological capabilities and/or efficient organizational structure of foreign firms gradually leaks out of the boundaries of the firm and can thus be absorbed by domestic firms; and that (2) domestic firms also have the prerequisite capacities and capabilities to absorb and assimilate, internalize and capitalize on the available advanced foreign knowledge.

Due to data deficiency, there is no evidence to indicate whether foreign T&L firms' entry through wholly owned foreign subsidiaries is better than joint ventures with Indian firms. Policies, however, could be directed to encourage a symphonic cord possibly

through joint ventures between Indian and foreign firms with technological transfers as the fulcrum of such partnerships.

An effective, efficient and reliable domestic T&L system can potentially act as a determinant factor for businesses while choosing foreign market entry destination. Nevertheless, for the ease of practice, foreign firms may still choose to set up their own T&L units. In a [survey](#) of logistics practices implemented by Chinese and German companies when internationalizing their business operations, a small number indicated the need to have self-run logistics assets and operations in foreign markets so as to maintain the required quality and services for their businesses. In fact, 12 percent and 3 percent of Chinese and German companies [suggested](#) that they roll out their logistics system without local adaptation. Such rollouts would encompass transferring domestic design and structure pertaining to the modes of transportation, use of warehouses, and cross docks, amongst others.

When such self-run units are not financially lucrative and infrastructurally plausible, foreign firms facilitate the development of new logistics service providers in the target market. In the same [survey](#), 71 percent and 61 percent of Chinese and German managers indicated that when foreign markets do not have an adequate T&L ecosystem, they would rather help develop a new domestic logistic service provider than invest in their own self-run units.

In other words, benefits from global T&L practices can also be reaped when foreign firms open their self-run T&L units, and implement home-country T&L systems in India. These T&L self-run units would not only serve their parent company but could also provide services to other foreign firms operating in India as well as Indian firms. Direct and indirect technological transfers and spillovers from these self-run T&L units can be channelized through the channels discussed above. Accordingly, policies could then encourage foreign firms to consider India as their T&L destination (self-run T&L shops) when strategizing the internationalization of their companies. Moreover, proactive support from the

government in the form of, for example, assistance to adapt to local requirements where needed, should be provided. When self-run units cannot be set up, the government can through policy support encourage foreign firms to help set up new T&L shops in India.

### **Absorptive Capacities and Capabilities**

None of the spillover benefit would be possible, if India as a whole, and India's T&L sector in particular, lack the required capacities and capabilities to absorb and assimilate the benefits accruing from the presence and activities of foreign firms. For example, take the availability of the required labor force. Indian T&L firms, [large medium](#) or small (interview of sole proprietor of Broadways India Roadways Corporation), along with consultancy firms in their white [papers](#), all have echoed that the sector not only suffers from a dearth of skilled manpower but also from skill mismatch further accentuating the operational woes of the Indian T&L sector. In such a scenario, no amount of FDI would translate into reaping spillover benefits.

Therefore India's T&L policies should go beyond and formulate coherent and comprehensive policies which can support the sector. Accordingly, policies should be directed to not only fill in the skill gap at the national-level but also at the domestic T&L sectoral level. For the long-run, policies should pivot on investing in education: Some of the measures could include but not be limited to: (1) investments in basic compulsory public education at large; (2) facilitating on-the-job-training in the T&L sector; (3) encouraging public and private educational institutes to provide vocational transport and logistics courses; and, (4) the Indian government could also foster education through international university partnerships and the provision of scholarships. This would not only help attain foreign knowledge but also open doors for other benefits such as benefits through international network effects.

For the short run, policies should look beyond the Indian borders, and pivot on human capital outside India. This would mean repatriating domestic human capital possessed in the Indian diaspora, and encouraging foreign human capital to relocate



to India. Although permanent relocation can be an option for the Indian diaspora to exercise, both foreign nationals and Indian diaspora, nonetheless, could help India gain through brain circulation either through long-term residency or short-term employment exchanges. Policies to develop India's human capital should also look into encouraging an interplay between long-run and short-run policies at the international level through India's participation at inter-governmental organizations such as SCO and [BRICS+](#).

By encouraging foreign participation in the Indian T&L sector, it can thus safely be concluded that technological upgradation, advancements, and innovations can play a pivotal role in advancing India's transport and logistics sector to global standards. Besides, efficiency gained through technological mileage would help India reduce its logistical costs to comparable global benchmarks by 2030, an objective set out by India's [National Logistics Policy](#). This is imperative given the geopolitical importance of the T&L sector, whose potential has a bearing on the dynamically changing global and regional geopolitics.

Accordingly, India's T&L policies should not only aim to develop the sector domestically but also integrate the sector in the global T&L landscape. To this end, international technological transfer and diffusion through foreign firms would, inadvertently, facilitate interoperability of T&L operations across borders. Besides, glocalization of the Indian T&L sector could also be attained through: (1) international T&L partnerships starting with neighboring countries along India's borders, and (2) by tapping international partnerships with countries under existing or new (particularly regional) international bilateral and multilateral agreements and arrangements, under the umbrella (or not) of intergovernmental organizations like SCO and BRICS+.

**Geostrategic Interests and Glocal Partnerships**  
These partnerships could cut across various modes of transport. Glocalization efforts could be directed to achieve harmonization of rules and regulations

governing international transportation, and [standardization](#) of the transportation ecosystem such as road designs, road numbering, signages and signals, amongst other variables. For example, with the [birth](#) of the India-Middle East-Europe Economic corridor, India's negotiations with corridor-partner-countries, ongoing FTA negotiations with the UK, EU, Israel, should endeavor to negotiate on behalf of India's T&L sector to trans-regionally integrate India in the corridor's T&L landscape. The endogenous relationships between connecting India's national T&L sector with other national T&L systems, and regional economic integration cannot be wished away. To this end, India should seek competitive collaboration with China's Belt and Road Initiative (BRI).

With limited to no available data, it is difficult to estimate India's efforts numerically. Certain reported figures suggest that India's efforts towards internationalization of the domestic T&L sector has been dismal at best. For example, it was [reported](#) that FDI inflows for the period April 2000 - September 2022 in air transport, ports, and railways was only USD3.16bn, USD1.63bn, and USD1.2bn, respectively.

However, India's commitment to technological changes and infrastructure development saw an explicit and expansive mention in India's "vote on account" interim budget presented on February 1, 2024. And here is some hope to India's transport and logistics sector getting a delayed but much needed timely boost.

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