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Conceptualising Highly Facilitated Trade Corridors in Southern Asia

PRITAM BANERJEE, *Senior Consultant, Asian Development Bank*

Abstract

Most of the global trade takes place between corridors that connect major economic or logistics clusters. The efficient operation of these corridors, therefore, assumes great importance for the trading economies connected through them. Some of the most important corridors criss-cross overland borders with road, rail, inland water, and coastal linkages between economies. As India advances on an integrated approach to transport infrastructure development under its ambitious Prime Minister's Gati Shakti initiative that includes several industrial and economic corridors, it is important to understand how these programs to improve connectivity within the Indian hinterland can be synergised with cross-border regional connectivity to further regional economic integration. An important aspect of achieving such synergy would be to develop a holistic framework for agencies of the countries in the corridors to work together and address the physical and regulatory bottlenecks that impede the efficient movement of goods across borders. Such cooperation should focus on coordinated development of border infrastructure, use of technology to simplify processes on both sides of the border, and protocols for information exchange between regulatory agencies. This policy brief builds on these ideas and focuses on the concept of a Highly Facilitated Trade Corridor (HFTC). An HFTC can be considered to be a combination of initiatives to address all major impediments to efficient transport and border operations and ensure effective regulatory collaboration. Developing such HFTCs focusing on the most important trade corridors connecting countries in the Bangladesh, Bhutan, India, and Nepal or the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation sub-regions would not only support better regional integration, but the demonstration effect of operationalising such a corridor would lead to the adoption of similar facilitation measures in other cross-border corridors resulting in an overall improvement in regional integration objectives across the region.

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Shortfalls in regulations and procedures

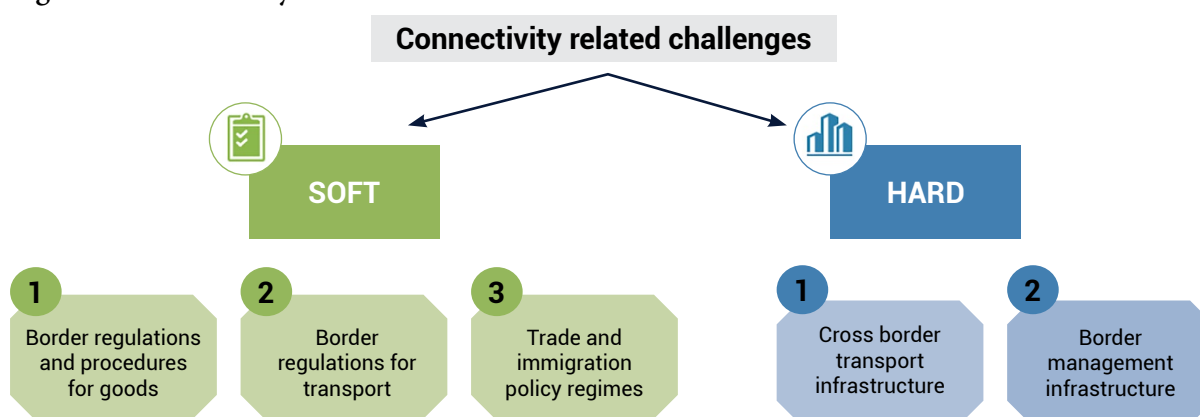
The basic premise of an efficient global market is the smooth flow of goods, services, technology, and people across borders, in other words, connectivity. Literature on trade and transaction costs has dealt extensively with the idea of political borders as barriers (Bougheas, Demetriades, & Morgenroth, 1999). The lack of effective economic connectivity has been a much-discussed policy issue in the context of the Bangladesh, Bhutan, India, and Nepal (BBIN) sub-region (Banerjee, Sengupta, & Stobdan, 2010). The borders between India and Bangladesh that dissect the BBIN region have long been considered one of the worst managed and subjected to the most severe transaction costs (Lakshmanan, Subramanian, Anderson, & Leautier, 2001). Generally, poor infrastructure and a small number of operational rail and road cross-border corridors create congestion which is further aggravated by the poor governance of border procedures (i.e., enforcement of customs and other allied regulations) and lack of

institutional solutions to facilitate trade (Roy & Banerjee, 2010).

Statistics show that tariff reduction under South Asian Free Trade Agreement (SAFTA) has not helped improve economic integration beyond a certain level. Most studies indicate improvement in connectivity including the institutional and procedural aspects of connectivity that will be the key to improving economic integration in the BBIN region (Raihan, 2015).

Regional integration in the BBIN sub-region has been held hostage by connectivity-related barriers. The BBIN sub-region is a part of the larger geography that I would like to call Southern Asia, including the BBIN and all of mainland South-East Asia (i.e., Myanmar, Thailand, Cambodia, Vietnam, Laos, Peninsular Malaysia, and Singapore). Such connectivity-related barriers can be broadly categorised under hard infrastructure-related issues and soft policy and procedural issues. More specifically, they can be summarised under five distinct categories as represented in Figure 1.

Figure 1: Connectivity-related issues



Source: Developed by the author

Border regulations and procedures for goods and people refer to trade facilitation and immigration issues, respectively. Border regulations for transport define the rules and procedures that govern the cross-border movement of vehicles (including trucks) and trains, such as the physical inspections and paperwork to comply with such regulations.

For example, most trucks take anything between 60 to 100 hours to cross the Petrapole-Benapole land port at the India-Bangladesh border. Typical border crossings in the US-Mexico border or the border between European Union (EU) and non-EU border states take less than 30 minutes.

Trade policy regimes relate to tariff and non-tariff measures that are applied to goods, while the immigration policy regime refers to the rights and privileges of foreign citizens as defined by the visa requirements and rules.

Cross-border transport infrastructure challenges refer to last-mile connectivity between many border points and the main trunk infrastructure. A good example of challenges in this context is the road between Kolkata and Petrapole leading to the India-Bangladesh border that runs through congested towns with several illegal encroachments along this route. There is also a busy railway crossing en route where trucks have to stop and wait for trains to pass, thereby adding to transit time. Other challenges include examples of inadequate infrastructure such as the Bangabandhu Bridge in Bangladesh which is currently unable to bear the weight of fully-loaded container trains impeding direct container rail connectivity between Dhaka and the Indian border.¹

Border management infrastructure consists of an ecosystem of land ports (serving both rail and road) that act as gateways through which the cross-border movement of goods and people is regulated. Inadequate or poorly planned infrastructure at the border can thus impede the efficient movement of goods and people.

Conceptualising Highly Facilitated Trade Corridor in Southern Asia

This policy brief introduces the concept of Highly Facilitated Trade Corridors (HFTC) which provides a holistic approach for addressing all of these connectivity-related challenges except trade and immigration policy (issue no. 3 in figure 1).

Most of the global trade takes place between corridors that connect major economic or logistics clusters. The efficient operation of these corridors, therefore, assumes great

importance for the trading economies connected through them.

Such corridors can represent a land-based corridor connecting contiguous countries. A good example of this is the Lobito Corridor that connects the hinterlands of landlocked Zambia and the Democratic Republic of Congo (DRC) with the port of Lobito in Angola. This corridor will link these three countries, as well as link landlocked Zambia and DRC with other countries through the port of Lobito.

Such corridors can also be multi-modal. For example, EU-China Smart and Secure Trade Lanes (SSTL) corridor covers both the overland railway route connecting China with the EU via Kazakhstan and Russia, as well as the maritime linkages connecting the main ports in Belgium, France, Germany, and Italy with the port of Shanghai.

The HFTC can be considered to be a combination of initiatives to address all major impediments to efficient transport and border operations, and ensure effective regulatory collaboration. Developing such HFTCs focusing on the most important trade corridors connecting countries in the BBIN sub-region would not only support better regional integration, the demonstration effect of operationalising such a corridor would also lead to the adoption of similar facilitation measures in other cross-border corridors leading to an overall improvement in regional integration objectives across the board.

There are four inter-related objectives for developing an HFTC for land corridors:

1. *Facilitate seamless cross-border transport operations:* By focusing on eliminating trans-shipment between trucks of the neighbouring countries at the border, congestion can be reduced. This can be further streamlined by minimising

¹ A new multi-purpose rail and road bridge is under development, along with new road and rail linkages. Located much further south of the current route, it would provide a more direct route between Dhaka and Kolkata.

customs-related procedures and inspections currently undertaken at the border locations on both sides.

2. *Collaboration between customs and other regulators at the border to minimise time and complexity for clearance of goods:* Achieving the first objective is not possible without the active cooperation and trust between regulators on both sides of the border with proper institutional mechanisms for sharing information, intelligence, and putting in place formal systems for operational cooperation. Ideally, such collaboration could lead even to regulators working together with single-point clearance, sharing facilities and conducting joint physical inspections, wherever possible
3. *Systems inter-operability between regulators and land ports:* The second objective requires institutionalised protocols for information exchange between regulators that would provide information in advance for faster clearance of cargo. Digital exchange of information would eliminate the need for physical documents issued/endorsed by one administration to be submitted across the border to the other administration which adds to delays in clearance.
4. *Coordinated border infrastructure development and management:* Efficiency of cargo throughput, including dwell time at land ports, depends on the quality of infrastructure on both sides of the border. Otherwise, the side with inadequate/inferior infrastructure will become a bottleneck. Coordinated development (which includes upgrading existing infrastructure deemed inadequate or inferior on both sides) ensures that such impasses do not arise.

In the context of the fourth objective, the BIMSTEC Masterplan for Transport

Connectivity developed by the Asian Development Bank (ADB), in partnership with BIMSTEC member governments, assumes importance.² This Masterplan identifies most of the last-mile to-the-border and at-the-border infrastructure gaps, making it integral to the ten-year action plan. These identified gaps, as also applied to the HFTC, have to be addressed on priority.

The next section provides a concise deliberation of the key actionable items and specific interventions required to achieve the four objectives.

Building blocks of HFTC

Developing HFTCs would broadly require the following ten interventions, under the two broad umbrellas of a) ensuring seamless cross-border transport operations and movement of goods, and b) maintaining efficient border infrastructure.³

Seamless cross-border transport operations

1. *Managing the temporary admission of vehicles:* This includes a set of comprehensive protocols that will allow the right of trucks and other commercial vehicles to cross borders by eliminating the need for trans-shipment between vehicles. These protocols would define the rights and obligations of foreign vehicles, as well as issues of vehicular standards, driver licensing, insurance, transit fees, and customs guarantees related to the vehicle. The BBIN Motor Vehicles Agreement (MVA) and BIMSTEC MVA would provide such protocols in the Southern Asian context. The greater operational flexibility the protocols allow, the more optimal and efficient transport operations would be (elaborated in point 2 below). Mandatory use of technology such as the Global Positioning System (GPS) would provide maximum assurance to

² BIMSTEC Master Plan for Transport Connectivity, Asian Development Bank accessible at <https://www.adb.org/documents/bimstec-master-plan-transport-connectivity>.

³ These ten interventions are important as per this author's view, and should be viewed more as a perspective rather than a rule.

- regulators while allowing for minimum pre-requisites.
2. *Allowing the movement of trailers and flatbeds, and not just trucks and change of drivers:* Critical flexibilities in the MVA protocols will include allowing trailers and flatbeds to cross-borders, for e.g., allowing an Indian trailer/flatbed to switch to a Bangladeshi tractor (prime-mover) at the border. It should also allow change of drivers at the border, for e.g., allow a Myanmar driver to take over the truck from a Thai driver at the border.
 3. *Customs Related Protocols that allow for inland clearances:* The most important facilitation would be to allow the seamless movement of sealed containerised cargo (or closed trucks in general) between hinterland customs stations along the corridor, without any procedures being done at the borders. This could be facilitated using Radio Frequency Identification (RFID) e-seals for containers/closed trucks and the use of non-intrusive inspection technologies at border crossings. Containers/trucks would be sealed and cleared by customs in an inland location (say, Kolkata in India) and e-sealed. The truck would be scanned and weighed using advanced X-ray scanners allowing non-intrusive inspection and weigh-in-motion (WIM) technology, and the RFID seal would be checked by sensors for any violation, all of this in a matter of minutes, and the truck would be allowed to cross across the border. It would proceed to an inland customs location (say in Dhaka) and customs and other clearance of goods would take place there. The concept of inland clearances would also apply to the movement of cargo by trains along the corridor. Point 5 below expands on the additional facilitation that should be applicable to the movement of cargo by rail. Similar facilitation should be extended to trucks/trains transiting through foreign territory (for e.g., a Nepalese truck transiting India to travel to Bangladesh). Protocols should allow for trusted transporters and trusted trader schemes (adoption of mutually recognised AEO programmes).⁴
 4. *Cooperation on operational and safety standards and associated physical inspection and handover of trains between administrations:* International Union of Railways (UIC) has developed the framework Agreement on Freight Train Transfer and Inspection (ATTI) to help enable seamless handover of trains between two different rail administrations across borders.⁵ HFTCs should adopt a framework (or a guiding principle) through which institutionalised cooperation will ensure seamless movement of freight trains with minimum duplication of inspections, checks, documentation etc. without compromising on security, while developing shared best practices in standards and their enforcement.
 5. *Institutional mechanism to enable seamless cross-border movement:* Effective management of cross-border movement requires close institutional cooperation between multiple agencies of different countries in a corridor. In light of this, it is important to put in place a formal institutional mechanism for cooperation. A good example of such an institutional framework can be found in the US-Canada Transportation Border Working Group (TBWG) that brings together multiple transportation and border agencies, and other organisations, to coordinate transportation planning, implement policy, and deploy technology to enhance border infrastructure and operations. Such an institution can also be tasked with the responsibility of developing operational

⁴ AEO or Authorised Economic Operator is a trusted trader/operator program based on World Customs Organization framework. Entities qualifying as AEOs received a number of additional facilitations including lesser degree of scrutiny and inspections and faster clearances.

⁵ See Agreement on Freight Train Transfer Inspection (ATTI) at <https://uic.org/special-groups/atti/#What-is-ATTI>.

protocols and SOPs between different sets of regulators or border managers that ensure smooth management of cross-border movements and expeditious solution to any challenges that arise.

Coordinated planning, development, and management of land border facilities

6. *Focus on infrastructure and inter-operability*: Critical focus is required in two areas. First, the upgradation or development of adequate road capacity between the land ports and economic centres along the corridor, including bridges to handle heavy freight movement and a large volume of traffic. Second, the development of rail linkages that allow inter-operability, for e.g., double gauging (provision for both metre gauge and broad gauge). This will require standardisation in signals and other operational aspects of railroad movement for thorough end-to-end operations between the different systems and the upgradation or development of bridges with adequate load-bearing capacity.
7. *Coordinated development of cross-border gateways with best-in-class design, technology and management Standard Operating Procedures (SOPs)*: Investing in border facilities without coordinating with the other side is a poor strategy. The throughput at any border facility, no matter how advanced, will always be subject to limitations on the other side of the border. This is where land borders fundamentally differ from maritime and air gateways. Since resources are always limited, the concept of developing HFTCs would have to include the identification of mutually agreed cross-border points on which countries on both sides of the border would focus their energies. This has indeed been the global best practice in all successful land-border corridors. Essential features in such border facilities will have to include infrastructure to support the technology enablement needed for

seamless cross-border movement of trucks and trains, i.e., dedicated lane/pass through facility equipped with:

- Weigh-in-motion (WIM) devices to capture the axle and gross-vehicle weights of passing trucks/train wagons.
- Advanced X-Ray inspection systems used for scanning cargo containers, trucks, train wagons and other vehicles in high-volume operations.⁶
- Overhead RFID e-seal scanners that check whether seals put in place by customs have remained intact in transit.

In addition, large proportion of this trade in the Southern Asian region is related to bulk goods (industrial raw materials) and agro-produce which is often not containerised. Such shipments would still undergo checks and customs clearances at the border posts. Managing such cargo would require the following facilities to be in place:

- Modern customs bonded warehouse with adequate space for temporary storage.
 - Well-designed truck parking bays equipped with handling equipment that allows fast, safe, and efficient loading and unloading of goods.
 - Facilities for handling and storage of special products. These include food, agro, and pharma requiring temperature-controlled environment.
 - Container yard and holding bays for loaded trailers with containers/bulk or oversized goods within the bonded secure area. This would facilitate cross-border moves where the parties do not want trucks, but the loaded containers/trailers to cross borders.
8. *Joint deployment of regulators and shared facilities*: Given the significant quantum of physical infrastructure, equipment,

⁶ Examples of this in use in cross-border facilities include the VACIS IP6500 Integrated X-Ray Inspection System.

and associated operational and regulatory human resources required for a well-functioning road and rail land border facility, opportunities need to be explored for developing business processes that reduce repetitive activities for regulating human resources, especially customs. Further, customs and other regulatory administrations from both countries at the border can devise protocols that allow joint inspections and scrutiny of documentation.⁷ This can be further facilitated by digital integration between customs systems, and protocols for sharing data discussed subsequently.

9. *Digital integration and information exchange protocols:* A critical trade facilitation measure for customs and other clearances related to the overland movement of goods is the exchange of pre-arrival (i.e., arrival at the land border check post) customs declaration data between neighbouring customs administrations. The receipt of such information a few hours prior to the arrival of a truck or train (empty or carrying goods) at the border allows customs administration to carry out risk assessment and clearance protocols in advance, thereby significantly speeding up the process of actual clearance.
10. *Joint Monitoring mechanism and total transit time, time release study, and dwell time:* Last but not the least, countries across the corridor should set up a joint monitoring mechanism that regularly tracks the total transit time for cargo across the corridor, joint time release studies for customs processes on both sides of the border to establish total time taken for goods clearance, and release end-to-end at a land-border involving regulators of both countries, and combined dwell time of cargo at both ends of a land-border. To the extent possible, real-time data available from multiple digital sources can be used

to measure total transit time, helping to pinpoint specific issues and impediments as they happen (Banerjee, 2020). Joint monitoring and identification of problems will help create a joint sense of purpose and ownership for all countries in the corridor.

Implementation plan for HFTC

HFTC interventions can be staggered and implemented in phases. A successful HFTC would first require a comprehensive agreement between the countries in the corridor outlining the specific interventions and related protocols associated with different initiatives that both countries would need to implement in each phase. Post this, in-principle commitment to the set of reforms and interventions required to achieve the connectivity and facilitation-related objectives of the HFTC, a time-bound implementation plan needs to be put in place.

In this context, given that India accounts for a bulk of the geography, especially in the BBIN sub-region, the recently launched PM Gati Shakti initiative, which intends to provide seamless multi-modal connectivity across India, including last mile linkages to the major land border gateways, provides a great opportunity for more integrated regional planning and corridor development. There is an urgent need for greater coordination between India's PM Gati Shakti program, and the infrastructure and economic corridor development programs in Bangladesh and Nepal to start with. Such coordination will provide an overall implementation framework for the expedited development of the physical infrastructure of roads and railways. In combination with the interventions highlighted in this article, this will provide a broad structure for HFTC development.

One way to achieve such coordination on both the infrastructure, as well as the procedural reforms and technology-adoption

⁷ There are existing global best practices in this regard is the Laredo bi-national inspection facility. Details available at Innovative Customs Procedures in Laredo, Texas Accelerate U.S. Exports to Mexico, Blog from International Trade Administration, US Federal Government, viewed at <https://blog.trade.gov/2019/11/18/innovative-customs-procedures-in-laredo-texas-accelerate-u-s-exports-to-mexico/>.

initiatives, is to set up a working group for HFTC implementation that includes all the key departments and agencies responsible for regulating the flow of goods and conveyances across borders of the countries in the identified corridor. This would include customs, transport authorities, border security agencies, land-port authorities, and agencies enforcing product-related regulations connected to human, animal, and plant health and safety, product standards, and the environment.

The HFTC working group should be made responsible for implementation with deadlines, and employ an SOP for escalation to higher officials if specific challenges to on-ground implementation arise and lead to delays. The progress in implementation being made by the working group should be subject to

regular monitoring by the political leadership in the corridor countries to underline their commitment to its achievement. In addition, the BIMSTEC Transport Connectivity Working Group can proactively monitor progress and support the HFTC working group to escalate challenges with governments and their agencies.

The successful development of one such HFTC in Southern Asia will not only act as a catalyst for regional integration, and have a multiplier effect on economic growth and employment, but also provide a working model for the development of other HFTCs in the region and beyond, thus bringing transformational change in the way this region manufactures, trades, and does business.

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