BRIEFING PAPER

#4/2022

Transform Transport Corridors into Economic Corridors

Towards Inclusive Growth & Trade in the BBIN Sub-Region

Joining Dots • Connecting People • Shared Prosperity

Suresh P. Singh and Swati Verma*

Even if tariffs are reduced to zero, along with a reduction in the sensitive list of products, non-tariff and para-tariff barriers, trade in the BBIN sub-region may not achieve its optimum level unless there is regional agreement towards trade facilitation encompassing transport connectivity, efficient transport, transit and trade logistics; minimisation of transaction costs; transparent and predictable decision making; and speedy resolution of disputes.

This Briefing Paper states that transforming transport corridors into economic corridors could be one initial step – it can help address many of the issues and boost trade and inclusive growth in the sub-region.

Concept of Transport Corridor

Transportation corridor, despite being very popular and used for years, does not have a precise definition. The World Bank (2006)[1] provides a descriptive definition and includes trade as an important concept element. According to this definition, transport corridors have both a physical and a functional dimension. The physical components of transport corridors are:

a) one or more routes that connect economic centres within and across countries;
b) routes with different alignments but having common transfer points, which are connected to the same endpoints;
c) routes composed of links over which transport services travel and nodes that interconnect transport services;
d) the endpoints of transport corridors are gateways that allow for traffic outside the corridor (and also its immediate hinterlands) to enter or exit via the corridor.

* Fellow and Research Associate, CUTS International

Functional components of transport corridors, on the other hand, are:

a) trade corridors which connect one or more adjoining countries, connect countries separated by one or more transit countries or provide access to the sea for landlocked countries (for example, the corridor connecting Nepal to the Bay of Bengal and the Arabian Sea);
b) while some corridors could be a single mode or route, others may have multiple modes and routes;
c) while some corridors may be relatively short in length, other corridors may include regions they serve (for example, the West Bengal corridor connecting Kolkata and Haldia ports with Eastern India, Bangladesh, Bhutan, and Nepal).

From the above description, one can say that a transport corridor is a generally linear area having one or more modes of transportation (like highways, railroads or public transit). Experiences show that with the passage of time, a transport corridor passing through various phases evolves to enhance either the flow of goods and people, or development of a particular sector of the economy, or support trade (a trade corridor).[2]

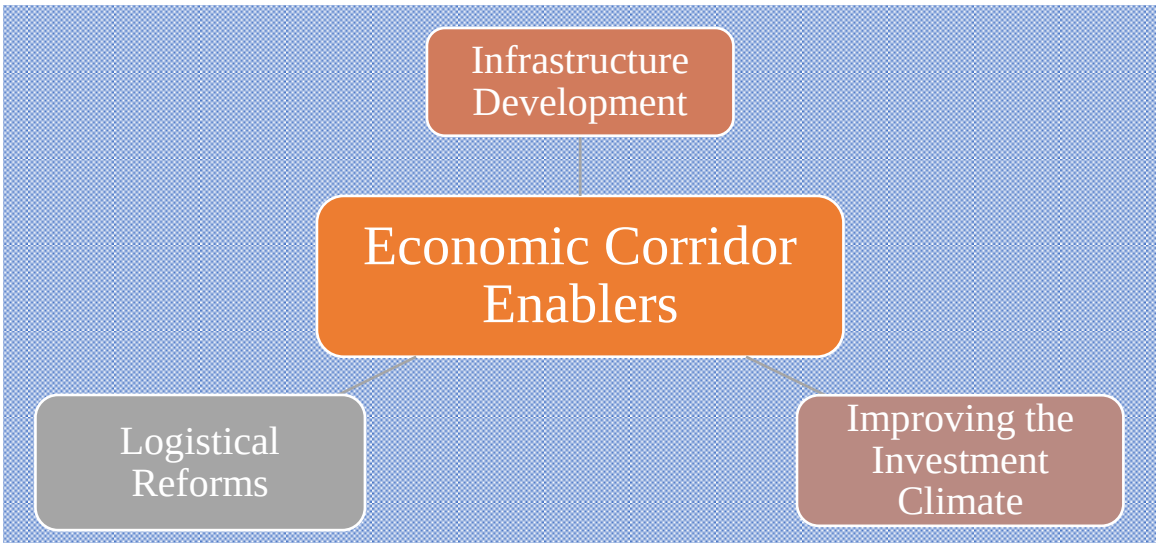
In all cases, a transport corridor may facilitate the creation of multiple supporting corridors and an increasing range of social and economic development activities. It is for this reason that many transportation corridors emerge as trade and economic corridors over a period of time.

Transition of Transport into Economic Corridor

Even though the term economic corridor has long been used to refer to economic connectivity between major metropolitan centres, the first appearance of this term in economics was in the policy documents of the Asian Development Bank (ADB) relating to the Greater Mekong Subregion (GMS) development programme launched in 1998. The GMS programme involved the development of three main cross-border economic corridors among the GMS countries as part of a large infrastructure project designed to improve transport links to remote and landlocked locations in these countries.[3]

The ADB defines the economic corridor as 'an integrated framework of economic development within a designated geographical area, which places trade-related infrastructure at the core, but goes further to encompass interconnected issues of public policy, regulations, and operational practices required for stimulating economic growth and development within the designated area'. The definition encompasses three key elements of a corridor development programme: infrastructure development, logistic reforms and investment climate improvement[4] shown in Figure 1.

Figure 1: Economic Corridor Enablers



The ADB in its Working Paper Series on Regional Economic Integration[5] talks about economic corridors. It notes 'economic corridors connect economic agents along a defined geography. They provide important connections between economic nodes or hubs that are usually centered in urban landscapes. They do not stand alone, as their role in regional economic development can be comprehended only in terms of the *network effects* that they induce'.

Network effects, in turn, are determined by inherent characteristics of the corridor, which could be in the form of *structural characteristics* (industrial structure, trade, and export composition; export complexity; agribusiness' share of exports; relative unit-labour costs for competitiveness; regional income distribution); *network and geographic cohesion characteristics* (population density and dynamics; prospects for trade diversification along value chains; intra-regional vs. inter-regional trade composition; share of components trade; vertical network integration; information network integration along value chains; transport network completeness; interconnectivity [local to global]; and *accessibility characteristics* (combined travel times and travel costs affect logistics chain efficiency; comprehensive transit arrangements and capabilities; market access capabilities development; export financing and financial market capabilities).

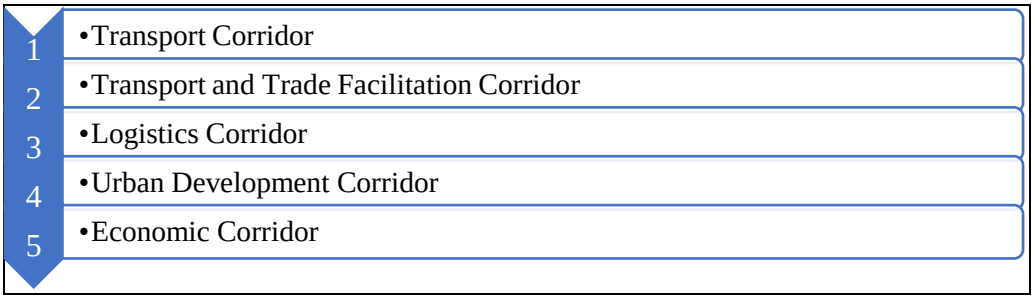
Another report (ADB 2014) provides a simple description of transport and economic corridors. It notes transport corridors are a set of routes that connect the economic centres within and across countries. These encompass several centres of economic activity. Upgrading transport and energy infrastructure brings in investment to a region, initially into sectors where there is potential to develop projects. Subsequently, connectivity and growth attract investments in related sectors.

Thus, a transport corridor in geographic space is enhanced with improved infrastructure and logistics, and grows as an economic corridor. The transition to an economic corridor emphasises the integration of infrastructure improvement with economic opportunities such as trade and investment and it includes efforts to address the social and other outcomes of increased connectivity.[6]

Regarding the evolutionary processes from transport to economic corridor, the existing literature on economic corridors does not seem to provide any 'universally a definition. Srivastava (2011)[7] argues

that there are five stages in transforming a transport corridor into an economic corridor (Figure 2). The paper also notes that this classification is a useful initial step but needs to be further developed. Further, from his description, it seems difficult to clearly distinguish stages 2 to 5, in part because the stages in themselves are not all well-defined.

Figure 2: Stages of Transition from Transport to Economic Corridor



Source: Adapted from Srivastava (2011)

What appears from the above discussion is that the approach to economic corridor development is integrated in nature and often begins by connecting cities, industrial centres, and other economic hubs with transportation infrastructure. Complimentary policies, including improvements to soft infrastructure, aim to help transportation corridors develop into economic corridors over time.[8] It acts as a catalyst to move people and goods efficiently and this efficiency stimulates economic growth.

It has also been observed that economic corridors are rarely developed as greenfield projects – most have developed from existing routes, and many are traceable to ancient trading routes (for example, the Silk route). Further, experience also shows that almost all corridors have evolved from existing land-based transport networks.

In view of the lack of any 'universally accepted' evolutionary processes, this paper relies on the taxonomy presented by Srivastava (2011) to understand the potential and scope for transforming transport corridors into economic corridors in the BBIN sub-region.

Major Subregional Economic Corridors in Asia

As indicated above, the benefits of an economic corridor for the domestic economy and for regional integration are dependent firstly on what characteristics the specific existing economic networks in which the economic corridors are embedded personify. Secondly, the characteristics on which corridor developments are intended to introduce or strengthen. There is evidence to suggest that different characteristics of economic corridors interact dynamically to create patterns of regional economic development.[9] Two examples – one national and another regional – are delineated below to understand the benefits and potential of economic corridors.

Karnali Economic Corridor

Few transport corridors in Nepal have the potential to evolve into economic corridors[10], all culminating at some major production/consumption centres in India. These are the Karnali Economic Corridor, connecting the far-western region of Nepal with Kumaon in Uttarakhand and Lucknow in Uttar Pradesh, the Gandhak Economic Corridor, connecting the western region of Nepal to Gorakhpur

in Uttar Pradesh; the Bagmati Economic Corridor, connecting the central region of Nepal with Patna in Bihar; and the Kosi Economic Corridor, connecting the eastern region of Nepal with Siliguri in West Bengal. In turn, they will get connected with the national highway networks of India.

Out of them, the construction of the Karnali Corridor is in progress, and a major part has already been completed. Anecdotal evidence[11] suggests that the corridor has been successful in realising its development objectives. The success of this corridor can serve as a good example of how economic corridors can contribute to inclusive growth and reduce transportation costs.

Evidence shows that the project has created employment opportunities for local people in various districts of the Karnali Province and is helping local farmers to get their products to the markets with ease. It has contributed increasingly to economic activities at the local level and helped in declining prices of essential goods, thus, improving the living standards of people. This is also helping better utilisation of barren lands as local markets are coming up.

Greater Mekong Subregion

The Greater Mekong Subregion (GMS) programme of subregional economic cooperation designed to enhance economic relations among six countries came into existence in 1992, with assistance from the Asian Development Bank (ADB).[12] These six countries include Cambodia, the People's Republic of China (specifically Yunnan Province and Guangxi Zhuang Autonomous Region), Lao People's Democratic Republic, Myanmar, Thailand and Vietnam.

This programme supports the implementation of high-priority subregional projects in agriculture, energy, environment, health and human resource development, information and communication technology, tourism, transport, transport and trade facilitation and urban development.

Towards realising its intended goal, the GMS programme has adopted a three-pronged strategy:

a) increasing connectivity through sustainable development of physical infrastructure and *the transformation of transport corridors into transnational economic corridors*;
b) improving competitiveness through efficient facilitation of cross-border movement of people and goods and the integration of markets, production processes and value chains; and
c) building a greater sense of community through projects and programmes that address shared social and environmental concerns.

The GMS member countries adopted the economic corridor approach in 1998 to help accelerate subregional development.[13] It was based on the understanding that the development of economic corridors would link production, trade, and infrastructure within a geographic area and benefit wider number of people across these countries.

The priority economic corridors included in the GMS are:

a) the North-South Economic Corridor (NSEC) extending from Kunming, PRC through Lao PDR to Bangkok;
b) the East-West Economic Corridor (EWEC) running from Da Nang Port in Vietnam, through Lao PDR, to Thailand and to the Mawlamyine Port in Myanmar and intersecting the North-South Economic Corridor at the provinces of Tak and Phitsanulok in Thailand; and

c) the Southern Economic Corridor (SEC), linking Cambodia with six provinces in Thailand, including Bangkok, four regions in Vietnam, including Ho Chi Minh City, and six provinces in Lao PDR, and finally reaching Dawei in Myanmar. It needs to be mentioned that *these corridors are not just roads or highways. Still, they are planned and implemented, encompassing a variety of economic activities that run parallel to main transport routes*.

A review of these corridors was conducted to ensure that:

a) there is a close match between corridor routes and trade flows;
b) GMS capitals and major urban centres are connected to each other; and
c) the corridors are linked with maritime gateways. The review came up with recommendations for possible extension and realignment of some corridors, which were endorsed by the GMS member countries in Thailand in 2016.

Additionally, as part of recommendations, a new sub-corridor was added to the North-South Economic Corridor linking Mandalay to Tamu at the border with India to promote links with South Asia (this is part of the India-Myanmar-Thailand Trilateral Highway Project linking India to Thailand through Myanmar).

A review and impact assessment of these priority corridors demonstrates that significant progress has been made in developing them (ADB 2018[14]). As per the report, the strategy and action plans for these three corridors were implemented by up to around 85 per cent. Road projects in these corridors have been completed or nearing completion and tourism infrastructure.

A major expected outcome of such corridors is to improve the ability of local stakeholders on the corridor to produce goods and to take it to market place, or to trade using the new transport networks, hence taking advantage of regional connections. An ADB study[15] (2008) highlights clear gains from economic corridors in the GMS. These are in the form of reduced land transportation costs and improved trade facilitation. Besides the infrastructure development, which automatically leads to employment and livelihood generation, the study mentions significant gains in intra-regional trade.

The GMS economic corridors have also contributed to improvements in physical land transport connectivity among the member countries and the more substantial gains from improved trade facilitation through improved transit times and reduced trade service costs. Two critical elements for the success of economic corridors are physical infrastructure, supported by soft aspects of trade facilitation.

There are also caveats, as reflected by studies. Even though a regional agreement has been ratified to facilitate border crossings, an assessment observed that the weakest links in the various economic corridors remain the border crossings. Administrative and transport-based complications continue to hinder smooth movement of vehicles.[16]

Brahmawong et al, (2011)17 in their analysis, mention that economic development by the corridors may increase the national income and per capita n ational income, but the society will face depletion of natural resources, degradation of environmental quality and diminished livelihood. A comprehensive analysis of all benefits and costs is crucial in decision-making. Even if the analysis shows that the economic, social, and environmental benefits exceed the economic and social costs for the host countries, caution must be made if the countries have a weak law-enforcing system.

Adapted from: https://www.greatermekong.org/content/economic-corridors-in-the-greater-mekong-subregion

Transport Corridors in BBIN Sub-region

In most of the developing countries, lack of sub-regional efficient transport corridors appears to be a major limiting factor for trade and economic growth. The land transport corridors that cater to sub-regional trade have inadequate infrastructure, which causes congestion, resulting in high cost of trade and diminishing returns on investment to industry. This, in turn, acts as a disincentive to future investment. Such a scenario implies a low rate of labour absorption, which perpetuates a vicious circle of poverty. This is true for the South Asia region, where all countries in the BBIN sub-region are present.

Various regional integration initiatives such as the South Asia Association for Regional Cooperation (SAARC),[18] the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC),[19] the South Asia Sub-regional Economic Cooperation (SASEC) Programme,[20] the Asian Highway Network under the aegis of United Nations Economic and Social Commission for Asia and the Pacific (ESCAP),[21] and lately the Bangladesh-Bhutan-India-Nepal (BBIN) Motor Vehicles Agreement (MVA)[22] provide lists of transport networks crucial for strengthening regional trade and cooperation. Most of the corridors overlap and are part of one or more initiatives.[23]

The SASEC Programme lists six transport corridors, which are catering to or have potential to cater to trade and regional integration of the sub-region. Five of these are linked to the countries in the BBIN sub-region.

Table 1: SASEC Road Transport Corridors

SASEC Road Corridor 1	➢ Kathmandu-Raxaul/Birgunj-Kolkata/Haldia
SASEC Road Corridor 2	➢ Chattogram (formerly Chittagong)-Dhaka-Benapole/Petrapole-Kolkata-Odisha-Vishakpatnam-Chennai
SASEC Road Corridor 3	➢ Kathmandu-Kakarvitta/Panitanki-Fulbari/Banglabandha-Rangpur-Hatikumrul-Dhaka- Chattogram (formerly, Chittagong); *and* ➢ Kathmandu-Kakarvitta/Panitanki-Fulbari/Banglabandha-Rangpur-Jessore-Khulna-Mongla
SASEC Road Corridor 4	➢ Thimphu-Phuentsholing/Jaigaon-Changrabandha/Burimari-Rangpur-Dhaka-Chattogram; *and* ➢ Thimphu- Phuentsholing/ Jaigaon-Chengrabandha/Burimari-Rangpur-Jessore-Khulna-Mongla
SASEC Road Corridor 5	➢ Kolkata-Petrapole/Benapole-Dhaka-Sylhet-Tamabil/Dawki-Shillong-Guwahati-Kohima-Imphal-Moreh/Tamu-Kale-Mandalay-Myawaddy; *and* ➢ Kolkata-Petrapole/Benapole-Dhaka-Sylhet to Sheola/Sutarkandi-Silchar-Imphal-Moreh/Tamu-Kale-Mandalay-Myawaddy
SASEC Road Corridor 6	➢ Colombo-Trincomalee Corridor

Source: SASEC Programme

Most of these corridors are operational at the country level and facilitate movement of people and freights within, or used for trading with neighbouring countries. For instance, SASEC Corridor 1 (Kathmandu-Raxaul/Birgunj-Kolkata/Haldia) has emerged as the most important trade link between India and Nepal.

Supported by improved infrastructure embedded in the Integrated Check Post (ICP),[24] it facilitated the movement of more than 160,000 cargo vehicles across the border, which works out to 445 vehicles per day. Similarly, SASEC Corridor 5 (Petrapole-Benapole) significantly contributed significantly to India-Bangladesh trade, with a total vehicle movement of over 106,000 – about 300 vehicles per day. Major trade and transport corridors and the movement of vehicles are provided in the table below.

Table 2: Cargo Movement through Land Borders (with ICPs)

Year	India-Bangladesh Border Points (with ICPs)				India-Nepal Border Points with ICP	
	Agartala	Petrapole	Sutarkhandi	Srimantapur	Rauxal	Jogbani
2015-16	30193	128995	11251	5642	168384	71952
2016-17	11485	146706	14695	6095	105165	81101
2017-18	10995	146341	18181	8976	126631	92148
2018-19	12073	163555	9346	7995	126912	65232
2019-20	13371	154055	15365	10420	148630	76312
2020-21	11146	106334	8534	5714	162577	92912
Source: Land Ports Authority of India						

Economic Corridors Gaining Momentum in the BBIN Sub-region

All the countries in the BBIN sub-region are in the process of, or are contemplating, establishing economic corridors with the purpose to improve connectivity, logistics within and with neighboring countries. The objective is to optimally benefit from transport corridors. For example, India has identified around 26,000 km of new and existing routes (to be upgraded to expressway standards) as 44 Economic Corridor projects. Further 8,000 km of inter corridors and about 7,500 km of feeder routes have been identified for improving effectiveness of economic corridors.[25]

Some of these corridors such as North East Economic Corridor (NEEC) covering Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura have potential to cater to regional connectivity and trade requirements.

Bangladesh has also identified several transport corridors for transforming these into economic corridors. An ADB report for Bangladesh (ADB 2016)[26] has identified nine comprehensive integrated multimodal economic corridor network that satisfy market-integration and linkage criteria. Development of these corridors is expected to improve regional connectivity, transit and integration. These also seek to improve connectivity within Bangladesh and enhance Bangladesh's role as the land bridge between South Asia and Southeast Asia (via Myanmar).

A list of economic corridors with high and very high prospects is provided in the table below. From the list, it is observed that three of the five corridors end at borders connecting India.

Table 3. Economic Corridors in Bangladesh with High and Very High Economic Prospects

Corridor	Route	National and Regional Highway
Northwest–Southeast (NW–SE) (982 km)	Banglabandha– Panchagarh– Rangpur–Bogra– Hatikamrul–Jamuna Bridge–Elenga–Tangail– Joydebpur–Dhaka North–Dhaka South–Katchpur– Madanpur –Comilla– Chittagong–Cox's Bazar– Teknaf–Myanmar Border	N5 (Banglabandha– Hatikamrul), N405 (Hatikamrul–Elenga), N4 (Elenga–Joydebpur), N3 (Joydebpur–Dhaka North), urban road (Dhaka North–Dhaka South), N1 (Dhaka South–Katchpur–Teknaf)
Southwest–Northeast (SW–NE) (504 km)	Benapole–Jessore–Narail– Bhatiapara–Bhanga– Mawa–Dhaka–Katchpur– Sarail–Sylhet–Tamabil	N706 (Benapole– Jessore), R750 (Jessore–Narail), Z7503 (Narail–Kalna Ferryghat), N806 (Kalna Ferryghat to Bhatiapara), N805 (Bhatiapara–Bhanga), N8 (Bhanga–Mawa–Dhaka South), N1 (Dhaka South– Katchpur), N2 (Katchpur– Tamabil)
North–South (Central) (NS–C) (338 km)	Mymensingh–Joydebpur– Dhaka North–Dhaka South–Mawa–Bhanga– Barisal and to Patuakhali	N3 (Mymensingh–Dhaka North), Urban Road (Dhaka North–Dhaka South), N8 (Dhaka South–Mawa–Bhanga– Barisal–Patuakhali)
North–South (East) (NS–E) (668 km)	Tamabilr–Sylhet–Sarail– Brahmanbaria–Comilla– Feni–Chittagong–Cox's Bazar–Teknaf–Myanmar Border	N2 (Tamabil–Sarail), N102 (Sarail–Brahmanbaria– Mainamati), N1 (Mainamuti–Myanmar Border)
Northwest–Northeast (NW–NE) (805 km)	Banglabandha– Panchagarh– Rangpur–Bogra– Hatikamrul–Jamuna Bridge–Elenga–Tangail– Dhaka–Katchpur–Sarail–Sylhet–Tamabil	N5 (Banglabandha– Hatikamrul), N405 (Hatikamrul–Elenga), N4 (Elenga–Joydebpur), N3 (Joydebpur–Dhaka North), Urban Road (Dhaka North–Dhaka South), N1(Dhaka South–Katchpur), N2 (Katchpur– Tamabil)

Source: ADB (December 2016), Connecting Bangladesh: Economic Corridor Network

Nepal also has potential to transform some transport corridors into economic corridor. The Karnali Economic Corridor, connecting the far-western region of Nepal with Kumaon in Uttarakhand have already come up and contributing to the local area development. Other potential corridors are the Gandhak Economic Corridor, connecting the western region of Nepal to Gorakhpur in Uttar Pradesh; the Bagmati Economic Corridor, connecting the central region of Nepal with Patna in Bihar; and the Kosi Economic Corridor, connecting the eastern region of Nepal with Siliguri in West Bengal.

Prioritising Transport into Economic Corridors

Considering that transformation of transport corridors into economic corridors would require huge funding and technical expertise, a set of criteria can be used to prioiritise transport corridors with the potential to be transformed into economic corridors. These could include the following:

- Transport corridors facilitating trade and transit between two or more countries
- Transport corridors with potential for sub-regional value chains
- Transport corridors with better logistics and scope for multimodal connectivity
- Transport corridors with the potential to enhance intra-regional trade
- Transport corridors have the potential to reduce trade gap and regional disparity
- Transport corridors having high trade volume
- Transport corridors having high cargo movement
- Transport corridors having high passenger movement

The approach to priortise transport corridors needs to have sub-regional perspective, rather than a national perspective. The perspective should be inclusive of both social and technical aspects of the transport corridor, implying that while it addresses social issues such as income gaps, at the same time it also leads to enhanced regional integration, high trade, better transit and passenger movement ecosystems.

Keeping this in mind, the BBIN MVA, signed in June 2015 and which is also the most ambitious and farsighted connectivity arrangement among the BBIN countries, appear to be the most important guide to provide leads on potential economic corridors. This is because transport corridors, which are included in the agreement are part of institutional memory, and will be the first to be operationalised when the agreement is fully implemented.

Box 1: BBIN MVA to help transition of transport corridors into economic corridors

The Bangladesh-Bhutan-India-Nepal (BBIN) Motor Vehicles Agreement (MVA) was signed in June 2015 with the objective to enhance intra-regional trade and cooperation among the countries of the sub-region through sub-regional connectivity. The Agreement seeks to enable seamless movement of vehicles that can help in faster and economical movement of goods and people among their territories. The Agreement also provides for tracking of cargo vehicles electronically, online issue of permits and fulfils other requirements to facilitate the seamless movement of vehicles.

The Agreement is yet to be implemented in view of Bhutan's withdrawal in 2017 and prolonged negotiations to finalise the protocols for its implementation among the remaining three countries, Bangladesh, India and Nepal. Several meetings have been held since then – January 2018 and February 2020, March 2022 and July 2022 to finalise the protocols and the enabling document in the form of the Memorandum of Understanding (MoU).

The implementation of the BBIN MVA will require and facilitate several interventions by member states to make movement of vehicles and cargos on the transport routes included under the Agreement smooth and efficient in terms of cost and time saving. Also, it has potential to transform transport corridors into economic corridors, supported by emergence of economic and industrial nodes on the routes.

There are about 30 sub-regional and bilateral corridors included under the BBIN MVA for movement of cargos and passenger vehicles. Two sub-regional transport corridors are (a) Dhaka-Banglabandha-

Fulbari-Siliguri-Panitanki-Kakarvitta-Kathmandu; and (b) Kathmandu-Kakarvitta-Panitanki-Siliguri-Chengrabandha-Burimari-Dhaka.

In addition, several other bilateral transport corridors can benefit from this. At the bilateral level, there are 11 transport corridors covering Bangladesh and India; and 17 covering India and Nepal. It is mentioned that at the national level, these are part of existing transport corridors used for transport of cargos and passengers within the country.

Further, as economic corridors require existing and relatively better infrastructure to facilitate realisation of desired benefits, corridors on which ICPs have been established may also be given priority. ICPs are futuristic in nature as they provide better and integrated infrastructure for trade facilitation, which include spacious cargo parking and processing building, cargo inspection sheds, warehouse and cold storage, quarantine facilities, among others.

Two important sub-regional transport corridors that connect all the three countries in the sub-region may be considered on priority to be transformed into economic corridors. These two corridors are:

- 976 km long Dhaka – Banglabandha – Fulbari - Siliguri - Panitanki – Kakarvitta – Kathmandu corridor; and
- 962 km long Kathmandu - Kakarvitta - Panitanki - Siliguri - Chengrabandha – Burimari – Dhaka corridor. The two corridors are overlapping in nature, and the second changes route from Siliguri in India connect Dhaka through Burimari in Bangladesh.

Table 4: Country-wise Distribution of Sub-regional Corridors (km)

Corridor	Bangladesh	India	Nepal
Dhaka – Banglabandha – Fulbari - Siliguri - Panitanki – Kakarvitta – Kathmandu	475.0	32.9	457.0
Kathmandu - Kakarvitta - Panitanki - Siliguri - Chengrabandha – Burimari – Dhaka	398.0	106.0	457.0

Initiatives are already underway to transform the part of corridor falling in Bangladesh under its Northwest– Southeast (NW–SE) (982 km) Corridor. To improve connectivity up to Kakarbhitta, Nepal has planned to lay a 127 km railway line from Inaruwa to Kakarvitta. The DPR work, which was started in 2015, is already completed. This railway line will run parallel two km south of Mahendra Highway, also known as East-West Highway that connects Terai region in the east to Bhim Datta in the west.

In addition to the sub-regional corridors, there are a number of operational bilateral transport corridors supporting trade between Bangladesh and India; and India and Nepal. Bangladesh and India, for instance, have 11 transport and trade corridors with varying importance. Similarly, India and Nepal have 17 transport corridors, which are used for trade and for movement of passengers between the two countries (see Table 5). It is also observed that many of these transport routes are in use for passenger vehicles movement, facilitated by bilateral agreements.

Table 5. Sub-regional Transport Corridors (BIN Countries)

1. Dhaka – Banglabandha – Fulbari - Siliguri - Panitanki – Kakarvitta - Kathmandu 2. Kathmandu - Kakarvitta - Panitanki - Siliguri - Chengrabandha – Burimari - Dhaka	
Bilateral Transport Corridors	
Bangladesh-India	**India-Nepal**
1. Kolkata – Petrapole - Benapole – Jashore -Dhaka	1. Siliguri - Panitanki - Kakarvitta – Kathmandu
2. Kolkata – Petrapole - Benapole – Jashore -Dhaka – Chattogram	2. Gangtok (Sikkim) – Darjeeling – Pashupatinagar – Fikal
3. Siliguri – Changrabandha - Burimari - Rangpur - Bogura – Hatikamrul - Dhaka – Chattogram	3. Guwahati (Assam) - Darjeeling – Pashupatinagar – Fikal
4. Siliguri – Phulbari - Banglabandha - Rangpur - Bogura - Hatikamrul - Dhaka – Chattogram	4. Damak – Kakarvitta – Siliguri – Darjeeling and or Gangtok (Sikkim)
5. Guwahati – Shillong – Dawki - Tamabil – Sylhet - Dhaka	5. Damak – Kakarvitta – Siliguri – Guwahati (Assam)
6. Guwahati – Shillong – Dawki - Tamabil – Sylhet - Sarail - Dhaka-Benapole - Petrapole - Kolkata	6. Kathmandu – Biratnagar – Kolkata
7. Agartala - Akhaura-Sarail – Narsingdi - Dhaka – Benapole – Petrapole - Kolkata	7. Kathmandu – Birgunj – Patna
8. Kolkata - Petrapole - Benapole – Jashore – Khulna – Barishal	8. Lumbini – Sunauli - Bodhgaya
9. Dhalu-Nakugaon-Nalitabari-Dhaka	9. Nepalgunj – Rupaidiah - Lucknow
10. Chattogram-Ramgarh-Subroom-Agartala-Chatlapur-Shamshernagor-Moulvibazar-Sylhet	10. Dehradun – Haridwar – Kashipur – Khatima – Banbasa – Mahendranagar
11. Dhaka- Siliguri-Gangtok	11. Delhi – Lucknow – Gorakhpur – Sunauli – Kathmandu
	12. Delhi – Rudrapur – Banbasa – Mahendranagar
	13. Lucknow – Sunauli – Kathmandu
	14. Varanasi – Azamgarh – Sunauli – Bhairahawa – Kathmandu
	15. Delhi – Lucknow – Gorakhpur – Sunauli – Bhairahawa — Pokhara
	16. Bodhgaya –Raxaul – Birgunj – Kathmandu
	17. Patna – Muzaffarpur – Madhubani – Kaluwahi – Bhittamod - Janakpur

While there is scope and potential, it is equally important that detailed analyses of cross cutting issues are done while developing the transport and subsequent economic corridors. These issues can be categorised in three sections -- social and environmental concerns; participation from private sector; and human resource development and capacity building of stakeholders impacted and involved.

The social and environmental concerns are the probable negative externalities of the development projects. Social issues such as rise in land prices, displacement of people, loss of work opportunities after displacement and transborder spread of communicable human and animal disease. While environmental issues may include risk of air, noise and water pollution during the construction work and deforestation. These may impact climate in long run.

The participation from the private sector is very essential for development and success of transport networks across countries. The transport network cannot work in silos, or just be government-to-government interactions. The private sector acts as an important catalyst and also source of infrastructure funding. In addition, it is crucial to develop and up-scale the capacities of the stakeholder involved to smoothen the planning and implementation stages of transport sector connectivity.

These issues can be solved by piloting inclusive planning for transport network development. For example, a meticulous investigation on environmental assessment inclusive of cost-benefit analysis can help mitigate the social and environmental concerns. Similarly, ensuring transparency, efficient regulatory framework and good governance can encourage private investment and public-private-partnerships. Providing trainings tailored for specific requirements and field of operation may enhance coordination between stakeholders.

Cases for Economic Corridor

Bilateral transport corridors, which have emerged as major trade routes, coupled with presence of ICPs could also be considered necessary interventions to facilitate their transition into economic corridors. These include the following.

Table 6: Cases for Economic Corridor

Cases for Economic Corridor: Bangladesh-India	Cases for Economic Corridor: India-Nepal
➢ Kolkata – Petrapole - Benapole – Jashore - Dhaka – Chattogram	➢ Kathmandu – Birgunj – Patna
➢ Agartala - Akhaura-Sarail – Narsingdi - Dhaka – Benapole – Petrapole – Kolkata	➢ Kathmandu – Biratnagar – Kolkata
➢ Chattogram-Ramgarh-Subroom-Agartala-Chatlapur-Shamshernagor-Moulvibazar-Sylhet	➢ Delhi – Lucknow – Gorakhpur – Sunauli – Kathmandu
	➢ Nepalgunj – Rupaidiah - Lucknow
	➢ Dehradun – Haridwar – Kashipur – Khatima – Banbasa – Mahendranagar

Concluding Remarks

Economic corridors are expected to usher in an era of inclusive and sustainable growth and also regional trade integration, through trade facilitation encompassing transport connectivity, efficient transport, transit and trade logistics; minimisation of transaction costs; transparent and predictable decision making; and speedy resolution of disputes. Transformation of transport corridors into economic corridors could be one initial step – it can help address many of the issues and boost trade and inclusive growth in the sub-region.

This paper highlights major transport and passenger corridors in the BBIN region, and also provides social and technical criteria/guidelines to priortise the development of transport corridors into economic corridors. It is recommended that considering the huge investment requirements, only sub-regional and bilateral transport corridors, which have the potential to enhance trade and local development and thereby generate sufficient revenue streams, may to be prioritised.

Moreover, it is important to conduct detailed social and environmental impact assessment, scope for private sector financing, and the need for human resource development during the stages of planning to optimally benefit from the corridor development. Detailed studies to understand the potential of each of the suggested corridors in terms of sub-regional trade is also required.

Endnotes

1 The World Bank, John Arnold (2006), Best Practices in Management of International Trade Corridors

2 Economic and Private Sector (2015), Professional Evidence and Applied Knowledge Services. Available at: https://assets.publishing.service.gov.uk/media/57a08995e5274a31e000016a/Topic_Guide_Development_Corridors.pdf

3 ADB (2017), Economic Corridors and Regional Development: The Malaysian Experience

4 *ibid*

5 ADB (2013), What is Economic Corridor Development and What Can It Achieve in Asia's Subregions?

6 ADB (2014), Developing Economic Corridors in South Asia

7 Srivastva (2011), Regional Corridors Development in Regional Cooperation, ADB Economics Working Paper Series

8 Centre for Strategic and International Studies, China's Belt and Road Is Full Of Holes | Center for Strategic and International Studies (csis.org)

9 ADB (2013), What is Economic Corridor Development and What Can It Achieve in Asia's Subregions?

10 ORF (2017), Trans-Himalayan economic corridor: Nepal as a gateway

11 The Kathmandu Post (March 7, 2021), Karnali Corridor Bringing Prosperity in the Region

12 GMS: Overview of the Greater Mekong Subregion Economic Cooperation Program, https://www.greatermekong.org/overview

13 GMS: Review of Configuration of Greater Mekong Subregion Economic Corridors, https://www.greatermekong.org/review-configuration-greater-mekong-subregion-economic-corridors

[14] ADB (2018), The Ha Noi Action Plan 2018–2022

[15] ADB (2008), Logistics development study of the GMS North-South economic corridor

[16] Ruth Banomyong (2010), Benchmarking Economic Corridors logistics performance: a GMS border crossing observation

[17] Brahmawong, P and R. Sukharomana. 2011. East-West Economic Corridor and Southern Economic Corridor of Greater Mekong Subregion: Who Gains and Who Loses? School of Economic and Public Policy, Srinakharinwirot University

[18] The meeting of transport ministers of SAARC countries which concluded on August 31, 2013 in New Delhi, identified road, rail and waterway corridors to facilitate the movement of people and goods in the region

[19] See BIMSTEC Master Plan for Transport Connectivity, April 2022, available at https://www.adb.org/sites/default/files/institutional-document/740916/bimstec-master-plan-transport-connectivity.pdf

[20] The SASEC Program, set up in 2001, brings together Bangladesh, Bhutan, India, Maldives, Myanmar, Nepal, and Sri Lanka in a project-based partnership to promote regional prosperity by improving cross-border connectivity, boosting trade among member countries, and strengthening regional economic cooperation. Till June 2020, 61 regional projects worth over $13 billion have been implemented in the energy, transport, trade facilitation, economic corridor development, and information and communications technology sectors.

[21] UNESCAP Intergovernmental Agreement on the Asian Highway Network, available at https://www.unescap.org/sites/default/d8files/knowledge-products/AHAgreement_with_Amended_Annex_I-%202020_EN2.pdf. The agreement came into effect on 4 July 2005.

[22] The BBIN MVA was signed by the four countries in June 2015 to facilitate seamless transportation of cargo and passengers, including third country transport and personal vehicles through the member country's territory. However, the Agreement is yet to be implemented.

[23] The present paper relies on road transport corridors provided under the SASEC Program.

[24] The ICP is an integrated system to provide secure, seamless and efficient systems for cargo and passenger movement, to reduce dwell time and trade transaction costs, to promote regional trade and people-to-people contact. It has all the trade related infrastructure under a single management, for example Lan Ports Authority in India.

[25] Ministry of Road Transport and Highways, Annual Report, 2021-22

[26] ADB (December 2016), Upgrading in the Indian Garment Industry: A Study of Three Clusters

With the support of
UKaid Foreign, Commonwealth & Development Office
ADB Asian Development Bank

CUTS International
D-217, Bhaskar Marg, Bani Park, Jaipur 302 016, India
Ph: +91.141.228 2821, Fax: +91.141.228 2485, E-mail: cuts@cuts.org, Web: www.cuts-international.org
Also at Delhi, Kolkata and Chittorgarh (India); Lusaka (Zambia); Nairobi (Kenya); Accra (Ghana); Hanoi (Vietnam); Geneva (Switzerland); and Washington DC (USA).