

Conceptualising Economic Corridors and Its Significance for South Asia

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Economic corridors (ECs) have become the centre of attention of many planned development initiatives worldwide. Yet no source has been able to provide a clear definition. The definition of economic corridors remains challenged largely due to the multitude of factors determining its genesis and nature, and thus no corridor matches exactly the characteristics of another. Most of the conceptual work analysing economic corridors has been conducted in the context of spatial planning and geography, centred around urban development and potential spill-over effects into peripheral (rural) areas, predominantly linked with ADB-initiated projects in Southeast Asia. Although many studies about Beijing's Belt and Road Initiative (BRI), and especially those concerning the China-Pakistan Economic Corridor (CPEC), have been published in recent years, it will turn out how far these BRI-related analyses will contribute to the conceptualisation and commonly accepted theoretical understanding of ECs. In brief, the paper understands ECs not only as infrastructural measures facilitating transport but rather as a comprehensive development approach to foster industrial capabilities, services, trade and investment. It is therefore expected that the establishment of ECs will be accompanied by crucial social and political impacts. To realise their full potential, economic corridors need to determine their economic, organisational, institutional, behavioural, political, and planning characteristics. Without these characteristics, any 'corridor' cannot be considered 'economic'. Furthermore, it is argued that these characteristics not only describe economic corridors as such but also serve as indicators to measure their feasibility, functionality, effectiveness and efficiency. Based on the existing literature and the author's own observations about ECs in Asia (Focus CPEC), the paper offers a new conceptualisation of ECs based on identified characteristics and indicators for the successful planning and implementation of ECs.

Keywords: Economic Corridor, Concept/Conceptualisation, South Asia, Belt and Road Initiative, BRI, China-Pakistan Economic Corridor, CPEC, Economic Development, Regional Cooperation, Connectivity, Infrastructure development, Inclusive Growth, South Asia.

Origins of the Economic Corridor Concept

As mentioned above, economic corridors (ECs) have become the main focus of development projects in various countries and regions.¹ Nevertheless, there is no clear definition of the EC in the literature yet.² One of the apparent challenges in considering the conceptualisation of ECs is that due to a multitude of factors determining their origins and nature, no corridor ‘matches exactly the characteristics of another’.³ Due to their increasing prominence among political and economic decisionmakers and the media, ECs have become the focus of academic research too. Most of the conceptual work regarding ECs has been conducted in the context of spatial planning and geography centred around urban development, predominantly linked with projects initiated (and funded) in Southeast Asia by the Asian Development Bank (ADB). Also, numerous research projects regarding the origins of corridor development have been conducted by the World Bank. For instance, substantial work is being carried out in the context of spatial development policy frameworks such as the European Spatial Development Perspective (ESDP) of the European Union (EU). In order to boost the growth of alternative dynamics, ‘global economic integration zones’ in ‘peripheral areas’, ‘Euro-Corridors’ equipped with multimodal infrastructure, ‘transnational cross border development corridors’, ‘infrastructure networks’, or ‘Trans-European Networks/TENs’ are receiving attention and promotion.⁴ However, it will turn out how far the studies on ECs that are part of the Chinese One Belt One Road (OBOR) or Belt and Road Initiative (BRI) will contribute to the conceptualisation and commonly accepted theoretical understanding of ECs.

The following statements can be made to encompass the prevalent notions of ECs. Initially, the idea of ‘corridor’ was developed to address the trade and accessibility problems of landlocked countries.⁵ It is thus expected that corridors should be created along with physical links between regions (besides linking urban nodes) that were not

¹ H. Safitri, *Economic Corridor Policy, Land Concentration and ‘Social Exclusion’*. *Java’s Economic Corridor Policy Implementation, Indonesia*, The Hague: International Institute of Social Studies, 2012, p. 1, <http://thesis.eur.nl/pub/13083/> (accessed on 15 October 2017).

² P. De, ‘Economic Corridors and Regional Economic Integration’, in P. De, K. Iyengar (eds), *Developing Economic Corridors in South Asia*, Manila: Asian Development Bank (ADB), 2014, p. 15, <https://www.adb.org/sites/default/files/publication/162073/developing-economic-corridors.pdf> (accessed on 15 October 2017).

³ H.-P. Brunner, ‘What is Economic Corridor Development and What Can It Achieve in Asia’s Subregions?’, *ADB Working Paper Series on Regional Economic Integration*, No. 117, Manila: Asian Development Bank, 2013, p. 1, <http://www.adb.org/publications/economic-corridor-development-and-what-it-can-achieve-in-asia-subregions> (accessed on 15 October 2017).

⁴ K. Pain, *Global Cities, Gateways and Corridors: Hierarchies, Roles and Functions*, paper presented at the International Conference on Gateways and Corridors (Canada’s Asia-Pacific Gateway and Corridor Initiative) on 2–4 May 2007, Vancouver, Canada, 2007, p. 8, http://www.gateway-corridor.com/roundconf-papers/documents/Pain_Kathy_Winnipeg.pdf (accessed on 15 October 2017).

⁵ J.-F. Arvis et al., *Connecting Landlocked Developing Countries to Markets: Trade Corridors in the 21st Century*. Washington, DC: World Bank, 2011, p. viii, <https://openknowledge.worldbank.org/handle/10986/2286> (accessed on 15 October 2017).

connected before.⁶ According to the more recent consensus, the purpose and function of ‘transport corridors’ is not just a matter of building infrastructure, especially not when such corridors should be efficient in reducing trade costs as well as improving connectivity.⁷

Furthermore, it is becoming obvious that ‘transport corridors’ reinforce the importance of urban nodes⁸ but do not create significant spill-over effects for the development of peripheries. In other words, ‘transport corridors’ have not aimed at the sustainable development and comprehensive modernisation of larger territorial entities. The view of the ‘corridor concept’ centred on transportation must be extended gradually by considering aspects of trade, logistics,⁹ urban development and supply chains.¹⁰ As stated by Srivastava,¹¹ five stages are considered in the evolution of a transport corridor into an EC: Stage 1) transport corridor; Stage 2) transport and trade facilitation corridor; Stage 3) logistic corridor; Stage 4) urban development corridor; Stage 5) economic corridor. Other analysts, like De,¹² have a narrower model of the different phases in the development of an EC, and pointing to three stages: 1) transport corridor; 2) logistic corridor; 3) economic corridor. But De, like Srivastava, emphasises the significance of trade facilitation, logistics, and services as catalysts in EC development.¹³

However, besides different notions on the development stages of an economic corridor, one can state the following: firstly, an economic corridor can be seen as the most advanced, developed and complex corridor. Secondly, besides the initial transport corridors, new models have appeared such as trade, logistics, or supply chain corridors¹⁴ which coexist and represent the broad spectrum of different types of development strategies and respective corridors.

⁶ R. Banomyong, ‘Comparing Corridor Development in the Greater Mekong Subregion and the Indonesia-Malaysia-Thailand Growth Triangle’, in N. Fau et al. (eds), *Transnational Dynamics in Southeast Asia. The Greater Mekong Subregion and Malacca Straits Economic Corridors*, Institute of Southeast Asian Studies, Singapore, 2014, p. 88.

⁷ J.-F. Arvis et al., *Connecting Landlocked Developing Countries...*, op.cit., p. xv.

⁸ P. Srivastava, *Regional Corridors Development in Regional Cooperation*, Asian Development Bank Economics Working Paper Series No. 258, p. 2.

⁹ Ruth Banomyong states: ‘A logistics corridor focuses not only on the physical connection but also on how the flow and storage of freight, people and vehicles is optimised in the corridor with the support of capable service providers and a facilitating institutional environment provided by relevant agencies’. R. Banomyong, *Comparing Corridor Development...*, op.cit., p. 89.

¹⁰ The purpose of such corridors is to reduce costs and time and to improve the reliability of performance, flexibility, and transparency of supply chain networks. As such, supply chain corridors enhance the services associated with the production and movement of goods and other activities that (directly) affect the value of goods.

¹¹ P. Srivastava, *Regional Corridors Development in Regional Cooperation*, op.cit.

¹² P. De, *Economic Corridors...*, op.cit, p. 16.

¹³ Ibidem; P. Srivastava, *Regional Corridors Development*, op.cit.

¹⁴ J.-F. Arvis et al., *The Cost of Being Landlocked: Logistics Costs and Supply Chain Reliability*, WB Directions in Development, Washington, DC: World Bank, 2010; <https://openknowledge.worldbank.org/handle/10986/7420> (accessed on 15 October 2017); R. Banomyong, ‘The Greater Mekong Sub-region of Southeast Asia: Improving Logistics Connectivity’, in J.H. Bookbinder (ed.), *Handbook of Global Logistics:*

The concept of economic corridor was first mentioned and presented as a major goal in the Greater Mekong Subregion (GMS) Development Plan.¹⁵ More concretely, the concept of ECs was ‘introduced at the GMS Eighth Ministerial Meeting in 1998 at a time when the GMS-ECP [Economic Cooperation Program] implementation was stalled by the Asian Currency Crisis’.¹⁶ Against this backdrop, the introduction of ECs in the regional development strategies was supposed to resolve the difficulties and impact of the financial crisis by stimulating economic endeavours along existing transportation infrastructure.¹⁷

It is important to mention that these innovative types of corridors have exceeded their primary functions by attracting investment and generating economic impulses and actions.¹⁸ Through the integration of local economies into international value and supply chains, the new concept of economic corridors became ‘indispensable in promoting global and regional economic development’.¹⁹

Conceptualisation of Economic Corridors

Today, it is widely recognised that EC is a development instrument aiming at the increase of economic growth over a certain period of time and in a specific area.²⁰ Therefore, ECs are linking economic agents along a defined geographical entity and usually provide important connections among major economic nodes centred in urban landscapes.²¹ Consequently, ECs are seen as ‘driver for inclusive growth’ link production, trade and infrastructure within the identified geographic framework of the centre of economic activities (here described as ‘growth zones’), and extend benefits to their lagging hinterlands (peripheries) as well as more disadvantaged, remote

Transportation in International Supply Chains, International Series in Operations Research & Management Science, New York: Springer, 2013, pp. 69–96.

¹⁵ ADB, *Central Asia Regional Economic Cooperation Corridor Performance and Measurement and Monitoring: A Forward-Looking Retrospective*, Asian Development Bank (ADB), Manila, Philippines, 2014, p. 2, <https://www.adb.org/publications/carec-corridor-performance-measurement-and-monitoring-forward-looking-retrospective> (accessed on 15 October 2017); C. Wiemer, *Economic Corridors for the Greater Mekong Subregion*, EAI Background Brief No. 479, Singapore: East Asian Institute, National University of Singapore, 2009, pp. 2–3. <http://www.eai.nus.edu.sg/publications/files/BB479.pdf> (accessed on 15 October 2017).

¹⁶ M. Ishida, *Special Economic Zones and Economic Corridors*, ERIA Discussion Paper Series, Economic Research Institute for ASEAN and East Asia, Jakarta, Indonesia, 2009, p. 4, <https://core.ac.uk/download/pdf/9306181.pdf> (accessed on 15 October 2017).

¹⁷ *Ibidem*, p. 4.

¹⁸ R. Banomyong, *The Greater Mekong Sub-region...*, *op.cit.*, p. 2.

¹⁹ ADB, *Central Asia Regional Economic Cooperation...*, *op.cit.*, p. 1.

²⁰ H. Safitri, *Economic Corridor Policy...*, *op.cit.* p. 1; AGIL (2000), *Zona Paz Economic Corridor Strategy*, concept Paper for USAID/Guatemala, Guatemala-CAP Income Generation Activities Project (AGIL), Bethesda, MD: Abt Association Inc., p. 2, http://pdf.usaid.gov/pdf_docs/Pnacy158.pdf (accessed on 15 October 2017).

²¹ H.-P. Brunner, ‘What is Economic Corridor...’, *op.cit.*

(rural, mountainous and arid) areas through transport development and expansion of production activities.²² As such, an EC is designed to create global, regional and domestic value and supply chains through the creation and/or connection of economic centres, and produces (ideally) positive multi-sectoral spill-over effects.

In brief, this study understands the concept of EC not only as an infrastructural measure for the transport of commodities, but rather as a comprehensive development approach to foster industrial and other manufacturing capabilities, services, trade and investment. It is expected that the establishment of ECs will be accompanied by crucial economic as well as social and political impacts within and beyond the chosen areas. Keeping this in mind, an EC requires economic, organisational, institutional, behavioural, political, and planning aspects (interpreted here as characteristics) for its full potential to be realised. Without these key characteristics, a ‘corridor’ cannot be understood as ‘economic’. Additionally, it is argued that these characteristics do not only describe an EC but they also serve as indicators measuring the feasibility, functionality, effectiveness and efficiency of an EC. Based on the existing literature as well as on the author’s own observations, the following indicators can be identified:

Conceptualised Geographic Framework

The development of an EC as a spatial entity is premised on the identification and definition of a geographical framework. Depending on its conceptualisation, the geographical framework can span different scales:²³ from a broad scale which is mostly regional or national to a narrower scale aiming at tackling specific, geographically limited local bottlenecks. As such, the geographical framework for the development of interconnection can be between entire regions, within a region, across sub-regions (on a national or transnational scale) between states, within a state or the subordinated territorial entities of a state (like a province of a state), as well as across regions and sub-regions.²⁴ The chosen space for a corridor can be a defined natural (given) area or a specifically planned one.²⁵ In both cases, however, it must possess a minimum of ‘geographic cohesiveness’ which is not undermined by (extraordinary) unthrifty, unfavourable environmental conditions like vast deserts, restive mountainous areas, or other areas with misanthropic conditions.

²² M. Ishida, I. Isono, ‘Old, New and Potential Economic Corridor in the Mekong Region’, in M. Ishida (ed.), *Emerging Corridors in the Mekong Region*, BRC Research Report No. 8, Bangkok: Bangkok Research Center (BRC), 2012, pp. 1–42, <http://www.ide.go.jp/English/Publish/Download/Brc/08.html> (accessed on 15 October 2017); C. Wiemer, *Economic Corridors...*, op.cit., pp. 2–3.

²³ J.-F. Arvis et al., *Connecting Landlocked Developing Countries...*, op.cit., p. 161.

²⁴ K. Yhome, R.R. Chaturvedy, ‘Emerging Trans-Regional Corridors: Perspectives from South and Southeast Asia’, in K. Yhome, R.R. Chaturvedy (eds), *Emerging Trans-Regional Corridors: South and South East Asia*, New Delhi: Observer Research Foundation (ORF), 2017, p. 1, <http://cf.orfonline.org/wp-content/uploads/2017/01/GP-ORF-Transregional-Corridors.pdf> (accessed on 15 October 2017).

²⁵ B. Marrian, *Towards a General Theory of Corridor Development in South Africa*, 2011, <http://repository.up.ac.za/bitstream/handle/2263/8193/5b6.pdf?sequence=1> (accessed on 15 October 2017).

Based on Srivastava's²⁶ notion of a development process based on 'sequencing zones' of national corridors and their subsequent transformation into regional corridors, one can state that the geographic framework of EC has been 'fluid' since its establishment. This 'fluidity' depends on the extent of the regionality and area of influence of an EC. Here, Srivastava identifies four zones which are demarcated with inter-zone sequencing: Zone 1) narrow national corridor, with a focus on the initial and/or the upgrading of existing road infrastructure; Zone 2) broad national corridor, including an area development and railroads; Zone 3) narrow regional corridor, including trade facilitation and logistics; and Zone 4) broad regional corridor, including cross-border economic zones (here understood as a 'transnational growth zone').²⁷

Identified Growth Zones

The identification of growth zones within the geographical framework is a crucial part of each EC planning process. The growth zones²⁸ are centres of economic activity, also described as economic and industrial nodes (alternately, hubs or clusters).²⁹ These nodes function as a major provider of most of the essential material and human resources,³⁰ but also as logistic and communication hubs or gateways inside and outside the defined geographical framework of the EC.³¹ In other words, the growth zones or nodes constitute the backbone of each EC geographical framework. Basically, there are different types of nodes (growth zones): commercial nodes (linking important places of economic activity in each EC participating country), border nodes (containing the foremost border hubs like checkpoints and dry ports), gateway nodes (giving access to external markets), or interchange nodes (determining intersections between different routes of a corridor or between different corridors).³²

²⁶ P. Srivastava, *Regional Corridors Development in Regional Cooperation*, op.cit., pp. 10–12.

²⁷ Ibidem, pp. 10–12.

²⁸ The 'growth zones' are also described as 'growth poles'. Patricia Uberoi states that 'growth zones' are often allied with various other more or less interchangeable terms, such as 'cooperation zone', 'growth poles' or 'growth polygon'. P. Uberoi, *The BCIM Economic Corridor: A Leap into the Unknown?*, Working Paper, Institute of Chinese Studies (ICS), New Delhi, India, 2014, p. 4, <http://www.icsin.org/uploads/2015/05/15/89cb0691df2fa541b6972080968fd6ce.pdf> (accessed on 15 October 2017).

²⁹ P. Srivastava, *Regional Corridors Development in Regional Cooperation*, op.cit., p. 2; C. Wiemer, *Economic Corridors...*, op.cit., p. 2.

³⁰ H.-P. Brunner, 'What is Economic Corridor...', op.cit., p. 1.

³¹ M. Castells, *The Information Age: Economy, Society and Culture. Volume 1: The Rise of Network Society*, Oxford: Blackwell Publishers, 1996; M. Franck, 'Twin Cities and Urban Pairs, A New Level in Urban Hierarchies Structuring Transnational Corridors? A Case Study of the Pekanbaru-Dumai Urban Pair', in N. Fau et al. (eds), *Transnational Dynamics in Southeast Asia...*, op.cit., p. 271.

³² E.-X. Lainé, 'Mukdahan and Savannakhet, Internationalization Process of Twin Mekong Border Cities on the East West Economic Corridor', in N. Fau et al. (eds), *Transnational Dynamics in Southeast Asia...*, op.cit., pp. 338–360.

Established Special Economic Zones (SEZ)

In theory and in practice, special economic zones (SEZs) are a crucial instrument for developing growth zones. As for economic corridors, there is a multiplicity of names and forms of SEZs with differing functions.³³ For example, many SEZs have characteristics of bonded zones (BZs), freeports, export processing zones (EPZs) or free trade zones (FTZs), industrial, science and technology parks, or petrochemical zones, and provide special incentives, including tax exemption or reduction to investors, purpose-built production facilities, duty-free imports, simplified customs procedures and other services.³⁴

There are, however, essential structural features to SEZs. Firstly, SEZs can be defined as a geographically demarcated area within a state. Secondly, this formally delimited part of a national territory operates with different, typically more liberal and administratively efficient, regulatory and fiscal regimes (sets of laws and/or measures) than the rest of the state.³⁵ Thirdly, SEZs are usually entrusted with a dedicated governance structure to run the regulatory regime of a SEZ.³⁶ Fourthly, SEZs are usually provided with a physical infrastructure supporting the activities of the firms and other economic agents operating within them.³⁷ In order for a SEZ to be fully-fledged, sufficient multimodal infrastructure (roads, railways, waterways) connecting the zone to markets, sources of inputs, and major transportation hubs (gateways) such as ports and airports, must be provided.³⁸ In addition, there must be adequate public transportation, real estate for business and housing (e.g. industrial or mixed parks), education and health facilities, water supply, and telecommunications networks.³⁹

³³ C. Baissac, 'Brief history of SEZs and overview of policy debates', in T. Farole (ed.), *Special Economic Zones in Africa: Comparing performance and learning from global experience*, World Bank, Washington, DC, 2011, p. 27, <https://openknowledge.worldbank.org/handle/10986/2268> (accessed on 15 October 2017); T. Farole, *Special Economic Zones in Africa...*, op.cit., p. 24, <https://openknowledge.worldbank.org/handle/10986/2268> (accessed on 15 October 2017).

³⁴ M. Ishida, *Special Economic Zones...*, op.cit.; FIAS, *Special Economic Zones: Performance, lessons learned, and implications for zone development*, Foreign Investment Advisory Service (FIAS), World Bank, Washington, DC, 2008, p. 2, <http://documents.worldbank.org/curated/en/343901468330977533/pdf/458690WP0Box331s0April200801PUBLIC1.pdf> (accessed on 15 October 2017); S. Woolfrey, *Special economic zones and regional integration in Africa*, tralac Working Paper, No. S13WP10/2013, Trade Law Center (tralac), Stellenbosch, 2013, p. 2, <http://www.tralac.org/files/2013/07/S13WP102013-Woolfrey-Special-economic-zones-regional-integration-in-Africa-20130710-fin.pdf> (accessed on 15 October 2017).

³⁵ A. Dobronogov, T. Farole, *An economic integration zone for the East African Community: Exploiting regional potential and addressing commitment challenges*, World Bank Policy Research Working Paper 5967, Washington, DC, 2012, p. 5, <http://documents.worldbank.org/curated/en/120641468023381622/An-economic-integration-zone-for-the-East-African-Community-exploiting-regional-potential-and-addressing-commitment-challenges> (accessed on 15 October 2017); S. Woolfrey, *Special economic zones...*, op.cit., p. 2.

³⁶ T. Farole, *Special Economic Zones in Africa...*, op.cit., p. 24.

³⁷ C. Baissac, 'Brief history of SEZs...', op.cit., pp. 24–25; T. Farole, *Special Economic Zones in Africa: Comparing performance and learning from global experience*, op.cit., p. 24.

³⁸ C. Baissac, 'Brief history of SEZs...', op.cit., pp. 24–25.

³⁹ T. Farole, *Special Economic Zones in Africa...*, op.cit., p. 24.

Moreover, SEZs also demand overall security, including energy and food security as well as protection against crime and terrorism.

SEZs commonly serve numerous objectives. They 1) attract foreign direct investment (FDI); 2) create jobs, especially to eradicate local unemployment; 3) improve trade facilitation and promote and diversify exports and imports; 4) modernise the economy in general and upgrade industry and manufacturing in particular through technology, knowledge and skill transfers; 5) induce economic reforms and development strategies; and 6) test innovative economic policies while maintaining the status quo for the rest of the country.⁴⁰ SEZs are considered successful if they are able to bring about significant structural change in the economy and long-term dynamic and sustainable economic benefits by achieving the abovementioned overall goals.⁴¹

To sum up, SEZs are development programmes in their own right which determine independent strategies for economic development. However, in the combination with ECs, both the zones and corridors can provide mutual reinforcement. In other words, the success of SEZs largely depends on the degree of their integration in the domestic economy. The establishment of necessary linkages⁴² between SEZs and the national economy can be promoted by an EC that benefits from the agglomeration effects and other benefits of SEZ. One should mention that an EC can help in reducing the potential negative side-effects of SEZs, like the tendency to create economic enclaves.⁴³ This is problematic when the enclaves are used by multinational companies and larger domestic investors from export-oriented industries. This can create market distortions and undermine free and fair economic competition, since local entrepreneurship, especially small and medium enterprises (SMEs), might be hampered in their development by the emergence of SEZs. SEZs have been criticised for hosting import-dependent activities that do not add significant value; perpetuating low-skill assembly operations; attracting FDI in low-skill, low technology and footloose industries; suppressing labour rights; allowing poor workplace health and safety conditions; and having weak

⁴⁰ C. Baissac, 'Brief history of SEZs...', op.cit., pp. 4–26; T. Farole, *Special Economic Zones in Africa...*, op.cit., pp. 91–94; FIAS, *Special Economic Zones...*, op.cit., pp. 12, 32; UNIDO, *Industrial Development Report 2009: Breaking in and moving up – new industrial challenges for the bottom billion and the middle income countries*, United Nations Industrial Development Organisation (UNIDO), Vienna, Austria, 2009, pp. 8, 79, https://www.unido.org/fileadmin/user_media/Publications/IDR_2009_print.PDF (accessed on 15 October 2017).

⁴¹ R. Auty, 'Early Reform Zones: Catalysts for Dynamic Market Economies in Africa', in T. Farole, G. Akinci (eds), *Special Economic Zones: Progress, Emerging Challenges, and Future Directions*, World Bank, Washington, DC, 2011, pp. 207–226, <http://documents.worldbank.org/curated/en/752011468203980987/Special-economic-zones-progress-emerging-challenges-and-future-directions> (accessed on 15 October 2017); T. Farole, *Special Economic Zones in Africa...*, op.cit.; T. Farole, G. Akinci (eds), *Special Economic Zones...*, op.cit., <http://documents.worldbank.org/curated/en/752011468203980987/Special-economic-zones-progress-emerging-challenges-and-future-directions> (accessed on 15 October 2017).

⁴² Mutual entrenchment will be implemented through so-called backward and forward linkages.

⁴³ T. Farole, G. Akinci (eds), *Special Economic Zones...*, op.cit., pp. 4–5.

environmental controls.⁴⁴ However, ‘well-managed’ zones can ‘play a long-term dynamic role in their country’s development process’,⁴⁵ particularly when they are embedded in EC development.

Connectivity Within the Geographical Framework (Internal Connectivity)

Internal connectivity within the geographical framework is a *sine qua non* condition for EC development. In other words, the growth zones (or nodes) of an EC must be linked through various connectivity projects. Furthermore, the nodes must be integrated into production chains⁴⁶ and trade and logistical networks⁴⁷ within the given geographical framework. Connectivity between the nodes is essential because without strong functional links, no significant economic movement and interaction can take place along the EC.⁴⁸ Ideally, there should be a high level of connectivity within a growth zone. For instance, this can be achieved through the existence of an efficient feeder system to improve the overall connectivity and mobility within a zone, such as an integrated train, tram, metro, taxi lines, and bus system that would facilitate pedestrian movement.⁴⁹ At the same time, the local transport system should also include effective mechanisms for goods traffic. It is essential for connectivity between the nodes as well as within the growth zones to be multimodal, meaning that the various transportation systems, for both passengers and goods, are complementary, inter-connected and harmonised. Multimodality of infrastructure and transport systems also helps to bridge any existing terrain diversity which is a feature of many areas chosen for an EC. Tariq Karim⁵⁰ recommends the adoption of an organic method to ‘configure the corridors and linkages in a manner that best appears to be in consonance with the geomorphology of different terrain’. This would contribute to the sustainability of the implemented infrastructure connectivity. However, in order for the infrastructure to be in sync with

⁴⁴ FIAS, *Special Economic Zones...*, op.cit., p. 33.

⁴⁵ D. Madani, *A Review of the Role and Impact of Export Processing Zones*, Policy World Bank Research Working Paper, Washington DC, 1999, pp. 7–8, http://siteresources.worldbank.org/EXT/EXPCOMNET/Resources/2463593-1213887855468/11_A_Review_of_the_Role_and_Impact_of_EPZs.pdf (accessed on 15 October 2017).

⁴⁶ H.-P. Brunner, ‘What is Economic Corridor...’, op.cit., p. 7, 8; B. Marrian, *Towards a General Theory...*, op.cit., 2001.

⁴⁷ P. Srivastava, *Regional Corridors Development in Regional Cooperation*, op.cit.

⁴⁸ W.G. Roeseler, D. von Dosky, ‘Joint development in urban transportation: A practical approach to modern growth management’, in *Landscape and Urban Planning*, Vol. 20, No. 4, 1991, p. 338; B. Marrian, *Towards a General Theory...*, op.cit.

⁴⁹ W.G. Roeseler, D. von Dosky, ‘Joint development in urban transportation...’, op.cit., p. 338; B. Marrian, *Towards a General Theory...*, op.cit., 2001.

⁵⁰ T.A. Karim, ‘Connecting South Asia with Southeast Asia: A Reality Check’, in K. Yhome, R.R. Chaturvedy (eds), *Emerging Trans-Regional Corridors: South and South East Asia*, New Delhi: Observer Research Foundation (ORF), 2017, p. 12, <http://cf.orfonline.org/wp-content/uploads/2017/01/GP-ORF-Transregional-Corridors.pdf> (accessed on 15 October 2017).

the variety of territorial and environmental conditions, the EC planning should support ‘multimodality of transport rather than uniformity’.⁵¹

Moreover, connectivity based on multimodality is crucial to achieve the necessary spill-over effects from growth zones into remote and/or underdeveloped areas, specifically in order for the peripheral regions to be able to benefit from the growth zones.⁵² According to Srivastava,⁵³ this ‘process is uneven, with the core (the metropolitan/urban areas) benefiting first and the periphery (hinterland/rural areas) becoming integrated only later’.

Connectivity Beyond the Own Geographical Framework (External Connectivity)

To achieve a high level of efficiency of ECs, it is important to implement measures to extend connectivity beyond the borders of the initially defined geographical framework. This gains particular significance when EC connectivity projects involve a transnational dimension. Referring to Srivastava’s⁵⁴ model of sequencing zones of EC development, this would mean the extension of Zone IV and the creation of a cross-border dimension to the EC.

However, the ‘external connectivity’ of an EC could include initiatives to link different ECs or the growth zones of one EC with nodes outside the initial geographical framework. In this context, ECs are supposed to serve as promoters of regional cooperation and integration within as well as amongst different regional entities, such as South Asia, Southeast Asia, Central Asia, the Middle East or South-Eastern Europe. Therefore, ECs must have an inclusive and comprehensive character to function as drivers of economic growth and of regionalisation processes. It is not enough for ECs to be integral to the economic fabric and economic actors surrounding it. If this were the case, ECs would generate limited economic benefits, as they would remain isolated – a narrow, exclusive area of operation. For example, they would remain at a narrow national or provincial level. But in order to achieve maximum benefit, ECs must pervade larger economic networks, such as regional and global value chains, production and transport networks.⁵⁵ The success of an EC depends not only on a smooth functioning of the inter-coordinated and synchronised multimodal infrastructure, but also on the development or at least access to an established gateway node. Ideally, such a gateway node is a port with overseas, blue-water trans-shipment

⁵¹ Ibidem, p. 13.

⁵² ADB, *Strategy and Action Plan for the Greater Mekong Subregion East-West Economic Corridor*, Asian Development Bank (ADB), Manila, Philippines, 2010, <https://www.adb.org/sites/default/files/publication/27496/gms-action-plan-east-west.pdf> (accessed on 15 October 2017); E.X. Lainé, *Mukdahan and Savannakhet...*, op.cit., pp. 341–342.

⁵³ P. Srivastava, *Regional Corridors Development in Regional Cooperation*, op.cit., p. 2.

⁵⁴ Ibidem, p. 11.

⁵⁵ H.-P. Brunner, ‘What is Economic Corridor...’, op.cit, p. 1.

capabilities. The linkage of an EC with one or more airport(s) is, nonetheless, of great importance too.

Articulated Common Culture and History

Recent and current EC development projects are increasingly qualified by an awareness of common culture and history. The complex significance of culture and history plays a crucial role in the development of an EC initiative.⁵⁶ The experience of common cultural and historical ground can contribute to ‘people-to-people’ contacts but also to the improvement of the necessary processes of diplomacy, negotiations, and communication. Furthermore, the sense of shared history and cultural belonging can create political and economic loyalties within a geographical framework containing unequal and competing actors.⁵⁷ Actualising this ‘soft power’, the awareness, or at least an explicit emphasis on common culture and history is prevalent in most of the implemented and envisaged EC initiatives, especially Chinese-funded ones.⁵⁸ But one must also be aware that the extensive use of soft-power instruments can create feelings of cultural deprivation and repression. This gains significance when the geographic framework of an EC includes subordinated territorial entities which are already feeling economically exploited and socially and politically side-lined by the central authorities. The situation gets even more complex when these ‘restive regions’ are inhabited by indigenous populations that feel increasingly marginalised by the development of ECs. In such a context, there is the immanent challenge that an EC initiative might be identified as an instrument of exploitation rather than of development, and the use of soft-power instruments might be seen as cultural suppression instead of building common ground.

Processes of Modernisation and Industrialisation

An EC must be endowed with an ‘enabling industry, one that is able to meet goals inherent to transport, trade, logistic as well as other pressing national and social objectives’.⁵⁹ The development of ECs is not only qualified by the stimulation of economic growth but also by efforts to advance processes of modernising economies

⁵⁶ T. Winter, ‘One Belt, One Road, One Heritage: Cultural Diplomacy and the Silk Road’, *The Diplomat*, 29 March 2016, <http://thediplomat.com/2016/03/one-belt-one-road-one-heritage-cultural-diplomacy-and-the-silk-road/> (accessed on 15 October 2017).

⁵⁷ T. Winter, ‘Heritage diplomacy along the One Belt One Road’, *IIAS Newsletter*, No. 74 (Summer), International Institute for Asian Studies, Leiden, Netherlands, 2016, <http://iiias.asia/the-newsletter/article/heritage-diplomacy-along-one-belt-one-road> (accessed on 15 October 2017).

⁵⁸ D. Shambaugh, ‘China’s Soft-Power Push. The Search for Respect’, *Foreign Affairs*, 16 June 2015, <https://www.foreignaffairs.com/articles/china/2015-06-16/china-s-soft-power-push> (accessed on 15 October 2017).

⁵⁹ NdoT, *Moving South Africa: The Action Agenda*, Pretoria: National Department of Transport (NdoT), 1999, pp. 6, 17, 18; B. Marrian, *Towards a General Theory...*, op.cit.

in general and of upgrading industries in particular. Moreover, well-planned EC development has the potential not only to create desired industrial agglomeration in urban areas but also to industrialise the hinterland. It is seen that especially areas of the hinterland in which economic viability exists, remain under-utilised.⁶⁰

Generally speaking, the upgrade of industries focuses not only on the improvement of existing industrial estates and manufacturing capacity, but also on the creation of new industries and industrial clusters. It is thus hoped that the participating countries and/or regions of a successful EC initiative would achieve a higher position in the global value chain (GVC) of production. More concretely, it is expected that the upgrade of industries will help to produce better quality, technologically advanced products. Subsequently, the strengthening of an industrial base due to EC development should not result in an increase in low-cost and low-technology products. Instead, the EC should promote the improvement of manufacturing innovation and the integration of technology and industry, foster processes of advanced restructuring in manufacturing (e.g. by strengthening more service-orientated sectors and introducing intelligent manufacturing), and support the internationalisation of industries by fostering own (domestic) brands. Subsequently, the modernisation and upgrade of industry will most likely be accompanied by the build-up of knowledge hubs, the respective creation of employment and subsequent reduction of poverty, which could also have a positive impact on social development.⁶¹

Social and Societal Development

It is expected that a functional and effective EC is characterised by economic growth that creates a remarkable uplift in the standard of living of people, especially those working and living in functioning and successful growth zones. When these growth zones create sufficient spill-over effects, the whole population of the geographic framework might have a chance to benefit from the EC initiative and its respective projects. For example, the availability and improved access to employment opportunities will not only improve people's overall living conditions, but increase social integration, too.⁶² More trade and other economic activities between the different areas of an EC and with neighbouring countries will strengthen people-to-people contacts. The latter, in combination with improving socio-economic conditions, will help people bridge cultural, ethnic and other differences between diverse communities within the geographic framework of an EC and the surrounding areas. Furthermore, in numerous cases, the overall EC vision harbours hopes that the uplift of people's living standards will

⁶⁰ K. Yhome, R.R. Chaturvedy (eds), *Emerging Trans-Regional Corridors...*, op.cit., p. 1; S. Dutta, S. Gupta, 'Economic Corridors and Pro-Poor Private Sector Development in South Asia: A Case Study of Bangladesh and India', in P. De, K. Iyengar (eds), *Developing Economic Corridors...*, op.cit., p. 219.

⁶¹ P. De, *Economic Corridors...*, op.cit., p. 15.

⁶² NDoT, *Moving South Africa...*, op.cit., pp. 6, 17, 18; B. Marrian, *Towards a General Theory...*, op.cit.

limit or even reverse unfortunate developments ('social evils') within the societies of the geographical framework (and beyond), like the reduction of religious extremism, jihadism, political violence and militancy, terrorism, separatism, and ethnic and social cleavages, among others. However, one must be also aware that the establishment of an EC, especially when it is not well-planned by centralised decisionmakers and side-lines the local population, needs to factor in numerous societal downsides, like the outbidding of local (especially) disadvantaged communities, social displacement and social conflicts.⁶³

Effective and Fair Regional Distribution Mechanisms

It is in the nature of ECs to create agglomeration effects, which of course are a desired phenomenon in the initial phase, but can also unfold negative effects or disadvantage areas with low capabilities.⁶⁴ To enhance spill-over effects and to bridge asymmetries, it is important to establish effective and fair mechanisms of financial regulation between the different actors and territorial entities, foremost in the centre-region but also in inter- and intraregional relations. This mainly includes fair distribution between political centres (places of decision-making) and peripheral areas. The establishment of a distribution mechanism gains significance, since in many instances of EC development, the main political decision-making centres are not identical with the centres of economic activity and/or revenue creation. In consequence, the establishment of fair allocation mechanisms is necessary due to the fact that territorial sub-entities are often subject to variations in economic conditions and capacity, creating 'differentiated abilities' to exploit the benefits generated by an EC.⁶⁵

Respective mechanisms of EC-related financial regulation should be established in three priority areas in a transparent and balanced manner:

- 1) Allocation of investment in quantitative (number of envisaged projects) and qualitative ('economic relevance') terms
- 2) Income and revenue distribution
- 3) Dispersal of financial costs (e.g. interest rates, maintenance of EC projects, security).

Pre-Existence of Economic Viability

The planning of an EC, especially the conceptualisation and definition of its general geographic framework and the identification of particular nodes, usually considers the pre-existence of economic viability.⁶⁶ The area in which an economic

⁶³ K. Yhome, R.R. Chaturvedy (eds), *Emerging Trans-Regional Corridors...*, op.cit., p. 1.

⁶⁴ H.-P. Brunner, 'What is Economic Corridor...', op.cit, p. 3.

⁶⁵ A. Palit, 'The MSR Economic Corridor: Character and Implications', in K. Yhome, R.R. Chaturvedy (eds), *Emerging Trans-Regional Corridors...*, op.cit., p. 61

⁶⁶ B. Marrian, *Towards a General Theory...*, op.cit.

corridor is to be developed has the necessary economic viability when the following criteria are met:⁶⁷

- 1) The area possesses an ‘enabling economic mass’ which means that the identified locations ideally encompass a ‘large amount of economic resources and actors’.
- 2) The area shows pre-existent strong economic growth.
- 3) The area exhibits a natural propensity and strong effective demand for further mixed-use development.
- 4) The area is free of crucial inhibitors (veto-actors).

To summarise, the criteria ensure that the development of a corridor in a given region makes sense in economic terms. A corridor from ‘nowhere to nowhere through nowhere’ would be futile.⁶⁸ It is also not very meaningful to combine substantive economic hubs when there is ‘no potential for growth in between (because of adverse geography such as extremely rugged terrain or desert)’. In other words, if a corridor is not economically feasible and does not offer investors ‘satisfactory cash return’ on their investment, it will not become a reality, at least not in sustainable, effective and efficient ways.⁶⁹

Integrated and Comprehensive EC Planning

EC development must be based on integrated and comprehensive planning. In other words, there needs to be a cooperative and overarching direction to oversee and execute the corridor vision, the respective plan, the planning process, and the implementation of the plan. In order to devise and administer this type of centralised approach, all of the relevant socio-economic and socio-political realities have to be taken into account.⁷⁰ Additionally, governmental actions by, for instance, sectoral departments responsible for land use policy and management, transportation planning, infrastructure investment and maintenance, and security sector agents, as well as actions by non-governmental actors, are imperative to ensure the realisation of the ‘corridor-vision’.⁷¹ Any actions that run counter to this vision will need to be adequately addressed. In practice, the integrated and comprehensive planning of economic corridors requires the two elements listed below:

⁶⁷ Ibidem, p. 1; W.G. Roeseler, D. von Dosky, ‘Joint development in urban transportation...’, op.cit.; GPMC, *Mabopane-Centurion Development Corridor: Integrated Growth and Development Implementation Strategy, 1997*, Greater Pretoria Metropolitan Council (GPMC), Pretoria, 1997, p. 6; B. Marrian, *Towards a General Theory...*, op.cit.

⁶⁸ P. Srivastava, *Regional Corridors Development in Regional Cooperation*, op.cit., pp. 3–4.

⁶⁹ W.G. Roeseler, D. von Dosky, ‘Joint development in urban transportation...’, op.cit., p. 336, 342; B. Marrian, *Towards a General Theory...*, op.cit.

⁷⁰ B. Marrian, *Towards a General Theory...*, op.cit.

⁷¹ W.G. Roeseler, D. von Dosky, ‘Joint development in urban transportation...’, op.cit., p. 329.

The Formulation of an Overall EC Vision

The overall vision should manifest the fundamental principles and guidelines for the establishment and functioning of the EC and a general code of conduct for the interaction and cooperation of actors within the chosen geographic framework, in addition to external relations.

A Concrete Action Plan

The corridor proposal should also include a concrete action plan along with a complementary time-frame. The action plan should outline exactly when key investments (like energy and infrastructure) in the corridor will be made to ensure private sector trust and involvement.⁷²

Political Will

To implement a mega development project like an EC, all crucial decisionmakers need to possess the necessary political will which depends on four main criteria: 1) the commitment and constructive mind-set of all the major actors; 2) the existence of an encompassing consensus; 3) the accommodation of local concerns and interests; and 4) the existence of driving forces.

Commitment and Constructive Mindset of All the Major Actors

All actors involved must possess the political will to implement the necessary measures. Decisionmakers at all levels of government and sector representatives need to be fully committed to the corridor project. This requires a cooperative and constructive mindset among all the major actors; without one, the successful and comprehensive implementation of an EC remains unlikely.⁷³ Most importantly, the constructive mindset is based on long-term commitment, making the political will sustainable and not appear like a short-term episode.

The Existence of an Encompassing Consensus

The decisionmakers must not only have the political will, but also the know-how and capacity to produce and maintain a consensus on the EC development. The consensus should include the majority of people living within the entire geographical framework of the EC. It is not unusual for individual projects or aspects of the concrete

⁷² W.G. Roeseler, D. von Dosky, 'Joint development in urban transportation...', op.cit., p. 329; B. Marrian, *Towards a General Theory...*, op.cit.

⁷³ W.G. Roeseler, D. von Dosky, 'Joint development in urban transportation...', op.cit.; NDoT, *Moving South Africa...*, op.cit., p. 30; B. Marrian, *Towards a General Theory...*, op.cit.

action plan to face criticism. Moreover, it is not a secret that some communities and persons oppose the entire EC initiative. However, on the whole, the core of an overall EC vision should not be challenged fundamentally. A severe questioning of the general benefits of an EC must be interpreted as indication of misdevelopment in the planning and/or implementation phase. Additionally, it is a pointer that dealing with challenges does ensure the unproblematic functioning of the development initiative in the long run.

The Accommodation of Local Concerns and Interests

Political also includes the volition and ability to consider the interests and concerns of the local people. Experience shows that a successful EC demands local ownership by the people. This calls for the sufficient inclusion of the local people in the decision-making processes of EC development. This gains significance in the context of individual project development in the homelands of respective local communities, especially when compulsory land acquisition and displacement is involved. If the local concerns and interests are not taken into account adequately, the appearance of veto actors will more likely increase the costs and delay EC development.

The Existence of Driving Forces

One of the most significant but also critical factors in building sufficient political will is the existence of driving forces. These driving forces are usually on the level of national governments and/or semi-governmental agencies, business representatives, and on the transnational level of international regimes or organisations. They come into play especially in the earlier stages of EC planning and implementation. From a critical perspective, the existence of driving forces fosters the notion that the EC is an exclusive, elite-driven project. However, driving forces also ensure the resilience of the necessary political will.

Enabling Institutional Structure and Mechanism ('Hard Infrastructure')

It is rather fruitless to prepare corridor plans without enforcing or implementing them, or hamper the realisation of the plans because of unnecessary red tape and lack of functional institutional and skilled human resources.⁷⁴ Therefore, to ensure the successful implementation of EC planning, the following further factors must be addressed:

⁷⁴ NDoT, *Moving South Africa...*, op.cit., p. 22; B. Marrian, *Towards a General Theory...*, op.cit.

Institutional Capacity

Whereas integrated and comprehensive planning is an essential precondition in the successful conceptual and preparatory phases of an EC, the subsequent period of implementing the overall EC vision, the concrete action plan and its operationalisation needs to be supported by an institutional structure and mechanism. Hall and Marrian emphasise the importance of institutions that are able to manage and ensure comprehensive implementation and regulation of the EC.⁷⁵ It is crucial for the EC-related institutional structure to be able to operate independently and to be free from the influence of the partisan interests of certain driving forces behind EC development.

Ability to Reform

Most likely, the necessary independent institutional structure for EC development needs to be newly formed and/or will require institutional transformation.⁷⁶ This usually requires complex reform measures involving all levels of government and respective administration. In addition to the establishment of effective planning bodies, the EC would also greatly benefit from the reduction of excessive regulations, rigid conformity to formal rules and regulations and other bureaucratic hindrances bearing on the decisionmaking and implementation process. Moreover, anybody responsible for the planning and implementation of the corridor and respective projects needs the necessary capacity and mandate to fulfil their tasks.⁷⁷

Human Resources and Management Capacity

The pre-existence of skilled human resources in decisionmaking and administration, endowed with sufficient technical and managerial know-how to implement major development programmes in general and ECs in particular, are a prerequisite for the planning and implementation phase of an EC.

Enabling Policy Framework and Mechanisms ('Soft Infrastructure')

The establishment of ECs requires soft infrastructure, and the relevant rules, regulations and standards need to be in place.⁷⁸ This soft infrastructure is important because there are not only poor transportation-related facilities and networks, but also non-physical hindrances hampering the smooth functioning of the EC. Such

⁷⁵ P. Hall, 'Land-use change and Transport policy', *Habitat International*, Vol. 7 (3/4), 1983, p. 73; B. Marrian, *Towards a General Theory...*, op.cit.

⁷⁶ P. Hall, 'Land-use change...', op. cit., p. 73.

⁷⁷ B. Marrian, *Towards a General Theory...*, op.cit.

⁷⁸ P. De, *Economic Corridors...*, op.cit, p. 16; P. De, I. Kavita, 'Making the Case for Economic Corridors in South Asia', in P. De, K. Iyengar (eds), *Developing Economic Corridors...*, op.cit., p. 5.

hurdles include, for example, high levels of regulation and trade barriers, red tape, corruption, inadequate enforcement of contracts, poor definition and enforcement of rules of engagement, asymmetry in standards, delays in customs, delays at ports and border crossings, pilferage in transit, highly restrictive cargo movement protocols, and confusing and complex customs clearance procedures (e.g. the number of required documents), among other institutional and policy constraints.⁷⁹ To overcome these challenges, the countries participating in cross-border EC development need to agree on a harmonised set of rules, regulations and standards. This calls for the formulation and implementation of well-planned national as well as regional policy frameworks and most likely also for numerous reform programmes. Steps should also be taken to strengthen existing or create new regional forums and frameworks like RTAs (regional trade agreements) and FTAs (free trade agreements), as well as other regional regimes and anti-corruption and pro-transparency measures. It is important for the respective decisionmakers not only to aim at setting a regulatory benchmark for the regional context, meaning the geographical framework of the EC, but to attempt to meet international (global) standards. Apparently, such processes require the setting up and strengthening of effective transnational coordination among the stakeholders and agencies involved. Without effective coordination (including the respective institutions, the ‘hard infrastructure’), it is unlikely that an optimal cross-border EC will come into existence. Furthermore, effective coordination will help maintain and reinforce the political will of the actors to participate in the EC development, and ‘it could also resolve conflicting interests between governments and stakeholders’.⁸⁰

Besides these mainly trade- and transport-related factors in the establishment of an enabling policy framework and mechanism, the setting up of financing schemes is of utmost importance for any planning and implementation of an EC vision. The development of an EC demands large investments. This capital needs to be raised, mobilised and allocated for the individual EC projects. Besides attracting financial resources from multilateral development banks like the Asian Development Bank (ADB), the World Bank, or the Asian Infrastructure Investment Bank (AIIB), larger economies such as Japan, China or India could fill financing gaps.⁸¹ Foreign direct investment (FDI), loans, or aid could be a concrete financial mechanism. Furthermore, money could be provided not only from the public but also from the private sector. In this context, public-private partnership could serve as a model.⁸² Nonetheless, it must also be emphasised that these financing mechanisms to attract capital must be flanked by national financial reform measures, especially regarding taxation. The

⁷⁹ U. Subramanian, J. Arnold, *Forging Subregional Links in Transportation and Logistics in South Asia*, World Bank: Washington, DC, 2001, pp. 75–79, <http://documents.worldbank.org/curated/en/529151468769277296/pdf/multi0page.pdf> (accessed on 15 October 2017).

⁸⁰ P. De, *Economic Corridors...*, op.cit., p. 40.

⁸¹ P. De, I. Kavita, *Making the Case...*, op.cit., pp. 5–6.

⁸² *Ibidem*.

latter include the establishment of transparency and accountability programmes and institutions to end impunity for economic and financial crimes and misbehaviour (e.g. lack in payment morale). This is important, not only to address current and upcoming EC-related financial burdens like interest rates or the cost of maintaining individual projects.

Enabling and Favourable (Safe) Environment

The success of development projects depends significantly on geographic stability and zoning security. Stability and security are crucial factors in building a positive image, which can be seen as a third precondition for an enabling and favourable environment. Without guarantees of security and stability – which enhances planning reliability – in the medium to longer term, potential investors will be hesitant to make investments.⁸³ As such, security concerns must be addressed adequately before countries start to develop an EC. This includes multidimensional aspects of secure trade like measures to promote transport security, improvement in customs regimes, port facilities, and logistics management⁸⁴ as well as new, specific security threats like international terrorism, jihadism, or militant subnational movements. Subsequently, the participating states and regions must develop a collective and coherent concept to ensure the security of EC development as well as its smooth functioning. This also comprises delivering overall good governance by the political decisionmakers to create the necessary stability within the chosen geographic framework of the EC. Furthermore, potential regional (domestic) and bilateral conflicts have to be taken into account. These conflicts gain significance when the chosen geographical framework includes disputed territories and contested claims over local resources, leading to an increase of traditional and non-traditional security threats.

One should also note that the success of an EC depends greatly on a positive image and perception among the broader public, the media and potential investors within and beyond the area of an EC.⁸⁵ A lack of security and stability significantly harms this positive image and subsequently hampers the creation of a conducive and favourable environment for a flourishing EC.

Effective Diplomacy

ECs are complex development instruments which not only involve a multitude of different actors (governments, international organisations and regimes, NGOs, individuals, etc.) but also affect all levels of state and society. To avoid conflicts,

⁸³ W.G. Roeseler, D. von Dosky, 'Joint development in urban transportation...', op.cit.; B. Marrian, *Towards a General Theory...*, op.cit.

⁸⁴ P. De, *Economic Corridors and Regional Economic Integration*, op.cit, p. 40.

⁸⁵ B. Marrian, *Towards a General Theory...*, op.cit.

costs and other hindrances during EC development, comprehensive people-to-people connectivity and transparent, inclusive policy formulation, decisionmaking and communication are all crucial. Subsequently, for unobstructed EC implementation, the establishment of effective mechanisms of public diplomacy and negotiations are needed. More concretely, the creation of a set of different negotiation mechanisms should include bilateral as well as multilateral formats. Furthermore, mechanisms should also, as much as possible, incorporate the different actors involved and/or affected by EC development. In other words, it is crucial to use not only the ‘Track One’ (diplomacy and decisionmaking is done exclusively on the official governmental level) but also a ‘Track Two’ mechanism of negotiation, in which civil society and other non-state actors have the opportunity to feed their insights, opinions, and interests into the EC decisionmaking process. Here, it would be of utmost importance for the local population and civil society representatives to be involved in the debates over the distribution of the costs and benefits of the EC initiative.

Besides obtaining the support of local communities, good public diplomacy and an effective negotiation mechanism would help to successfully communicate the overall EC vision on the international level and subsequently win over more partners. This is important, since there is generally much suspicion towards large-scale development projects when it comes to concrete incentives and security and geopolitical considerations.

Sustainability, Ecological and Environmental Awareness

Deteriorating general economics of nature, environmental mismanagement and degradation, environment-related social and political conflicts and inefficient use of scarce natural resources have negative impacts on the overall environment within the EC’s geographic framework in general and on certain economic sectors like agricultural production and tourism in particular. Subsequently, a lack of ecological and environmental awareness and protection severely hampers sustainable development, which hits not only agrarian communities but also urban areas, especially growth zones. To achieve sustainable growth, EC development has to take into account the fact that environmental issues are interwoven within economic and social systems. In other words, the EC vision needs to consider the so-called triple-bottom line approach,⁸⁶ combining environmental, social and economic considerations. But the integrative role of this approach also needs to be extended by including built environment, governance and (political, administrative) institutional issues, which are also essential components of sustainable development.⁸⁷

⁸⁶ ‘Triple Bottom Line’, *The Economist*, 17 November 2009, <http://www.economist.com/node/14301663> (accessed on 15 October 2017).

⁸⁷ R.D. Gardener, *Sustainable Regional Development: Developing a Sustainability Assessment Framework for District and Metropolitan Integrated Development Plans*, thesis presented in partial fulfilment

The search for sustainability and ecological and environmental awareness comprises the following determinants: Firstly, any EC development needs to understand the complexity of the interactions and relationships that impact the wider environment, economy and social and institutional systems. Secondly, there is a need to put regions, including local, subordinated territorial entities, in the centre of EC planning. Here, the incorporation of local-based solutions and enhancement of local ownership (e.g. through community participation) are essential elements. Thirdly, to avoid the negative impacts of large-scale development projects, an environmental assessment of the participating regions is necessary, since it can support the processes of formulating and integrating sustainability objectives into environmental protection plans and programmes. Subsequently, the monitoring and minimising of the ecological risks involved in EC development will require new and innovative approaches to achieve sustainable growth. Given this, it is expected that ECs will be linked with the promotion of greener technologies and more efficient use of regional resources, enforcing green manufacturing as well as considering issues like social justice, the needs of disadvantaged local communities and resource sharing, among other things.⁸⁸

Final Thoughts: The Need to Bridge the Connectivity Gap in South Asia and the Potential Role of Economic Corridors

South Asia has reached a pivotal point. Comprising Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka and the Maldives, and being home to around one-fourth of the world's population, South Asia has witnessed remarkable up and downs in all areas of both state and society. Even a passing view of its current developments shows that the entire subcontinent is in transition and has reached a crossroads. Despite a more or less shared colonial experience of the British Raj (colonial rule), the South Asian states have progressed along widely diverse paths of statehood, nation-building, and different strategies of development. This finds expression not only in the tremendous variety of regime types, ranging from democracies to authoritarian regimes (including monarchical systems and military dictatorships), but also in the subcontinent's emergence as a hub for international terrorism, religious fundamentalism, and large socio-political movements, with separatist and anti-systemic or pro-democratic leanings. On top of this, several states have faced the challenge of boosting their economies to address worrying, manifold socio-economic difficulties. Having this in mind, it does not come as a surprise that South Asia is home to persistent encounters between Eastern and Western concepts and notions of institution- and nation-building as well as the normative foundation of nations to address manifold

of the requirements for the degree of Master of Philosophy in Sustainable Development Planning and Management in the Faculty of Economic and Management Sciences at Stellenbosch University, 2014, p. 40, <http://scholar.sun.ac.za/handle/10019.1/86408> (accessed on 15 October 2017).

⁸⁸ P. De, *Economic Corridors...*, op.cit., p. 20.

tasks. The fact that the region is struggling not only with multi-layered socio-economic uncertainties, but also with deeply entrenched national disharmonies and bilateral crises, makes it a site of some of the world's most intractable intra- as well as inter-state conflicts. This has led critical analysts to identify the region as a part of the global 'Arc of Crisis'.⁸⁹ In this context, South Asia was unable to fully recover from the traumatic partition that followed the end of European presence. The latter phenomenon turned into a major source for intraregional diplomatic conflicts, and fully-fledged wars became rampant and prevailed over the logic of effective and cohesive regional cooperation.

South Asia has not stood out as one of the great success stories when it comes to regional integration and cooperation. This is seen in the limited achievements of the South Asian Association of Regional Cooperation (SAARC). Since its official establishment in 1985, instead of functioning as a vehicle for multilateral collaboration, it is hampered by inadequate political will or insufficient capacity to promote sustainable integration and cooperation processes.⁹⁰ Fundamental state-building tasks and bilateral issues caught the main attention of South Asian political leaders after gaining independence. Regionalism and inter-regional cooperation was therefore a distant concern for these newly founded states.⁹¹

However, one has to understand that regional integration and cooperation is not a linear process; rather, it is an evolutionary path marked by various highs and lows. The appearance of persistent challenges within the EU, which is often portrayed as the world's pioneer of regionalisation, can be seen as proof. Despite having experienced several deep crises, the EU continues to function without undermining its basic normative principles and stresses the resilience of the integration process in Europe. In other words, the traumatic legacies of the past – first and foremost the experience of two world wars, the destruction of Europe and the experience of radical ideologies leading to the death of many millions of people – and their collective memory led to the political determination to change the unfortunate trajectories, creating a path towards European integration which can take multiple courses but does not change direction.

Today, it seems that South Asia has finally reached a turning point that could lead the region towards greater regionalisation. Therefore, one should take the current

⁸⁹ 'Arc of Crisis' is a term introduced into the debate by Zbigniew Brzezinski in 1978. According to Brzezinski, the 'arc of crisis' stretches 'along the shores of the Indian Ocean, with fragile and social and political structures in a region of vital importance to us threatened with fragmentation. The resulting political chaos could well be filled by elements hostile to our values and sympathetic to our adversaries.' Cited after: I. Rehman, 'Arc of Crisis 2.0?', *National Interest*, 7 March 2013, <http://nationalinterest.org/commentary/arc-crisis-20-8194> (accessed on 14 March 2018). See also: G. Lenczowski, 'The Arc of Crisis: Its Central Sector', *Foreign Affairs*, Spring Issue, 1979, <https://www.foreignaffairs.com/articles/russian-federation/1979-03-01/arc-crisis-its-central-sector> (accessed on 14 March 2018).

⁹⁰ A. Rahman, 'SAARC: Not yet a community', in J. Rolfe (ed.), *The Asia Pacific: A Region in transition*, Honolulu: Asia-Pacific Center for Security Studies, 2004, pp. 133–148.

⁹¹ S. Datta, Sreeradha, 'India: The Bridge Linking South and Southeast', in K. Yhome, R.R. Chaturvedy (eds), *Emerging Trans-Regional Corridors...*, op.cit., pp. 16–25.

developments in the respective countries into account, since it seems that several trends have emerged which have the potential dynamic to break with entrenched, unfortunate patterns from the past. Here, besides the steady rise of religious extremism, jihadism, and cross-border terrorism (including state-sponsored terrorism) turning bilateral ties sour, there is an awareness among South Asian political decisionmakers that the steady process of regional disintegration needs to be reversed. Additionally, suffering from a multitude of socio-economic inequalities, but at the same time having the opportunity to evaluate their own situation in a comparative national as well as international perspective, South Asia's growing civil societies are starting to question the harmful logic of fragmented national interests and conflicts. Consequently, the argument that colonialism is the cause of most of the current problems, such as underdevelopment and political instability, is losing credibility. This of course will not force the individual national governments to increase trust and transparency of state behaviour immediately, but it might help overcome the endemic unwillingness to initiate any cohesive, purposeful action in the direction of ending the traditional political and economic disunity in the region.

Presently, there is a greater perception of the necessity for interstate rapprochement and cooperation, to unleash new dynamics in the direction of a more integrated South Asia. This process is undoubtedly enforced through voices from within the region which are increasingly advocating a break with the unfortunate historical paths to achieve security, economic development and public welfare, and the complex identity crises of the South Asian states. Along with all the major stakeholders in the region, India is of crucial importance for the success of any kind of regional project. Not only because of the tremendous asymmetries in size and population which make India the natural centrepiece of South Asia, but also because of a newly and partly rediscovered interest in the energy resources and trade potential that new routes, allegiances and transport agreements may yield. This is gaining momentum, since all South Asian states share a border with India, but practically none of them share a common border, except for the troubled Durand Line between Afghanistan and Pakistan. Furthermore, it is important to note that the smaller states of South Asia are not spared by the global dynamics and ensuing regional processes of transition. Each of them has discovered their geopolitical leverage within the emerging regional dynamics. Yet they are still constrained by complex internal politics. Needless to say, whatever the outcome of this process, it will define the international perception of South Asia either as an area of persistent crisis or as a region which still has the potential to develop fruitful cooperation.

But what could the driving forces and appropriate instruments for improved regional cooperation be? It becomes clear that besides some individual success stories (like the growing middle class), South Asian states have to contend with endemic poverty, tremendous inequalities, mega-urbanisation, and extra-ordinary challenges when it comes to infrastructure, environmental issues, food and energy security. Most of these issues can be linked with the lack of connectivity within South Asia and interconnections

with other regions, for example Southeast Asia or Central Asia. Against this backdrop, the establishment of a South Asia-wide EC network would significantly improve trade and transport facilities and facilitate regional trade. Additionally, it would improve the infrastructure which is still ‘abysmally inadequate and of poor quality’ compared to other regions.⁹² If this challenge is sufficiently addressed, ECs can create more opportunities for the successful establishment of cross-regional linkages. They would also help to link South Asia with global transport and logistic networks and production chains. In this context, ECs are not only able to play a key role in integrating economies⁹³ across a region and functioning as essential building blocks of regional economic integration,⁹⁴ but they can also serve as confidence-building tools in a non-congenial political environment.

However, in order to be able to benefit from these potential positive impacts, EC planners need to move beyond the economic prism and consider the larger political and social context; without this, the development of an EC can lead to further entrenchment of existing conflicts and cleavages, turning peaceful regional cooperation, especially in South Asia, into an even more distant dream.

Taking into account the persistent tensions between India and Pakistan as well as New Delhi’s unease with Beijing’s major development vision – the ‘Belt and Road’ initiative/BRI (currently the strongest driving force of economic corridor construction world-wide) and its extensions into South Asia, first and foremost the China-Pakistan Economic Corridor (CPEC) – it seems unlikely that political differences can be sufficiently bridged in the near future. The ongoing distrust and subsequent lack of political consensus will continue to severely hamper cross-border connectivity within the region. Therefore, it is imperative to understand the challenges which major cross-border infrastructure projects in South Asia are facing.

To sum up, by monitoring several economic corridor projects, such as the ongoing implementation of the CPEC, and the associated challenges, it becomes obvious that a comprehensive approach to the concept of ECs is needed, not only to guide the formulation and implementation of such mega development initiatives, but also to measure their effectiveness, efficiency and sustainability. Assessing the performance of an EC solely on the basis of economic cost-benefit calculations, including increase in trade volumes, build-up of physical infrastructure, logistics, services, or industrial and manufacturing areas, among other quantitative indicators, is crucial but far too narrow. Assessing the social and political dimensions of EC implementation should be of utmost importance, especially in the case of South Asian countries faced with a multitude of domestic and bilateral challenges. The case of South Asia clearly

⁹² T.A. Karim, ‘Connecting South Asia...’, op.cit., p. 15.

⁹³ R. Vickerman, ‘Restructuring of Transportation Networks’, in G. Atalik, M.M. Fischer (eds), *Regional Development Reconsidered*, Berlin: Springer, 2002, pp. 148–158.

⁹⁴ H. Kuroda, M. Kawai, R. Nangia, ‘Infrastructure and Regional Cooperation’, in F. Bourguignon, B. Pleskovic (eds), *Rethinking Infrastructure for Development*, Washington, DC: World Bank, 2007, pp. 235–260.

underlines the challenges to a smooth implementation and further functioning of ECs when overt or clandestine, simmering social, political and economic flashpoints are not sufficiently addressed. The unwillingness and/or inability to create a regional political consensus and to bridge the gap in local ownership in remote areas due to the partisan economic interests of the national decisionmakers, as well as a lack of communication and transparency are increasingly provoking additional resistance to EC initiatives. In tackling this puzzle, the concept of EC shows that numerous aspects have to be factored in to ensure not only successful implementation but also smooth functioning, offering maximum benefits for the actors involved.