Chapter 1

ASEAN-India Connectivity: A Regional Framework and Key Infrastructure Projects

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CHAPTER 1.

ASEAN-INDIA CONNECTIVITY: A REGIONAL FRAMEWORK AND KEY INFRASTRUCTURE PROJECTS

Fukunari Kimura Toshihiro Kudo So Umezaki

Abstract

Connectivity has been a key concept in the policy debates on economic integration in ASEAN and East Asia, particularly since the adoption of the Master Plan on ASEAN Connectivity (MPAC) in October 2010. Although the primal objective of the MPAC is to enhance connectivity among ASEAN Member States, ASEAN's connectivity with neighbouring countries such as other members of the East Asia Summit is another issue to be addressed. As the second phase of the Comprehensive Asia Development Plan (CADP), Economic Research Institute for ASEAN and East Asia (ERIA) has conducted a series of research on the issue of ASEAN-India connectivity, based on the understanding that the issue has not been explored enough relative to its huge potential benefits to the region.

This chapter provides a regional framework to consider the issue of ASEAN-India connectivity and discusses the current status, opportunities, and challenges of key infrastructure projects for that purpose. Two main routes are proposed, namely, a sea route along the Mekong India Economic Corridor and a land route along the Trilateral Highway, or Asian Highway No.1, connecting Thailand, Myanmar, and India. Development projects in Dawei, Myanmar, is the focus of the former, and the latter will be elaborated further into existing, emerging, and potential routes including various border crossing routes between Myanmar and Northeast India, Kaladan Multimodal Transit Transport Project, and other related infrastructure projects such as Kyaukphyu projects to enhance connectivity between Myanmar and China.

1. INTRODUCTION

Economic Research Institute for ASEAN and East Asia (ERIA) submitted the Comprehensive Asia Development Plan (CADP) to the 5th East Asia Summit in October 2010¹, as a grand spatial design for infrastructure development in East Asia. The conceptual framework of the CADP, which was elaborated based on new waves of international trade theory namely the fragmentation theory and new economic geography, demonstrated how the region can pursue deepening economic integration as well as narrowing development gaps. This claim was supported by simulation analyses on the impacts of logistic enhancement to the region using the Geographical Simulation Model (GSM). The CADP also provided a long list of prospective infrastructure projects which would be important to realize the policy recommendation of the CADP.

During the same series of summit meetings, the 17th ASEAN Summit adopted the Master Plan on ASEAN Connectivity (MPAC) as an umbrella master plan to expedite the establishment of the ASEAN Community. The MPAC defined three modes of connectivity, namely physical connectivity, institutional connectivity, and people-to-people connectivity, as the keys for the successful establishment of the ASEAN Community. The MPAC and the CADP share a common philosophy in the sense that both stress the importance of physical and institutional connectivity in

¹ Chairman's Statement of the East Asia Summit (EAS), Ha Noi, 30 October 2010. "13. We commended the Economic Research Institute for ASEAN and East Asia (ERIA) for its effective contributions in enhancing regional economic integration, bridging development gaps and promoting connectivity for both ASEAN and EAS countries, including its intellectual contribution to developing the ASEAN Connectivity Master Plan. We noted the Statement of the ERIA's 3rd Governing Board Meeting and its study identifying its future contribution to regional integration. We appreciated the completion of the Comprehensive Asia Development Plan (CADP) by ERIA in collaboration with the ADB and the ASEAN Secretariat."

deepening economic integration and narrowing development gaps. Although the MPAC is a plan of ASEAN, it also emphasizes the importance of the connectivity with neighboring countries.

Although the CADP successfully fulfilled its initial mission, there still remain a number of issues which require further intensive studies. Out of these outstanding issues, ASEAN-India connectivity was selected as the main theme of the 2nd phase of the CADP, because of the growing importance of the issue amidst the ongoing restructuring of economic activities. As stated in the MPAC, ASEAN put an explicit emphasis on the connectivity with the neighboring countries including China, India, and other EAS member countries. Although both China and India are emerging economic superpowers in the region and the immediate neighbors to ASEAN, the extents of the government and the business activities of the private sector, China has been aggressively penetrating into ASEAN. In comparison, the exposure of India to ASEAN is rather limited, reflecting the differences in the historical relationships and the weaker physical connectivity with ASEAN. In view of the potential benefits for both ASEAN and India, it is highly important to develop a basic strategy to enhance the connectivity between ASEAN and India. This is the objective of this report.

The concept of the Mekong-India Economic Corridor (MIEC)² is one of the examples. Although the validity of MIEC was also demonstrated in the CADP, there remain significant missing links, including the lack of a Mekong bridge in Neak Leoung (Cambodia) and the lack of the gateway port in Dawei (Myanmar). In addition, the connectivity between Thailand and Myanmar should be enhanced through the

² ERIA (2009).

construction of a highway between Dawei and Thai border (physical connectivity) and various trade and transport facilitation measures (institutional connectivity). It is important to pinpoint the challenges ahead of the development of MIEC through an updated review of the progress of these projects.

Another major route to enhance ASEAN-India connectivity can be developed by upgrading road infrastructure of the Thailand-Myanmar-India section of Asian Highway No.1, which has also been identified as the Trilateral Highway in the cooperation among these three countries³. As the road infrastructure in Thailand is already well developed, the remaining issues are the sections in Myanmar and the Northeast India. More importantly, trade and transport facilitation across two national borders between Thailand and Myanmar, and Myanmar and India needs to be addressed with strong political commitment, although there is no trade and transport facilitation initiative between Myanmar and India as of today.

In addition, given the wide geographical scope and the less developed transport infrastructure, it is also important to pay explicit attention to the connectivity between Myanmar and Northeast India. The border area is less populated, less developed, and less connected. Enhancing the connectivity between Myanmar and Northeast India would open new opportunities for the development of the border area, which in turn would contribute to narrow the development gaps.

In the followings, section 2 presents the conceptual framework of the CADP as the basis for the subsequent discussion. Section 3summarizes the current status of international trade between ASEAN and India. Section 4 highlights the existing, planned, and potential routes to enhance ASEAN-India connectivity and analyses the

³ The identified route is Bangkok – Nakhon Sawan – Tak – Mae Sot//Myawaddy – Thaton – Payagyi – Mandalay – Gangaw – Kaleymyo – Tamu//Moleh – Imphal – Kohima.

opportunities and challenges for each route. Section 5 concludes this chapter by presenting some policy recommendations.

2. THE CONCEPTUAL FRAMEWORK OF THE COMPREHENSIVE ASIA DEVELOPMENT PLAN (CADP): A REVIEW

In response to the Joint Press Statement of the EAS in June 2009, ERIA promoted the formulation of the Comprehensive Asia Development Plan (CADP) in collaboration with Asian Development Bank (ADB) and the ASEAN Secretariat and submitted the final report of the CADP to the 5thEAS in October 2010. This section describes the conceptual framework of the CADP as the basis of the following discussion in this report⁴.

Since the 1980s, East Asia has achieved remarkable economic development by establishing international production networks through fragmentation of manufacturing industries, under which fragmented production processes were relocated to make the best use of location advantage of each region/country. However, the coverage of the production networks remains limited to the regions around existing and emerging industrial agglomerations, such as outskirts of the capital of each country, and significant development gaps still remain in East Asia. The CADP claims that the remaining development gaps could be turned into the sources of economic dynamism, which in turn could contribute to further deepening economic integration and to narrowing development gaps at the same time.

The conceptual framework of the CADP is based on new waves of international

⁴ The report of the CADP is fully downloadable from ERIA website, www.eria.org.

trade theory such as the fragmentation theory and new economic geography. For example, as for machinery industries, many production processes are needed before final goods are produced, some of which are labor intensive, capital intensive, or knowledge intensive processes. Given such nature of manufacturing activities, it may be more efficient to produce goods through fragmentation by relocating each production process to the best place to make the best use of the location advantage than to locate whole production processes with different factor intensities in one place. This explains the benefits of fragmentation (Figure 1).

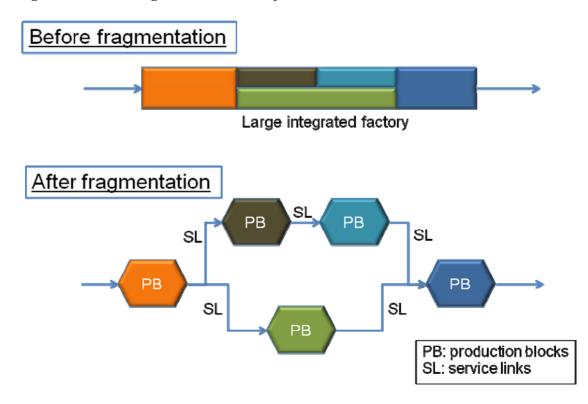


Figure 1: The Fragmentation Theory: Production Blocks and Service Links

Source: ERIA (2010).

The conditions for this to function well are (1) the existence of areas with different production conditions defined by factor endowments, and (2) not-too-expensive service link $cost^5$ to connect fragmented production processes. Seen from this viewpoint, there still remain plenty of room to optimize the location of production processes through fragmentation in East Asia, where the large economic disparities remain, that is, there are countries and regions with significantly different wage levels.

New economic geography claims that it is required to properly control agglomeration effects and dispersion effects which have influence between industrial agglomerations and surrounding areas (Figure 2). Once an industrial agglomeration is formed, many more firms will approach to the industrial agglomeration, seeking convenience of component procurement and accessibility to a large market. This is an agglomeration effect. On the other hand, if an industrial agglomeration is developed, production costs, such as wages and rents, will increase and some firms will try to leave the industrial agglomeration. This is a dispersion effect. If the service link cost is reduced by infrastructure development, trade liberalization and/or facilitation, and other policy measures, the dispersion effect could be relatively increased, as the disadvantage to locate in a remote area could be mitigated by improved business environment. Furthermore, to promote relocation of production processes to areas with low wage levels, basic economic infrastructures, such as electricity and water, need to be improved in the areas.

⁵ Service link costs are defined as all costs to connect fragmented production processes, which include transportation costs, customs duty, and so on.

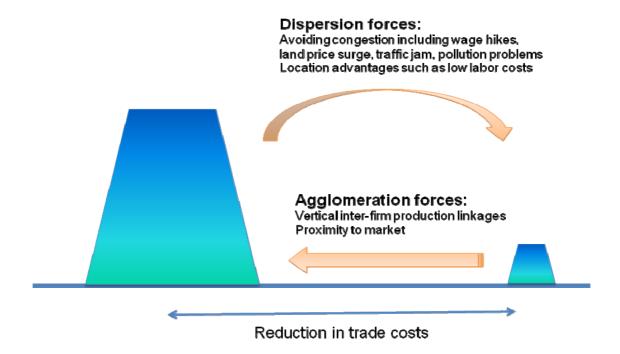


Figure 2: Agglomeration and Dispersion in New Economic Geography

Source: ERIA (2010).

In fact, international production networks in East Asia have been established through the processes described above. The economic disparities persisting in East Asia would be the source to further continue this process, and to deepen economic integration and narrow development gaps. For this purpose, infrastructure development plan should be designed from a wider point of view encompassing the existing subregional initiatives such as the Greater Mekong Subregion (GMS), Indonesia, Malaysia, Thailand Growth Triangle (IMT-GT) and Brunei, Indonesia, Malaysia, the Philippines, East ASEAN Growth Area (BIMP-EAGA).

The CADP designates the intended regions of analysis, composing ASEAN countries and neighboring regions, as three tiers on a conceptual basis. Tier 1 includes countries/regions that are already in production networks and where industrial

agglomerations have started to form. Issues and challenges to take care of are upgrading industrial agglomerations, increasing innovation, and climbing up the ladder from middle-income to fully developed countries/regions. Tier 2 corresponds to countries/regions that are not yet fully integrated into quick and high-frequency production networks. Issues and challenges are how to participate in quick and high-frequency production networks by reducing service link costs and improving location advantages for production. Tier 3 comprises countries/regions that are not likely to come into quick and high-frequency production networks in the short run but would like to provide a new framework for industrial development with the development of logistics infrastructure as a trigger.

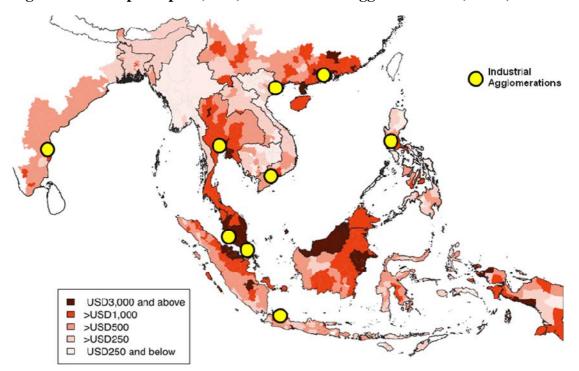


Figure 3: GDP per capita (2005) and Industrial Agglomerations (Tier 1)

Source: ERIA (2010).

The regions designated as Tier 1 in the ASEAN and neighboring region are the metropolitan areas (industrial agglomerations) such as Bangkok, Singapore, Kuala Lumpur, Jakarta, Manila, Hanoi, Ho Chi Minh, and Chennai (Figure 3). These industrial agglomerations have worked as nodes of production networks and supported remarkable economic growth in the region, and are expected to lead the economy of the region in the future as well. Therefore, development strategies for Tier 1 to overcome "the middle income trap" and shift to truly advanced and innovative economies are of critical importance for the future of the region. This will require these industrial agglomerations themselves to be able to realize more innovations in various aspects of production. A firm survey conducted by ERIA revealed that the firms promoting innovations actively are more willing to make use of business transactions with multinational corporations, technical supports from public agencies, technical licenses from other corporations, and so on. Especially concerning the first point described above, supportive measures are important to enable local small and medium enterprises (SMEs) to engage with multinational corporations or participate in the international productive networks. To make industrial agglomerations more innovative, it is required to create this sort of a virtuous cycle between business relationships and technical innovations. In addition, to improve urban amenities through infrastructure development including public transportation networks, water supply and sewerage systems is effective to enhance attractiveness of industrial agglomerations as a destination for foreign direct investment.

The development strategies in Tier 2 focus on the reduction of the service link costs. The most effective strategy for Tier 2 to participate in the productive networks is to invite some of the production processes (typically, labor-intensive processes) in the

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existing industrial agglomerations through fragmentation. For this to take place, business environments need to be improved to ensure that parts and components could be traded at low cost and in a reliable manner. In concrete terms, the reduction of cost and time for transportation and crossing national boundaries are necessary and which in turn requires further measures for trade liberalization/facilitation, transport facilitation, enhancement of competitiveness of logistic sector through liberalization, upgrading of transportation infrastructure such as highways and railways, and the development of basic infrastructure such as electricity and water to support economic growth in Tier 2.

The mountainous areas of the Indochina Peninsular and small islands in the Southern Philippines and the Eastern Indonesia are amongst those which fall into Tier 3. Most of these regions are difficult to participate in the production networks of manufacturing industries even in the medium to long term. However, by enhancing the connectivity with neighboring Tier 1 and Tier 2 regions, it is possible to make use of their location advantages on primary products, natural resources, and tourism resources in a more effective way and formulate original development strategies of the regions.

Although the policies to be prioritized in each tier are different, when designing a comprehensive infrastructure development plan, it is crucial to pay full attention to interactions among these tiers. What comes into the picture here is the concept of economic corridors. The CADP emphasizes the effectiveness of development strategies centered by economic corridors to promote fragmentation of production activities by mainly enhancing connectivity in each region along corridors through the improvement of logistics (i.e. reduction of the service link cost), while controlling agglomeration/dispersion effects and aiming at balancing deepening economic integration with narrowing development gaps.

3. DEVELOPMENT AND CURRENT STATUS OF ASEAN-INDIACONNECTIVITY

3-1. ASEAN-India Trade Relationship

During the first decade in the 21st century, India has emerged as one of the key players in the global economy. As illustrated by De (2011), India's merchandise trade increased from US\$ 93.0 in 2000 to US\$ 422.9 in 2009, with a high compound average growth rate (CAGR) of 18.3%. During the same period, merchandise trade between ASEAN and India also recorded a significant increase from US\$ 7.1 billion in 2000 to US\$ 41.3 billion in 2009, with a CAGR of 21.6%. A careful and detailed analysis on international trade between ASEAN and India by Obashi (2011) revealed the growing importance of each other, particularly in the 2000s. For ASEAN, India's share as the destination of merchandise export and as the origin of merchandise import doubled from 1.6% and 1.0% in 2000 to 3.3% and 2.1% in 2009, respectively. For India, ASEAN's share as the destination of merchandise export increased rapidly from 6.5% in 2000 to 10.6% in 2009, whereas ASEAN's share as the origin of merchandise import recorded a slight decline from 11.0% in 2000 to 9.1% in 2009, indicating the slow progress of ASEAN in penetrating into Indian market⁶.

Meanwhile, the proportion of machinery in ASEAN's total imports from India has doubled during the 5 years to 2009, from 9.8% to 19.3%, though not to the level of the machinery's share for the ASEAN's export side, which has been more than 30% since 2000. In relative terms, ASEAN Member States tend to export more machinery parts to and import more finished machinery products from India, compared to two decades

⁶ According to De (2011), in contrast to ASEAN, China expanded its share in India's merchandise import more than double during the same period, from 5.8% in 2001 to 13.1% in 2009.

ago.

In the ASEAN's machinery exports to India, computer parts and accessories and electric integrated circuits are the top two goods, constituting more than 10% shares in major exporters, namely Singapore, Malaysia, and Thailand. Another interesting point to note in the ASEAN's machinery imports from India is the rapid increase in mobile phones. The share of India as the import origin of mobile phones surged from a negligible level in 2005 to 10% in 2009. Obashi (2011) attributed this surge for the establishment of a Nokia factory in Chennai, India, in January 2006. As supporting evidence, the market share of Nokia is about 60% in Indonesia, the top importer of mobile phones from India, 49% in 2009, among the ASEAN Member States. That is, the global strategy of a single company could shape trade patterns between two countries with weak trade relationship.

All these development are regarded as the evidence of the significant growth and structural shifts in merchandise trade between ASEAN and India. Considering the growth performance and the geographical adjacency, however, the trade relationship between ASEAN and India could have been enhanced further. The shares of Thailand in India's export and import are 0.96% and 1.04% respectively in 2009, despite the relatively short distance between the two countries. India's trade with CLMV countries is still limited, suggesting further scope for trade expansion in near future. As De (2011) concluded, "one of the major obstacles to the expansion of trade between India and ASEAN is the high cost of moving goods across the borders." There remain plenty of room to improve physical connectivity between ASEAN and India to reduce service link costs, which in turn is expected to further accelerate the fragmentation of manufacturing activities. By promoting this process, ASEAN and India can effectively

deepen economic integration, and as a consequence, narrow the remaining development gaps in the region.

3-2. Myanmar's Trade with Neighbours

This subsection takes a closer look at Myanmar's trade with neighboring countries, considering its strategic location surrounded by India, China, and other part of ASEAN. As narrowing development gap is one of the two ultimate goals for ASEAN and East Asia, it is important to pay special attention to the lowest income country in the region. Although there are a number of challenges for the economic development of Myanmar, its strategic location is one of the natural endowments to utilize in designing its development strategy. For this purpose, it is worthwhile deepening our understanding on the development and the current status of Myanmar's trade with neighboring countries.

Although Myanmar's share in the regional trade is still limited, Myanmar has steadily increased its international trade since the introduction of an open door policy in 1988 under the military government. During the last two decades, Myanmar's export increased from US\$ 466 million in FY1991/92 to US\$ 8,864 million in FY2010/11 with a CAGR of 16.8%, and Myanmar's import increased from US\$ 851 million in FY1991/92 to US\$ 6,415 million in FY2010/11 with a CAGR of 11.2%. The high export growth was not severely affected by the import ban imposed by the United States in 2003, mainly because of the rapid expansion of trade with two neighbouring countries, Thailand and China⁷. The share of Thailand in Myanmar's trade (export +

⁷ According to IMF, Direction of Trade Statistics, United States was the largest export destination for Myanmar with a share of 22.4% in 2000, followed by Thailand (11.8%), India (8.2%) and China (5.7%).

import) doubled from 15.2% in FY2000/01 to 30.4% in FY2009/10, reflecting the increase of Myanmar's export of natural gas to Thailand through pipelines. The comparable figures for China expanded more than a double from 12.0% to 24.2%, and this figure is likely to grow further once natural gas export the gas pipeline to China is completed in 2013. In contrast, Myanmar's trade with other neighbouring countries has been sluggish during the last decade. The share of India in Myanmar's trade marked a rather slow expansion from 8.9% in FY2000/01 to 10.3% in FY2009/10. As for Bangladesh, the share was even halved during the same period from 1.4% to 0.7%⁸.

Border trade with neighbouring countries shared around 8% of Myanmar's total trade in the end of the 1990s, but the share gradually increased to 13.9% in FY2010/11. In FY1997/98, the shares of China and Thailand in Myanmar's border trade (export + import) were 56.7% and 32.6% respectively, followed by India (8.7%). Reflecting the rapid increase in Myanmar's border trade with China, the corresponding shares of the three countries has become 77.9%, 19.9%, and 1.0%, respectively. That is, the performance of Myanmar's border trade with three major partners has witnessed a significant difference; despite the comparable length of the border⁹. This contrasting performance of the three neighbouring countries can be attributable for the physical connectivity.

Muse (105 mile), located between Muse in Myanmar and Ruili, Yunnan Province of China, has been the largest border check point in Myanmar, with a distinctive share of 65.4% in FY2006/07, followed by three border check points along the Thai border

⁸ All these figures are calculated based on the data provided in Kyaw Min Htun, *et al* (2011), unless otherwise stated. The same applies for the next paragraph.

⁹ According to Myanmar Embassy in Tokyo (http://www.myanmar-embassy-tokyo.net/about.htm), Myanmar shares national borders with China (2,204km), Thailand (2,107km), India (1,643km), Bangladesh (271km), and Lao PDR (238km).

namely Myawaddy (14.3%), Kawthaung (7.2%), and Myeik (4.1%). Muse (105 mile), established in 1995, started to function as a one-stop service center in 1998. In the same year, the main route (R4) connected 460km between Muse and Mandalay, the second largest city in central Myanmar. As a result, the transportation time between Muse and Mandalay was drastically reduced from 2-3days or up to one week to 12-16 hours¹⁰. In addition, China established a Jiegao Special Border Trade Area in Ruili, and constructed a highway connecting Kunming and Baoshan in 2005. And in the next year, a Border Trade Zone was opened in Muse, with a strong support of China. All these infrastructure development contributed significantly in enhancing physical connectivity between China and Myanmar, providing firm evidence on the importance of physical infrastructure to expand international trade across national borders¹¹.

Myawaddy in Myanmar and Mae Sot in Thailand have been regarded as the main gate for the border trade between the two countries, as implied by the fact that they are on the East West Economic Corridor (EWEC) facilitated by ADB, the Asian (and ASEAN) Highway No.1 designated by UNESCAP, and the Trilateral Highway Project. In order to meet the growing volume of border trade with Thailand through Myawaddy ¹², Myanmar government constructed Myawaddy Trade Zone in 2008.However, the border trade through Myawaddy has been officially closed since July 2010 due to ethnic insurgency issues in the area. As discussed above, Myawaddy is the main gate for Myanmar's border trade with Thailand. Therefore, it is highly

¹⁰ See Kudo (2010) for details.

¹¹ Another important aspect to note is the insurgency problem in Myanmar. As Kudo (2010) pointed out, "(t)he border trade through the new "Burma Road" has become possible by not only the road and border gate development, but also restored peace and security and the resultant Myanmar government's control in the border areas.

¹² US\$ 2.3 million in FY2001/02 to US\$ 13.0 million in FY2006/07.

expected that the border gate would resume the operation as soon as possible.¹³ It should be also noted that the completion of EWEC is adopted as one of the strategic actions in the Master Plan on ASEAN Connectivity (MPAC).

Myanmar's border trade with India has been slow as compared to those with China and Thailand. Along the national border with India, there are two border check points in Tamu and Rhee. According to Kudo (2010), the shares of these bore check points in Myanmar's border trade were 0.9% and 0.6 % respectively in FY 2006/07. The border areas are mountainous, and the road infrastructure is generally insufficient to accommodate a large amount of international trade. In addition, the limitation on the number of items allowed to trade and the mode of settlement have been major obstacles to the expansion of trade activities across the border between Myanmar and India. That is, there remain ample room to enhance institutional connectivity. This issue will be further elaborated in the next section.

3-3. Emerging Nodes of ASEAN-India Connectivity: Myanmar and Northeast India

The characteristics of Myanmar in ASEAN and those of Northeast India in India are similar in various aspects. Myanmar locates on the west end of ASEAN, having China on the north, and is the lowest income country in ASEAN with the weakest connectivity with other ASEAN Member States. Similarly, Northeast India locates on the northeast end of India, having China on the northeast beyond Myanmar the immediate neighbor, and is among the poorest regions in India with the weakest connectivity with other parts

¹³ Nevertheless, according to the Thai official statistics, the volume of cross-border trade between Myanmar and Thailand has been increasing since the closure of official border trade gate in Myawaddy-Mae Sot. The large amount of informal border trade has been conducted through the informal routes, and shows a strong demand for goods of each country.

of India. The main economic activity is agriculture, and both have some natural resources. Another important fact is that the connectivity between Myanmar and Northeast India is still very weak, although they share a 1,643km long national border.

On the other hand, Myanmar and Northeast India, surrounded by all three of the most vigorous economies in the world, namely, China, India, and (other part of) ASEAN, are expected to play a very important role as the connecting nodes to physically link these economies. In this broader perspective, Myanmar and Northeast India are no longer at one end of the region they belongs to. Taking this strategic role into consideration, development strategies for Myanmar and Northeast India can be the core of the regional strategy to enhance ASEAN-India connectivity.

4. INFRASTRUCTURE FOR ASEAN-INDIA CONNECTIVITY

4-1. A Regional Framework

Figure 4 provides a framework for the regional strategy to enhance connectivity between ASEAN and India. There are two main routes, the sea route, as the west link of the Mekong-India Economic Corridor (MIEC), and the land routes, with various optional routes, along the trilateral highway between Thailand, Myanmar, and India.

The west link of MIEC, from Bangkok to Chennai via Dawei, is designed to enhance the connectivity between the two Tier 1 regions. Bangkok and Chennai have formed agglomerations of manufacturing industry by inviting a large amount of foreign direct investment most notably in automotive and electronics sectors. The enhanced connectivity between Bangkok and Chennai is expected to enable those manufacturing companies to improve their competitiveness by reviewing and restructuring their production networks, including further fragmentation of some parts of production processes. Reflecting the promising benefits, ASEAN Leaders agreed to promote the completion of MIEC in the Master Plan on ASEAN Connectivity (ASEAN, 2010).

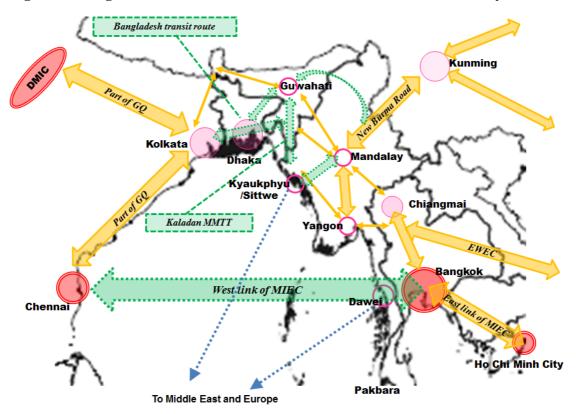


Figure 4:A Regional Framework to Enhance ASEAN-India Connectivity

However, MIEC is not sufficient to meet a number of challenges the region faces. In order to effectively expand regional production networks, which is of crucial importance to pursue both deepening economic integration and narrowing development gaps at the same time, it is necessary to improve physical infrastructure for land transportation. As illustrated in Figure 3, there still remains large area with less than US\$ 500 per capita income along the north bank of the Andaman Sea, consisting of Myanmar and Northeast India. These economies are characterized by agriculture and other natural resource industry, with no significant manufacturing activity. For these regions, enhanced connectivity with neighbouring cities and countries is highly important to widen the access to the large market and to invite new industries, fragmented production processes, based on their location advantages. There are a number of challenges to enhance physical connectivity through land transportation, as observed in the implementation process of the Greater Mekong Subregion (GMS) project, including the Cross Border Transport Agreement (CBTA)¹⁴. In Figure 4, the routes in yellow arrows are existing routes and those in green arrows are largely in preparation stages or require extensive upgrading work, and the thickness of arrows indicates the strength of connectivity. As discussed in the last section and highlighted in Figure 4, there is a significant gap in the connectivity between Myanmar and Northeast India. This gap needs to be filled with various physical infrastructure projects as already identified as the Trilateral Highway connecting Thailand, Myanmar and Northeast India, most of which are also identified as Asian (and ASEAN) Highway And the Trilateral Highway is expected to connect to the well-developed No.1. national highway network in India, including the Golden Quadrilateral (GQ).

These two routes, namely, the west link of MIEC and the Trilateral Highway are the key for the successful enhancement of the connectivity between ASEAN and India. The remainder of this section discusses the development, current status, opportunities and challenges of various segments of these two routes, as well as other related and complementary routes to enhance the connectivity between Myanmar and China, and between Northeast India and Bangladesh.

¹⁴ Ishida (2011) discusses the challenges in implementing CBTA in detail.

4-2. Mekong India Economic Corridor (MIEC)

4-2-1. Background

One of the main policy recommendations in the CADP was to promote the Mekong-India Economic Corridor (MIEC), which enhances the connectivity between Ho Chi Minh City, Phnom Penh, Bangkok, and Dawei by road, and further to Chennai in India by sea route. MIEC is an extended version of the Southern Economic Corridor (SEC) as defined by ADB, with the objective of exploring more impacts by widening the scope of regional economic integration.

Compared to the East West Economic Corridor (EWEC) and the North South Economic Corridor (NSEC), MIEC is more relevant to the conceptual framework of the CADP in the sense that it includes existing and emerging industrial agglomerations along the corridor, namely, Ho Chi Minh City, Bangkok, and Chennai. In order to pursue deepening economic integration and narrowing development gaps at the same time, it is important to utilize two opposite forces of globalization, namely, agglomeration forces and dispersion forces. In order to make this mechanism work effectively, an economic corridor should be designed to include regions at different development stages, that is, those with a different endowment of economic resources. In between the above mentioned industrial agglomerations, MIEC passes through lower-income countries and regions such as Cambodia and Dawei in Myanmar. In this regard, MIEC is a good example to examine the validity of the conceptual framework of the CADP. Reflecting the promising impacts to the region, ASEAN Transport Ministers adopted the promotion of MIEC as one of the key actions in the latest 5 year plan of ASEAN transport cooperation, the Brunei Action Plan (BAP), and the decision was also supported by ASEAN Leaders as reflected in the Master Plan on ASEAN Connectivity (MPAC). This is one of the recent major progresses in realizing MIEC.

As often discussed, an economic corridor is only as strong as its weakest link. There still remains a lot to do to explore the full potential of MIEC by enhancing weak links. For example, the CADP recommended the construction of a Mekong Bridge in Neak Leoung (Cambodia). Japan's recent decision to provide assistance to Cambodia, despite the difficulties stemming from the bad fiscal position of the country, is another major and welcomed development. This project is expected to improve drastically the physical connectivity between Phnom Penh and Ho Chi Minh City by allowing truck drivers to go across the Mekong River without waiting for ferries. The simulation analyses in the CADP found that the Cambodian regions along National Road No.5 such as Svay Rieng, Prey Veng, and Phnom Penh would enjoy larger benefits, while regions along National Road No.6 could be negatively affected. The total economic effect in Cambodia is still positive. Although the Mekong Bridge in Neak Leoung itself is a national project of Cambodia, the positive economic effects would spread to neighboring countries such as Vietnam and Lao PDR. This implies that the lack of a bridge over the Mekong River in Neak Leoung has been a significant bottleneck in ASEAN and surrounding regions, instead of being merely a bottleneck in Cambodia.

Given this significant step made in Cambodia, the remaining and more important issue is to establish the new linkage between Bangkok and Chennai. It is important to open an access routefrom Bangkok to the Andaman Sea, by constructing a highway road connecting Kanchanaburi (Thailand) and Dawei. And, a comprehensive development project should be implemented for Dawei, including a deep sea port, special economic zones, power plants, and so on. In particular, a deep sea port in Dawei will provide vast opportunities for the firms operating in Bangkok metropolitan area and the region along MIEC by opening up a new shipping route to India, the Middle East, and Europe. On the other hand, firms in India, particularly those in Chennai, are expected to have less costly and alternative access to ASEAN. In addition, this development is expected to reduce congestion in the Malacca Strait.

All in all, the full spec MIEC can be regarded as a multimodal economic corridor, or a land bridge, passing through the Indochina Peninsular as a whole. And, the simulation analyses in the CADP revealed that the impacts of MIEC on economic growth and narrowing development gaps were much larger than other scenarios such as EWEC and NSEC. According to the simulation, the percentage increases in real GDP in 2020 vis-à-vis the baseline scenario are 0.32% for EWEC, 0.14% for NSEC, and 1.19% for MIEC, and the percentage reductions in the Gini coefficients, a measure of income inequality, are 0.07% for EWEC, 0.13% for NSEC, and 0.23% for MIEC (ERIA, 2010).

4-2-2. Outline of Dawei Development Projects

Myanmar needs deep sea ports for the promotion of regional and international trade. Myanmar Port Authority (MPA) which provides port services conducted preliminary study and site selections for deep seaport by taking into consideration of natural and technical conditions. The appropriate sites are earmarked for construction of deep sea ports along the coastline of Myanmar; such as Kyaukpyu in Rakhine State, Kalegauk in Mon State, Dawei and Bokpyin in Tanintharyi Region.

In July 1996, an MOU had been signed between MPA and Italian Thai Development Public Company Limited (ITD) to execute feasibility study for Dawei deep sea port and integrated development plan. The scope of the project included

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construction of highway road and development of deep sea port to accommodate 50,000 DWT and 300,000 DWT general/container vessels and break bulk vessels respectively. According to the feasibility study, ITD selected three favorable locations for deep sea ports.

An Memorandum of Understanding (MOU) on the Dawei deep seaport and industrial estate project between MPA and ITD was signed on 6 December 2008 and the Framework Agreement signed on 2 November 2010. ITD has been granted the right from the Myanmar Government to develop the Dawei Project covering the area of 250 km², over 75 years project period, for the development of a deep sea port, industrial estate, and trans-border corridor link. The total project cost is estimated to be US\$80 billion.

(1) Dawei Deep Sea Port

Three proposed deep sea ports with the maximum draft of -20m Chart Datum are planned with the capacity of over 200 MT per annum for services of liquid cargo, general cargo, containers and bulk cargo. Dawei Deep Sea Port will be integrated with road and rail transportation right up to the port terminals in order to accommodate the tremendous amount of raw materials and finished goods. In addition, the sea ports will be equipped with a shipbuilding facility capable of providing building and maintenance services for large vessels.

According to the port plan, vessels can approach through navigation channel and fair way to port areas. Port development project has two port areas as follows:

a) Deep sea port (North)- Port area is 2.7 km² and 1.5 km² cargo yard and 1.4 km² ship building yard are included.

b) Deep sea port (South)- Port area is 3 km² and 1.5 km² ship agriculture yard is included.

The Dawei Port facilities and industries are well linked. The steel industry will be supported by the bulk port, requiring throughput of iron ore, coal and other materials, and will export its owned finished products totaling 40 million tons a year. The Dawei Port will handle 5 million tons of agricultural produce like rice, sugar, corn, tapioca and other grains a year. The import of coal will be 25 million tons a year. The Dawei Port will handle 3.2 million TEU a year, which is equivalent to 45 million to 50 million tons of general cargo, 35 million tons of chemical and petrochemical, and 36 million tons of crude oil. The handling capacity of the Dawei Port is up to 200 million ton a year.

(2) Dawei Industrial Estate

The integrated industrial estate offers a consolidated one-stop industrial production base, consisting of upstream to downstream products in five different zones as follows:

- a) Zone A- Heavy industry zone (38.3 km²) includes coal fired power plant, steel mill, fertilizer, ship building and cargo yards and deep sea port;
- b) Zone B Heavy industry zone for oil and gas storage, oil refinery, gas separation plant and compound circled power plant;
- c) Zone C- Medium and heavy industry zone (44.7 km²) for upstream and downstream petroleum industry;
- d) Zone D- Medium industry zone (58.6 km²);
- e) Zone E- Light industry zone (43 km²); and
- f) Public area (13.5 km²) for commercial complex, authority center and township and district offices.

The industrial estate will need at least $300,000 \text{ m}^3$ of water per day. A reservoir will be built to provide 100 million m³ to the industrial estate during the four month of dry season.

(3) Dawei Special Economic Zone Law

In order to enhance the Dawei Deep Sea Port and Industrial Estate Project, the previous military government enacted Dawei Special Economic Zone Law as Law No (17/2011) on 27 January 2011. The objectives of this law are as follows:

- a) to implement the Dawei Special Economic Zone by the supervision of the Central Body in accord with the objectives contained in section 3 of the Myanmar Special Economic Zone;
- b) to emerge as the pivotal place for the trade and transportation of South East Asian Region;
- c) to develop the businesses of the Dawei Special Economic Zone;
- d) to create more employment opportunities for the public within the Dawei
 Speicial Economic Zone; and
- e) to develop the infrastructures within the Dawei Special Economic Zone.

Although it is still in the early stage of development, the planned deep sea port and special economic zone (SEZ) at Dawei are providing clues as to its industrial and energy impact.ITD has already named some of the companies that may invest in the project, including Myanmar's Asia World Company, while the Thai energy company, PTT Exploration and Production (PTTEP), will reportedly be responsible for producing 6000 megawatts (MW) of electricity transmitted to Thailand. PTTEP is said to be involved in establishing a coal fired power plant, a steel mill, and a fertilizer factory

located in the SEZ's heavy industry zone A. While the heavy industry zone B will contain oil and gas storage facilities, an oil refinery, a gas separation plant, and a combined cycle power plant.

The first phase of the development project includes road construction of an eight lane freeway between Dawei and Kanchanaburi of Thailand. The preparation works that were implemented in 2010 was a small port, soil boring at deep sea port basin, accommodation and site offices, and Nabule-Phu Nam Ron road. However Nabule -Yebyu road construction project and land acquisition and relocation of seven villages in Nabule area are underway up to the present (October 2011). The Dawei Deep Sea Port will require over 50,000 acres of land.

Sevenvillages - Nyaungbinseik village of Launglon, and Hteingyi, Pradat, Leishaung, Mayingyi, Mudu and Kalouthta villages of Yebyu Township-were included in the Dawei Special Economic Zone, and these villages and villagers will be displaced. Hteingyi, Pradat, Lesishaung, Mayingyi and Mudu villages will be relocated to Bawa village, Nyaungbunseik village to Pantininn village and Kaloutha to nearby area. Region government, Dawei Special Economic Zone Supportive Group (temporary), and ITD are coordinating to reimburse villagers for loss of annual and perennial crops plantations at current prices. ITD have been directed to give back the villages enough lands for accommodation and agriculture in new settlement, to reclaim lands for farming and growing perennial crops, to provide them with monthly cash assistance to families in the interval, while they are making no profit from farming; to relocate and allowing them to continue farming in old place while starting crops plantation in new settlement, to help the families start farming if they live on earnings from framing, and the crop is in season, to provide monthly cash assistance before the start of next season if the crop is out of season so as to avoid suffering from lack of income, to allow families who earn livings from perennial crops to grow the same crop in new plantation and then displace there when they are able to make profits from the plantation, and to provide guaranteed monthly and annual cash assistance if they are so displaced earlier; coordination has been made to complete construction school, hospital, clinic, bazaar, and religious edifices in new settlement at the time of displace; two-storey RC buildings with GI-sheet roofs will be built for displaced families; and plans for convenience of socio-economic status of displaced villagers are included. In order to secure environmental and social issues, Chulalongkorn University and Tesco Co.,Ltd. will conduct Environmental Impact Assessment (EIA) and TEAM Consulting Engineering and Management Co., Ltd. of Thailand will conduct Social Impact Assessment (SIA).

4-2-3. Opportunities and Challenges

The fact that ASEAN Leaders adopted the promotion of MIEC as one of the strategic actions in MPAC indicates the strong political will of ASEAN Member States, not only of the countries of immediate concerns, Myanmar and Thailand.

Kumagai and Isono (2011) conducted a series of simulation analyses using the 4th version of the IDE/ERIA Geographical Simulation Model (GSM), and their findings can be summarized as follows: (1) MIEC has the largest impacts on Cambodia, followed by Myanmar, Thailand, and Lao PDR; (2) Tanintharyi, where Dawei is located, enjoys the largest impact, equivalent to 9.5% vis-a-vis the baseline scenario; (3) allowing the transit transport in Myanmar is critical for countries other than Myanmar, especially for Thailand; (4) Dawei project has larger impact than Pak Bara project for Thailand, and there is almost no additional impact when we compare Dawei project only and both

Dawei and Pak Bara projects; (5) West Bengal and Tamil Nadu have slight positive impacts while others see slight negative impacts and in total in India there is almost no impact, mainly due to the fact that India has higher preference for domestic products. The higher expected impact on lower income AMSs, such as Cambodia and Myanmar, implies that MIEC is effective in narrowing development gaps (NDGs), one of the main objectives of the ASEAN Community.

In this way, the Dawei project will enhance connectivity between Bangkok and Chennai, which can open wide opportunities for the businesses to optimize their production activities in ASEAN and India (through fragmentation and reviewing supply chains). Having an alternative route, in addition to the existing route via Singapore, would enhance the resilience of regional production networks. Myanmar, one of the least developed economies in the region, will enjoy the economic benefits from the Dawei project according to the GSM. The Dawei project may provide an attractive industrial location for private firms and factories that are currently located in Thailand and the neighboring countries, including Japan affiliated ones, to relocate to. Japanese firms understand well the necessity to diversify their production sites in the region, so that they could avoid the risks of natural disasters.

On the other hand, there also exist challenges.ITD has established a special purpose company (Dawei Development Corporation: DDC), which is wholly owned by ITD. ITD has been looking for investors for up to 49% share of DDC. Total investment amount of DDC is estimated as US\$80 billion. As is often the case, funding is the main problem in the implementation of the Dawei development project.ITD has long had difficulty in finding partners, mainly because Myanmar has long been under the Western, the US's in particular, sanctions. Large MNCs were thus far reluctant to invest and do businesses in Myanmar, since they are afraid of damaging their reputation in the international community. However, the new government of Myanmar, which was established 30 March 2011, is apparently moving forward to political and economic reforms, including the dialogue with Aung San Suu Kyi, the leader of democratic forces, the release of quite a number of political prisoners, relaxing media control and internet access, the consultation with the IMF to restructure the country's highly distorted exchange rate system, and so forth. Based on these changes, the US started to talk intensively with the Myanmar government, and people think that the sanctions imposed by them may soon be relaxed, or lifted in due time. The next ASEAN Summit in mid-November will reward Myanmar by allowing it to take a role of ASEAN Chair in 2014. Accordingly, the large MNCs started to pay more attention to Myanmar. The change of this atmosphere can be regarded as a favorable factor for fund raising for the Dawei project.

Another challenge is the small population in Dawei. Most of them have migrated to Thailand as migrant workers. Whether they come back to Tanintharyi Region or not when the Dawei project is completed, is an important factor for the success of the industrial estates.

4-3. Connectivity between Myanmar and Northeast India

As already discussed, the weak physical connectivity between Myanmar and North India has been one of the major bottlenecks to enhance the border trade between the two countries. This subsection discusses the development, current status, and prospects of the connectivity between Myanmar and Northeast India, focusing on the physical and institutional infrastructure. Out of the eight states in Northeast India, four states, namely Arunachal Pradesh, Nagaland, Manipur, and Mizoram, share national borders with Myanmar, and the total length stretches to 1,643km. Along the national border, four land customs stations (LCSs) in (1) Moreh in Manipur / Tamu in Sagaing, (2) Zolkawtar in Mizoram /Rihkhawdar (Chin), (4) Avakhungin Nagaland / Layshi in Sagaing, and (4) Nampong in Arunachal Pradesh / Pangsu in Sagain, have beenidentified to serve the border trade with Myanmar¹⁵. Out of these, Moreh LCS has been the busiest, handling almost 99% of the regions' trade with Myanmar, although Northeast India's trade with Myanmar has always remained less than a percent of India's total trade with Myanmar since the opening of Moreh LCS in 1995 (De, 2011).

The remainder of this subsection will discuss the current status, opportunities, and challenges of three routes for the enhance the connectivity between Myanmar and Northeast India, namely, (1) Moreh/Tamu route, (2) Zolkawtar/Rhee route, and (3) Nampong/Pangsu route which is known as Stilwell Road.

4-3-1. Moreh/Tamu Route

Moreh in Manipur State of India and Tamu in Sagain Region of Myanmar has been the main gate for the border trade between India and Myanmar. Moreh is 109 km away from Imphal, the capital city of Manipur State, and there is a small town (Palel) in between. The road from Imphal to Palel (49 km) is largely 2 lanes, flat terrain, and the surface is fairly paved and maintained. In contrast, the road from Palel to Moreh (60 km) is single-lane and mostly mountainous. The surface is paved but not maintained,

¹⁵ Avakhung was agreed bilaterally as an LCS in Nagaland, with its Myanmar counterpart of Layshi, in October 2008. Border check points in Avakhung/Layshi and Nampong/Pangsu are not in operation.

therefore a number of sections between Palel and Moreh need to be repaired¹⁶. On the Myanmar side, a 150 km road from Tamu, Kalewa, to Kalemyo and a 10 km road from Kyigone to Kalemyo were constructed by the Border Road Organization (BRO) of India by 2001, and named as a friendship road. The road from Tamu to Kalemyo is in a good condition, as a result of a maintenance work by Myanmar government in 2008¹⁷. The road from Imphal, Palel, to Moreh, and the friendship road from Tamu, Kalewa, to Kalemyo are integral parts of the trilateral highway project under the Mekong-Ganga Cooperation initiative, and are expected to serve as a trunk route to facilitate the movement of goods and people.

The bilateral agreement between Myanmar and India limits the number of tradable items for the border trade to 40, and only in terms of barter trade. Trade imbalance needs to be settled by reverse trade within 6 months, instead of financial settlement¹⁸, and there's no "formal" foreign exchange facility in the border area. Due to these restrictions, official border trade has not been growing. According to the statistics of Moreh LCS, in FY2010/11, India's export to Myanmar was Rs. 2.6 million of cumin seed, and India's import from Myanmar was Rs. 32 million of betel nuts and Rs 4 million of dry ginger. The remaining trade imbalance needs to be settled by India's

¹⁶ Authors conducted an experimental drive in May 2011. It took 56 minites from Imphal to Palel (49km) with an average speed of 52.5km/h, and 94 minutes from Palel to Moreh (60km) with an average speed of 38.3km/h. Reflecting the security issues in the border area, we encountered three security check points by the Assam Rifles along the route. Time for the security check was less than 1 minute each, probably reflecting the recent improvement in the security problems.

¹⁷ According to an experimental drive conducted by researchers of Yangon Institute of Economics in 2011, it took 150 minutes for the 131 km road from Kalay to Tamu, with an average speed of 52.4km/h, implying a good condition of the road. See Kyaw Min Htun, *et al* (2011) for details.

¹⁸ This is because of the economic sanction on Myanmar imposed by the United States. As the Asian Clearing Union (ACU) mechanism still depend on the use of US dollar for final settlement. There is a plan in India to use Indian Rupee as the currency of settlement for the bilateral trade with Myanmar.

additional export of some of the 40 goods listed in the bilateral agreement¹⁹. Such a restricted trade practice has been a major bottleneck to expand the bilateral trade between India and Myanmar.

Instead, informal border trade has been growing, although it is very difficult to know the exact figures. Local people living in the border area are allowed to go to Myanmar only by registering name and age, even without showing their passport. There are markets on both sides of the border, to serve for the customers from the other side of the border. The market in Myanmar side deals a number of imported Chinese products such as electric appliances, blankets, and plastic products, and Myanmar products such as fruits, candles, and soaps. And Chinese products, similar to those traded in the border markets, can be found in markets in Imphal or other places. Putting these pieces of information together, it is natural to consider that Chinese products have been imported through informal border trade to meet the demand in Northeast India. As referred in De (2011), the total trade at Moreh including informal volume is estimated at Rs. 2,800 million, which is far more than the official trade statistics, Rs. 150 million, indicating a significant amount of informal trade across the border, backed by a strong demand in the market.

Therefore, in order to expand the trade between Myanmar and India across the border, it is important for the both governments to take necessary steps to upgrade existing border trade to normal trade, by lifting or expanding the list of tradable items and by allowing financial settlements including the introduction of letters of credits (L/C). However, from the viewpoint of India, there is a fear of possible influx of

¹⁹ On 9 May 2011, the Reserve Bank of India (RBI) had a meeting with local traders and bankers in Imphal. Reportedly, RBI had been trying to convince Myanmar counterpart to introduce "letter of credit (L/C)" for the settlement of border trade, instead of restricting to barter trade. At that point, however, Myanmar side was not interested in this idea. *The Sangai Express*, 10 May 2011.

Chinese products into the domestic market. Given the potential demands for Chinese products, as implied in the last paragraph, a proper management of the country of origin by Myanmar government would be of crucial importance, to keep the trade flows under control. Another direction for India and Myanmar might be to consider transit transport agreements involving China and Thailand.

De (2011) attributes the low level of border trade at Moreh to the lack of modern trade facilities, both hardware and software, and the absence of adequate security. However, with a proper policy environment and moderate improvement of road infrastructure, Moreh/Tamu border can become an important gateway connecting India to Myanmar, and further to China and Thailand.

4-3-2. Zolkawtar/RheeRoute

Zolkawtar in Mizoram State of India and Rihkhawdar (Rhee) in Chin State of Myanmar are the secondary gate for the border trade between India and Myanmar. Zolkawtar is 225 km away from Aizawl, the capital city of Mizoram State. The whole stretch from Aizawl to Zolkawtar is largely 2 lanes and highly mountainous terrain²⁰, although the surface is paved and fairly maintained as compared to the section between Palel and Moreh in Manipur. Reflecting the better security condition, there is no security checkpoint along the route from Aizawl to Zolkawtar.

The regulation on border trade is the same with those for Moreh/Tamu border. In Zolkawtar, physical border facilities such as land customs station (LCS), post office, and a bank (State Bank of India) are already developed, and ready to operate.

²⁰ Despite the good condition of the road infrastructure and the absence of security checkpoint, because of the mountainous terrain, it took 460 minutes for the authors to drive from Aizawl to Zolkawtar. The average speed was 29.3km/h.

However, the development of "official" border trade is much slower than Moreh/Tamu border.

If the route from Aizawl to Agartala is improved, and the transit trade through Bangladesh is realized, this route will become the shortest land route connecting Myanmar and Kolkata via Northeast India and Bangladesh.

4-3-3. Nampong/Pangsu Route: Stilwell Road

Ledo road was constructed during the World War II by the US army to establish a new strategic route connecting between Ledo in Arunachal Pradesh and Bhamo in Kachin to provide the necessary supplies to China and resistance group against Japanese army in the region²¹. Ledo Road, by connecting to Burma Road at Bhamo, established a strategically important supply route from Ledo to Kunming. Later, Ledo Road was renamed as Stilwell Road by Chiang Kai-Shek to praise the achievement of General Joseph W. Stilwell, who conducted the operation.

Stilwell road passes India/Myanmar border in Nampong/Pangsu, where the bilateral agreement was made to establish border check points. As of today, however, Nampong LCS has not started its operation, and the border is not yet opened for official border trade. As Saharia (2010) points out, reactivation of Stilwell road, including the operationalization of border checkpoints in Nampong and Pangsu, could open wide opportunities for India, Myanmar, and China to explore the full potentials of sub-regional economic integration. Saharia (2010) further claims that "asset value of this existing massive infrastructure of both the countries can be fully utilized by just linking the missing part" by Stilwell Road, based on the fact that both India and China

²¹ See Saharia (2010) for the details of Stilwell Road.

have well connected networks of highways and railways up to Ledo and Ruili respectively, and that Myanmar already established strong connectivity from Muse, the counterpart of Ruili, to Mandalay²², and to Yangon.

Although there are a number of challenges ahead to reactivate Stilwell Road, exactly same as the case of Moreh/Tamu and Zolkawtar/Rhee routes, and there is a need to conduct further study, it is worthwhile putting this initiative on the agenda of regional cooperation. Indeed, "India and China are eager to reopen this road; India wants to open its landlocked northeastern states to trade with China and ASEAN nations, while China is willing to send its products through the same route. Myanmar would be able to reap benefit handsomely from this trade by charging transit fees and gaining spin-off benefits from tourism" (Kyaw Min Htun, *et al*, 2011). This can be a practical way to materialize its "Look East Policy" for India, and to explore the full benefits of MPAC for ASEAN, Myanmar in particular. And for East Asia as a whole, this is a promising way to pursue deepening economic integration and narrowing development gaps, as the enhanced connectivity among Northeast India, Myanmar, and Yunnan would mitigate geographical disadvantages of, and open new opportunities for the region.

4-4. Connectivity between Northeast and Mainland India

4-4-1. Kaladan Multimodal Transit Transport Project

As is well known, one of the main bottlenecks for the economic development of Northeast India is its weak connectivity with other parts of India. As a result of the separation of East Pakistan (now Bangladesh) in 1947²³, the connectivity between Northeast and other part of India was physically narrowed to a 26 km-wide route,

²² This route is known as New Burma Road. See Kudo (2010) for details.

²³ Later, East Pakistan declared independence as Bangladesh in 1971.

so-called "chicken neck". After years of disregard, "Government of India lately seriously engaged in addressing the various issues including massive investment in infrastructure development particularly in the areas of communication and road, rail, and air connectivity" (Saharia, 2010).

Kaladan Multimodal Transit Transport (KMTT) Project is one of such initiatives, which was designed to provide an alternative route that connects Northeast India and the mainland India, Kolkata in particular, through Chin and Rakhine in Myanmar²⁴. KMTT project includes following infrastructure development: (1) expansion of Sittwe port from the maximum capacity of 4,000 to 7,000 ton; (2) construction of river port in Paletwa; (3) channel dredging of Kaladan River from Sittwe to Paletwa; (4) road construction from Paletwa to Myeikwa at Myanmar-India border (129km)²⁵. The government of India provided US\$ 76 million for KMTT project, although this does not include the cost for the road construction between Paletwa and Myeikwa.

KMTT project has already commenced, and planned to be completed within a few years to come. As this project is strongly promoted by India, there is no funding problem. Although the size of the project is much smaller than the mega project in Kyaukphyu supported by China, it seems to be adequate considering the size and scope of economic activity in the neighboring region. In addition, a synergy with Kyaukphyu project is expected.

Although physical infrastructure for KMTT project is to be constructed in Myanmar territory, it is of crucial importance to establish necessary institutional arrangement

²⁴ For further information on KMTT project, see De (2011) and Kyaw Min Htun, *et al* (2011).

²⁵ The original plan was to use inland waterway up to Kaletwa, 67km north of Paletwa. As it was found that the width and depth of Kaladan River between Paletwa and Kaletwa are not sufficient enough for inland waterway transport, the plan was revised as explained in the text. Based on the interview with Essar, the contractor of KMTT project, in May 2011.

between India and Myanmar in order to reap the full potentials of the project. However, the economic viability of the project is still unclear, probably because the project has been driven primarily by political and strategic motives of India and Myanmar.

4-4-2. Bangladesh transit route

The dependence on "chicken neck" and the expectation on KMTT project in connecting Northeast and the mainland India have roots in the strained relationship between India and Bangladesh. If the transit trade through Bangladesh were allowed with a reasonable level of efficiency, the landscape of this issue would be changed dramatically. Indeed, India and Bangladesh have already reached to an agreement on transit trade through inland waterway (Ganga) in Bangladesh.

In order to facilitate the border trade between Northeast India and Bangladesh, India has established 26 LCSs along the border, of which 20 are already in operation (De, 2011). Among the four states sharing national borders with Bangladesh, namely Assam, Meghalaya, Tripura and Mizoram, Meghalaya is the largest gateway. Northeast India's export to Bangladesh is dominated by raw materials such as coal, limestone, boulders, and agro-horticultural products, while the North India's import from Bangladesh is largely finished products such as cement, synthetic fabric, readymade garments, and processed foods, reflecting weak manufacturing sector in Northeast India. In contrast, Bangladesh, taking advantage of its abundant labor force, has become a global center of garment/apparel industry. The enhanced connectivity between India and Bangladesh, both in terms of physical and institutional, could boost the border trade and open new opportunities for Northeast India to invite some of the production

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processes related to the manufacturing activity in Bangladesh.

4-5. Connectivity between Myanmar and China: Kyaukphyu project

Kyaukphyu is situated in the north of Rambree Island, Kyaukphyu District in Rakhine State. It is divided into two, the shore and the archipelago. It is situated at 6 feet above the sea level. The group of islands consists of 71 archipelagos. The landscape is not a flat plain. The area of the township is 678.37 square miles or 434,144 acres, which range 54 miles from the east to the west and 90 miles from the north to the south. Kyaukphyu Township is organized with 10 wards including 54 village tracts and 262 small villages. The whole population is about 200,000. Being formed by a group of archipelagos, Kyaukphyu, the small town, has many creeks and rivulets. All rivers and creeks are salinated, and the tide occurs for the whole year round. Thus, water transportation is a single means to access most villages in the township. On the main island of Rambree, where Kyaukphyu is situated, Ram town and other villages of the township can be accessed by road.

4-5-1. Shwe Gas Project

Started in 2000, the Shwe Gas project is led by a consortium of companies carrying out natural gas operations in the Shwe, Shwe Phyu and Mya gas fields situated in Block A-1 and A-3 off the coast of Rakhine State. With 51% of the shares for both blocks, Daewoo International Corporation of Korea is the operator of the project. ONGC Videsh Limited and Gail Limited from India respectively hold 17% and 8.5% of the shares and Korea Gas Corporation holds another 8.5% share. Myanma Oil and Gas Enterprise (MOGE) as the national partner in the Shwe consortium holds 15% share. The natural gas produced under the Shwe project will be sold to the affiliate of China National Petroleum Corporation (CNPC), and sent to China via a pipeline that will run across Myanmar. The project was started in 2009. Onshore Gas Terminal (OGT) is being constructed near Kyauk Pyu. The construction of OGT was started in 2009 and will be completed in 2013.

4-5-2. Kyaukphyu Deep Seaport

Kyaukphyu Deep Seaport plan is being implemented in the Made Island. A deep seaport with 91 berths will be built to cover for 11 containers, 19 cargo vessels, 39 petrol chemical carriers, 8 repairing ships, 2 cruise liners, and 12 service ships. Kyaukphyu's Deep Seaport is under construction near the town in the Than Zit River on Made Island. The Made Island is situated 8 miles away in the south-east of Kyaukphyu. The island is 3.5 miles long and 2.5 miles wide. According to the records of 1975, it is found that foreign vessels can sail and anchor safely in the sea around Kyaukphyu and the Made Island. It is known that the Myanmar Port Authority has surveyed that the depth of sea is from 105 feet to 158 feet within 35 miles range of the waterway. The water area of the Made Island has 4,000 square feet, so there is sufficient space for anchored ships. Since 1995, the authorized persons as well as domestic and foreign experts have done many surveys, and the best location was selected. That place is fit for the essential requirements for a deep seaport including natural landscape that could protect from heavy cyclones and high tide.

Total length of water front on the port area on the Made Island is 2350 meters and total backup area covered 4390 acres. Least available depth (LOA) is 30 meters, and

800 meters at Southern part of Island will be allocated for Oil and Gas Terminal and 1550 meters at Northern part of Island is allocated for Commercial Deep Seaport.

It is also found that the projects of the Kyaukphyu-Kunming Oil Pipeline, the Natural Gas Pipeline, and the China-Myanmar Economic Corridor are under the arrangement to carry out simultaneously with the deep seaport project. On 31 October 2009, the opening ceremony was held for the beginning of the project of Myanmar-China Crude Oil Pipeline and the Work Boat Wharf. The signing ceremony of MoU for the China-Myanmar Corridor Project was held on 18 May 2010. The corridor would connect with Muse (opposite to Ruili, the Chinese bordr town) and Kyaukphyu. Kyaukphyu Deep Seaport could be berthed by 300,000-ton oil tankers. The project includes a 480-meter long quay, a 150-meter long jetty to allow 5000-ton vessels to berth, a 29.7 kilo meter long waterway, a 600,000-cubic meter water storage tank, and machine facilities as well as constructing buildings.

The construction of the retaining banks at port site on the Made Island has been done. It comes to know that the waterway is being cleared up for the purposes of incoming and outgoing ships. While the deep seaport project is under way, the floor of the Than Zit River is being dredged by machines to make oil tankers access the Indian Ocean. The waterway is essential for the deep seaport. It is known that for the convenience of incoming and outgoing of over 300,000-ton vessels, the shoal and the river bed are being dredged. The task of clearing the waterway is being carried out day and night by dredging ships of Dharty Co. Ltd. Within the area of the Than Zit River, the local people are doing fishing. The early warning has been made by the concerned departments to all fishermen to mark the visible signs in daytime as well as light signals in night time for safety.

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The industrial estate will be constructed together with Kyaukphyu Deep Seaport, though the local people do not know yet where the industrial estate would be constructed. It is not started yet until to the date of writing this chapter (October 2011). Foreign and domestic investors are interested in Kyaukphyu Industrial Estate project, so they are preparing to invest in it if it emerges.

4-5-3. Kyaukphyu – Kunming Railway Project

A ceremony to sign a Memorandum of Understanding on Muse-Kyaukpyu rail transportation system project between Myanma Railways under the Ministry of Rail Transportation of the Republic of the Union of Myanmar and China Railway Engineering Corporation of the People's Republic of China was held on 27 May 2011. Also present on the occasion were Vice-President of the Republic of the Union of Myanmar Thiha Thura U Tin Aung Myint Oo, Union ministers, members of Myanmar Investment Commission, Chinese Ambassador Mr Li Junhwa, and President Mr Li Chang Jin of China Railway Engineering Corporation of China and party.

In the presence of the Union Minister for Rail Transportation, Managing Director U Thein Swe of Myanma Railways and Chairman of China Railway International Mr Zhao Deyi, on behalf of China Railway Engineering Corporation, signed the MoU and exchanged notes.

Plans are under way to construct 78.92 miles long railroad, 41 small and large bridges, 36 tunnels in 37.37 miles in total length and seven railway stations on Muse-Lashio railroad section, which will be the first phase of the project. The estimated term of the phase is about three years. The project will take account of environmental issues and protection tasks.

The project of Kyaukphyu - Kunming Railroad is estimated to finish in 2015. The route will pass through the Rakhine State, Magway and Mandalay Regions and Shan State. The railroad is divided into 4 sections. The first section is from Kyaukphyu, Ann to Minbu. The second is from Minbu to Magway to Mandalay. The third is from Mandalay to Lashio to Muse and finally Muse to Jijo in Myanmar-China border area. The construction of the railroad project has not started yet in Kyaukphyu as of October 2011.

4-5-4. Opportunities and Challenges

Kyaukphyu projects will pose opportunities and challenges to both Myanmar and China. First, the natural gas and oil pipline project will bring another large amount of foreign currency to Myanmar. Myanmar currently exports natural gas to Thailand, which accounts for 40-50% of Myanmar's total exports. Myanmar will have another source of foreign currency earnings. The fees for usage of oil pipeline will also bring a considerable amount of foreign exchanges to Myanmar.

Second, on the other hand, China can secure natural gas, which is much needed for its rapidly growing economy. The oil pipeline can reduce China's dependence on the Malacca Straits for its importing oil and diversify its route of sourcing oil from the Middle East and Africa.

Third, the construction of deep seaport will provide an opportunity for Kyaukphyu to develop its own industrial cluster. This possible cluster will be enhanced by better connectivity between Kyaukphyu and Muse, the border town of Yunnan Province of China, by road and railway. China may use this corridor to export its goods to India, the Middle East and Europe via Kyaukphyu Deep Seaport.

However, there are some challenges. First, the impact of the Shwe natural gas on the Chinese economy will be limited. The impact of the oil import through the pipeline to China is also limited. This is because China's energy demand is huge, and the provision of natural gas and imported oil via Kyaukphyu Deep Seaport and pipeline is not large enough to improve the Chinese energy security.

Second, the gas and oil pipelines run through some part where ethnic insurgencies are rampant. The pipelines can be a good target of the ethnic armed groups. The Myanmar military have to tighten the security along the pipelines and this will cost. Moreover, such an action of the Myanmar army may promote militarization in the regions, which may cause human rights abuses.

Third, the proposed industrial estate has less prospects to succeed thus far. The Kyaukphyu area is remote, rural, and less connected with other parts of Myanmar. The deep seaport is not sufficient to create an industrial cluster. How to attract potential investors is a big challenge for the Myanmar government.

Last, but not least, there exists anti-Chinese sentiment among Myanmar local people. This may be related to the way of implementation of big projects of Chinese companies financed by the Chinese government. It is often said that the Chinese companies do everything by their own resources including laborers, and the local firms and people cannot enjoy the related works. Information of the projects is not well disclosed, and so forth. How to cooperate with Myanmar firms and people to implement the big projects is also important for China.

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5. POLICY RECOMMENDATIONS

It is important to reconfirm the ultimate goals of enhancing regional connectivity, that is, to facilitate the economic development of ASEAN and East Asia by deepening economic integration and narrowing development gaps. Based on this, we need to have a conceptual framework to streamline various infrastructure projects and institutional arrangements, including ongoing initiatives and those in the pipeline or needed.

5-1. A Regional Framework

A regional framework strategy for the enhancement of ASEAN-India connectivity needs to be designed based on a multi-modal approach, a multi-functional approach, and a multi-tier approach.

First, it is obvious that regional connectivity cannot be completed with a single mode of transportation, implying a need to take a multi-modal approach. As discussed in detail in the last section, a number of infrastructure projects have been proposed and are being implemented in all modes of transportation, namely, land (including road and railways), maritime (including inland waterway transport), and air. In land transport, the completion of the ASEAN Highway Network (AHN), including the upgrading of a weak link along the EWEC between Thingannyinaung and Kawkareik (AH1), and other AHN sections in Myanmar such as Dawei-Kawthaung (AH112), Dawei-Maesameepass (AH123)²⁶, Chaun U-Kalay (AH1), and Kengtong-Taunggyi (AH2), was adopted as one of the prioritised strategies in the Master Plan on ASEAN Connectivity (MPAC). The

²⁶ This section is an integral part of MIEC, connecting Dawei and Thai border near Kanchanaburi.

abovementioned sections on AH1 in Myanmar are also identified as integral parts of the trilateral highway connecting Thailand, Myanmar, and India. In addition to the long-waited completion of the Singapore Kunming Rail Link (SKRL), which is also a prioritised project in MPAC, there is another ambitious plan to establish a rail link from India to Hi Chi Minh City crossing the Indochina Peninsular²⁷. In maritime transport, the construction of new ports in Dawei, Kyaukphyu, and Pakbara are in the pipeline, and the expansion or upgrading of existing ports, such as Yangon, Sittwe, and Chennai, are identified. Inland waterways along the Kaladan River and Ganga are also expected to play important roles in enhancing the connectivity between the mainland and Northeast India via Myanmar and Bangladesh respectively. In air transport, there are plans to construct or upgrade airports in Chennai and Dawei. Although this is beyond the scope of this report, air transport network is expected to be enhanced by the ongoing initiatives to establish the ASEAN Single Aviation Market (ASAM) and the ASEAN's air transport agreements with its Dialogue Partners including India, China, and Korea. Although all these initiatives are important on their own, it is of crucial importance to pay enough attention to the connectivity between these different modes of transportation.

Second, in order to explore the full potentials of enhanced regional connectivity, physical infrastructure alone is not sufficient enough, indicating a need for a multi-functional approach. Infrastructure for physical connectivity, such as roads, ports, airports, gas pipelines, and power grids, are of course important as necessary conditions. As discussed in the last section, for example, the connectivity between Myanmar and Northeast India has been limited not only by the lack of adequate

²⁷ See De (2011) and Kyaw Min Htun, *et al* (2011) for details.

physical infrastructure but also by the restrictive institutional arrangement between Myanmar and India, namely the restrictions on the tradable items and the mode of settlement. In order for the success of the comprehensive development plan in Dawei, as the crucial link in MIEC, the timely implementation of transport facilitation agreement in ASEAN is highly important, and it was also agreed by ASEAN Leaders as one of the prioritized strategies in MPAC²⁸. A proper enforcement of regional transport agreement would enable logistic service providers to reduce significantly the cost to cross national borders, by saving the money and time for unloading and reloading²⁹. In addition, the connectivity of people can be a facilitating factor particularly in the case of border trade. For example, there are various ethnic groups along the border between Myanmar and Northeast India, and some of them share a same language and maintain a strong cultural tie, including trade relationship whichever it is formal or informal. Although they could be sometimes recognized as a discouraging factor for insurgency problems in the border areas, their existing economic relationship can be the basis to expand bilateral trade in the future.

Third, as claimed in the CADP (ERIA, 2010), it is of crucial importance to consider the interactions among the regions in different development stages. In the geographical coverage of this report, there are existing industrial agglomerations such as Bangkok and Chennai (Tier 1). These agglomerations are expected to lead the regional economy by providing large markets of final and intermediate goods and raw

²⁸ According to MPAC (ASEAN, 2010), "(i)n order to realise the vision of "single market and production base" as envisaged in the AEC Blueprint, ASEAN's connectivity should be enhanced through transport facilitation initiatives to minimise (and eventually eliminate) the frictions at national borders that increase the transactions cost of moving goods between countries in the region. These initiatives include: ASEAN Framework Agreement on the Facilitation of Goods in Transit (AFAFGIT); ASEAN Framework Agreement on the Facilitation of Inter-State Transport (AFAFIST); and ASEAN Framework Agreement on Multimodal Transport (AFAMT)."

²⁹ See JETRO (2009) and Ishida (2011) for details.

materials for neighbouring Tier 2 and Tier 3 regions, and by continuously upgrading themselves to be more innovative to expand the frontiers of economic activities in the region as a whole.

Considering the size and their roles in regional production networks, Chiang Mai, Kolkata, Dhaka, and Kunming can be regarded as existing Tier 2 regions, followed by emerging Tier 2 regions such as Yangon and Mandalay. In addition, taking account of the ongoing development plans and geographical location, Dawei, Kyaukphyu, and some cities in Northeast India such as Guwahati are also expected to join into the regional production network as new connecting nodes of regional production networks. The major role of Tier 2 is to be the sources of economic dynamism in the region by attracting production processes from neighbouring Tier 1 or other places through fragmentation, which are suitable to the location advantage of the region. This process of fragmentation would benefit not only Tier 2 by providing new economic activities which includes new employment opportunities, but also Tier 1 by allowing them to focus more on innovative economic activities.

With enhanced connectivity, other regions, conceptually regarded as Tier 3, are expected to expand their economic activities, such as agriculture, mining, and tourism, based on their own location advantages including the endowment of natural and cultural resources, lower wages and rents. Indeed, Myanmar and Northeast India are endowed with natural and mineral resources such as natural gas, oil, coal and limestones, and have potentials as agricultural production base or tourism destination. These opportunities would not be materialized without efficient and reliable connectivity with neighbouring regions.

5-2. Key InfrastructureProjects

Figure 5 visualizes key infrastructure projects to enhance the connectivity between ASEAN and India. As already discussed, there are two main routes, namely the sea route along MIEC and the land route along the Trilateral Highway. Although the designed route of Trilateral Highway ends at Kohima in Northeast India, it is expected to connect to mainland India through the existing national highway network in India via "chicken neck," through the multimodal transport corridor being developed under the Kaladan Multimodal Transit Transport project, or through Bangladesh using its highway network or inland waterway.

As already discussed, development projects in Dawei are of the primal importance for the successful completion of MIEC. Although there is a comprehensive plan including a deep sea port, a special economic zone, highway to Thai border, a power plant, and so on, the actual construction work has just started and will take several years for completion. In addition, there are a lot of challenges to explore the full potentials of the plan, particularly in inviting foreign investment in Dawei. Furthermore, as pointed out by Kumagai and Isono (2011), it is important to establish an effective and efficient institutional arrangement to allow transit transport in Myanmar part of MIEC, that is, between Maesameepass (Thai border) and Dawei. Under the transport cooperation in ASEAN, three framework agreements on transport facilitation are planned to be implemented by the year 2015, with explicit emphasis on the designated transit transport routes (TTRs)³⁰. Although this route connecting Kanchanaburi and Dawei is identified as a part of ASEAN Highway Network, it is not included in the "designated" TTRs. As the completion of MIEC is already agreed as one of the

³⁰ For more details on TTRs and transport facilitation measures in ASEAN, see ERIA Study Team (2010).

strategic actions in MPAC, this route should be included in the designated TTRs in order to explore the full potentials of the plan. Physical connectivity is necessary, but not a sufficient condition for the success. It should be complemented by an institutional connectivity, that is, a proper institutional arrangement to facilitate cross border movement of goods and services. This in turn would contribute in reducing significantly the service link costs connecting Bangkok and Dawei, and Chennai as well, and facilitating fragmentation of manufacturing activities to Dawei.

On the Indian side, Chennai and surrounding areas have a number of infrastructure projects as well, particularly to expand the capacity of ports and airport, and to enhance the road and rail networks connecting Chennai with other parts of India. Indeed, reflecting the rapid growth of Chennai and surrounding areas, the capacity of Chennai port, including the backyard space, and the access to the port have been identified as key bottlenecks for further development of the region. This problem is well addressed by the planned expansion of ports of Ennore as well as Chennai, and the plan to enhance the connectivity between the two ports. In addition, as Chennai is a growing hub of automotive industry, the planned construction of a Ro-Ro (roll-on, roll-off) berth and a multi-level car parking is expected to have a major impact. With all these infrastructure projects, Chennai and surrounding areas will be well prepared as the gateway connecting ASEAN and India.

In its original design, the identified route of Trilateral Highway is from Bangkok, Nakhon Sawan, Tak, to Mae Sot in Thailand, from Myawaddy, Thaton, Payagyi, Mandalay, Gangaw, Kaleymyo, to Tamu in Myanmar, and from Moleh, Imphal, and to Kohima in India, tracing the Asian (and ASEAN) Highway No.1. As the routes in Thailand and India are already well developed, with an exception that a mountainous section between Moreh and Palel would need moderate repair or upgrading works, the remaining issues are to upgrade physical road infrastructure in Myanmar and to establish effective and efficient institutional arrangement to facilitate cross border trade and transportation.

Along the Trilateral Highway, two sections are highlighted in Figure 5, namely, between Thingannyinaung and Kawkareik (near Thai border), and between Chaung U and Kalay (a section between Mandalay and Indian border). These projects are of urgent importance, not only as integral parts of the Trilateral Highway but also as the trunk route to enhance domestic connectivity in Myanmar. From a regional perspective, in addition to these physical infrastructures, institutional connectivity to facilitate cross border trade and transportation needs to be enhanced under the trilateral cooperation. In this sense, India's plan to establish an Integrated Check Post (ICP) in Moreh is very important.

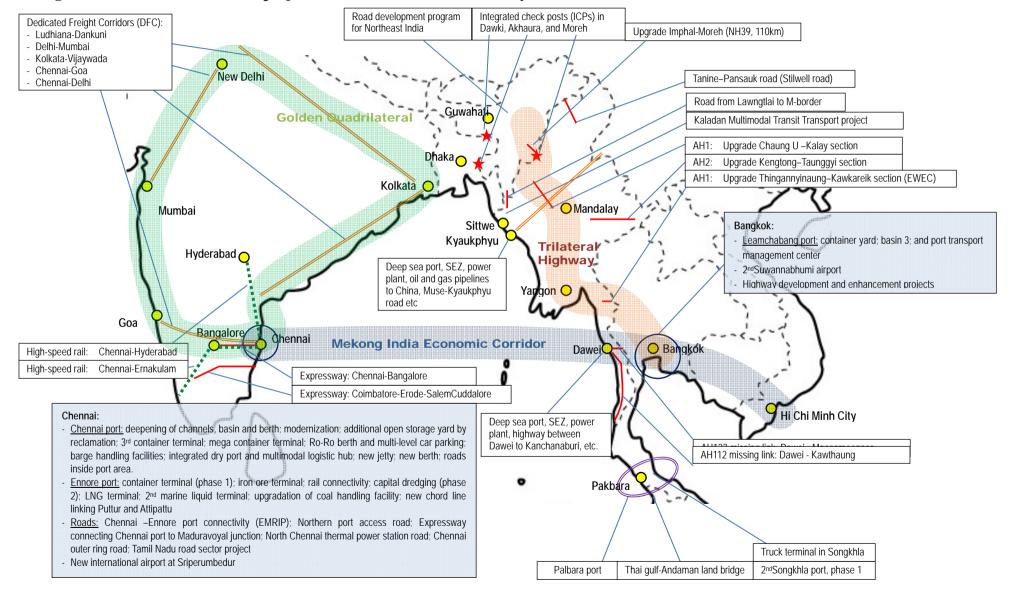


Figure 5:Selected infrastructure projects for ASEAN-India connectivity

FINAL REMARKS: BEYOND THE DISASTERS

The year of 2011 will surely be remembered as a year of unprecedented disasters in the history of economic development in East Asia. The mega earthquake, tsunami, and the subsequent electricity shortage in Japan severely damaged regional production networks, and the impacts spread not only to other part of Japan, but also to East Asia, and further to the world. In order to recover from the disaster, a number of manufacturing companies reviewed their global strategies, including the restructuring of their supply chain networks. One of the major actions of Japanese companies, not only the global players but also small and medium enterprises, was to upgrade the role of production facilities in Southeast Asia, including Bangkok metropolitan area.

The restructuring process was disrupted by another unprecedented disaster, the massive floods on Thailand in October 2011. A significant area of Thailand, including agricultural areas and several industrial estates, were completely sunk, and a number of manufacturing companies were forced to suspend the production activities due not only to the direct damages from the floods but also to the disruption of supply chains. The disasters are still going on.

To make the matters worse, the global economy has been suffered by the financial crisis in Europe, while the US economy has still been struggling in the recovery from the severe recession for years. As a result, we are observing a sign of slowdown in emerging economies including China and India, which can negatively affect the recovery from the disasters. It will take a long time for the affected people, companies, and regions to fully recover from the damages.

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Although not by choice, the disasters have renewed people's perception on the importance of connectivity, including the necessity to have alternative routes and sources of supply to enhance the resiliency of regional production networks. It is risky to depend too much on a specific route or production facilities, although it could be efficient from a short term viewpoint. A longer term perspective, which is of crucial importance, is requiring ASEAN and East Asia to renew and upgrade its commitments for regional cooperation such as the establishment of the ASEAN Economic Community, including the implementation of the Master Plan on ASEAN Connectivity, and the deepening of economic integration and the narrowing of development gaps in East Asia and beyond.

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