

Chapter **1**

Introduction

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Chapter 1

Introduction

1.1. Background

The establishment of the Association of Southeast Asian Nations (ASEAN) Economic Community (AEC) at the end of 2015 was a great impetus to regionalism, connectivity, and freer trade and investment regimes. The dialogue partners of ASEAN found a greater attraction with ASEAN and looked forwards to increased trade and economic cooperation with the AEC. These regional gains were soon overshadowed by rising and thickening borders in Europe and North America, affecting the movement of goods and services, and people. The year 2016 witnessed two major events against the free trade regime in the world. The United Kingdom's decision to exit the European Union was announced in 2015 – and has since been completed – put a question mark on the global pursuit of free trade. The election of Donald Trump in 2016 as president of the United States (US) and the 'America First' policy of the Trump administration has presented strong headwinds to the world trade regime, the most significant of which are the withdrawal of the US from the Trans-Pacific Partnership agreement in 2017, the ongoing trade war with China triggered in March 2018, and the crisis of the World Trade Organization's Appellate Body that became apparent in December 2019. Closer to home, India announced their withdrawal from negotiations for the Regional Comprehensive Economic Partnership in November 2019, leaving the remaining 15 member countries to work on the conclusion of the partnership.

Since the beginning of 2020, the outbreak of the coronavirus disease (COVID-19), which originated in Wuhan, China, has threatened global connectivity and supply chains as we have known. The global order, which was marked by the interdependence of nations, international trade, and the cross-border movement of people, has come to a grinding halt. What started as disruptions in, and the breakdown of, supply chains soon became restrictions on the cross-border movement of people. These necessary protective measures are severely affecting economic activity. In the latest *World Economic Outlook* (WEO), the International Monetary Fund (IMF) describes 'this year the global economy will experience its worst recession since the Great Depression, surpassing that seen during the global financial crisis a decade ago' (IMF, 2020, p.v).

The IMF revised its projection on the growth rate of the world in 2020 from the original figure of 3.4% in October 2019 to –3.0% in the latest WEO released in April 2020 (Table 1.1). All countries and groups of countries are projected to suffer from severe adverse impacts. Emerging and developing Asian countries are no exception, but the negative shocks are relatively moderate. In ASEAN, Thailand and Cambodia are projected to contract sharply, probably because of their relatively high dependence on the US and European countries, which are hardest hit by the pandemic.

Table 1.1. IMF’s Projection on the Impacts of the COVID-19 Pandemic

	2019		Projections								
			2020		2020			2020			
	Growth Rate		CA/GDP		Growth Rate			CA/GDP			
	Oct-19	Apr-20	Oct-19	Apr-20	Oct-19	Apr-20	Change	Oct-19	Apr-20	Change	
World	3.0	2.9	0.3	0.4	3.4	-3.0	-6.4	0.1	-0.4	-0.5	
Advanced Economies	1.7	1.7	0.6	0.7	1.7	-6.1	-7.8	0.5	0.1	-0.4	
United States	2.4	2.3	-2.5	-2.3	2.1	-5.9	-8.0	-2.5	-2.6	-0.1	
Euro Area	1.2	1.2	2.8	2.7	1.4	-7.5	-8.9	2.7	2.6	-0.1	
Japan	0.9	0.7	3.3	3.6	0.5	-5.2	-5.7	3.3	1.7	-1.6	
Emerging & Developing Asia	5.9	5.5	0.4	0.6	6.0	1.0	-5.0	0.2	0.1	-0.1	
China	6.1	6.1	1.0	1.0	5.8	1.2	-4.6	0.9	0.5	-0.4	
India	6.1	4.2	-2.0	-1.1	7.0	1.9	-5.1	-2.3	-0.6	1.7	
Myanmar	6.2	6.5	-4.8	-2.0	6.3	1.8	-4.5	-4.9	-4.7	0.2	
Thailand	2.9	2.4	6.0	6.9	3.0	-6.7	-9.7	5.4	5.2	-0.2	
Lao PDR	6.4	4.7	-12.1	-7.2	6.5	0.7	-5.8	-12.0	-10.9	1.1	
Cambodia	7.0	7.0	-12.5	-12.5	6.8	-1.6	-8.4	-12.3	-22.2	-9.9	
Viet Nam	6.5	7.0	2.2	4.0	6.5	2.7	-3.8	1.9	5.2	3.3	
Emerging & Developing Europe	1.8	2.1	1.6	1.4	2.5	-5.2	-7.7	0.6	-0.4	-1.0	
Latin America & the Caribbean	0.2	0.1	-1.6	-1.7	1.8	-5.2	-7.0	-1.5	-1.5	0.0	
Middle East & Central Asia	0.9	1.2	-0.4	0.4	2.9	-2.8	-5.7	-1.4	-5.7	-4.3	
Sub-Saharan Africa	3.2	3.1	-3.6	-4.0	3.6	-1.6	-5.2	-3.8	-4.7	-0.9	

CA/GDP = current account balance as percentage of gross domestic product, IMF = International Monetary Fund.

Note: Oct-19 and Apr-20 columns present the estimates or projections in October 2019 and April 2020 issues of the World Economic Outlook, respectively. The Change columns show the difference between the projections in October 2019 and April 2020, which can be interpreted as the IMF’s projection on the impacts of the COVID-19 pandemic.

Source: Compiled based on IMF (2019, 2020).

With COVID-19 declared a global pandemic, the ASEAN Economic Ministers recognised ‘the adverse impacts of the COVID-19 outbreak on the economy, particularly including but not limited to the travel and tourism, manufacturing, retail and other services sectors as well as the disruption of supply chains and the financial markets,’ and have agreed to resolve to ‘strengthen a long-term supply chain resilience and sustainability, including through better transparency, agility, diversification and, in particular, the implementation of the Master Plan on ASEAN Connectivity (MPAC) 2025’.¹ The world is still in the middle of the turbulence, and at the time of writing, there is no single expert opinion to forecast the future course of the pandemic. Connectivity is now at risk like never before. However, it is also important to remind about the prosperity that connectivity has brought to the world. As the ASEAN Economic Ministers emphasised, it is time to reconsider the resilience and the sustainability of connectivity, instead of focusing too much on the efficiency and the effectiveness of connectivity, in which the economic aspect is the major criterion for evaluation. The assurance of physical connectivity has never been tested before like now. The study on the Trilateral Highway (TLH) and its eastward extension is salutary to increased connectivity between India and ASEAN.

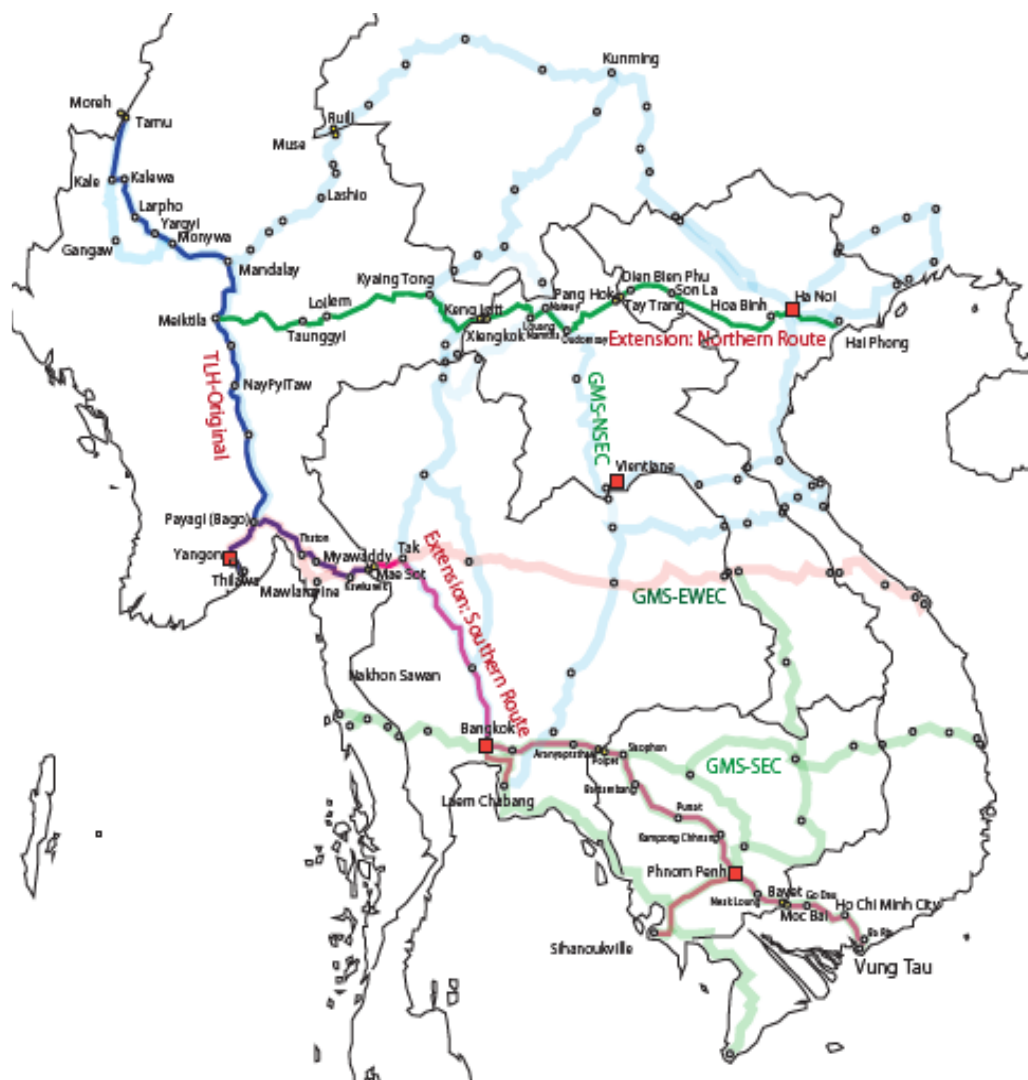
1.2. The Trilateral Highway and its Eastward Extension

Greater connectivity between India and ASEAN has long been both economic and strategic objectives for the ASEAN–India partnership. The Trilateral Highway (TLH) was first conceived at the Trilateral Ministerial Meeting on Transport Linkages in April 2002, where India, Myanmar, and Thailand agreed to make all efforts to establish trilateral connectivity by 2016. Along the TLH, ‘there are two border crossings, four customs check points, three international time zones, three customs EDI systems, two different vehicle driving standards and three different motor vehicle laws. Challenge is to reach convergence in standards and procedures along the corridor’ (AIC–RIS, 2015: 70). The Chair’s statements of the ASEAN–India summits in 2010 and 2012 further acknowledged the importance of linking the TLH with ASEAN’s connectivity plans, as well as its extension to the Lao People’s Democratic Republic (Lao PDR), Cambodia, and Viet Nam.

¹ ‘Strengthening ASEAN’S Economic Resilience in Response to The Outbreak of The Coronavirus Disease (COVID-19)’, a statement released at the 26th ASEAN Economic Ministers’ Retreat, 10 March 2020, Da Nang, Viet Nam.

Although significant progress has been made in the development of the TLH, particularly since 2011, it is still a project under construction, and therefore its contribution to the economic growth and development of the region has not yet reached its potential. At the ASEAN–India informal summit held on 15 November 2018 in Singapore, the Government of India proposed to commission the Economic Research Institute for ASEAN and East Asia (ERIA) to conduct a study on developing an economic corridor along the TLH and the feasibility of its extension to Cambodia, the Lao PDR, and Viet Nam, and the proposal was welcomed by the leaders.

Figure 1.1. Trilateral Highway and Potential Eastward Extension Routes



EWEC = East–West Economic Corridor, GMS = Greater Mekong Subregion, NSEC = North–South Economic Corridor, SEC = Southern Economic Corridor, TLH = Trilateral Highway.

Source: Drawn by Umezaki and Kumagai (2020), based on ADB (2018b).

Based on the Thai proposal at the 16th ASEAN Highways Sub-Working Group Meeting (16th AHSWG) in August 2018 and other existing initiatives such as the Greater Mekong Subregion (GMS), the Ayeyawady–Chao Phraya–Mekong Economic Cooperation Strategy, the Master Plan on ASEAN Connectivity (MPAC) 2025, and the ASEAN Highway Network (AHN), as well as the recognition that connectivity to international ports is an important factor for the development of economic corridors, this study will consider the potential eastward extension routes presented in Figure 1.1.

(1) Original alignment:

Moreh– (**India/Myanmar border**)–Tamu–Kygone–Kalewa–LarPoh–Yargyi–Monywa–Mandalay–Nay Pyi Taw–Bago (–Yangon)–Thaton–Eindu–Hpa-An–Kawkareik–Myawaddy (**Myanmar/Thailand border**)
Mae Sot

(2) Northern route for eastward extension:

Meiktila–Loilem–Keng Tong–Tarlay–Keng Lap (**Myanmar/Lao PDR border [Myanmar–Lao PDR Friendship Bridge]**) Xieng Kok–Muang Sing–Louang
Namtha–Nateuy–Oudomxay–Muang Khua–Pang Hok (**Lao PDR/Viet Nam border**) Tay
Trang–Dien Bien Phu–Son La–Hoa Binh–Ha Noi–Hai Phong

(3) Southern route for eastward extension:

Mae Sot–Tak–Nakhon Sawan–Bangkok(–Laem
Chabang)–Hinkong–Kabinburi–Aranyaprathet (**Thailand/Cambodia border**)
Poipet–Sisophon–Battambang–Pursat–Kampong Chhnang–Preach Kdam–Phnom Penh
(–Sihanoukville)–Neak Loung–Bavet (**Cambodia/Viet Nam border**) Moc Bai–Go Dau–Ho
Chi Minh City–Ba Ria–Vung Tau

In 2018, the Asian Development Bank (ADB) released a series of comprehensive reports on the assessment and review of configuration of the economic corridors under the GMS Economic Cooperation Program (ADB, 2018a–2018h).² As a result of the reconfiguration, a significant part

² The recommendations on the configuration of GMS economic corridors in ADB (2018a, p.19) are closely related to the TLH and its eastward extension: (i) include an extension at the western end of the EWEC to Yangon–Thilawa using the Myawaddy–Kawkareik–Eindu–Hpa-An–Thaton–Kyaikto–Payagi–Bago–Yangon–Thilawa route, with a possible extension to Pathein; (ii) include the Kunming–Dali–Ruili–Muse–Mandalay–Nay Pyi Taw–Yangon route in the NSEC; (iii) add an extension to the Kunming–Dali–Ruili–Muse–Mandalay–Nay Pyi Taw–Yangon route to link Mandalay to Tamu at the border with India, using the Mandalay–Kalewa–Tamu route via Monywa or Shwebo; (iv) add the Boten–Oudomxay–Luang Prabang–Vang Vieng–Vientiane–Nong Khai–Udon Thani–Nakhon Ratchasima–Laem Chabang route to NSEC; and (v)

of the TLH was designated as parts of the North–South Economic Corridor (NSEC). The section between Tamu and Mandalay, via Kyigone, Kalewa, Lar Poh, Yargyi, and Monywa, was named as subcorridor No.6 of the NSEC (NSEC-6). The section between Mandalay and Bago, via Meiktila and Nay Pyi Taw was designated as subcorridor No.5 on the NSEC (NSEC-5). The section between Yangon and Myawaddy, via Bago, Thaton, Hpa-An, Kawkaleik, was confirmed as a part of the East–West Economic Corridor (EWEC) with some minor reconfiguration.

The northern route of the eastward extension does not overlap with the GMS economic corridors, except for short sections between Luang Namtha and Nateuy (NSEC-1), which is also a part of the Asian Highway No.12 (AH-12), and Nateuy and Oudomxay (Muangsai) (NSEC-2), which is also a part of the Asian Highway No.12 (AH-12). Several sections overlap only with the Asian Highway. Meiktila–Tarlay in Shan State of Myanmar is a part of the Asian Highway No.2 (AH-2). The long section from Oudomxay in the Lao PDR to Ha Noi in Viet Nam via Pang Hok/Tay Trang border overlaps with the Asian Highway No.13 (AH-13), whereas the remaining Hanoi–Haiphong section is also a part of the Asian Highway No.14 (AH-14). In 2019, ASEAN, with support from the World Bank and Australian Aid, identified the upgrading of the section between Tarlay and Keng Lap (Kyainglat) as one of the 19 initial pipeline projects (World Bank et al., 2019a).³ In summary, the remaining section on the northern extension route, which is not covered by any international cooperation initiatives, is between Xieng Kok and Luang Namtha via Muang Sing in the Lao PDR. In particular, the section between Xieng Kok and Muang Sing has long been left out of development, is the only unpaved section along the northern extension route.

The southern route of the eastward extension overlaps with the EWEC from Mae Sot to Tak, and with the NSEC-1 from Tak to Bangkok, and with the Southern Economic Corridor (SEC-1) from Bangkok to Ho Chi Minh City in Viet Nam via Cambodia. Two branch routes from Bangkok to Laem Chabang and from Phnom to Sihanoukville are also parts of the SEC-3 and SEC-4, respectively.

include a Bangkok and Ha Noi link in NSEC using the Bangkok–Nakhon Ratchasima–Udon Thani–Sakon Nakhon–Nakhon Phanom–Thakhek–Na Phao–Chalo (via Route No.12)–Vung Anh–Vinh–Ha Noi route; (vi) include a link between Vientiane and Ha Noi using the Paksan–Nam Phao–Cau Treo–Vinh route with an extension to Vung Anh. Italic highlights, added by the author, indicate the section directory related to the TLH and its eastward extension.

³ World Bank et al. (2019b) also identifies the section between Takaw and Keng Tung (Kyaington) as one of the potential pipeline projects.

Overlapping with international cooperation initiatives does not guarantee assistance from the coordinating institutions, yet these sections are in a favourable position because they are closely connected with the international aid community. As ADB has its own funds to finance infrastructure projects, the sections that overlap with the GMS economic corridors are more likely to get access to external finance. Potential benefits of road infrastructure can be explored when the section is well connected to the existing networks of roads and other modes of transport. Therefore, it is important to design road infrastructure projects for the TLH and its eastward extension with close communication with these international cooperation initiatives. This also applies to the initial pipeline of transport infrastructure projects identified in the MPAC 2025 that are at an advanced stage of project preparation and are also being considered for co-financing from ASEAN's dialogue partners and international organisations.

1.3. The Trilateral Highway from the Perspectives of India, Myanmar, and Thailand

The TLH is originally an initiative of three countries: India, Myanmar, and Thailand. As is often the case, perspectives and expectations on the TLH differ by country. This subsection describes the image of the TLH from the perspectives of India, Myanmar, and Thailand separately, based on three country reports prepared for this study (De et al., 2020; MSR, 2020; and Banomyong, 2020).

(1) The Trilateral Highway from the Perspective of India⁴

The North Eastern Region of India (NER), consisting of the states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim, is India's natural resource powerhouse. The region is endowed with not only vast natural resources such as oil and natural gas and hydropower, but also has an agroclimatic condition that has been helping the region to grow some of the country's best agroforestry products. A well-educated labour force, relatively high literacy rate, and access to clean water are some of its unique strengths over other Indian regions. Besides, the NER is surrounded by an international border, serving as India's gateway to the east. As against these strengths, there are weaknesses and threats emanating to a large extent from the difficult terrain of the region and inadequate infrastructure (Sarma and

⁴ This subsection is based on the country report for India (De et al., 2020).

Bezbaruah, 2009). This poses one of the greatest constraints to economic growth, thereby nullifying the NER's border advantage. Transport and logistics bottlenecks have long been identified as serious constraints to the growth of the NER.⁵

Overall, trade and transport infrastructure in the NER is dominated by the distribution of goods and products that are sourced mostly from the rest of India. The region lags behind the rest of India in the pace of economic growth and has a relatively small regional market.⁶ Trade has special significance for the economies of the NER states. However, growth potential is considerably high in the NER, when one considers its geographical proximity to growing Southeast Asian and East Asian markets. Given its geographical location, an enhanced engagement with ASEAN under the Act East Policy (AEP) may generate new economic opportunities, thereby fuelling the growth in the NER, other things being equal.

The NER is central to the AEP. The AEP is designed to provide economic opportunities to the NER to benefit from its vast border and vibrant neighbours. The NER's value chain potential can be unlocked if border infrastructure and transportation networks, in particular, are improved (De and Majumdar, 2014). In other words, improvement of border infrastructure, coupled with enhanced transportation networks with ASEAN, may provide new economic opportunities to the NER (Sarma and Choudhury, 2018).

To strengthen the connectivity between India and ASEAN, the TLH between India, Myanmar, and Thailand is being developed and there is a plan to extend the highway to Cambodia, the Lao PDR, and Viet Nam.⁷ The completion of the TLH is expected to facilitate faster movement of goods and people between India and ASEAN⁸ and add growth impetus to the NER (De et al., 2019).

(2) The Trilateral Highway from the Perspective of Myanmar⁹

The TLH is not new for Myanmar and has been in talks for more than two decades from the time of the military government. The origin of the TLH on the Indian side is the India Myanmar

⁵ For example, De (2011), Brunner (2010), RIS (2012), De and Kunaka (2019), to mention a few.

⁶ The total population of about 46 million (2011 census) with 70% living in Assam alone.

⁷ According to the Chairman's Statement of the ASEAN-India Informal Breakfast Summit on 15 November 2018, the leaders welcomed India's proposal for a study by the Economic Research Institute for ASEAN and East Asia (ERIA) on developing an economic corridor along the Trilateral Highway (TLH) and the feasibility of its extension to Cambodia, Lao PDR, and Viet Nam.

⁸ Kimura and Umezaki (2011) and De (2016), to mention a few.

⁹ This subsection is based on the country report for Myanmar (MSR, 2020).

Friendship Road (IMFR), connecting Tamu, Kyigone and Kalewa, as well as another branch from Kyigone to Kalembo. The construction of the IMFR was started in March 1993 by the Border Road Organisation (BRO) of India, and completed on 13 February 2001.¹⁰

During the initial talks on the TLH with India and Thailand in 2002, Myanmar was represented by the Ministry of Foreign Affairs, headed by U Win Aung, who served as the Minister for Foreign Affairs from 1998 until 2004. The plan was to construct a highway from Moreh in India to Mae Sot in Thailand. The route was initially planned to go through the city of Bagan in Myanmar and to be completed within 2 years. In April 2003, a technical field survey on the 1,360 kilometre (km) highway was completed, and the route alignment was agreed under the Khin Nyunt administration.

However, between 2004 and 2011, many of the infrastructure projects were put on hold or discontinued, and the TLH project was no exception.

During the Thein Sein administration (2011–2016), Myanmar re-energised its infrastructure projects in parallel with massive inflows of investment coming both from the private and public sectors. Myanmar and India held a bilateral summit talk in Nay Pyi Taw, during the state visit of Manmohan Singh on 27–29 May 2012, then Prime Minister of India, to Myanmar. As an important result of the meeting, the leaders agreed to resume the development of the TLH. In particular, India was to undertake the Kalewa–Yargyi road segment to highway standard while Myanmar would undertake upgrading the Yargyi–Monywa stretch to the same standard by 2016. Based on the agreement in May 2012, Prime Minister Narendra Modi approved commencing the construction of 69 bridges on the Tamu–Kyigone–Kalewa section of the TLH. The progress and the current status of these projects are discussed later in the Chapter 3 of this report.

Taking advantage of its strategic location, Myanmar has keen interest in enhancing connectivity with neighbouring countries to serve as a ‘land bridge’ connecting three vibrant regions: Southeast Asia, South Asia, and China. The connectivity with Thailand and other ASEAN member states has been undertaken under the GMS Economic Cooperation Program lead by ADB since 1992. The most relevant project is the GMS East–West Economic Corridor (GMS–EWEC), the original alignment of which starts at Mawlamyine, the capital city of Mon State of Myanmar,

¹⁰ Ishida (2020), based on ‘India, Myanmar road opened’, *the Hindu*, 13 February 2001. After supporting the maintenance until 2009, India handed the road back to Myanmar.

passes through Thailand and Cambodia, and ends at Da Nang, a centrally-administered city in central Viet Nam. The connectivity with China was strengthened significantly during the military administration, when foreign relationships with other countries were almost discontinued. Myanmar is strategically important for China because it enables China to establish alternative trading routes to the Middle East, Africa, and Europe without passing through the Strait of Malacca. On the Indian side, the IMFR has been developed with assistance from India as mentioned above. Although the connectivity with neighbouring countries has been enhanced in this way under the initiatives of partner countries, these projects were designed to end at Myanmar, without exploring the full potential of Myanmar to become a land bridge. In this respect, the TLH is the first international initiative that assumes Myanmar's role as a land bridge connecting two of the three regions: South Asia and Southeast Asia. The current administration under the leadership of Aung San Suu Kyi recognises the TLH to be in line with national logistic plans.

(3) The Trilateral Highway from the Perspective of Thailand¹¹

Thailand favours the development of the TLH and has a Thai-centric perspective where the country believes that it will gain the most benefits from linking with India. Official Thai position is that Thailand will benefit from the TLH as Thailand is now the centre of transport and communication in the region as well as the gateway to ASEAN. India wants to trade with and invest in Thailand and use Thailand as a springboard to other ASEAN countries (Public Relations Department, 2016). Despite the actual efforts to promote the TLH, the Thai administration has not made many public statements on the importance of the TLH.

The Thai position shows Thailand as the logistics hub for the region (i.e. Southeast Asia) as well as the main entry point into ASEAN for India although Myanmar is the first contact point with India, in particular when it comes to land connectivity.

Myanmar also wants to be a key connector in linking ASEAN with South Asia. Myanmar is right in the middle between India and Thailand and has a lot to gain from enhanced connectivity with its two neighbours. However, Myanmar has not formulated a regional connectivity strategy and is working hard in terms of its own domestic connectivity due to infrastructure and legal limitations. The current regulatory environment in Myanmar also requires more improvement

¹¹ This subsection is based on the country report for Thailand (Banomyong, 2020).

for the implementation of the trade and transport facilitation agenda, thus making transit trade challenging.

These types of competing national strategies need to be understood if enhanced integration and connectivity is going to be achieved for the TLH. There are discussions on the modalities required for the development of the TLH, but progress has been slow. This is because the TLH requires not only road infrastructure investment and development, but also a facilitating institutional environment.

There already exists Indian investment in Thailand and there have been efforts to link Ranong Port on the Andaman Sea with ports in India. The most positive outcome was a feeder service and some memorandums of understanding signed by the Port Authority of Thailand. The biggest issue is that Ranong Port has no hinterland and feeder vessels linking with India are often empty for one leg of the journey. Nonetheless, the Port Authority of Thailand has been persistent in their development effort to make Ranong Port successful. Another key issue is the access channel, which belongs to Myanmar.

Thai policymakers have a strong belief that Thailand is the logistics hub for ASEAN and a target for Indian trade and investment. At the same time, Thailand wants to use the TLH to transport goods via Myanmar to India as part of its logistics development in order to reduce costs for Thai businesses when trading with India. It is believed that this will enable Thailand to sell more agricultural products to India and other South Asian countries. Sanitary and phytosanitary issues do not seem to be an urgent agenda item in the discussion related to the TLH.

According to the Thai commercial attaché in New Delhi, the TLH is 'an opportunity for Thai trade and investment as Thai goods are popular in India and benefit from the Thai–India Free Trade Area (FTA), and the ASEAN–India FTA. Currently Thailand has a trade surplus of around US\$ 8 billion with India. The average growth rate is around 10%, but many Thai businesses are unsure of doing business with India apart from the large firms due to a lack of information. The Indian market is changing rapidly and “new” India is an opportunity' (Matichon, 2018).

The Ministry of Commerce of Thailand has been inviting Thai small and medium-sized enterprises to develop their markets in India as demand is high with limited competition. The physical completion of the highway will enable enhanced connectivity with Thai agricultural products and perishable goods taking around 3 to 4 days to access markets in the NER of India,

which is faster than using sea transport from Thailand. The advice given is for Thai small and medium-sized enterprises to sell goods first and then explore investment opportunities with the Thai commercial office in New Delhi, which is willing to coordinate with Indian agencies to facilitate investment.

Provincial policymakers in Tak Province, at the border with Myanmar, also see the completion of the physical infrastructure as critical to the increase in trade, especially border trade. Local officials believe that there will be an increase by 42% of border trade value as a result of the completion of the second bridge linking Thailand and Myanmar. The expected yearly value for border trade was estimated at B100 billion, with the TLH being one of its main drivers. The TLH is seen as the main trade route between Mae Sot–Myawaddy–Yangon–India. The distance to India from Mae Sot is not considered far, with easy access and faster transit times.

This means that Thai goods will be able to access the eastern part of India, especially consumer goods as Thai products are considered to be high quality with reasonable prices. Thai goods are well accepted by consumers in neighbouring countries. However, since there are no official statistics for border trade, it is difficult to accurately estimate the overall value of border trade. It has been estimated that border trade values are underestimated by at least 60%.

The Thai private sector sees opportunities for cooperation along the TLH in agriculture, infrastructure, logistics, and tourism. The Thai private sector is looking for partners both in Myanmar and India to enable their cooperation interest. However, there is still a lack of information related to opportunities as well as an uncertain business environment.

There is a gap in understanding between the Ministry of Commerce and the perception of the Thai private sector. The Thai private sector considers the Indian market to be difficult and challenging to penetrate. They have limited knowledge of the potential market in the North Eastern Region of India. Even those that are selling there do not organise the logistics and prefer to sell at the Thai border. The buyers from Myanmar or India must arrange for the logistics themselves. Official transit is difficult and the use of 'grey' channels is the current optimal logistical system. This is why finding accurate border and transit trade statistics is impossible.

Tourism opportunities are often discussed by the Thai private sector. There is a strong potential for growth in tourism with the eastern part of India. Thailand is already a destination for Indian tourists. On average, there are more than 1 million Indian tourists per year visiting Thailand. Thailand is also a preferred location for 'Bollywood' movies, thus making Thailand well known to the Indian public.

The opinions related to the development of the TLH are mostly favourable both from the public and private sector in Thailand. However, the private sector sees more the challenges of linking with India via Myanmar from a trading perspective. Uncertain rules and regulations, unreliable logistics channels, limited infrastructure, and the lack of integrated service providers for transit to India has dampened the appetite of the Thai private sector. The public sector is more optimistic as it believes that the discussion between the three countries (India, Myanmar, and Thailand) will eventually create not only the infrastructure links, but also the supporting environment that will enable the success of the TLH.

1.4. Stocktaking

(1) ASEAN–India Connectivity (ERIA)

In 2010, ERIA conducted one of the earliest studies on connectivity between ASEAN and India, as an extension of its flagship study on the Comprehensive Asia Development Plan (CADP) (ERIA, 2010). The TLH was of course one of the key initiatives studied in the project. The resulting report, Kimura and Umezaki (2011), pointed out several policy recommendations related to the TLH. As for physical infrastructure, several sections were identified for repair or upgrading works including (i) a mountainous section between Palel and Moreh in Manipur, India, (ii) a section near the Thai border between Thingannyinaung and Kawkareik in Myanmar, and (iii) a section between Chaung U and Kalay in Myanmar. Regarding the institutional arrangements, Kimura and Umezaki (2011) pointed out the importance of (i) removing the restrictions on the tradable items and the mode of settlement for the border trade between India and Myanmar, and (ii) a proper enforcement of regional transport arrangements to enable logistic services providers to reduce the cost of cross-border transport.

The change of government in Myanmar in March 2011 triggered international assistance to the country, including those for the development of the TLH. During her first visit to Myanmar in October 2011, the Thai Prime Minister, Yingluck Shinawatra, discussed the importance of

bilateral cooperation including the construction of a new bypass road between Thingannyinaung and Kawkareik. As a result, a bypass route connecting the two towns was newly constructed under the assistance of Thailand, and officially inaugurated in June 2015. In May 2012, India's Prime Minister, Manmohan Singh, made a historical visit to Myanmar, for the first time in a quarter century, to embark on a new journey of bilateral cooperation, which included India's assistance to upgrade the Kalewa–Yagyi section by 2016 and to repair 71 bridges along the India Myanmar Friendship Road from Tamu, Kyigone, to Kalewa (TKK: 149.70 km), while Myanmar would upgrade the Yargyi–Monywa stretch to highway standard. Although delayed, the upgrading work of a 120.74 km section between Kalewa and Yagyi has been in progress with assistance from India and aiming for completion by May 2021. This would serve as an alternative route connecting Kalay and Chaung U in Myanmar. Looking beyond Moreh, the terminal point of the TLH in India, a 95 km section between Moreh and Imphal, including the section between Moreh and Palel, has been being upgraded and expanded assisted by ADB. In addition, an integrated check post was opened in Moreh in January 2019 to upgrade the functions of the existing land custom station. Institutional arrangements have been improved as well. Border trade between Moreh (India) and Tamu (Myanmar) was normalised in 2015 by removing the positive list of tradable items for barter trade. Furthermore, in order to facilitate cross-border transport along the TLH, India proposed a motor vehicles agreement to Myanmar and Thailand, although it is still under negotiation.

As described above, most policy recommendations by Kimura and Umezaki (2011) have already been realised or at least are in progress along the TLH. However, the development of the TLH itself is still in an early stage, and the utilisation is still limited, particularly on the Indian side as illustrated in the next subsection.

(2) GMS Economic Corridors (ADB)

As illustrated in Figure 1.1 the original alignment of the TLH is a combination of a part of the GMS–NSEC and the GMS–EWEC.

ADB conducted a comprehensive assessment of GMS economic corridors and published a series of reports in December 2018 (ADB, 2018b–2018h). The key items in this study are the road class (design standard) based on the Asian Highway standards and road conditions.

According to ADB (2018b), two sections in Myanmar, a 91.7 km section between Kalewa and Lah Poh and a 150.8 km section between Kalay and Gangaw, are classified as Below Class III in terms of design standard (Figure 1.2). The section between Kalewa and Lah Poh is part of a 122 km section between Kalewa and Yagyi, which is being upgraded with assistance from India. According to the Thai presentation at the 16th ASEAN Highways Sub-Working Group Meeting (16th AHSWG) in August 2018, this route is regarded as a part of the TLH. The section between Kalay and Gangaw, which is a part of the Asian (and ASEAN) Highway No.1, is not part of the official alignment of the TLH. This section is also important as an alternative route when the route through Kalewa, Lah Poh, and Yagyi is not available due to, for example, possible flooding of the Chindwin river.

Figure 1.3 indicates more sections that need upgrading. Along the TLH, the India Myanmar Friendship Road from Tamu and the section between Kalewa and Lah Poh are classified as Poor, and the sections between Lah Poh and Mandalay and between Nay Phi Taw and Taunggoo are classified as Fair.

The ADB reports cover all routes of the GMS economic corridors, therefore the information on the road class and road conditions are available for other GMS countries. This will be an indispensable source of information for the study team to consider the eastward extension of the TLH.

As Figure 1.4 shows, the road infrastructure in Thailand has no significant problems as all sections on the GMS economic corridor are designed as Primary or Class I, and the road condition is classified as Good. In Viet Nam, there is no Below Class III section and the road condition is largely Good. In Cambodia, the Lao PDR, and Myanmar, there remain significant sections Below Class III and Poor road condition.

Figure 1.2. GMS Economic Corridor Routes in Myanmar: Road Class



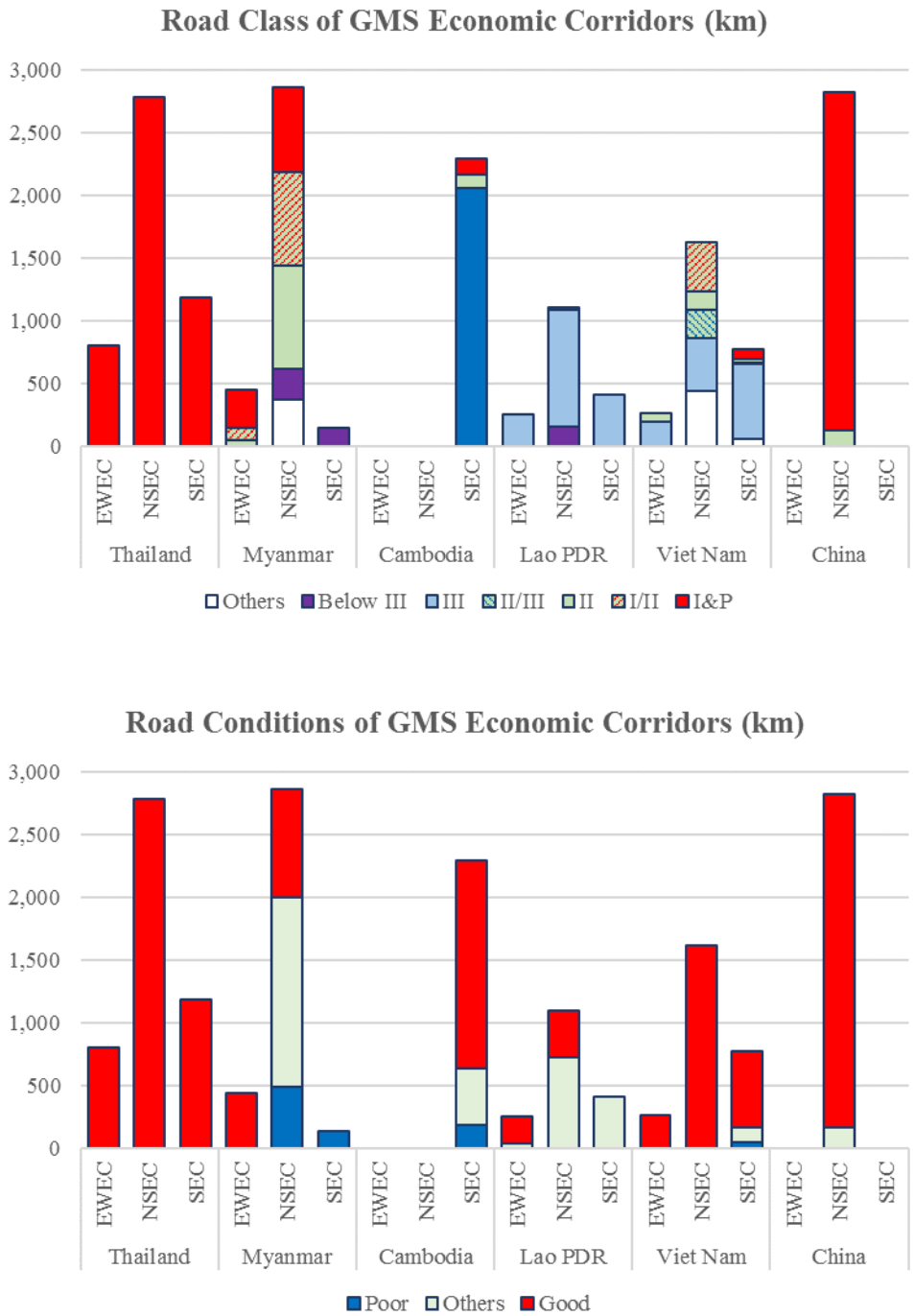
Lao PDR = Lao People’s Democratic Republic; PR = People’s Republic; TBD = to be determined;
 GMS = Greater Mekong Subregion.
 Source: ADB (2018b).

Figure 1.3. GMS Economic Corridor Routes in Myanmar: Road Conditions



Lao PDR = Lao People’s Democratic Republic; PR = People’s Republic; TBD = to be determined;
 GMS = Greater Mekong Subregion.
 Source: ADB (2018b).

Figure 1.4. Assessment of GMS Economic Corridors



EWEC = East–West Economic Corridor, GMS = Greater Mekong Subregion, I&P = Class I and Primary, NSEC = North–South Economic Corridor, SEC = Southern Economic Corridor.
 Source: Compiled based on ADB (2018b).

(3) The Asian Highway (UNESCAP)

The Asian Highway (AH) is a regional transport cooperation initiative aimed at enhancing the efficiency and development of road infrastructure in Asia, in support of the development of Euro–Asia transport links and improving connectivity for landlocked countries. The AH network comprises over 141,000 km of roads passing through 32 member countries. Although the AH project was initiated in 1959, the progress was slow until political and economic changes in the region spurred renewed interest in the network in the late 1980s and early 1990s. The formalisation of the AH network was initiated in 2002. UNESCAP worked with member countries to develop the International Agreement on the Asian Highway Network, which was adopted on 18 November 2003 and entered into force on 4 July 2005. The agreement includes a list of AH routes, classification, and design standards.

UNESCAP maintains the AH database, which includes more detailed information on the road conditions than the ADB reports. The AH database is updated on a biennial basis, and the last update was done in 2019. As the updating procedure depends on voluntary submission of information by member countries, the latest available data differ by country. The latest data were submitted in 2019 by India, Myanmar, and Viet Nam, and in 2017 from Thailand and Cambodia, whereas the Lao PDR has not updated the information since 2010. In addition, although UNESCAP prepares a template for the database, the available items and the quality of the data differ significantly by country. Although the information provided in the AH database is not sufficient to identify exact sections classified to each category, it is useful to narrow down the sections to conduct a detailed study.

The TLH overlaps with the Asian Highway No.1 (AH-1) between Tamu and Kyigone, between Sagaing and Myawaddy via Mandalay and Bago (Payagyi), and the additional section between Bago (Payagyi) and Yangon. According to the latest data for Myanmar in the AH database,¹² there are no Below Class III sections along these sections. Regarding the surface condition, 0.604 km out of 12.372 km section between Mandalay and Sagain, and 34.11 km out of 131.362 km section between Kalay (Kalemoyo) and Tamu are assessed as Poor condition.¹³

The northern route of eastward extension overlaps with the Asian Highway No.2 (AH-2) between

¹² Although the recent update was done in 2019, the information may not always reflect the status as of 2019.

¹³ The section between Kalay (Kalemoyo) and Kyigone is not part of the TLH.

Meiktila and Keng Tung via Kalaw, Taunggyi, Loilem, and Ta Kaw (633.37 km) and the section between Keng Tung and Tarlay, which is a part of 156.81 km section between Keng Tung and Tachileik. According to the AH database, there are Below Class III sections (unknown distance) on the 356.169 km section between Loilem and Keng Tung, and a 24.688 km section with Poor surface condition on the 177.129 km section between Loilem and Ta Kaw.

In the Lao PDR, the northern route of the eastward extension overlaps with the Asian Highway No.3 (AH-3) between Luang Namtha and Nateuy, with the Asian Highway No.12 (AH-12) between Nateuy and Oudomxay, and with the Asian Highway No.13 (AH-13) between Oudomxay and Pang Hok (a border with Viet Nam). According to the AH database, although it has not been updated since 2010, the 45 km section between Luang Namtha and Nateuy is Class II and the surface condition is Good; the 79 km section between Nateuy and Oudomxay is Class III and the surface condition is Good; the 172 km section between Oudomxay and Pang Hok is Class III and 103 km of the section is Good and the remaining 69 km is Fair in terms of the surface condition.

In Viet Nam, the northern route of the eastward extension overlaps with the AH-13 from Tay Trang (a border with the Lao PDR) to Ha Noi via Dien Bien Phu, Son La, and Hoa Binh; with AH-1 within Ha Noi from Hoang Mai to Thach Ban; and with the Asian Highway No.14 (AH-14) from Ha Noi to Hai Phong via Hai Duong. Although there is no information on the design standard in the AH database, all sections are two lanes or more, and the surface condition is Fair or Good, implying that there is no significant problem in the Viet Nam section of the northern route of eastward extension.

In Thailand, the southern route of the eastward extension is assumed to overlap with the AH-1 from Mae Sot (the border with Myanmar) to Aranyaprathet (the border with Cambodia) via Tak, Nakhon Sawan, and Hin Kong. According to the AH database, out of the total stretch (697.414 km), a 14.0 km section between Nonh Khae and Hin Kong is classified as Priority, and more than 605.639 km is Class I, and less than 77.775 km is Class II. That is, there is almost no problem in the road infrastructure in Thailand.

In Cambodia, the southern route of the eastward extension overlaps with the AH-1 from Poipet (the border with Thailand) to Bavet (the border with Viet Nam) via Kampong Chhnang and Phnom Penh. According to the AH database, out of the total stretch (577 km), more than 139 km is classified as Class II and more than 395 km is Class III. The remaining 43 km between Svay Rieng

and Bavet consists of Class II and Class III sections. In terms of surface condition, all sections are evaluated as Good. Although there remains room for improvement, it is important to emphasise that there is no Below Class III section any more, and the surface condition is Good along the southern route of the eastward extension.

In Viet Nam, the southern route of the eastward extension overlaps with the AH-1 from Moc Bai (the border with Cambodia) to Bien Hoa passing close by Ho Chi Minh City, and then with the Asian Highway No.17 (AH-17) from Bien Hoa to Vung Tau City. Although the information on the design standard is not provided in the AH database, the 29.9 km section between Moc Bai and Bien Hoa is four lanes, asphalt paved, and the surface condition is Fair; and the 73.6 km section between Bien Hoa and Vung Tau City via Phu My is six lanes, asphalt paved, and the surface condition is Good. That is, the southern route of the eastward extension in Viet Nam has no serious problem in the quality of road infrastructure.

In summary, along the original alignment of the TLH and its eastward extension, road sections classified as Below Class III or assessed as Poor surface condition are found only in Myanmar, according to the AH database. It is therefore important to put an explicit focus on these sections because the weakest link tends to determine the strength of the entire stretch of the road (Banomyong, 2012). In addition, the sections which do not overlap with the AH, i.e. the sections between Chaung-U and Kalewa via Yargyi and between Tarlay and Luang Namtha via the Myanmar–Lao PDR Friendship Bridge, need to be assessed in detail in this study.

(4) MPAC 2025 (ASEAN)

The Master Plan on ASEAN Connectivity 2025 (MPAC 2025) is one of the most important plans of cooperation in ASEAN in recent years (ASEAN, 2015). In order to achieve a seamlessly and comprehensively connected and integrated ASEAN that will promote competitiveness, inclusiveness, and a greater sense of community, the MPAC 2025 identifies five strategic areas: (i) sustainable infrastructure, (ii) digital innovation, (iii) seamless logistics, (iv) regulatory excellence, and (v) people mobility. It is important to note that all these areas are more or less related to the objectives of the TLH, implying that the development of the TLH itself can be a building block to achieve the vision of the MPAC 2025.

In November 2019, the ASEAN Secretariat released two reports on the initial pipeline of ASEAN infrastructure projects, the technical assistance from the World Bank, and the support of the

ASEAN–Australia Development Cooperation Program Phase II (World Bank et al., 2019a, 2019b). ‘The pipeline will be rolling, meaning that projects in the Initial Pipeline will evolve over time, as new project proposals are submitted, and existing projects in the Initial Pipeline are either implemented or removed from the Initial Pipeline due to lack of progress or change in circumstances. In this way, the pipeline is designed to be a long-term dynamic tool to help the ASEAN Member States assess and prioritize infrastructure projects that will have regional impacts’ (World Bank et al., 2019b, p.3).

Table 1.2 presents the list of initial and potential pipeline infrastructure projects. The projects highlighted in yellow are part of the original alignment of the TLH, whereas those highlighted in green are part of the eastward extension of the TLH. In addition, projects highlighted in blue are expected to generate significant synergies with the TLH and its eastward extension, by providing alternative modes of transport or enhancing connectivity with other parts of the region. The Yangon–Mandalay Expressway is indeed the most important segment of the TLH because it connects the two largest cities in Myanmar. This arterial road could be further enhanced by the Nay Pyi Taw–Kyaukpyu Expressway and the Muse–Tigyaing–Mandalay Expressway in the initial pipeline, and the Muse–Mandalay Railway and the Kan Pai Ti–Myiktyina–Tigyaing Expressway in the potential pipeline, because they are expected to enhance further the already strong connectivity with China. During the process, the role of Mandalay as a logistics hub will be strengthened, which in turn is expected to increase the traffic along the TLH as well. The Tamu–Kalay–Mandalay Railway in the potential pipeline is a challenging and costly project, which may require the success of the TLH in terms of increased flows of people, goods, and vehicles along the route as a prerequisite.

Table 1.2. Initial and Potential Pipeline Projects for MPAC 2025

Initial Rolling Pipeline Projects		Country	Sector	Type	US\$ mil.
1	Jalan Rasau Road Upgrading (19km)	Brunei	Road	B	44
2	Siem Reap – Ratanakiri Road Upgrading (390km)	Cambodia	Road	B	463
3	Kuala Tanjung International Hub Port and Industrial Estates: Phase II	Indonesia	Port	B	265
4	Expansion of Hang Nadim International Airport	Indonesia	Airport	B	421
5	Development of Kijing Port	Indonesia	Port	G	400
6	Lao PDR National Road No. 2 Upgrading (230km)	Lao PDR	Road	B	272
7	Lao PDR National Road No. 8 Upgrading (132km)	Lao PDR	Road	B	207
8	Lao PDR – Viet Nam Power Interconnector	Lao PDR	Power	G	50-130
9	Lao PDR – Myanmar Power Interconnector: Lao PDR Section	Lao PDR	Power	G	16.5
10	Myanmar – Lao PDR Power Interconnector: Myanmar Section	Myanmar	Power	G	50
11	Nay Pyi Taw – Kyaukpyu Expressway (380.85km)	Myanmar	Road	G/B	540
12	Muse – Tigyaing – Mandalay Expressway (443km)	Myanmar	Road	G	868
13	Yangon – Mandalay Expressway (589km)	Myanmar	Road	B	935
14	Tarlay – Kyainglat Road Upgrading (56.3km)	Myanmar	Road	B	71
15	ASEAN Digital Hub	Thailand	ICT	G	152
16	Hat Yai – Sadao Motorway	Thailand	Road	G	1,295
17	Bangkok – Nong Khai HSR: Phase II (355km)	Thailand	Rail	G	7,930
18	Southern Coastal Corridor Project: Phase II (100km)	Viet Nam	Road	G	346
19	Ho Chi Minh City – Moc Bai Expressway	Viet Nam	Road	G	570
Potential Pipeline Projects		Country	Sector	Type	US\$ mil.
1	Tunnel to Brunei Temburong Bridge	Brunei	Bridge	G	219
2	Jalan Labu Road Upgrading	Brunei	Road	B	22
3	Phnom Penh - Bavet Railway	Cambodia	Railway	G	865
4	H.A.S. Hanandjoedin Airport	Indonesia	Airport	B	27
5	Trans-Sumatra Railway: Jambi – Betung – Palembang	Indonesia	Railway	G	500
6	Trans-Sumatra Toll Road: Kuala Tanjung – Tebing Tinggi – Parapat	Indonesia	Road	G	63
7	Trans-Sumatra Toll Road: Palembang –Tanjung Api-Api	Indonesia	Road	G	676
8	Vientiane – Mu Gia Railway	Lao PDR	Rail	G	3,457
9	Mu Gia – Vung Ang Railway	Viet Nam	Rail	G	1,587
10	Thakhek – Savannakhet – Pakse – Vang Tao Railway	Lao PDR	Railway	G	2,306
11	National Road No.18A Upgrading	Lao PDR	Road	B	76
12	Lao PDR – Viet Nam Power Interconnector (North)	Lao PDR	Power	G	400
13	Viet Nam – Lao PDR Power Interconnector (North)	Viet Nam	Power	G	400
14	Muse – Mandalay Railway	Myanmar	Railway	G	4,000
15	Tamu – Kalay – Mandalay Railway	Myanmar	Railway	G	2,500
16	Dawei – Hitki Railway	Myanmar	Railway	G	2,200
17	Mawlamyine – Ye – Dawei Railway Upgrade	Myanmar	Railway	B	415
18	Kan Pai Ti – Myitkyina – Tigyaing Expressway	Myanmar	Road	G	840
19	Takaw – Kyaington Road Upgrading	Myanmar	Road	B	216
20	Hpa-An Bridge	Myanmar	Bridge	G	25
21	5th Thai – Lao Friendship Bridge	Thailand	Bridge	G	80

ASEAN = Association of Southeast Asian Nations, ICT = information and communications technology, MPAC = Master Plan on ASEAN Connectivity.

Note: G and B denote greenfield and brownfield investment, respectively.

Source: Compiled based on World Bank et al (2019a, 2019b).

The National Route No.2 (NR-2) in the Lao PDR,¹⁴ Tarlay–Kyainglat (Keng Lap), and the Ho Chi Minh City–Moc Bai Expressway overlap the northern route of the eastward extension of the TLH. The first two projects in the Lao PDR and Myanmar are still at early stages. In contrast, the Ho Chi Minh City–Moc Bai Expressway may be close to implementation as the Korea International Cooperation Agency recently conducted a pre-feasibility study in 2018.

The ongoing initiatives for the TLH and the eastward extension share the vision with the MPAC 2025, in the sense that both set a goal to achieve regional prosperity through the enhancement of physical and institutional connectivity. The eastward extension will provide more opportunities to the ASEAN member states to enhance the connectivity within the region as well as to widen access to India. In this respect, the TLH can be regarded as an important subset of the MPAC 2025. With this close relevance and strong commitment of the original members, India, Myanmar, and Thailand, the TLH can spearhead the development of regional transport and economic corridors, and thereby be an enabler of the MPAC 2025.

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¹⁴ Exactly speaking, NR-2 consists of NR-2W (130 km) from Pakbeng to Oudomxay (Muangxay) and NR2E from Oudomxay to Pang Hok at the border with Viet Nam facing Tay Trang (World Bank et al., 2019a). Although World Bank et al (2019a) explain eastward terminal is Khoua district, the attached map in World Bank et al (2019a) indicates the terminal is at the border with Viet Nam, that is, Pang Hok in May district.

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