

Chapter 4

GMS Economic Cooperation and Its Impact on CLMV Development

Masami Ishida

Institute of Developing Economies, JETRO

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Chapter 4

GMS ECONOMIC COOPERATION AND ITS IMPACT ON CLMV DEVELOPMENT

Masami Ishida

ABSTRACT

Development in the Cambodia, Laos, Myanmar, Vietnam (CLMV countries) is impossible to discuss without mentioning the projects of the Greater Mekong Subregion Economic Cooperation Program (GMS-ECP). The GMS-ECP is an economic cooperation program inaugurated in 1992 by six countries, namely, Cambodia, Laos, Myanmar, Vietnam, Thailand, and Yunnan Province of China through the initiative of Asian Development Bank (ADB). In this chapter, the three stages of GMS-ECP history is reviewed. Then, the concept of GMS economic corridors, which include the cross-border transportation agreement (CBTA), is explained. Finally, the paper reviews the policies implemented so far on using geographical locations for developing the economic corridors. Thus, favorable policies are identified and analyzed.

1. INTRODUCTION

About fifteen years ago, the Greater Mekong Subregion Economic Cooperation Program (GMS-ECP) was inaugurated (1992). Since then, the regional economic cooperation of the six Member Countries of GMS region (e.g., Cambodia, China, Laos, Myanmar, Thailand and Vietnam) have expanded and deepened. 1992 was considered a symbolic year because the long wartime in Indochina was ended through the Paris Peace Agreement in the following year. Peace building was an initial, yet, important role expected from GMS-ECP. Its members formulated means to grow towards peace,

through dialogues for economic cooperation among themselves.

Today, the GMS-ECP contributes in the regional integration of the East Asia through its free trade agreements. GMS-ECP designated the economic corridors within in the GMS region to facilitate increased cross-border trade and inland transportation among major cities in East Asia. Free trade movements, however, could widen regional gaps because they promote further agglomeration of the major cities.

On the other hand, Asian Development Bank (ADB) claims that one of the main purposes of the GMS-ECP is poverty reduction. The GMS-ECP is expected to play an important role in narrowing existing gap and reducing poverty while expanding and deepening the regional integration.

This chapter provides a review on the brief history of GMS-ECP and a description of the problems and prospects in realizing the economic corridors (ECS) of the GMS. This discussion provides clarity on the possible means to reduce the regional gaps. Section one explains the project sectors involve and the decisionmaking system. The second section traces the three stages of the GMS-ECS. The third section describes the transfiguration from the transport corridors to the economic corridors, referring specifically to the additional economic activities and the development of soft infrastructure of the economic corridors.

2. THE FRAMEWORK OF THE GMS-ECP

The Greater Mekong Subregion Economic Cooperation Program (GMS-ECP) started with a Ministerial Meeting through ADB's initiative. Its Member Countries are Cambodia, Laos, Myanmar, Vietnam, Thailand and China. As for China, Yunnan

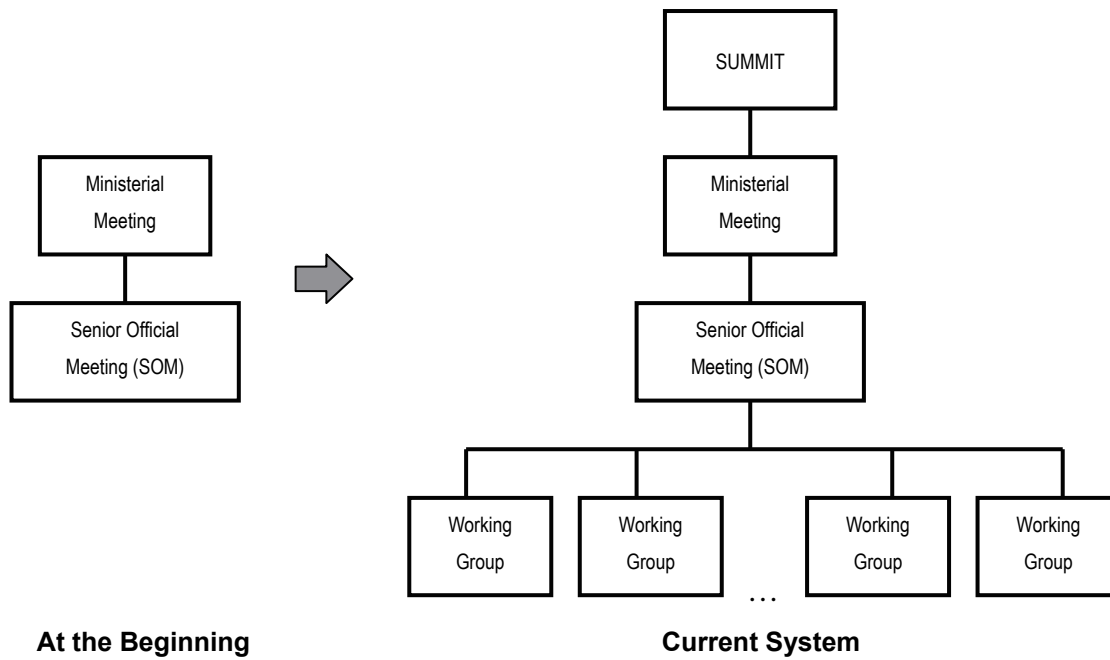
Province of China was initially considered as a member country of the program (ADB, 1993, p.1) but in 2005, Guangxi Zhuang Autonomous Region of China also became a member of the GMS-ECP.

GMS-ECP started with six development sectors, namely: transportation, telecommunication, energy, human resource, environment, and trade and investment. In 1994, tourism was added as a new development sector; trade and investment was separated in 1998; and, agriculture was included in 2001. Thus, it is now composed of nine sectors, namely: 1) Transportation; 2) Telecommunication; 3) Energy; 4) Human Resource; 5) Environment; 6) Trade; 7) Investment; 8) Tourism; and, 9) Agriculture.

After drawing the blueprint of potential projects in the region and the GME-ECP progressed into phases of implementation, Member Countries and ADB established the following sectoral working groups:

- (a) GMS Subregional Transportation Forum (STF)
- (b) Subregional Telecommunication Forum (STCF)
- (c) Electric Power Forum (EPF)
- (d) GMS Working Group on Human Resource Development (WGHRD)
- (e) Subregional Working Group on Environment (WGE)
- (f) GMS Business Forum (GMS-BF)
- (g) Subregional Investment Working Group (SIWG)
- (h) GMS Tourism Working Group (TWG)
- (i) Working Group on Agriculture (AGA)

In terms of the decisionmaking system, GMS-ECP started with two layers process (left side of Figure 1) which were the senior official meeting (SOM) and Ministerial Meeting. When the working groups were established, layers increased into three. In

Figure 1: Change in Decisionmaking System of GMS-ECP.

Source: author.

2002, a custom of opening the GMS Summit started, consequently, the number of layers increased to four (right side of Figure 1). Aside from the technical and financial support, ADB also acted as a catalyst or an “honest broker,” who encourages dialogues, provides the fora, and extends assistance when needed. The process only emphasized the fact that the Member Countries owns the GMS-ECP and not ADB, even if it had provided valuable assistance and resources.

3. BRIEF HISTORY OF GMS-ECP

The history of the GMS-ECP can be presented and understood easily by dividing its period into three stages; the first stage (1992-1996); the second stage (1994-2001); and,

the third stage (2001- to present).

3.1 First Stage (1992-1996)

The first stage (1992-1996) was the period that involved two components, namely, the creation of GMS-ECS principles and the fact finding and project formation. The creation of principle component generated several important principles, which were declared at the First Ministerial Meeting in 1992. One of the most important principle is the “two plus” principle, wherein, projects of the GMS-ECP need to be subjected into any of these two conditions:

- (a) each project involves, at least, two countries (purely subregional project), or,
- (b) a national project that will benefit the whole region (national project with subregional dimension).

Construction of a bridge at the border of two countries is an example of the former. A national project on constructing and opening a new airport, however, is an example of the latter. It is important to note that GMS-ECP project does not require the unanimous agreement of six countries; it can start based on an agreement of any number of participating countries. The “two plus” principle brought about more projects focused on border areas, which were more likely regarded as periphery and a cross-border trade. Moreover, the role played by ADB as an “honest broker”, utilizing, and improving existing infrastructure are also examples of other principles.

The second component of this stage is the fact finding and project formation. It involved the country visits of a study team, dialogues (exchange of views) on subregional cooperation, and the identification of projects to strengthen subregional economic cooperation. Thus, the Third Ministerial Meeting in 1994 finalized and

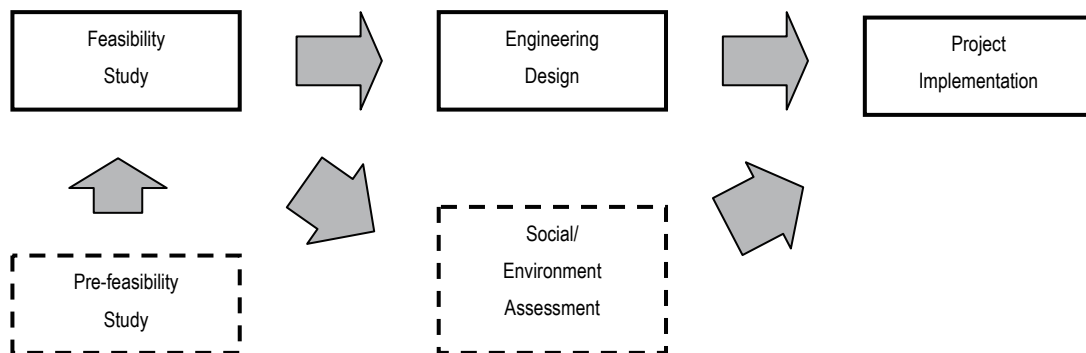
approved the list of projects that later became the blueprint of the GMS-ECP.

3.2 Second Stage (1994-2001)

The second stage (1994-2000) is the implementation stage of the listed projects. One of the listed projects was the Yunnan Expressway between connecting Chunxiong and Dali; it was constructed soon after it was listed up. However, most of listed projects start with feasibility study and undergo engineering design prior its stage of implementation. In some cases, pre-feasibility studies were conducted before a full blown feasibility study. Social and environment impact assessments were conducted simultaneously with the engineering study (Figure 2).

In terms of project financing, it was clear that not all listed projects were to be funded by ADB. Some national projects, with subregional dimension, were financed out of the country's budget. Others are sponsored or cosponsored by ADB or by the other donors.

Figure 2: Processes for Implementing Listed Projects.



Source: author.

3.3. Third Stage (2001- to Present)

The third stage started on the tenth anniversary of the GMS-ECP in 2001. Being a memorable year, GMS-ECP started its 10-Year Strategic Program (2002-2011). Projects were categorized into 10 flagship programs with GMS tourism development as the eleventh flagship program in 2002.

- 1) North-South Economic Corridor
- 2) East-West Economic Corridor
- 3) Southern Economic corridor
- 4) Telecommunication Backbone and ICT
- 5) Regional Power Interconnection and Power Trade Agreements
- 6) Facilitating Cross-Border Trade and Investment
- 7) Enhancing Private Sector Participation and Skill Competencies
- 8) Developing Human Resources and Skill Competencies
- 9) Strategic Environment Framework
- 10) Flood Control and Water Resource Management
- 11) GMS Tourism Development

4. ECONOMIC CORRIDOR

4.1 Transportation Corridors

Transportation sector is considered to be the most important among the GMS-ECP sectors. As a matter of fact, ADB initially felt the necessities for rebuilding transport infrastructure that was badly damaged by almost forty years of conflicts. In the 1994 list of the projects, the nine cross-border transport infrastructure (CBTI) routes were designated as road improvement projects of the subregional priority projects (Figure 3).

- R1. Bangkok-Phnom Penh-Ho Chi Minh City-Vung Tau Road Project
- R2. Thailand-Lao PDR-Viet Nam East-West Corridors
- R3. Chiang Rai-Kunming Road Improvement Project via Myanmar and Lao PDR
- R4. Kunming-Lashio Road System Improvement Project
- R5. Kunming-Hanoi Road Improvement Project
- R6. Southern Lao PDR-Sihanoukville Road Improvement Project
- R7. Lashio-Loilem-Kentung Road Improvement Project
- R8. Southern Yunnan Province-Northern Thailand-Northern Lao PDR-Northern Viet Nam Road Improvement Project
- R9. Northeastern Thailand-Southern Lao PDR-Northeastern Cambodia-Central Viet Nam Corridor Project

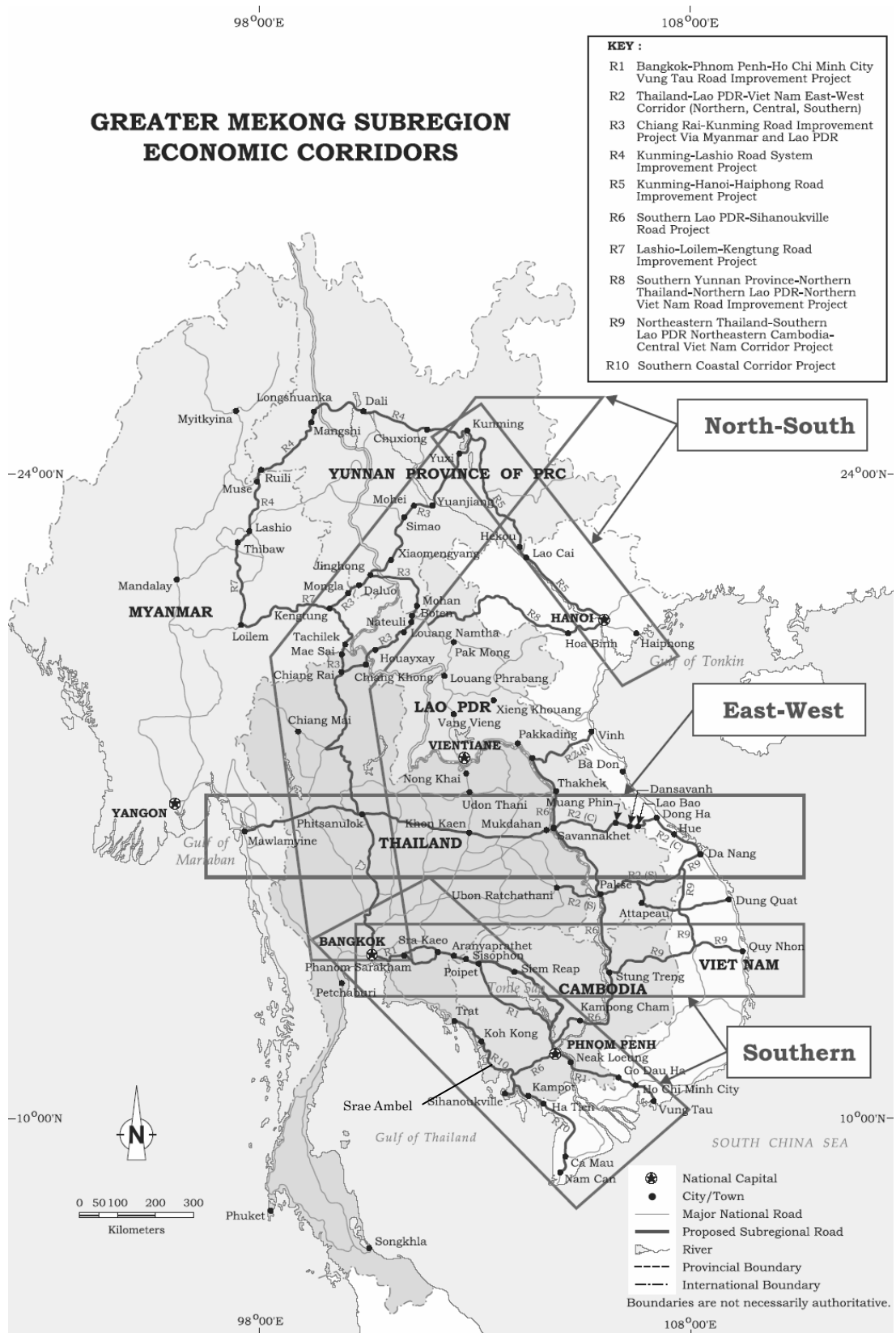
R1 is the Central Subcorridor of the Southern Economic Corridor (SEC). R2 is part of the East-West Economic Corridor (EWEC). R3 and R5 are parts of the North-South Economic Corridor (NSEC). The purpose of the projects is to construct and improve road infrastructure only. Nevertheless, the economic effects of the cross-border road infrastructure turned out to be larger based on the concept of the economic corridors and CBTA.

4.2 Three Economic Corridors

The concept of economic corridors was introduced at the Seventh Ministerial Meeting in 1998 at the time when its project implementation had been stagnated by the Asian currency Crisis. It was born to serve as a primer mover to conquer the difficulties after the crisis.

The basic idea of the economic corridors is to vivify economic activities along the

Figure 3: Three Economic Corridors in the Greater Mekong Subregion.



Source: ADB(2002).

transport corridor through the CBTI. Concrete examples, include: the establishments of industrial estates on the border area; the construction of telecommunication and electricity transmission cables; and, natural gas pipelines and tourism activities along the corridors.

The three economic corridors, composed of the EWEC, the NSEC and the SEC (Figure 3), were formally launched during the eighth Ministerial Meeting in 2000.

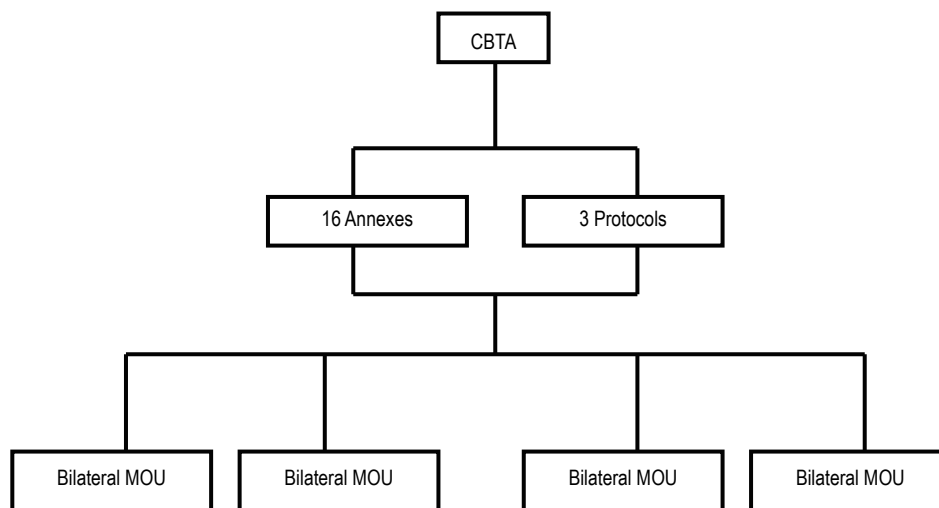
4.3 Cross-Border Transport Agreement

As the program entered into the second stage, some Member Countries emphasized the need for soft infrastructure or the removal of the nonphysical barriers that hindered free movements of commodities and people at the borders. Thus, this was considered at the second meeting of subregional transportation forum (STF) in 1995 and resulted in an agreement to conduct studies to realize such needs.

The studies examined the problems that prevent the free movement of commodities and people in the region and the existing international conventions on the cross-border movement of commodities and people. These studies were the basis of the STF in drawing the basic framework of the CBTA, that was explained at the seminars of the Member Countries. Consequently, Thailand, Laos and Vietnam signed the CBTA in 1999. Afterwards, Cambodia signed in 2001, China in 2002, and Myanmar in 2003 through the negotiation and amendment of some articles. Thus, by 2003, all the six Member Countries had already signed the CBTA.

Details of the CBTA, as provided in its 16 annexes and three protocols, were agreed by the Member Countries in March 20, 2007. Bilateral memorandums of understanding (MOU), in line with the CBTA (its annexes and protocols), for the

Figure 4: Stratum Structure of CBTA.



Source: Author in accordance with ADB (2002).

following borders were agreed upon (Figure 4).

- 1) Lao Bao, Vietnam and Danh Savanh, Laos on the EWEC
- 2) Savannakhet, Laos and Mukdahan, Thailand on the EWEC
- 3) Aranyaprathet, Thailand and Poipet, Cambodia on the SEC
- 4) Bavet, Cambodia and Mocbai, Vietnam on the SEC

As a matter of fact, beautiful pictures were drawn in the article of MOU, but they are far from the realities. Nevertheless, as a trial to realize the CBTA, the “single stop” inspection had already been undertaken at the borders of Lao Bao, Vietnam and Danh Savanh, Laos. The process of the single stop inspection involves the following phases:

Phase 1. Customs of exporting countries and importing countries are integrated to importing countries. This phase has been started already.

Phase 2. Documents for the customs clearance of the two countries are integrated.

Phase 3. Processes for quarantine of the two countries are integrated with the importing countries.

Phase 4. Processes for migration of the two countries are integrated to importing countries.

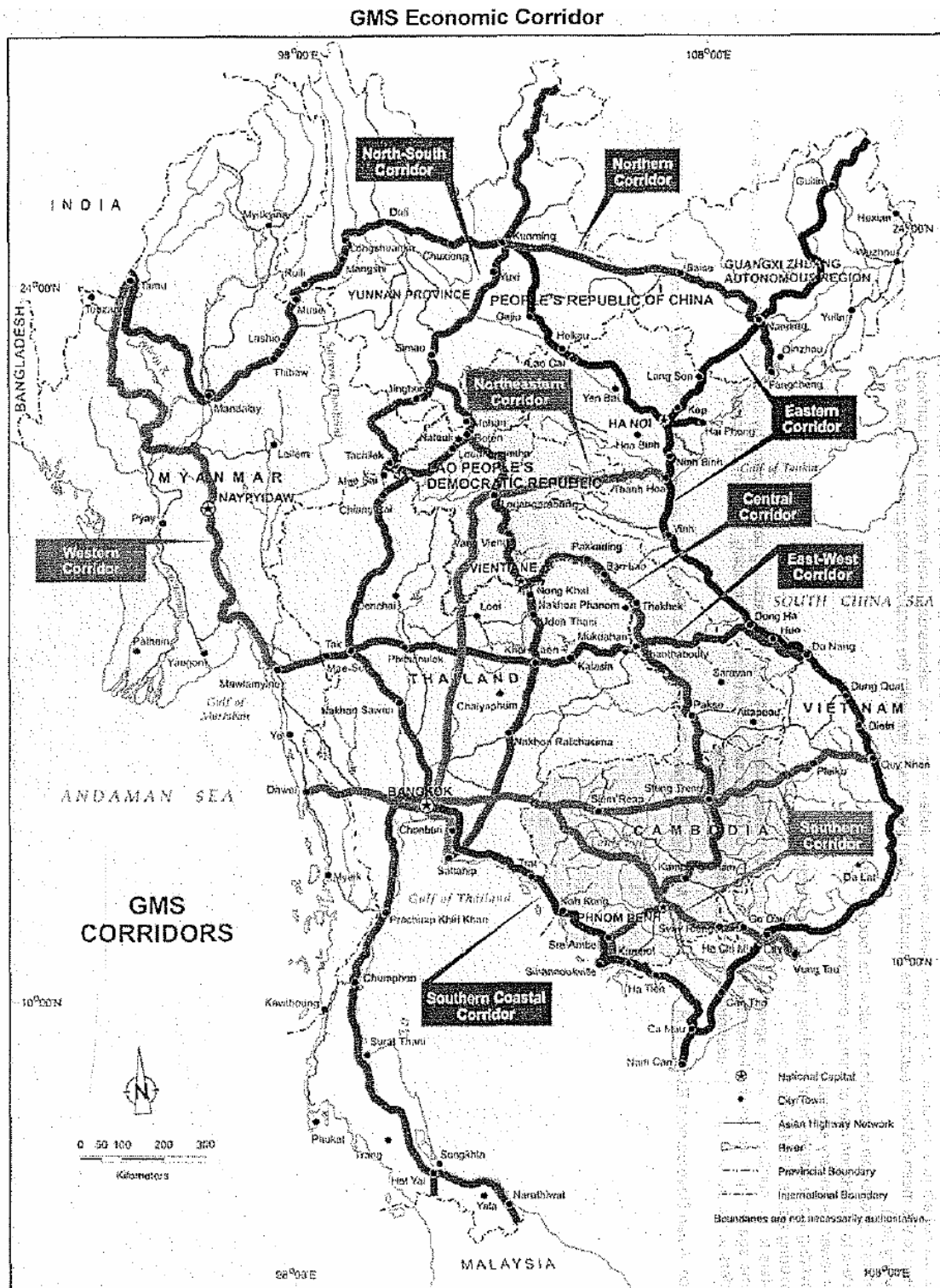
Furthermore, CBTA is explained to shorten the loading and unloading process through the release of Truck passport, that is the country's permit for a vehicle to pass from one country to another. A good example is the case wherein trucks can cross the borders between Thailand and Laos, and between Laos and Vietnam; but, trucks of Thailand and Vietnam cannot cross from each other's borders.

4.4 New Economic corridors

The 14th Ministerial Conference of GMS-ECP held in Manila on June 19-21, 2007, endorsed the Mid-Term Review of its 10-Year Strategic Framework (2002 – 2012). A draft for discussion, entitled *Mid-Term Review of the Greater Mekong Subregion Strategic Framework 2002 – 2012*, was published on ADB website. Based on the map of GMS economic corridor, new economic corridors were added, and some parts of North-South Economic Corridor were changed (Figure 5):

The Eastern Economic Corridor (EEC) is based on National Road No. 1 (NR 1) of Vietnam (between Camau and Dongdang); NR 322 or Expressway No. 075 (between Youyiguan and Guilin passing through Nanning of Guangxi Zhuang Autonomous Region); and, Changsha of Hunan Province (through an extension of the road). The Western Economic Corridor (WEC) is part of the Route No. 1 of Asian Highway and it

Figure 5: New Economic Corridors in the Greater Mekong Subregion.



Source: ADB (2007b).

Remarks

Eastern Economic Corridor : – Guilin – Nanning – Hanoi – Danang – Ho Chi Minh – Camau

Western Economic Corridor: Tam – Naypydaw – Mawlamyaine

Northern Economic Corridor: Fangcheng – Nanning – Kunming – Mandalay – Tamu

Northeastern Economic Corridor: Bangkok – Lom Sak – Luang Phrabang – Thanh Hoa

North-South Economic Corridor: – Kunming – Tak – Bangkok – Narathiwat –

Central Economic Corridor: Boten – Muang Xai – Luang Phrabang – Vientiane – Pakse – Stung Treng – Phnompenh – Sihanouk Ville

Other Economic Corridors: Sattahip – Chonburi – Bangkok – Dawei

: Bangkok – Nakhon Ratchasima – Khon Kaen – Vientiane

connects Mawlamyaine and Tam (through the new capital of Naypydaw) and Imphal of Northern Part of India (extension road). The Northern Economic Corridor (NEC) connects Guangxi Zhuang Autonomous Region, Yunnan Province, Myanmar, Fangcheng (the port city), and Imphal (located on the extension of Tam). This economic corridor plans to connect China and India by road. The Northeastern Economic Corridor (NEEC) passes in relatively underdeveloped areas. Both peripheries of the North-South Economic Corridor have changed; the north edge is Shuifeng (border of Yunnan Province and Sichuan Province); and, Chongqing is located on its extension roads. The Southern edge is extended from Bangkok to Narathiwat, while Kuala Lumpur and Singapore is located on its respective extension roads. As a result, the routes were changed and the junction of the EWEC was transferred from Phitsanulok to Tak on NR 1 of Thailand. The Central Economic Corridor basically connects Laos and Cambodia from Boten, the Lao border with China up to the port of Sihanouk Ville.

With regards to the other economic corridors: the route between Sattahip and Dawei connects the Eastern Seaboard Area (the most industrialized area in the region) to the one route passing through the deepest port of Andaman Sea. In this way, the

commodities produced in the Eastern Seaboard Area can be exported to India, the Middle East, and Europe without passing the Malacca strait. This corridor also gives Myanmar a short-cut route to the Pacific Ocean. The other route between Bangkok and Vientiane is the same with that of the NR 2 of Thailand.

5. THE IMPACTS OF ECONOMIC CORRIDORS AND FAVORABLE PROJECTS

5.1 After the Completion of the Second Mekong International Bridges

EWEC has been opened since the completion of the Second Mekong International Bridge between Savannakhet, Laos and Mukdahan, Thailand. However, some parts of the road between Thailand and Myanmar have not been paved and still operate on single lane. The NSEC is expected to be opened by the completion of another Mekong international bridge between Chiang Khong and Huay Xai in 2011. The Central Subcorridor of the SEC is also expected to be opened with the completion of Mekong River bridge of Neak Loeang in Cambodia.

The completion of the Second Mekong International Bridge is surely an epoch-making event in the development of the East-West Economic Corridor. However, the business community paid more attention to the Bangkok-Hanoi Road than the EWEC (Ishida, 2007a). Part of the EWEC, which also includes some parts of Laos, will be utilized for the movement of commodities between Bangkok and Hanoi. The government of Laos expressed worries on this situation, referring to a possibility that the Lao part of the EWEC is only being utilized for transit trucks between Bangkok and Hanoi. In the same manner, its government worries that the Cambodian part of the Central Subcorridor of the SEC will only be utilized for transit of trucks between

Bangkok and Ho Chi Minh City.

As a matter of fact, the completion of the abovementioned bridges of Mekong River will likely to increase transportation among the mega-cities like Bangkok, Ho Chi Minh and Hanoi. Such increases could cause further agglomeration of people and industries and expands the gap between major cities and rural communities along the economic corridors. In order to narrow the gap between rural communities and mega-cities along the corridors, the Member Countries should consider some favorable ideas/projects. As mentioned in the preinvestment survey, EWEC was designed to utilize the geographical features for its effective utilization; border areas, junctions and ports as gateways (ADB, 2001).

5.2 Special Economic Zones at Border Areas

In the GMS-ECP, the development of border areas has been the focus of intervention. These areas had been treated not only as peripheries, but also as the battle fields where opposing military forces faced each other prior the 1992 GMS-ECP inauguration. It is because border areas have several and unique advantages. For example, in a project at the border between a higher income country and a lower income country, the former can utilize labor forces of the latter at lower wages (compared to what they used to pay). Another example is about the resource endowments between a country with better economic infrastructures and that with poorer infrastructures. People from the latter can have access to supply of energy, telecommunication lines, water, and ports. Accordingly, dynamism can be born out of differences in factors and resource endowments between the two countries at border areas (Kudo, 2007).

Table 1 shows that special economic zones have been planned and some of them

Table 1: Realized and Planned Special Economic Zones.

Borders	Provinces		Values in Border Provinces as of 2003					
			Populations (1,000 persons)		Densities (Persons/Km ²)		GPP/cap. (\$US)	
Bavet–Mocbai	CV	Svay Rieng-Tay Ninh	551.0	1,017.1	185.8	252.4	366.1	
Koh Kong–Trat	CT		182.0	225.0	16.3	79.8	1,542.2	
Poipet-Aranya Prathet	CT	Banteay Mean Chey-Sa Kaeo	748.0	541.4	75.3	75.3	920.5	
Denh Savanh– Lao Bao	LV	Savannakhet–Quang Tri	833.9	608.5	38.3	128.2	300.9	234.0
Savannakhet-Mukdahan	LT		833.9	339.1	38.3	78.1	300.9	600.6
Thanaleng - Nong Kai	LT	Vientiane-Nong Khai	650.6	913.3	166.0	124.6	1,005.0	576.5
Huai Xai - Chiang Khong	LT	Bokeo-Chiang Rai	141.0	1,214.9	22.8	104.0	231.1	743.7
Myawaddy - Mae Sot	MT	Karen–Tak	1,607.0	498.7	52.9	30.4	309.3	1,010.8
Tachilek - Mae Sai	MT	Shan-Chiang Rai	5,142.0	1,214.9	33.0	104.0	448.3	743.7

Remarks: Data for the GPP per capita are very rough estimates. These were obtained using the following processes:

- 1) The GPP per capita in Vietnam was obtained by multiplying monthly per capita income (based on 2003-2004 household survey), with the population of provinces, by 12 months.
- 2) The GPP per capita in Laos was is a deflated value of 2005. It was obtained by dividing the GDP per capita ratio of 2005 by that of 2003 (based on ADB's *Key Indicators*).
- 3) The GRP per capita in Myanmar is based on inflated monthly household expenditure values from a 2001 survey. It was calculated by multiplying the GDP per capita ratio of 2003 by that of 2001 (based on ADB's *Key Indicators*). Annual expenditure per capita is obtained by dividing the annual expenditure per household by the value of the averaged household size and multiplying its quotient by 12 months.

Sources: Distances:

- Vietnam: Giao Thong Duong Bo Viet Nam, *Tap Ban Do, Thong Duong Bo Viet Nam*.
- Laos: measure through an automobile odometer when I traversed the route in August 31, 2006.
- Thailand: measured from the *Road Map of Thailand 2005-2006*, compact disk (CD), think net.
- Myanmar: measured with a ruler from the *Global Travel Map, Myanmar*, Asia Books. Area, Population and Income.
- Vietnam: General Statistics Office (2004) *Statistical Yearbook 2003*. General Statistics Office (2006); *Results of the Survey on Households Living Standards*, a paper presented in a workshop in Hanoi, January, 2006.
- Laos: collected from the Provincial Office of Laos.
- Thailand: National Statistical Office (Various Years) *Statistical Yearbook Thailand*.
- Myanmar: Central Statistical Organization (2002) *Statistical Yearbook 2002*. Exchange Rates
- Countries except Myanmar: IMF (Various Years) *International Financial Statistics*.
- Myanmar: the average value of daily exchange rates of the Foreign Exchange Certificate (FEC) Exchange Center in 2001 (based on the Tokyo Mitsubishi Bank).

had already been operating. In the Lao and Thai borders of Thanaleng – Nong Khai, a lot of manufacturing factories have already been operating along the road between the center of Vientiane city and Mekong Friendship Bridge even if it was not a GMS Planned Special Economic Zone. Similarly, an industrial estate had been developed at Bavet in Cambodia by the Manhattan Development, Ltd. with three foreign companies operating. In Lao Bao, Vietnam, a special economic zone had been built, also. Several manufacturing companies had been operating and many imported goods are being sold at duty free shops at the border area. In Mae Sot, Thailand, a lot of Thai companies produce garments by employing workers of Myanmar at cheaper wages.

On the other hand, enclosed lands had been prepared and designated for the special economic zones at Poipet and Koh Kong, but as of 2007, no company has built any factory in the area. In Savannakhet, a special economic zone had been planned with an investor intending to build an industrial estate at Savan district near the Second Mekong International Bridge. To this date, the whole land has not been bought from its inhabitants. As for the borders of Huai Xai – Chiang Khong and Tachilek – Mae Sai, the province of Chiang Rai is considered as a gateway for Laos and Myanmar while Chiang Saen Port of Mekong River plays a strategic gateway for Yunnan Province of China. A special economic zone has been planned in the area, but no investor has emerged so far.

Examining the provincial values of population, population density and gross provincial product (GPP) of border provinces in Table 1 revealed that provinces who have operational special border economic zones have relatively higher population densities (e.g., Bavet, Lao Bao and Thanaleng), while those some of having not been realized are caused by other reasons. An exception is the case in Mae Sot, where garment factories hire legal and illegal migrant workers from Myanmar causing the

increase in its population at the border area. It is also important to consider that provincial data do not always reflect the actual situation at the border, particularly, in big provinces (by area) like Shan and Karen in Myanmar.

As far as seeing the data of population density, the possibility of Savannakhet as a location of an industrial estate can be doubted. Although it is the second largest province in Laos, but the population density is smaller and its population are scattered. As a matter of fact, most of investors planned to invest in plantation and agricultural sectors, while the number of approved investors dramatically increased in 2006 before the completion of Second Mekong International Bridge (Keola, 2007). The population of Koh Kong is also relatively small and it is in the similar situation. As a matter of fact, Khon Kaen Sugar Industry Public Company, Ltd. (Thai company) which has been the share holder of Savannakhet Sugar Corp. and Koh Kong Plantation Co., Ltd., has been granted concessions of 10,000 and 20,000 ha, respectively in Savannakhet and Koh Kong (*The Nation*, August 17, 2007).

Locating industrial estates at border areas with relatively smaller population is not appropriate as far as a large scale of labor migration does not occur; it cannot make use of abundant labor force with cheaper wages. Instead, such areas should make use of other factor endowments with comparative advantages like abundant land and natural resources. Needless to say, however, developing such border areas should be socially and environmentally sustainable.

5.3 Making Use of Junctions

The preinvestment survey for the EWEC in 2001 enumerates Phitsanulok, Khon Kaen and Dong Ha as intersection or junctions of the NSEC, the National Road No.2 (NR 2)

of Thailand and the NR 1 of Vietnam, respectively. Specifically in Phitsanulok, commodities produced at cities or villages along the EWEC can be transported to cities and villages along the NSEC like Chiang Mai, Kunming, and Bangkok; the same happens with commodities from the NSEC to the EWEC. Similarly, at Khon Kaen, the NR 2 of Thailand can transport goods to Vientiane, Nakhon Ratchasima and Bangkok; and at Dong Ha, NR 1 of Vietnam can transport goods to Hanoi and Ho Chi Minh Cities.

In addition to the abovementioned junctions, Seno district in Savannakhet, where the EWEC crosses with NR 13 of Laos, is a very important junction. Savannakhet is a special economic zone and Seno was either mentioned alone or with Savan. NR 13 is the most important passage in Laos, that connects major cities like Luang Phrabang, Vientiane, Savannakhet and Pakse. In fact, Japan Logistic System Corp established a joint venture with Logitem Laos GLKP Co., Ltd.. It started operating an interland container depot (ICT) at Seno district on October 1, 2007. The joint venture transfers freights between Bangkok and Hanoi. This reiterates that Seno is not only an important junction in NR 13, it also serves as transfer point for freights between Bangkok and Hanoi. Thus, Savannakhet remains a strategically important location even if it may not be an appropriate location for industrial estate. Similarly, developing ICT has been planned at Khon Kaen and Phitsanulok. (Tsuneishi, 2007, p.21). Based on the map of new economic corridors (Figure 5), Table 2 enumerates all other junctions.

5.4 Major Cities and Ports as Potential Markets

Table 2 enumerates the major cities and ports, which are important and export potential markets. For CLMV countries, there are many other major markets in Thailand and

Table 2: Junctions of Economic Corridors, Major Cities and, Ports along them.

Junctions	Country	Corridors and Major Cities and Ports	Corridors and Major Cities and Ports
Tak	Thailand	EWEC Danang, Khon Kaen, Maulamyaine	NSEC Bangkok, Kunming
Phitsanulok	Thailand	EWEC	NSEC
Khon Kaen	Thailand	EWEC	NR 2 Bangkok, Vientiane
Savannakhet	Laos	EWEC	CEC Vientiane, Phnom Penh, Sihanouk Ville
Dong Ha	Vietnam	EWEC	EEC Hanoi, Danang, Ho Chi Minh
Luang Phrabang	Laos	NEEC Bangkok, Hanoi	CEC Kunming, Vientiane, Phnom Penh
Stung Treng	Cambodia	SEC Siem Reap, Quy Nhon	CEC
Sre Ambel	Cambodia	SEC Eastern Sea Board Area	CEC Phnom Penh, Vientiane

Source: Prepared by the author based on Figure 5.

China. Provinces near major cities can also serve as potential markets, as in the case of Ayutthaya and Rayong Provinces in Bangkok. Because of the many factories established in these areas, income level was found to be relatively higher. And, Member Countries of the CLMV has many important major cities such as Phnom Penh, Vientiane, Yangon, Mandalay, Hanoi and Ho Chi Minh. Connecting these major cities by roads is very strategic in marketing the goods they produced (Table 3).

Along with economic growth is the risk of traffic jams. Major national roads most likely converge in major cities like Bangkok, Hanoi, Ho Chi Minh and Phnom Penh. Thus, outer ring roads are needed to connect major national roads while avoiding possible traffic jams.

Ports are the gateways for export markets. The same is true with bringing the goods produced in CLMV countries to the overseas market. In the Mekong Region,

Table 3: Population and Economic Indicators of Major Cities in GMS Area in 2003.

		Area (1,000 Km ²)	Population (1,000 Persons)	Density (Persons/Km ²)	GPP/Cap. (US\$)	GPP (million US\$)
Phnom Phen	Cambodia	267.0	1,283.0	4,805.2		
Kampong Cham	Cambodia	9,799.0	1,805.0	184.2		
Vientiane	Laos	3,920.0	650.6	166.0	824.4	536.3
Yangon	Myanmar	10,166.9	6,188.0	608.6	208.8	1,292.2
Mandalay	Myanmar	37,008.1	7,407.0	200.1	183.6	1,359.7
Ho Chi Minh	Vietnam	2,095.2	5,554.8	2,651.2	894.5	4,968.8
Ha Noi	Vietnam	921.0	3,007.0	3,264.9	619.6	1,863.2
Danang	Vietnam	1,255.5	747.1	595.1	514.7	384.5
Bangkok	Thailand	1,565.2	5,844.6	3,734.1	7,215.8	42,173.4
Chiang Mai	Thailand	20,107.1	1,603.2	79.7	1,356.5	2,174.7
Nakhon Ratchasima	Thailand	20,494.0	2,591.1	126.4	1,028.2	2,664.0
Khon Kaen	Thailand	10,886.0	1,770.6	162.6	1,143.4	2,024.4
Ayutthaya	Thailand	5,890.1	751.3	127.5	3,403.1	2,556.6
Rayong	Thailand	3,552.0	556.7	156.7	13,726.8	7,642.2
Kunming	China	21,582.0	5,008.0	232.0	1,963.8	9,834.6
Nanning	China	-	6,416.7	-	946.2	6,071.4

Sources and Remarks: Same in Table 1.

Laem Chabang Port and Khlong Toey Port play the most important role in export marketing. Export goods produced in Laos are usually transported through these sea ports. Likewise, Cambodia, Myanmar, Southern Vietnam and Northern Vietnam uses the Sihanouk Ville, Yangon, Saigon and Haiphong ports as feeder ports to Hong Kong or Singapore, respectively (Table 4).

For the cities and villages in the EWEC, the Danang and Maulamyine ports are designed as the gateways to the Pacific and Indian Oceans, respectively. Danang port (Tiensa), specifically, was expected to be one of the deepest ports in Vietnam. However, the quantity of container cargos is less than those in Saigon and Haiphong. The latter

Table 4: Major Sea Ports in the Mekong Region

Port	Country	Location	Depth (m)	Container Throughput (TEU/Year)
Sihanouk Ville	Cambodia	Sea	8.3	231 (2006)
Phnom Penh	Cambodia	River	5	-
Yangon	Myanmar	River	9	129 (1999)
Thilawa	Myanmar	River	10	-
Maulamyaine	Myanmar	Sea	-	-
Dawei	Myanmar	Sea	12	-
Khlong Toey	Thailand	River	8	-
Laem Chabang	Thailand	Sea	14	4,642 (2006-07)
Map Ta Phut	Thailand	Sea	10	-
Saigon	Vietnam	River	10	1,200 (2005)
Thi Vai & Cai Mep	Vietnam	River	15	-
Qui Nhon	Vietnam	Sea	-	-
Danang	Vietnam	Sea	12	34 (2005)
Hai Phong	Vietnam	River	8	400 (2005)
Cailan	Vietnam	Sea	12	-

Sources: Ishida (2007b), *Port Autonome de Sihanoukville*, web sites of Institution for Transport Policy Studies and *News Net Asia* on December 4, 2007.

rivers ports, however, are relatively shallow. The smaller quantity of cargo reflects the level of industrialization in Danang City. If the port city is less industrialized, the quantity of cargos becomes smaller; thus, lesser ships dock in the port. Furthermore, lesser ship implies that the location is not attractive for an export-oriented investment. The development of industries and transport infrastructures mutually need each other. The port of Maulamyine was expected to reduce the transport time, by passing through the Malay Peninsula and the Malacca Strait, to exports goods from Thailand to Europe and the Middle East. However, it has not been developed because the area is shallow and still needs to be dredged. Dawei is another potential deep sea port. Thus, a road connecting Bangkok and Dawei has been planned as a new economic corridor.

As for the other sea ports, Thilawa, Chi Vai and Cai Mep, and Cailan port will also be developed to serve as the substitutive sea ports of Yangon, Saigon and Hai Phong, respectively. The Map Ta Phut Port is being used primarily as an industrial port in a chemical industrial complex. Lastly, Qui Nhon Port is expected to serve the border areas of North Sub-Corridor of the SEC.

6. CONCLUDING REMARK

The GMS-ECP has been focused in the development of transport infrastructure. By all means, spreading and expanding transport infrastructure network is effective for the remote villages to sell their goods to major markets in the region as well as overseas. Needless to say, however, to be able to increase the function of transportation network, efforts to reduce cross-border barriers such as CBTA, the use of junctions, and ports for exports, are needed. In addition, it is also necessary to recognize the marketing demands and needs of remote areas.

More than giving opportunities for remote areas to sell their goods, it is also strategic to develop border areas as special economic regions. At the borders between relatively developed countries, like Thailand and underdeveloped countries, the differences of factors and resource endowments can create dynamism for the advantage of both.

Finally, the GMS-ECP can be considered as the most effective development scheme in the region among the other economic cooperation schemes that had been implemented (i.e., AIA and ACMECS). Future development in the region will be implemented along the railway of the economic cooperation program. As learned from

the case of Danang Port, however, developing of infrastructure alone does not bear fruits but its relation to the overall welfare of every Member Country. Furthermore, the greater roles played by the public sector in the GMS-ECP is significant in operationalization of the objectives of GMS-ECP. In the future, however, an industrial development driven by private sectors maybe explored.

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