

ERIA Discussion Paper Series

Special Economic Zones and Economic Corridors

Masami ISHIDA^{#§}*Development Studies Center, Institute of Developing Economies, Japan*

June 2009

Abstract: Various reports show that special economic zones (SEZ) have become a prime catalyst for regional development in developing countries such as China and the ASEAN countries. The SEZ can be defined as a specific geographical region with economic laws that are more liberal than a country's typical economic laws. Many SEZs have characteristics of bonded zones, export processing zone (EPZ) or free trade zones and provide special incentives, including tax exemption or reduction to investors. The purpose of the paper is to enumerate the candidates for SEZ in Cambodia, Laos, Myanmar, and Vietnam (CLMV countries) according to four types: "metropolitan areas," "ports and harbors," "border areas" and "junctions or intersections." The first two types are based on the experience of forerunning ASEAN countries and the latter two are based on the economic corridors of the Greater Mekong Sub region Economic Cooperation Program. The paper concludes by identifying locations for the questionnaire and flowchart approach-based surveys, and presenting country-specific strategies.

Keywords: ASEAN, SEZ, Port, Harbor, Junction, Economic Corridor, CLMV, GMS.

JEL Classification: L6, L91, N75, O18, O53.

[#] Director, Development Studies Center, IDE-JETRO. Address: Institute of Developing Economies, JETRO, 3-2-2 Wakaba, Mihama-ku, Chiba-shi, Chiba 261-8545 Japan. E-mail: toshihiro_kudo@ide.go.jp.

[§] This research was conducted as a part of the Economic Research Institute for ASEAN and East Asia (ERIA) project "Research on Development Strategies for CLMV Countries." The author is deeply indebted to the members of this project. The opinions expressed in this paper are the sole responsibility of the author and do not reflect the views of the ERIA.

1. Introduction

The East Asian countries have attained remarkable economic growths in these 30-40 years. One of the major factors of economic growths in forerunning ASEAN countries (Singapore, Malaysia, Thailand, the Philippines, and Indonesia) and China can be attributed to their massive foreign direct investment (FDI) in specific areas.

In the forerunning ASEAN countries, industrial estates had been built mostly in the suburban areas of capital cities. With several incentives provided by the governments, many foreign companies have invested and set up their factories in these industrial estates since the second half of the 1980s.. In the first half of 1980s, the government of China designated five cities as Special Economic Zones (SEZ)¹ and later, 14 open coastal cities (OCC). These areas have received huge inflows of FDI, especially after 1992². At present, these areas in the ASEAN countries and China are connected by container ships and have formed various industrial production networks.

Given the recently-developed and diversified modes of transportation, the companies can now choose the most efficient mode of transports---via sea, air, roads or railways. Economic corridors have been developed under the Greater Mekong Subregion Economic Cooperation Program (GMS-ECP), where major roads have connected the ASEAN countries with China and will connect ASEAN-China with Southern Asia. With the additional options provided by roads or railways, companies' behavior will change, and the importance of Cambodia, Laos, Myanmar, and Vietnam (CLMV) as connectors of the three regions will increase.

¹ It is said that this is the origin of Special Economic Zones (SEZ). Since then, such SEZs have been established in several countries. Characteristics of SEZ are diverse, but it can be defined as a specific geographical region with economic laws that are more liberal than a country's typical economic laws. Many SEZs have characteristics of bonded zones, export processing zone (EPZ) or free trade zones and provide special incentives including tax exemption or reduction for investors.

² 1992 was a remarkable year: Deng Xiaoping visited southern China and appraised the progress of SEZ. That year, the 14th Congress of Chinese Communist Party came up with the term "Socialist Market Economy."

The purpose of this study is to search for the candidates for SEZ in CLMV after classifying SEZs into four types. Section 2 identifies two types of SEZ from the experiences of the forerunning ASEAN countries. Section 3 introduces economic corridors of the GMS-ECP, recognizes two other types of SEZ, and explains the cross-border transport agreement (CBTA) as a measure for cross-border trade and transport facilitation. Section 4 searches for candidates of SEZ in CLMV and selects cities for the questionnaire survey and the flowchart approach-based survey. Section 5 concludes with country-specific strategies.

2. Experiences of Forerunning ASEAN Countries

Forerunning ASEAN countries such as Malaysia, Thailand, and Indonesia have received massive FDIs from Japan and Asian newly industrializing economies (NIEs) such as South Korea, Taiwan, Hong Kong and Singapore since the middle of the 1980s. As a result, an international production and distribution network has been formed among the economies of Japan, Asian NIEs, China, and ASEAN countries. A review of the development of these forerunning ASEAN countries makes it clear that the areas that have attracted large investment are not many: for example, Kuala Lumpur, Selangor, Johor and Penang in Malaysia, Eastern Sea Board Area (Chonburi and Rayong), Bangkok and its neighboring prefectures (Ayutthaya, Pathumthani and Samutprakarn) in Thailand, Jabotabek (Jakarta, Bogor, Tangerang and Bekasi) area in Indonesia, and neighboring areas of Manila (Cavite and Laguna) in the Philippines (Figure 1)³. These areas have common characteristics: their distance from a port or harbor is relatively short, and the procurement of labor force is easy or the population is relatively large⁴. In addition, industrial estates and infrastructure such as

³ These areas are introduced as provinces, states or prefectures that had received a lot of investment from Japan (Ishida 2006).

⁴ As an exceptional case, Lamphun, a province in the Northern part of Thailand, has already received

Figure 1. Forerunning ASEAN Countries: Areas that Received Substantial FDIs



Source: Circles were added on the map of South-East Asia by the author.

highway, electricity, and water for industrial use have been developed. Industrial estates or factories in the estates have often been designated as bonded zones or bonded factories, respectively. Finally, tax incentives were given to companies that invested in these areas.

Of the areas within CLMV where the distance to their port and harbor is relatively short and where labor force is available or the population is relatively large, Ho Chi Minh City and Hanoi and their suburban provinces (Dongnai and Binduong Province and Hai Phong, Hai Duong, Vinh Phuc and Bac Ninh Province) have been identified and in fact have already received huge FDIs. It is not easy, however, to find such areas with both larger population and better access to deep ports in Cambodia, Laos, and Myanmar (CLM⁵). Thus, one needs

huge FDI.

⁵ This expression is sometimes used because the Vietnamese economic development is the most outstanding among CLMV countries.

to loosen the conditions for SEZ in this case as thus: If one---instead of both---conditions is present, then an area can be a candidate for SEZ. That is, if the population is relatively large and dense, or if the distance to any ports and harbors is relatively short, then an area can be a candidate as SEZ. Locations with the former characteristic are called “metropolitan areas”, while the latter is termed as a “port and harbor area” in this paper.

Aside from loosening the SEZ conditions, the CLMV countries have been benefiting from the development of the GMS-ECP economic corridors. Thus, in the next section of this paper, these economic corridors of GMS-ECP are introduced before the candidates for SEZ are enumerated.

3. Economic Corridors of GMS-ECP

3.1. Economic Corridors

The economic corridor is a concept introduced at the GMS Eighth Ministerial Meeting in 1998 at a time when the GMS-ECP implementation was stalled by the Asian Currency Crisis. Economic corridors were born to help the area to rise above the difficulties after the crisis. The basic idea is to enliven economic activities along the major roads or the transport corridors. Concrete examples include the establishments of industrial estates on the borders, and the construction of telecommunication and electricity transmission cables, and natural gas pipelines and tourism activities along the corridors.

The routes of the economic corridors are designated as follows (Figure 2):

- East –West Economic Corridor

Danang (Vietnam) –Dongha – Laobao = Dengsavan (Laos) – Savannakhet = Mukdahan (Thailand) – Phitsanulok –Tak –Maesot =Myawaddy (Myanmar) –Paan –Mawlamyine

Figure 2. Three Economic Corridors in the Greater Mekong Sub Region



Source: ADB (2002).

- North –South Economic Corridor

Bangkok (Thailand) – Phitsanulok –Chiangrai;

Chiangrai – Chiang Khong =Huayxai (Laos) – Luangnamtha –Boten =Mohan(China)
–Xiaomengyang (Laos Route);

Chiangrai –Maesai = Tachilek (Myanmar) –Kyaingtong –Mongla = Daluo (China)
–Jinghong –Xiaomengyang (Myanmar Route);

Xiaomengyang – Simao –Kunming;

Kunming–Hekou = Laocai (Vietnam) –Hanoi –Haiphong;

- Southern Economic Corridor

Bangkok (Thailand)-Aranyaprathet = Poipet (Cambodia) –Sisophon);

Sisophon –Battambang –Phnom Penh (NR 5 Route)

Sisophon –Siem Reap –Phnom Penh (NR 6 Route)

Phnom Penh –Bavet =Mocbai (Vietnam) –Ho Chi Minh City –Vungtau

The East–West Economic Corridor (EWEC) is a simple route from Danang of Vietnam on the coast of the Pacific Ocean, to Maulamyine of Myanmar on the coast of the Indian Ocean. The North-South Economic Corridor (NSEC) is divided into sections: Bangkok–Kunming Road and Kunming–Hanoi–Haiphong Road. The Bangkok–Kunming Road has two routes between Chiangrai (Thailand) and Xiaomengyang (China), which are the Laos Route and the Myanmar Route. The Southern Economic Corridor (SEC) has two routes between Sisophon and Phnom Penh: the National Road 5 (NR5) route and the NR6 route.

Later, two sub corridors were added to the Southern Economic Corridor (SEC), and the route from Bangkok to Vungtau has been called the central sub corridor of the SEC.

The new sub corridors are:

- Southern Coastal Sub corridor

Trat (Thailand) = Koh Kong (Cambodia) –Kampot –Kep –Kampong Trach =Praek Chak (Vietnam) –Hatien –Rachgia –Namcan

- Northern Subcorridor

Siem Reap (Cambodia) –Stung Treng –Ban Lung =Ou Ya Dav (Vietnam) –Playku –Quynhon

With respect to the NSEC, the new route between Hanoi and Nanning (Guangxi Zhuang Autonomous Region) was added after the agreement to add the Guangxi Zhuang Autonomous Region to the GMS in 2005 was signed:

- New Route of the North-South Economic Corridor

Hanoi (Vietnam)–Lang Song =Pingxiang (China) –Nanning

Fortunately, there are major Southern China Cities such as Guangzhou, Dongguan, and Shenzhen on the extension of the road.

The economic corridors connect major cities in GMS area such as Bangkok, Hanoi, Ho Chi Minh City, Phnom Penh, and Kunming. In fact, road transport has already connected Singapore, Kuala Lumpur, Bangkok, Hanoi, Nanning, Guangzhou, and Shanghai since the completion of the Second Mekong International Bridge between Savannakhet and Mukdahan, and an order-based transport service between Shanghai and Singapore has been provided by one Japanese logistic company.

In short, the economic corridors of GMS have provided an additional transport option---i.e., via roads---to the companies that deliver goods between China and ASEAN countries or within the ASEAN. More importantly, it is impossible to connect Singapore, Malaysia, and Thailand to China by land transportation without going through at least one of the CLMV countries. The development of economic corridors will further connect China with Southern Asia, and the ASEAN nations with Southern Asia in the future. Roads constructed within the economic corridors of GMS brought with them two advantages to

CLMV: “border areas” and “junctions”.

Border areas in the Mekong Region had been treated not only as peripheries but also as battlefields where opposing military forces faced each other prior to the 1992 GMS-ECP inauguration. Since the inauguration, these border areas have been given some attention because of their several and unique advantages. For example, in a project at the border between a higher income country and a lower income nation, the former can utilize the labor force of the latter at lower wages (compared to what such firm from the high income country used to pay). Another example pertains to the resource endowments between a country with better economic infrastructure and a country with poorer infrastructure. People from the latter can have access to the 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 the border areas (Kudo 2007).

A junction or crossroad of major roads is a point that connects cities and villages along one major road and those along the other major road. Thus, freights are loaded and unloaded at the junction or the crossroad so as to change directions. In this case, junctions and crossroads are important as logistic bases.

3.2. Cross-border Transport Agreement

In support of the economic corridors, a cross-border transport agreement (CBTA) is introduced here as one of the major policy frameworks of GMS-ECP. The CBTA is an agreement to facilitate the cross-border movement of vehicles. It has been signed by six countries of GMS-ECP and is in the process of ratification. It is composed of the main agreement, 17 annexes and three protocols. Bilateral memoranda of understanding (MoU) for five borders in accordance with these documents have been signed by each pair of countries.

The gist of CBTA is mainly composed of two components. One is single-window

inspection (SWI) and single-stop inspection (SSI). The SWI aims to unify the windows for customs, immigration and quarantine (CIQ) into a single window. For SSI, the process and inspection of CIQ is currently done twice: i.e., by the exit country and by the entry country. The SSI aims to unify the redundant procedures into a single step. Specifically, those processes will henceforth be done only in the entry country.

The other component is the exchange of traffic rights. Currently, goods are transferred from country A to country B at some border areas in the Mekong Region. This is because these countries do not provide traffic rights to each other. The CBTA carries articles that assume the exchange of traffic rights among member countries. For example, vehicles, and their parts and machine tools are exempted from taxations. In the case of transit transport by road---for example from Thailand to Vietnam via Laos---the containers are exempted from inspection in the transit country provided the containers are sealed.

After the MoU was signed, it became effective in some borders, and should have already started per MoU's schedule. Such has not been realized, however, except at the border of Lao Bao and Densavan between Vietnam and Laos on the EWEC, where the physical inspection for taxation purposes and t for quarantine have been unified.

There are several reasons for the delay. First, the thick CBTA documents, which are in English, are known to government officials who participated in the negotiation, but officials at border check points do not understand them. In short, the dissemination has not been widely done. People in the countries of the Mekong Region do not speak English in daily life. The translation of the CBTA into each country's language as well as training of officials at the border check point on English as well as the language of a neighboring country are therefore necessary.

Second, the CBTA was signed by ministers of transportation. The National Transport Facilitation Committee (NTFC), which was formed in each country, is composed of officials coming from related ministries such as taxation, health, agriculture, and homeland affairs.

In other words, the NTFC was designed to avoid sectionalism. However, one financial minister was allegedly quoted as saying that he did not know anything about the signing of the CBTA by a transport-related minister. In this case, coordination among related ministries with a leadership of the highest ranked official like a prime minister or a president is needed.

Third, there are several contradictions between the CBTA and domestic regulations. In addition, institutional regimes and facilities such as the common control area (CCA), a space for physical inspection by officials of both countries, have not been set up.

The realization of the CBTA in the future will surely facilitate cross-border trade and cross-border logistics. It can reduce the distance between factories and markets and is necessary for the development of CLMV.

4. Candidates of SEZ in CLMV

Based on the experiences of forerunning ASEAN countries and China, and the possibilities provided by GMS economic corridors, the types of SEZ in CLMV can be classified as metropolitan areas, ports and harbors, border areas, and junctions or crossroads. Here we would like to search for candidates for the SEZ based on the four types.

4.1. Metropolitan Areas

Table 1 enumerates major cities in CLMV. A metropolitan area plays an important role as a potential market for goods produced in CLMV and as provider of abundant labor force. Hanoi, Ho Chi Minh City and their suburban areas have already been developed and received FDIs. Among the other metropolitan areas that have been left behind, Yangon and Mandalay of Myanmar have larger potential. Next to these cities, Phnom Penh and Kampong Cham

Table 1. Population and Economic Indicators of Metropolitans in CLMV

		Area (1,000 Km ²)	Population (1,000 Persons)	Density (Persons/Km ²)	GPP/Cap. (US\$)	GPP (million US\$)
Phnom Penh	Cambodia	267.0	1,313.9	4,530.5		
Kampong Cham	Cambodia	9,799.0	1,857.5	189.6		
Vientiane	Laos	3,920.0	788.9	181.6	1,301.8	1,026.9
Yangon	Myanmar	10,166.9	6,460.0	4,258.8	274.8	1,775.4
Mandalay	Myanmar	37,008.1	7,739.0	1,401.7	169.3	1,310.1
Ho Chi Minh	Vietnam	2,095.2	6,107.8	2,909.9	1,110.4	6,782.1
Ha Noi	Vietnam	921.0	3,236.4	3,510.2	787.8	2,549.6
Danang	Vietnam	1,255.5	789.8	628.3	640.0	505.5

Notes: Data for the Gross Provincial Product (GPP) per capita are very rough estimates. These were obtained using the following processes:

- 1) GPP and GPP per capita in Cambodia have not been published.
- 2) The data of GPP, GPP per capita in Laos are values for planning in 2006/2007 which are collected from the Provincial Offices of Laos. The population data are based on the yearbook.
- 3) The GRP per capita in Myanmar is based on monthly household expenditure values of 2004/2005 survey. Annual expenditure per capita was obtained by dividing the annual expenditure per household by the value of the averaged household size and multiplying its quotient by 12 months.
- 4) As for the exchange rate of Myanmar, it is calculated by dividing the value of GDP in Kyat by GDP per capita in US dollars published on the website of ASEAN Secretariat
- 5) The GPP per capita in Vietnam was obtained by multiplying monthly per capita income (based on 2006 household survey), with the population of provinces, by 12 months. The GPP is the product of GPP per capita and population.

Sources: Cambodia: National Institute of Statistics [2006] *Kingdom of Cambodia Statistical Yearbook 2006*.

Laos: National Statistical Center [2008] *Lao PDR Statistical Yearbook 2007*, Vientiane.

Myanmar: Central Statistical Organization [2008] *Statistical Yearbook 2006*.

Vietnam: General Statistics Office [2008] *Statistical Yearbook 2007*.

also have a larger population but do not have many companies in manufacturing except traditional industries such as rice mills in Kampong Cham.

On the other hand, Vientiane and Danang have already received several FDI companies, but their population is less than one million each. However, if one were to factor in the suburban areas of the two cities, which are Vientiane Prefecture and Hue, with other provinces of the middle part of Vietnam, the potential population becomes bigger than one million.

4.2. Ports and Harbors

Ports are the gateways to export markets and play important roles in the procurement of

raw materials and intermediate goods from other countries. The same is true with bringing the goods produced in the CLMV to the overseas market. Table 2 enumerates major ports and harbors in the CLMV. In the world of sea transport in East Asia, however, these ports work as feeder ports, and most of the ships from these ports gather at two major hub ports in Asia: Hong Kong and Singapore.

For cities and villages along the EWEC, Danang and Maulamyine ports are designed as 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, which are river ports that 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, few ships dock in the port. Furthermore, less number of ships implies that the location is not attractive for an export-oriented investment. On the other hand, if the port city is industrialized, the quantity of cargos increase and the number of ships also rise and attracts more investors. The development of industries and the transport infrastructure must proceed hand in hand.

Table 2. Major Ports and Harbors in CLMV

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

The port of Maulamyine was expected to reduce time to transport goods from Thailand to Europe and the Middle East because it can provide a route that is a shorter alternative than the Malacca strait route. In fact, it takes two or three weeks to go to the Indian Ocean from Siam Bay via the Malay Peninsula and the Malacca Strait. On the other hand, it takes only three or four days from Bangkok to Yangon by road even though the road condition in sections of Myanmar is extremely bad. However, the effectiveness of Maulamyine as a sea port is doubtful because the area is shallow and still needs to be dredged while it is one of large cities in Myanmar.

Dawei is another potential deep sea port. Thus, a road connecting Bangkok and Dawei has been planned as a new economic corridor despite the fact that it has only few companies in the modernized manufacturing sector.

As for the other ports and harbors, Thilawa, Thi Vai and Cai Mep, and Cailan Ports will be developed to serve as substitute sea ports of Yangon, Saigon and Hai Phong, respectively. Among these, the Thi Vai and Cai Mep ports have already attracted interests. Major container terminal operators in the world such as PSA International, SSA Marine, and Hatchison Port have decided to build container terminals by establishing joint venture companies with local partners since the Japanese government had decided to give assistance and to dredge the ship route from the river mouth to the upstream (United Nations 2007). As to the Saigon and Hai Phong Port, both are river ports instead of deep sea ports, but they have been major ports in the Northern and Southern parts of Vietnam, respectively.

Lastly, Sihanouk Ville should be mentioned. It is not a deep port at 8.3 meters in depth. It should be noted, however, that it is Cambodia's sole sea port that is deep enough, considering the current scale of the Cambodian economy. In terms of the frequency of arrivals, nine liners drop by at Sihanouk Ville Port from/to Singapore, Thailand, Vietnam,

Malaysia and Indonesia in a week⁶. Several industrial estates have been built as SEZ, one of which is supported by the Japanese official development assistance (ODA) program.

4.3. Development of Border Areas

Table 3 shows special economic zones at border areas that have been planned, some of which are already in operation. Along the Lao and Thai borders of Thanaleng-Nong Khai, manufacturing factories have been operating along the road between the center of Vientiane City and Mekong Friendship Bridge. Similarly, an industrial estate had been developed at Bavet in Cambodia by the Manhattan Development, Ltd., with several foreign companies in operation. In Lao Bao, Vietnam, a special economic zone has also been built. Several manufacturing companies have been operating, and many imported goods are sold at duty free shops at the border. In Mae Sot, Thailand, Thai companies produce garments by employing workers from Myanmar at cheaper wages.

Table 3. Realized and Planned Special Economic Zones at Border Areas

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	538.2	1,046.8	181.4	259.4		522.9
Koh Kong–Trat	CT		191.5	219.9	17.2	78.0		2,025.8
Poipet–Aranya Prathet	CT	Banteay Mean Chey–Sa Kao	773.1	538.3	115.7	75.0		1,186.0
Denh Savanh– Lao Bao	LV	Savannakhet–Quang Tri	859.7	625.3	38.7	131.4	529.0	327.1
Savannakhet– Mukdahan	LT		859.7	335.4	38.7	77.0	529.0	791.7
Thanaleng - Nong Kai	LT	Vientiane–Nong Khai	711.9	899.6	181.6	123.0	1,301.8	805.2
Huai Xai - Chiang Khong	LT	Bokeo–Chiang Rai	149.6	1,225.7	22.8	105.0	406.3	929.5
Myawaddy - Mae Sot	MT	Karen–Tak	1,674.0	527.7	369.5	32.0	194.5	1,193.3
Tachilek - Mae Sai	MT	Shan–Chiang Rai	5,306.0	1,225.7	228.4	105.0	164.6	929.5

Notes and Sources: Same in Table 1 with respect to CLMV countries. As for Thailand, it is based on National Statistical Office [2007] *Statistical Yearbook Thailand 2007 (Special Edition)*.

⁶ Based on an interview with a Japan International Cooperation Agency (JICA) expert at the Port Authority of Sihanouk Ville, dated November 15, 2007.

On the other hand, at Poipet and Koh Kong in Cambodia and Savannakhet in Laos, the enclosed lands have been developed, and several companies plan to establish factories after the area is designated as a SEZ. However, the population density of Koh Kong and Savannakhet is low, and both sites thus might face difficulty in hiring labor unless a large migration occurs in these areas. Meanwhile, it is possible that a new border area will be developed at Poipet since the current border sites do not anymore have enough vacant space due to the proliferation of casinos.

Meanwhile, the population density and gross provincial product (GPP) of border provinces in Table 3 revealed that provinces of the sides with operational special border economic zones have relatively higher population density (e.g., Bavet, Lao Bao and Thanaleng) than those of the other sides. An exception is the case in Mae Sot where garment factories hire legal and illegal migrant workers from Myanmar, causing population at the border area to increase. It is also important to consider that provincial data do not always reflect the actual situation at the border, particularly in big provinces (i.e., by area) such as Shan and Karen in Myanmar.

In terms of population density, designating Savannakhet as an industrial estate is unlikely. Although it is the second largest province in Laos, its population density is low and scattered. In fact, most investors planned to invest in plantation and agricultural sectors, while the number of approved investors dramatically increased in 2006 before the completion of the Second Mekong International Bridge (Keola 2007). The population of Koh Kong is also relatively small and is in a similar situation. Khon Kaen Sugar Industry Public Company, Ltd. (Thai company), shareholder of Savannakhet Sugar Corp. and Koh Kong Plantation Co., Ltd., has been granted concessions of 10,000 ha and 20,000 ha, respectively in Savannakhet and Koh Kong (*The Nation*, August 17, 2007).

Locating industrial estates at border areas with a relatively smaller population is not

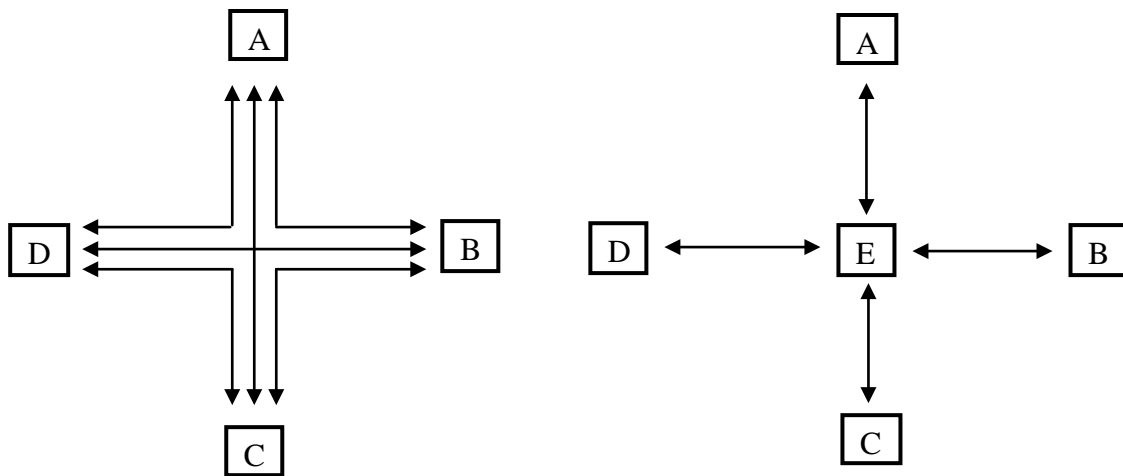
feasible if large-scale labor migration does not occur. Such an option will be unable to make use of abundant labor force at cheaper wages. Instead, such border areas should make use of other factor endowments with comparative advantages such as abundant land and natural resources. Needless to say, developing such border areas should be socially and environmentally sustainable.

4.4. Making Use of Junctions

The pre-investment survey for the EWEC in 2001 enumerates Phitsanulok, Khon Kaen and Dong Ha as intersection or junctions of the East-West Economic Corridor (EWEC) and the North-South Economic Corridor's (NSEC), National Road No. 2 (NR 2) of Thailand and the NR 1 of Vietnam, respectively. In Phitsanulok, specifically, 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 can be done 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 be used as passageway for goods to Hanoi and Ho Chi Minh City.

The effectiveness of junctions can be generalized. There are two cases shown in Figure 3. The left case is that from each point, goods can be delivered to three other points with the assumption that two sets of two points are connected by two lines and the lines cross each other at their middle points. The right-side case shows that goods can be delivered from each point *A*, *B*, *C* and *D* to point *E*. Such good is conveyed to each point after unloading and loading with the assumption that point *E* is located at the crossroad of two lines. The left case needs 12 tracks, and the total transportation distance needed is twice of the right case. On the other hand, the right case needs four tracks only but requires constant unloading and loading. The left case can be more effective than the right case in many situations.

Figure 3. Effectiveness of Inland Container Depot at Junctions



Source: Author created.

In addition to the abovementioned junctions, Seno district in Savannakhet, where the EWEC crosses with NR 13 of Laos, is equally important. Savannakhet is designated as a special economic zone, and Seno was either mentioned alone or with Savannakhet. NR 13 is the most important passageway in Laos as it connects major cities such as Luang Phrabang, Vientiane, Savannakhet, and Pakse. The Japan Logistic System Corp established a joint venture with Logitem Laos GLKP Co., Ltd. to operate an innerland container depot (ICT) at Seno district on October 1, 2007. The joint venture transfers freights between Bangkok and Hanoi. This reinforces the fact that Seno is not only an important junction in NR 13 but 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 an industrial estate. Similarly, developing ICT has been planned at Khon Kaen and Phitsanulok (Tsuneishi 2007).

In addition to Savannakhet, Luang Namtha can be another transportation hub of the NSEC. Because Luang Namtha is along the NSEC between Bangkok and Kunming, the road to Hanoi and road to Vientiane also gather at Luang Namtha. In fact, regular buses that

connect Kunming and Vientiane by way of Luang Namtha have already been operating.

4. 5. Locations for Surveys

Taking into consideration the areas enumerated so far as well as their number of existing firms, the locations chosen for the questionnaire survey are as follows:

Cambodia: Phnom Penh, Sihanouk Ville and Bavet

Laos: Vientiane and Savannakhet

Myanmar: Yangon, Mandalay and Myeik

Vietnam: Danang

And the locations for the flowchart approach-based survey are:

Cambodia: Phnom Penh and Sihanouk Ville

Laos: Vientiane and Savannakhet

Myanmar: Yangon

Vietnam: Danang

A paragraph may be needed to mention on the objectives of these surveys!!!

5. Concluding Remarks

Candidates as SEZs in the CLMV have earlier been enumerated. Based on the listed candidates, this paper concludes with the present country-specific strategies.

To develop Cambodia, this paper presents a strategy to develop Phnom Penh and Sihanouk Ville as one set. In Phnom Penh, the Phnom Penh SEZ has already been developed in 2008 and has several manufacturing companies in operation. In Sihanouk Ville, some manufacturing companies were said to have already decided to invest in the SEZ. The advantage of Phnom Penh is its larger population, but the distance to Sihanouk Ville Port

is about 220km. On the other hand, Sihanouk Ville is a port city, but its population is not large. Each of these locations satisfies only one of our two conditions (i.e., larger population and better access to deep ports) so together, they can complement each other. These two cities should attract suitable industries, respectively. For example, heavy industries like chemical resins and steel and iron, whose transport cost per weight is higher, are suitable in Sihanouk Ville. In addition, the industries that can substitute import with domestic production are possible in Sihanouk Ville Port. Such industries can maintain their economy of scale by exporting to foreign countries from Sihanouk Ville.

On the other hand, industries, whose transport cost per weight are lower (such as precision industry) or are labor-intensive, are suitable in Phnom Penh. Therefore, “a good combination of Phnom Penh and Sihanouk Ville” is the policy strategy for Cambodia.

Another strategy for Cambodia is to utilize the border areas. Bavet and Poipet have relatively larger population and are situated on the central sub corridor of the Southern economic corridor. Thus, these two cities are good candidates as SEZ. On the other hand, Koh Kong is better off taking another direction; that is, it could instead focus on attracting agro-based industries.

Laos, Vientiane, Savannakhet, and Luang Namtha were discussed in this study. Among the three cities, Savannakhet is on the EWEC, and Luang Namtha is on the NSEC, but Vientiane is not on the economic corridors. However, Vientiane is a city that holds the largest population per area and better access to Thailand via Friendship Bridge; thus, the city is suitable for the manufacturing industry. On the other hand, Savannakhet and Luang Namtha can increase their role as a junction of major roads and can attract agro-based industries. Given low population of Laos, manufacturing industries that need more labor force should be focused on Vientiane.

Therefore, this paper recommends that based on the above analysis, Vientiane, Savannakhet and Luang Namtha’s specific functions should be strengthened.

As for Myanmar, three regions should be developed as SEZ candidates. The first is the Yangon and Thilawa region. This region has a larger population and its access to the harbor can be realized by improving the Thilawa port and the access road between the two cities. The second region is the west coastal area of Malay Peninsula, which includes Maulamyaine and Dawei. The advantage of this area can be realized by improving roads connected to Thailand. In addition to two port cities, Myeik should be added because this port is used by ships from/to Singapore and Malaysia, and fishery-related industries have been well developed. The third region is Mandalay and Sagine. This region is an inland region, but has a huge population and better road access to China.

As for Vietnam, Ho Chi Minh, Hanoi, and their suburban areas (including Hai Phong and Vuntau) have already been developed and have received substantial FDIs. The supporting SEZ strategy should be focused on the middle part of Vietnam, which includes Danang, Hue, Don Ha and Lao Bao. A policy to strengthen the linkage between the EWEC and Danang Port is needed. The distance from Savannakhet to Danang is about 500 km---which is shorter than the 720-km distance to Laem Chabang Port in Thailand. A few transport operators in Laos, however, do not use the Danang Port. Among the reasons are the strict restriction on the road speed and the frequency of ship arrivals. The largest problem, however, is that it takes more than one month for Vietnam to act on the vacant container order of a transport operator in Laos. In contrast, Thailand's turnaround is two or three days only. Simplifying the cross-border processes, therefore, remains a challenge for Vietnam.

References

Central Statistical Organization, Myanmar (2008). *Statistical Yearbook 2006*.

General Statistics Office, Vietnam (2008). *Statistical Yearbook 2003*.

International Monetary Fund. Various Years. *International Financial Statistics*.

Ishida, M. (2006). “FDI from Japan to South East Asia”. Presentation Material at a seminar on the European Economic Presence in South-East Asia: Empirical Observation and Analysis, held by Centre for European Studies, Bangkok and Research Institute of Contemporary South-East Asia (IRASEC) dated on November 16-17.

Ishida, M. (2007). “Danang Port as a Key of development of the East West Economic Corridor (in Japanese)”. In Greater Mekong Sub region Economic Cooperation Program; Realizing Three Economic Corridors, ed. Ishida M. and T. Kudo, Chiba: Institute of Developing Economies.

Keola, S. (2007). “East-West Corridor and Laos: What will change by the completion of Second Mekong International Bridge (in Japanese)”. Greater Mekong Sub region Economic Cooperation Program: Realizing Three Economic Corridors, ed. Ishida M. and T. Kudo. Chiba: Institute of Developing Economies.

Kudo, T. (2007). “Border Industry in Myanmar: Turning the Periphery into the Center of the Growth”. *IDE Discussion Paper No. 122*, Chiba: Institute of Developing Economies.

National Statistical Office (2007). *Statistical Yearbook Thailand 2007 (Special Edition)*.

Tsuneishi, T. (2007). “Thailand Economic Cooperation with Neighboring Countries and Its Effects on Economic Development within Thailand”. *IDE Discussion Paper No. 115*. Chiba: Institute of Developing Economies.

United Nations (2007). *Review of Maritime Transport 2007*.

ERIA Discussion Paper Series

No.	Author(s)	Title	Year
2009-17	Erlinda M. MEDALLA and Jenny BALBOA	ASEAN Rules of Origin: Lessons and Recommendations for the Best Practice	Jun 2009
2009-16	Masami ISHIDA	Special Economic Zones and Economic Corridors	Jun 2009
2009-15	Toshihiro KUDO	Border Area Development in the GMS: Turning the Periphery into the Center of Growth	May 2009
2009-14	Claire HOLLWEG and Marn-Heong WONG	Measuring Regulatory Restrictions in Logistics Services	Apr 2009
2009-13	Loreli C. De DIOS	Business View on Trade Facilitation	Apr 2009
2009-12	Patricia SOURDIN and Richard POMFRET	Monitoring Trade costs in Southeast Asia	Apr 2009
2009-11	Philippa DEE and Huong DINH	Barriers to Trade in Health and Financial Services in ASEAN	Apr 2009
2009-10	Sayuri SHIRAI	The Impact of the US Subprime Mortgage Crisis on the World and East Asia -Through Analyses of Cross-border Capital Movements-	Apr 2009
2009-09	Mitsuyo ANDO and Akie IRIYAMA	International Production Networks and Export/Import Responsiveness to Exchange Rates: The Case of Japanese Manufacturing Firms	Mar 2009
2009-08	Archanun KOHPAIBOON	Vertical and Horizontal FDI Technology Spillovers: Evidence from Thai Manufacturing	Mar 2009
2009-07	Kazunobu HAYAKAWA, Fukunari KIMURA, and Toshiyuki MATSUURA	Gains from Fragmentation at the Firm Level: Evidence from Japanese Multinationals in East Asia	Mar 2009
2009-06	Dionisius A. NARJOKO	Plant Entry in a More Liberalised Industrialisation Process: An Experience of Indonesian Manufacturing during the 1990s	Mar 2009
2009-05	Kazunobu HAYAKAWA, Fukunari KIMURA, and Tomohiro MACHIKITA	Firm-level Analysis of Globalization: A Survey	Mar 2009
2009-04	Chin Hee HAHN and Chang-Gyun PARK	Learning-by-exporting in Korean Manufacturing: A Plant-level Analysis	Mar 2009

2009-03	Ayako OBASHI	Stability of Production Networks in East Asia: Duration and Survival of Trade	Mar 2009
2009-02	Fukunari KIMURA	The Spatial Structure of Production/Distribution Networks and Its Implication for Technology Transfers and Spillovers	Mar 2009
2009-01	Fukunari KIMURA and Ayako OBASHI	International Production Networks: Comparison between China and ASEAN	Jan 2009
2008-03	Kazunobu HAYAKAWA and Fukunari KIMURA	The Effect of Exchange Rate Volatility on International Trade in East Asia	Dec 2008
2008-02	Satoru KUMAGAI, Toshitaka GOKAN, Ikumo ISONO, and Souknilanh KEOLA	Predicting Long-Term Effects of Infrastructure Development Projects in Continental South East Asia: IDE Geographical Simulation Model	Dec 2008
2008-01	Kazunobu HAYAKAWA, Fukunari KIMURA, and Tomohiro MACHIKITA	Firm-level Analysis of Globalization: A Survey	Dec 2008