

CHAPTER 4

A Study on Cross-Border Trade Facilitation and Regional Development along Economic Corridors in Cambodia

Sau Sisovanna

This chapter should be cited as:

SAU, Sisovanna 2012. “A Study on Cross-Border Trade Facilitation and Regional Development along Economic Corridors in Cambodia” in *Emerging Economic Corridors in the Mekong Region*, edited by Masami Ishida, BRC Research Report No.8, Bangkok Research Center, IDE-JETRO, Bangkok, Thailand.

CHAPTER 4

A STUDY ON CROSS-BORDER TRADE FACILITATION AND REGIONAL DEVELOPMENT ALONG ECONOMIC CORRIDORS IN CAMBODIA

Sau Sisovanna

INTRODUCTION

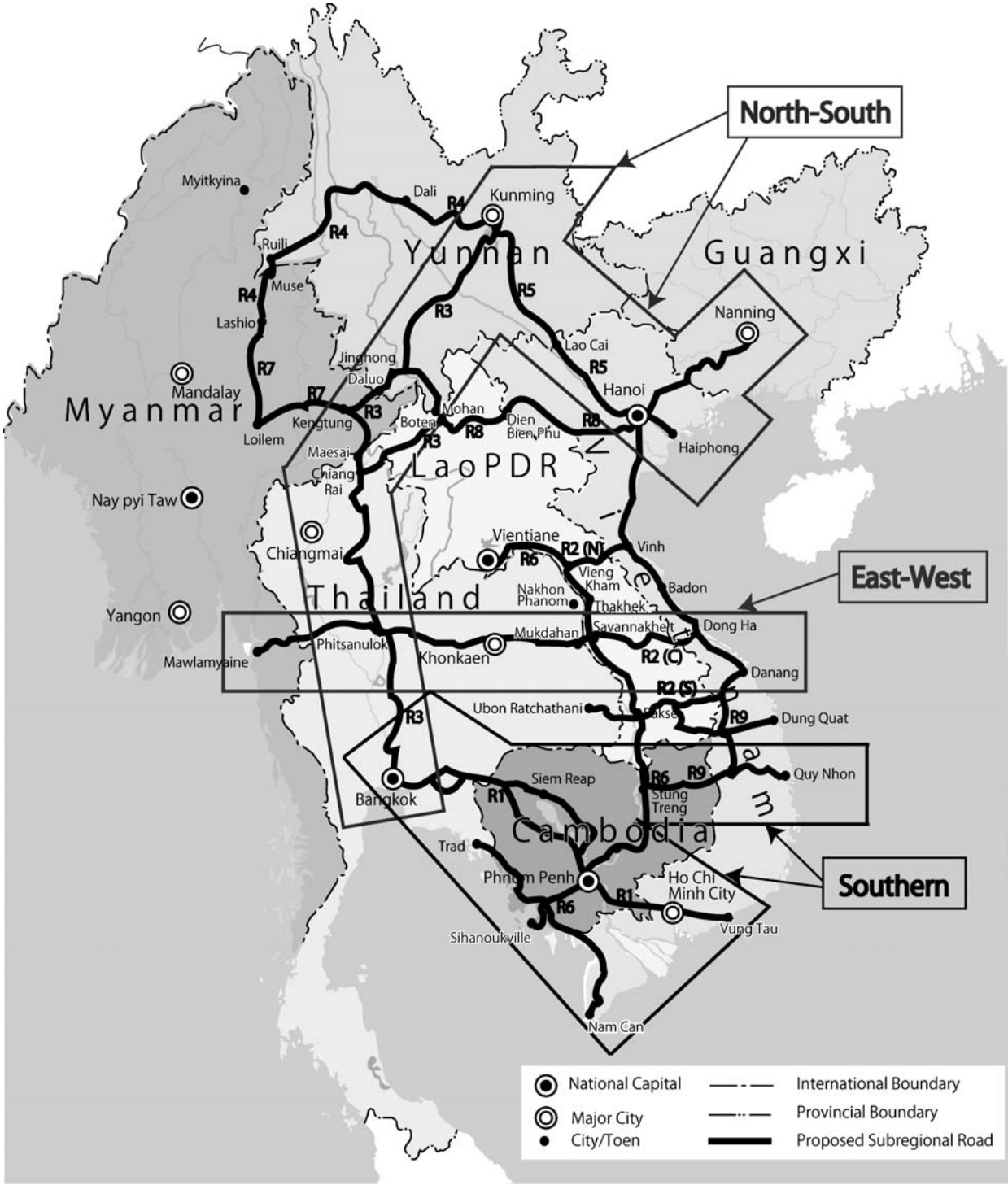
After the General Election in 1993, Cambodia has become a peaceful country with improved political stability, sovereignty, social order, cooperation, and development. Strong macroeconomic management and favorable external factors, including the provision of debt relief and Cambodia's integration with the region and the international economy, helped Cambodia to grow quickly.

The Royal Government of Cambodia (RGC) has recognized the private sector as the important engine for economic growth. The RGC also considers regional integration as one of the key pillars of its development agenda for acceleration of its economic growth and for providing Cambodia with economies of scale and opportunities to attract investment, create jobs, generate income, and contribute to poverty reduction. The Southern Economic Corridor (SEC) is the only corridor that geographically covers Cambodia, connecting it to Vietnam and Thailand, and to a limited extent to the southern part of the Lao People's Democratic Republic (Lao PDR, Figure 1).

As over 90 % of the population lives along the SEC, Cambodia is greatly affected by the development of the SEC. Since the introduction of the concept of three economic corridors and their transformation from transport corridors in 1998, some observers have concerns that the Cambodian part of the SEC might be utilized only for transit by trucks between Bangkok and Ho Chi Ming City. This study examines the reasons why these

observers are worried, by using criteria such as population density, poverty incidence, and economies of scale at a provincial level.

Figure 1: Greater Mekong Subregion Economic Corridor



Source: Drawn by the editor in accordance with ADB (2002).

The purpose of this study on cross-border trade facilitation and regional development along the economic corridors is to find out the problems and feasibilities for further development of the provinces along the SEC and surrounding provinces. More concretely, the logistics routes and industries of the provinces and the surrounding provinces are surveyed.

The paper consists of an introduction, six sections, and a conclusion. The first section looks at the history, background, and literature survey of the SEC. The second section examines the provinces along the SEC in Cambodia, including the Central Sub-corridor, Northern Sub-corridor, Southern Coastal Sub-corridor, and Inter-corridor Link. The third section three looks at the Cambodian part of the Development Triangle Area of Cambodia, Lao PDR and Vietnam. The fourth section investigates the potential of provinces along the Coastal and Northern sub-corridors in Cambodia. The fifth section identifies the challenges and constraints of SEC development. The sixth section investigates Cambodia's regional development policy and the conclusion summarizes with a Cambodian-specific context.

1. SOUTHERN ECONOMIC CORRIDOR

1.1. History and Background of the Southern Economic Corridor

The economic corridor approach to subregional development was adopted by the Greater Mekong Subregion (GMS) countries during the 7th GMS ministerial meeting, held in Manila in 1998, a time when project implementation was stagnated by the Asian Financial Crisis. The economic corridor approach aimed to help accelerate the pace of subregional economic cooperation as a prime mover to conquer the difficulties after the crisis.

The basic idea of economic corridors is to vivify economic activities along the transport corridor through the cross-border transport infrastructure (CBTI). Concrete examples include the establishment 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 are the East-West Economic Corridor (EWEC), the North-South Economic Corridor (NSEC) and the SEC (Figure1). They were formally

launched during the 8th ministerial meeting in 2000. The development of these corridors was subsequently designated as a flagship initiative under the Ten-Year GMS Strategic Framework endorsed by the leaders of GMS countries during the first GMS summit, held in Phnom Penh, Cambodia, in 2002.¹ At the third GMS summit, held in Vientiane, Lao PDR, in March 2008, GMS leaders stressed the need to redouble efforts to transform transport corridors into economic corridors and maximize benefits from improved physical connectivity in the subregion. In June 2008 in Kunming, the Economic Corridor Forum (ECF) Inaugural Meeting officially established the ECF as the main advocator and promoter of economic corridor development in the GMS, and as part of the GMS institutional mechanism. The ECF second meeting in Phnom Penh in September 2009 concluded that the meeting had very encouraging results on the need to fully understand issues and challenges specific to a locality or a corridor and in coming up with approaches that are appropriate in addressing them. At the Asian Development Bank's (ADB) Symposium for Developing the SEC in Phnom Penh on March 9-10, 2011, it was confirmed that the SEC is a major potential for Cambodian economic growth and development, and that it also requires concrete plans and close coordination of infrastructural investment and related measures to boost and support business opportunities.

The role of economic corridors in GMS development is reflected in the joint statement of the 8th ministerial meeting, which declared that "GMS member countries will create economic corridors linking the subregion to major markets; nodal points within these economic corridors will serve as centers for enterprise development; economic corridors will be an expansion of key transport corridors so as to enhance economic activities and benefits, and over the longer term to build on the potential of the subregion as a land bridge serving the People's Republic of China (PRC), Southeast Asia, South Asia, and East Asia." The development of economic corridors is expected to help achieve the vision of GMS as a prosperous, harmonious, and integrated subregion by providing increased connectivity, enhanced competitiveness, and a greater sense of community. It supports the strategic thrusts of the Ten-Year GMS Strategic Framework, namely: (i) strengthening infrastructure links; (ii) facilitating cross-border trade, investment, and tourism; (iii) enhancing private sector participation and competitiveness; (iv) protecting the environment and promoting the

¹ Description so far is based on Ishida (2008).

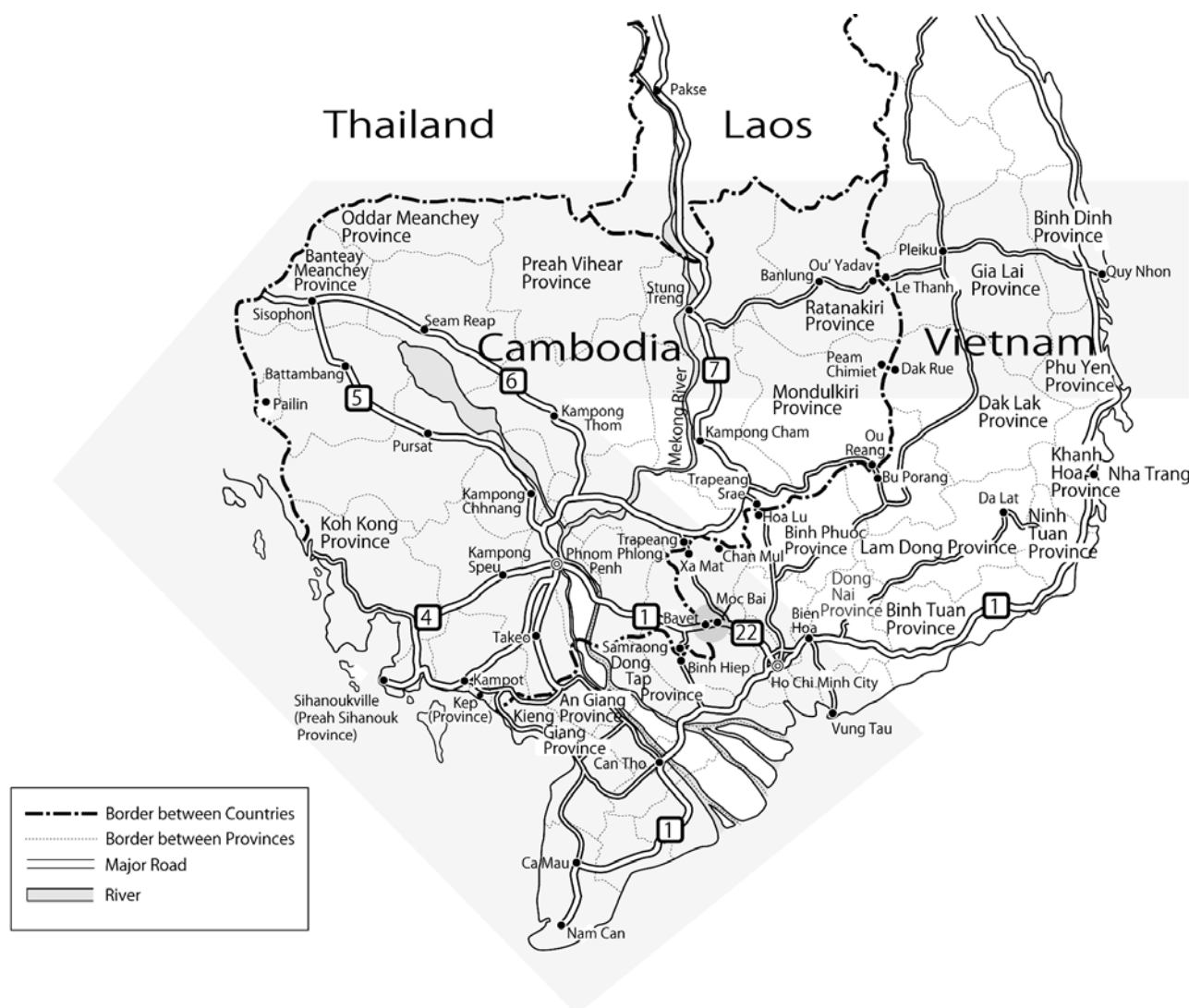
sustainable use of shared natural resources; (v) and developing human resources and skills competencies. From a broader perspective, the development of GMS economic corridors offers a means for the less-developed member countries of the Association of Southeast Asian Nations (ASEAN) to catch up with the more economically advanced member countries and to reinforce the market integration process that is increasing in East Asia. Operationally, the economic corridor approach is aimed at (i) extending the benefits of improved transport links to remote and landlocked locations in the GMS, which have been disadvantaged by their lack of integration with more prosperous and better located neighboring areas; (ii) providing a spatial focus for GMS activities, with the backbone, growth centers, and nodal points serving as catalysts to the development of surrounding areas; (iii) opening up many opportunities for various types of investment from within and outside the GMS; (iv) enhancing the effect of subregional activities through the clustering of projects; (v) serving as a mechanism for prioritizing and coordinating investment among neighboring countries; and (vi) generating tangible demonstration effects.

The SEC comprises the following sub-corridors and the Inter-corridor Link connecting major towns and cities in the southern part of the GMS and sections in Cambodia and Vietnam are shown in Figure 2:

- (i) the Bangkok - Phnom Penh - Ho Chi Minh City - Vung Tau (Central Sub-corridor);
- (ii) the Bangkok - Siem Reap - Stung Treng – Rattanakiri -O Yadav – Le Thanh - Pleiku - Quy Nhon (Northern Sub-corridor);
- (iii) the Bangkok – Trat - Koh Kong – Kampot - Ha Tien - Ca Mau City – Nam Can (Southern Coastal Sub-corridor); and
- (iv) the Sihanoukville - Phnom Penh – Kratie - Stung Treng - Trapang Kreal) – Viengkham - Pakse - Savannakhet (Inter-corridor Link, which links the three SEC sub-corridors with the EWEC).

The conceptual purpose of each of these three sub-corridors and the Inter-corridor Link is varied, but complementary. The Central Sub-corridor links three major population and commercial centers: Bangkok, Phnom Penh, and Ho Chi Minh City. The sub-corridor helps to integrate the social, commercial, and economic resources of these centers to form a

Figure 2: The Southern Economic Corridor in Cambodia and Vietnam



Note: The name of province which is same as the provincial capital is abbreviated.

Source: drawn by the editor.

subregional economic zone. The Southern Coastal Sub-corridor links the commercial, industrial, and tourism complex of the Eastern Seaboard in Thailand with the coastal region of Cambodia. This has the potential for industrial and commercial growth based on fisheries, energy resources, light industry and trade (centered in Sihanoukville). Its extension to the southern Mekong Delta in Vietnam taps into the growth area for food processing and other light industries. The Northern Sub-corridor links a succession of existing and potential world-class tourism sites that may be developed into a major tourist trail stretching from

Bangkok via Siem Reap (Angkor Wat), Preah Vihear (the center of numerous Khmer-era temples), Stung Treng (the Mekong River with freshwater dolphins and the Khone waterfalls in southern Lao PDR), and Rattanakiri (natural park and wildlife) to the central highlands and coastal areas (beach tourism and eco-tourism) in Vietnam.

1.2. Literature Survey

Even though a lot of studies have been dedicated to economic corridors and countries in the GMS over the decades, in this paper, we will provide an integrated summary of the studies done on the need for cross-border trade facilitation and regional development along economic corridors in Cambodia, especially the SEC. We are particularly devoted to such studies as they are basically looking at the same issues that will be discussing in this paper.

Ishida (2008) says that the basic idea of economic corridors is to vivify economic activities along the transport corridor through the CBTI (Ishida 2008, p. 7). The ADB voices that the 6 GMS countries launched a program of subregional economic cooperation designed to enhance economic relations among countries, and to reduce poverty (ADB, Cambodia in the GMS). In the meantime, there is much literature, including the ADB and others, claiming that the transformation from a transport to a full-fledged economic corridor will not only boost economic growth but also help Cambodia reduce poverty and improve the lives of the majority of the Cambodian people (ADB's Symposium for Developing the Southern Economic Corridor, 2011).

However, the Economic Research Institute for ASEAN and East Asia 's (ERIA) study raised the issue that the governments of Cambodia and Lao PDR have expressed the concern that parts of their countries on the SEC and the EWEC are utilized just for transit by trucks between Hanoi and Bangkok, and between Bangkok and Ho Chi Minh City. The study tries to explain that development of the SEC or the EWEC might greatly change the geographical distribution of population and the agglomeration of industry and would significantly benefit the cities along them, and it cities that the SEC and the EWEC are expected to attract population and industry. The SEC benefits most of the regions in Cambodia and southern Vietnam.

Moreover, Wiemer (2009) says that concentration of development along transport routes allows for economies of scale, scope, and agglomeration to be exploited. Moreover,

by linking areas of diverse resource endowment profiles, complementary specialization is facilitated within a coherent geographical space. Such concentrated local development in turn lays foundations for contributing into the larger realm of the global supply chain (Wiemer 2009).

Concretely, industrial special economic zones (SEZs) have been established along the SEC at the border areas of Poi Pet, Koh Kong, and Bavet for Cambodia, and at Savannakhet for Lao PDR along the EWEC. Moreover, cross-border transport agreements were already made between Cambodia and Vietnam and between Cambodia and Thailand. Presently, the construction of the Neak Leung bridge, financed by the Japanese government, will pave the transport road between Bangkok and Ho Chi Minh City through Poi Pet and Bavet, Cambodia (Geographical Simulation Analyses on Economic Corridors).

1.3. Route of Cambodia SEC

1.3.1. Central Sub-corridor

From Bangkok, the Central Sub-corridor traverses Sa Kaeo Province in Thailand and crosses into Cambodia through the Aranya Prathet-Poipet border gate (Table 1). In Cambodia, it passes through Sisophon and goes to Phnom Penh via two routes. The first one is via Route No. 5, which crosses the provinces of Banteay Meanchey, Battambang, Pursat, Kampong Chhnang, and Kandal before reaching Phnom Penh. The second way is via Route No. 6, which passes through Siem Reap, Kampong Thom, Kampong Cham, and Kandal provinces before reaching Phnom Penh. From Phnom Penh, this sub-corridor follows Route No. 1 and goes through Svay Rieng Province down to the Bavet-Moc Bai border gate between Cambodia and Vietnam. From Moc Bai, this sub-corridor goes to Ho Chi Minh City via Route No. 22, after which it connects with Route No. 51, passing through 4 provinces in Vietnam: Tay Ninh, Ho Chi Minh City, Dong Nai, and Ba Ria-Vung Tau.

1.3.2. Northern Sub-corridor

The alignment of the Northern Sub-corridor is similar to that of the Central Sub-corridor from Bangkok to Siem Reap in Cambodia, where it then branches off eastward and passes through Stung Treng, Mondulhiri, and Rattanakiri provinces before reaching the O

Table 1: Distance between Major Points in the Central Sub-corridor

Origin-Destination	Distance (km)
Bangkok Aranya Prathet	242.0
Poipet-Sisophon	59.4
Sisophon - Battambang	67.3
Battambang- Pursat	104.2
Pursat- KampongChhnaing	99.3
Kampong Chhnang - Phnom Penh	90.3
Phnom Penh - Neak Loeung	62.3
Neak Loeung - Svay Rieng	65.2
Svay Rieng - Bavet	41.1
Moc Bai - Ho Chi Minh City	72.2

Source: Measured by the editor during a field trip in September 2009.

Table 2: Distance between Major Points in the Southern Economic Corridor

Origin-Destination	Distance (km)
Stung Treng – Banlung	143.0
Banlung – O Yadav	69.2
Le Thanh - Pleiku	75.0
Pleiku - Quy Nhon	157.2

Source: Measured by the editor and the author during a field trip in September 2011.

Yadov-Le Thanh border gate between Cambodia and Vietnam (Table 2). From the Le Thanh border gate, this sub-corridor runs eastward via Route No. 19 of Vietnam to Pleiku in Gia Lai Province and ends in Quy Nhon in Binh Dinh Province in the central region of Vietnam.

1.3.3. Southern Coastal Sub-corridor

The Southern Coastal Sub-corridor also starts from Bangkok, then runs southward, passing through Chonburi, Rayong, Chanthaburi, and Trat, where it crosses into Cambodia at the Hat Lek - Cham Yeam border gate. In Cambodia, this sub-corridor traverses Koh Kong, Sihanoukville, Kampot, and Kep provinces, via Routes No. 48, No. 4, No. 3, and No. 33 to the Prek Chak (Lork)-Ha Tien (Xa Xia) border gate between Cambodia and Vietnam (Table 3). The sub-corridor then traverses Kien Giang Province and Ca Mau Province in Vietnam's Mekong Delta and ends at Nam Can, going via Route No. 80 from Ha Tien to Rach Soi

Table 3: Distance between Major Points in the Southern Coastal Sub-corridor

Origin-Destination	Distance (km)
Trat – Hatrek	116.0
Koh Kong – Sre Ambel	157.0
Veal Rinh - Sihanoukville	39.4
Veal Rinht- Kampot	53.4
Kampot- Prek Chak	39.1
Hatien – Rach Gia	97.0
Rach Gia – Ca Mau	130.0

Source: Measured by the editor, author, and Dr. Phi Vinh Tuong during field trips in September 2010 and July 2011.

(Rach Gia), via Route No. 63 from Rach Soi to Minh Luong to Bay Sang, via the coastal road from Bay Sang to Ca Mau City, and via Route No. 1 from Ca Mau City to Nam Can. Currently, sections of Route No. 33 in Kampot Province, Cambodia, to the border with Vietnam along the Southern Coastal Sub-corridor are being improved under an ADB loan approved in November 2007.

1.3.4. Inter-corridor Link

The Inter-corridor Link starts from Sihanoukville in Cambodia and passes through Kampong Speu, Phnom Penh, Kandal, Kampong Cham, Kratie, Mondulkiri, and Stung Treng before reaching Trapang Kreal (Dong Kralor) at the Cambodia-Lao PDR border. In Lao PDR, it follows Route No. 13, traversing the southern Lao PDR provinces of Champasack, Saravane, Savannakhet, and Khammouane, connecting the three SEC sub-corridors to the EWEC in Savannakhet (Table 4).

1.4. Provinces along the Corridors

The SEC covers (i) 8 provinces in the eastern region of Thailand, including Bangkok, Samut Prakan, Chachoengsao, Sakaew, Chonburi, Rayong, Chanthaburi and Trat; (ii) 4 zones across 21 provinces and municipalities in Cambodia, including the Phnom Penh zone (Phnom Penh), the Tonle Sap zone (Banteay Mean Chey and Siem Reap), the mountain zone (Stung Treng and Rattanakiri), and the coastal zone (Koh Kong and Kampot); (iii) 4 regions in Vietnam,

Table 4: Distance between Major Points in the Inter-corridor Link

Origin-Destination	Distance (km)
Sihanoukville- Phnom Penh	230
Phnom Penh- Kratie	315
Kratie- Trapang Kreal (DongKralor)/ Veun Kham (Cambodia- Lao PDR)	197
Veun Kham - Savannakhet	407
Sihanoukville- Savannakhet	1,149

Source: Strategy and Action Plan for the Greater Mekong Subregion Southern Economic Corridor.

including the southeast region (Ho Chi Minh City and Ba Ria-Vong Tau Province), the central highland region (Gia Lai Province), the south central coast region (Binh Dinh Province), and the Mekong River Delta region (Kien Gian and Ca Mau provinces); and (iv) 6 provinces in the southern Lao PDR, including Attapeu, Champasak, Khammouane, Saravane, Savannakhet, and Sekong.

The combined population of SEC provinces in Cambodia is 12,294,471 or 91.78 % of the country's total population. The population in the Central Sub-corridor is 9,803,447, the Northern is 1,390,826, the Coastal is 739,084, and the Inter-corridor is 5,703,222 (General Population Census of Cambodia 2008). With the exception of Phnom Penh, these provinces are sparsely populated, having as few as 4 people per km² in Monduliri and 10 people per km² in Stung Treng Province. Phnom Penh has the highest population density in the country with 4,516 people per km². The majority of the population in the SEC provinces (80.5 %) lives in rural areas. The incidence of poverty is lowest in the Southern Coastal Sub-corridor (26.8 %) and highest in the Northern Sub-corridor, especially in Stung Treng, Monduliri, and Rattanakiri, where around half of the population (averaging 47.26 %) lives below the poverty line. This is far above the incidence of poverty for the whole country (5 %). The literacy rate is highest in Phnom Penh (92.91 %) and lowest in Rattanakiri, (44.58 %).

SEC areas in Cambodia are blessed with abundant and diverse natural resources. The two dominant topographical features are the Mekong River and the Tonle Sap Lake. The sediment deposited during the Mekong's annual wet-season flooding renders this area's agricultural land very fertile. The Tonle Sap is one of the world's richest sources of

freshwater fish.

Cambodia's dry forests, with protected forests, which consists of long-life, large tropical hardwood trees, are located in Mondulkiri Province in the eastern part of the country.

Exploitable oil and natural gas deposits were found beneath Cambodia's territorial waters in 2004, and significant potential mineral resources such as bauxite, coal, gold iron, precious stones, and other resources have been shown by geological surveys.

1.4.1. Central Sub-corridor

From Bangkok, the Central Sub-corridor traverses Sa Kaeo Province in Thailand and crosses into Cambodia through the Aranya Prathet-Poipet border gate. In Cambodia, it passes through Sisophon and goes to Phnom Penh via two routes. The first one is via Route No. 5, which crosses the provinces of Banteay Meanchey, Battambang, Pursat, Kampong Chhnang, and Kandal before reaching Phnom Penh. The second way is via Route No. 6, which passes through Siem Reap, Kampong Thom, Kampong Cham, and Kandal provinces before reaching Phnom Penh. From Phnom Penh, this sub-corridor follows Route No. 1 and goes through Svay Rieng Province down to the Bavet-Moc Bai border gate between Cambodia and Vietnam.

This sub-corridor is the largest among the 4 sub-corridors and the most developed region in Cambodia, with a labor force that is relatively more educated and skilled than the labor force in other sub-corridors. The sub-corridor's land area covers 45.37 % of total country land, with a population of 9,803,447 persons or 73 % of the total population. The population density is 120 persons per km². The majority of the population (81.15 %) lives in rural areas, the literacy rate averages 78.73 %, and the poverty incidence averages 35.15 % (Table 5).

The economy of this sub-corridor has been growing rapidly and is expected to continue to do so in the future. The two international airports in Cambodia are located in this sub-corridor, at Phnom Penh and Siem Reap, which also have the most attractive tourist destinations in the country. Almost all of the provinces in the sub-corridor have abundant resources for agriculture development, especially for the cultivation of cassava, rice, rubber,

Table 5: Population and Land Area of Cambodia Central Sub-corridor

Provinces/Cities	Total Population	Land area (Km ²)	Population Density (persons/km ²)	Rural Population (%)	Literacy rate (%)	Poverty incidence*
Banteay MeanChey	677,872	6,679	87	73.24	77.99	37.15
Battambang	1,025,174	11,622	88	82.36	79.26	33.69
Pursat	397,161	12,692	31	93.54	77.31	39.57
Kompong Chnang	472,341	5,521	86	91.00	76.56	39.57
Kandal	1,265,280	3,564	355	84.52	83.67	22.24
Phnom Penh	1,327,615	294	4,516	6.40	92.91	4.60
Siem Reap	896,443	10,299	87	80.56	71.24	51.84
Kompong Thom	631,409	13,814	46	95.00	69.86	52.40
Kompong Cham	1,679,992	9,799	171	93.00	76.31	37.04
Svay Rieng	482,788	2,966	163	96.47	80.06	35.93
Prey Veng	947,372	4,883	194	96.50	80.80	37.20
Total of the 11 provinces	9,803,447	82,133	120	81.15	78.13	35.15

Source: General Population Census of Cambodia 2008; and * MOP, A Poverty Profile of Cambodia 2004, February 2006.

sugarcane, and beans. Many garment factories have located their production bases in this sub-corridor, particularly in Phnom Penh and Kandal Province.

1.4.2. Northern Sub-corridor

The alignment of the Northern Sub-corridor is similar to that of the Central Sub-corridor from Bangkok to Siem Reap in Cambodia, where it then branches off eastward and passes through Stung Treng, Mondulhiri, and Rattanakiri provinces before reaching the O Yadav-Le Thanh border gate between Cambodia and Vietnam.

This Cambodia part of the sub-corridor's land area covers 33.28 % of total country land, with a population of 1,390,826 persons or 10.37 % of the total population. The population density is 23 persons per km². The majority of the population lives in rural areas (87.85 %), the literacy rate averages 60.25 %, and the poverty incidence averages 47.26 % (Table 6).

This sub-corridor is rich in water, forest, and mineral resources. It has many areas with large potential for hydropower development, particular in Mondulhiri and Rattanakiri. The potential for eco-tourism is very promising. This corridor has a low density of population and relatively large agro-industrial and forestry land areas that are suitable for industrial tree

Table 6: Population and Land Area of Cambodia Northern Sub-corridor

Provinces/Cities	Total Population	Land area (Km ²)	Population Density (persons/km ²)	Rural Population	Literacy rate (%)	Poverty incidence* (%)
Siem Reap	896,443	10,299	87	80.56	71.24	51.84
Stung Treng	111,671	11,092	10	85.75	60.40	46.11
Mondulhiri	61,107	14,288	4	92	61.49	46.11
Rattanakiri	150,466	10,782	14	87.16	44.58	46.11
Preah Vihear	171,139	13,788	12	93.76	63.54	46.11
Total of 5 provinces	1,390,826	60,249	23.1	87.85	60.25	47.26

Source: General Population Census of Cambodia 2008; and* MOP, A Poverty Profile of Cambodia 2004, February 2006.

plantations and commercial crops such as coffee, rubber, sugarcane, and beans.

1.4.3. Southern Coastal Sub-corridor

The Southern Coastal Sub-corridor also starts from Bangkok, then runs southward, passing through Chonburi, Rayong, Chanthaburi, and Trat, where it crosses into Cambodia at the Hat Lek-Cham Yeam border gate. In Cambodia, this sub-corridor traverses Koh Kong and Kampong Speu provinces, mostly via Route No. 48, No.4 and No.3 up to the Prek Chak (Lork)-Ha Tien border gate between Cambodia and Vietnam.

This Cambodia part of the sub-corridor's land area covers 8.45 % of total country land, with a population of 739,084 persons or 5.52 % of total population. The population density is 48 persons per km². The majority of the population lives in rural areas (82.69 %), the literacy rate averages 76.70 %, and the poverty incidence averages 25.44 % (Table 7).

In this sub-corridor, hydropower in Koh Kong and tourism development in coastal areas are the key opportunities. It is engaged mainly in agricultural production and has a large agricultural labor force.

1.4.4. Inter-corridor Link

The Inter-corridor Link starts from Sihanoukville in Cambodia and passes through Kampong Speu, Phnom Penh, Kandal, Kampong Cham, Kratie, Mondulhiri, and Stung Treng before

Table 7: Population and Land Area of Cambodia Coastal Sub-corridor

Provinces/Cities	Total Population	Land area (Km ²)	Population Density (persons/km ²)	Rural Population	Literacy rate (%)	Poverty incidence* (%)
Koh Kong	117,481	10,090	12	69.31	76.18	23.18
Kampot	585,850	4,873	120	91.76	78.53	29.96
Kep	35,753	336	106	87	75.37	23.18
Total of 3 provinces	739,084	15,299	48.3	82.69	76.70	25.44

Source: General Population Census of Cambodia 2008; and * MOP, A Poverty Profile of Cambodia 2004, February 2006.

reaching Trapang Kreal (Dong Kralor) at the Cambodia-Lao PDR border. At the Lao border, it follows Route No. 13, traversing the southern Lao PDR provinces of Champasak, Savannakhet, and Khammouane, connecting the three SEC sub-corridors to the EWEC in Savannakhet.

This Cambodia part of the Inter-corridor's land area covers 32.64 % of total country land, with a population of 5,703,222 persons or 52.57 % of total population. The population density is 97 persons per km². The majority of the population lives in rural areas (75.31 %), the literacy rate averages 75.66 %, and the poverty incidence averages 35.33 % (Table 8).

This sub-corridor includes a coastal area in Sihanoukville that has white-sand beaches and islands. It has a deep-sea port in Sihanoukville and many SEZs are located along the sub-corridor. There is also potential for hydropower development, especially in Kratie and Mondulkiri.

1.5. Roads, Railways and Inland Waterways

There are differences in the availability and quality of infrastructure among SEC national components and among SEC sub-corridors, with the Thailand component having the highest level of infrastructure development and the Cambodia and Lao PDR components having the lowest level. A critical constraint on the development of SEC provinces in Cambodia and Lao PDR is the lack and poor state of physical infrastructure and facilities, especially of feeder roads connecting to the main transport routes.

Table 8: Population and Land Area of Cambodia Inter-corridor

Provinces/Cities	Total Population	Land area (km ²)	Population Density (persons/km ²)	Rural Population	Literacy rate (%)	Poverty incidence* (%)
Preah Sihanouk	221,396	1,938	114	59.60	80.69	23.1
Kompong Speu	716,944	7,017	102	92.40	76.30	57.22
Phnom Penh	1,327,615	294	4,516	6.4	92.91	4.6
Kandal	1,265,280	3,564	355	84.52	83.67	37.04
Kompong Cham	1,679,992	9,799	171	93	76.31	46.11
Kratie	319,217	11,094	29	88.73	73.51	46.11
Monduliri	61,107	14,288	4	92.05	61.49	46.11
Stung Treng	111,671	11,092	10	85.75	60.40	46.11
Total of 8 provinces	5,703,222	59,086	97	75.31	75.66	35.33

Source: General Population Census of Cambodia 2008; * MOP, A Poverty Profile of Cambodia 2004, February 2006.

1.5.1. Road Transport

Many road sections in SEC sub-corridors in Cambodia have been or are being upgraded, including sections of Route No. 5 and Route No. 6 between Sisophon and Phnom Penh in the Central Sub-corridor. A bridge across the Mekong River in Neak Leung is under construction, which will significantly reduce travel time from Phnom Penh to Ho Chi Minh City. It has been financed by the Japanese government.

The Northern Sub-corridor sections of Route No. 66 between Siem Reap and Stung Treng, around 245km, including the bridge crossing the Mekong River at Stung Treng town, are still a missing link. Meanwhile, the section of Road No. 78 between O Porng Morn and Ban Lung, Ratanakiri town, of around 125 km is under construction.

In the Southern Coastal Sub-corridor, a new sealed road (National Route No. 48) was completed from Koh Kong town to Sre Ambel in 2007, and 4 bridges on the river crossings along this route were opened in May 2008. Route No. 33 will be improved to the required standard for a national road from the Prek Chak, Vietnam-Cambodia border to the intersection with Route No. 31 in Kampong Trach. The intersection with Route No. 31 will be enlarged to accommodate turning traffic and improve safety. The section of Route No. 33 between Kampong Trach and Kampot has been improved under the World Bank Flood Rehabilitation Project. Two of the existing Bailey bridges are to be replaced: a bridge near Kampot that collapsed in 2006, with government funding, and the short bridge in Kampong

Trach, which has been proposed for funding from the government of Japan. The remaining 24 bridges and culverts between Kampong Trach and Kampot are narrow and in poor condition. These bridges will be repaired and widened or replaced, depending on the findings and recommendations of the consultants providing detailed design and implementation services.

1.5.2. Rail Transport

There are two railway lines in Cambodia. The northern line (386km) runs from Phnom Penh to Banteay Meanchey Province in the Central Sub-corridor and the southern line (264km) runs from Phnom Penh to Sihanoukville in the Inter-corridor Link. The train mainly carries heavy fuel oil for generators, cement, and rice on the inbound service to Phnom Penh, and wood and stones on the outbound service to Sihanoukville. Part of the rail network is not operational because the route between Phnom Penh and Poipet and the route between Sisophon and Poipet were badly damaged during the civil war. The railway track between Phnom Penh and Sihanoukville is usable but sometimes unreliable.

The main railway line from Bangkok to Ho Chi Minh City is part of the Singapore-Kunming Railway Link, an ASEAN flagship project. There are missing links between Poipet and Sisophon in Cambodia (48 km), between Phnom Penh and the Vietnam border near Loc Ninh (254 km), and between Loc Ninh and Ho Chi Minh City (129 km) in Vietnam. Completing the Bangkok-Ho Chi Minh City railway connection requires extensive rehabilitation and/or new construction of the line from Poipet at the Thailand- Cambodia border to Ho Chi Minh City.

The railways are currently being rehabilitated by the Australian company Toll Holdings, to be operated under the name Toll Royal Railways and to complete a missing link in the Trans-Asian Railway. The first line to be reopened as part of the project was the 117 km section between Phnom Penh and Touk Meas in October 2010, with the complete line to Sihanoukville to be open by May 2011.

There is an agreement with Australia's Toll Holdings to upgrade the national railway system, restore the link from the present western railhead at Sisophon to the Thai railhead at Poipet, and to construct a new 225 km line linking Cambodian railways to the Vietnamese railhead of Loc Ninh. The renovation of the existing lines, to be carried out in 48 km

segments, is expected to take 2-3 years. The link to Vietnam would involve construction of two major bridges: one across the Tonle Sap River, and another across the Mekong River in Kampong Cham Province.

The western line connecting to the Thai rail network at Poipet is currently being reconstructed, and a new railway connecting Phnom Penh to Ho Chi Minh City is in planning, which would complete the rail link from Singapore to Kunming.

Moreover, the Chinese railway company Nanning Survey and Design Institute Co. Ltd, a subsidiary of the China Railway Siyuan Group, plans to survey a potential 700 km rail line in northern Cambodia that stretched across Preah Vihear, Stung Treng, Kampong Thom, and Kratie provinces and connects to the Laos and Vietnam borders.²

1.5.3. Inland Waterways

The inland waterway system of Cambodia has a total navigable length of 1,750 km, of which only 580 km is navigable all year round. The system consists of the Mekong River and its tributaries, the Tonle Sap Lake and its tributaries, the Tonle Sap River, and the Bassac River. The Mekong River accounts for about 30 % of the length of navigable inland waterways, Tonle Sap 15 %, and the remaining waterways 50 %.

In Cambodia, water transport is available from Phnom Penh to Siem Reap through the Tonle Sap River in the Central Sub-corridor (Table 9). Phnom Penh Port is the biggest river port in Cambodia. Located 330 km from the mouth of the Mekong River, it was used only for general cargo in the past but now has been upgraded to handle containers. Together with a multipurpose terminal, it will serve as a logistic and supply base for the emerging oil and gas industry in Cambodia. On the Tonle Sap River, there are ports located at Chhnok Trou of Kampong Chhnang Province, and at Chong Kneas of Siem Reap Province on the Tonle Sap River and Lake.

In the Inter-corridor, the waterway runs by the Mekong River from Phnom Penh to Kampong Cham, and from Kampong Cham to Kratie, and from Kratie to Stung Treng, with river ports located at the center of each province to handle domestic cargo and passengers. At low-water levels, the presence of rocks between Kratie and Stung Treng (128 km) by

² *The Phnom Penh Post*, November 17, 2011.

Table 9: Maximum Navigable Vessel Size in the Mekong River Basin by Section

	River Section	Length (km)	Year-round navigation possible	Vessel size restriction (DWT)	
				Low Water	Mean-high water
Mekong Mainstream	Luang Prabang-Vientiane	425	Yes-but requires small boats and skilled pilots during dry season	15	60
	Vientian-Savannakhet	459	Yes	200	60
	Savannakhet-Pakse	261	No “high water” only navigation possible	Less than 10	50
	Pakse-Khinak	151	Yes	50	
	Khinak-Veun Kham	14	No-navigation not possible at any time due Khone Falls		
	Veun Kham-Stung Treng	30	Yes-with size limitations at low water	15	50
	Stung Treng- Kratie	128	Yes-with size limitation at low water	20	50
	Kratie- kampong Cham	121	Yes	80	200
	Kampong Cham- Phnom Penh	100	Yes-navigable by sea-going ships	2,000	
	Phom Penh-Junction of Vam Nao Pass	154	Yes-navigable by sea-going ships	3,000-4,000	5,000
Bassac River	Vam Nao Pass-South China Sea		Yes-navigable by sea-going ships	3,000-4,000	3,000-4,000
	Phnom Penh-Junction of Vam Nao Pass		Yes- but not possible by sea-going ships	20	50
Tonle Sap	Vam Nao Pass- South China Sea	188	Yes-navigable sea –going ships	5,000	5,000-6,000
	Phnom Penh-5km South of Kampong Chhnang	94	Yes-navigable by sea-going ships	1,000	2,000
	Kampong Chhnang- Chhnoc Trou	46	Yes-with size limitations at low water	20	150
Mekong Delta Waterways	Chhnoc Trou- Chong Kneas	109	Yes-with size limitations at low water	20	150
	Dense network of man-made canals, natural creeks and Mekong tributaries, with a total navigable length of 4785 km	4,785	Yes- Vessel size restrictions within this network vary from 10-300DWT		
	Sekong- Mekong tributary (La0 PDR and Cambodia)		Yes-this waterway is navigable between the Lao PDR and Cambodia, providing an alternative international transit corridor to the Mekong which is non-navigable though the Khone Falls.		

Source: Overview on Transport Infrastructure Sectors in the Kingdom of Cambodia.

river from Phnom Penh restricts passage to small vessels of up to 20 tons. The remaining navigable waterways are restricted to vessels of 100 to 150-ton capacity.

In Kampot Province in the Southern Coastal Sub-corridor, there are two ports: a small port in Kampong Kandal and a medium-sized port in Koh Toch. Both ship movements and the tonnage of cargo carried out on the inland waterway system of Cambodia have demonstrated a positive growth trend over the past decade. Maintenance of channel depths within the Mekong River of at least 4.5 m from Phnom Penh to the Vietnam border and at

least 2.5 m from Phnom Penh to Kratie requires heavy maintenance dredging of up to 330,000 m³ per year.

Phnom Penh Port has expanded its new container terminal of 20 ha at about 25 km downstream of the Mekong River to take advantage of Vietnam's Cai Mep Port development. The distance between Bavet-Moc Bai and the Cai Mep port is 146 km. The port provides faster services and lower cost. The Phnom Penh Autonomous Port (PPAP) will transfer 75 % of its loading capacity to a new location at Kandal Province to better handle the increased shipments passing through the capital. The PPAP had received US\$ 68 million in financing from the Chinese government for a second terminal 25 km east to Phnom Penh, on which construction began in September 2010. The Kandal facility would handle about 300,000 TEUs a year, compared with the 70,000 TEUs handled at Phnom Penh.

1.5.4. Power

Cambodia's electricity supply comes from 22 small, isolated power systems, most being diesel generators. There is no high-voltage transmission system outside Phnom Penh, so the country's electricity supplies are mostly isolated, unreliable, and in poor condition. Generation capacity is well below demand, so most would-be consumers must install and operate individual diesel-fueled and automotive-battery units. In several cases, the power supply along SEC sub-corridors in Cambodia is provided by neighboring countries such as Vietnam and Thailand.

1.5.5. Telecommunications

The upgrading of telecommunication services in Cambodia will be an important element in the development of the SEC and the promotion of economic activity in the country. The current telecommunication network is inadequate for business activities that require heavy data transfer over the internet.

2. DEVELOPMENT TRIANGLE AREA

2.1. Background

The Development Triangle Area (DTA) including Cambodia, Lao PDR, and Vietnam

(collectively known as CLV) was initiated in 1999 when the prime ministers of these three countries agreed upon development cooperation among themselves. It aims to promote prosperity of the people in the member countries. Originally, the development project was to focus on 7 provinces, namely Ratanakiri and Stung Treng in Cambodia; Attapeu and Sekong in Lao PDR; and Kon Tum, Dak Lak, and Gia Lai in Vietnam. These 7 provinces have a similar terrain, climate, and socio-economic background, providing great potential for agriculture, forestry, tourism, trade, and light industries.

In 2004, the DTA in the border areas of the three countries was established, as a consequence of a decision by the three prime ministers, consisting of 10 provinces, namely Stung Treng, Rattanakiri, and Mondulakiri in Cambodia; Sekong, Attapeu, and Saravane in Lao PDR; and Kon Tum, Gia Lai, Dak Lak, and Dak Nong in Vietnam.

In December 2009, in Dak Lak at the Joint Coordination Committee Meeting, the three countries unanimously added the provinces of Kratie (Cambodia), Champasak (Lao), and Binh Phuoc (Vietnam) to the composition of the DTA. One of the priorities of this development triangle is to establish a transport network linking the triangle with the three capital cities (Attapeu, Stung Treng, and Pleiku) and Vietnam's seaports. In 2004, the three member countries' representatives finalized and approved the CLV socio-economic Development Master Plan in the third meeting during the 10th ASEAN summit. In the same year, Japan agreed to provide financial support to facilitate the development projects in the CLV member countries.

The 4th summit of CLV countries on the DTA was held in Vietnam in December 2006. During the summit, the prime ministers of the CLV countries reaffirmed initiatives and decisions approved at the previous meetings on building the development triangle in order to hasten economic growth, reduce poverty, and promote cultural and social progress in the region on the basis of bringing into play potentials and advantages of each country, simultaneously contributing actively to peace, consolidation, stability, integration, and development. In the same meeting, the three prime ministers set up a Joint Commission for the Coordination of CLV Cooperation for Development of the Triangle Area to jointly implement and harmonise policies among the CLV region.

2.2. Objectives of Development Triangle

The development triangle envisages the CLV region as an integrated, prosperous, and harmonious region. The development triangle objectives are to promote sustainable economic growth, reduce poverty and income disparities, and manage and conserve natural resources and the environment.

2.3. Components of Development Triangle

To fulfill these objectives, there are various kinds of strategies to implement, namely, transportation networks, energy and electricity, trade and investment, tourism and environmental conservation, and human resource development and health care.

2.4. Basic Information of CDTA Provinces

The 4 Cambodia provinces of Stung Treng, Rattanakiri, Mondulkiri, and Kratie in the northeast of Cambodia are part of the Development Triangle Area (DTA), covering a land area of 47,256 km² or 26.10 % of the country's total land area, with a population of 642,461 people (Table 10). The population density averages 13.6 persons per km², including 4 persons per km² in Mondulkiri, 10 persons per km² in Stung Treng, 14 persons per km² in Rattanakiri, and 29 persons per km² in Kratie provinces. The majority of the population lives in rural areas, or 88.44 %. The literacy rate is among the lowest in the country, averaging 62.5 %, while the incidence of poverty is among the highest in the country.

Table 10: Population and Land Area of Cambodia Development Triangle Area

Provinces	Total Population	Land area (Km ²)	Population Density (persons/km ²)	Rural Population (%)	Literacy rate (%)	Poverty incidence* (%)
Kratie	319,217	11,094	29	88.73	73.51	46.11
Mondulkiri	61,107	14,288	4	92.05	61.49	46.11
Stung Treng	111,671	11,092	10	85.75	60.40	46.11
Rattanakiri	150,466	10,782	14	87.16	44.58	46.11
Total of 4 provinces CDTA	642,461	47,256	16	88.44	62.5	46.11

Source: General Population Census of Cambodia 2008; * MOP, A Poverty Profile of Cambodia 2004, February 2006.

The DTA is the habitat of various ethnic groups (there are 31 ethnic groups residing in the provinces of Cambodia and the numbers in Vietnam and Laos are about 40 and 15, respectively). These 4 provinces have not yet developed commercial production with self-reliant and sufficient agriculture. Their trade has not yet developed with only some private enterprises in charge of supplying essential products and consumer goods for residents. Transportation infrastructure, electricity, water supply, and post and telecommunications have been invested in for construction. Services and tourism are developing more slowly than their potential.

One of the most important achievements made in the DTA, representing the special cooperation of the three countries and localities, was the construction and upgrading of the transportation network, especially road transportation routes (*Reviewing Adjusting and Supplementing The Master Plan For Socio-Economic Development in Cambodia-Lao-Vietnam Triangle Area Up to 2020*).

2.5. Road Transportation Status in Cambodia DTA

Development of the transport network is seen as the most important breakthrough for socio-economic development and tourism development in the CDTA. The strategy for the development triangle is to link the border provinces of Cambodia, Lao PDR, and Vietnam. Strengthening physical linkages would overcome the lack of physical connectivity and promote cross-border trade, investment, and tourism together. Important transportation projects are Route No. 78 linking Ban Lung-O Yadav in Rattanakiri (Cambodia) to Gia Lai (Vietnam), and Route No. 18B linking Attapeu (Lao PDR) to Vietnam.

Moreover, it is expected that transportation networks would serve as economic corridors benefiting local communities rather than only transportation. The transportation networks would serve as vital economic linkage for transportation, trade, and tourism among the three countries. The following is the road transportation status in the CDTA:

- Route No. 7 is 476 km long and starts from Skun (Kampong Cham Province) connecting with Kratie, Stung Treng provincial town, and the Laos border (linking with Road 13 of Laos). At present, Route No. 7 is in good condition with a width of 11 m

(paved with DBST or double bituminous surface treatment).

- Route No. 78 starts from Route No. 7 at the O Pong Moan junction in Stung Treng Province (15 km from Stung Treng provincial town), connecting with Ban Lung (Rattanakiri Province) to the Cambodia-Vietnam border with a total length of 194 km. The 70 km section from Ban Lung to O Ya Dav (Cambodia-Vietnam border) was completed in 2009. A 124 km section from O Pong Moan to Ban Lung is being constructed and improved to grade III by using DBST.
- Route No. 78A starts from Route No. 78 at Ban Lung and connects with Road 1J of Laos. With a total length of 150 km, an 80 km section is constructed of soil and gravel and the remaining 70 km section is under a planning program.
- Route No. 76 starts from Route No. 7 (in the Snuol district, Kratie Province) to Ta Ang in Rattanakiri Province, connecting to Route No. 78 at about 8 km from Ban Lung, Rattanakiri provincial town. This road runs through the Lumphat district (Rattanakiri Province), Koh Nhek (Mondulkiri Province), and Sen Monorom, Mondulkiri provincial town. The total length is about 306 km. The project for rehabilitation of Route No. 76 linking Snuol and Sen Monorom, undertaken by China Road and Bridge Construction Company, has a total length of 127 km (DBST, width 11m) and is reaching the final stage. The 179 km of road from Sen Monorom (Mondulkiri provincial town) to Ta Ang (Rattanakiri Province) is still an earth road of 4-5 m width. The feasibility study for that remaining section is carried out by a Chinese team.
- Road 376 starts from Route No. 7 (at Prich Mountain, Kratie) going through Mondulkiri (111 km) and connecting with the PR 376 (Chi Mit-Dak Road) border gate in Vietnam. Its length of 95 km is still surfaced with gravel and earth.
- PR 376 from Route No. 76 to Nam Lear (Pechreada district, Mondulkiri) to the Dak Boeur border (Dak Nong, Vietnam) has a total length of 60 km.
- Feasibility study was conducted for installation of a drainage system in Kratie, Mondulkiri, Rattanakiri, and Stung Treng town.
- Road connection from the Keo Seima district via O Raing, Pechreada to Koh Nhek district is about 286 km further than the connection to Vietnam (Binh Phuoc, Dak Nong, Dak Lak).
- Route 75 from Route No. 76 (Koh Nhek district) connects to Route No. 78 at Royor Leu

Commune) with a length of 101 km.

- Route No. 73 starts from Kratie provincial town and connects with Route No. 7 (Kampong Cham) at Pratheath with a total length of 93 km.

Currently, the provincial roads, national roads and rural transport network in the CDTA provinces have been gradually rehabilitated and upgraded, increasingly meeting socio-economic development requirements (*Reviewing Adjusting and Supplementing The Master Plan For Socio-Economic Development in Cambodia-Lao-Vietnam Triangle Area Up to 2020*).

2.6. The Air Ports

The airports in the 4 provinces of the CDTA have been temporarily closed due to poor infrastructure. So far, due to lack of financial support, there is no rehabilitation project in progress in the CDTA besides existing completed design studies funded by international donors.

There were preliminary studies of the airports in Mondulakiri, Stung Treng, and Rattanakiri funded by the ADB, with a prioritized rehabilitation project given to Rattanakiri. The detailed design study of the Rattanakiri airport was completed by the ADB with an approximate rehabilitation cost of around US\$ 7 million.

Given the economic potential of the CDTA in the future, the upgrading and rehabilitation of the airports in the provinces are necessary. This would help facilitate trade, tourism, and other businesses in the area.

2.7. Power and Telecommunications

While electricity has an important role in promoting the living standard of the people, the current electricity supply is only sufficient for the provincial towns and major districts of the 4 provinces. Continuous efforts are being made to supply electricity to every household and to lower the tariff, through the imports from the neighboring countries and the construction of hydropower dams within the region where a number of potential sites have not yet been exploited.

In Mondulakiri, the sources of electricity supply are a power generator with the supply

capacity of 370KW and two micro-hydropower plants in O Romeas and O Mleng with a combined supply capacity of 360KW. However, the supply is only sufficient for Sen Monorom town. Electricity is imported from Vietnam for the Keo Seima district, with the supply capacity of around 500KW. In Kratie, electricity is supplied by two sources. A power plant with an installed capacity of 1.6MW supplies only the provincial town. The other supply for the Snuol district is imported from Vietnam with a capacity of 1MW. For Rattanakiri, the electricity is imported from Vietnam through the O Yadav-Le Thanh border gate to the Borkeo and O Yadav districts. While for Stung Treng Province, electricity is imported from Lao PDR. Moreover, there are hydropower sites of great potential in the CDTA provinces (Table 11) for which Cambodia needs to seek funds to build power plants in the future.

With improved infrastructure, the telecommunication network in the CDTA has been expanding rapidly. An increasing number of mobile phone operators have been extending to the 4 provinces, making the service charges cheaper. However, internet service is still expensive though a number of providers are there.

3. POTENTIAL PROVINCES ALONG THE SOUTHERN COASTAL AND NORTHERN SUB-CORRIDORS

The sub-corridors have the necessary drivers of growth, including an agricultural base, an industrial base, and world-class tourism assets. With the appropriate physical, policy, and institutional framework, the SEC could very well be a primary generator of economic growth. The Southern Coastal and Northern Sub-corridors have advantages in agriculture, forestry, and fishery production and processing, which also provides many investment opportunities in the SEC. Manufacturing enterprises can be promoted in areas where supply chains and logistics can be efficiently operated, with the effort being spearheaded by foreign direct investment (FDI) in SEZs.

Cambodia can draw a huge amount of tourists due to its world-class tourist attractions such as Angkor Wat and other old temples, and the beaches at coastal zones along the SEC have good potential for tourism development, which can help create employment and raise

Table 11: Potential Hydropower Sites in CDTA Provinces

Province	Potential Hydropower Sites in CDTA Province	Distance from Provincial Town (km)	Capacity (MW)	Project Cost estimate (US\$ million)
Kratie	1)Sambo	40-50	467-3,300	700-3,940
	2)Prek Chhlong1	120	7	
	3)Prek Chhlong2	60	24	
	4)Prek Te 1	75	7	
	5) Prek Te 2	50	10	
	6) Prek Te 3	25	13	
Stung Treng	1)Sre Pork Krom 2	30	222	339
	2)Se San Krom 2	28	207	374
Rattanakiri	1)Sre Pork Krom3	32	330	
	2)Prek Leang 1	70	55	
	3) Prek Leang IA	60	12	
	4) Prek Leang 2	80	44	
	5) Se San Krom 3	30	375	
Mondulkiri	5) Se San Krom 1		90	
	1)Prek Pock Krom4	100	235	
	2) Prek Rovieng 1	70	7	
	3) Prek Rovieng 2	80	5	
	4)Prek Chbar	95	5	
	5) Prek Otalay 1	20	5	
	6) Prek Otalay 2	23	4	
	7) Prek Otalay 3	25	5	
	8) Prek Otalay 4	30	7	
	9) Prek Phear 1	35	17	
	10) Prek Phear 2	40	8	
11) Prek Phear 3	45	9		

Source: Overview report on Reviewing, Adjusting the Cambodia-Laos-Vietnam Development Triangle Master Plan; Strategy and Action Plan for the GMS Subregion Southern Economic Corridor.

incomes in the communities along the Southern Coastal Sub-corridor. Increased connectivity along SEC sub-corridors can facilitate the development of circuit tours of the diverse tourism resources.

Cambodia has the advantages of abundant agricultural land, water resources, forestry and fishery reserves, mineral resources (including oil and gas), world-renowned tourism assets such as those in Siem Reap Province, a large supply of unskilled laborers, and coastal areas suitable for tourism development (Table 12).

**Table 12: Key Resources in Southern Economic Corridor Provinces in Cambodia
(Continues)**

< Central Sub-corridor >		
Provinces	Mining resources	Other resources
Banteay Meanchey	1) limestone, 2) phosphate	1) Daunsam flooded forest
Battambang	1) limestone, 2) gold ore, 3) iron ore, 4) aluminum, 5) precious stones, 6) clay	1) Tonle Sap River, 2) Samkok Mountain 3) Daunsam flooded forest
Pursat	1) Phosphate, 2) antimony, 3) chromium, 4) clay	1) Oral Mountain, 2) Samkok Mountain 3) Tonle Sap River
Kampong Chhnang	1) granite, 2) molybdenum	1) Oral Mountain, 2) Tonle Sap River
Kandal		1) rivers
Phnom Penh	1) clay	
Siem Reap	1) granite, 2) clay	1) Kulen Mountain, 2) Tonle Sap River
Kampong Thom	1) gold, 2) clay	1) Tonle Sap River
Kampong Cham	1) gold	
< Northern Sub-corridor >		
Provinces	Mining resources	Other resources
Siem Reap	1) clay, 2) granite	1) Kulen Mountain, 2) Tonle Sap
Stung Treng	1) clay, 2) iron ore, 3) marble, 5) coal, 4) precious stones, 6) dolomite	
Mondulkiri	1) lead, 2) copper, 3) zinc, 4) granite, 5) gold 6) aluminum, 7) bauxite	1) Phnom Preck, 2) Phnom Namlear
Rattanakiri	1) lead, 2) copper, 3) zinc, 4) gold, 5) lead, 6) precious stones, , 7) copper, 8) zinc, 9) gold	
Preah Vihear	1) precious stones	
< Southern Coastal Sub-corridor >		
Provinces	Mining resources	Other resources
Koh Kong	1) limestone, 2) graphite, 3) gold, 4) iron ore	1) Kirirom Plateau, 2) Phnom Samkok
Kampot	1) phosphates, 2) white sand	1) Bokor Mountain

**Table 12: Key Resources in Southern Economic Corridor Provinces in Cambodia
(Continued)**

< Inter-corridor >

Provinces	Mining resources	Other resources
Sihanoukville	1) white sand, 2) oil and gas	1) Bokor Mountain, 2) beautiful beaches
Kampong Speu	1) lead, 2) copper, 3) zinc, 4) silver, 4) tin 5) tungsten, 6) limestone	1) Bokor Mountain, 2) Kirirom Plateau
Phnom Penh		1) Rivers
Kandal	1) molybdenum	
Kampong Cham	1) clay, 2) gold	
Kratie	1) lead, 2) copper, 3) zinc, 4) granite, 5) gold, 6) precious stones	
Mondulkiri	1) lead, 2) copper, 3) zinc, 4) granite, 5) gold, 6) aluminum	1) Phnom Preck, 2) Phnom Namlear
Stung Treng	1) clay, 2) iron ore, 3) marble, 4) precious stones, 5) coal, 6) dolomite	

Source: Prime Investment Information in Cambodia, Council for the Development of Cambodia.

3.1. Distances to Ports and Markets

3.1.1. Southern Coastal Sub-corridor

This coastal sub-corridor has great potential for tourism development along coastal areas, and large potential for hydropower development, in particular in Koh Kong and Kampot provinces. The deep-sea areas enable the development of international ports for marine transportation (International Sihanoukville Port and others). It is engaged also in agricultural production of durian, pepper, rice, fruits, and food processed products, as well as SEZs development in Koh Kong, Sihanoukville and Kampot, and other light manufacturing and export-oriented industries.

The development of Cambodia's southern coastal area under the scope of the SEC aims to facilitate the transnational movement of goods, services, capital, people, and information within the region. Among the three economic corridors of the GMS, all of which aim to intertwine all of the GMS countries physically, spatially, and economically, the SEC is the only corridor that geographically covers Cambodia, connecting it to Vietnam and Thailand and, to a limited extent, southern Lao PDR. The coastal sub-corridor is considered

Table 13: Distances to Major Ports and Market Destinations

	Phnom Penh	Takeo	Sihanoukville	Laemchabang	Markets
Koh Kong	307	78	237	359.2	Korea, China, EU, USA, Thailand,
Sihanoukville	230	172	0	593.6	EU, Japan USA, China, Thailand,
Kampot	148	78	93	609.9	EU, Japan, Vietnam, Thailand, China
Kep	173	103	118	634.9	EU, China, Vietnam, Thailand.

Source: measured by the editor.

geographically important for both cross-border and overseas trade due to its borders with neighboring countries and its proximity to the deep-sea Sihanoukville port (Table 13).

In addition, a number of potential industrial zones and SEZs in Preah Sihanouk and Koh Kong are located along the coastal sub-corridor, where industrial linkages could be established domestically and internationally. Furthermore, the Southern Coastal Sub-corridor has an important feature in its connection to Thailand's Eastern Seaboard industrial complex and some industrial zones in Vietnam. These critical factors imply that the cross-border facilitation and the subregional integration through this sub-corridor can provide an opportunity for Cambodia's coastal area to host an inflow of industries from neighboring countries, including supporting industries of the Eastern Seaboard of Thailand. The relocation of industries from Thailand and Vietnam to the southern coastal area of Cambodia can also be facilitated through effectively promoting preferential treatments under various GSP schemes that Cambodia currently enjoys. It should be noted, however, that the development of the GMS program in Cambodia is still in its infancy and that there remain a number of challenges to overcome, including Cambodia's weak institutions and infrastructure (quantity and quality of roads). Moreover, industries in the southern coastal area along the corridor need to be promoted in harmony with the environment as this area is rich with natural resources.

Table 14: Distances to Ports and Market Destinations

Provinces	Phnom Penh	Kampong Cham	Sihanoukville	Quy Nhon	Markets
Stung Treng	481	357	711	445	China, Vietnam, Japan, EU
Rattanakiri	588	464	818	302	China, Japan, EU, Vietnam

Source: measured by the editor.

3.1.2. Northern Sub-corridor

This sub-corridor has great, historic, cultural temple tourism sites such as Angkor Wat and other diverse ethnic culture for developing cultural tourism. It covers a large land area, has fertile soil, and is suitable for agriculture, fisheries, livestock, and agro-industry plantation and processing. It also has a huge forest land area, a large number of national protected parks, national forests, and biodiversity that are great potentials for eco-tourism development. There is also a system of rivers with great potential for hydropower development. It is rich in water, forests, and numerous types of minerals with commercial reserves (bauxite, iron, gold, coal, precious stones).

Moreover, the Northern Sub-corridor has world and regional context, and expanded capacity for FDI attraction, technology transfer, and markets. Further attention should be given to investment in these areas in triangle development by neighboring countries and others using the GSP quota for export to major markets such as the EU, Japan, and Canada (Table 14).

3.2. Industrial Potentials

So far private sector investment in Cambodia has been heavily dependent on the tourism sector and the construction subsector that account for 62 % of the total investment amount approved in the past 15 years, whereas merely 16 % of approved investment was in the manufacturing sector and 4.57 % was in the agriculture sector. At the same time, the industrial subsector investment still depends heavily on FDI in textile, apparel, and footwear. The long-time target of industry diversification will be yet achieved in foreseeable time. Although investment in the agriculture sector is increasing in the past period, it still remains moderate in size. And the construction sector seems to be shrinking. Investment in the

diversified industrial sectors has yet to be successfully promoted in Cambodia. Moreover, Cambodian enterprises still lack the capital to cover large-scale projects by themselves.

However, present private investment in the coastal area is characterized by heavy dependency on tourism and area development. While investment in the manufacturing sector is still slow and its scale is also rather small, export-oriented industries have yet to locate in the area, with a few exceptions.

The other vital characteristics of investment in the coastal area are that the resource-based investment has been active such as in Preah Sihanouk Province, investment has been made in the oil terminal, refinery and exploration in Koh Kong Province, investment has been made in mining, and investment is planned for manufacturing alcohol based on sugarcane.

8 out of Cambodia's total SEZs are operational across the country, while the rest are still waiting for both local and foreign investors, according to data from the Council for Development of Cambodia. The government considers SEZs an important part of the country's economic development as they bring infrastructure, jobs, skills, and enhanced productivity. At the same time, investors in the SEZs will benefit from a number of fiscal incentives, including income tax, customs, and VAT benefits. According to the statistics, the operational SEZs are those located in the provinces of Koh Kong, Svay Rieng, Banteay Meanchey, Kandal, Kampong Cham, Preah Sihanouk, and Phnom Penh. And the products being produced in those SEZs include vehicles and parts, garments, bicycles, footwear, jewelry packaging, pure drinking water, electric poles, sugar, and agro-products.

Currently, among the total SEZs approved in Cambodia, 11 are located in the coastal area, 6 in Preah Sihanouk Province, 4 in Koh Kong Province and one in Kampot Province. Among the existing ones in coastal area, only the Sihanoukville SEZ II in Preah Sihanouk Province and the Neang Kok Koh Kong SEZ are operational. The SEZs in the area have so far failed to attract investors and bring in enough economic effect. This is due to the financial bases of investment projects being uncertain, the vulnerability of the legal framework, and the lack of attractiveness of the fiscal preferential treatment and the institutional setting. Tables 15 and 16 summarize the economic sector status of Cambodia's coastal and northern provinces, respectively:

Table 15: Economic Sector Status of Cambodia Coastal Provinces

	Items	Kampot	Kep	Sihanoukville	Koh Kong	Takeo	
Agriculture	Labor force	86.08%	79%	47.17%	63.65%	87.60%	
	Rice	Area (ha)	124,600	3,000	12,500	9,600	246,400
		Product	319,700	5,300	21,700	21,900	810,200
	Corn	Area (ha)	1,300	0	-	100	500
		Product	2,400	0	-	400	500
	Rubber	Agro-indust	-	-	-	-	-
		Eco.Land	-	-	-	-	-
		Household	-	-	-	-	-
	Others	Black pepper, cashew nuts, sugar can	Black pepper	Sugarcane, durian	Suga cane,	-	
	Market destination	local, Vietnam, Thailand	local, Vietnam	local, Phnom Pen, Thailand	Local, Thailand	Local, Phnom Penh, Vietnam, Thailand	
	Fisheries (ton)	5,500	700	570	1,295	10,800	
	Livestock	Poultr	1,105,800	71,900	163,082	50,282	2,144,225
		Buffal	12,700	500	7,501	6,968	4,160
		Pig	145,000	12,800	12,563	10,436	197,101
Cattle		228,000	15,100	10,347	6,142	370,131	
Logistic Route	NR3, NR33, R31, NR48, NR4	NR33, R33a,R31	NR4, NR3, NR48	NR48, NR4,	NR2, NR3, R31		
Industry	Labor force	2.69%	4.43%	14.88%	6.82%	3.76%	
	Manufacturing	Cement factories, salt refiner., garment,	Crab meat collection, ice, drinking water	125 small industries and handicrafts; garments, textile, footwear, seafood/ cold storage, refinery/ oil terminal, other manufacturing	192 small industries and handicrafts ;	847 small manufacturing, handicrafts,	
	SEZ	01 SEZ (Not yet in operation)	n/a	6 SEZs approved by sub-decree, but only 1 Sihanoukville SEZ II is operational	4 SEZs , but only 1 SEZ (Neang Kok Koh Kong SEZ) is operational	01SEZ (Not yet in operation)	
	Mining	Iron ore, gold, clay for cement factories, limestone, phosphate minerals, lignite, clay minerals	Gold, quartzite	white sand	selica sand, Jet, supphire, sandstone	Molybdenum, copper, silica, tin, jaspers, granites	
Energy	Imported from VN, will be used Kamchay Hydropower 193MW,	Imported from VN, but will be used from Kampot Hydropower	generators, but will be used power from Kamchay hydropower	Imported from Thailand, will be used power from hydropowers	Imported from VN, and will be used from Kampot Hydropower		
Service	Tourism	Bokor mountain Resort	Sea beach	beach, island resort, golf course,	beach, and eco-tourism	Many cultural tourism sites	

Note: “NR” means National Road or Route and “VN” means Vietnam.

Source: CRCDC

Table 16: Economic Sector status of Cambodia Northern provinces

	Items	Kampong Cham	Rattanakiri	Mondulkiri	Kratie	Stung Treng	
Agriculture	Labor force (%)	83.70	85	77.99	82.32	79.80	
	Rice	Area(ha)	219,800	27,100	17,100	42,300	23,000
		Product(t)	747,200	46,500	32,700	121,000	63,200
	Corn	Area(ha)	13,300	333	700	1,700	600
		Product (t)	36,500	753	5,800	2,900	500
	Rubber	Agro-industry (ha)	52,253	3,704	n/a	4,971	n/a
		Eco.Land Concess.	600	21,276	20,485	81,421	162,350
		Household	41,546	13,960	6,280	5,650	910
	Others	cassava, cashew nuts, soybean, peanut	cassava, cashew nuts, soybean, peanut	cassava, cashew nuts, soybean, peanut	cassava, cashew nuts, soybean, peanut	cassava, cashew nuts, soybean, peanut	cassava, cashew nuts, soybean, peanut
	Market destination	Local, Phnom Penh, and other provinces, VN,	Local, VN, China	Local, China, VN,	China, VN, Local	Local, Lao, VN	
	Fisheries (t)	7,000	500	250	3,500	2,000	
	Livestock	Poultry	1,711,936	104,846	49,159	266,154	104,751
		Buffalo	67,946	18,356	11,272	13,008	35,368
		Pig Inventory	148,198	31,844	9,952	33,590	38,018
		Cattle	379,460	29,985	13,804	104,587	26,024
Logistic Route	NR6,7,11,70,71, 72,73, 60	R78,R78A,R76	NR76, PR376, R75, R79,	NR7,NR76, NR73, R 376, PR 282,	NR 7, R 66, R78		
Industry	Labor force (%)	3.77	2.61	4.49	3.65	3.49	
	Manufacturing	2,520 small industries and handicrafts	161 small industries and handicrafts	82 small industries and handicrafts	843 small industries and handicrafts	152 small industries and handicrafts	
	SEZ	Not yet in operation	n/a	n/a	n/a	n/a	
	Mining	Gold, ceramic clay, clay minerals, rhyolites, basalt.	Copper, gold, zircon gems, cooper-lead- zinc, basalt, -Gold and iron mine are exploring	Bauxite, Copper-lead-Zinc, Gold,	Copper, Lignite, gold, bauxite,	iron ore, manganese, gold, dolomite, limestone, amethyst, marbles, coal.	
	Energy	Imported from Vietnam	Mini hydro-power,	Many potential hydropower sites	May hydropower sites	Imported from Lao. Hydropower will be constructed	
Service	Tourism	Many cultural tourism sites	Many Eco-tourism sites	ecotourism,	Dolphin, Ecotourism, Cultural sites	Many Eco-tourism sites	

Source: CRCDC

4. CHALLENGES AND CONSTRAINTS

The realization of the SEC's full potential requires that certain impediments and constraints be addressed to improve its competitiveness and make possible the integration of economic

activities along corridors.

A major constraint on the development of SEC provinces in Cambodia is the lack of and poor state of physical infrastructure and facilities, including unreliable electricity supply and limited storage and warehousing facilities. Information technology equipment and communication facilities also represent major bottlenecks. There remain unpaved sections in the Southern Coastal Sub-corridor segment and the Cambodia component of the Northern Sub-corridor. Border-crossing facilities along Cambodia-Lao PDR traversed by the Inter-corridor Link are also underdeveloped. A major impediment to the efficient flow of people and goods in SEC sub-corridors is the delay in the implementation of the cross-border transport agreement (CBTA).

Workers in the Northern Sub-corridor and the Southern Coastal Sub-corridor have low levels of skills and knowledge and are unable to apply advanced technology and management practices to raise productivity or improve competitiveness. The key challenges are how to fully integrate the less-developed areas of the SEC with its more-developed areas so they can obtain meaningful benefits from the development of the corridor, and how to effectively address social and environmental concerns during SEC development. There is still a wide variation of income and poverty levels among the Cambodia provinces of the SEC as well as among the SEC sub-corridors. This requires the integration of the less-developed areas into the more-developed ones. Efforts in this direction will have to deal with certain problems inherent in the less-developed areas of the SEC, including (i) inadequate physical infrastructure, (ii) low incomes that cannot support a higher level of investment and production, (iii) remoteness from the major economic and population centers, and (iv) low population density over widely dispersed residential areas.

Although the development of the SEC is expected to bring benefits to the local population in terms of increased trade and investment and greater income-generating opportunities, there are potential undesirable consequences for the SEC and the people residing in the corridor and surrounding areas. These are already being experienced and need to be addressed effectively. Such consequences include the social and environmental impact.

Consequences of SEC development might be social impact such as a displacement of local communities, the spread of communicable diseases, the trafficking of women and children and illegal trade, increased land prices around road construction sites, and increased

traffic accidents. SEC development could lead to deforestation and loss of biodiversity due to large subregional infrastructure projects, and the increased mobility of people and goods may create opportunities for the rapid exploitation of natural resources along the corridor. Moreover, there could be environmental degradation because expanding industrial and economic activities along the corridor could lead to pollution and waste disposal issues.

5. DECISION MAKING REGIMES FOR REGIONAL DEVELOPMENT

5.1. Rectangular Strategy

The government adopted the Rectangular Strategy for Growth, Employment, Equity, and Efficiency as the framework for the country's socio-economic development. The Rectangular Strategy focuses on critical development issues such as the enhancement of the agricultural sector, rehabilitation and construction of physical infrastructure, private sector development and employment generation, and capacity and human resource development.

The RGC considers the National Strategic Development Plan (NSDP) as the single, overarching development strategy for pursuing prioritized goals and actions for any specific period. The NSDP has been framed as the implementation of the Rectangular Strategy, linking the vision in the Rectangular Strategy to concrete goals, targets, and strategies. It synthesizes goals and targets contained in the Five-Year Socio-Economic Development Plan for specific periods, the National Poverty Reduction Strategy for specific periods, and the Cambodian Millennium Development Goals. The NSDP highlights most essential strategies, targets, and actions, but it leaves more details to be spelled out in sectoral and sub-national plans which will feed into the first annual review of the NSDP scheduled for any date. NSDP preparation began in December 2004 and was led by the General Directorate of Planning of the Ministry of Planning (MOP). In March 2005, the government created an Inter-Agency Technical Working Group on NSDP Formulation – composed of 29 ministries/agencies – whose day-to-day work is managed by a secretariat chaired by the MOP.

Government ministries and agencies, donors, and civil society organizations were involved in the formulation of the NSDP. National-level consultations were held to elicit comments and to agree upon the overall goals and objectives of the NSDP. In mid-2005, a Technical Working Group on Planning and Poverty Reduction was established as a

mechanism by which stakeholder input could be incorporated in the NSDP formulation process. Suggestions from stakeholders were incorporated in the draft NSDP, which was subsequently discussed at a national workshop. The NSDP was approved by the Council of Ministers, later by the National Assembly in May, by the Senate in June, and promulgated by the King. A NSDP monitoring framework was approved and announced at the Government-Donor Cooperation in Cambodia (GDCC) meeting on June 14, 2006.

5.2. Other Strategies and Reform Programs

Other major strategies and reform programs are the Public Investment Program, which seeks to align the annual national budget to the targets in the NSDP; the Strategic Framework for Decentralization and Deconcentration, which seeks to transfer increased responsibilities for economic development and poverty reduction to lower levels of government; and the Public Financial Management Reform Program, which seeks to improve the linkage between policy priorities and budget planning and implementation, integrate accountability, review processes for both finance and performance, and improve the pay and management of the civil service.

The participation of the people: There are systems and procedures to ensure that people can participate in planning and monitoring public services in order to meet local needs and priorities. Based on the principle of “democratic participation,” the RGC will develop management systems on provincial/municipal, district/*khan*, and commune/*sangkat* levels, which will operate with transparency and accountability in order to promote local development and delivery of public services to meet the needs of citizens and contribute to poverty reduction within respective territories.

The provincial/municipal, district/*khan*, and commune/*sangkat* council, whose members were selected by the citizens (indirectly and/or directly), is an organization representing citizens to prepare, discuss, adopt, and implement the development plan and budgets, coordinate the development plan and activities, and deliver public services within their territories. The budget is very limited. Although the organic law gives authority to communes/*sangkats* to have access to their own sources of revenues, they have so far received revenue from only one source, i.e. the transfer of national budget through the commune/*sangkat* fund. Even if many development plans, local or regional, were proposed, they would have to seek top-level approval on whether they meet the criteria of the

development plan as a priority and whether they meet with budget availability and are aligned with the annual national budget. Even so, in practice, many sectoral development programs have been formulated and managed in the form of centralization. Provincial/municipal sectoral departments perform their duties directly and are responsible to their line ministries and institutions at the national level.

In a special case, such as the use of external funds supporting any development program in any regions, the RGC encourages governors of relevant provinces to develop their own provincial development project plans to submit for approval on inclusion into programs of the DTA.

CONCLUSION

The SEC has the essential drivers of growth, including established markets, an agriculture and industrial base, and world-class tourism assets. Cross-border trade facilitation and regional development along economic corridors in Cambodia have been playing a significant role in strengthening economic growth, improving the living standard of the Cambodian people, and contributing to poverty reduction. Efforts to solve current problems inherent in the less-developed areas of the sub-corridors shall be taken to ensure that the less-developed areas of the SEC share in the benefits of SEC development. It is important that necessary infrastructures and an efficient customs and transit system are put in place alongside designed SEC and other road networks. The SEC is developed in relation to the demand of local industries and markets so that the corridor would be fully utilized. Developing the SEC entails careful planning and coordination of infrastructure and complementary related measures to support business opportunities along the corridor. It is a multi-sector endeavor which calls for close partnership between the public and private sectors in the localities along the corridor as well as nationally.

The RGC, therefore, shall make efforts to reform the institutional framework by strengthening cooperation between relevant agencies in trade clearance, develop and implement national and regional development plans, and mobilize resources to improve physical connectivity and competitiveness.

REFERENCES

- Asian Development Bank (2002) *Building on Success: A Strategic Framework for the Next Ten Years of the Greater Mekong Subregion Economic Cooperation Program*. Manila: Asian Development Bank (in website of ADB, accessed on August 8, 2006).
- Asian Development Bank (2010) *Strategy and Action Plan for the Greater Mekong Subregion, Southern Economic Corridor*. Manila: Asian Development Bank.
- _____ (2009) *Transport and Trade Facilitation in the Greater Mekong Subregion –Time to shift Gears*. Manila: Asian Development Bank.
(<http://beta.adb.org/documents/greater-mekong-subregion-time-shift.gear>.)
- Christian Ksoll (2011) *The Blue Book on Transport and Trade Facilitation along the Southern Economic Corridor in Cambodia* (Preliminary Draft).
- Draft Report on Reviewing Adjusting and Supplementing the Master Plan For Socio-Economic Development in Cambodia-Laos-Vietnam Triangle Area Up to 2020.
- Grainger. Andrew (2007) “Trade Facilitation: A review” *Working Papers 2007*, Trade Facilitation Consulting, Ltd (www.trade-facilitation.co.uk).
- Ishida, Masami (2008) “GMS Economic Cooperation and Its Impact on CLMV Development”. In ERIA Project Research Report 2007 No. 4, *Development Strategy for CLMV in the Age of Economic Integration*, ed. Sotharith, Chap. Chiba: Institute of Developing Economies (<http://www.eria.org/research/no4.html>).
- Wilson, John S., Catherine L. Mann and Tsunehiro Otsuki (2003) “Trade Facilitation and Economic Development: Measuring the Impact,” *World Bank Policy Research Working Paper*, No.2988 2003 (www.papers.ssrn.com/so13/papers).
- Nhem, Kun (2011) “Status and Challenges of Single Window and Paperless Trade Implementation in Cambodia.” Bangkok: UNESCAP.
(www.unescap.org/tid/projects/tfforum10_campdf)
- Bryane, Michael, Frank Ferguson and Alisher Karimov (2010) “Do Customs Trade Facilitation Programs Help Reduce Customs-Related Corruption?” *Working Paper Series*. Social Science Research Network.

(http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1705904)

Ministry of Agriculture, Forestry and Fisheries (2011) *Annual Report for 2010-2011*, Phnom Penh.

Ministry of Commerce, Cambodia (2009) Update on the 12-points Action Plan as of July 31.

Ministry of Industry, mines, and energy (2010) *Annual Report for 2010*. Phnom Penh: Ministry of Industry, mines, and energy.

Ministry of Planning, Cambodia, and United Nations Development Program (2006) *A Poverty Profile of Cambodia 2004*.

Ministry of Planning (2009) *General Population Census of Cambodia 2008*. Phnom Penh: NIS.

Ministry of Planning, Cambodia (2008) *Statistical Year Book 2008*, Phnom Penh: NIS.

Sophorndara, Nop (2009) "Trade and Transport Facilitation in Cambodia" *Studies in Trade and Investment* 66. *Impact of Trade Facilitation on Export Competitiveness*. United Nation publication. Bangkok: UNESCAP, pp. 133-145 (<http://www.unescap.org/publications/detail.asp?id=1351>)

Prasad, Biman Chand, (2007) "Trade Facilitation and Customs Valuation in Fiji: a Comparative Analysis of Needs and Priorities", In *Trade facilitation beyond the Multilateral Trade Negotiations: Regional practices.*, pp. 223-243 (www.unescap.org/tid/artnet.pub/).

Rattanakiri Province (2011) *Five Year Development Plan (2011-2015)*. Banlung: Rattanakiri.

Stung Treng Province (2011), *Socio-Economic Profile*. Stung Treng: Provincial Government.

Nippon Koei Co. Ltd, KRI International Corp (2010) *The Study on National Integrated Strategy of Coastal Area and Master Plan of Sihanoukville for Sustainable Development, Final Report*. Tokyo: Japan International Cooperation Agency (http://www.jica.go.jp/english/operations/social_environmental/archive/pro_asia/cambodia_13.html).

Wiemer, Calla (2009) "Economic Corridors for the GMS" *EAI Background Brief* 2009 No. 479. Singapore: East Asian Institute, National University of Singapore (<http://www.eai.nus.edu.sg/BB479.pdf>).