### CHAPTER 9

# Japan's ODA to Mekong River Basin Countries: With Case Studies

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#### This chapter should be cited as:

Minoru Makishima, 2010. "Japan's ODA to Mekong River Basin Countries: With Case Studies." In *Japan and Korea with the Mekong River Basin Countries*, edited by Mitsuhiro Kagami, BRC Research Report No.3, Bangkok Research Center, IDE-JETRO, Bangkok, Thailand.

## Japan's ODA to Mekong River Basin Countries: With Case Studies

Minoru Makishima

#### INTRODUCTION

Japan has geographically and economically close ties to Mekong River Basin Countries (MRBCs) comprised of Cambodia, Laos PDR, Myanmar, Thailand, and Vietnam. Japan, through Japan International Cooperation Agency (JICA), has been the biggest source of official development assistance or ODA to each country. This includes grant, technical cooperation, and loan (so-called "Yen Loan"). Cambodia, Lao PDR, Myanmar, and Vietnam (CLMV) have gained more than 50 percent of ODA share in the Asian region. In terms of ODA disbursement by country, Japan has ranked first among Development Assistance Committee (DAC)<sup>1</sup> members.

Although Japan has put priority to CLMV countries, the influence of China has been remarkably rising in the MRBCs. The development of economic corridor proposed by Asian Development Bank (ADB) has accelerated to increase the influence in the region trough trade, and foreign direct invest (FDI) and also economic assistance.

In addition, new donor countries such as Korea and Thailand, has been increasing the existence in MRBCs.

This paper discusses Japan's ODA in the MRBCs to seek new assistance initiatives in the region through the development of the economic corridor, having case studies on infrastructure development, especially transport development.

#### 1. CURRENT SITUATION OF JAPAN'S ODA TO MRBCs

Based on arising issues difficult to solve through bilateral cooperation, the importance of regional cooperation appears to offer some options. In particular, the First Japan-CLV Foreign Ministers' Summit in Vientiane came about in 2004. It aimed to

A forum through OECD to deals with issues related to cooperation with developing countries.

develop the border region of the three countries, called "Development Triangle". Japan announced US\$20 million of aid out of the Japan ASEAN-Integration Fund (JAIF)<sup>2</sup>. However, Myanmar was removed as ODA recipient due to the arrest of Myanmar's democracy leader Aung San Suu kyi the previous year. Still aiming to extend regional cooperation throughout MRBCs, Japan formed the Japan-Mekong Partnership Program including Myanmar in 2007. A new partnership was established for the common flourishing at the First Mekong-Japan Summit Meeting in Tokyo in 2009. More than 500 billion yen (US\$5.5 billion) in aid over three years for the Mekong region was pledged, aiming to boost economic development in the region. As special efforts, 63 action plans and measures named "Mekong-Japan Action Plan 63" was announced. The main pillar and measures of the action plan is as follows.

#### Comprehensive Development in the Mekong Region

#### (1) Further Development of both Hard and Soft Infrastructure

The hard infrastructure development comprises: (a) assistance to the construction of roads and bridges for remaining parts of the East-West Economic Corridor and Southern Economic Corridor; (b) Development Triangle; (c) key seaports and airports such as Sihanoukville Seaport in Cambodia; and (d) construction of power lines and information web. On the other hand, the soft infrastructure includes: (a) efficient and effective operations at customs; (b) logistics workshops for logistics service providers and shippers; (c) training programs on Special Economic Zones (SEZs) development for CLMV countries; (d) dispatching of experts and holding seminars to develop the areas that is expected to become the growth center as industrial and logistic network; and (e) training programs for fostering of entrepreneurs in the Mekong region countries. It was mentioned that the basic direction of the enhancement of hard infrastructure and trade facilities was based on the agreement at the Mekong-Japan Economic and Industrial Cooperation Initiative (MJ-CI)<sup>3</sup> in October 2009. Moreover, Thailand's neighboring countries' cooperation and the initiative of Asian Development Bank

<sup>&</sup>lt;sup>2</sup> It is the fund established by Japanese government to support ASEAN's integration in 2006. Initially financial assistance of 7.5 billion was pronounced through it.

<sup>&</sup>lt;sup>3</sup> MJ-CI is the cooperation framework agreed in Mekong Japan Economic Ministers' meeting in Thailand. It has become the base of the strategy and action plans at Mekong-Japan Summit.

(ADB), ASEAN Secretariat, and Economic Research Institute for ASEAN and East Asia (ERIA) was mentioned. In order to promote Japanese investment, human resource development in logistics and so on, the role of Japan External Trade organization (JETRO) is expected.

#### (2) Promotion of Public-Private Cooperation

This includes: (a) conduct of public-private joint dialogues for the promotion of trade and investment; (b) launch of a new forum consisted of public, private, and academic sectors; (c) assistance for Lach Huyen Port development in Vietnam as a model for public-private partnership; (d) utilization of Nippon Export and Investment Insurance (NEXI)<sup>4</sup> for promoting private companies to enter the market in the region; (e) financial support including two-step loans by the Japan Bank for International Cooperation (JBIC); (f) support for improvement of infrastructure related to major mine reserves in the region; (g) conduct of seminars and investment missions through the ASEAN-Japan Center<sup>5</sup>; and (h) cooperation with the Mekong Institute in Thailand and other institutions.

#### (3) Support for the Development of Cross-regional Economic Rules and Systems

This includes: (a) human resource development for the improvement of the intellectual property system by holding seminars and dispatching of experts; (b) support of economic legal infrastructure; and (c) full implementation of Cross Border Transport Agreement (CBTA).

#### Construction of Society that Values Human Dignity

#### (4) Environment and Climate Change - A Decade Toward the Green Mekong

This includes: (a) sustainable forest management; (b) conservation and sustainable use of biodiversity; (c) Mekong water resource management, (d) energy saving and

<sup>&</sup>lt;sup>4</sup> Trade and investment insurance that was established in 1950 to support Japanese foreign trade through reducing risk such as war and prohibition of foreign currency.

<sup>&</sup>lt;sup>5</sup> It was established in 1981 by the ASEAN government and Japan to promote trade, investment and tourism between the ASEAN and Japan.

clean energy; (e) city planning resistant to flood; (f)prevention of natural disasters through weather and forecasting system, flood and drought management etc.; (g) policy making capabilities in the field of environment. Moreover, the cooperation with Food and Agricultural Organization (FAO) and Deforestation and Forest Degradation in Developing Countries (REDD) is mentioned.

#### (5) Overcoming vulnerability

According to the Millennium Development Goals, Japan expressed contribution in cooperation with NGOs: (a) the construction of the hospitals and schools in poverty areas; (b) disaster relief; (c) the clearance of landmines and unexploded ordnances (UXOs); (d) the support for poor people in cross-border regions through education and vocational training, etc.; (e) measures against issues that expand beyond borders such as tackling of rapidly infectious diseases etc.; (f) science and technology cooperation and (g) preventing of human trafficking.

#### (6) Strengthening Cooperation for Stability in the Region

This refers to promoting democratization in Myanmar through general election to be held in 2010.

#### (7) Japan's ODA Policy to the Mekong Region Countries

More than 500 billion Yen of ODA was committed to CLV countries in the next 3 years from 2010 as well as to the Mekong region as whole.

#### Expansion of Cooperation and Exchanges

#### (8) Enhancing Human Exchanges

This includes: (a) inviting some 30,000 people to Japan including youth and senior citizens from Mekong region countries in three years from 2010; (b) receiving 10,000 youths from Mekong region countries for continuing exchange programs, (c) continuing to receive students from Mekong region countries, (d) promoting the exchange through Japan-East Asian Network of Exchange for Students and Youths Programme (JENESYS) <sup>6</sup> and Kominnkan (Community Center) in Japan and Community Learning Centers (CLCs).

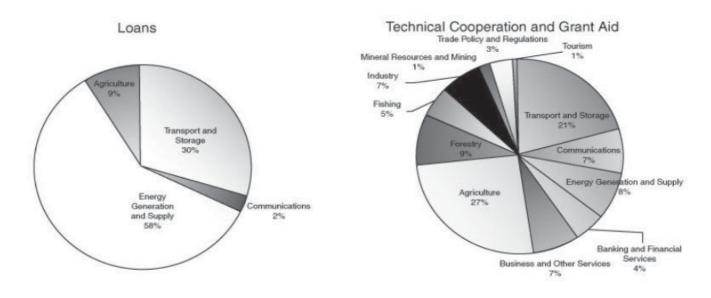
<sup>&</sup>lt;sup>6</sup> The program that aims to invite 20 young and emerging artists, designers, and people in the creative field from ASEAN, India, Australia, and New Zealand every year by the support of Japan Foundation.

#### (9) Promotion of tourism

#### (10) Protection of Cultural Heritage

Based on the above action plan, infrastructure development such as transport and communication is emphasized. Although the aid to Myanmar is limited to education, health, and medical care owing to democracy issues, the percentage of infrastructure development such as transportation sector in Japan's ODA is relatively high. It is believed that infrastructure development is indispensable to achieve economic growth and long-lasting poverty reduction. The development of each sector may not be expected without stable infrastructure. Figure 1 shows that 30 percent of the expenditure by Yen Loan and 21 percent of the infrastructure projects were allotted for the transport and storage sector.

Figure 1: JICA's Aid to ASEAN countries by Sector (2007)



Source : JICA

#### 2. HARD INFRASTRUCTURE DEVELOPMENT COOPERATION

#### 2.1 East-West Economic Corridor

#### 2.1.1 Japan's ODA

Greater Mekong Subregion (GMS) cooperation program aimed at Mekong regions has made a great deal of efforts to infrastructure development by the ADB since 1992.

A number of economic corridor models such as the North-East Economic Corridor, East-West Economic Corridor, and Southern Economic Corridor Development for regional development are being undertaken. More initiatives of the same sort are planned by the ADB and other foreign assistance including Japan (Figure 2).

From the aforementioned infrastructures, Japan has the most contribution to East-West Economic Corridor (EWEC). The EWEC links the total 1,450 km distance from Da Nang in Vietnam to Mawlamyine in Myanmar, through Mukudahan in Thailand and in Savanakhet in Lao PDR (see Figure 3). The Second Mekong International Bridge built in 2006 is epoch-making ODA project for Japan across two countries—the border between Mukudahan and Savannakhet. Furthermore, Japan greatly contributed to infrastructure development along EWEC through ODA. The main national Road No. 9 of Lao PDR, leading to the Vietnamese border, was upgraded to all weather standards in 2003. The Hai Van Tunnel in Vietnam was constructed in 2005 by Japan's ODA. It is the longest tunnel in Southeast Asia at 6.28 km that lies on National Road Route 1 between Da Nang and Hue in central Vietnam. Opening of the tunnel brought shorter transit time through Hai Vai Pass from one hour to less than 10 minutes.

Despite infrastructure development of the EWEC, it seems that economic activities such as trade and investment have not been vigorous. In order to promote industrial development, establishment of industrial estates in cooperation with the public and private sector is a potential.

ANDAMAN SEA GMS CORRIDORS

Figure 2 : GMS Corridor Network

Source: ADB

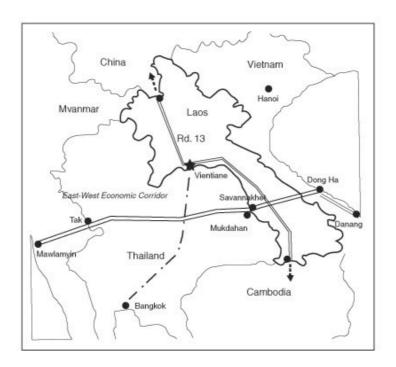


Figure 3: East-West Economic Corridor

Source: ASEAN Center and the othres

#### 2.1.2 Effect of Transport Development

The EWEC links Mawlamyine in Myanmar and Da Nang by way of northeast Thailand and Savanakhet. It lessened travel time by road between Bangkok and Hanoi from about 10 days by sea to 3 days on road. Nippon Express began the two-way scheduled consolidated truck service through EWEC, although the volume of cargo bound from Hanoi to Bangkok is comparatively small. Such service can be extended to Guangzhou and Shanghai in China. As shown in Table 1, land transport from Hanoi to Guangzhou only takes two days in comparison with the 4-6 days required by sea transport. However, travel by land costs twice more than sea transport. Travel by water is a limitation to expansion because at present maritime shipping is advantageous in bulk transport transactions. One-way transport from Thailand and China to Vietnam increases the cost. Some goods are sensitive to shock which may be unsuitable for cargo transport.

However, less lead time may be attractive to manufacturing industries. At present, users of land transport are limited, but it will develop in the future along with the improvement in logistics and the supply chain among Mekong regions.

Table 1: Inter-City container cargo transport Indochina

	Land Transport			Sea Transport		
Route	Km	Day	Cost	Day	Cost	Remarks
					(US\$)	
	(US\$)	)				
Hanoi-Guangzhou	1,190	2	3,000	4-6	1,500	40ft container including
Customs						
HCMC*-Hanoi	1,600	3-4	1,200	4-6	750	40ft container domestic
						cargo
Bangkok-Hanoi	1,555	3-4	4,200	10-15	2,000	40ft container including
Customs						
Bangkok-HCMC	913	2	1,390	2-3	560	10t truck and 20ft container,
						excluding customs

<sup>\*</sup> Ho Chi Minh City.

Source: NNA, "East-West Economic Corridors Developed by Japan", February 2007.

#### 2.1.3 Cross Border Transportation Development Agreement (CBTA)

Cross Border Transportation Development Agreement (CBTA) is a multilateral agreement for the facilitation of cross-border transport of goods and people in Greater Mekong Subregion (GMS). It was agreed among Lao PDR, Thailand, and Vietnam in 1999, Cambodia in 2001, China in 2002, and Myanmar in 2003. CBTA stipulations cover: (a) facilitation of border-crossing formalities; (b) cross-border movement of persons; (c) transit traffic regimes; (d) requirements for road vehicles in cross-border traffic; (e) exchange of commercial traffic rights; and (f) infrastructure standards.

As procedures to facilitate border crossing, some attempts has been tried including single window, single stop custom inspection, coordination of hours of operation, and exchange of advance information and clearance (Figure 4). In order to facilitate cross-border movement of people, multi-entry visa and recognition of driver's license is

#### indispensable.

At present, coverage of CBTA in EWEC is as follows.

- (a) Myawaddy (Myanmar) Mae Sot (Thailand)
- (b) Mukudahan (Thailand) Savanakhet (Lao PDR)
- (c) Densavan (Lao PDR) Lao Bao (Vietnam)

However, some obstacles exist, although the CBTA was signed by each country.

- (a) Waste of time and cost by cross-border transshipment
- (b) Shortage of shipping storage to sort cargo
- (c) Shortage of safety facilities such as street lamp, guardrails, and rest station for over-the-road driver
  - (d) Cumbersome procedures for certification—origin and bonded transportation

As for transshipment, eleven track companies acquired a multinational transport operating license enabling its vehicles to travel from Thailand through Laos to Vietnam in June 2009. Owing to this license, they can operate along EWEC running from Thailand through Savanakhet and Densavan in Lao PDR, and also Lao Bao and Da Nang in Vietnam. This eliminates the need for cross-border transshipments along the route of EWEC. It brought the benefits such as cutting transshipping costs, ensuring cargo safety, and reducing lead time. The success might increase the transportation to China by road in the future.

For promoting effective procedure, training for custom officers is expected by Japan's ODA.

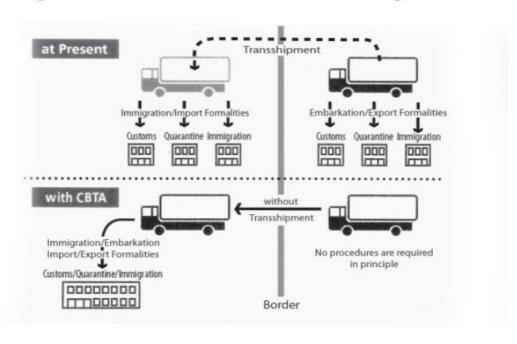


Figure 4: Mechanism to Facilitate Border-crossing Formalities

Source: JETRO

#### 2.1.4 Local Economic Development

#### (a) Savanakhet

As for Lao PDR, the EWEC has a profound meaning to promote local development planning. Following the First Thai-Lao Friendship Bridge<sup>7</sup> of Mekong River in the north, middle, and south in Lao PDR can be extended to northeastern Thailand and Vietnam coast through EWEC. The establishment of the Special Economic Zone (SEZ) at Savanakhet was proposed by a feasibility study of JICA. Expecting the completion of Second Mekong International Bridge, the establishment of Swan-Seno Special Economic Zone (SSEZ) was decided by the government of Lao PDR in 2002. It is composed of two separate sites—Site A (305 ha) and Site B (20 ha) from the bridge of Savannakhet province. The categories of business activities planned to be develop in the SSEZ includes: (a) export processing zone, (ii) free trade zone and (b) free service and logistic center including tourism, banking, and so on.

In order to attract foreign direct investment, special privilege is granted like duty

<sup>&</sup>lt;sup>7</sup> The bridge over Mekong connecting Nong Khai in Thailand with Vientiane in Lao PDR, was constructed by the assistance of Australia in 1994.

free for import and export products. Corporate tax has also been lowered to 8-10 percent from the previously 20 percent. Geographically, SSEZ locates midway between Da Nang (about 500 km east) and Bangkok (about 600 km south-west), and also the midway point along Road No.13 from the border of China to Cambodia. Resource like ore and wood is rich and electricity problem is not serious. Despite six years of operations and a comparatively favorable investment climate, SSEZ seems slow in development. A few companies like the Japan logistics, after joining the SSEZ, its development and management was shifted to private sector. In order for the SSEZ to succeed, shortage of labor, especially skilled labor, shall be improved. At this point, Japan might make contribution through industrial training. At the same time, Lao PDR government is requested to take initiative in the promotion of FDI to SSEZ.

#### (b) Densavan-Lao Bao

The establishment of Densavan Border Trade Zone in Lao PDR at the border of Lao Bao in Vietnam was planned in 2002 but not yet developed. On the contrary, Lao Bao Special Economic - Commercial Area (SECA) was set up by Vietnam Government in 1998 to attract investment and tourist. This comes strategic for providing water and electricity along with a commercial center. As of January 2010, thirty-two enterprises have operated at SECA. It is consisted of twenty-eight domestic companies, three Chinese and two Thai investments. Main products for investment are motorcycles, bicycles and mobile phones that are targeted to Vietnam, Lao PDR and Cambodia. Big difference of the development in the region may be due to each government's development support. Cross-border Trade Transport Agreement (CBTA) was already agreed at the Densavan-Lao Bao border in 2005. With respect to electricity, Lao Bao has sold Densavan area. Regarding other resource such as water and labor, complementary relationship of both countries should be further promoted for the development. Regarding capacity building development that is one of the bottlenecks in the region, a vocational training center is going to be established in Lao Bao in collaboration with ADB, JICA and Vietnam government. People in Densavan may have an opportunity to make use of the facility.

#### (c) Da Nang

National Development Planning of Vietnam encompasses the harmonious development among three economic zones compromised by North, Central, and South. However, compared to the North including Hanoi and the South including Ho Chi Minh City, economic activities of the Central are relatively weak. In order to stimulate economy of the Central zone, Vietnam government emphasizes transport development.

The Da Nang port rehabilitation project was undertaken to improve cargo handling capacity making use of the Yen loan in 2004. More importantly, the upgrading of Tien Sa Quay included provision of machinery and equipment, dredging, and construction of breakwater container yard and the road pavement extended to National Road No. 1. At present, the port is already 12 m depth and a cargo handling volume of about 40,000 TEU per year and is expected to increase by 50,000 TEU in handling volume in 2010. Main export items are woodchips, garments, sea food and handicrafts. On the other hand, main import items are industrial materials such as steel. Main export counterparts are EU, China and Japan. However, this makes up only 2 percent of the contribution for the whole country. In order to strengthen the function of the port and nearest industrial estate (Dung Quat Industrial Estate), Da Nang port is expanding to have additional breakwater, container terminal, and passenger station by Japan's ODA of 2007-2009. Aside from port expansion, a new expressway from Da Nang to Quang Ngai, 131 km south from Da Nang, has also been constructed from 2009 by the Yen Loan.

Da Nang is favored as the gateway to three world heritage sites in Vietnam—Hoi An, Hue, and My Son. This will enable it to become a tourist hub in Vietnam. That is one of the reasons why tourism investment concentrates into this region rather than the manufacturing sector. On the other hand, the central region being generally rich in natural resources, a large-scale investment such as petroleum refinery and shipbuilding is noticeable in the region. Tourism sector will develop in Da Nang and surrounding areas. On the other hand, resource-based industry will develop in the coastal area of the central part. Active involvement of Japan's public and private sector in the region is expected.

#### (d) Development Triangle

Development Triangle covers the CLV border region which is on the plateau around 600 to 800 meters above sea level in Mekong region. As seen in Figure 5, it includes the following provinces: Cambodia (Mondukiri, Rattnakiri, and Stung Treng); Lao PDR (Attapeu, Salavan, and Sekong); and Vietnam (Dak Lak, Dak Nong, Gia Lai, and Kon Tum). The region has about 110,000 km² and a population of about 4 million. Being geographically isolated, the income of the region is generally low compared to the average national level of their respective countries. It is regarded as poorest areas in CLV countries. The region has similarity in respect of economic and social conditions, depending upon agriculture.

The goal of the Development Triangle is economic growth, poverty reduction, social and cultural progress in the region. The region is rich in natural resource such as mineral, gems, bauxite, gold, silver, wood, rubber, and fertile soil. Advancing high value-added local products such as agricultural products and the industries with local character shall be promoted. Investment on hydropower plant, mineral processing plant, and crop plantation is also expected. The region is blessed with unexplored beautiful nature attractive to tourists. Tourism will be most potential through the improvement of access to the main road such as the EWEC. Japan plays a key role in the various fields of development in the region with consideration on environmental conservation.

Presently, there are 23 Development Triangle projects have been proposed to Japan by Cambodia, Lao PDR, and Vietnam (Table 2). These projects include the infrastructure development like construction of road, bridge, hydropower plant, hospital, and irrigation system, installation of water supply, improvement of basic services like education, and so on. Most of these being basic human needs, Japan is expected to provide such assistance for keeping the standard of living of the people. Later would be seeking other possibilities for further development.

Figure 5 : Map of the Cambodia-Lao PDR-Vietnam Development Triangle



Source: Ministry of Planning & Investment, Vietnam

Table 2: List of Proposed Projects for the Cambodia-Lao PDR-Vietnam Development Triangle

(As of January 2008)

Country	No.	Project Name
		Construction of laterite road and bridges from Stung Treng Town to Sopheakmit of Preah Romkel
Cambodia	1	commune
	_	Feasibilty study and construction of O Ka Chanh micro hydropower development project. Installed
	2	capacity 100 KW, Ratanakiri Province
	_	
	3	The laterite road construction project from Ban Lung Town to three districts of Lum Path District
	4	Clean water supply project in Ratanakiri Town
	5	Dormitory for teachers training (in service training) in Ratanakiri Province
	6	Pro-poor community based tourism development
	7	Environmental education network in triangle development zone
	8	Clean water supply project in Sen Monorom Town of Mondul Kiri Province
	9	In-Situ conservation of plant genetic resources for development value in the northeast provinces of Cambodia
	10	Upgrading schools in three 3 provinces of triangle area (5 school per provinces)
Total project cost		10 projects (US\$ 7.5 million)
Lao PDR	1	Road improvement from That Teng District of Sekong Province connecting to Saravane Province
	2	Construction of bridge cross the Sekong River of Attapeu Province
		Agriculture development in Phoungvong District, Attapeu Povince and Saravane District of Saravane
	3	Province
	4	Primary school and construction seven 7 units in Saravan, Sekong and Attaapeu Provinces
	5	Construction of district hospitals in Samuay and Lakhonepheng, Saravan Provinces
Total project cost		5 projects (US\$ 7.5 million)
Vietnam	1	To build a boarding upper secondary school for ethnic minorities, of which basic education is combined with vocational training in Tu Mo Rong District, Kon Tum Province
	2	To improve infrastructure and supply water of basic medical facilities for grass root health care center in Sa Thay town, So Thay district, Kon Tum Province
	3	To construct a hospital in Tu Mo Rong District, Kon Tum Province
	4	To build small-scaled irrigation stations to supply water for agriculture production and living of local people
	5	Poverty reduction for ethnic minority people in Dak Glei district, Kon Tum Province through implementation of capacity building, rural economic development and infrastructure development
	6	The clean water supply of Dak Ha commune, Tumorong district, Kon Tum Province
	7	Clean water supply in 6 villages of Dak To Re Commune, Kon Ray district, Kon Tum Province
Total project cost		7 projects (US\$ 3.5 million)

Cambodia, Laos, Vietnam	1	The feasibility study of the road improvement on the Cambodia-Laos-Vietnam (CLV) Development Triangle			
Total project cost		1 project (US\$ 1.5 million)			
Grand total project cost		23 projects (US\$ 20.0 million)			

Source: Ministry of Foreign Affairs, Japan.

#### 2.2 Southern Economic and Mekong-India Economic Corridor Development

The Southern Economic Corridor (SEC) is south of Indochina Peninsula that runs Bangkok-Phnom Penh-Ho Chi Minh City-Vung Tau. It is advocated by the ADB under the GMS framework. The SEC is composed of three routes.

- (a) Central Sub-Corridor

  Bangkok-Aranyaprathet (Thailand) = Poipet (Cambodia)-SisophonPnom Penh = Bavet- Moc Bai (Vietnam) = Ho Chi Minh City-Vung Tau
- (b) The Northern Sub-Corridor

  Bankok-Aranyaprathet (Thailand) = Poipet (Cambodia)-Sisophon-Siem ReapStung Treng-Ratanakiri = O Yadov (Vietnam)-Pleiku-Quy Nhon
- (c) The Southern Costal Sub-Corridor

  Bangkok-Trat-Hat Lek (Thailand) = Koh Kong (Cambodia)-KampotCa Mau-Nam Can

In the Central Sub-Corridor, the road between Phnom Penh and Bavet is divided by the Mekong River. People have to get on a ferry boat at Niec Luong in Cambodia to cross over Vietnam. Japan is expected to build a bridge between Niec Luong and Bavet by ODA that has been pending<sup>8</sup>. The Northern Sub-Corridor runs along the local provinces of Thailand, Cambodia, and Vietnam. Ratanakiri located in northeast Cambodia and an area of the Development Triangle, is also included in the corridor. The improvement of access to the EWEC will lead to economic and social opportunities in the region. However, the corridor has not been active because of the center's no-growth pole for trade and investment on route. The Southern Coastal Sub-Corridor has not been extended to Vietnam. Hence, it is also underdeveloped as well as the

Notes: 1. The list shows projects requested by the governments of Cambodia, Lao PDR and Vietnam. Each project will be implemented after its feasibility is confirmed by the recipient country and Japan. Each project will be implemented after its feasibility is confirmed by the recipient country and Japan.

<sup>2.</sup> The costs in the list are based on the estimation by each recipient country.

<sup>&</sup>lt;sup>8</sup> The completion is expected before 2012 when the ferry may not meet the demand.

Northern Sub-Corridor. Indubitably, the Central Sub-Corridor connecting Bangkok and Ho Chi Minh City has the most potential. Both cities have a population of around seven million. They are also the second largest cities with the most industries in Mekong region.

Mekong-India Economic Corridor Development (MIEC) is a concept based on Central Sub-Corridor of SEC proposed by the Economic Research Institute for ASEAN and East Asia (ERIA)<sup>9</sup>. It covers not only Ho Chi Minh City, Phnom Penh and Bangkok. It will further be extended to Tavoy, Myanmar, and Yangon, to be connected to Chennai, India by sea route in Andaman Sea. It is a challenging concept which aims to link with East and the South Asia by road and sea (Figure 6).

It is also expected to link with Delhi-Mumbai Industrial Corridor (DMIC) in India. DMIC is a Japanese-Indian collaborative project agreed in 2006 for comprehensive infrastructure development to create India's largest industrial belt zone through the linkage with the industrial parks and harbors of the six states between Delhi and Mumbai. It expects to promote foreign export and direct investment, particularly those in Japan. Anticipating the development of DMIC, it is intended to augment trade with India and South Asia by reducing travel distance between India through the establishment of MIEC.

Industrial development by building industrial base as well as infrastructure development is expected in the MIEC. As growth poles (centers) that will function for urban and industrial agglomerations, the following zones are proposed.

- (a) Thailand: Bangkok, Nakhon Pathom, Pathum Thani, Samut Prakan, Samut Sakhon, Samut Songkhram, Eastern Seaboard.
- (b) Cambodia: Phnom Penh, Province of Kandal.
- (c) Vietnam: Ho Chi Minh City, Binh Duong, Dong Nai.

Furthermore, Growth Nodes that is proximal to Growth Poles which may have suitable investment climates are illustrated as follows.

- (a) Thailand: Chachoengsao-Prachinburi, Ayutthaya, Kanchanaburi
- (b) Cambodia: Sihanoukville, Battambang, Svay Rieng-Bavet, Sisophon-Poipet
- (c) Vietnam: Ba Ria-Vung Tau, Can Tho-Vin Long

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<sup>&</sup>lt;sup>9</sup> International Organization that supports the ASEAN Secretariat by making policy recommendations, such as East Asia Summit (EAS), aimed at furthering East Asian's economic integration.

#### (d) Myanmar: Dawei

In the case of Thailand, Bangkok Metropolitan and Greater Bangkok area have already remarkably developed a good infrastructure. Bangkok and Southern Seaboard will function effectively as growth pole and the expected growth nodes also will support it.

The imbalance of development among those countries and the international relation may hamper the development of the MIEC. Possible obstacles are pointed out as follows.

- (a) Cambodia occupies substantial part in the MIEC, but suffers high public and external debt. Current debt servicing will become an obstacle to raise funds for infrastructure projects.
- (b) Lessening the lead time for transporting goods will bring major benefits for Thailand and Vietnam. Phnom Penh may become no more than existence to be passed through between Bangkok and Ho Chi Minh City. Sihanoukville Port that is a little remote from the route of the MIEC may not be utilized.
- (c) Thailand and Cambodia is in a tense political situation due to territorial problem and the treatment of former Thailand Prime Minister Takshin. The negotiation and cooperation for border development will be difficult.
- (d) Vietnam may get a lot of benefit from the development of MIEC. Vu Tau area will remarkably develop as the backland of Cai Mep and Thi Vai port supported by Japan's ODA.
- (e) In Myanmar, foreigners are not allowed to enter Dawei from the border of Thailand. At present, Japan has suspended economic assistance to transport development in Myanmar. The negotiation to open the gate to Myanmar should be through Thai government or ADB in order to realize the MIEC project.

It is expected that the MIEC would promote economic integration and impact to the regional economy.<sup>10</sup> However, a large amount of fund is required for implementing the project. According to the estimates by ERIA, the total investment requirements for the MIEC is about US\$88 billion in 10 years planning including various projects such

<sup>&</sup>lt;sup>10</sup> According to Institute of Developing Economies (IDE) Geographic Simulation Model, it is predicted that the MIEC may increase national Gross Domestic Product of Cambodia, Vietnam, Myanmar and Thailand by 17.6%, 37.8%, 4.8% and 1.9%, respectively.

as high road of highways, airports, ports, power, industrial estates, human resource development, and social infrastructure.

Building of Infrastructure/Development Fund and close cooperation with public and private sector is indispensable.

Several issues on the SEC/MIEC development is discussed below.

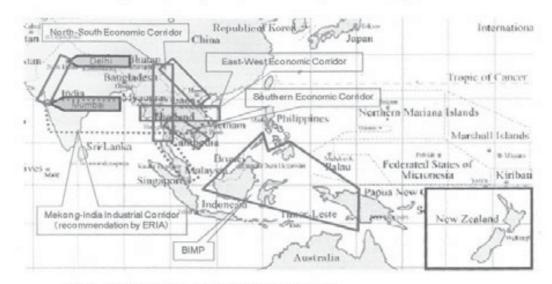


Figure 6 : Comprehensive Sub-regional Development

Source: Ministry of Economy, Trade and Industry, Japan

#### 2.2.1 Public-Private Partnership

Public-Private Partnership (PPP) engages the government and private sector for the purpose of operating a project or service. As seen in the MIEC project, infrastructure development requires huge capital demand where public revenues cannot provide sufficient capital. The private sector, on the other hand, may see high risks in implementing projects with government. In order to facilitate participation of the private sector, the government needs to share information on investment and financial framework up to the nitty-gritty of overall project schedule.

Around 10 PPP projects including feasibility study (FS) have been conducted in Asia. Such includes the Phu My Thermal Power Plant Construction Project, the management and operation of Cai Mep-Thi Vai Port in Vietnam, and improvement of the Sihanoukville Port. According to the dwindling ODA budget, the number and the

role of PPP is increasing. A financial framework to support PPP needs to be considered.

#### Asia Infrastructure Development Fund (AIDF)

In the implementation of infrastructure development such as the MIEC, funding creation of an infrastructure fund is suggested. The Asia infrastructure Development Fund (AIDF) shall be raised from various sources such as the Japan Finances Corporation (JFC), Japan Bank for International Cooperation (JBIC), private bank, ADB, and foreign financial institutions.

The target for initial fund is roughly 100 billion yen to be used for infrastructure development such as port, road, railway, water, and sewerage in Asia. According to the World Bank, the infrastructure development cost in Asia is up to 160 billion yen, but only 15 billion yen has been used. The establishment of AIDF will promote the infrastructure development in Mekong region with the increase of participation of private sector.

#### Viability Gap Funding (VGF)

In spite of huge investment, some projects are likely to be in a close break-even situation. The concept of Viability Gap Funding (VGF) was pronounced by the Indian government in 2005. The said VGF may be a grant or low interest loan intended to bridge the gap on revenue expenditure and revenue receipts based on government policies for a specified period. It aims to improve balance of payments in unprofitable infrastructure project to enable the project to still be commercially viable.

Although there are several issues such as the need for explicit criteria in granting VGF and the amount of subsidies, it is more important that the Japanese government should establish the VGF to enhance the participation of the private sector in aspects of providing specific support for infrastructure projects.

#### 2.2.2 Cai Mep – Thi Vai Port

Presently, the biggest container terminal in Vietnam is Cat Lai Terminal in Saigon Port. The berth length is 973 m with 6 berths and berth depth is -10m~-12m. Handling capacity is 2.5 million TEUs a year. The throughput in Cat Lai Terminal is about 1.85 million TEUs reaching about 40 percent of the total throughput in Vietnam in 2007.

However, the terminal is not along the sea and required to ascend the stream for about 80 m in Dong Nai River from the South China Sea. The depth of the course is 8.5 m. Considering the tidal variation, the vessels within DWT 36,000 is entered into the terminal. Another terminal in Saigon Port is not of deep sea port, hence, has to also ascend the stream from the sea.

Current rapid economic growth in Vietnam has remarkably raised the transport demand. In this situation, the Cai Mep-Thi Vai Port has been constructed as the first international container terminal by Japan's ODA. It is located in Vun Tau Province, about 120 km south from Ho Chi Minh City. Thi Vai is to be used for general terminal for conventional vessel. On the other hand, Cai Mep is an international terminal specialized for container vessels. The vessel capacity for container is 60,000 TEUs (DWT 80,000). The first phase started operation in June 2009. Currently, the berth length is 300 m with 2 berths equipped with 3 gantry cranes. In the second phase, it will be expanded to 600 m berth length and 6 berths. As deep sea port, the berth depth is to be -14 m, but at present, most big vessels cannot use full capacity because the depth of access channel is still -9.2 m. Dreading would be completed by the end of 2010 until the depth of -14 m. Through barge carrying ships, the terminal receives container vessels of about 300 TEUs from Phnom Penh every week. It takes about 22 hours from Phnom Penh to Cai Mep terminal.

Phase 1 is scheduled to be over by 2012. Phase 2 will start from 2012 until 2015 which will expand the terminal and improve surrounding infrastructure such as road, bridge, railway, and new airport.

Misusi O.S.K Lines has already started direct container routes of 6,350 TEUs to the North American Routes. It takes about 15 days going to the United State of America (USA) without dropping in Hong Kong or Singapore by feeder containership. The availability of the feeder containership from neighboring countries such as Cambodia and Lao PDR to Cai Mep - Thi Vai Port will be growing from now on.

#### 2.2.3 Ho Chi Minh City

Ho Chi Minh City (HCM City) is 1,730 km far from Hanoi with a total area of about 2,100 km<sup>2</sup>. HCM City is the biggest city and economic hub in Vietnam. The GDP growth rate of HCM City in 2008 was 11 percent. This is 1.6 times higher than

that of the whole country. HCM City has played an important role to Vietnamese development, accounting for 21 percent of the total GDP, 30 percent industrial output, 29 percent total retail sales and services, 40 percent export turnover, and 33 percent national budget.

Along with burgeoning economic development, the population of HCM City has been swelling. The population has exceeded 700 million. It was only 200 million 10 years ago. The ballooning population was due to the rapid migration from rural areas. Existing infrastructure system was not able to catch up with the rapid economic development and increasing population. Thus, the need for transport development to improve the quality of urban living and the environment has remarkably increased.

Major transport projects by Yen Loan related to Ho Chi Minh City are as follows.

- (a) Ho Chi Minh City Urban Railway Construction Project (Ben Thanh-Suoi Tien Section (Line 1)
- (b) Hanoi-Ho Chi Minh City Railway Line Bridges Safety Improvement Project (II)
- (c) Saigon East-West Highway Construction Project
- (d) North-South Expressway Construction Project (Ho Chi Minh City-Dau Goay)
- (e) National Highway No. 1 Bypass Road Construction Project
- (f) Cuu Long (Can Tho) Bridge Construction Project

In addition to the above is the Tansonnhat International Airport in Ho Chi Minh City which was constructed by a Yen Loan in 2007. About 40 percent of the 98 billion yen of Yen Loan was used for transport development in Vietnam. Vietnam government has emphasized regional balance of economic assistance. Currently, projects related to Ho Chi Minh City have been increasing along with economic development.

The major multilateral and bilateral donors to Vietnam in the transport sector are the World Bank, ADB, Japan, United Kingdom, and France.

At present, Vietnam is expected to build high-speed 1,600 km railway linking Hanoi with Ho Chi Minh City, adopting Japan's Shinkansen bullet-train technology. The possibility of obtaining Japanese government assistance to fund part of the construction cost of about 55 billion dollars is also being explored. However, it is still unclear if the plan will be realized because of the issue on fund procurement and profitability, along with the delay in Japan's decision-making.

It is believed that Ho Chi Minh City and Vu Tau area will surely develop in the

years to come. A lot of donors are interested to get involve in infrastructure projects. Japanese companies in charge of ODA program/projects have to compete with other countries on technical assistance and advance technologies.

#### 2.2.4 Sihanoukville Autonomous Port

Cambodia has two major ports—Phnom Penh and Sihanoukville. Phnom Penh Port is a river port connecting with Mekong River. It was able to handle ships of up to 8,000 tons during wet season and 5,000 tons during dry season. Although it is near the capital, transportation of cargo is limited.

Sihanoukville Autonomous Port is located on the Gulf of Thailand south of Cambodia and the only deep sea port. It was originally small-scale with old facilities. Japan gradually provided about 8.5 billion yen for improving the container terminal. Sihanoukville Urgent Rehabilitation Project was implemented in 1999-2005 by Yen Loan. Such improvement included the 240 m container berth, land reclamation, container terminal and facilities, and dredge works in the port. After which the Sihanoukville Port Urgent Expansion Project in 2004 expanded to another 160 m container berth, land reclamation, supply handling equipment, and dredge works.

Presently, the depth of old jetty built and new quay is -9.0. The container terminal completed in 2007 has 400 m berth with -10.0m draft and the container yard of 6.0 ha. The equipment such as 2 units of gantry crane, 5 units of transfer crane, 8 units of tractor and chassis are installed. The container terminal capacity is 350,000 TEUs a year, while the container throughput in 2008 was about 260,000 TEUs. Main export item accounts for 95 percent of the total. The main market is the USA (70 %) and the European Union (25%).

Now, forest-related business in Cambodia attracts paper-manufacturing companies and trading companies. For the transportation of the wood chip, a container berth exclusively to the arrival and docking of vessels is required. Moreover, oil and natural gas has been mined in the coast of Sihanoukville. The establishment of an oil supply base is expected.

In this situation, Japan expressed the assistance on Multipurpose Development Project for an amount of about 7.1 billion yen (about US\$75 million) in 2009. It aims to expand the capacity of the port to deal with the requirement of general/bulk cargo

vessels carrying wood chip, wheat, steam coal, steel, cement, among others.

In addition to the cooperation of the port, Japan has supported to establish a Special Economic Zone (SEZ) adjacent to the Sihanoukville Autonomous Port by Yen Loan. It is based on the regional development of "the Phnom Penh-Sihanoukville Growth Corridor" composed of two cities and five provinces<sup>11</sup> where there are 4.8 million people representing 37 percent of the total population. The establishment of this SEZ intends to: (a) attract more foreign direct investment; (b) create around 25,000 to 30,000 jobs in the area; (c) contribute to reduce the poverty in Cambodia; and (d) support the port as a backup service. The construction started in early 2009 at the land of 70 ha and is scheduled to be completed in 2011. In the SEZ, one-stop service related to investment and customs procedures is expected with Japan's support.

Regarding the development of the Sihanoukville Autonomous Port, several issues exist.

- (a) The road between Sihanoukville and Phnom Penh is about 230 km almost the same as Phnom Penh and Ho Chi Minh City. It takes about 4 hours in one-way one lane. Furthermore, it goes off the route off Southern/Mekong India Economic Corridor. The link with the corridor by expressway is expected to increase the user of the port.
- (b) At present, railway linkage between Sihanoukville and Poi Pet through Phnom Penh does not work. There are two missing links—Poi Pet Sisophone (48 km) and Phnom Penh-Lock Ninh (255 km). Although, the rehabilitation project by ADB is planned, it may take time.
- (c) The site of Japanese SEZ is only 70 ha, while the SEZ by Chinese capital is 1,200 ha. Present Japanese investment to Cambodia is quite few. China may get the most benefit through the improvement of Sihanoukville Autonomous Port by Japan's ODA.
- (d) New Cai Mep Port in Vietnam directly links with Phnom Penh via the Mekong River. It will absorb import and export shipments. The transportation from Sihanoukville to Cai Mep Port by feeder boat may increase for utilizing direct line to USA.

<sup>&</sup>lt;sup>11</sup> It is composed of two cities (Phnom Penh, Sihanoukville) and five provinces (Kandal, Takeo, Kampot, Kohkong, and Kompong Speu).

#### 3. SOFT INFRASTRUCTURE DEVELOPMENT COOPERATION

Regarding infrastructure development in the soft aspect including cross-border development, some cases by Japan's ODA are illustrated as follows.

#### 3.1 Enhancing the quality of customs

#### (a) Risk Management in Customs and Security at Sea Port

Based on exchanges of goods and people, speedy procedure in customs and strengthening oversight of illegal business in the border is required. Risk management training has been conducted among the custom officers of Thailand, Cambodia, and Vietnam by Japan's technical cooperation. The training aims to detect smuggling and counterfeit goods across borders, as well as implement safe and simple cross-border procedure. The knowledge and understanding of customs procedures through training in Japan and individual country has been deepened by data analysis. Mekong border troubled by smuggling has found a solution with the introduction of data analysis such as data base of habitual offenders and historical trend analyses of crimes, and anticipated to be an effective protection against crime. According to the survey at Mae Sot Custom House in Thailand, around 30 percent of the smuggling incidences have been detected at the immigration between Mea Sot and Myawaddy in Myanmar. Most of the smuggling activities happened along the border river. Detection is difficult in these points that are why widespread smuggling prevailed. A close collaboration between Thailand and Myanmar is needed to solve smuggling problems in the border.

In 2006, improvement of security facilities at Sihanoukville Autonomous Port and Phnom Penh Autonomous Port was made in order to strengthen counter-terrorism/anti-terrorism measures as well as facilitate trade. Security facilities were also provided in both ports.

In Tan Cang Cat Lai Port of Ho Chi Minh City, large X-ray cargo inspection equipment is going to be provided by Japan's ODA for increasing security.

#### (b) Customs Administration

As a capacity building program for customs officers, Japan's best practices have been adopted. It includes: (i) organization and function; (ii) customs and tariff policy, customs laws and regulations; (iii) bonded area; (iv) import/export clearance; (v)

surveillance at sea port; (vi) training management; (vii) intelligence management; and (viii) study tour at central customs laboratory and so on. In order to enhance development of customs, techniques such as speedy inspection and simplification of custom clearance, and enhancing transparency and fairness are also learned.

#### (c) Economic legal infrastructure

Japan has supported legal and judicial system development in Cambodia, Lao PDR, and Vietnam being in a transition to a market economy. JICA has provided technical assistance in the development of each of the aforementioned countries' legal system such as drafting of legal documents as well as human resource development.

In the Japan-Vietnam Joint Initiative in 2003, Japan has supported Vietnamese institutional reforms for improving the business environment and poverty reduction, together with the cooperation with Keidanren <sup>12</sup>. The program includes the improvement of the legal framework and transparency in the application of laws. It may have a positive effect to attract FDI to Vietnam.

#### 3.2 Roadside Stations (Michi no Eki)

Roadside stations called "Michi no Eki" in Japan lie along public roads. A particular station has facilities like a parking lot, rest space, and an information center are useful for travelers. Such stations can also be utilized for promoting local products, holding events, and attracting tourists as well as being a transportation information base. In 2003, it started at a local city in Japan supported by Ministry of Land, Information and Transport, and local authorities. Local initiative for regional promotion is utilized through the station. Presently, there are almost 80 stations of this kind in Japan.

The concept of roadsides station has been introduced to Vietnam road administration and local authorities as a new facility that will be beneficial to drivers and residents of the region. As a pilot project in 2009, three road side stations was established on NR Route 6 in Hoa Binh Province, NR Route 1 Nihn Binh Province, and

<sup>&</sup>lt;sup>12</sup> A comprehensive economic organization born in 2002 by amalgamation of the Japan Federation of Economic Organization and Japan Federation of Employer's Association with 1,606 membership comprised of 1,295 companies as of 2009.

Bac Giang Province in the north by Japan's ODA. With the upsurge in economic activities in Vietnam, traffic becomes heavy and road facilities become a need primarily for service drivers. Moreover, the roadside station is potential to a regional development community center through the promotion of local products and tourism.

Tourism is still a work in progress in terms of learning and using the English language. In years to come, roadside stations are anticipated to expand in the provinces through continued Japanese assistance. Such is in line with initiatives related to One Village One Product (OVOP) movement. OVOP was launched in Japan in the 1970s to encourage local industry and rural society. It spread around developing countries like the OTOP (One Tambon One Product) of Thailand. Eventually, the roadside station in various places extending to the corridor will contribute in a more active Mekong region.

#### 4. CONCLUSION AND POLICY IMPLICATIONS

As seen in Figure 3, the GMS economic corridor from North to South connects with China and other Mekong River Basin Countries. As a partner in trade, investment, and assistance, China's influence is rising in the region. Japan has to feed its way into the East-West Economic Corridor (EWEC) and the Southern Economic Corridor (SEC)/ Mekong-India Economic Corridor (MIEC) through economic activities in the Mekong region.

Seemingly, Japan's approach to the EWEC and SEC/MIEC was through the ODA. Each corridor required both hard and soft infrastructure in its way to development. This entails huge amounts of projects. Hence, fund sourcing through the Asia infrastructure Fund and the utilization of Public-Private Partnership (PPP) and other public sources should be promoted.

Regarding the "Development Triangle" along the border of Cambodia, Lao PDR and Vietnam, Japan plays a key role to poverty reduction and promotion of the local industry through linkage with the EWEC and SEC/MIEC. The grassroots grant aid scheme and cooperation with non-profit organization (NPO) are potential sources.

<sup>&</sup>lt;sup>13</sup> The movement to promote locally made products in Villages (Tambon) by former Prime Minister Thakshin Sinawatra (2001-2006); referred to as OTOP in Japan.

With regard to the Sihanoukville Autonomous Port, Japan contributed in the establishment of the SEZ through its ODA funds scheduled to be completed in 2001. This covers only 70 ha while the China construction covers 1,200 ha. China is eyeing the possibility of oil supply base and natural gas in the area. Currently, Japanese investment in Cambodia is minimal, falling behind China's business expansions in spite of Japan's endeavors in infrastructure improvements. The government of Japan needs to consider increase investment support by enhancing cooperation with private sector.

Regarding soft infrastructure development, cross-regional economic rules and systems are crucial, likewise, with the capacity building of customs. Single Window Inspection composed of customs, immigration, and quarantine (CIQ) in the border of the corridor and ports shall be promoted by Japan's initiative. In addition, utilization of electric tag cross-over the border shall be utilized to promote transportation by road with cooperation from the private sector.

Lastly, development experience of Thailand, especially, the Eastern Seaboard Development, is a model of CLMV countries. It is composed of two industrial complexes with two seaports—Laem Chabang, about 110 km southeast and Map Ta Put, about 185 km southeast from Bangkok—on the coast at the Gulf of Siam. The discovery of the natural gas in the Gulf prompted the development of the region in 1970s. Under the leadership of the Thai government, through the initiative of technocrats from the National Economic Social Development Board (NESDB) and Japanese cooperation, port development was almost completed in the middle of 1990s. Since then, petrochemical industry has clustered mostly into Map Ta Phut area, while the Laem Chabang Area comprised the automobiles and electronics industrial cluster. Currently, the Cai Mep-Thi Vai area and Sihanoukville Autonomous Port area may be a similar situation of the initial stages of the Eastern Seaboard. In order to implement development planning, capable administrators and engineers under political leadership are required. Japan should play a leading role in human resource development for both the bureaucrats and engineers in CLMV countries, making use of their experience of Furthermore, Japan has to consider cooperation with the Eastern Seaboard. environmental issues in development planning. At present, the area of Map Ta Put industrial Estate in Eastern Seaboard is in the midst of serious environmental and unhealthy problems of people who live nearby. This is due to the rapid development of the industrial sector and the formation of the industrial cluster. Japan need to pursue environmentally sound and sustainable development in the implementation of ODA.

As for Myanmar, much potential is seen in economic development having excellent human resource. Japan has to open its door to a resumption of the assistance in order not to be behind USA and other countries.

#### **REFERENCES**

- ADB (Asian Development Bank). 2008. Kingdom of Cambodia and Socialist Republic of Vietnam: Cambodia and Socialist Republic of Vietnam: Greater Mekong Subregion: Phnom Penh to Ho Chi Minh City Highway Project. Manila.
- CICP (Cambodian Institute for Cooperation and Peace). 2008. The Study on Infrastructure Development in Cambodia, ERIA JRP Series No.6, Economic Research Institute for ASEAN and East Asia (ERIA), Jakarta, Indonesia.
- Department of Transport, Ho Chi Minh City's People Committee http://www.sgtcc.hochiminhcity.gov.vn
- ERIA (Economic Research Institute for ASEAN and East Asia). 2008. Mekong India economic corridor development: ERIA project report No. 4-2. Jakarta, Indonesia.
- Igusa, K. 2008. Challenges regarding regional revitalization in Asia and one village one product: Applicability of the Oita model to Asian countries. *Journal of OVOP Policy* (1):5-20. International OVOP Policy Association, Japan.
- Inthamith, S. 2009. The Cambodia-Laos-Vietnam development triangle. Ministry of Planning and Investment, Vientiane, Lao PDR.
- Ishida, M. (ed.). 2007. Evaluation of the effectiveness of GMS economic corridor: why is there more focus on the Bangkok-Hanoi Road than the East-West Corridor? Discussion Paper No. 123, Institute of Developing Economies, JETRO, Chiba, Japan.
- Ishida, M. 2009. Special economic zones and economic corridors. ERIA Discussion Paper Series, ERIA-DP-2009-6, ERIA, Jakarta, Indonesia.
- Makishima, M. 2009. Japan's ODA to Mekong river basin countries. BRC Discussion

Paper Series No. 20, BRC-JETRO, Bangkok.

Ministry of Foreign Affairs. 2009. The bulletin on *Japan and Mekong*, Tokyo, Japan. http://mofa.go.jp

Ministry of Economy, Trade and Industry. 2005. Report of Asian PPP Study Group, Tokyo, Japan. <a href="http://meti.go.jp">http://meti.go.jp</a>

Sihanoukville Autonomous Port (PAS). The bulletin on port management and development. Phnom Penh, Cambodia. http://www.pas.gov.kh

Suzuki, M. and K. Souknilanh. 2008. Perspective of Savan-Seno special economic zone and Vientiane industrial park in the Lao PDR. In *The formation of industrial cluster in Asia and regional integration*, edited by Kuchiki, A. and M. Tsuji, Institute of Developing Economies, JETRO, Chiba, Japan.

Transport Development Strategy Institute (TDSI). 2008. The study on infrastructure development in Vietnam, ERIA JRP Series No.16, ERIA, Jakarta, Indonesia.

National Development and Reform Commission, Ministry of Foreign Affairs, Ministry of Finance, PRC. 2008, Country report on China's participation in Greater Mekong Subregion Cooperation, China.

National Economic Research Institute, Ministry of Planning and Investment, 2008. The Study on Infrastructure Development in Lao PDR, ERIA JRP Series No.11, ERIA, Jakarta, Indonesia.

Nippon Yusen Kaish Line (NYK). 2009. General introduction Vietnam ports, Hanoi, Vietnam.

(Japanese)

Ogasawara, T. 2005. Mekon Chiki niokeru Kaihatsu Kyoryoku [Development cooperation and international relationship in Mekong Region]. In Mekon Chiki

Kaihatsu: Nokosareta Higashi Asia no Frontier Mekong Regional Development: Remaining Frontier in East Asia] edited by Ishida, M., and A. Sensho. No.1, Institute of Developing Economies, JETRO, Chiba, Japan.