## CHAPTER 6

## **Regional Development of the Golden and Emerald Triangle Areas: Thai Perspective**

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## CHAPTER 6 REGIONAL DEVELOPMENT OF THE GOLDEN AND EMERALD TRIANGLE AREAS: THAI PERSPECTIVES

## Nucharee Supatn

## INTRODUCTION

Regarding international cooperation in the Greater Mekong Sub-region, two triangle areas of the three bordering countries also exist in Thailand. The first is known as the "Golden Triangle" of Myanmar, Lao PDR, and Thailand. It was known as the land of opium and the drug trade in a previous era. The second, the "Emerald Triangle," includes areas of Cambodia, Lao PDR, and Thailand. In addition, there is also the "Quadrangle Area" of China, Lao PDR, Myanmar, and Thailand which is an extension of the Golden Triangle. Though there is no border between China and Thailand, there is cooperation in trading, drug and criminal control, and also the development of regional infrastructure, especially in the North-South Economic Corridor (NSEC) and the 4<sup>th</sup> Thai-Laos Friendship Bridge which is currently under construction.

Figure 1 shows the location of the two triangles. The circled area indicates the Golden Triangle, which is located in the upper-north of Thailand, whereas the Emerald Triangle is in the northeastern region of the country. However, as these two triangles are located in different regions of Thailand with different characteristics and contexts, the discussions of each region are presented separately. Details of each triangle together with border activities are discussed in the next sections.

## **1. GOLDEN TRIANGLE COOPERATION**

## 1.1. From "Opium Trafficking" to "Triangle Cooperation"

The Golden Triangle is a region of Southeast Asia that covers an area of about 150,000



**Figure 1: Golden and Emerald Triangles** 

Source: Created by the author and the editor.

km<sup>2</sup> bordering three countries: Myanmar, Laos and Thailand. It is located in the Chiang Saen District, 9 km from Chiang Saen city and about 28 km from the Mae Sai District of Chiang Rai Province in Thailand. The "Golden Triangle", geographically, is the delta between the Mekong River and the Ruak River called locally *Sop Ruak (Sop,* in Thai, means meet each other). The Ruak River flows into the Mekong River and forms a natural boundary among the three countries: Laos to the east of the Mekong, Myanmar to the north of the Ruak, and Thailand to the west of the Mekong River. This region, known as the land of opium, has a lengthy and very complex history (Lintner, 2000). Opium poppies appear to be native to the region. In the 1800s, British traders in Southeast Asia wanted to meet strong demand for Chinese silk and a wide variety of Asian products in Europe. Trading in goods was done in this area four to five times a year. As most currencies were unacceptable to the local traders, drug traders were forced

to pay in gold. Consequently, this region came to be generally known as the "Golden" Triangle. Since the 1950s, opium production and the worldwide drug trade from the Golden Triangle has become a serious problem. The drug area was expanded to include the neighboring areas of Shan State and Kachin State of Myanmar, Chiang Rai, Chiang Mai and Mae Hong Son provinces in Thailand, and Luangnamtha, Phongsaly, Oudomxay, and Luangprabang provinces in Laos.

The drug problem has diminished since the governments of the concerned countries designed and applied several strategies to deal with it. In Thailand, crop replacement and alternative development programs have been implemented in the Golden Triangle and nearby highland areas for more than 30 years. Consequently, a sustained reduction in opium production has been noted since 1984 (UNODC, 2006). However, at present, Thailand, Myanmar, Lao PDR, and China still maintain close cooperation to control the drug problem in this region. Due to recent criminal activity, and apart from drug control cooperation, the four countries have also built sub-mechanisms for intelligence exchanges, patrolling, and law enforcement in order to tackle major problems under the framework of the "Law Enforcement Cooperation Along the Mekong River Mechanism."

After the drug era, the Golden Triangle became a well-known tourist attraction for both Thai and foreign tourists. In addition, based on its location, high-value border trade among Laos, Myanmar, China, and Thailand has been in place for some time. Recently under the Greater Mekong Sub-region (GMS) Economic Cooperation Program, the 1,855 km NSEC connecting Bangkok and Kunming was constructed. Two parts of the NSEC, the R3A and R3B, play important roles in border trading and freight transportation in the region (Srivastava and Kumar, 2012). R3 is separated into R3A and R3B at Xiaomengyang in Xishuanbanna in China and then proceeds directly to Chiang Rai Province in Thailand via Lao PDR to Chiang Khong by R3A and via Myanmar to Mae Sai by R3B. The availability of these two roads promotes more convenience in freight transportation and border trading. Consequently, the border trade and import-export volume has increased dramatically in recent years.

<sup>&</sup>lt;sup>1</sup> Chiang Rai Times, 2012.

## 1.2. Three Gateways of Chiang Rai Province

Border trading between Thailand and Myanmar can be undertaken at sixteen crossing points. However, the two points that have the highest border trade volume are Mae Sai in Chiang Rai and Mae Sot in Tak Province. Concerning Thailand and Laos, the border trade takes place through twelve crossings in Phayao, Nan, and Uttaradit, and Chiang Rai, where the most important point is at the Chiang Khong border crossing. Trade between Thailand and southern China also occurs even though there is no border connecting the two countries: freight can be transported between the two countries via Laos or Myanmar. Moreover, freight transportation by water is active via the Mekong River from Guanlei and Jinghong in Yunnan Province of southwest China to Chiang Saen Port in Chiang Rai. Thus, the three permanent border crossing points in Chiang Rai, i.e., Mae Sai, Chiang Saen, and Chiang Khong, are important to the region since they connect Laos, Myanmar, southwest China, and Thailand. The locations of the three permanent crossing points are shown in Figure 2.

The details of the three permanent crossing points are discussed below:

## 1.2.1. Mae Sai Permanent Crossing Points

The first Mae Sai crossing point is located 61 km north of Mueang Chiang Rai. It is connected to Tachileik Town in Myanmar on the opposite side of the Sai River. The Mae Sai customs house began operating in the year 1949 and has provided customs services up to now. In 2005, the Thai government decided to construct a new customs house at the second bridge crossing on the Sai River. The customs house at the second bridge has been fully operational since 2008.<sup>2</sup> Both places are considered to be permanent checkpoints. However, the utilization rate of Mae Sai 2 is still not high since not all types of vehicles from Myanmar are allowed to use this crossing point. In addition, road transportation on part of the North-South Economic Corridor via Route R3B from Jinghong in China to Kengtung, Tachileik and Mae Sai (164 km), is not popular at this time. Though the road distance is shorter than that of R3A, as it runs from Jinghong to Chiang Khong via Boten, Luangnamtha and Huoixai in Laos (250

<sup>&</sup>lt;sup>2</sup> Maesai Customs House (www.maesaicustoms.com).

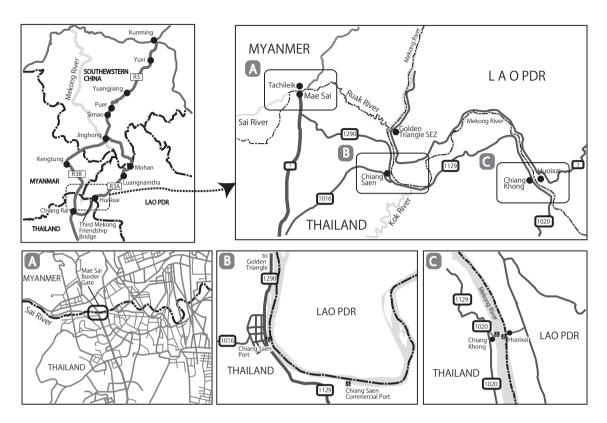


Figure 2: Three Permanent Crossing Points in Chiang Rai Province

*Notes*: A indicates Mae Sai Border; B indicates Chiang Saen Ports; C indicates Chiang Khong Border. *Source*: Created by the author and the editor.

km), excessive fees are charged at various checkpoints along the way (Road Association of Thailand, n.d.). As such, the numbers of cars and the amount of freight transportation crossing Mae Sai 2 are not as high as might be expected. Apart from land-based services, Mae Sai customs house also controls the airbase import-export activities at Mae Fa Luang International Airport, located 8 km east of the city of Chiang Rai.

The Mae Sai border market, located at the first checkpoint, is well known as a large market that sells various kinds of products from China at cheap prices. The market is mostly crowded with Thai tourists. Moreover, a large number of Thai tourists cross the border to shop at the Tachileik border market on the Myanmar side to buy Burmese local products and Chinese products as well.

## 1.2.2. Chiang Saen Commercial Port

Chiang Saen Port is a river port located on 62 ha of land on the banks of the Mekong River in Chiang Saen District, opposite Lao PDR. Behind the port is the road linking Chiang Saen and Chiang Khong. Freight from Chiang Saen Port can be transported to Guanlei Port in southwest China near the Burmese-Chinese border, which is about 265 km in length. Most cargo ships on the Mekong stop by this port to wait for cargo transfers by truck or by other cargo ships to areas in China, Myanmar, Thailand, and Laos.

Regarding the increase of freight transportation on the Mekong River, the Thai Government decided to construct a new port named "Chiang Saen Commercial Port," with the main objective to promote Thailand as the gateway for the development of Indochina and the GMS. It is also considered to be a connecting point for trade with southwest China, Myanmar and Laos whereby inland transport to Laem Chabang and Bangkok Port is possible. The Chiang Saen Commercial Port is located 10 km away from the first port. It is capable of accommodating ships of 250-300 metric tons. There are two 300 m long pontoons that can serve four cargo ships and accommodate six to nine trucks simultaneously. Each pontoon is convenient for loading and discharging cargo by port workers who are usually employed by cargo owners. In addition, there is also a 1,450 m long quayside area that can accommodate ten cargo ships that need a mobile crane for the loading and discharging of heavy cargoes. Six million metric tons of freight transportation can be shipped yearly when the port is working at full capacity.<sup>3</sup> As all related facilities, such as warehouses, a container yard, a truck yard, weight and inspection stations, and so on are available, one-stop service can be offered at the port.

There are three routes to access to the port. First, Highway No. 1 (Phaholyothin Road) turns into Highway No. 1016 at Mae Chan District and it is around 30 km to the port from there. The port can also be reached by National Highway No. 1290 from Chiang Saen City and also by Highway No. 1129 from Chiang Khong District. This port was unofficially opened on April 1, 2012 under the control of the Port Authority of

<sup>&</sup>lt;sup>3</sup> Chiang Saen Port (www.csp.port.co.th).

Thailand (PAT). The official grand opening will take place on December 12, 2012.<sup>4</sup> The old port, in fact, has been chosen to become a tourist port after the full utilization of the new port. However, as there are no marketplaces, food, or accommodation facilities for port workers attending the cargo ships at the new port at this time, a one-year extension for continued utilization of the old port has been given. Most products imported through this port are fruit from China, such as pomegranates and apples, and sunflower seeds, garlic, shiitake mushrooms, and cassava, while exported products include mostly frozen chicken and red meat, palm oil, and energy drinks.

## 1.2.3. Chiang Khong Port and Crossing Point

Chiang Khong Port is a small river port in Chiang Khong district. A 24 m wide and 180 m long berth is adjacent to the Mekong River, facing Huoixai in Bokeo Province in Lao PDR. A road linking Chiang Saen and Chiang Khong Districts is located at the back of the port. Primarily, this port serves small ships and ferries from Laos. Customers are able to proceed to customs clearance, immigration, quarantine, and other services conveniently at offices located in the same area of the port. This facility has officially provided services since 2003 under the control of the PAT. The main aim of the Chiang Khong port operation is to facilitate and promote border trade between four countries, i.e., China, Myanmar, Laos, and Thailand. The concrete quayside terminal can accommodate 3-5 motor vessels, each of 80-150 gross tonnage, at a time.<sup>5</sup> One-stop service, including the services of other concerned agencies, i.e., the customs department. the excise department, the marine department, the immigration office, the public health office and the animal and plant quarantine restriction office, are provided at the port. In addition, a small truck vard for five 10-wheel trucks is available. The top three imported products through this port are vegetables, fruit, and fresh flowers from China. The highest import and export value is from two-way trade with China at 79.78% and 51.22% of the total value, followed by Laos (42.5%) and Myanmar (6.28%). The top three exported products are petrol (diesel), consumer products, and benzene to both China and Laos. The number of cars crossing the border at this point, both inbound and outbound, has increased 60-80% every year since 2009. The total number of cars

<sup>&</sup>lt;sup>4</sup> The Government Public Relations Department (http://contentcenter.prd.go.th).

<sup>&</sup>lt;sup>5</sup> Chiang Khong Port (www1.port.co.th).

crossing at this point in 2011 was 16,250 inbound and 16, 884 outbound, while the number of containers crossing the border has also increased. The numbers of both full freight and empty containers in 2011 were noted when they were compared with those of 2010. A total of 8,561 inbound and 8,690 outbound containers were recorded in 2011. The number of vehicles crossing this border is expected to dramatically increase next year after the opening of the 4<sup>th</sup> Thailand-Laos Friendship Bridge. The forecasted number of all types of vehicles crossing the border via this bridge is up to 3,000 cars per day.<sup>6</sup>

The 4<sup>th</sup> Thailand-Laos Friendship Bridge is located 5 km south of Chiang Khong City. The bridge is 14.70 m wide and 480 m in length (Asienreisender, 2012). The total road length to the main road connection is approximately 11 km. The bridge is currently under construction and expected to be completed in mid-2013. The costs of construction are shared equally between Thailand and China. This bridge is part of Route R3A of the NSEC from Kunming and Bangkok. It will help solve bottleneck problems of the long road link between Thailand, Laos and China, and partially Vietnam, as well. The total length of the NSEC (1,855 km) functions as part of the highway network linking several countries in the region. As stated by the Asian Development Bank, potential market coverage will be extensive given the excellent state of the existing road network from Singapore via Malaysia to Chiang Rai, and from Kunming to Beijing.<sup>7</sup> The Chiang Khong Customs House will be relocated to the new bridge.<sup>8</sup>

## **1.3. Cross-Border Movement of Goods and People**

The import-export value of trade in Mae Sai, Chiang Saen and Chiang Khong is presented in Table 1.

The total trade value reported in Chiang Rai in 2011 between Thailand and Laos was USD 236.03 million, which was about 7.2 % of the total trade between the two countries. The export values at both Chiang Khong and Chiang Saen crossing points were much higher than the import values. The types of products imported and exported at both crossings were similar, though the rankings of product volume were different.

<sup>&</sup>lt;sup>6</sup> Based on an interview with an officer of the Chiang Khong Customs House on September 26, 2012.

<sup>&</sup>lt;sup>7</sup> ADB (www.adb.org).

<sup>&</sup>lt;sup>8</sup> Chiang Khong Customs house(www.chiangkhongcustoms.com).

					()	Unit: USD 1	million)		
		From/7	Го Laos		From/To Myanmar				
	Chiang	Khong	Chiang	g Saen	Chiang	g Saen	Mae Sai		
	2011	2012 <sup>1)</sup>	2011	2012 <sup>1)</sup>	2011	2012 <sup>1)</sup>	2011	2012 <sup>1)</sup>	
Imports	15.34	11.84	1.08	0.59	0.20	0.01	3.70	3.31	
Exports	105.70	106.14	113.91	95.51	78.93	58.56	311.61	229.79	
Total	121.04	117.99	114.99	96.10	79.13	58.57	315.31	233.10	
		Im	port-Export	Value of th	e Whole Cou	ntry (All Ga	ites)		
	20	2011 2012 <sup>1)</sup>		2011		2012 <sup>1)</sup>			
Imports	662.45		569.29		3,347.61		2,521.86		
Exports	2,616.93		2,639.22		1,954.81		1,664.49		
Total	3,279	0.38	3,208	.51	5,302.43		4,186.36		

 Table 1: Import-Export Value at Chiang Rai Permanent Crossing Points

*Note*: 1) Figures are based on the first nine months of 2012 (January to September). *Source*: Department of Foreign Trade, Ministry of Commerce, 2012

The top three products imported via Chiang Khong were wooden products, seeds, and crops (6.34%, 4.14%, and 3.35%, respectively), while the top three products imported via Chiang Saen were crops, tractors and parts, and seeds (34.9%, 19.88%, and 16.82%, respectively). The top three products exported through Chiang Khong were petrol, both diesel (25.29%) and benzene (8.96%), followed by frozen and dried fruit (9.24%). The top three products exported via Chiang Saen port were mostly chicken (29.17%) and red meat (16.46%), followed by livestock (2.73%). The details can be seen in Table 2.

Total Thailand and Myanmar trade in the Golden Triangle was USD 394.44 million, which was about 7.4% of the total trade value between Thailand and Myanmar. Imports and exports from and to Myanmar were traded at both the Mae Sai crossing point and Chiang Saen port. The top three products imported from Myanmar via the Mae Sai crossing were metallic ores and products (28.36%) and fruit (27.94%), followed by vegetables (14.64%), livestock, such as cows, buffaloes, and swine (6.5%), and non-metallic ores and products (4.9%). The products exported to Myanmar via the Mae Sai crossing were alcoholic drinks, petrol (diesel), and vehicles and parts (11.96%, 6.48%, and 6.37%, respectively), while the top three export products of Chiang Saen Port were non-alcoholic drinks, alcoholic drinks and palm oil (11.46%, 5.83%, and 5.31%, respectively). Similar to the border trade between Thailand and Laos, the import

]	From/T	o Laos	From/To Myanmar				
Chiang Khong		Chiang Saen	Chiang Saen		Mae Sai		
				Import			
Products	%	Products	%	Products	%	Products	%
Wooden Products	6.4	Crops & Products	34.9	Livestock	9.4	Metallic Ores	28.4
Seeds	4.1	Tractors & parts	19.9	Ores & products	6.1	Fruit	27.9
Crops & Products	3.4	Seeds	16.8			Vegetables	14.6
Bags	2.4	Machines & parts	7.7			Livestock	6.5
Tractors & parts	0.9	Ores & products	3.2			Non-metallic Ores	4.9
Non-organic chemicals	0.6	Wooden Products	1.0			Crops	3.8
Fertilizer	0.6	Ion	0.9			Machines & parts	3.6
Ores & products	0.5	Vegetable	0.1			Apparel	1.4
Cloth	0.4	Cotton cloth	0.1			Cars & vehicles	0.6
Palm oil	0.4					Cotton cloth	0.4
Others	80.6	Others	15.5	Others	84.5	Others	7.9
				Export			
Petrol (diesel)	25.3	Chicken	29.2	Non alcoholic drinks	11.5	Alcoholic drinks	12.0
Frozen/Dried Fruits	9.2	Red meat	16.5	Alcoholic drink	5.8	Petrol (diesel)	6.5
Petrol (benzene)	9.0	Livestock	2.7	Palm oil	5.3	Vehicles and parts	6.4
Chicken	6.4	Rubber	1.9	Sugar	5.0	Petrol (benzene)	5.8
Vehicles & parts	4.6	Petrol (diesel)	1.7	Frozen/dried fruit	1.8	Iron and steel	5.3
Rubber	4.5	Frozen Pork	1.4	Vehicles and parts	1.0	Cloth and thread	5.3
Petroleum product	4.5	Construction machines	0.9	Instant noodles/food	0.9	Vehicle tires	5.0
Red meat	3.6	Frozen duck	0.8	Flour	0.7	Non alcoholic drinks	3.5
Organic Chemical	3.5	Frozen/dried fruits	0.6	Shoes/sandals	0.7	Organic Chemicals	2.4
Construction Machines	2.0	Non-Organic Chemical	0.3	Organic Chemicals	0.6	Palm oil	2.1
Others	27.4	Others	44.0	Others	66.8	Others	45.8

### Table 2: Types of Products Imported-Exported at Chiang Rai's Crossing Points

Notes: 1) Figures shown in the table are percentages of each product by the total import /export value.

2) Total exports of 2011 at Chiang Khong =USD 105.70 million; at Chiang Saen= USD 192.83 million; at Mae Sai=USD 311.61 million.

Source: Department of Foreign Trade, Ministry of Commerce, 2012.

value was much lower than that of the export value even though the total import value from Myanmar to Thailand was much higher than the export value since Thailand imported high-value natural gas from Myanmar. However, natural gas is imported via other crossing points, not the Golden Triangle area.

Products exported through these three crossings included primarily petrol and consumer products that supply people in Laos, Myanmar and southwest China. Imported products were mostly local products from Myanmar and Laos as well as agricultural products, i.e., fruit, vegetables, and crops from southwest China. In addition to border trade activity, the number of people using the crossings is also interesting. The details of the number of people crossing the border can be seen in Table 3.

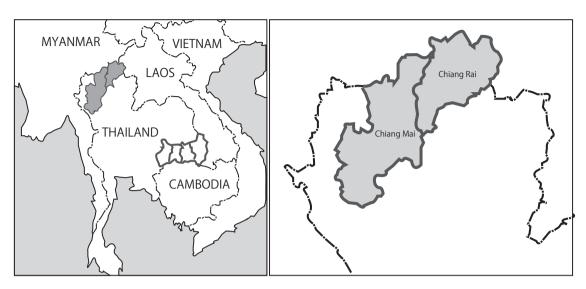
A large number of Thai, Laos and Burmese citizens utilize these crossing points for different purposes, such as business, personal, tourism, and gambling at a casino operated by the Lao PDR. Local people can cross the border without passports. Only a border pass or signature on the provided documents is required. The number of foreign tourists crossing the borders via these checkpoints is still not high even though they could visit many countries in the region at the same time. The number of tourists traveling to Laos is higher than the number traveling to Myanmar. This may be due to the ease of travel and security.

## 1.4. Provinces Located in the Golden Triangle Area

Two main provinces of Thailand that play a very important role in Golden Triangle activities are Chiang Rai and Chiang Mai. The Golden Triangle is located in Chiang Rai province where the three permanent crossing points, Chiang Khong, Chiang Saen and

							(Unit: P	ersons)			
		20	11			20	12 <sup>1)</sup>				
Nationality	Passp	ort	Border pas	s/Signature	Pass	oort	Border pas	s/Signature			
	In	Out	In	Out	In	Out	In	Out			
	Mae Sai Check Point										
Thai	289	318	1,540,439	1,494,235	4,760	5,661	1,027,805	1,013,500			
Burmese	114,477	71,365	298,257	278,715	79,886	71,365	199,781	200,377			
Tourist	6,696	NA	-	-	5,368	NA	-	-			
			Chiang	Khong Chec	ek Point						
Thai	62,911	66,395	30,717	31,223	35,145	38,740	21,729	22,077			
Laotian	55,166	110,866	17,350	17,149	40,170	75,418	12,001	12,070			
Tourist	11,718	NA	-	-	8,645	NA	-	-			
	Chiang Saen Check Point										
Thai	335	86	23,894	26,672	3,431	3,693	16,804	19,604			
Laotian	456	557	32,569	28,904	4,709	7,565	21,050	20,215			
Tourist	1,319	NA	-	-	1,046	NA	-	-			

*Note:* 1) 2012 statistics are from the first eight months (January to August) of the year 2012. *Source:* Immigration Bureau, Royal Thai Police, 2012.



**Figure 3: Golden Triangle and Nearby Provinces** 

Source: Created by the author and the editor.

Mae Sai, are located. Chiang Mai province is not only the biggest city of the northern region, but also the center of northern Thailand in education, tourism, finance, investment, and so on. The location of the two provinces is shown in Figure 3.

To understand the characteristics of each province, Table 4, Table 5, and Table 6 present a number of details. Table 4 shows land use; Table 5 shows major agricultural products since they are important to the economic sector of the provinces, while Table 6 shows the gross provincial product together with the population, population density, and rank. The details of each province are discussed in the next section.

## 1.4.1. Chiang Rai Province

Chiang Rai province is known as the "Global Golden Gateway of *Lanna* Culture and International Trade"<sup>9</sup> since it is located in the upper north of Thailand. The city center of Chiang Rai is about 830 km from Bangkok. The province borders Tachileik, Myanmar to the north, Lao PDR to the east, Chiang Mai to the west, and Phayao province to the south. The border with Myanmar is 130 km in length; that with the Sai

<sup>&</sup>lt;sup>9</sup> The Tourism Investment Department, Tourism Authority of Thailand (www.tourisminvest.tat.or.th/).

Land Characteristics	Chiang Rai	Chiang Mai	
Forest land (km <sup>2</sup> )	5,164.62 [44.22%]	16,609.48 [82.61%]	
Farm holding land (km <sup>2</sup> )	4,181.19 [35.80%]	3,124.30 [15.54%]	
Paddy land	17.16 %	4.30%	
Upland field	9.13 %	2.73%	
Fruits and permanent crops	5.02 %	5.2 %	
Vegetables and ornaments	0.90 %	1.06%	
Pasture land (for livestock)	0.06 %	0.09%	
Resident, waste land & others	3.54%	2.15%	
Unclassified (non-agriculture) (km <sup>2</sup> )	2,332.56 [19.97%]	373.28 [1.86%]	
Total area (km <sup>2</sup> )	11,678.37	20,107.06	

Table 4: Land Use in the Golden Triangle Area and Related Provinces

Notes:	1) The province that has the highest population density is Bangkok (3,634 persons/km <sup>2</sup> ).
	2) All figures in the tables are based on 2010 data.
Source:	Office of Agricultural Economics, Ministry of Agriculture and Cooperatives, 2012 and

Department of Provincial Administration, Ministry of Interior, 2012

River 10 km in length; the border with the Ruak River is 20 km in length while that with the Dan Lao mountain range is 100 km in length. It is also bordered by Lao PDR (184 km in length), by the Luangprabang mountain range (94 km), and by the Mekong River (90 km).

Of the total area of Chiang Rai province (11,678.37 km<sup>2</sup>), 44% is forest land. Apart from that, and like the majority of provinces in Thailand, most of the land (35.80%) is farm-holding land, while 17.16% of the total land is paddy land. Thus, it is not surprising that the major agricultural product of Chiang Rai is rice, while cassava and rubber are also major crops. In addition, longan, coffee beans and tea are also major agricultural products.

The total population in 2011 was  $1,157,302^{10}$  with a population density of 102.61 and a per capita GPP of USD 2,103.9 (ranked  $53^{rd}$  in the country). The agriculture and wholesale/retail trading sectors serve as the two main categories in Chiang Rai's gross provincial product (36.5% and 14.9%, respectively).

Although there are significant natural and human resources in Chiang Rai, the

<sup>&</sup>lt;sup>10</sup> This value is different from that of Table 6 as of 2010. This relation is applied to the cases of other provinces.

Products	Province	Chiang Rai	Chiang Mai
Rice	Planted area (km <sup>2</sup> )	2,281.30	825.26
	Production (tons)	981,998	387,744
	% of the country	4.8	1.9
	Yield (tons/ km <sup>2</sup> )	440.63	470
Longan	Planted area (km <sup>2</sup> )	204.31	494.35
	Production (Tons)	54,225	195,195
	% of the country	7.2	25.9
	Yield $(tons/km^2)$	273.18	400
Coffee bean	Planted area (km <sup>2</sup> )	72.38	
	Production (tons)	40,460	
	% of the country	95.4	
	Yield $(tons/km^2)$	697.80	

# Table 5: Major Agricultural Products in the Golden Triangle Area and Related Provinces

*Note:* 1) Yield is reported based on the original data in which the computation is made based on the production/ harvested area; not production/ planted area.

Sources: National Statistical Office, Ministry of Information and Communication Technology, 2012; Office of Agricultural Economics, 2012; Chiang Rai Provincial Agricultural Extension Office, 2012; Chiang Mai, Provincial Agricultural Extension Office, 2012.

provincial economy is still dependent on agriculture and the wholesale/retail trading industry. To utilize provincial resources, the government has a policy to develop a special economic zone in the province. Not merely common industrial estates, the three specific zones will be developed at Chiang Khong, Chiang Saen, and Mae Sai based on the strategic location of each city. Mae Sai will be appointed as the "GMS Trading City" where business connections among Thailand, Myanmar and southwest China will be promoted to enhance trade in consumer products and focus on financial activities. Chiang Saen will be appointed as the "GMS Port City" since it is located on the banks of the Mekong River.<sup>11</sup> The Mekong River port at Chiang Saen would play an important role as a hub for river freight transportation among China, Myanmar, Laos, and Thailand. This new commercial port with all necessary facilities has been operating

<sup>&</sup>lt;sup>11</sup> Department of Foreign Trade, Ministry of Commerce (http://www.moc.go.th).

Province	Chiang Dai	Chiang Mai				
Products	Chiang Rai	Chiang Mai				
Gross Provincial Product (GPP) (USD million)	2,545.61	4,455.23				
Agriculture (%)	36.5	18.5				
Non-Agriculture (%)	63.5	81.5				
Wholesale and retail trade $^{1}$ (%)	14.9	15.1				
Education (%)	9.1	9.2				
Manufacturing (%)	9.8	12.2				
Others (%)	29.7	45.0				
GPP Per capita <sup>2)</sup> (USD)	2,103.90	2,781.03				
Rank of the Region	12	3				
Rank of the Country	53	34				
Population (1,000 persons)	1,210	1,602				
Population Density (person/km <sup>2</sup> )	103.61	79.67				
Rank of the Country	47	55				
Notes: 1) Wholesale & retail trade includes the repair of	f motor vehicles, motorc	ycles and personal				
and household goods.						
2) GPP per capita of the kingdom = USD $4,84$	12.5					
Bangkok and vicinity (6 provinces) = USD 11,653.00						
Sub-central region (6 provinces) = USD 8,525	5					
Eastern region (8 provinces) = USD 11,466						
Western region (6 provinces) = USD 3,708						

# Table 6: Gross Provincial Product at Current Market Price by EconomicActivities: 2010

Northern region (17 provinces) = USD 2,553

Northeastern region (19 provinces) = USD 1,584

Southern region (14 provinces) = USD 3,379

3) The province that has the highest population density is Bangkok (3,634 persons/km<sup>2</sup>).

4) The values of GPP and population density are published by NESDB and are not same as the values of Table 6 of Chapter 1 which is based on National Statistics Office (NSO).

*Sources*: Office of the National Economic and Social Development Board (NESDB); the Office of the Prime Minister, 2012.

since mid-2012; it will help Chiang Saen to become the port city of the region. As river freight transportation costs are much cheaper than road transportation, the use of the river is expected to increase in the future when security is ensured. Thus, Chiang Saen would play an important role as one of the port cities of the GMS region. Moreover, the Mekong River tourism route between Thailand and China via Laos and Myanmar can be developed in the near future. The 4<sup>th</sup> Thai-Laos Friendship Bridge will be complete

and ready to use by mid-2013.<sup>12</sup> As a result, Chiang Khong has been promoted to be the "Logistic City": it will facilitate freight transportation among the four countries in the region. A one-stop logistic hub will be established near the bridge. Thus, not only would border trade activities increase, but the transshipment of products among the four countries and others in different regions could be easily accomplished from Chiang Saen to Laem Chabang or Bangkok Port to a third country nearly anywhere in the world. Regarding special economic zones, Chiang Rai province has set up a three-stage plan of development to become the "Connecting City" (in the initial phase) and develop into a "Destination City" (in the next phase) and to be the "GMS Economic Hub" in the final phase (Office of Commercial Affairs Chiang Rai, Ministry of Commerce, Thailand, 2012). However, as this is the strategic policy of the province, detailed action plans are required in order for it to be successful.

## 1.4.2. Chiang Mai Province

Chiang Mai province is known as the largest and most significant city of the north since it is the center of the region in terms of education, tourism, finance, investment, and so on. As Chiang Mai was the former capital of the Kingdom of *Lanna* from the 13<sup>th</sup> to the 18<sup>th</sup> centuries,<sup>13</sup> it has typical *Lanna* culture that distinguishes it from other provinces.

Chiang Mai is becoming an increasingly modern city with many businesses, financial institutions, and universities together with a large number of Buddhist temples and *Lanna* historical and cultural sites. Additionally, 82.6% of the total land area (20,107.06 km<sup>2</sup>) is forest and mountains with many natural tourist attractions. Thus, it attracts more than five million tourists and visitors each year. At a distance of 696 km from Bangkok, Chiang Mai borders Shan State, Myanmar to the north where the 227 km border includes the Dan Lao and Thanon Thongchai mountain ranges. It borders Chiang Rai province to the east, Mae Hong Son province to the west, and Tak Province to the south. Chiang Mai has a total population of 1,708,564 with a population density of 81.59 persons per km<sup>2</sup>. The per capita GPP is USD 2,781.03, ranked 34<sup>th</sup> in the country. As most of the land is mountains and forests, the farm-holding land is only 15.54%. Consequently, the major economic factor that contributes to GPP is

<sup>&</sup>lt;sup>12</sup> Based on an interview with the Vice-Governor of Chiang Rai on September 26, 2012.

<sup>&</sup>lt;sup>13</sup> http://www.lanna.com/travel-info/about-chiang-mai/history-of-chiang-mai.html.

non-agricultural products (81.5%). This figure includes wholesale and retail trade, manufacturing, education, and hotels and restaurants at 15.1%, 12.2%, 9.2% and 8.6%, respectively (2011).

To access to the Golden Triangle Region from Bangkok by car, National Highway No. 1 should be taken with a turn onto National Highway No. 32 at Phra Nakhon Si Ayutthaya and a direct ride from there to Nakhon Sawan province. Then, turn right to Phitsanulok on National Highway No. 117 to Denchai district (in Phrae Province) and turn left to take National Highway No. 11 to Chiang Mai via Lampang province. The total distance is 695 km. Then, to reach Chiang Rai from Chiang Mai Province, National Highway No. 118 should be taken to Doi Sa Ket, Veiang Pa Pao and Mueang Chiang Rai at a distance of 191 km. By this route, the distance between Bangkok to Chiang Rai is about 886 km.

However, to shorten the distance, National Highway No. 11 from Phitsanulok can be taken before turning to National Highway No. 101 and on to No. 103 before rejoining with National Highway No. 1 at Phayao Province and going straight to Chiang Rai Province. The total distance from Bangkok to Chiang Rai by this route is 804 km. However, to reach Chiang Rai easily, National Highway No. 32 can be taken the entire way to Chiang Rai with a total distance of 830 km.

## 2. EMERALD TRIANGLE COOPERATION

### 2.1. History of Emerald Triangle

The Emerald Triangle refers to the three borders of Lao PDR, Cambodia, and Thailand. The region where Thailand borders both Cambodia and Laos and the Mekong flows into Cambodia is named the "Emerald Triangle" in recognition of its magnificent green landscapes. The 12 km<sup>2</sup> area in which the Emerald Triangle is located is known as Chong Bok, which used to be a battlefield among the three countries for years. The situation improved in 1988. In 1993, a pavilion namely "*Sala Ruam Jai*" was constructed in the middle of the triangle facing the three countries (Mahidol Cultural Mapping Project).<sup>14</sup> This pavilion is a symbol of a good relationship and cooperation

<sup>&</sup>lt;sup>14</sup> Mahidol Cultural Mapping Project (http://www.mapculture.org/coppermine/displayimage).

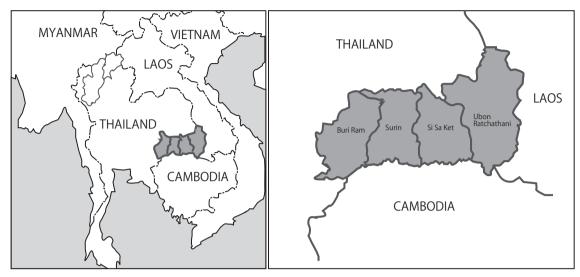
among Laos, Cambodia, and Thailand. In 2000, the Emerald Triangle cooperation project (to include a golf course) was proposed by Cambodia. A joint investment of private investors from the three countries was planned. In 2002, a 16 km road providing access to the Emerald Triangle from the Nam Yuen District on the Thai side was constructed.<sup>15</sup> However, the implementation of the Emerald Triangle Cooperation Project was delayed. Currently, the road is controlled by Thai military personnel. Non-military people are denied access to the Emerald Triangle point, which is around 4 km away.

The Emerald Triangle Cooperation Project was established in 2000 to promote cooperation in tourism, economics, social matters, and politics among the three bordering countries. The first formal meeting was held at Pakse on August 2, 2003 among the Ministers of Foreign Affairs of Cambodia, Lao PDR, and Thailand. The result was the creation of the Pakse Declaration. The three countries agreed to establish a joint working group to formulate an action plan on tourism cooperation. The area of cooperation includes the promotion of: 1) an international border checkpoint with "one-stop service," 2) human resource development, 3) Emerald Triangle tourism, and 4) infrastructure and tourism facility development. A golf course project at the connecting point of the three countries was proposed. A joint investment of the private sectors from the three countries was planned. Later, a meeting of the working group from the three countries was held in Ubon Ratchathani, Thailand on December 15 -16, 2003. This cooperative effort was aimed at complementing the GMS economic framework and the East-West Economic Corridor (EWEC) as well as overall economic cooperation within ASEAN. The cooperation includes seven cities: Stung Treng, Preah Vihear, and Oddor Meanchey for Cambodia, Champasack and Saravane for Lao PDR, and Ubon Ratchathani and Si Sa Ket for Thailand.<sup>16</sup> In addition to Ubon Ratchathani and Si Sa Ket provinces, this agreement expanded the area of cooperation to include Surin and Buri Ram provinces (Figure 4).

The discussions on tourism cooperation activities were undertaken with four main

<sup>&</sup>lt;sup>15</sup> Ubon Ratchathani Province (http://www.ubonratchathani.go.th).

<sup>&</sup>lt;sup>16</sup> Department of International Economic Affairs, Ministry of Foreign Affairs, (http://www.mfa.go.th/ business/).



**Figure 4: Emerald Triangle and Nearby Provinces** 

Source: Created by the author and the editor.

objectives: 1) to enhance tourism activities along the border, 2) to promote and facilitate cross-border tourism and ease travel into and within the three countries through border checkpoints, 3) to develop and promote tourism attractions in the Emerald Triangle area, and 4) to enhance cooperation between the public and private sectors of member countries, especially at the local level.

However, for several reasons, the parties did not move forward with the golf course project, while the Emerald Triangle project was not implemented by the governments of the three parties at either the central or provincial level.

After delaying implementation of the Emerald Triangle project for more than five years, all parties wanted to reactivate this project. Thus, the second meeting of the foreign ministers of the three countries was held on October 3, 2009 in Siemreap, Cambodia. The meeting reviewed the progress of the cooperation and decided to expand the scope to other areas apart from tourism, such as agriculture, infrastructure development, trade promotion, and regional sustainable economic growth. Even though there were several meetings between local and provincial government officials of Thailand and Cambodia and Thailand and Laos, there has, as yet, been no meeting at the ministerial level. Hence, only cooperation at the provincial level among the three countries has continued and several cooperative activities were implemented without

any progress at the central government level.

Emerald Triangle cooperation would provide significant benefits to all parties not only in tourism cooperation, but also in generating economic growth in the triangle region and nearby areas. The income disparity among the three countries would be reduced while the well-being of people at the grassroots level would increase. As such, Emerald Triangle cooperation should be promoted and continued by all parties: Laos, Cambodia, and Thailand.

## 2.2. Border Trade and Cooperation in the Emerald Triangle

There are two permanent crossing points between Thailand and Laos in Ubon Ratchathani: Chong Mek, which is connected to Vang Tao in Pakse province of Laos, and Khem Marat, which is connected to the Nakhonepheng district of Saravane province of Laos. In 2011, the import-export value reported in Ubon Ratchathani was about USD 358 million, which was around 11% of the total value of the whole country.

The border trade value between Thailand and Laos was somewhat higher than that of Thailand and Cambodia (Table 7). Moreover, the trade value has increased significantly every year. Even though the trade value at the Khem Marat crossing point

 Table 7: Import-Export Value at the Emerald Triangle

(Unit: USD million)

	From/To Laos				From/To Cambodia			
	Khem	Marat	Piboon Munsahan		Chong Chom		Chong Sa Ngam	
	(Pak	Sang)	(Chon	g Mek)				
	2011	2012 <sup>1)</sup>	2011	2012 <sup>1)</sup>	2011	2012 <sup>1)</sup>	2011	2012 <sup>2)</sup>
Imports	0.47	0.61	36.67	38.72	0.86	4.04	0.0008	0.009
Exports	44.09	37.89	276.72	225.68	25.96	32.95	0.0065	0.012
Total	44.56	38.50	313.39	264.40	26.83	36.99	0.0073	0.021
		Impo	ort-Export V	alue of the	Whole Co	untry (All G	ates)	
	20	2011 2012 <sup>1)</sup>		2011		2012 <sup>1)</sup>		
Imports	662.45		569.29		158.45		170.72	
Exports	2,616.93		2,639.22		1,905.33		1756.50	
Total	3,27	9.38	3,208.51		2,063.79		1,927.22	

*Notes*: 1) Figures are reported based on the first nine months (January to September, 2012).

2) Figures are reported based on the first eight months (January to August, 2012).

Sources: Chong Sa Ngam Customs House and Department of Foreign Trade, Ministry of Commerce, 2012.

in 2011 was 5% less than 2010, the trade value at Chong Mek increased by 28.5% in the same year. Comparing the first nine months of 2012 with the same period of 2011, the trade value has increased at both points: 9.91% in Khem Marat and 18.43% at the Chong Mek crossing point.

As shown in Table 8, the products imported from Laos to Thailand were mostly agricultural products, such as fresh vegetables and vegetable products, processed wood and wooden products, crops, palms, fruit and so on. The products exported to Laos

Khem Marat <sup>1)</sup> (Pak Sang)		Piboon Munsaha (Chong Mek)		Chong Chom & Chong Sa Ngam <sup>2)</sup>		
		Import				
Products	%	Products	%	Products	%	
Vegetables & products	73.8	Vegetables & products	43.9	Cassava Chips	48.8	
Wooden products	11.5	Processed wood	21.4	Used Tractors	10.0	
Crops & products	1.1	Palms & products	18.6	Used Trucks	7.6	
Iron & steel	0.2	Fruit & fruit products	7.3	Dammar Resin	4.4	
Fruit & fruit products	0.1	Machines & parts	2.5	Cassava Roots	3.0	
		Wooden Products	1.6	Wood Oil	2.5	
		Crops & Products	1.2	Rattan	2.4	
Others	13.4	Others	3.7	Others	21.5	
Total value (USD million)	0.5		36.7		6.02	
		Exported				
Products	%	Products	%	Products	%	
Vehicles and parts	11.0	Petrol (diesel)	19.7	Petrol	68.0	
Non-alcoholic drinks	9.4	Petrol (benzene)	9.7	Cement	5.2	
Engines	7.4	Iron and steel	6.0	Beer	3.9	
Fruit juice	3.3	Vehicles and parts	4.8	Excavators & Equipment	3.4	
Seasonings	2.4	Non-alcoholic drink	2.5	Tiles	1.9	
Machines & parts	2.1	Cars & parts	1.9	LPG Gas	1.6	
Iron and steel	2.0	Vehicle tires	1.9	Fruit Juice	1.3	
Others	62.5	Others	53.5	Others	14.7	
Total value (USD million)	44.1		276.7		36.78	

Table 8: Types of Products Imported-Exported to Laos in the EmeraldTriangle Region

Notes: 1) Figures are reported based on the year 2011 (January to December 2011).

2) Figures are reported based on the fiscal year 2012 (October 2011 to August 2012).

Source: Department of Foreign Trade, Ministry of Commerce, 2012; Chong Chom Customs House, 2012; Chong Sa Ngam Customs House, 2012.

include petrol, vehicles, cars, engine and auto parts, soft drinks, seasonings, steel, iron, and machines for manufacturing firms.

The Thai-Cambodian border trade, concerning products exported to Cambodia, can be categorized into three groups: energy products, construction material and equipment, and consumer products. There is significant demand in all three categories. However, as the energy products, i.e. diesel and benzene, are more expensive than the other categories, its export volume was about 68% of all export value, while construction-related products such as cement, excavators, tiles, and so on appeared on the list of the top ten highest export values. As the price of consumer products is much lower than the first two categories, only some product types, such as beverages like beer and fruit juice, appeared on the list of top ten highest export values.

Products imported from Cambodia include forestry and local products such as dammar resin, wood oil, rattan, and chili. Recently, Thailand imported a quantity of cassava from Cambodia and resold it as the raw material for ethanol and to flour manufacturing firms outside the region. The volume of imported cassava chips was about 49% of all imported products. Other types of imported products include used trucks and tractors which were exported for construction work in Cambodia and were imported back when the construction projects were completed.

Border trading between Thailand and Cambodia is primarily undertaken at two permanent crossing points, Chong Chom in Surin and Chong Sa Ngam in Si Sa Ket Province. Actually, there are 15 natural passes between the two countries, but only Chong Chom, Chong Sa Ngam, and Aranyaprathet in Sa Kaeo Province are permanent crossing points.

Chong Chom is connected with the O'Smach district, Oddor Meanchey province. Chong Sa-Ngam is connected with Choam Pass in Anlong Veng district, Oddor Meanchey province. Chong Sa Ngam opened as a permanent crossing point in 2005 and its customs process for importing and exporting products is currently under the control of Chong Chom customs. However, there is a policy to set up a Chong Sa Ngam customs house to accommodate the higher volume of border trade anticipated in the near future. Another point that has significant border trade activity is a natural pass in Buri Ram named Chong Sai Ta Gu. It is now an informal checkpoint for cross-border trade. Temporary border markets are operated twice a week (on Friday and Saturday) with a number of Cambodians crossing the border to buy consumer products. The locations of the crossing points in the region are shown in Figure 5.

The import-export value at Chong Chom and Chong Sa Ngam in 2011 was USD 26.8 million, which is about 13% of overall imports-exports between Thailand and Cambodia. The export value was higher than the import value. Apart from border trading, the number of people crossing the border is also interesting. The number of Thais and Cambodians using this border pass and signature process reflects the number of local people who work at border trading and other related activities. Most Thai people with passports cross the border to gamble at the two casinos built in the O'Smach district on the Cambodian border. The number of Thais with passports who crossed the border at Chong Sa Ngam was much higher in 2012 because a new casino opened in Choam, on the Cambodian side. It is also noticeable that the number of tourists crossing the border at these points is still very low. The number of people crossing the border can be seen in Table 9.

## 2.3. Provinces Located in the Emerald Triangle Area

The Emerald Triangle is located in the southern part of the northeastern region. The

## Figure 5: Crossing Points between Thailand and Cambodia in the Emerald Triangle and Nearby Area



							(Unit: l	Persons)	
			2011		2012 <sup>1)</sup>				
	Passp	oort	Border	•	Pass	oort	Border	*	
			Signat	ure <sup>1)</sup>			Signat	ure <sup>1)</sup>	
Nationality	In	Out	In	Out	In	Out	In	Out	
		Chong S	a Ngam Che	ckpoint (Si	Sa Ket prov	ince)			
Thai	6,981	7,104	21,344	21,485	55,705	56,500	21,280	21,280	
Cambodia	1,301	1,151	20	15	1,301	1,151	50,567	50,568	
Tourist	971	1,069	-	-	1,268	1,228	-	-	
		Chon	g Chom Che	eckpoint (S	urin province	e)			
Thai	273,811	273,898	77,885	79,555	140,905	148,181	51,987	52,933	
Cambodia	11,568	12,466	19,045	18,622	11,210	11,751	22,224	22,033	
Tourist	994	NA	-	-	1,022	NA	-	-	
M ( )									

## Table 9: Number of People Crossing Thai-Cambodian Border

Notes: 1) Figures for 2012 are reported based on the first eight months (January to August).2) Non-Thai non-tourists crossing at this border are Cambodians.

Sources: Chong Chom customs house, 2012 and Immigration Bureau, Royal Thai Police, 2012.

whole region covers 160,000 km<sup>2</sup>. It is located on the Khorat Plateau, which slopes down from the Phetchabun mountain range in the west toward the Mekong River and the Laotian border. The plateau is composed of two plains separated by the Phu Phan mountains. The northern Sakon Nakhon plain is drained by the Loei and Songkhram Rivers, while the southern Khorat plain is drained by the Mun and Chi Rivers. The Chi River flows through the center of the region before turning south to meet the Mun in Si Sa Ket Province. The Mun River rises in Khao Yai National Park and runs east to join the Mekong in Ubon Ratchathani Province. Table 10, Table 11, and Table 12 present some characteristics of the four related provinces (shown in Figure 4). Land usage and major agricultural products are shown in Table 10 and Table 11. Table 12 shows the gross domestic, regional, and provincial products, population and population density, the rank of the country and the region as well as the major sectors that contribute to the GPP.

As more than 70% of the land is farm-holding land, except Ubon Ratchatani in which the farm-holding land is 54.4%, it is certain that agriculture is the largest sector of the regional economy, generating around 22% of the Gross Provincial Product, which is higher than that of other regions and also when compared to 8.5% for Thailand as a

Land Characteristics	Ubon Ratchathani	Si Sa Ket	Surin	Buri Ram	
Forest land (km <sup>2</sup> )	3,035.11 [19.3%]	1,069.42 [12.1%]	931.21 [11.5%]	963.34 [9.3%]	
Farm-holding land (km <sup>2</sup> )	8,558.56 [54.4%]	6,339.36 [71.7%]	6,042.22 [74.4%]	7,491.93 [72.6%]	
Paddy land	46.83%	60.17%	65.20%	57.06%	
Upland field	1.71%	3.85%	2.88%	8.73%	
Fruit and Permanent crops	1.13%	3.80%	3.14%	2.91%	
Vegetables and ornaments	0.15%	0.72%	0.26%	0.41%	
Pasture land (for livestock)	0.24%	0.31%	0.44%	0.22%	
Residential, Waste & Others	4.30%	2.86%	2.45%	3.26%	
Unclassified (non-agriculture)	4,151.17 [26.4%]	1,431.20 [16.2%]	1,150.63 [14.2%]	1,866.61 [18.1%]	
Total area (km <sup>2</sup> )	15,744.84	8,839.98	8,124.06	10,321.88	

Table 10: Land Usage in the Golden and Emerald Triangle Area and RelatedProvinces

*Notes*: 1) All figures shown in the table are from the 2010 data base.

*Sources*: Office of Agricultural Economics, Ministry of Agriculture and Cooperatives, 2012 and Department of Provincial Administration, Ministry of Interior, 2012.

whole. Even for the Ubon Ratchathani Province in which its agriculture sector is 15.8% of the Gross Provincial Product which is less than other provinces in the region, its GPP from agriculture sector is also higher than that of the country average. Moreover, almost 60% of the total land is paddy field. This makes rice the major product of the region. In the last few years, there has been investment in rubber plantation in the region; the production is currently the second-largest followed by cash crops like cassava and sugarcane.

However, due to the socio-economic conditions, the exceptionally hot, dry climate, and mostly sandy soil with substantial salt deposits, the north-eastern region remains the poorest region of Thailand. In 2010, the per capita GPP was the lowest in the country at USD 1,584 as compared to the national average of USD 4,842.51.

The importance of the agricultural sector seems to be declining while the trade and service sectors have been increasing. Wholesale and retail trade, which include SME businesses such as car and motorcycle repairing, wood processing, and the trading of personal and household goods is the second largest sector of the regional economy

		Ubon			
Products	Province	Ratchathani	Si Sa Ket	Surin	Buri Ram
Rice	Planted area (km <sup>2</sup> )	325.21	5,343.60	5,359.39	4,747.68
	Production (Tons)	109,611	1,486,868	1,432,431	1,291,349
	% of the country	0.5	7.3	7.0	6.34
	Yield (Tons/ $km^2$ )	326.25	278.25	267.28	271.88
Rubber	Planted area (km <sup>2</sup> )	309.01	317.41	233.89	23.68
	Production (Tons)	26,541	14,162	18,856	50,194
	% of the country	0.83	0.44	0.59	1.57
	Yield (Tons/km <sup>2</sup> )	133.75	165.63	201.25	184.38
Cassava	Planted area $(km^2)$	588.52		156.63	381.16
	Production (Tons)	1,312,033		354,499	959,726
	% of the country	5.8		1.6	4.3
	Yield (Tons/km <sup>2</sup> )	1,962.98		2,281.88	2517.50
Sugarcane	Planted area $(km^2)$	3.28		116.38	299.51
	Production (Tons)	9,553		536,969	232,306
	% of the country	0.001		0.54	0.23
	Yield (Tons/km <sup>2</sup> )	2,913.75		4,701.25	5316.88
Shallot	Planted area (km <sup>2</sup> )		56.49		
	Production (Tons)		10,401		
	% of the country		5.3		
	Yield (Tons/km <sup>2</sup> )		186.22		

 Table 11: Major Agricultural Products in the Emerald Triangle Area and Related

 Provinces

*Notes*: 1) Yield is reported based on the original data in which the computation is made based on the production/ harvested area; not production/ planted area.

2) The amount of Cassava and sugar cane product in Sri sa ket are not high comparing to other provinces in the region. Thus, the numbers are not reported here. Similarly, the amount of shallot products in Ubon Ratchathani, Surin, and Buri Ram are not high comparing to that of Sri Sa Ket. Hence, the numbers are not reported as well.

*Sources*: National Statistical Office, Ministry of Information and Communication Technology, 2012, Office of Agricultural Economics, 2012 and Ubon Ratchathani, Si Sa Ket, Surin, and Buri Ram Provincial Agricultural Extension Offices, 2012.

followed by manufacturing and the education sector.

Two provinces of Thailand that are parts of the Emerald Triangle are Ubon Ratchathani and Si Sa Ket. However, Surin and Buri Ram, the two connecting provinces, also play an important role in border activities. Thus, the brief characteristics of these four provinces are discussed. Ubon Ratchathani has borders with both Cambodia and Lao PDR where two permanent crossing points to Laos, Chong Mek and Pak Sang, are

## Table 12: Gross Provincial Product at Current Market Price by EconomicActivities: 2010

Province Products	Ubon Ratchathani	Si Sa Ket	Surin	Buri Ram
Gross Provincial Product (GPP) (USD million)	2,711.10	1,794.94	1,775.16	2,137.06
Agriculture (%)	15.8	22.7	22.4	23.7
Non-Agriculture (%)	84.2	77.3	77.6	76.3
Wholesale and retail trade <sup><math>1</math></sup> (%)	25.3	22.5	26.5	22.2
Education (%)	14.0	15.7	14.3	14.3
Manufacturing (%)	12.1	6.9	9.8	13.9
Others (%)	32.8	32.2	27.0	25.9
Per capita GPP <sup>2)</sup> (USD)	1,450.00	1,165.87	1,234.19	1,294.00
Rank of the Region	9	18	16	13
Rank of the Country	66	75	73	70
Population (1,000 persons)	1,870	1,540	1,438	1,652
Population Density (Person/km <sup>2</sup> )	118.7	174.21	170.01	160.00
Rank of the Country	44	21	18	27

*Notes*: 1) Wholesale & retail trade includes the repair of motor vehicles, motorcycles and personal and household goods.

 Per Capita GPP of the whole kingdom=USD4,842.5; Bangkok and vicinity (6 provinces)= USD11,653.00; Sub-central Region (6 provinces)=USD 8,525; Eastern Region (8 provinces)=USD 11,466; Western Region (6 provinces)=USD 3,708; Northern Region (17 provinces)=USD 2,553; Northeastern Region (19 provinces)=USD 1,584, and Southern Region (14 provinces)=USD 3,379.

3) The province that has the highest population density is Bangkok (3,634 persons/km<sup>2</sup>).

4) The values of GPP and population density are published by NESDB and are not same as the values of Table 5 of Chapter 1which is based on National Statistics Office (NSO).

*Source*: Office of the National Economic and Social Development Board (NESDB), the Office of the Prime Minister, 2012.

located. Si Sa Ket, Surin, and Buri Ram border Cambodia. The two permanent crossing points, Chong Sa Ngam and Chong Chom are located in Si Sa Ket and Surin while a natural border pass (Chong Sai Ta Gu) is located in Buri Ram. Current border activities are seen at these crossings.

The four provinces are located in the northeastern region of Thailand, bordering Laos and Cambodia with the Mekong River and Dangrek mountain range (Phanom Dong Rak, in Thai). People living in the region are a mix of *Thai-Isan*, *Suai*, Lao-speaking and Khmer (the language of Cambodia). However, Thai language is

officially and generally spoken by almost everyone, while Khmer is widely spoken in areas along the Cambodian border, i.e., Buri Ram, Surin, and Si Sa Ket.

The road infrastructure of the four provinces is good. Roads are paved, in good condition, and provide access to all districts of the provinces. Roads between districts and sub-districts are at least two-lane roads, mostly paved and in good condition except for those that are under construction or were damaged from flooding or other reasons. However, many of those are undergoing repairs. To access the region from Bangkok by car, National Highway No. 1 to Saraburi must be taken. Then, turn left to National Highway No. 2 to Nakhon Ratchasima. Take National Highway No. 24 to Chokchai district, then:

- To Buri Ram province, continue along National Highway No. 24 to Nongki and Nang Rong district (Buri Ram) and turn left onto National Highway No. 218 to Mueang Buri Ram. The total distance is 410 km.
- 2) To Surin province, continue on National Highway No. 24 to Prakhonchai (Buri Ram province) and turn left to National Highway No. 214 to Mueang Surin via Prasat district (Surin). The total distance is 450 km.
- 3) To Si Sa Ket province, continue on National Highway No. 24 to Nongki district (Buri Ram) and Sangkha (Surin). Then, turn left onto National Highway No. 220 to Mueang Si Sa Ket. The total distance is 540 km.
- 4) To Ubon Ratchathani province: continue on National Highway No. 24 to Sikhiu and Kunthaluk district (Si Sa Ket). Then, turn onto National Highway No. 2085 and No. 2178 to Mueang Ubon Ratchathani via Warin Chamrap District. The total distance is 629 km.

However, National Highway No. 226 from Nahon Ratchasima to Warin Chamrap can link all four provinces together with a distance of 50, 105, and 61 km from Buri Ram to Surin to Si Sa Ket and to Ubon Ratchathani, respectively. Though the four provinces are contiguous in the same region, there are some characteristics that highlight their differences. The details of each province are as follows:

## 2.3.1. Ubon Ratchathani

Ubon Ratchathani is a city on the Mun River in the southeast region of Thailand. The province is known as a city of beautiful lotuses, the two-colored river, and prehistoric rock paintings. As the name "Ubon Ratchathani" means city of lotus, the province uses lotus as the provincial logo. The name "Two-Colored River" comes from the point at which the blue water of the Mun River joins with the brown color of the Mekong River and appears to be of two colors. In addition, "pre-historic rock paintings" refers to an area of the Pha Taem National Park that has a cliff with paintings which are believed to be approximately 3,000 years old.<sup>17</sup>

The province is located 630 km from Bangkok. Its area is around  $15,744.84 \text{ km}^2$ , a size which makes it the largest in the region and the fifth-largest in the country. It borders on Amnat Charoen Province to the north, Cambodia and the Banthat Mountain Ranges to the south, Lao PDR to the east and Yasothon and Si Sa Ket provinces to the west. The Mun River runs from the west through the middle of the city to meet with the Mekong in the east. Sandstone cliffs and the Mekong River serve as a natural border between Thailand and Laos.

Regarding economic activity, Ubon Ratchathani is not very different from other provinces in the region. About 19.3% of the total land is forested, while about 55% is farm-holding land. More than 46% is paddy field and, thus, rice is the major product of the province (See Table 10). Other agricultural products include rubber, cassava and sugarcane. However, the production volume is not high (See Table 11). Though the volume of agricultural products is not high (15.8% of GPP), the GPP and per capita GPP of Ubon Ratchathani is higher than other provinces in the region (ranked 66<sup>th</sup> out of a total of 77 provinces). The major economic sectors that contribute to the GPP are wholesale and retail trade, manufacturing, and education with 25.3%, 14.0% and 12.1% of GPP, respectively.

To access Ubon Ratchathani without driving, either the train or buses are available. The train route ends at Warin Chamrap district, while all buses end at the city center in Mueang Ubon Ratchathani. Within the province, there are 13 bus routes that connect all main places in the city center and nearby areas. Taxis are also available in

<sup>&</sup>lt;sup>17</sup> http://isan.sawadee.com/ ubonratchathani.

the city center. In addition, there are many buses linking all districts in Ubon Ratchthani and nearby provinces as well. Moreover, there is also a bus route linking Ubon Ratchathani and Pakse in Laos. Additionally, Ubon Ratchthani has the Ubon Ratchathani International Airport serviced by four airlines (Thai Airways, Nok Air, Air Asia, and Thai Smile), that provide air transportation services between Ubon Ratchathani and Bangkok, Chiang Mai, and Phuket. Moreover, the nearby Pakse Airport, serviced by Laos Airlines, also provides air transportation between Pakse and Ho Chi Minh City.<sup>18</sup>

Border activities with Laos are active in Ubon Ratchathani: not only border trading at the two crossing points, Chong Mek and Pak Sang, but also other cooperative activities between Thai and Laos, such as contract farming and the naming of sister cities. Moreover, many Thai investors have invested in various types of businesses in Champasack province in Laos. Cooperation has been accomplished at various levels of the central and provincial governments and between the private and public sectors. Joint meetings and trade fairs have been held periodically on both the Laos and Thai sides. For example, the International Conference to Promote Relations between Sister and Friendship Cities and Ubon Ratchathani together with the "*ISAN* Link ASEAN" trade fair was held on August 28-30, 2011 in the province.<sup>19</sup> The representatives of 20 cities from eight countries and also nearby provinces participated in this activity.

Another business that is currently booming in the region is international tourism. Thai tourist operators have created several routes from Ubon Ratchathani to Vietnam via Laos and Cambodia by plane, by car, and mixed transport (plane and car). From the beginning, tourist operators in Ubon Ratchathani tried to get together with tourist operators from other regions of Thailand to join in the trips to patronize tourist-related business operations, such as hotels, restaurants, transportation, and cooperate with other operators in Laos, Cambodia, and Vietnam. Nearly one hundred tourist operators agreed to join the trips that were held this year (2012). If successful, more regional cooperation and growth in the tourist sector are expected in the near future.

<sup>&</sup>lt;sup>18</sup> http://www.ubonguide.org.

<sup>&</sup>lt;sup>19</sup> Based on an interview with officers of Si Sa Ket province on October 1, 2012.

### 2.3.2. Si Sa Ket

Si Sa Ket is located in the highlands near the Dangrek mountain range (Phanom Dong Rak, in Thai) in the south and on the slope leading north to the Mun River, which is about 571 km from Bangkok. The province borders Yasothon and Roi Et provinces to the north, Oddor Meanchey and Preah Vihear of Cambodia to the south, Surin province to the west and Ubon Ratchathani to the east. The Mun River divides the province into two parts, north and south. The northern part has grassy fields, while the southern part is comprised of forested mountains in the Mun River valley. The Dangrek mountain range, around 85 km in length, acts as a border between Thailand and Cambodia. Khao Phra Wihan National Park covers an area of 130 km<sup>2</sup> of the Dangrek Mountains in Si Sa Ket. Its name was given based on the Khmer empire temple Prasat Preah Vihear (as called Prasat Khao Phra Wihan in Thai). The temple is located in Cambodia, but faces north to Thailand where its entrance is in Si Sa Ket province (St John, 1994).

Bus services to visit Si Sa Ket are available for those who do not use private cars. It takes around eight hours from Bangkok to the province. A train service is also available. The same route as Ubon Ratchathani should be taken, but the passengers can get off at the Si Sa Ket railway station. Although there is no airport in Si Sa Ket province, travelers can use the facilities of the Ubon Ratchathani International Airport, which is only about 61 km from Si Sa Ket City.

Only 12.1% of Si Sa Ket is forest, while 71.7% is farm-holding land. Paddy fields comprise 60.2% of the province. However, the agricultural sector contributes only 22.7% of the GPP. The major agricultural product of the province is rice followed by rubber and shallots. Another 22.5% of the GPP is from the wholesale and retail trading sector and 15.7% is from the educational sectors. The manufacturing sector plays a less important role in provincial economics since it contributes only 6.9% to the GPP, while this industry contributes more than 10% of other provinces' GPP. Si Sa Ket is considered one of the poorest provinces of Thailand. Its per capita GPP is only USD 1,165.87, which is ranked 75<sup>th</sup> out of 77 provinces.

Chong Sa Ngam is the permanent crossing point that connects Si Sa Ket to Anlong Veng in Cambodia. It has been in operation as a permanent checkpoint since 2005.<sup>20</sup> Various types of products are imported and exported between Thailand and Cambodia via this crossing. There is also a low-priced trading market operated three times per week on Tuesday, Thursday, and Sunday at the border-crossing area. Cambodian people in the nearby area cross the border to buy various consumer products from this market, while a number of Thai people cross the border for gambling in a recently opened casino in Cambodia. In addition, almost USD 10 million was invested by Si Sa Ket province to construct a permanent market located 2 km from Chong Sa Ngam checkpoint.<sup>21</sup> However, this market has yet to become popular. Apart from border trading, Si Sa Ket also has many cooperative activities with Cambodia. For example, the Governor of Siemreap, Oddor Meanchey and Preah Vihear of Cambodia and the Governor of Si Sa Ket signed an MOU on cooperation in education, tourism, and trade fairs among the provinces on August 27, 2012. Then, they held the "SME-OTOP Fair@Siem Reap" on September 21 to 24, 2012. More than 120 Thai operators joined the fair. The fair in Cambodia was deemed a success as all products were sold out. Cooperation in education and religion was another highlight. For example, there were more than 50 educational scholarships given to Cambodian students to study in Si Sa Ket province. Recently (September 26, 2012), the province held a special event to celebrate year 2600 in Buddhism at Chong Sa Ngam Temple (Wat Mai Chong Sa Ngam). More than 3,000 Cambodian and 7,000 Thai people joined in the event.<sup>22</sup>

## 2.3.3. Surin

Surin province is located 450 km from Bangkok and has a total land area of 8,124.06 km<sup>2</sup>. It is situated between the Mun River in the north and the Dangrek mountain range in the south. The province is well known as an elephant city with its annual grand elephant show. Beautiful silk and attractive silver beads and ornaments, such as necklaces, belts, rings, watches, and bracelets, are also well-known products of the province as well as its famous organic rice. The motto of the city is: "Surin: the land of elephants, splendid silk, beautiful silver beads, stone castles, sweet cabbage, aromatic

<sup>&</sup>lt;sup>20</sup> Si Sa Ket Immigration (http://sisaket.immigration.go.th).

<sup>&</sup>lt;sup>21</sup> Si Sa Ket Province (www.sisaket.go.th).

<sup>&</sup>lt;sup>22</sup> Based on an interview with officers of Si Sa Ket province on October 1, 2012.

rice, and beautiful culture." Surin borders Maha Sarakham and Roi Et to the north, Si Sa Ket to the east, Oddor Meanchey of Cambodia to the south, and Buri Ram to the west.

Evidence of the Dvarahevati culture, dating to between the 7<sup>th</sup> and 11<sup>th</sup> centuries CE, is found in the Surin region. Buddhism became the dominant religion of the region in that period. Following the Dvaravati period, the powerful Khmer Empire expanded its influence to the northeastern area and it became the dominant culture of the region. More than thirty Khmer stone temples were constructed throughout the region. These temples existed in the same era as the well-known Angor Wat, Angor Thom, and other Khmer stone temples in the region. Even though most of them have decayed, their remains are significant evidence of the history and ancient civilization of the Khmer empire. The best known Khmer stone temples in Surin are Prasat Phum Pon and Prasat Sikhoraphum.<sup>23</sup>

Most of the land, 74.4%, is farm holding, while 65.2% is paddy field. The rice produced in Surin is about 7% of the total production of the country. Surin rice is known as organic rice. This places rice from Surin in the premium product category. Additionally, rubber, cassava, and sugarcane are major crops of the province. Agricultural products contribute 22.4% to the GPP. Wholesale and retail trade is also a major sector, contributing 26.5% of GPP, followed by the educational and manufacturing sectors at 14.3% and 9.8% of GPP (2010). However, for the same reasons as Si Sa Ket, Surin is ranked as one of the poorest provinces in Thailand with a per capita GPP of USD 1,234.19 and a rank of 73<sup>rd</sup> out of the 77 provinces of Thailand.

Surin province can be reached by car, bus, and train. It takes approximately six hours driving from Bangkok. Many bus operators provide services several times per day. However, traveling by bus or train requires seven to eight hours. In addition, air transportation is not convenient for Surin travel as there is no commercial airport in the province. The nearest airport is in Buri Ram, which is 75.3 km away from Mueang Surin. There are no daily flights available and the flight schedules sometimes change. Another nearby airport is Ubon Ratchathani International Airport. Though there are many flights available to this airport, it is also not convenient for travel to Surin as it is more than 160 km away. Thus, transportation between Bangkok and Surin seems to be a

<sup>&</sup>lt;sup>23</sup> Surin Province (http://www.surin.go.th).

weak point for non-local people to travel or invest in Surin province. However, after reaching the province, several transportation services such as motorcycle taxi, tuk-tuk, and pick-up cars are available for travel.

Chong Chom and the Chong Chom border market are well-known permanent checkpoints between Surin and O'Smach, Oddor Meanchey, Cambodia. A large and varied number of imported and exported products are transported via this crossing. The Chong Chom border market is located 3 km away from the border. Vehicles from Cambodia, i.e. trucks, cars, and motorcycles, are allowed to cross the border to reach the market. Cambodian people in nearby areas cross the border to buy various consumer products, while Thais visit the market to buy some special products, such as used bicycles from Japan, apparel, and home appliances from China. Products from third countries are imported via the Sihanoukville seaport in Cambodia. The products are then transported by trucks to the Chong Chom market.

As at Chong Sa Ngam, a large number of Thais also cross the border to Cambodia each day to gamble at the two casinos located near the Cambodian border. Since there are a large number of border activities at Chong Chom, the current facilities are insufficient. Consequently, a renovation plan for the Chong Chom crossing point has been drawn up by the central government (July 30, 2012) and is expected to begin shortly.

To promote more cooperative activities, the Governors of Surin and Oddor Meanchey have prepared an MOU to promote cooperation between sister cities to include trading, investment, tourism, and also the opening of more crossing points between the two countries. Cooperation in the tourism industry is currently active. As Surin province is one of the four provinces that has joined the "Nakhon Chaiburin" Project (Nakhon Ratchasima, Chaiyaphum, Buri Ram, and Surin), cooperation between provinces has been established. The aim is to promote tourist activities, especially for the high-end, aging, and retired groups who search for long-stay locations as well as those who come for the culture and eco-tours. The "Thailand Beyond" project was created in 2012 to arrange a tourist route as Thailand plus Laos, or Thailand plus Cambodia, or a Thailand-Laos-Cambodia route.<sup>24</sup>

<sup>&</sup>lt;sup>24</sup> Based on an interview with the Vice-Governor of Surin province on October 2, 2012.

### 2.3.4. Buri Ram

Buri Ram is a land of ancient Khmer prosperity. The southern part of the province has a number of Khmer stone temples with the best known, Prasat Phanom Rung and Prasat Mueang Tum, regarded as among the most beautiful Khmer architecture in Thailand. The province is located at the southern end of the Khorat Plateau and has several extinct volcanoes around the province that make the soil sandy and inappropriate for the planting. Only certain crops can be planted in the province.

Buri Ram is 410 km from Bangkok. It borders Khon Kaen and Maha Sarakham to the north, Nakhon Ratchasima to the west, Surin to the west and Sa Kaeo and Oddor Meanchey of Cambodia to the south. It has an area of 10,321.88 km<sup>2</sup>. There are many transportation alternatives to access the province: car, bus, train or air. Buses, with or without air-conditioning, and train services are available several times per day. Nok Air operates three flights between Buri Ram and Bangkok three times a week. The air service is provided at Buri Ram Airport which is located in the Satuek District, which is about 33.5 km away from Mueang Buri Ram.

Concerning land usage, 72.6% is farm holding of which 57.06% is paddy field. Forest land is only 9.3% of the total area. Similar to other provinces in the region, rice is the major agricultural product of the province. Its production represents about 6.34% of the whole country. Cassava is also a major crop of the province. Its production is around 4.3% of the whole country followed by rubber and sugar cane. Agriculture, a major sector, contributes 23.7% to the GPP, followed by wholesale and retail trading, education, and the manufacturing sectors (22.2%, 14.3%, and 13.9 % of the GPP, respectively). Buri Ram is also ranked as one of the poorest provinces in Thailand: its per capita GPP is USD 1,294 with a rank of 70<sup>th</sup> out of the 77 provinces of Thailand.

Currently, there are no permanent crossing points between Thailand and Cambodia in Buri Ram. However, there is a natural border pass, Chong Sai Ta Gu, which is located 80 km from Buri Ram in the Ban Kruat district. The pass is about 15 km from Ban Kruat city. It connects to Chup Koky, Ampuen district in Oddor Meanchey province of Cambodia. Presently, there is demand for border trading at this crossing since people from both sides need several products from each other. As such, a temporary border market has been operating twice per week on Fridays and Saturdays, 9.00 to 14.00 on both sides. The products trading here are mostly consumer products,

food, and some local products from Cambodia. There is demand from both sides to upgrade this natural crossing to be either a temporary or permanent crossing point so that increased border trading can occur and people can easily cross the border to each side. The Thai government has now agreed (September 25, 2012) to upgrade the crossing to either a temporary or permanent crossing point.<sup>25</sup> It is an example of the coordination between the foreign ministry of Thailand and that of Cambodia. Road access to the crossing is not now in good condition. Around 6 km on the Thai side and 15 km on the Cambodian side are still unpaved. The Thai Government has already allocated a budget to improve road quality.

If the crossing is officially opened, it would contribute not only to border trade, but also to the tourist sector because the road from Chuo Koky to Ampuen district is forested mountains with the beautiful natural attractions of the valley and ancient Khmer temples along the way. Moreover, it is only 48 km from the crossing to Oddor Meanchey province, 120 km to Siemreap, and 330 km to Phnom Penh. It is an alternative tourist route to access tourist attractions in Cambodia from the Thai side. Thus, the ancient Khmer culture tour route, starting from Prasat Hin Pimai in Nakhon Ratchasima to Phanom Rung Historical Park, Prasat Mueang Tum, Prasat Ta Muaen, Prasat Ta Muaen Tuj, Prasat Ta Muaen Thom, and ending at Angor Wat, Angor Thom and other Khmer temples in Siemreap, can be developed.

## 3. BEYOND THE BORDER TRADES: POSSIBLE FUTURE DEVELOPMENT

Regarding the current cooperative activities in the Golden and Emerald triangles, three related points are noted. The first is on the development of the manufacturing sector in each province. The second is on cooperation to promote tourist activities. The third is on the redundancy of the cooperative activities at both the local and international levels. The details of each point are discussed as follows:

<sup>&</sup>lt;sup>25</sup> Based on an interview with officers of Buri Ram province on October 2, 2012.

## 3.1. Development of the Manufacturing Sector in Each Province

As agriculture is a major economic sector in all provinces in both the Golden and Emerald Triangles, value should be added to the products before trading. Currently, most agricultural products are sold as raw materials to manufacturers in other regions. The traditional trading culture in which the middlemen buy the product from the farmers and sell it to a third party is still in use. If there were agricultural processing factories in these regions, such as those for ethanol, sugar, flour, rubber processing and so on, the farmers could contact and sell their products to the factory directly. This process not only saves the cost of middlemen, it also helps reduce transportation costs as well. Thus, investments in related agro-industries in these regions should be promoted.

During interviews with business operators in the region, ethanol manufacturing investors from other regions were mentioned. Since cassava, which is the major raw material of ethanol, can be planted in the region and also imported from Cambodia, an ethanol manufacturing factory would help to add value to local business. However, as production of ethanol requires know-how and a huge monetary investment, foreign investors or investors from outside the regions are needed. Manufacturing industry could be promoted in the regions since these provinces are located in Investment Promotion Zone 3 (22 provinces) which offers investment incentives, such as the exemption of import duty on machinery, a corporate income tax exemption for eight years and exemption of import duties on raw or essential materials used in the manufacturing of exported products for five years.

## 3.2. Cooperation on the Promotion of Tourist Activities

The tourist industry is another sector that can contribute to provincial economies. The target can be Thai tourists who like to explore nearby countries, foreign retirees and the elderly from both Asia and Europe who want a long stay and tourists who are interested in the ancient Khmer culture. Routing, facilities and pricing should be designed to match well with the various groups of tourists. Even though there seems to be some action on the part of the tour agencies, cooperation among them is still insufficient. Collaboration, not competition, among tourist operators should be promoted in order to benefit from economies of scale from the larger numbers of customers. The cooperation

should be accomplished not only locally, but with the cooperation and agreement in nearby countries of tourist-related businesses, such as restaurants, hotels, entertainment venues and so on. Hence, the routing and services while traveling can be given smoothly with high quality, but at an appropriate price.

In addition to promoting international tours, the policy on border crossing procedures and driving to nearby countries must be reconsidered and revised. The number of tourists will increase if they are allowed to drive to and in all neighboring countries freely, i.e., using a car to travel within Laos, Cambodia, Vietnam, China, and Thailand, particularly if border crossing procedures are simple and quick. Since each country in the Golden and Emerald Triangle regions has its own different tourist attractions that can attract tourists to come and explore, a convenient process should encourage them to come. As tourism has already been selected as one provincial strategic plan, crucial support from the government and all stakeholders should be given.

If the tour operators in all countries in the Triangle areas share their knowledge with each other and set up the most effective programs based on sufficient knowledge of local food, restaurants, souvenirs, and local attractions of the region, tourist services would not only satisfy the customers, but also promote intentions to return and spread positive word of mouth from the customers in the future. As such, the tourist industry would be strengthened.

## 3.3. Redundancy of Cooperative Activities

It is noticeable that all provinces in the Golden and Emerald Triangle regions are active in creating projects within provinces and between provinces and nearby countries. However, the cooperation between provinces in Thailand has not been clearly demonstrated. Thus, some activities created by different provinces may be redundant or have scheduling conflicts and are consequently less effective. Therefore, a policy with specific action plans should be set so that all stakeholders could follow the same policy and strategy. As such, more effective cooperation can be expected.

For example, the agreement to establish sister cities among many provinces was made while the activities of each party were not clearly stated and implemented. Trade fairs may be visible activities, but they may not be sustainable. As such, the master plan on which province (in Thai) should be paired as a sister province with which province (in Laos or Cambodia) should be set, including the minimum required activity plans. Then, each province could set up a sophisticated policy and activities that are advanced and capable of being implemented.

## 4. CONCLUDING REMARKS

Even though the Golden and Emerald Triangles are border points between Thailand and two other countries, their characteristics are different. The Golden Triangle, which is a delta located near the Mekong River in the north of Thailand, borders Lao PDR and Myanmar and is also relatively close to China. Thus, border trade and activities are undertaken not only by Thailand, Laos, and Myanmar, but also China. Its area covers more than 150,000 km<sup>2</sup>. The NSEC with R3A and R3B makes the regional road infrastructure much better than in the past and facilitates road transportation between China and the three parties of the Triangle. Moreover, with the Mekong River available, freight can be transported by several means. Different goods can be supplied to different customers based on their separate demands via the most appropriate means with lower transportation costs. Fruit, vegetables, and agricultural products from China can be supplied to the northern areas and also distributed to the central regions of Thailand and shipped to the whole country. Consumer and energy products, together with meat and food from Thailand, can be sent to Laos, Myanmar, and also southwest China. This situation increases the value of the border trade in the Golden Triangle and causes expectations to rise. The development of local infrastructure, such as roads, customs houses, immigration offices, river ports, and other logistics facilities to serve the growing trade volume and border activities in the region has been planned and implemented.

In contrast, the border activities of the Emerald Triangle are smaller and somewhat different. The Triangle, which borders three countries, is located some distance away in the forested mountains. Border activities are mostly performed between two parties. Thai-Laos border trades and activities are performed in Ubon Ratchathani, while those of Thai and Cambodia are performed in Si Sa Ket, Surin, and Buri Ram. The road infrastructure of Laos and Cambodia limits the amount of freight transportation within their countries. Thus, the products exported to Laos and Cambodia are mostly consumed in the bordering provinces and nearby areas. As such, the border trade value of the Emerald Triangle is much less than that of the Golden Triangle. In addition, the variety of the products traded in the Emerald Triangle is less than that of the Golden Triangle. Only local agricultural and forestry products are imported to Thailand.

However, the similarity in both regions is seen in the development of the agro-industry sector. Agricultural products that are produced in the region are sold as raw materials to middlemen or the manufacturers in the central area. Value could be added by promoting investment in manufacturing and agricultural processing factories in the region. Moreover, the tourist industry could be expanded in both triangles. The Mekong River tour to China (via either Myanmar or Laos), tours to Myanmar, and tours to Laos can be set to attract the tourists from Thailand, Laos, Myanmar, China and also visitors from other countries. The ancient Khmer cultural tours can also be set in the Emerald triangle area. However, cooperation among countries is definitely required.

All districts in both Triangles can be developed and grow together if all levels of the government and private sectors cooperate. The trend seems to be that all parties would like to cooperate with each other and that is a good sign for a better future.

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