CHAPTER 5

# Triangle Area Development: Prospects and Challenges for Lao PDR

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**This chapter should be cited as:**

Nolintha, Vanthana, 2012. "Triangle Area Development: Prospects and Challenges for Lao PDR." In *Five Triangle Areas in The Greater Mekong Subregion*, edited by Masami Ishida, BRC Research Report No.11, Bangkok Research Center, IDE-JETRO, Bangkok, Thailand.

# CHAPTER 5

# TRIANGLE AREA DEVELOPMENT: PROSPECTS AND CHALLENGES FOR LAO PDR

*Vanthana Nolintha*[*]

## INTRODUCTION

Traditionally, economic cooperation in the border area in Laos has focused on the promotion of border trade, the establishment of a border trade zone and local market goods. In recent years, the triangle area development has been pursued as a new and more comprehensive model for border area cooperation in Laos. The most formal triangle area development is under the framework of Cambodia-Laos-Vietnam Development Triangle Area (CLV-DTA: commonly known as CLV cooperation) initiated in 1999 and fully operational in 2004. Other triangle area developments include the Emerald Triangle (Cambodia-Laos-Thailand), the Golden Triangle (Laos-Myanmar-Thailand), the Greater Golden Triangle[1] (Laos-Myanmar-Thailand- China) and the Economic Quadrangle Area (China, Laos, Myanmar and Vietnam). These four triangle development initiatives are relatively less active and less formally acknowledged compared to the CLV framework.

The triangle area developments are in line with the policy of the Lao government in terms of regional integration, spatial development and poverty reduction. Deepening the integration of the Lao economy into the Greater Mekong Subregion (GMS), Association of Southeast Asian Nations (ASEAN) and global economy is highlighted in the 7$^{th}$ Five Year

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* The author wishes to express appreciation to Dr. Masami Ishida of the BRC for invaluable comments and suggestions. The study could not be completed without supports from Khammerng Bannalath, Sailomyenh Pheuysitthiphone and Chansy Sammavong from NERI in the field research. All opinions or errors in this paper are those of the author and do not represent the view of NERI, Ministry of Planning and Investment or the BRC.

[1] The term "Greater Golden Triangle" is used by the author to include Yunnan province of China into the Golden Triangle Cooperation. In practice, in recent years there have been several meetings between government officials and representatives of the private sector from various provinces in this sub-region to discuss ways to enhance economic cooperation between the border provinces.

Socio-economic Development Plan 2011-2015 (Government of Lao PDR: GOL, 2011a). "The importance of triangle area development will increase in the future in order to increase the prosperity in the sub-region," (GOL, 2011b). The sector priorities of the 7th Plan in terms of spatial[2] development will focus on developing many economic corridors connecting each region with neighbouring countries, establishing Special Economic Zones (SEZ) and Border Trade Zones in certain strategic areas and developing regional hubs for triangle area development, especially the CLV framework (GOL, 2011a). In fact, sub-regional integration in the triangle area, in particular the CLV development framework, was already explicitly indicated in the National Growth and Poverty Eradication Strategy as one of the fundamental measures of the Lao government to create a favourable environment for growth and development (GOL, 2005). Increasing local and regional market access, improving road infrastructure and strengthening agricultural businesses were included among the pillars for rural development and poverty reduction (GOL, 2005, p.16). These highlight that triangle area development fits well into the on-going policy directives of the Lao government.

The triangle area development initiative employs multidisciplinary theoretical foundations, including regional development and economic integration. Regional development was considered as a separate discipline when there was increased acknowledgement that the nations are not homogenous; the impact of development was not equal across the country and planners needed to link various isolated projects to national goals (Friedmann, 1966). Regional development, therefore, includes decisions on resource allocation and development direction for an area larger than one individual province or city. On the other hand, economic integration is the process of trade liberalization to lower tariff and non-tariff barriers among participating countries. The degree of economic integration can vary from a preferential trade area to a monetary union and complete economic integration (Ray, 1998). From the perspective of each member state, the triangle area development initiative is an effort of the central government to expedite the development in the periphery areas of individual countries, which are often among the least developed regions, by strengthening cooperation with provinces in two or more bordering countries. The triangle development area cannot be considered as a pure trading bloc because the

[2] The word "spatial" in this paper is used to differentiate various regions in the country (north, central and south) from the broader transnational region (for example, the GMS region, the ASEAN region).

member states do not employ any preferential trade policies against non-members. Member states cooperate in terms of setting a shared and complementary development direction, deciding priority development projects which are beneficial for all members and facilitating cross-border trade and investment. Member states can also join efforts to mobilize external support for the triangle development region.

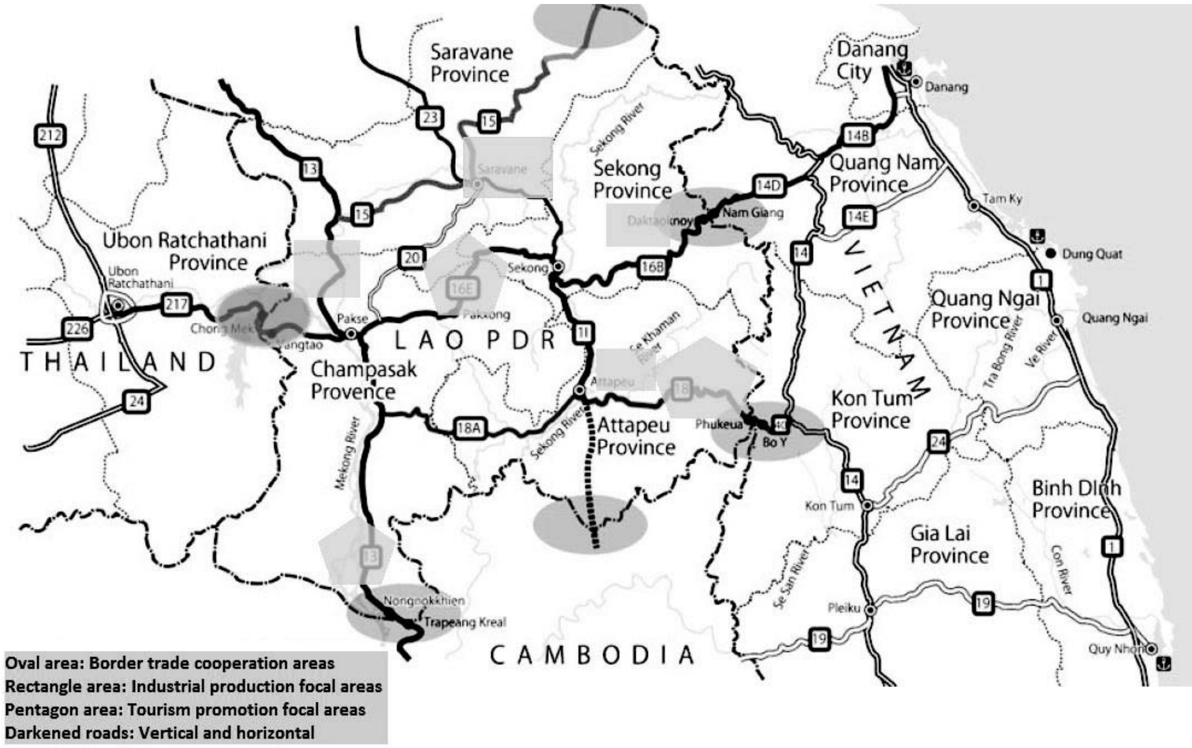
This paper aims to examine recent developments of triangle areas in Laos with particular focus on the prospects and challenges of such initiatives. The first section will review the implementation of the CLV-DTA, in particular from the perspective of Laos. The second section will examine recent developments of provinces in the upper northern region of Laos and evaluate the possibility of formal triangle area development in this region. The last section will provide policy recommendations on the promotion of triangle area development in Laos.

# 1. CLV DEVELOPMENT TRIANGLE AREA

### 1.1. Overview of CLV Development Triangle Area

CLV-DTA cooperation was officially established in 2004. The CLV now covers 13 provinces: Kratie, Mondol Kiri, Ratanak Kiri and Stung Treng in Cambodia; Champasack, Saravane, Attapeu and Sekong in Laos; and Binh Phuoc, Dak Lak, Dak Nong, Gia Lai and Kon Tum in Vietnam. In order to implement the 2004 Vientiane Declaration, the Lao government has developed the Socio-economic Development and Cooperation Master Plan for the Development of the Triangle Area of Lao PDR 2010-2020 (Lao CLV hereafter). The master plan sheds light on key development directions for development of triangle areas in Champasack, Saravane, Attapeu and Sekong (Lao Development Triangle Area: LDTA hereafter). The LDTA has a total land area of 44,091 $km^2$ with a population of over 1.3 million and a gross regional product of more than USD 1 billion. The vision of the Lao CLV is to "develop this area as a centre of economic cooperation, trade, investment, tourism and transit services in the south of Lao PDR with the aim of sustainable economic growth, a steady and fitting economic structure where people enjoy higher income and a better quality of life, a secure and just society, and freedom from poverty by 2020" (GOL, 2010).

**Figure 1: Map of Southern Laos Region Showing the Proposed Development Concept of the Lao CLV**




*Source*: CLV Master Plan 2010-2020, GOL (2010); Drawn by the editor and modified by the author.

The Lao CLV employs the "1-3-4-5-6" development model (Figure 1). Champasack will be developed as the economic centre of the LDTA, serving as the growth pole[3] for the southern region. Three tourism focal areas will be developed. A cultural and natural heritage tourism focal area is proposed for development with the centre being the Wat Phu Champasack temple and Khong Island in Champasack province. This area will be linked to other natural and cultural tourist sites, including the Khonphapheng waterfalls and the fresh-water dolphin conservation area. An organic agriculture and recreation-based tourism focal area will be developed around the Bolaven plateau area covering Paksxong district in Champasack, and Thateng in Sekong and Laongam in Saravane. This area will cover various organic agricultural production areas, especially coffee and tea, and many popular waterfalls. A natural and cultural conservation tourism focal area will be developed with

[3] More discussions on the growth pole theory can be found in Christofakis (2011), who discusses the implication of the model in the case of Greece, and Richardson (1978) presenting an opposing argument to the model.

the centre being Attapeu province. This tourism focal area will cover the Ho Chi Minh Trail, caves that sheltered some revolutionary leaders and a natural conservation area.

Four focal industrial production zones will be promoted in Xaysetha district (Attapeu), Dakcheung district (Sekong), Saravane district (Saravane) and Bachiangchaleunsook, Phonthong and Sanasomboon (Champasack). Five economic corridors will be developed both horizontally and vertically (refer to Figure 3 of Chapter 1), including the East-West Economic Corridor-1 (EWEC-1)[4] (from the Phoukeua border to National Road No.13 south by NR No.18A and NR No. 18B), EWEC-2 (from the Lao-Vietnamese border in Sekong province to the Lao-Thai border in Champasack by NR No. 16 and NR. No. 16B), EWEC-3 (from the Lao-Vietnamese border in Saravane province to NR No. 13 south via NR No. 15A and NR No. 15B), NSEC-1 (from the Lao-Cambodian border in Attapeu province vertically to the Toumlan district of Saravane by NR No. 1I, NR No. 16, NR No. 1H and NR No. 1G, connecting to Savannakhet and further north) and NSEC-2 (from the Nongnokkhien border in Champasack to Pakse), the western part of Saravane and further to the central region of Laos via NR No. 13 south). Finally, six border trade zones will be developed in Phukeua (the Lao-Vietnamese border in Attapeu), Daktaoknoy (the Lao-Vietnamese border in Sekong), Lalai (the Lao-Vietnamese border in Saravane), the Lao-Cambodian border in Phouvong district (the new border checkpoint in Attapeu), Nongnokkhien (the Lao-Cambodian border in Champasack) and Vangtao (the Lao-Thai border in Champasack).

The Lao CLV is well supported by government policy at both the central and provincial levels and under organized institutional arrangements. The Ministry of Planning and Investment will play a leading role in supporting other ministries and provincial authorities to implement the agreed master plan. The Economic Department of the Ministry of Foreign Affairs has been appointed as the secretary to the National Joint Coordination Committee in order to coordinate with related parties at the central and provincial levels in negotiating with their foreign counterparts to implement the agreed policies and further discuss any necessary measures. The role of the provincial level sub-committees includes coordinating with other provinces of the DTA, organizing a joint meeting to plan, review and share experiences in implementing the master plan and related CLV activities in the

[4] The term “EWEC” here and the term “NSEC” below are different from the EWEC (Danang-Mawlamyaine) and the NSEC (Bangkok-Kunming-Hai Phong and Hanoi-Nanning) of the GMS program, respectively.

DTA, and disseminating information about the Lao CLV to other stakeholders at provincial and district levels. All member agencies of the committee and sub-committee are required to prepare a separate budget for CLV-related activities within each agency's fiscal budget and planning.

## 1.2. Socio-economic Development in the Lao Development Triangle Area

### *1.2.1. Champasack*

Champasack province has long been the centre of socio-economic development in southern Laos and is currently promoted as the economic hub for the LDTA. The province is bordered by Saravane to the north, Cambodia to the south, Sekong and Attapeu to the east, and Thailand to the west. Champasack possesses a long history of connectivity and interaction with other provinces domestically and with neighbouring countries. The province is also well known for agricultural production and tourism. It is divided into 10 administrative districts, with Pakse as the capital. Pakse is the only urban district of Champasack, while other districts are largely rural with more than 80% of villages still classified as rural villages.[5] Champasack is the most populous province in the south and ranks third nationwide with over 661,358 people as of 2011 (Table 1) and the second-highest population density (43 people per km$^2$). The population is growing at an average of 1.37% per year, relatively slower than other big provinces. However, the

**Table 1: Key Economic Indicators of Provinces in the LDTA**

| | Champasack | Saravane | Attapeu | Sekong |
|---|---|---|---|---|
| Land area (km$^2$) | 15, 415 | 10,691 | 10,320 | 7,665 |
| Population | 661,358 | 375,517 | 130,402 | 100,595 |
| GPP (billions kip) | 6,876 | 2,408 | 890 | 360 |
| GPP per capita (USD) | 1,262 | 805 | 881 | 460 |

*Note*: GPP per capita is reported as per the provincial figures hence the exchange rates used could vary between provinces.

*Source*: DPI in each province.

[5] This is in accordance with the definition of the Department of Statistics in 2008.

population of Pakse, its capital, is expected to grow rapidly at a rate of 3.8% a year from 2010 to 2015 and 4.5% from 2015 to 2025 (JICA, 2010). Pakse is among the few districts nationwide that have experienced net immigration. The rate of net immigration is above 0.5% of the population, close to the rate observed in the inner districts of the capital, Vientiane (Messerli et al, 2008). This phenomenon, to a certain extent, reflects an urbanization feature, similar to Vientiane. Other districts of Champasack experienced net emigration during the same period. These population characteristics imply that due to the economic prosperity of Pakse and Champasack, in general, there have been increasing numbers of migrants moving from other parts of Champasack and the southern region to search for better opportunities in the growing city of Pakse.

The gross provincial product (GPP) of Champasack has grown at an average of 10% a year during the last five years. Industrial and service sectors show the most rapid growth. Despite recent transformations of the economic structure, agriculture remains the largest sector (36% of GPP in 2011), followed by services (34%) and industry (30%). The GPP in nominal terms reached LAK 6,876 billion in 2011 (USD 1,262 per capita), increasing more than two times from 2005. Champasack province has significant potential in agriculture and tourism. The Bolaven Plateau, located 40 km from Pakse, is endowed with high-quality soil and favourable weather conditions suitable for the planting of coffee and other agricultural cash crops. The significance of the plateau has been recognized since the period of French protection in the early 20$^{th}$ century. The French introduced the planting of various agricultural products, such as coffee, rubber and bananas. Coffee, subsequently, has become one of the major products of the province. The export value of agriculture has increased from USD 7.8 million (46% of total exports) in 2001 to USD 27.9 million (70.9% of total exports) in 2010.

With strong economic growth, the poverty ratio has declined substantially from 18.4% in 2002/03 to 10% in 2007/08. Education and healthcare services have also improved gradually. The number of schools increased to 1,032 in 2010 with a total of 4,359 classrooms and 134,952 students. There are 10 hospitals in the province, with a total capacity of 385 beds, and 63 health centres (216 beds). The access to clean water ratio remains high (83.8% of households) and the rate of households using clean toilets increased from 36.6% in 2005 to 52.1% in 2010.

*1.2.2. Saravane*

Saravane is the second-most populous province and second-largest economy in the LDTA. The population reached 375,517 in 2011 with a density of 35 persons per km$^2$ (Table 1). Ta Ouy and La Vane are the largest ethnic minority groups, numbering 30% and 20% of the population, respectively. The province is strategically located as it has a border with Vietnam to the east and with Thailand to the west. The province has a relatively large plains area and the Bolaven Plateau, which is suitable for agricultural production. The population is mainly concentrated in the plains area along NR No. 13 and the Bolaven plateau. Saravane has eight districts of which two are classified as poor and high priority[6] and one district classified as poor (Messerli et al, 2008). These poor districts happen to be those located in the eastern part of the province which has a mountainous landscape and weak transport infrastructure. Other than these districts, the accessibility to provincial and district centres is quite convenient.

The Saravane economy has grown at a rate of 10.14% per year during the last five years, slightly above the target rate of 9-10%. The GPP was LAK 2,408 billion in 2011 with a per capita GPP of USD 805. The share of agriculture decreased from 60% in 2006 to 54% in 2010, while that of the industrial sector and the service sector each increased 3 percentage points to 19% and 26%, respectively. Despite a slight decline in the share of the economy, agriculture remains the dominant sector of the Saravane economy. From 2006 to 2010, the province produced more than 1.3 million tons of rice. The factors behind the success of rice production are government investment in repairing and extending the irrigation system, the introduction of a credit system for improved seeds and training in new production know-how. For instance, the harvest area of dry season paddy fields increased from 4,000 ha in 2005 to 12,000 ha in 2010. Coffee production also exceeded 50,000 tons in the previous five years with a total harvest area of 22,489 ha (2010). Other important agricultural products include cardamom (2,600 tons), peanuts (54,520 tons), bananas (285,000 tons), maize (77,300 tons), cassava (467,690 tons) and sweet potatoes (26,350 tons). Industrial crops, such as rubber, are planted in Laongarm, Khongxedone, Saravane

[6] Based on poverty criteria in 2004, a poor district is one in which more than 51% of villages are classified as poor. If the rate of poverty is more than 70%, the district is further classified as a poor and high priority district.

and Nakhonepheng with the total area of 4,474 ha. Livestock rearing is also active in Saravane. Major livestock includes cattle (129,831 buffaloes and 151,007 cows), pigs (695,800), poultry (2.5 million), goats (44,101) and horses (1,904).

### *1.2.3. Sekong*

Sekong was established in 1984; it was separated from Saravane province. Sekong is the country's second smallest province (7,665 $km^2$) with the lowest population (100,595 in 2011) and second-lowest population density (13 persons per $km^2$) as shown in Table 1. The province is populated by 14 ethnic minority groups of which the Lao ethnic group comprises only 12%. Sekong is among the most remote areas of Laos. It contains two of the four administrative districts (Kalum and Dakcheung) which are classified as poor and high priority districts (Messerli et al, 2008). In 2010, 47% of total households lived below the poverty line. The province is located in one of the most challenging areas in that 65% of total land area is mountainous and 30% is plateau, leaving only small plains area. Therefore, access to the provincial capital and district centres was very difficult, especially from the eastern part of the province. However, the situation has improved in recent years thanks to the upgrade of NR No. 16, which connects to Vietnam. Interestingly, except for those living in the provincial capital, Lamam, and the agriculture hub of Thateng, the population in this province is widely dispersed.

The economy of Sekong has begun to grow an average of 6.67 % per year in recent times. Sekong is among the smallest provinces in terms of population and land area and its economy is the smallest in the DTA. The GDP reached LAK 360 billion in 2011, equivalent to slightly over 5% of Champasack's GPP. The structure of the GPP has gradually transformed from agriculture to services. The share of agriculture declined from 65% in 2006 to 57% in 2011, while the service sector increased from 25% to 31%. Major agricultural products include rice (27,865 tons), maize (7,450 tons) and coffee (2,305 tons). Livestock husbandry includes cattle (58,000), pigs (134,000), goats (31,000) and poultry (705,000). The manufacturing sector in Sekong province only includes traditional activities, such as primary wood processing and furniture production. The major service activities are tourism and retail trade.

*1.2.4. Attapeu*

Attapeu is located in the far south of Laos, sharing borders with Sekong to the north, Cambodia to the south, Vietnam to the east and Champasack to the west. The province houses Phukeua-Bo Y International Checkpoint, the most important gateway to Vietnam in the LDTA. Attapeu is another relatively small province in terms of population (130,402 inhabitants in 2011 and a population density of 13 persons per $km^2$) when compared to LDTA and the nation as a whole (Table 1). Because of the mountainous landscape, the accessibility to Sanxay and Phouvong districts, located in the eastern and southern parts of the province, is more difficult than other parts. These two are categorised as poor and high priority districts. In 2010, the poverty rate declined to 30.97%. Despite the challenges of the geographical landscape, the province benefits from improving road infrastructure, especially NR No. 18B and NR No. 1I linking the capital of the province with Vietnam and neighbouring provinces (Sekong and Champasack).

The economy of Attapeu has done quite well in recent years with the GPP growing at an average rate of 10.8 % per year from 2006 to 2011. The GPP reached LAK 890 billion in 2011, surpassing the target and doubling the level of 2006. The per capita GPP increased from USD 392 in 2006 to USD 881 in 2011. The service sector grew at a rapid rate, followed by agriculture and industry. Attapeu has progressed well in terms of increased agricultural production. Rice production increased from 45,000 tons in 2005 to over 67,800 tons in 2010. Other outstanding agricultural products included maize (4,200 tons) and taro/sweet potatoes (22,800 tons). Livestock farming expanded rapidly in the province. In 2011, Attapeu had 253 caged fish farms (170 tons), three pig farms (320 tons), three chicken meat farms (12 tons) and one chicken egg farm.

The growing of industrial crops has been another popular sector in the province. For instance, in 2010 rubber plantation was about 30,000 ha, the largest in the DTA in relation to the size of the province. Although the value added from the industrial sector has grown well, output remains in the traditional sector, such as wood, construction bricks and handicraft jars. The major driver in the industrial sector was the construction of infrastructure,[7] including roads, convention centres and accommodation, as part of the preparations to host the 7th CLV Joint Coordination Committee meeting in 2011. The tourism sector began to expand in line with the growth of tourism in the LDTA. The number of tourists visiting the province increased from an average of below 20,000 before 2007 to 67,000 in 2011. The number of accommodation sites increased from 15 to 22 with a total capacity of 506 beds in 2011.

### 1.3. Potential of the Provinces in the LDTA

Provinces located in the LDTA could benefit from improved connectivity. The distance from Pakse, the center of the LDTA and other cities in the LDTA, to the seaport is less than 600 km (Table 2). After the completion of NR No. 16B, the distance from this region to the seaport will be shortened to less than 400 km, giving southern Laos greater connectivity with the regional economy. Via the NR No. 16B, the distance between the Andaman Sea in Myanmar and the South China Sea in Vietnam will be just 1,549 km, slightly more than the distance between Danang (Vietnam) and Mawlamyine (Myanmar) via NR No. 9 (Nolintha, 2012). However, the geographical conditions of NR No. 16B are more favourable to truck transport; hence, travel time will be saved via this route (Ubon Ratchathani Chamber of Commerce, 2011). These improvements in connectivity could be an important potential for this triangle area. In addition, the Pakse airport, the only airport in the LDTA, has been upgraded to international standards. Major ameliorations include improving the flight control system and expanding the runway, now suitable for Boeing 737 aircraft. Pakse airport is the only airport in the country with direct flights to destinations other than the capital city. Domestic destinations include Luangprabang and Savannakhet. Current international flights from Pakse include some major sub-regional cities such as Bangkok, Siem Reap and Ho Chi Minh. Improvements in road transport between Champasack and nearby provinces increased opportunities to utilize Pakse airport.

Since the establishment of the CLV and the launch of the Lao CLV Master Plan, all provinces in the LDTA managed to attract sizable FDI. In the fiscal year 2010-11, more than USD 100 million worth of FDI has been approved in Champasack, Saravane and

[7] In Laos, GDP and GPP calculation includes the construction of infrastructure in the industrial sector. Therefore, the recent boom in construction as preparation for the CLV meeting boosted the value added in this sector.

**Table 2: Distance and Travel Time of Various Origins intra-LDTA and with Ports via NR No. 18**

| | Distance (km) | Time (hh:mn) | Average speed (km/h) |
|---|---|---|---|
| Pakse-Saravane[1)] | 114.0 | 2:03 | 55.6 |
| Saravane-Sekong[1)] | 92.0 | 1:22 | 67.3 |
| Sekong-Attapeu[1)] | 72.0 | 1:01 | 70.8 |
| Attapeu-Danang | 349.7 | 7:00 | 50.0 |
| Attapeu-Quy Nhon | 387.4 | 8:16 | 46.9 |
| Sekong-Danang | 425.7 | 8:36 | 49.5 |
| Sekong- Quy Nhon | 463.4 | 9:52 | 47.0 |
| Pakse-Danang | 546.4 | 10:57 | 49.9 |
| Pakse-Quy Nhon | 584.1 | 12:13 | 47.8 |
| Danang - Ubon Ratchathani | 619.1 | 12:56 | 47.9 |
| Quy Nhon- Ubon Ratchathani | 723.3 | 14:08 | 51.2 |

*Note*: 1) from field visit in 2012.
*Source*: BRC field visit in 2011 and 2012.

**Table 3: FDI in the LDTA (FY 2010-11)**

| | Champasack | Saravane | Attapeu | Sekong |
|---|---|---|---|---|
| FDI value (USD million) | 101 | 121 | 632.5 | 139.9 |
| Agriculture (% of FDI) | 52 | 54 | 3.4 | 28 |
| Industry (% of FDI) | 27 | 43 | 95 | 0.35 |
| Service (% of FDI) | 21 | 3 | 0.3 | 72 |

*Source*: DPI in each province.

Sekong (Table 3). Some outstanding FDI projects in Champasack include rubber plantations and processing projects, a beer brewery, a golf club and a Pakse-Ubon Ratchathani transport service. In addition to rubber plantations, Saravane has managed to attract some interesting projects, such as a cement factory and facilities for cash-crop

**Table 4: Import and export in the LDTA**

(Unit: USD million)

| | Champasack | Saravane | Attapeu | Sekong |
|---|---|---|---|---|
| Import (year) | 61<br>(FY 2009-10) | 7.3<br>(FY 2009-10) | 18.8<br>(FY 2009-10) | 16.2<br>(2011) |
| Export (year) | 39.4 | 7.5 | 5.8 | 14.5 |

*Source*: DPI in each province.

processing. Major FDI projects in Sekong are in hydropower and mining, accounting for 72% of total FDI. Attapeu has been very successful in attracting FDI in the recent years. For instance, the value of FDI approval in the fiscal year 2010-11 is more than USD 632 million. This is extraordinarily high for a relatively small province like Attapeu. Major FDI projects are in the hydropower sector (95% of total investment), for example, the Sekhaman 1 hydropower project. The mining sector has also received greater interest from investment inflows to the LDTA. Some investors, both domestic and foreign, have already granted the government permission to survey the feasibility. These include two gold survey projects, six bauxite survey projects, three iron ore survey sites and one coal survey project. However, unlike the expansion of FDI, foreign trade in this region has seen relatively small increases. Exports reached almost USD 40 million (2009/10) in Champasack, more than six times higher than the level in Attapeu (Table 4). Major exports from Champasack are agriculture, wood and wood products. Imports are also higher in Champasack, with the major import items being petrol, construction materials, vehicles and food. The existence of import and export activities between the provinces in the LDTA and other provinces of the CLV marks an important base which can be further developed in the years to come. The growth of trade in the last few years also signals that the strengthening of economic cooperation among member provinces and the expansion of their economies could provide a further boost to the demand for goods from the LDTA, in particular, those for which the region has a comparative advantage.

**Table 5: Hydro-power Projects in the LDTA**

| | Champasack | Saravane | Attapeu | Sekong |
|---|---|---|---|---|
| Total number of projects (capacity) | 5 (NA) | 2 (1,80.3 MW) | 5 (4,5.87 MW) | 8 (1.8 MW) |
| Completed projects (capacity) | 1 (5 MW) | 2 (1,80.3 MW) | 2 (4,5.11 MW) | None |
| Projects under construction (capacity) | 2 (NA) | None | 3 (755 KW) | 2 (0.33 MW) |
| Planned projects | 2 (NA) | NA | NA | 6 (1.47MW) |

*Source*: DPI in each province.

The hydropower sector is another area with potential for the LDTA. Four hydropower dams such as Xeset 1, Xeset 2, Houihor and the Xelabum dam currently operate in the LDTA to supply electricity for local consumption and export (Table 5). Furthermore, the Sekaman 1 and Sekaman 3 hydropower dams are under construction. The government has plans to build more hydropower dams, expected to be completed by 2020 with a total capacity of 1.9585 MW, in the LDTA. Some major projects in the pipeline include Sekong 4 (600 MW), Sekong 5 (400 MW), Sekaman 4 (155MW), Sepone 3 (100 MW), Dak Imeun (130 MW) and Sepien-Senamnoi (340 MW). Cooperative projects between Vietnam and Laos in hydro-power are Sekamen 1, Sekaman-4, Dak Y-Mon and Sekaman-0. Although the hydro-power sector has significant potential, the development of this sector needs good coordination intra-LDTA and intra-CLV. Such coordination will ensure that the upstream development of the hydropower dams will not adversely impact downstream users.

Special and specific economic zones (SEZ) could be another potential for the LDTA to attract and guide specific types of FDI into various promoted areas. Recently, SEZs have been actively promoted in Lao PDR. The premier SEZs are Savan-Seno SEZ in Savannakhet and the Golden Boten SEZ in Luangnamtha. Recently approved SEZs include the Golden Triangle SEZ in Bokeo (2010), the Phukiaw SEZ in Khammuane (2010) and the Vientiane Industry and Trade Area in Vientiane (2011). In the LDTA, several SEZs are in the planning stages. Three SEZs in Champasack were proposed to the government and are currently at the feasibility study stage. The Mahanathisiphundon (four thousand islands) SEZ is the most promising one, aiming to capitalize on the province's richness in agriculture, tourism and trade potential. Another two zones in Champasack are specific economic zones, one focusing on agricultural processing and services in the Bolaven plateau area and the other on trade near the Vangtao-Chongmek checkpoint. Two border-trade promoted zones are proposed for development in Saravane, while the SEZs in Attapeu plan to focus on industrial production and border trade promotion. The SEZs in Saravane and Attapeu are at the initial screening stage by the government. Considering the experiences in SEZ development for a relatively small country like Laos, the government could first focus on a limited number of SEZs with the strongest real economic potential before expanding to other areas (Nolintha, 2010 and 2011). Sequencing the development plans for developing SEZs in the LDTA will allow the government to channel limited resources to develop the necessary infrastructure together with a careful screening of foreign developers. The promoted sectors should also take into account long-term viability with particular reference to long-term development directions of the LDTA.

### 1.4. Achievements and Challenges in Implementing the Lao CLV

#### *1.4.1. Key Achievements*

Recent developments in the LDTA show some achievements of the Lao CLV framework. The most outstanding accomplishment is the development of infrastructure in the LDTA, in particular that of roads. The construction and improvement of NR No. 1H and NR No. 1I are in line with the proposed vertical corridor under the LDTA development model, while the improvement of NR No. 18B, No. 16B and No. 15B support the fulfilment of horizontal corridors. The on-going construction of the Sekaman Bridge in Attapeu will also have an important role in improving the connectivity in this triangle area. Other timely infrastructure improvements have been undertaken, including the upgrade of the international airport in Pakse and city roads and service infrastructure in Attapeu province to host the 7$^{th}$ Joint Coordination Committee Meeting in 2011.

Strengthening cooperation in the CLV framework helps to increase FDI inflows to the region and encourage expansion of trade among the member provinces. Vietnam has been more active in investment in the LDTA. The popular sectors that attract Vietnamese investment are agriculture (especially rubber plantation), hydropower and mining. The exports of the LDTA have also increased significantly from USD 33 million in 2005 to USD 67 million in 2009. The major exports are wood, wood products, non-timber forest products, livestock, rice and maize. On the other hand, imports remain at an average of USD 30 million. Hence, the LDTA has managed to accumulate a trade surplus in recent years.

### *1.4.2. Observable Challenges*

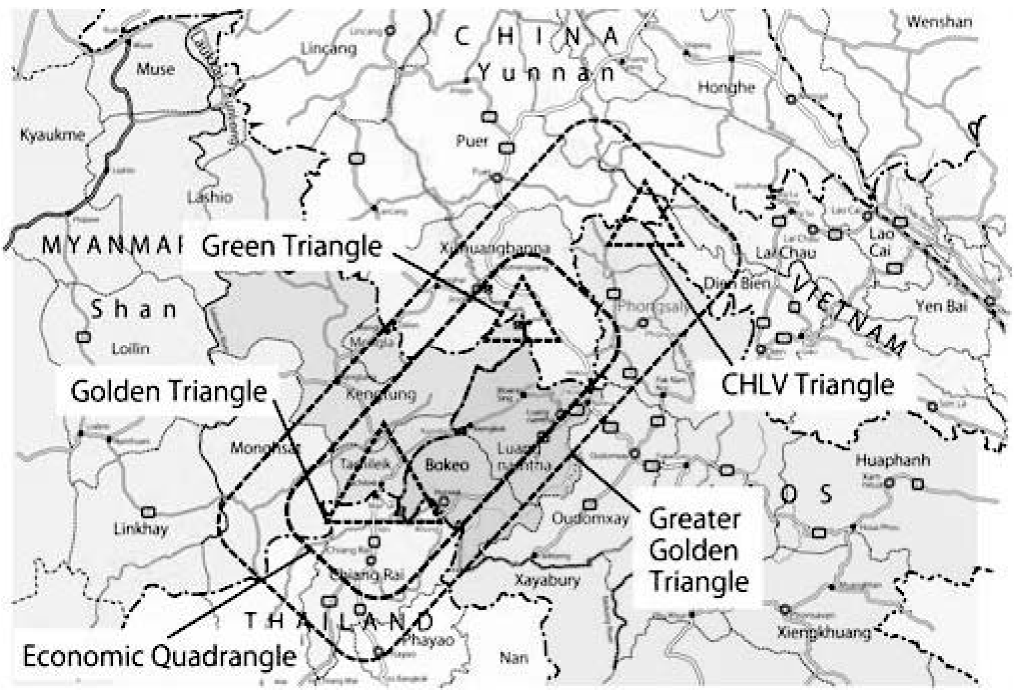
Along with achievements, the developments of the LDTA were also faced with certain challenges. These are summarised as follows:

- Preferential policies and mechanisms exist, but lack implementation.
- The tourism sector has expanded substantially, but the boom is concentrated on Champasack.
- The export structure remains unsustainable, concentrating on primary products such as wood, semi-processed wood products, agriculture and mining.
- Statistics related to LDTA activities have not been systematically kept.
- Coordination among participating provinces after the meeting remains scanty and not systematic.
- Much cooperation remains to be done with limited resources at the bilateral and/or provincial levels.
- Other than road infrastructure, the development model of Lao CLV has not been systematically pursued and investment promotion incentives have not truly reflected the promoted sectors and development directions.
- Delay in implementing the CLV project in one member province can cause delays for other member provinces when requesting new funding.
- External resource mobilization has been only moderate.

## 2. TRIANGLE DEVELOPMENT INITIATIVES IN THE NORTHERN REGION OF LAOS

There are several triangle development initiatives and concepts related to the northern region of Laos. The Golden Triangle (Laos-Thailand-Myanmar) is the best known cooperation initiative in this area. However, this area has long been linked with piracy and the smuggling of opium and, more recently, amphetamines due to difficulties in policing (Supatn, 2012). Under the framework of law enforcement cooperation along the Mekong River, Laos, Thailand, Myanmar and China established mechanisms for intelligence exchanges, patrolling and law enforcement, as well as for tackling major problems jeopardizing public order, combating transnational crimes and dealing with emergency

**Figure 2: Development Triangle Concepts Related to the Northern Region of Laos**




*Note*: Map is originally drawn by the editor and modified by the author.
*Source*: Observations by the author, 2012.

events. In order to realize the true economic potential in this border area, the Lao government has established the strategic Golden Triangle Special Economic Zone. The Greater Golden Triangle[8] Cooperation is another initiative, originally proposed by the Chiang Rai Chamber of Commerce in 1990 and later promoted again by the Chiang Mai Chamber of Commerce in 2000 (Ishida, 2012). The area could cover the Golden Triangle and bordering Chinese provinces. There have been several ad hoc meetings between public and private sectors of nearby provinces, usually in either Chiangrai or Chiang Mai province of Thailand. Other triangle areas include the Green Triangle (covering the border areas of Myanmar, Laos and China), the China-Laos-Vietnam Triangle area (covering the far northern area of Laos in Phongsaly province and nearby areas of China and Vietnam) and the economic quadrangle area to extend the Greater Golden Triangle to include some provinces of northwestern Vietnam (Figure 2).

**2.1. Socio-economic Development of Provinces in the Triangle Areas**

The upper-north region of Laos is one of the most promising and at the same time challenging areas for development. For the purpose of this study, the upper-north region includes Bokeo, Luangnamtha, Oudomxay and Phongsaly (Figure 3). This region is strategically located near fast-growing economies such as China, Vietnam and Thailand, offering the greatest potential for logistics, trade and investment. NR No. 3 and the North-South Economic Corridor (NSEC) of the GMS run through this region via Bokeo and Luangnamtha. However, this region tends to be in high altitude areas with a large percentage of the land area being either mountainous or plateau. Such natural characteristics may create opportunities for agriculture and livestock, but also make connectivity and access difficult for some of the remote areas. In addition, small population and low population density add more challenges to the growth of a domestic market. Despite being slightly different in the order of significance, the priority sectors promoted by provincial authorities are agriculture and agro-processing, logistic services, tourism, hydro-power and mining. Unlike the southern region, there are fewer variations in the

[8] This area could also be referred to as the economic quadrangle area. The author, however, chooses to call this area the Greater Golden Triangle to differentiate it from the Triangle framework that also covers some northern provinces of Vietnam.

**Figure 3: Map of GMS Showing Provinces of the Upper-north Region of Laos**


*Source*: Drawn by the editor in accordance with the request of the author.

**Table 6: Key Economic Data of Provinces Located in the Northern Triangle Areas**

| | Oudomxay | Phongsaly | Luangnamtha | Bokeo |
|---|---|---|---|---|
| Area (km$^2$) | 15,370 | 16,270 | 9,325 | 6,196 |
| Population | 299,935 | 178,006 | 168,140 | 169,807 |
| Population density | 19.5 | 10.9 | 18.0 | 27.4 |
| Ethnic Minorities (% of population) | Lao (9.14)<br>Khamu (58.9)<br>Hmong (13.9) | Lao-tai (20)<br>Mone-khmer (24)<br>Chinese-Tibet (49) | Lao (39)<br>Akha (38)<br>Hmong (23) | Lao (15)<br>Khamu (24)<br>Lue (17), Hmong (13) |
| GPP (billion LAK) | 1,952 | 915 | 1,086 | 1,366 |
| GPP per capita (USD) | 808 | 624 | 815 | 998 |
| Poverty | 33.7 | 46 | 30.5 | 32.6 |

*Source*: DPI in each province.

characteristics of the provinces in this region (Table 6). Except Oudomxay, these provinces are quite comparable in terms of population, size of economy and poverty status. Although Oudomxay has a relatively larger economy, the current difference is not substantial enough for it to become the growth pole of this region.

### *2.1.1. Oudomxay*

Oudomxay province is the centre of the northern region both in terms of its geographical location and its road network. The province is also promoted as one of the four industrial production focal areas under the northern region master plan. Oudomxay is a mountainous province with a land area of 15,370 km$^2$. Mountains cover about 85% of the land. It shares borders with China and Phongsaly Province to the north, Luangnamtha and Bokeo to the west, Xayabury to the south and Luangprabang to the east. Geographically, Oudomxay province is almost blocked by provinces with only a short border with China. However, the province is an important crossroads and transit location among Thailand, China and Vietnam as there is an active flow of goods through the province, both directly from China and via other nearby provinces. Similar to Champasack, this province has long served as the economic centre for the northern region. The province is also a central crossing place for five northern provinces: Bokeo, Luang Namtha, Phongsaly, Luangprabang and Xayabury. However, the rural road network, social services and market infrastructure are still at the development stage, making access to rural areas in the province difficult and affecting the provision of services.

The province consists of seven districts with a total population of 299,935 (2010). Population density is approximately 19.5 persons/km$^2$. The province has various ethnic groups of which the Kharnu represents a majority of about 60% of the population, whilst the Lao ethnic group is a minority. People’s livelihoods depend mostly on farming, especially upland rice farming. Their main income is from commercial agricultural production, particularly maize, Job’s tears, non-timber forest products and other crops. Moreover, a number of people earn their living from being traders and small merchants.

The majority of the total labor force is employed in agriculture. The share of agricultural production in total provincial production value in 2010 is 56%, while the industrial and service sectors account for 21.7% and 22.3%, respectively. Rubber plantation has grown in recent years from 4,530 ha in 2007 to 30,296 ha in 2010 (NAFRI, 2011). The industrial sector consists mainly of a food processing factory, a candle factory, a battery factory, electricity, a water supply and small repair shops. The mining industry has potential, but it is still under a feasibility study and the surveying process. The industrial sector employs only a small percentage of the labor force. The service sector is expected to play a more important role in boosting economic growth of the province. The main areas of potential cited by the provincial authority include natural and cultural tourism and a plan to develop the province as the central hub for conferences in the northern part of the Lao PDR.

### *2.1.2. Luangnamtha*

Luangnamtha province is bordered by Myanmar to the northwest, China to the north, Oudomxay province to the south and east, and Bokeo province to the southwest. Luangnamtha is largely mountainous and a very sparsely populated province of only 168,140 inhabitants (2011). The average annual growth rate of the population during the past five years is 3.32% and the population density is approximately 18 persons per $km^2$. These statistics show that the population grew at a faster pace than the country average, but the density of the population is still far below other parts of the country. Despite the fact that the province has a fairly small population, it has a high proportion of Lao Sung and other ethnic minorities. In fact, the population consists of 23 ethnic groups, the largest number of such groups in the country, with the four main ones being Phou Thai, Kamou, Leu and Ikoh. There is also a large Chinese presence providing labor in various sectors of the economy.

Luangnamtha consists of five districts: Namtha (the capital), Sing, Long, Viengphouka and Nalae. Namtha has been substantially developed over the past decade partly due to rapid expansion of trade with China and booming tourism. The historical town of Muang Sing (Sing district) has become a new tourist destination because of its diversity of ethnic minority groups. Long, Viengphoukha and Nalae districts have relatively limited lowland and seem to be less economically active, less wealthy and have poorer infrastructure.

The Luangnamtha economy[9] is still based on agriculture, which is 69.7% of total provincial production, followed by services and industry contributing 15.8% and 14.5%, respectively. GPP growth over the past five year has been, on average, 7.8% p.a. The industrial sector has grown the fastest, followed by services and agriculture. The domination of the agricultural sector is shown both in terms of the expansion of agricultural land and the volume of production. The total area of rice production is about 18,603 ha with an annual production of 62,580 tons (2010). The cultivation areas for industrial crops have also been on an increasing trend. In particular, the total area of rubber plantation was 35,000 ha in 2010, equivalent to 25% of total rubber plantation in the north and 15% of total rubber plantation in the country.

There are several economic corridors running through Luangnamtha. The North-South Economic Corridor, the GMS regional highway, serves as an important infrastructure project for the province. Two other small corridors have also been promoted under the northern region master plan. Considering that Luangnamtha is bordered by many countries, it is not surprising that the province has five checkpoints, three of them major. The Nateui international checkpoint is the most important one as it makes Luangnamtha a gateway for overland travel and trade among China, Laos, Myanmar and Thailand. The international checkpoint is located about 20 km from Mohan (China) and 37 km from the municipality area in Namtha District. Another important checkpoint is Pangtong, located in the Sing district and mainly used for most of the informal trade with China. This checkpoint not only facilitates trade from Luangnamtha, but also from other parts of the country, including Oudomxay and Xayabury. Finally, the Siengkok local checkpoint bordering Myanmar is also significant, especially as a major channel for the transit trade with Thailand. Apart from these major checkpoints, Luangnamtha also has two other checkpoints, including Huakong which shares a border (by the Mekong River) with China and Thailand. This checkpoint is used mainly for patrolling waterway communications in that area. The Ban Mom traditional checkpoint in the Sing district is mainly for immigration purposes and technically no trading activity is allowed.

[9] The GPP and other related data are based on statistics provided by the Department of Planning and Investment in Luangnamtha Province.

*2.1.3. Bokeo*

Bokeo is the smallest province in Laos with a total land area of 6,196 $km^2$. It is located in the northwest of the country and shares borders with Thailand (about 145 km, of which 48 km is part of the land border), Myanmar (about 98 km) in the west, Luangnamtha province (about 100 km) in the north and east, and Xayabury province (about 35 km) in the south. It consists of five districts with a total population of 169,807 and a population density of 27 people/$km^2$ (2011).

Bokeo benefits from improved access and connectivity. The province has two international border checkpoints: Huoixai-Chiang Kong and Tonpheung at the Golden Triangle SEZ. Other checkpoints include Paktha, Ban Momand Bandan. Paktha is an internal river checkpoint used to re-check boats from China, Myanmar and Thailand which have already been checked at the Huoixai international checkpoint and which will continue to Luangprabang, Vientiane or the south of the country. Ban Mom is an official trade checkpoint between Laos and Myanmar, but due to its remoteness and commercially difficult access, it is not popular with traders. This border is basically used as a river port to collect boat transit fees between Thailand and China in both directions. Ban Dan is a local checkpoint with Thailand, commonly used for local residents and trading of some local agriculture and non-timber forest products. The checkpoints are all situated along the Mekong River.

Bokeo is the second-largest economy in the upper-northern region. The GPP is estimated to be LAK 1,366 billion. The economy grew at 7.5% per year from 2006 to 2010, slightly higher than the provincial target. The per capita GPP increased from USD 399 in 2006/07 to USD 998 in 2009/10. This average income is the highest in the region. The service sector shows the highest growth of 10% per year, followed by industry (8.3%) and agriculture (7.2%). Unlike at the national level, the differences among the growth rates of these three sectors are very small, indicating that the economy seems to have a broader base for sources of growth. In addition, such similar sectorial growth rates have translated into minor structural change. The share of agriculture has been reduced from 51% in 2005/06 to 48% in 2009/10, while the share of industry and services increased slightly to 19% and 33%, respectively.

### *2.1.4. Phongsaly*

Phongsaly is situated in the far north of Laos, bordering on China to the north, Luangprabang to the south, Vietnam to the east and Oudomxay to the west. The province has a total area of 16,270 km$^2$ of which 99% is mountainous. The average altitude of the province is 1,361 meters above sea level and the highest mountain reaches 1,948 meters. The province has seven administrative districts. The capital district is Phongsaly while the Boonneua district, which is endowed with more favourable geographical characteristics, will be developed into a provincial economic centre. The total population is 163,733 with a population density of 10.9 persons per km$^2$, which is the lowest in the country. Due to the limited presence of plains areas, the actual population density could be much higher.

The Phongsaly economy has grown relatively slowly compared to other provinces in the region. On average, the GPP grew at 6.73% per year during the 2006-10 period, slightly higher than the previous five years, but lower than the target set in the provincial five-year plan by 1.8 percentage points. The service sector grew at 11.67%, followed by industry (10%) and agriculture (3.3%). The GPP reached LAK 915 billion in 2011, which is about half of Oudomxay's GPP. Per capital GPP reached USD 624 in 2011, again the lowest in the region. The main challenges for economic development in Phongsaly include the difficult geographical landscape, limited plains area and poor road infrastructure.

In order to accelerate the development of the province, the socio-economic development strategy for 2020 has been drafted (DPI Phongsaly, 2011). The strategic plan lays out key development directions and targets 2020. The province will adopt the 122 development model. An economic hub will be developed at Boonneua. Two economic corridors will be developed: one will run from Lan Tui border (Laos-China) to Vientiane and another from Panghok checkpoint (Lao-Vietnam) to Oudomxay, Luangnamtha, Bokeo and Thailand. Finally, two border trade cooperation zones will be promoted at the Panghok border and the Lan Tui border. This development model aims to utilize untapped potential and overcome some of the development challenges. Four industries will be promoted, including agriculture-forestry processing, tourism and services, energy and mining.

## 2.2. Potential of Provinces in the Upper-north Region of Laos

Provinces located in the proposed northern triangle area have enormous untapped potential

**Table 7: Access and Connectivity in the Upper-northern Region of Laos**

| | Oudomsay | Phongsaly | Luangnamtha | Borkeo |
|---|---|---|---|---|
| International Checkpoint in the Same Province | | Panghok (Vietnam): 287km, 8.5h | Natuey (China): 57.5km, 51m | Huoixai (Thailand),<br><br>Tonpheung (Thailand): 64km, 1h20 |
| Local<br><br>Checkpoint | Meo Chai (China): 96km, 3h | Lan Tui (China): 110km, 4 h | Pantong (China): 1.5, 2h | Tonpheung International (Thailand): 64km, 1h20 |
| Checkpoints in Other Provinces | Nateuy International Checkpoint (China) 56.9km, 1h<br><br>Panghok (Vietnam): 193km, 5h | Pa ktha (China): 85km, 3h | Huayxay (4th Mekong Bridge): 182km, 3h | Nateuy International Checkpoint (China) 239km, 4h |
| Distance to Major Cities | Vientiane Capital: 583.6km<br><br>Luangprabang:<br><br>194km | Vientiane Capital: 851.6km<br><br>Luangprabang:<br><br>426km | Vientiane Capital: 698.6km | Vientiane Capital: 894km |
| Inland Water Way | to Mekong River, connected with tributary in lower Northern Region | to Mekong River, connected with tributary in lower Northern Region | | Mekong River way connected with Thailand, Myanmar and China |

*Note*: 1) The country in the parenthesis is the one which is on the other side of the border.
2) "h" and "m" are abbreviations of a hour/hours and minutes, respectively.
*Source*: BRC Field Visit, 2012.

for markets and development. Despite having difficult terrain in some parts of this region, most provinces have good access and connectivity within the region and with provinces of bordering countries (Table 7). The Panghok International checkpoint, an important gateway to Vietnam, is located in Phongsaly province with proximity to Oudomxay and other provinces. For instance, the distance between the Panghok checkpoint and the capital of Oudomxay is just 193 km with an estimated travel time of about five hours. Another important international checkpoint in this region is the Natuey international checkpoint at the Lao-Chinese border of Luangnamtha. The Natuey checkpoint is located right at the eastern end of the R3, ADB's North-South Economic Corridor and near the Golden Boten

**Table 8: Airport developments in the Upper-northern Region of Laos**

| Airport | Bokeo | Luangnamtha | Oudomxay | Phongsaly |
|---|---|---|---|---|
| Existing | Yes | yes | Yes | Yes |
| Type of airport | Domestic | Domestic | Domestic | Domestic |
| Total area | 5 ha | 42.9 ha | 40 ha | 10 ha |
| Length & Width of air strips (m) | 1,500m X 23m | 1,600 m X 30 m | NA | 1,100 m X 12 m |
| Frequency | 4 times a week | 4 times a week | 4 times a week | 2 times a week |

*Source*: BRC Survey, 2012.

SEZ. The Natuey checkpoint is also situated near to Oudomxay. Finally, the international checkpoints in Bokeo are the most interesting access points to this region. Currently, cross-border activities are ongoing at the Huoixai international checkpoint in downtown Bokeo and Tonpheung international checkpoint, situated at the Golden Triangle SEZ. After the completion of the 4$^{th}$ Mekong bridge, another international checkpoint will also be located right at the western end of the R3. These improvements in connectivity will make Bokeo an important frontier for economic cooperation with western neighbours. The connection between the international checkpoint in Bokeo and Panghok checkpoint in Phongsaly could make a significant east-west trade route. In addition, there exist domestic airports in all provinces, accommodating regular flights between the provincial capital and Vientiane (Table 8). This potential in connectivity coupled with the right policy directions will allow the upper-north region to overcome some of its development challenges and capitalize on potential in trade, agricultural processing, tourism and heavy industries like hydro-power and mining.

FDI inflow has begun to grow in this region, helping the development of major basic industries. Bokeo has been the most successful in attracting FDI (Table 9). For instance, the value of FDI approvals during the FY 2005/06 to 2008/09 period has grown to more than USD 350 million. Some outstanding FDI projects include motorcycle assembly, garments, SEZs, comprehensive tourism development and mining. Oudomxay comes second in terms of attracting FDI. More than USD 110 million worth of FDI projects were approved from 2006 to 2010 in Oudomxay. The largest sectors are industry, including energy and mines (57% of total FDI) and agriculture and forestry (33%). FDI inflows to other provinces are

**Table 9: FDI in the Upper-northern Region of Laos**

(Unit: USD million/%)

| Bokeo | Luangnamtha | Oudomxay | Phongsaly |
|---|---|---|---|
| 16.4 (2011) | 10.6 (2011) | 29.9 (FY 2010 - 11) | 46 ( 2006-2010) |
| Agriculture (40.24%)<br>Manufacturing (41.46%)<br>Service (18.29%) | Agriculture (7.11%)<br>Manufacturing (92.89%)<br>Service (0%) | Agriculture (50%)<br>Mining (25%)<br>Others (24.9%) | Agriculture (51.32%)<br>Mining (23.87%)<br>Others (24.81%) |

*Source*: DPI in each province.

rather moderate (USD 51 million in Luangnamtha and USD 46 million in Phongsaly during the same period). Substantial portions of FDI in Luangnamtha and Phongsaly flow to rubber plantations and rubber processing. Rubber could offer many economic benefits for farmers if it is properly developed and managed. Large rubber plantations could also present several challenges including possible labor shortages, management of waste latex and fluctuations in rubber price (more detail discussions are provided in Chapter 1).

In addition, cross-border activities in this region have begun to witness the benefits of improving connectivity. All provinces have recorded increasing exports and imports with neighbouring countries. For instance, the value of exports from Bokeo has increased from USD 5 million in 2006 to USD 13 million in 2011. The common major exports are agricultural, mainly cash crops. Exports of mining output are significantly higher in Luangnamtha, while furniture is a major export in Oudomxay (Table 10). Imports have also increased quite dramatically and surpassed exports in most other provinces except Phongsaly. Major imports are petrol, vehicles, construction materials and consumption goods. Movements of people are also noteworthy in this region. The number of people crossing the checkpoint (both inbound and outbound) is very high in Phongsaly and Oudomxay (Table 11). The expansion of tourism in this region is one reason for the growth of cross-border interaction. The number of tourists visiting this area has increased and is highest in Bokeo and Luangnamtha (Table 12). The number of tourism facilities has also increased substantially. For instance, the number of hotels in Oudomxay has more than

## Table 10: Import and Exports in the Upper-northern Region of Laos

(Unit: USD million/%)

| | Bokeo | Luangnamtha | Oudomxay | Phongsaly |
|---|---|---|---|---|
| Imports | 23.7 (2011) | 35.43 (2011) | 60.92 (2011) | 4.68 (2010) |
| Major imports (%) | Fuel (23.7) | Vehicle and equipment (25) | Industrial goods (50) | NA |
| | Cement (13.8) | Textile, clothing, consumption goods (18.8) | Constructions goods (30) | NA |
| | Rod of iron (24.4) | Electrical equipment and electricity supply (16.5) | Consumption goods (20) | NA |
| Export value | 12.68 (2011) | 23.27 (2011) | 22.03 (2011) | 6.5 (2010) |
| Major exports (%) | Maize (44) | Various mineral (64) | Furniture (60) | Agriculture production (80) |
| | Polished rice (17) | Agriculture and livestock (31) | Agriculture (30) | Non-forests production (20) |

*Source*: DPI in each province.

## Table 11: Cross-border Movement of People in the Upper-northern Region of Laos

| | Borkeo | Louangnamtha | Oudomxay | Phongsaly |
|---|---|---|---|---|
| Inflow | NA | 27,610 (2011) | 83,677 (2011) | 66,594 (2010) |
| Outflow | NA | 12,313 (2011) | 16,650 (2011) | 35,157 (2010) |

*Source*: DPI in each province.

## Table 12: Tourism in the upper-north region of Laos

| | Number of tourists | Number of tourist sites | Hotel | | Guesthouse and resort | | Travel agent and branch | |
|---|---|---|---|---|---|---|---|---|
| | | | 2005 | 2010 | 2005 | 2010 | 2005 | 2010 |
| Bokeo | 135,559 (2009) | 172 | 4 | 5 | 20 | 39 | 7 | 14 |
| Luangnamtha | 120,000 (average) | 72 | 3 | 5 | 47 | 74 | 3 | 5 |
| Oudomxay | 60,000 (average) | 179 | 6 | 15 | 57 | 63 | 1 | 2 |
| Phongsaly | 40,665 (2010) | 112 | 4 | 6 | 32 | 38 | 0 | 1 |

*Source*: DPI in each province.

doubled over the last five years, while the number of guesthouses and resorts is nearly double in number in Bokeo and Luangnamtha. The number of travel agents has also increased in all provinces.

Despite being the priority sector for this region, there has been slow investment in hydropower in recent years. Currently, only two hydropower dams are operating in Bokeo (5 MW) and Luangnamtha (1.2 MW). Nine projects are under construction of which four are relatively large dams located in Bokeo and Luangnamtha (Table 13). Four small dams are planned in small rivers across Oudomxay with a total capacity of 0.89 MWh. Based on the northern region master development strategy, hydro-power is promoted as one of the priority sectors to fuel the growth of the northern region's economy and exports to neighbouring countries. By 2015, the construction of nine domestic consumption-based electricity production projects (eight hydropower and one lignite) will be completed with a total capacity of 474 MW. Four projects are located in the study area with a total capacity of 236 MW. Under this master plan, a 1,230 MW hydro-power dam on the Mekong River in the Pakbeng district of Oudomxay will be promoted.

Finally, an SEZ is another area of potential for this region. The Golden Boten SEZ (BT-SEZ) was established in 2010 with a total area of 1,640 ha. Promoted businesses include trade and services. At present, much service and trade infrastructure has been installed including hotels, shopping centres, restaurants and a transhipment area. However, current business activities, particularly in the area of tourism and services, are much below the capacity of the infrastructure. On the other hand, the Golden Triangle SEZ (GT-SEZ) in Bokeo is in an expansion stage. Much advanced business infrastructure has been established, including a good connecting road, good standard accommodation and services, immigration and customs facilities and a basic utility supply. Recent businesses attracted to the GT-SEZ are related to tourism and entertainment. In addition to trade and services, the GT-SEZ also welcomes light manufacturing, such as agro-processing, to take advantage of the province's heritage in agricultural production. Other SEZs are planned in Oudomxay and Phongsaly, though they are still at the initial screening stage by the government

**Table 13: Hydro-power Projects in the Upper-northern Region of Laos**

| | Borkeo | Louangnamtha | Oudomxay | Phongsaly |
|---|---|---|---|---|
| Completed projects (capacity) | 1 ( 5 MW) | 1 (1.2 MW) | None | 3 (1.42 MW) |
| Projects during construction (capacity) | 2 ( 208 MW) | 3 (213 MW) | 4 (0.89 MW) | 1 (60 MW) |
| Total number of projects (capacity) | 3 (213 MW) | 4 (214 MW) | 4 (0.89 MW) | 4 (61.42 MW) |

*Source*: DPI in each project.

**Table 14: SEZ Developments in the Upper-northern Region of Laos**

| | Borkeo | Louangnamtha | Oudomxay | Phongsaly |
|---|---|---|---|---|
| Number of total SEZ (land area) | 2 | 2 | 5 | 1 |
| Number of completed SEZ (land area) | 1 ( 3,000 ha) | 1 ( 1,640 ha) | None | None |
| Number of planned SEZ (land area) | 1 | 1 | 5 | 1 |
| Expected year of completion of the planned SEZ | Under feasibility study stage | Recently propose to the government | Recently propose to the government | Recently propose to the government |

*Source*: DPI in each project.

(Table 14). As in the southern triangle areas, development of SEZs in this region should focus on utilizing existing SEZs, such as the BT-SEZ and GT-SEZ. The decision to develop any new SEZs in this area should carefully consider real comparative advantages and the capacity to link with the potential of nearby provinces. Establishing an SEZ in Oudomxay focusing on agriculture processing and manufacturing could be an ideal decision in the short term. By doing so, more investments will be attracted to develop this industrial hub for the northern region. The strategic location of Oudomxay will allow the expansion of the economy and attract raw materials and input from nearby provinces, creating a synergy and spill-over as well industrial linkages. SEZs in other areas could be established in the medium to long term.

### 2.3. Possibilities for a Formal Triangle Development Area in Northern Laos

Several triangle development areas have been discussed and proposed for the northern region. Based on the current level of development and the potential of provinces located in the upper-northern region of Laos, there is a possibility that a Greater Triangle Development Area (GT-DTA) could be developed in the near term. The GT-DTA could cover Chiang Rai in Thailand, Bokeo and Luangnamtha in Laos, Tachileik in Myanmar, and Xishuangbanna in China. The objectives of the GT-DTA are to promote trade and investment in this area, better utilize the NSEC, increase the economy of scale by linking areas of similar development potential and addressing the development gap. Promoted sectors include agro-processing, tourism, services and trade. There exist some fundamental conditions for the triangle area to be developed. First, many of the priority sectors are already linked. For instance, there are common tourism routes in this region. Laotian agricultural products are already major cross-border trade items for border provinces in Thailand and China (for example, maize from Bokeo, sugarcane and other cash crops from Luangnamtha). Second, the road infrastructure, such as the R3 together with the 4th Mekong Bridge, creates favourable conditions for cross-border transport and logistics services. Third, the SEZs in Bokeo and Luangnamtha are equipped with advanced business infrastructure ready for investment from neighbouring provinces. Finally, China already has a significant role in northern Laos and Myanmar; hence, the political will exist in Laos, Myanmar and Thailand for deeper province-level cooperation. At the same time, China could lead in providing financial support for the triangle development scheme. The cooperation mechanism could be somewhat different from the CLV. After the initial establishment, which needs the active involvement of the government, the provincial authorities should provide facilitation and monitoring roles while leaving the major driving role to provincial chambers of industry and commerce and the private sector. The GT-DTA will focus more on the utilization of existing infrastructure and developing the already existing potential. Additionally, the private sector will have an important role to play.

In the medium to long term, the Economic Quadrangle Area (EQA) could be considered. The EQA could extend the GT-DTA to include Chiang Mai in Thailand, Oudomxay, Xayabury and Phongsaly in Laos, and possibly also Dien Bien and Lai Chau in Vietnam.[10] Promoted sectors in the EQA could include tourism, services and trade, and manufacturing. The tourism sector under the EQA will be more comprehensive than under the GT-DTA. Promoted tourism projects might include the cultural tourism route (Chiang Mai- Chiang Rai- Bokeo- Luangnamtha- Yunnan), the Mekong River tourism route (China-Myanmar-Thailand-northern Laos), the historical tourism route (linking important tourist sites in northern Laos and Vietnam, such as Vietnam war-related sites in Dien Bien Phu and other north-western provinces of Vietnam and similar attractions on the Laotian side), and Laos-China-Vietnam triangle tourism. Intra-country investment in tourism could also be promoted in the EQA. Under this scheme, Chiang Mai could combine its extensive experience in tourism development and capital to invest in promising tourism projects in member provinces in Laos, Myanmar and Vietnam. Cross-border trade and international

[10] The usual economic quadrangle area often covers only the border provinces of China, Myanmar, Laos and Thailand. However, in this paper it is argued that it could be more beneficial for this region if the framework also seeks to integrate the border provinces of Vietnam.

transit trade could extend to Vietnam. Finally, the manufacturing sector can promote agro-processing, rubber processing and construction materials production. Some pre-conditions for the EQA include the progress of the GT-DTA, improvement in road infrastructure in Phongsaly and the north-western Vietnamese provinces, maturity of rubber-industry trees in northern Laos and the expanding provincial economies increased demand for construction materials. Since the quadrangle involves many countries, geopolitical conditions among member countries will have an important role in securing the success of this scheme.

## CONCLUSION

The development triangle area is a new initiative, suitable for expediting the development of peripheral areas of the country. The Cambodia-Lao-Vietnam Development Triangle cooperation serves as a model for a formal triangle development framework in this region. In the recent years, the Lao Development Triangle Area has recorded some major achievements, including an improvement in road infrastructure, an increase in trade and FDI inflows and an expansion of tourism. However, LDTA has faced some limitations, such as delays in implementing the preferential policies: the statistics related to LDTA activities are not being recorded systematically, the coordination among participating provinces post the meeting remains low and unsystematic, much cooperation remains at a bilateral level and/or provincial level with limited resources and a low level of external resource mobilization.

Many triangle development areas relating to the northern region of Laos have been proposed and discussed. Despite having a challenging landscape, most provinces in the northern region have good intra-region access and connectivity and with the provinces of bordering countries. The geographical characteristics of the region are suitable for agriculture and livestock husbandry. Tourism has the potential to be developed and linked with the provinces of neighbouring countries. Except for Phongsaly, road infrastructure in other provinces has gradually improved, offering potential for trade and logistic services. Hydropower and mining could provide a stimulus to economic growth in this region. In addition, many important gateways, economic corridors and SEZs are located in this region, contributing to an increasing number of cross-border activities, including FDI and trade, and the movement of people. However, the developments in this region also face sizable challenges. Sectors promoted by each province are very similar (and even the same), lacking a focus for each region. A larger rubber plantation area poses challenges in terms of labour shortages during the harvest stage, management of waste latex and fluctuation in the rubber price. The mountainous landscape also throws up development challenges for poverty reduction.

In order to better utilize the potential of the northern region, the Greater Triangle Development Area (GT-DTA), it has been proposed that development focus on the near term. The GT-DTA could promote trade and investment, better utilize the NSEC and SEZs, increase the economy of scale by linking similar aspects of development potential and address the development gap. The promoted sectors in the GT-DTA are agro-processing, tourism, services and trade. The GT-DTA could cover the border provinces of Thailand, Laos, Myanmar and China. In the medium to long term, an Economic Quadrangle, a larger and more comprehensive development triangle area, could be considered, including more provinces of the GT-DTA and some north-western provinces of Vietnam. Promoted sectors in the EQA could include tourism, services and trade, and manufacturing. The EQA will be a more comprehensive and complex example of border cooperation, which will utilize the longer-term potential of this region. The development of EQA tends to be conditional upon the progress of the smaller examples of border cooperation, such as the GT-DTA, the improvement in road infrastructure in Phongsaly and the north-western Vietnamese provinces, the maturity of industrial trees in northern Laos, the increasing expansion of provincial economies and the geopolitical relations among the member countries.

In order to improve the implementation of CLV cooperation, this paper proposes the following recommendations:

- A monitoring mechanism on the implementation of CLV projects should be established.
- The priorities of the member provinces should be better reflected in the allocation of the government budget.
- Each member province should ensure the timeliness of CLV project implementation.

- The tourism sector should be better linked in order to take full benefit of the tourism potential and CLV arrangements.
- Continuation of support from Japan will be crucial to the success of the CLV initiative together with more active efforts in mobilizing external resources.

➢ Recommendations specific to LDTA:

- Coordination among LDTA provinces should be improved and more systematic.
- Lao government should continue current momentum in increasing investment in important infrastructure in the LDTA.
- Other sectorial policies should better reflect the development directions set in the Lao CLV Master Plan.
- The list of priority projects under LDTA should be better reviewed (the priority of priorities).
- Statistics related to Lao DTA specific activities should be better recorded.

➢ Recommendations for the development triangle in the northern region:

- Development plans in each province should be better linked with the Northern Region Master Plan
- Priority sectors in most provinces are very similar, lacking a focus and local specialities (a comparative advantage study is needed).

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