CHAPTER 4

Cities, SEZs and Connectivity in Major Provinces of Laos

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CHAPTER 4

CITIES, SEZS AND CONNECTIVITY IN MAJOR PROVINCES OF LAOS*

Vanthana Nolintha

INTRODUCTION

The Lao People's Democratic Republic has undergone some major transformations over the past decade. The structure of the economy in the Lao PDR (hereafter referred to as Laos) has gradually changed from agriculture-based to an emphasis on industry and services. At present, the service sector accounts for 37% of the gross domestic product (GDP) in Laos, while industry and agriculture make up 26% and 33%, respectively. This change in the economic structure reflects the rapid growth of the industrial and service sectors, which on average accelerated at 12.5% and 8.4% annually over the past five years. Another transformation is the urbanization of some major cities. The populations of Vientiane Capital, Savannakhet and Champasack (see Figure 1) have increase by 30%, 20% and 17%, respectively, over the past decade. Another indicator of urbanization is the percentage of urban population, which increased from 17% in 1995 to 27% in 2005 (the latest census). With the rapid urbanization, the number of vehicles, passengers and

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freight transport increased rapidly. For instance, new motorcycle registrations rose from 9,900 in 2000 to almost 90,000 in 2009. In addition, the number of passenger trips increased from 18.8 million in 2000 to 39.6 million people in 2008. Freight transport also jumped in the same period, from 2.3 to 4.5 million tons. Finally, Laos has invested substantially to transform from a land-locked disadvantage into an opportunistic land-linked nation. This has led to a major improvement in transportation linkage both within the country and with neighboring countries, the construction of a major international bridge and the establishment of special economic zones (SEZs).

Figure 1: Map of Lao PDR Showing Vientiane Capital, Savannakhet and Champasack

Source: Author.

The above-mentioned transformations present both challenges and opportunities for Laos in the planning of big cities to promote intra-provincial and intra-regional connectivity. The urbanization in developing economies is slightly different from other parts of the world. While it is generally the case that rural-urban migration and urbanization take place in parallel with industrialization in advanced countries of Europe, the urbanization of developing countries may or may not progress alongside their industrialization. For instance, Iran, Saudi Arabia and Kuwait are among the countries that experienced negative relations between urbanization and industrialization, while Thailand, Malaysia and Indonesia saw positive relations (Kojima, 1996). Furthermore, rapid modernization without consistent urban planning could lead to various urban problems. For example, many big cities in China faced inadequacy in public facilities, housing and food during their periods of rapid urbanization (Kosizhawa, 1978).

This paper will analyze the development of cities, SEZs, ports and borders in Lao's three major economic provinces: Vientiane, Savannakhet and Champasack. This will increase the understanding of recent developments in these big cities and point out any obstacles or opportunities for regional trade and investment.

1. RECENT DEVELOPMENTS IN LAOS

The Lao economy managed to grow 7.9% during the 2006-2010 period, despite external shocks from the recent global economic and financial crisis. With such strong growth, the per capita GDP reached USD 986 at the end of this period. With an annual growth rate of 12.5%, the industrial sector is the main engine driving economic expansion, followed by the service sector at 8.4%. Agriculture growth remains at 4.1% per year. The structure of the economy has gradually changed towards the direction of modernization and industrialization, with the service sector accounting for 37% and the industrial sector increasing to 26% of the GDP.

Laos was able to maintain economic stability over this period. The most outstanding feature is the ability to reduce inflation from the average of 10.3% during 2001-2005 to a low level of 4.9% over the past five years. Furthermore, the KIP, the national currency, has appreciated about 5% against the U.S. dollar and 2% against the Thai baht. Such appreciation is within the targeted band. The KIP's appreciation signals a strengthening of the Lao economy and the success of the Bank of Lao PDR (central bank) in building the public's confidence in using the Lao currency and reducing the degree of dollarization. Finally, the money supply has grown at a more manageable level, reducing pressure on the price level.

Investment is growing significantly. Public investment reached almost 25 thousand billion KIP, with Official Development Assistance funding this largely (84%). Government investment in the public investment program accounts for 16%. In addition, domestic investment contributes about USD 1.7 billion to total investment. Finally, approved foreign direct investment (FDI) hit a record high of USD 8 billion over the past five years. The most attractive sectors for FDI include resources such as hydropower and mining and non-resources such as agriculture and services.

Many indicators of economic balance show signs of improvement. The budget deficit remains at 4.7% of the GDP, in which total revenue amounts to 16.5% and total expenditure is recorded at 21.2% of the GDP. In addition, the trade deficit fell to 5.3% of the GDP, reflecting the strong growth of exports. By the end of the period, export value reached 20.72% while that of imports accounted for 26.1%.

In parallel with the economic progress, the social sector has gradually improved. Most of the basic infrastructures expanded both in terms of number, size and quality. These provide a supportive environment for production, transportation, commerce and investment as well as the people's livelihood. In addition, the poverty headcount declined from 33.5% to 26.5% over this period. Education has significantly improved, showing the number of elementary schools increasing more than eightfold in the period and the enrolment rate rising by 7 percentage points. Finally, considerable progress is observed in the health sector with life expectancy improving to 63 years. Such social progress to a large extent is a result of the government's commitment to fulfill the Millennium Development Goals (MDGs) by 2015. To ensure achievement of the MDGs, the government has made social development one of the three ultimate objectives of the 7th National Socio-economic Development Plan 2011-2015. The government, together with the development partners, has finished the needs assessment and costing exercise for fulfillment of the MDGs and at present is in engaged in roundtable meeting discussions to source the financial supports for the program.

2. EXPANSION OF MAJOR CITIES

With Laos' rural setting, the development of big cities is concentrated in a few provinces situated along the banks of the Mekong River. Over the past five years, Vientiane Capital in the center, Luangprabang in the north, and Savannakhet and Champasack in the south have showed the fastest development of city areas. These provinces are the centers of development either formally through government policy or informally through the actual spread of development. The concept of core cities development in Laos is in fact well-acknowledged in a number of studies. The Master Development Strategy of the Northern Region declares Luangprabang as the center of economic development of the north, and Oudomsay, Xiengkuang and Vientiane as centers for industrial development (NERI, 2008). Savannakhet and Khammuane provinces are considered centers of Laos' central region, and it was proposed that these provinces should be developed by way of integration with the northeastern border region of Thailand (JICA, 2001). Finally, in the national development strategy, both in the short-term and medium-term frameworks, there is a specific section that addresses the issue of spatial or regional development. For the scope of this paper, Vientiane Capital, Savannakhet and Champasack are selected for more in-depth discussion to reflect the current wave of city development that concentrates on the central and southern regions of Laos.

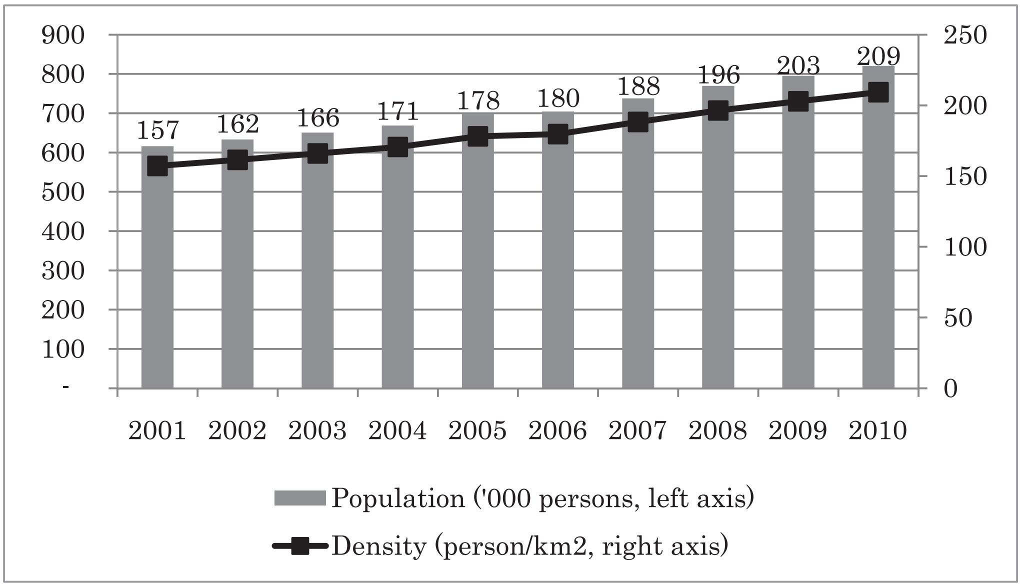
2.1. Vientiane Capital

Vientiane Capital (Vientiane hereafter) has been Laos' capital city since independence in 1975 and was previously capital of the Lanexang Kingdom since 1560. Vientiane, in Pali, means "City of Sandalwood" or the "City of Moon." The history of Vientiane dates to as early as the year 705 and 706, when Chinese merchants discovered a city named "Van Tan" located in the central basin of the Mekong River. Vientiane was ruled by foreign administration for more than a decade between 1828 and 1945, which had an impact on the development of the city economically and culturally. Despite a long history of ups and downs, Vientiane is now the center of Laos on all three pillars: politics, economics and culture. Because of this special characteristic, the city has witnessed the most rapid development, fueled by government investment as well as domestic and foreign investment. To date, Vientiane is also the most industrialized city in Laos, with the most advanced infrastructure and supporting services.

2.1.1. Population and Migration

Vientiane is the second most populous city in Laos with more than 800,000 people (Figure 2) spread over a land area of just 3,920 km2. The size of Vientiane is five times smaller than that of Savannakhet and four times smaller than Champasack's. Because of such limited land area, population density increased rapidly from 157 to 209 people per km2 over the past decade, with the average annual population growth rate at 3.9%. Under the current trend, Vientiane's population will reach 1 million in five years and the density will be over 250 people per km2. The rapid increase in population is largely a result of internal migration. First, 41% of the current population of Vientiane was born in other districts (Messerli *et al.*, 2008). Second, 40% of the people who migrated across provinces went to Vientiane Capital. Most of the immigrants traveled from the central part of Vientiane province, Xiengkuang and Huaphan to search for better employment, education and healthcare in the capital city. Finally, five of nine districts in Vientiane recorded a net immigration during the 12 months before the last population census in 2005. This shows an extremely high incidence of immigration because across the country there were only 10 districts that saw net immigration during that period. Most districts in Laos observe net emigration. This rapid growth in the population of Vientiane presents a challenge for the capital in terms of the provision of adequate and quality public services.

Figure 2: The Trend of Population in Vientiane Capital



Source: Vientiane Capital's Department of Planning and Investment, 2010.

Vientiane Capital comprises nine districts, of which Chantabouri, Sikhottabong, Xaisettha and Sisattanak could be considered as the metropolitan or inner area of the capital (Figure 3). The population in these four districts covers almost half of Vientiane's population. Most of the commercial activities, government buildings and international organizations are located in these inner districts. Other urbanized districts include Naxaythong, Xaithany and Hatxayfong, where more than 70% of the population resides in the urban area. Because of the scarcity of land area and consequent rise in land prices in the inner part of the capital, young and middle income families started to build new houses and relocate to the outer area of Vientiane Capital. Xaithany (labeled 106 on Figure 3), a reviving and growing new community in the outskirts of Vientiane, is now the most populous district with almost 180,000 people in 26,000 households. This relocation trend on the one hand will reduce the overpopulation and land scarcity in the inner area but, on the other hand, creates a challenge in communication between these two growing centers.

Figure 3: Map of Vientiane Capital Showing the Locations of the Districts

Source: Messerli *et al*., 2008.

2.1.2. Economic Progress

The economy of Vientiane Capital has enjoyed a golden era during the past five years. The economy received three major stimuli, including the 10^{th} ASEAN Summit in 2004, the Southeast Asian Games (SEA Games) in 2009 and the celebrations of Vientiane Capital's 450th anniversary in 2010. These major events help to boost the economy of Vientiane in terms of job creation in the construction and supporting services. The annual income of the capital dwellers increased almost 70% during the past five years to reach USD 2,213 (Table 1). This is more than double the average income at the national level. Such a massive increase in income reflects the rapid growth of the Vientiane economy at 12.2% per year as fueled by services (average of 24% p.a.) and the industrial sector (13% p.a.). The GDP of the province doubled during this period and the government plans to double the figure again over the next five years. By Fiscal Year 2009-10, industry had become the biggest sector of the economy in covering 45% of the GDP, followed by services (39.5%) and agriculture (15%).

Investments by the private sector play an important role in pushing the economy of Vientiane Capital. Accumulated investment by the private sector (both domestic and foreign) over the past five years reached USD 3.3 billion, making up 93.4% of total investment. The situation is very much different from other parts of the country and the national average. For instance, across the whole country private investment represents around 50% of total investment. The active role of the private sector is further confirmed by the number of enterprises or economic entities operating in Vientiane. Based on the economic census in 2006, which was the first large scale enterprise survey in Laos, there are almost 29,000 economic units active in Vientiane, representing 22.7% of all economic units in the country (DOS, 2007). The majority of the economic units engage in retail trade, wholesale trade and repairing (66%) and manufacturing (13.8%). In addition, the growing demand of business activities has led to a rapid increase in the salaries paid to workers in Vientiane. For instance, the average monthly salary in Vientiane increased from 620,000 LAK in 2004 to 910,000 LAK in 2006, rising 20% annually in nominal terms (DOS, 2009). A worker in Vientiane earns about 15% more than the national average, 36% more than in Champasack and 40% more than in Savannakhet. This helps to explain the rapid immigration of people from other parts of the country in search of better employment opportunities in the capital.

Table 1: Economic Indicators of Vientiane Capital

	2005-06	2006-07	2007-08	2008-09	2009-10	2014-15
GDP (current price, million USD)	930	1,083	1,447	1,527	1,816	*4,198*
GDP Per capita (USD)	1,320	1,467	1,880	1,920	2,213	*4,413*
GDP Growth (% p.a.)	11.4	11.8	12.7	11.9	13.0	*12.6*
Structure of the economy (%)						
Agriculture	20.6	18.5	17.5	16.6	15.0	*17.4*
Industry	48.2	45.9	44.8	45.0	45.5	*51.1*
Service	31.2	35.7	37.7	38.4	39.5	*31.5*
Sectorial growth (% p.a.)						
Agriculture	10.86	4.02	2.87	14.98	15.77	*10.3*
Industry	15.19	15.84	20.23	4.71	10.55	*14*
Service	16.05	16.32	14.92	52.20	21.39	*13*

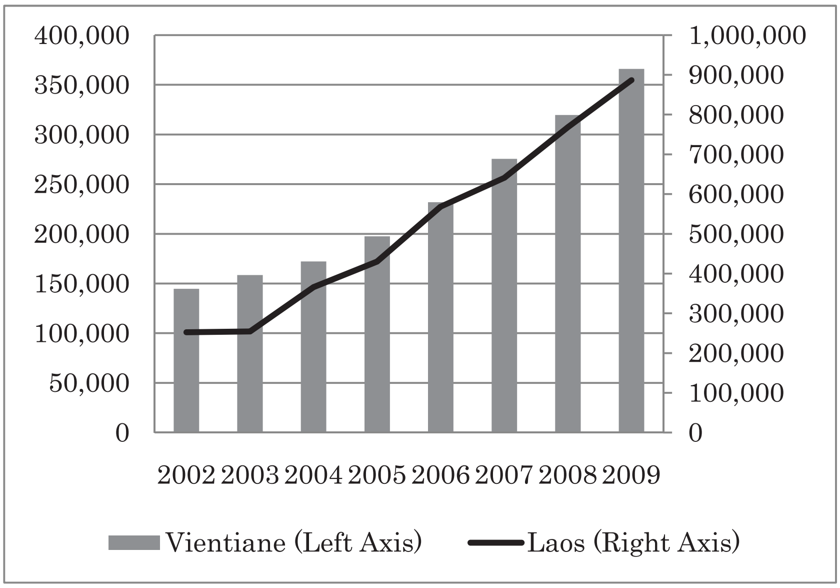
Note: Actual data for 2006 to 2009, estimated data for 2009-10 and targets for 2015.
Source: Vientiane Capital's Department of Planning and Investment, 2010.

2.1.3. Automobiles and Road Accidents

The rapid growth of the economy has led to an increase in the number of automobiles but fewer incidences of road accidents. The number of automobiles registered in Vientiane grew from 200,000 units in 2005 to 350,000 units in 2009, showing an annual increase of 16.3% (Figure 4). The number could reach 930,000 to 940,000 in 2015[1]. A comparison of the number of automobiles in Vientiane with other major cities reveals some interesting findings. On the one hand, in absolute terms the number of automobiles in Vientiane is almost three times higher than in Savannakhet and five times more than in Champasack. On the other hand, the pace of increase in the number of vehicles is slowest in Vientiane compared to the other two provinces. Finally, in relation to the size of each province, the current pace of increase in the number of vehicles in Vientiane puts a lot more pressure on road transportation around the capital than at other major cities. Surprisingly, given the rapid growth in the number of vehicles, the incidence of road accidents has actually been on the decline in Vientiane. For instance, the number of road accidents decreased from 2,295 in 2007 to 1,736 cases in 2009 (Figure 5). This trend is against the general pattern found in other major cities. Among the underlining reasons are the awareness campaign by the authorities to promote road safety during some of the country's biggest events hosted in the capital, and the increased contribution of the private sector in support of the road safety campaign.

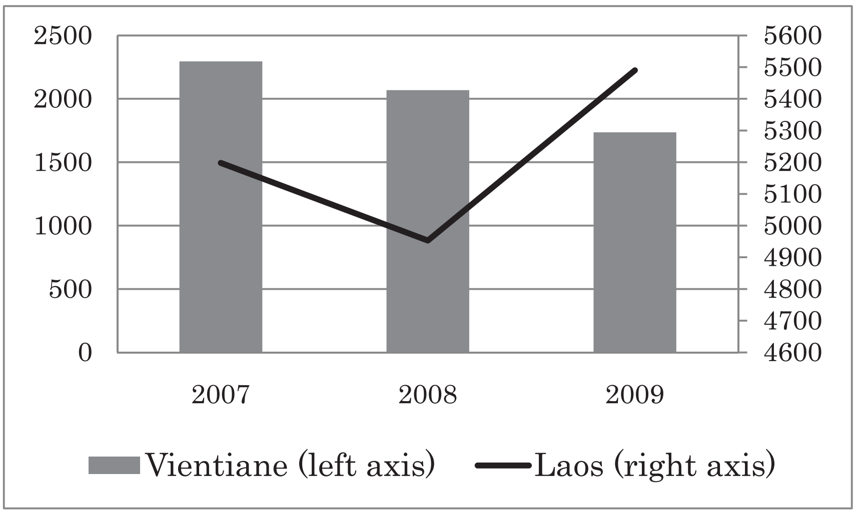
[1] The forecast is based on the time trend or the elasticity from an increase in the GDP to an increase in the number of vehicle registrations suggesting a similar number.

Figure 4: Vehicle Registration in Vientiane



Source: Department of Transport, 2010.

Figure 5: The number of Road Accidence in Vientiane and Laos.



Source: Department of Traffice Police, Ministry of Public Secutiry, 2010.

2.2. Savannakhet

Savannakhet is located in the central region of Laos, sharing a border with Khammuane province to the north, Saravan province to the south, Vietnam to the east and Thailand to the west. This geographical advantage presents the opportunity for Savannakhet to access large foreign markets and attract foreign investment into the province. The strategic location of Savannakhet has been well-recognized for a long time. The name "Savannakhet" comes from the words "Savanh Nakhone," which means the city of paradise. This is in fact the original name of Savannakhet. In addition, because of its special location, Savannakhet was chosen to be a base for the U.S. army during the Vietnam War, and the name "SENO" was given to one part of Savannakhet. "SENO" is an acronym for four French words: *Sud*, *Est*, *Nord* and *Ouest*, which means South, East, North and West in English. This suggests that Savannakhet is considered both a crossroad between Northern and Southern Laos and a linkage between the East and the West. This historical mark signals the geographical importance of the province.

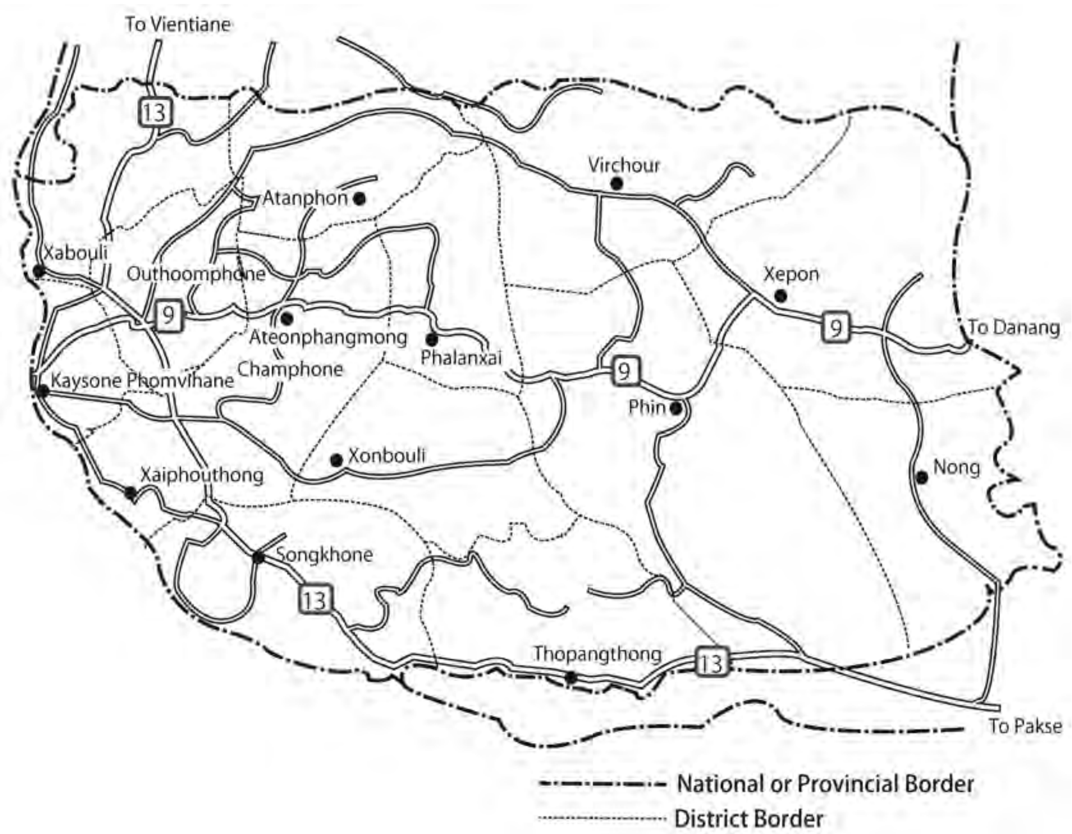
2.2.1. Population and Migration

Savannakhet is among the country's largest provinces in terms of population and land area. By 2010, its population is estimated to be 902,064 people, the highest in Laos, with a density of 41 people per km^2. The population has grown at a moderate rate of 1.78% a year over the past five years. The density is the third largest in Laos after Vientiane and Champasack. The total area of Savannakhet is 21,774 km^2, which is more than five times larger than Vientiane Capital. Savannakhet comprises 15 districts, of which Kaysone Phomvihane is the provincial capital. The name of the city was changed from Khanthabouli to honor Laos' great President Kaysone Phomvihane in 2005. The city is the birthplace of the president. With a population of 121,861, this is the second-largest city in Laos after Vientiane Capital.

Kaysone Phomvihane city (see Figure 6), often known as Savannakhet city, has a population of 121,861 people as of 2010, up from 112,915 in 2005 (Table 2). With the current rate of growth, the population is expected to reach 160,000 by 2025. Some other big districts include Champhone, Outhoomphone and Songkhone, with a population of over 80,000 people in each district. Kaysone Phomvihane is the most urbanized city in Savannakhet, with 72.1% of its population being urban dwellers (DOS, 2006). Except for Xaiphouthong, the percentage of urban population in the other districts is less than 20%. This implies that currently there is a sizable gap in the urbanization across the province.

According to the locations of Kaysone Phomvihane and Savannakhet province, one could expect to observe substantial immigration from other areas and less so for emigration. However, from the latest population census in 2005, 80.1% of the population in Kaysone Phomvihane city was born in this district. Moreover, 94% of the population was interviewed at the same district for the last two censuses (DOS, 2006). This shows that the movement of the population is rather slight. In addition, Kaysone Phomvihane city as well as Savannakhet province experienced net emigration during the 12 months prior to the 2005 census (Messerli *et al.*, 2008). The net population outflow in Kaysone Phomvihane city was about -0.5% to -1% of the district population. Finally, there has been considerable emigration from Kaysone Phomvihane city to Vientiane Capital. Based on the 2005 census, 5-8% of Kaysone Phomvihane city migrated to Vientiane Capital (Messerli *et al.*, 2008). This rate is the highest in the central and southern areas of the country, but rather moderate compared to the North.

Figure 6: Map of Savannakhet Province



Source: drawn by author and editor in accordance with www.business-in-asia.com/laos_tour.html.

Table 2: The population in Kaysone Phomvihane and Savannakhet during 2005-2010

	2005	2006	2007	2008	2009	2010
Kaysone Phomvihane	112,915	113,915	115,852	117,821	119,824	121,861
Savannakhet	825,902	843,245	857,580	872,195	886,986	902,064

Source: Savannakhet Province's Department of Planning and Investment, 2010.

2.2.2. Economic Development

Savannakhet is one of the most important economic powerhouses for Laos. Its economy managed to grow at an average of 10.5% per year during 2006-10. This is higher than the national level. Moreover, the economy is targeted to grow at an even higher rate of 11-12% annually in the next five years (Table 3). Due to the availability of a large flat area, agriculture remains the largest sector of the economy. As of 2010, agriculture accounted for about half of Savannakhet's GDP. The industrial sector has expanded by 5 percentage points to 23.43% of the GDP over the past five years. Finally, services remain at about a quarter of the GDP. This shift in the composition of the economy reflects the rapid growth of the industrial sector (15% per year on average). The structure of the economy is expected to change in accordance with the national modernization and industrialization strategy. By 2015, the industry sector is targeted to cover about 30% of the GDP, leaving about 39% to agriculture and 29% to the service sector. Because of the economic progress, the average income in Savannakhet has increased substantially from USD 525 in 2005 to USD 897 in 2010. This is expected to double by 2015. The rapid economic growth has put more pressure on planning of the city so that development can accommodate and facilitate the growing economy.

Table 3: GDP of Savannakhet Province

	2005-06	2006-07	2007-08	2008-09	2009-10	*2011-2015*
GDP (current price, billion Kip)	4,277	4,786	5,360	6,069	6,918	
GDP (current price, million USD)	442.8	503.5	569.6	710.2	809.1	
GDP per capita (USD)	525	587	653	801	897	*1,705 (in 2015)*
GDP growth (% p.a.)	10	10.35	10.5	10.75	11	*11-12*
Structure of the economy						
Agriculture	56.98	55.54	53.97	52.38	50.73	*39.34*
Industry	19.49	20.35	21.34	22.36	23.43	*31.15*
Service	25.53	24.12	24.7	25.27	25.84	*29.51*
Sectorial growth rate of GDP						
Agriculture	7.2	7.22	7.23	7.25	7.27	
Industry	13.01	14.81	15.72	15.77	16.08	
Service	12	12.75	13.00	13.05	13.25	

Note: Actual data for 2005-2010 and targets for 2011-2015.

Source: Savannakhet Province's Department of Planning and Investment, 2010.

Box 1: Mitr Lao Sugar Investment in Savannakhet

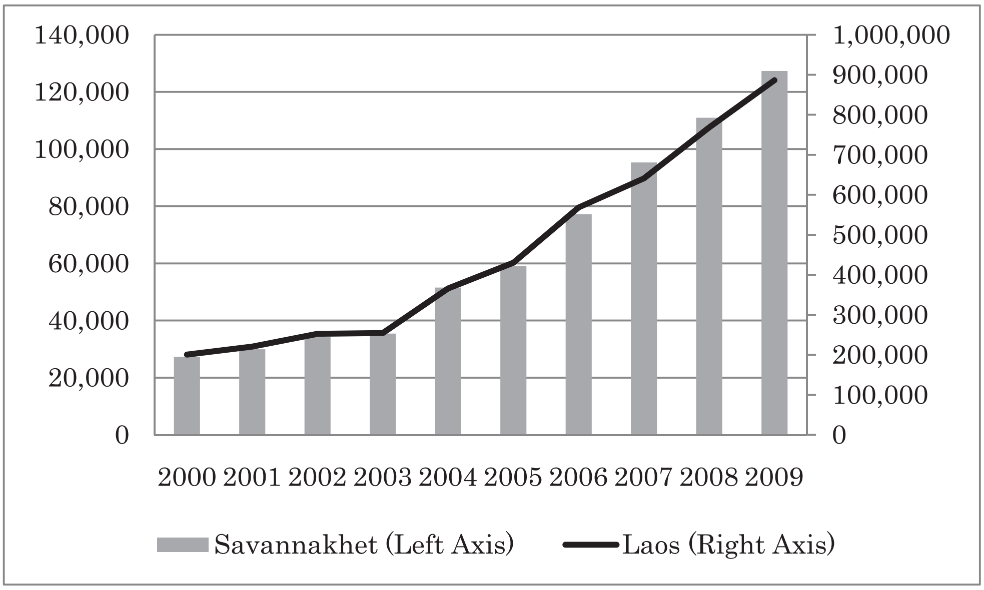
The company has received a 40-year contract on 10,000 hectares of land for a sugar plantation. Built in 2006, the sugar mill has a capacity of 60,000 tons of sugar per year and uses the most advanced production technology. Production began in late 2008 and 95% of output is exported to the EU. At present, the company employs 300 workers in the factory and over 3,000 labors at the plantation. This investment is expected to contribute to Savannakhet's economy, job creation and poverty reduction. The company uses the Thai route and Leam Chabang port for exportation because, compared to Da Nang, there are more frequent ships and the fees are cheaper.

Source: Author's interview

Savannakhet province has been very successful in attracting FDI. Excluding investment in the SEZ, there have been 65 new approved FDI projects with capital of over USD 690 million during the past five years. This volume of investment is triple the level of the previous five years. As expected, the agriculture sector attracted most of the investment (79% of total FDI) in the period. Some outstanding areas that attract FDI include sugarcane plantations, sugar production, and eucalyptus, rubber and other industrial trees plantations. The FDI inflow into the industrial sector covers about 7% of total investment. This might be small in terms of value but it means a lot for the industrialization of Savannakhet. It sends a signal about the industrial capacity of the province. Some interesting industrial products include electrical wires, motorcycle assembly and electronic parts assembly. Finally, the FDI in the service sector accounts for 8% of total investment. Most of the FDI in this sector is related to the province's potential in tourism and logistic services. Casinos, hotels, transportation/logistic service providers, and banking are among those attracting considerable investment.

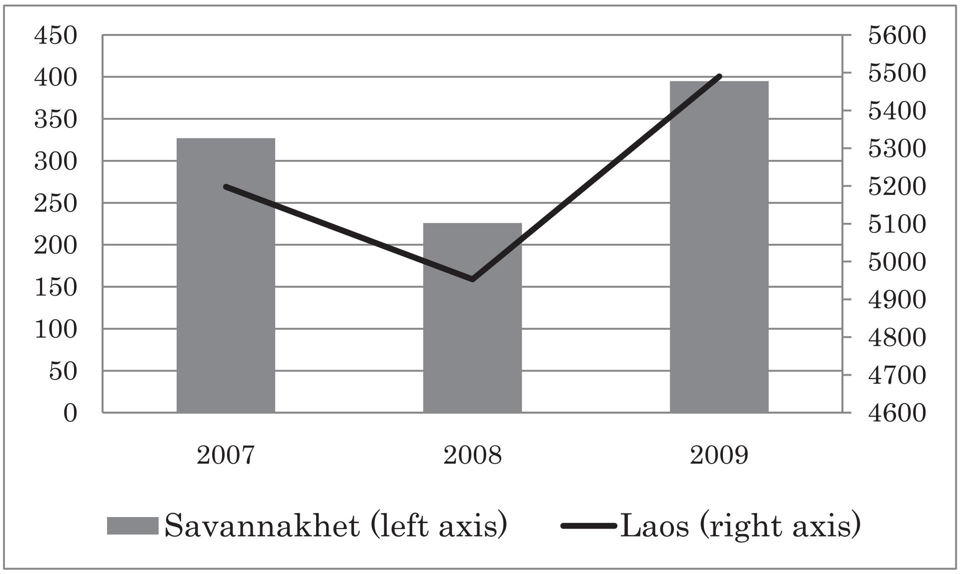
With the rapid growth of the economy, the number of vehicles and car accidents have increase substantially. Savannakhet has the second-highest number of vehicle registrations, up from 27,000 to 127,000 over the past 10 years. On average, the number of vehicles increased 20% per year during 2006-2010 (Figure 7). A simple elasticity calculation reveals that for every 1% increase in the provincial GDP, the number of vehicles grew by 1.9%. Based on this elasticity, it is estimated that the number of vehicles in Savannakhet will almost triple the current level by 2015. Moreover, Savannakhet is seeing the fastest increase in number of cars, showing a jump from 4,800 in 2005 to almost 14,000 cars in 2009. This represents average annual growth of 47%. Finally, Savannakhet is among the provinces with high incidents of road accidents. The number of road accidents rose slightly from 327 in 2007 to 395 cases in 2009 (Figure 8). But this figure is not that substantial considering the rapid increase in vehicles and the size of the population in Savannakhet.

Figure 7: Vehicle Registration Statistics in Savannakhet Province



Source: Department of Transport, 2010.

Figure 8: Road Accident Statistics in Savannakhet Province



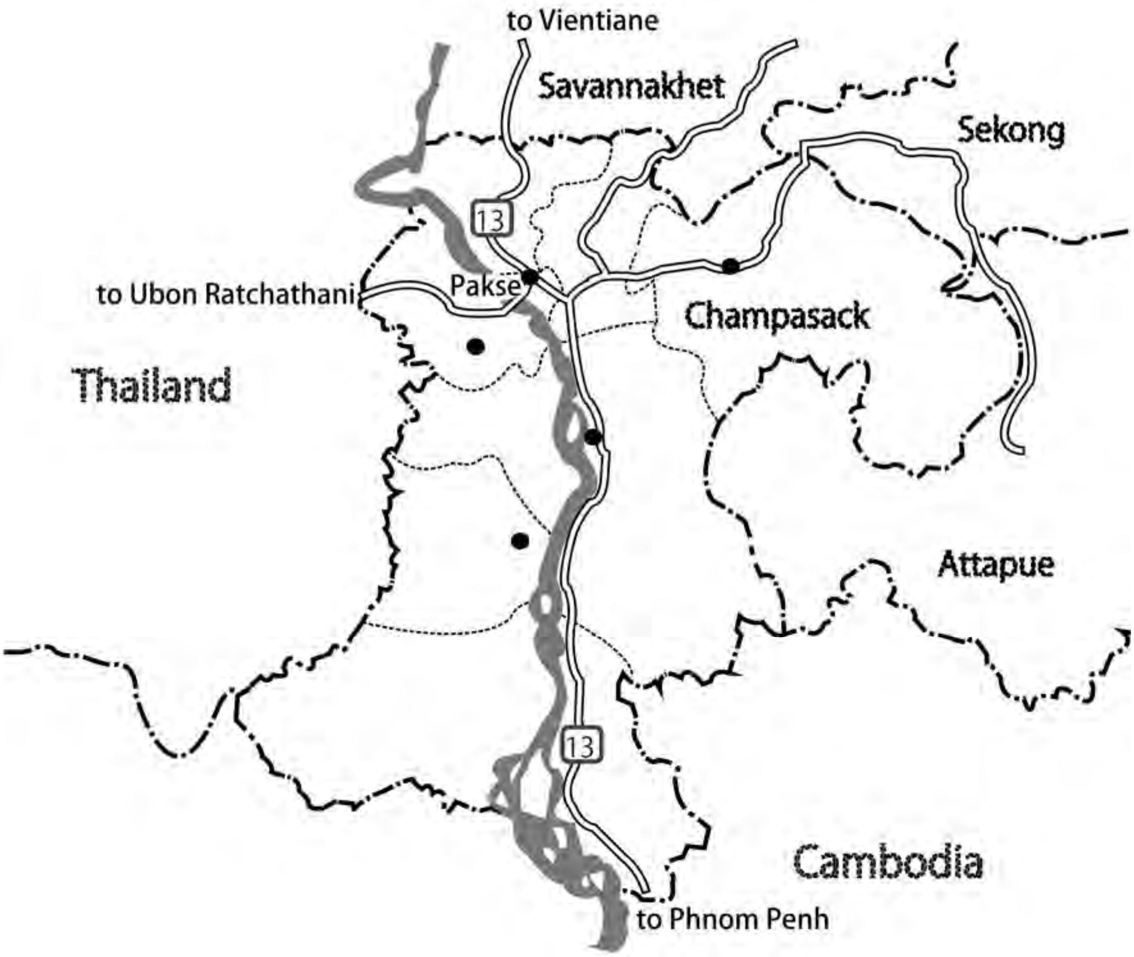
Source: Department of Traffice Police, Ministry of Public Secutiry, 2010.

2.3. Champasack

Champasack province is a growing center of Southern Laos. The province is bordered by Savannakhet to the north, Cambodia to the south, Sekong and Attapue to the east, and Thailand to the west (Figure 9). As it is one of the three ancient capitals of Laos, Champasack has always been seen as a regional core endowed with a lot of potential. Champasack possesses a long history of connectivity and interaction with other provinces domestically and with neighboring countries. Some footprints of the past glory include French architecture, and the ancient temple that is now a UNESCO World Heritage Site. The province is also well-known as an agricultural production heaven, thanks to the rich soil and appropriate height of the Bolaven Plateau. The province 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[2].

Figure 9: Map of Champasack



Source: Drawn by author and editor in accordance with Messerli *e. al* (2008).

2 This is in accordance with the definition of the Department of Statistics in 2008.

2.3.1. Population and Migration

Champasack is the most populous province in the South and ranks third nationwide with over 640,000 people (2009). Although Champasack has a large land area of 15,000 km^2, the population density (42 people per km^2) is the second highest in the country. In terms of population growth, Champasack seems to expand not as rapidly as Vientiane and Savannakhet. Its population grew at the rate of only 1.37% per year during 2000-2008. However, the population of Pakse, its capital, is expected to grow rapidly from 73,000 in 2005 to 101,000 in 2015 and 147,000 in 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 Vientiane Capital (Messerli *et al*., 2008). This phenomenon, to a certain extent, is similar to Vientiane Capital. 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 growing Pakse city.

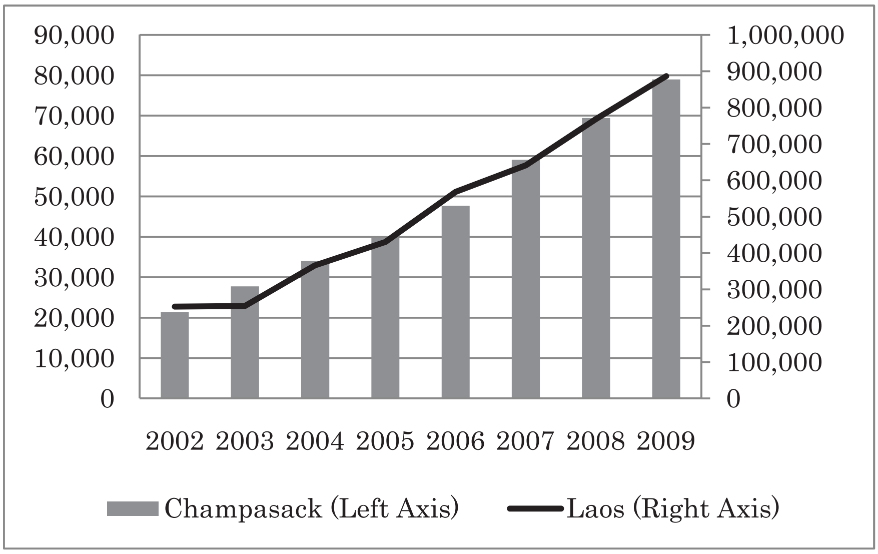
2.3.2. Economic Development

Champasack province has high potential in primary industry and tourism. The Bolaven Plateau, located 40 kilometers from Pakse, is endowed with high-quality soil 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 20th century. The French introduced the planting of various agricultural products such as coffee, rubber and bananas. Coffee, therefore, has become one of the major outputs of the province. For instance, the value of coffee bean exports in 2009 was USD 14.7 million. This was actually down from previous years because recently some coffee manufacturers in Champasack have managed to increase their exports of processed coffee, giving more value to provincial outputs.

FDI inflow into Champasack has been on an increasing trend, especially for the past few years. The volume of FDI approvals grew from an average of less than USD 10 million per year in the early 2000s to more than USD 50 million by the end of that decade. Vietnam (45%) and Thailand (37%) are the main investors. Other major investors are Singapore (9%), South Korea (3%) and China (2%). In addition, the provincial authority is proposing an investment list of 52 projects in agriculture and forestry, manufacturing, tourism, infrastructure, energy and mining. To promote investment, the province plans to establish an SEZ in the Khong district.

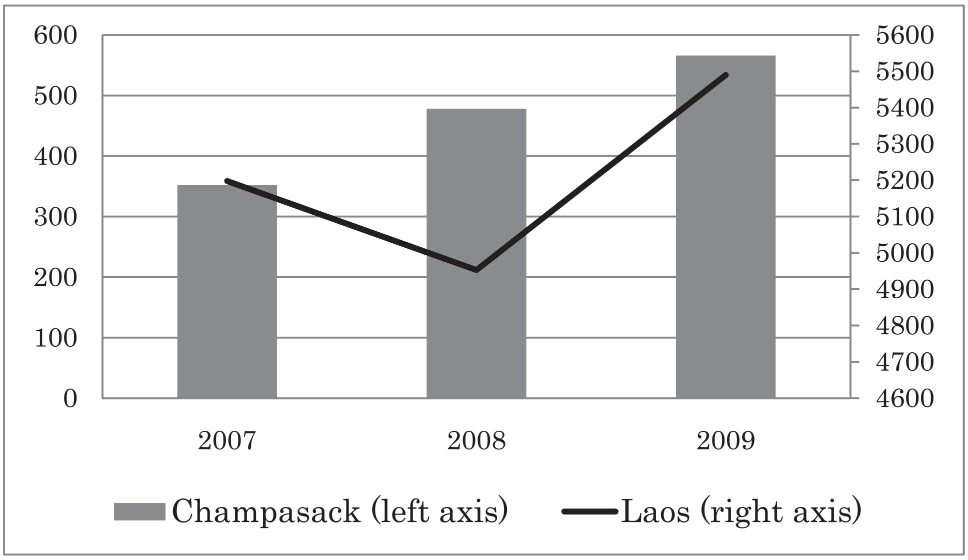
The growing population and expanding economy have led to a rapid increase in the number of vehicles (Figure 10). On average, car registrations have increased 18.4% annually during the past five years. This is similar to expansion in Savannakhet. If the trend continues, the number of vehicles will increase from the current level of 79,000 to more than 200,000 by 2015. Unlike in Vientiane and Savannakhet, it is more obvious that the increase in the number of vehicles is parallel to the increase in the number of accidents. For instance, road accidents jumped from 352 in 2007 to 560 cases in 2009 (Figure 11).

Figure 10: Vehicle Registration Statistics in Champasack Province



Source: Department of Transport, 2010.

Figure 11: Road Accident Statistics in Champasack Province



Source: Department of Traffice Police, Ministry of Public Secutiry, 2010.

3. SEZS DEVELOPMENT

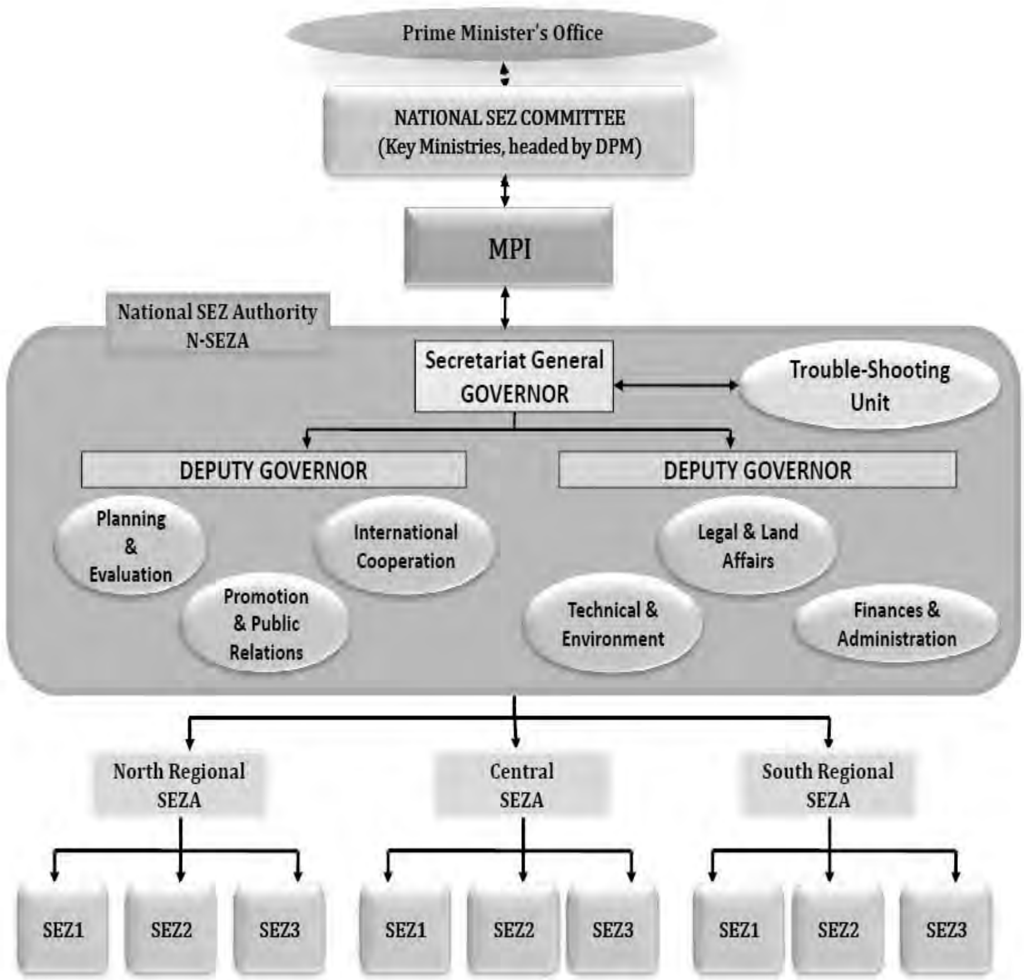
Many economies in Asia achieved their current levels of economic progress through the formation of industrial parks and/or SEZs. The boom in SEZs dates to the 1960s and 1970s when many Asian economies such as Taiwan, South Korea and mainland China set up SEZs as a means to attract FDI and stimulate development. At present, there are more than 400 SEZs around the world, and the number seems to be growing as many developing countries are following the success of others. The Shenzhen SEZ in China is perhaps one of the most successful SEZs in the region, if not the world, inspiring the development of SEZs globally (Wei, 2000). Some unsuccessful cases of SEZs are unavoidable, including ones in China such as in Guangdong, and in Bombay and Khanla of India. The development of SEZs in Laos began in the early 2000s when the prime minister signed the decree on formation of the Savan-Seno Special Economic Zone in Savannakhet province. Since then, there have been many ups and downs in the country's SEZ development. This section of the paper will first explain the latest developments in the regulatory framework governing SEZs. The rest of the section will discuss the development of SEZs in Laos' major cities, with special attention given to the active SEZs and some potential developments in the pipeline.

A separate government authority has been set up to promote and administer the development of the SEZs. In recognition of the importance of such zones, the government has designated the National Committee for Special Economic Zones (NCSEZ), chaired by the standing deputy prime minister. Members of the NCSEZ include ministers of key related ministries such as Planning and Investment, Industry and Commerce, Public Works and Transport, Finance, Justice and the National Land

Management Authority. In addition, the SEZ Secretariat Committee was just established in 2010 as one department of the Ministry of Planning and Investment to support the function of the NCSEZ (Figure 12). This authority has the key mandate to promote, facilitate and administer the development of the special and specific economic zones. Following the establishment of this new authority, there have been many proposals from various provinces to establish SEZs. To date, there are several active SEZs operating in Laos, namely the Savan-Seno SEZ in Savannakhet, Golden Boten SEZ in Luangnamtha, and Golden Triangle SEZ in Bokeo (identified with a blue circle in Figure 13). The Vientiane Industry and Trade Park (VITA) project has just been approved to be constructed in Vientiane Capital. In addition, five other SEZs in Khammuane, Savannakhet, Champasack, Sayabury and Xiengkuang are currently under review by this new authority. Another SEZ in Huaphan province and a tourism-based economic area in Sammnuea district of Houaphan are newly proposed projects. The Densavanh Border Trade Area in Savannakhet has been submitted for review by the authority for upgrading into another compressive SEZ near the Vietnamese border of Savannakhet. Finally, the government has also identified 12 other potential areas for SEZ development over the next five years (Figure 14).

This rapid expansion of SEZs raises the question as to whether SEZ development is the right policy choice for Laos. If it is, then the next question would involve how Laos should develop the SEZs. Laos could either develop many SEZs across the country like the current trend or concentrate support on the development of a few SEZs that have the most potential before expanding to other regions. This trade-off still has not received a convincing answer in the literature. The reasons for supporting simultaneous SEZ development include (1) complementarities exist among various regions and sectors, (2) lower possibility of inefficient resource allocation due to concentration in just a few areas, and (3) reduces the risk of rising disparity across provinces or regions (Wei, 2000). However, the opposite arguments include the fact that the limited resources of developing countries are better utilized by concentrating in just a few potential areas. Furthermore, by focusing on a few areas, the country can learn from the strengths and weaknesses of pioneers and later can apply the knowledge to achieve its own success. This paper argues that if Laos chooses the first track, then the potential benefits from SEZs might not be maximized. With the condition that Laos is a relatively small country, when many SEZs are built across it the size of SEZ coverage in relation to non-SEZ size will increase. Therefore, the difference between investing inside and outside of SEZs will increasingly be diminished and finally eliminated. SEZs will then be indifferent to other parts of the country and Laos will no longer benefit from this model of development.

Figure 12: Organizational Structure of the National Secretariat Committee of SEZ

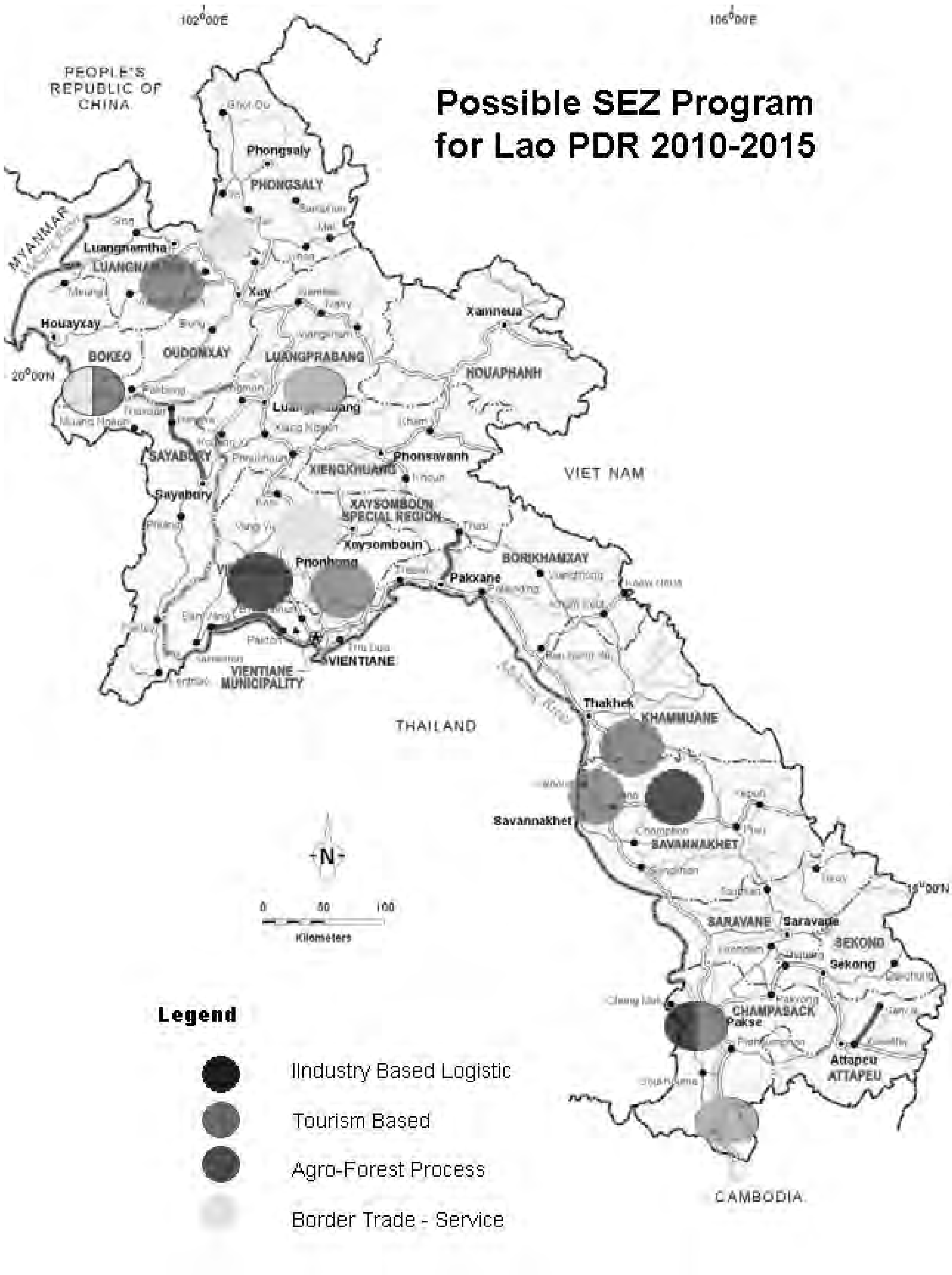


Source: National Secretariat Committee of SEZ, 2010.

Figure 13: Existing SEZs in Lao PDR

Source: Author's observation.

Figure 14: Possible Sites for Further SEZs Development in Lao PDR



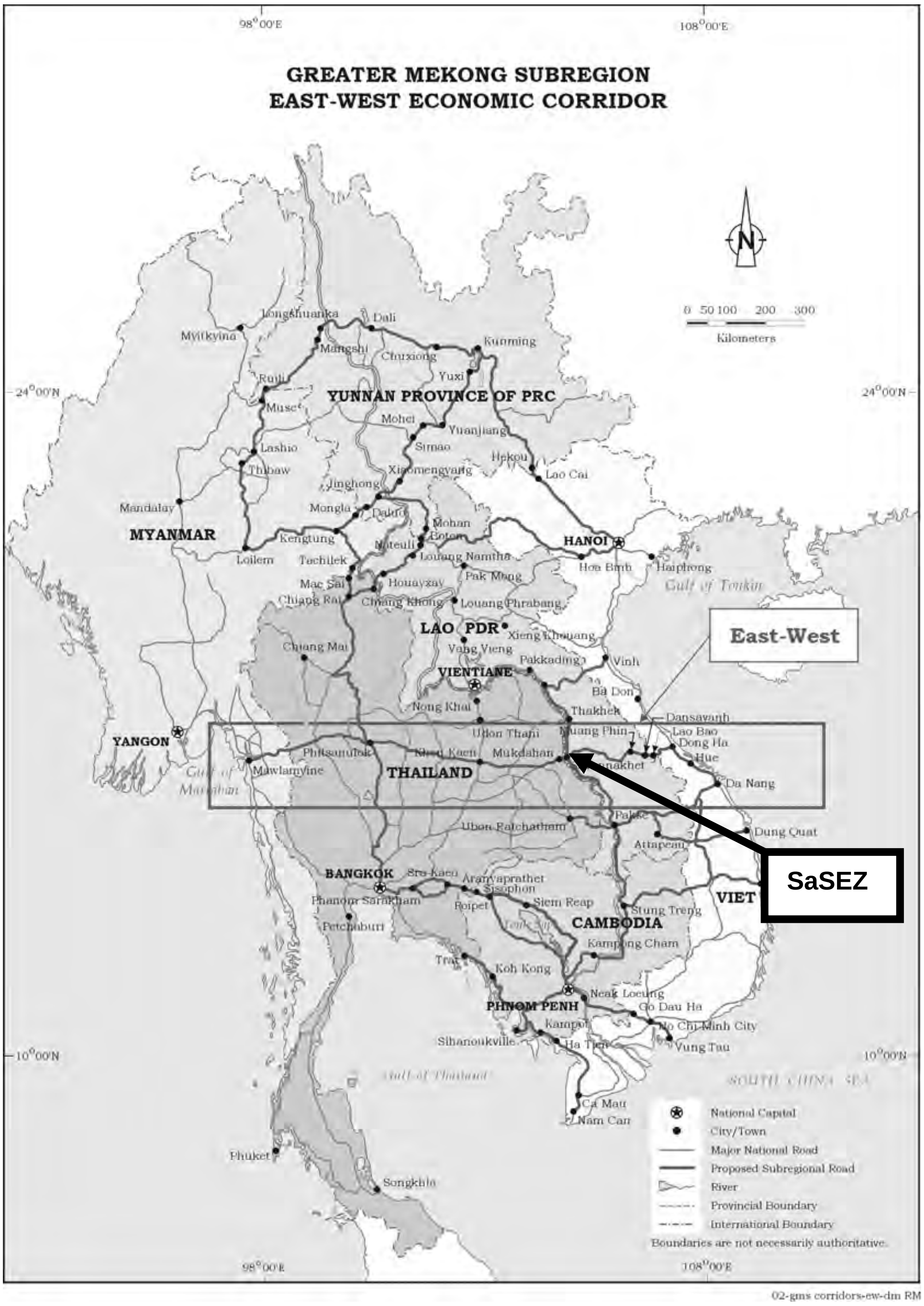
Source: National Committee for SEZ Secretariat.

3.1. Savan-Seno Special Economic Zone

The Savan-Seno Special Economic Zone (SaSEZ hereafter), the first SEZ in Laos, was established by Prime Minister Decree N.148 in 2003. SaSEZ was set up to capitalize on foreign and domestic investment in the non-resource sector by way of the location advantage of the province. SaSEZ is located at the center point of the East-West Economic Corridor (EWEC) and is right next to the Second Lao-Thai Friendship Bridge. Investment in this SEZ has several options for accessing a seaport. The most popular route is via the Second Lao-Thai Friendship Bridge (Figure 15), then to Road No. 2 via Mukdahan and Khon Kaen province of Thailand, then to the Laem Chabang port in Thailand. This route is approximately 720 kilometers from the SEZ. Another possible route is via the regional highway R.9 along Savannakhet to Da Nang port in Vietnam. Although this second route is about 220 kilometers shorter, exporters still rely more on the Thailand route. With completion of the EWEC[3], investors can also access the seaport in Myanmar. In addition to these existing routes, another alternative is along Road No. 12 of Khammuane province, connecting to Vung Ang port in North-Central Vietnam. This route is considered a new east-west corridor, providing the shortest distance to a seaport for the export of agro-processing products from the central part of Laos (JDI, 2010).

[3] This is subject to the development of a road network and a seaport in Myanmar.

Figure 15: Map of the Greater Mekong Sub-region Showing the Location of SaSEZ and the East-West Economic Corridor



Source: Author depicted from www.adb.org/gms/.

There is an ongoing debate about the substitution of R.9 of Savannakhet and R.12 of Khammuane for east-west transportation linkage. This paper, although not within the scope of research, would like to contribute a preliminary perspective to this debate. This paper[4] argues that there is a considerable degree of competition between these two routes because of their similar characteristics and development policy directions. The routes are almost parallel to each other, connecting Thailand from the west to Vietnam in the east. The completion of the Third Lao-Thai Friendship Bridge and the plan to establish an SEZ near the bridge will add important features to the potential of R.12 and increase comparability with R.9. These characteristics will make the two routes competitors in terms of the provision of regional logistic service. The governments in Khammuane and Savannakhet should cooperate to search for ways of creating synergy among the provincial development potentials rather than allowing competition for the benefit of spatial development at large.

SaSEZ is governed by the Savan-SENO Special Economic Zone Authority (SEZA), which has the mandate to promote and facilitate investment in this zone. The SEZA is working under the direct supervision of the standing deputy prime minister and has the authority to approve investment licenses. Therefore, investing in SaSEZ will receive full support from both the central and local governments. SaSEZ is divided into four sites designated for different investment purposes (Table 4).

4 Based on the field visit to Road No.12 and Road No.8 during 19-22 December 2010 with the support from the Bangkok Research Center.

Table 4: Investment Sites in SaSEZ

Sites	Location	Area (ha)	Type of investments
A	Next to the 2nd Mekong Bridge	305	Trade and service
B	28 Km east from Kaysone Phomvihane City	28	Logistics and transportation
C	10 Km east from the city, along Route N.9	234	Industry and manufacturing
D	8 Km east from the city	118	Housing complex for relocations of households from Site A
B1	25 km east from the city	300	Available land for future development.

Source: Savan-SENO Special Economic Zone Authority, 2010.

Despite the government's strong commitment to the development of SaSEZ, progress was rather slow during the first five years. Among the reasons for this are the problem of land clearance at Site A, and a lack of capital and viable developers for infrastructure development. Some other issues include the absence of a national strategic road map for overall SEZ development; difficulties in horizontal and vertical institutional cooperation; a weak legal framework; the slight technical capacities of officials in SEZ management, investment analysis and negotiations with investors; and poor information dissemination (ADB, 2008). Most of the early works concentrated on the formulation of specific rules and regulations for the Prime Minister Decree and land clearance instead of on promotion of the investment opportunities. In 2007, the SEZA entered an agreement with the Thai Airport Grounds Services (TAGS) from Thailand to develop Site A into a trade and service hub. However, with the impact of the recent global financial crisis and the political turmoil in Thailand, development of Site A has met with major delays. In 2008, the SEZA, on behalf of the government, signed an agreement with the Pacifica Streams Development Company from Malaysia to develop Site C into a commercial and industrial hub with the official name of Savan Park Special Economic Zone (Figure 16). The investment is through the joint-venture company Savan Pacifica Development, with 70% of equity belonging to the Malaysian developer. A summary of the latest SEZA status is provided in Appendix 1.

Figure 16: Project Design of Savan Park

Source: Savan Pacifica Development (2010).

Savan Park is the most developed of the sites of SaSEZ. Its development spreads over four phases. Each phase covers about 50 hectares of land and takes about seven years. Since Savan Park's establishment in 2008, a lot has been invested in infrastructure development, including land clearance, land development and a high-voltage electricity network (see details in Appendix 1). Investments inside Savan Park enjoy various incentives, including lower taxes, longer land leases and fixed land concession fees (see details in Appendix 2). In addition, Savan Park leads in initiatives to address issues such as labor and water shortages, two of the biggest concerns of SaSEZ's development. To deal with the problem of labor supply, the company has developed a labor force database to allow unemployed workers to register their details. The company plans to train the first batch of 500 laborers by June 2011 to make them ready for industrial employment. The company has also attracted a Malaysian investor to join with the state-owned water supplier in developing water distribution specifically for the SaSEZ utility. The development of Phase 1 is expected to be completed by 2011, two years earlier than the initial plan. In light of progress in the physical development, Savan Park has been successful in attracting investors from all over the world. As of July 2010, 16 investors from 10 countries had already been granted investment licenses in Savan Park. Thirty-five out of 153 industrial lots have been sold to investors[5]. One investor from Japan has already completed construction of its factory and is installing machinery. Five other investors have started construction of their factories.

Progress in SaSEZ's development has moved along substantially during the past few years after the establishment of Savan Park. The commitment and flexibility of the

[5] As of September 15, 2010 (www.savanpark.com).

SEZA in acting as the coordinating agency between the government and the investors have played crucial roles. The autonomy of the SEZA and the direct communication channel between it and the central government allow the authority to address various emerging issues in a timely manner. Strengthening the capacity of SEZA officials and further improvement of the horizontal cooperation with other government authorities within Savannakhet could boost effectiveness and efficiency. In addition, the SEZA could play a more active role in pushing the liberalization of trade and customs procedures at the implementation level in accordance with the policy direction. Besides the commitment of the government, the recent achievements in SaSEZ's development to a large extent could be attributed to the professionalism of the Malaysian developer. The company has shown a number of initiatives for accelerating the site's development, has been active in attracting prospective investors, and has invested a lot in marketing. The development of SaSEZ could be a good case study for further SEZ development in Laos in terms of the government management and promotion mechanism, form of partnership with foreign developers, and importance and choice of capital mobilization for the development of public utility.

3.2. Densavanh Border Trade Commercial Zone

The Densavanh Border Trade Commercial Zone (SaBTZ) is located at the Laos-Vietnam border in Densavanh village, Sepone district of Savannakhet province. The development of SaBTZ is in parallel with the establishment of a similar zone on the Vietnamese side. SaBTZ was established by the Prime Minister Degree in 2002. It is under the management of an independent government authority, reporting to the provincial government. The zone spreads over 19 kilometers from the Laos-Vietnam border along

Route N.9 (EWEC) covering 1 kilometer of each side of the road. SaBTZ has a total area of 1,823 hectares, of which 24 hectares are for the existing checkpoints, 50 hectares for new checkpoints, 529 hectares for commercial centers and 1,220 hectares for industrial production areas (Figure 17). SaBTZ benefits from preferential policies such as exemptions on land leasing, duty incentives, profit tax privileges and taxation incentives, among many other privileges offered to investors in this zone. The investment license could be approved within the zone and subject to the final approval of the provincial government.

Figure 17: Map of Densavanh Border Trade Commercial Zone

Source: Densavanh Border Trade Commercial Zone Management Authority, 2006.

Progress in SaBTZ's development has been sluggish compared to the border trade zone on the Vietnamese side and SaSEZ. Major obstacles at SaBTZ include the lack of financing for the necessary infrastructure such as water supply, high-voltage electricity and land clearance, an insufficient institutional framework, inadequate government officials for the management of SaBTZ, and a large area of land covered by unexploded ordinance (Khonthapane, Insisienmay and Nolintha, 2006). Reportedly, some obstacles have been recently addressed such as the complete construction of the water supply and high-voltage electricity from Vietnam. Local authorities have discussed the full implementation of the Prime Minister Decree on formulation of the zone many times but so far no conclusions have been reached. Because of the delay in infrastructure development, many possible projects by foreign investors have been suspended. To date, 11 projects have been granted investment licenses, of which nine projects are foreign investments. The approved projects include a duty-free commercial center, a hotel, banking and light manufacturing. However, only a few projects have started construction. SaBTZ has expressed an interest to upgrade from a border trade zone to an SEZ to further improve the incentives[6].

3.3. Development of SEZs in Vientiane

The SEZ development in Vientiane was the earliest SEZ project in Laos, with the planning process beginning as early as 1995. However, progress has been very slow due to the lack of resources for developing the necessary infrastructure in this potential SEZ, both from the government and the private sector. Even without an SEZ, Vientiane has been very successful in the past in attracting both domestic and foreign investment to

[6] Personal interview with the SaBTZ management authority (15 Oct 2010).

enjoy the country's most advanced infrastructure and supporting facilities. This might also reduce interest in developing a zone designated for industrial production. Following the government's current policy priority in the promotion of SEZ development, there are at present two SEZ projects located in the designated SEZ area of Vientiane Capital. These aim to boost manufacturing and export businesses. Some discussion of SEZ development in Vientiane is provided in the following sections.

The Vientiane Industry and Trade Park (VITA Park) is the most recent SEZ development project approved to be built in Vientiane Capital. VITA Park is located at Km 21 in Xaythany district as a joint venture between the Lao government (30%) and the Taiwanese investor Ban Wei Development Company Limited (70%). VITA Park covers a total land area of 110 hectares with a contract of 75 years (extendable) to develop the land. The park is located close to the planned Vientiane train station and the planned new government office area. VITA Park has the capacity to accommodate 147 factories in industry, trade and services. In addition to the factories, there is a plan to develop a shopping complex, commercial buildings, vocational training centers, schools, a hospital and a hotel in the park. Employment at the full scale is expected to reach 200,000 people, contributing significantly to poverty reduction and economic growth in Vientiane Capital and the prosperity of the whole economy. Some distinct benefits given to investors in VITA Park are:

- Tax-free zone for all import and export duties.
- Zero consumption tax.
- Zero company profit tax through the first 10 profitable years.
- Only 8% company profit tax after the exemption years.

- Lao local suppliers enjoy tax rebates on materials supplies to the zone.
- Only 5% personal tax for foreigners. For Lao citizens, the first 200,000 KIP is exempted from tax, followed by 5% subsequently.
- Only 5% company bonus tax for companies with two or more shareholders (after the exemption years).
- Zero tax on the company's imported motor vehicles, equipment, and administrative and building materials.

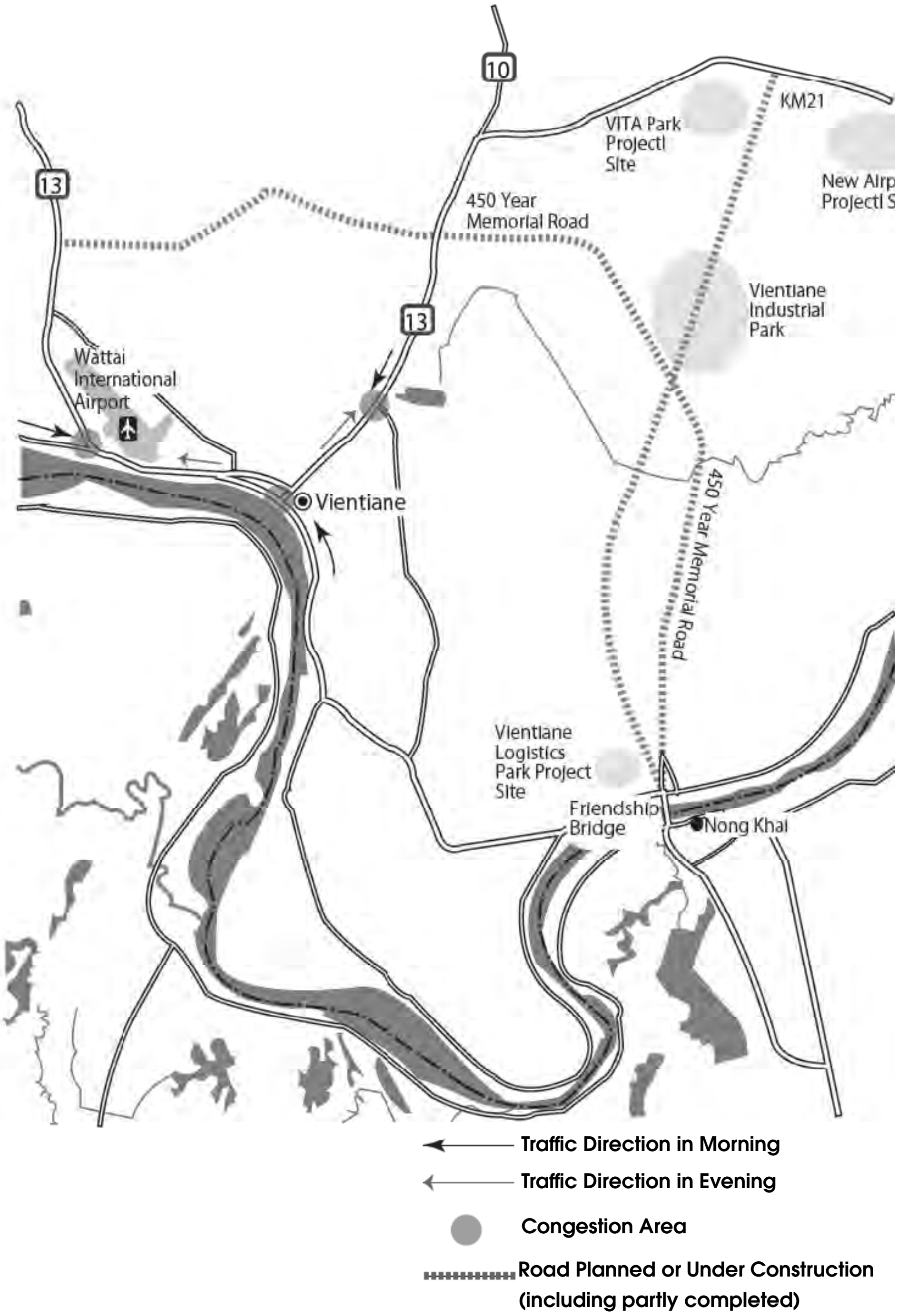
Vientiane Industrial Park (VIP) is another SEZ development initiative, located 18 kilometers from the center of Vientiane along R.13. The preliminary study supported by the Japanese International Cooperation Agency (JICA) estimates the cost of investment to be USD 73 million, of which USD 13 million is for community resettlement and USD 60 million for construction (Vientiane Times, 2010a). The study points out several benefits in the areas of production, employment, tax revenue and technology transfer. VIP's development is planned for two phases in 2013 and 2015. In the first phase, much of the focus will be on preparation works, including resource mobilization, project design and local community resettlement. The second phase will begin construction and lease out facilities to investors by 2015. Total land area is over 2,000 hectares, of which 55 hectares has already been occupied as of 2008. Suzuki and Keola (2008) argue that despite having a more attractive location advantage compared to other SEZs in Laos, VIP's current situation is not yet favorable for investment due to the inadequate supporting infrastructure and high cost of transportation between the zone and export destinations. The authors proposed keeping the leasing fee lower relative to the SEZs in Vietnam and Cambodia, improving customs services and developing a logistic park.

4. LINKAGES BETWEEN SEZS, BORDERS AND MARKETS

4.1. Urbanization and City Transportation

Urbanization and industrialization in the major cities have led to a rapid increase in population and the number of vehicles, putting more pressure on city transportation. Although the traffic congestion in Laos is moderate compared to other major cities in the region, the trend of increasing traffic congestion can be observed in Vientiane during rush hour in the morning and evening, especially in the past few years. Traffic congestion is now common at major intersections around Vientiane, coming inward in the morning and going out in the evening (Figure 18). This traffic congestion reflects the arrival of a common city problem: The population travels into the central business district in the morning to work and later travels out of the CBD to the residential areas (Figure 18).

Figure 18: Map of Major Roads in Vientiane Showing Congestion Areas

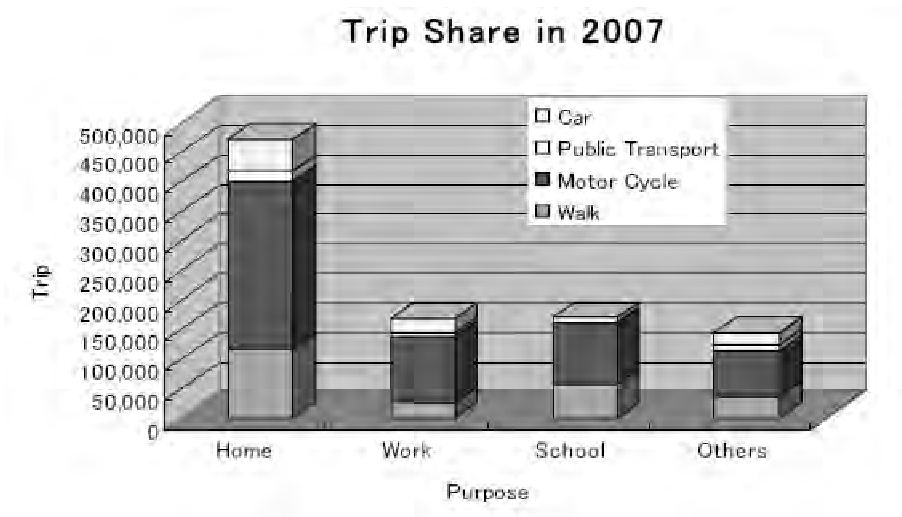


Source: Original map from http://jp.danang.gov.vn, edited by the author.

The presence of large transport trucks in the city adds to traffic pressure. At present, large trucks are allowed to run in the city only after 6 p.m. Therefore, in the evening after working hours, there are long queues of trucks in the city area going to other parts of Vientiane or other provinces. The size and length of the trucks adds to the degree of difficulty for city traffic, especially with the Thai trailer-trucks and the local trucks transporting construction materials such as sand, cement and rocks. This does more than create additional traffic in Vientiane during the already congested hours. From the perspective of the private companies, the longer the trucks are stuck in city traffic, the greater the cost and time for business transactions.

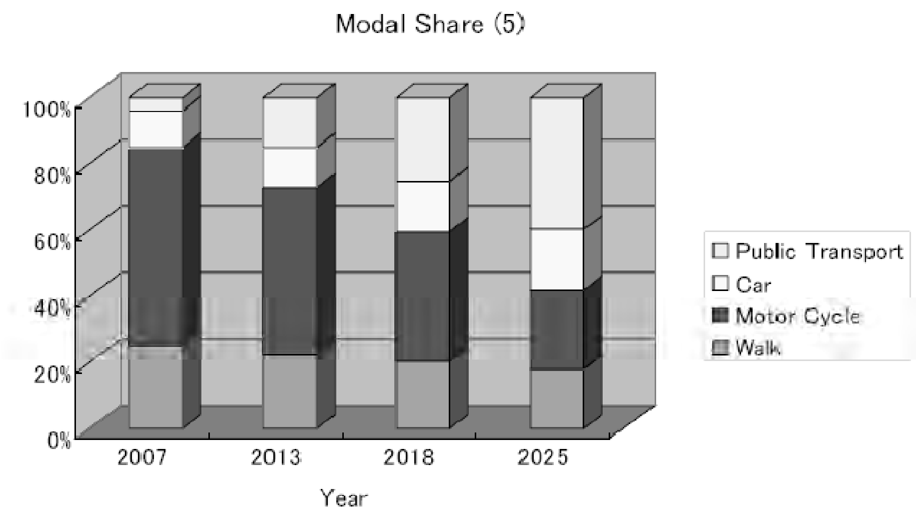
The lack of a good public transport system also contributes to this traffic congestion problem. Most of the population in Vientiane relies on their own transportation for going to work, home and school. For instance, the share of motorcycle usage for travelling back home is more than 60%, while public transport's share is only about 5% (Figure 19). For more manageable city transport, it is proposed that the share of motorcycle usage should be gradually reduced to 20% by 2025 and public transport's should be increased to 40% (Toda, 2008). To do so, various measures on improving both the quality and the quantity of public services need to be developed to accommodate the growing transportation demand in Vientiane (Figure 20). Other factors contributing to traffic congestion in Vientiane include the imbalance between the number of vehicles and accessibility to major arterial roads, the narrowness of the roads, and motorists' disregard of traffic regulations.

Figure 19: Share of Various Modes of Transports in Vientiane Capital



Source: Toda (2008).

Figure 20: Targeted Share of Various Modes of Transports in Vientiane Capital to 2025



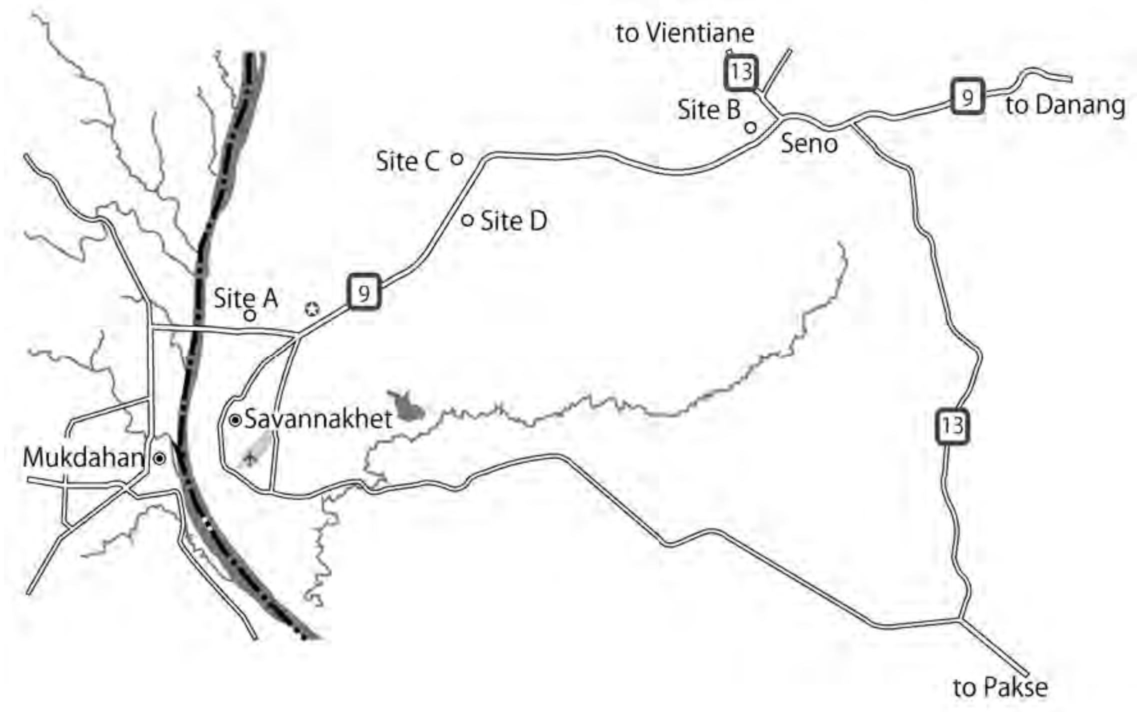
Source: Toda (2008).

However, traffic congestion will be reduced after the Vientiane 450 Years Road is completed as a bypass from 13 South Road to Thadeau Road (Figure 18). This new highway is 20.9 kilometers long, 33 meters wide and has six lanes. It will allow trucks from Thailand coming from the First Lao-Thai Friendship Bridge to travel into the outskirts of Vientiane, connecting to the north of Vientiane via 13 North Road and to the south of the city via 13 South Road. Similarly, trucks travelling from other provinces could bypass the city area on way to their final destinations. At the moment, the related authority is working with the external expert to finalize a Vientiane Capital transportation plan that will be presented to the government for consideration. This plan will respond to bypass traffic for province-province connection as well as the traffic inside the capital.

Unlike in Vientiane, traffic congestion is not yet a problem in Kaysone Phomvaihane city of Savannakhet and Pakse of Champasack. First, the current level of urbanization and economic development is still far behind that of Vientiane Capital, leaving more room for city traffic. Second, both cities already have well-located bypass roads that allow passengers and freight from nearby provinces to pass by easily (Figure 21). However, there are some differences between the city traffic conditions in Kaysone Phomvihane and Pakse. The population in Kaysone Phomvihane to a large extent still lives near the city center and away from the growing industrial area. This reduces the opportunity for traffic congestion, at least for the time being. However, the growing economic activity could lead to a substantial increase in traffic between the city center and the outskirts, especially via National Road No. 9. The economic activities in Savannakhet will be boosted by the progress of the SEZ hence large-scale secondary and tertiary industries will be located in the SEZ and along the National

Road No. 9. In addition, administrative offices and supporting industries located in the city center will increase to accommodate growth in economic activity.

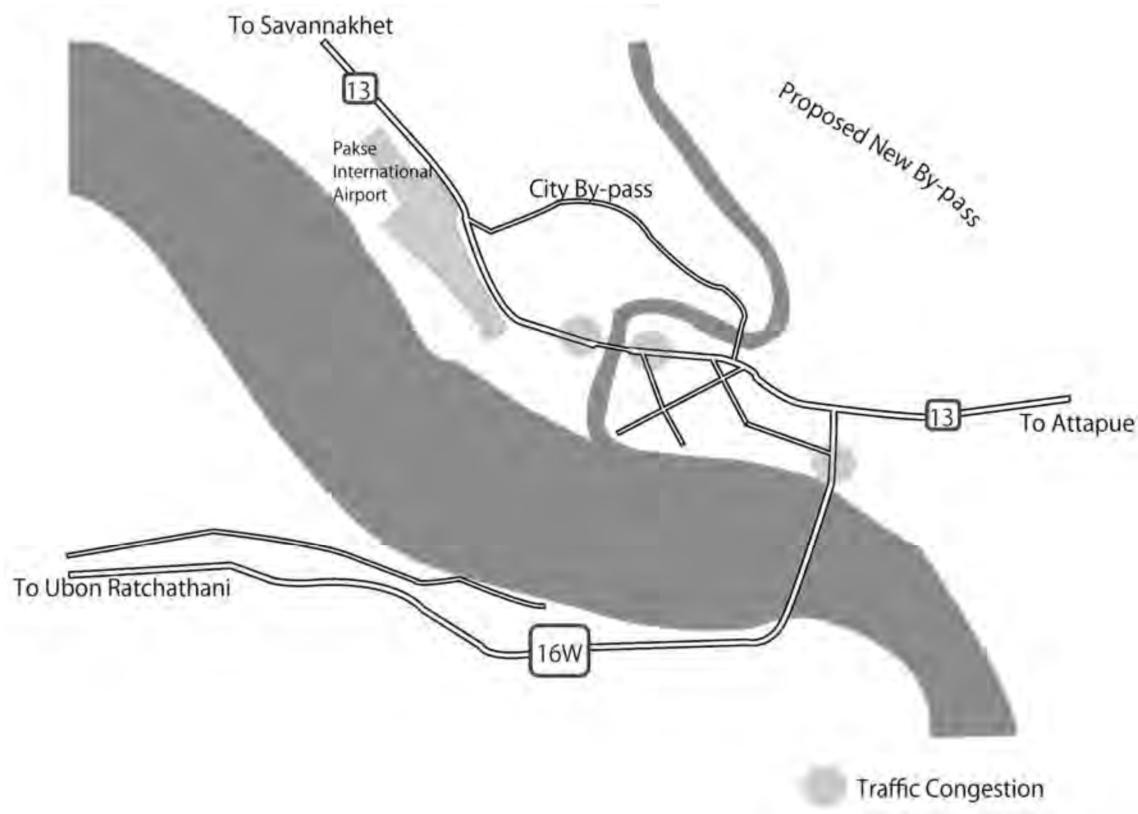
Figure 21: Major Roads in Kaysone Phomvaihane City Showing SEZs



Source: Original map from Google, edited by the author and editor.

A shift of the residential area to the outskirts of the city has been observed in Pakse. In the future, this could lead to a problem of congestion during rush hour such as in Vientiane. In fact, during peaks hours, Pakse is already beginning to experience minor traffic congestion at the old bridge connecting the northern area of the city with the inner part (Figure 22). Another occasionally congested area is found around the new Japanese government-funded road that connects Pakse with districts on the west side of the Mekong River. This often happens when a large number of tourist buses from Thailand enter the city, especially during weekends or major festivals. In the future, with the promotion of investment in various areas of potential such as high value-added agriculture at Bolaven Plateau, labor intensive industry in the southern part of the province, tourism, and the planned establishment of the SEZ, increased economic activity might put more pressure on city traffic. However, the provincial authority already sees this challenge and is planning responsive measures. These include the proposal to construct another bypass road from the 11^{th} kilometer south of the city through the Bachieng district, connecting with R.13. This would be able to accommodate the increasing province-province traffic. In addition, there is a proposal to construct a new bridge, replacing the existing historical bridge, and an extension of the city's main road. Together these will help reduce pressure on transportation in the city area.

Figure 22: Map of Major Roads in Pakse



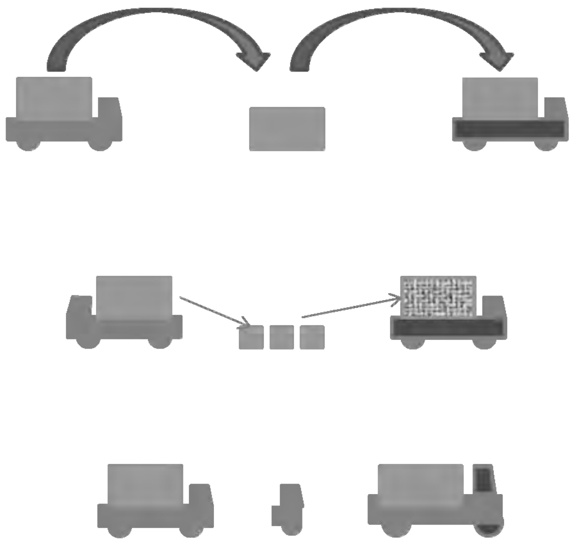
Source: Original map from Google, edited by the author and editor.

4.2. Cross-border Connectivity

The geographical location of all the major provinces makes improvement of connectivity of utmost importance for realizing the potential advantage from regional integration. Connectivity refers to both the software and hardware dimensions of the ease of cross-border activities. As for the software, the ratification of the Cross-Border Transport Agreement (CBTA) is an important and necessary condition for optimal benefit of the hard connectivity such as the infrastructure construction. The CBTA aims to simplify the border-crossing procedures of vehicles in order to save both cost and time in regional transportation. An important feature of the CBTA is the introduction of “single window” and “single stop” procedure. The single window is an attempt to combine the three documentation procedures at the border into one window where the customs, immigration and quarantine officials work together at a single location. Single stop is a policy of merging two physical inspection systems into one system at the border of the importing country. The CBTA and all the annexes and protocols have been signed by the governments of six Greater Mekong Subregion countries since 2007, but at present the implementation of the agreement is still diverse and not complete in the GMS (Ishida, 2010). Specifically, in Savannakhet the implementation of the CBTA is progressing well at the Densavanh-Laobao border (Laos-Vietnam) but not at the Savannakhet-Mukdahan (Laos-Thai) border. The major issue causing delays in CBTA implementation at the Laos-Thai border is reported to be the inconsistency between the CBTA and the related law in Thailand. Unless the Thai authority pushes for amendment of the related law, progress in CBTA implementation at the Laos-Thai border will be very difficult if not impossible.

Subject to partial implementation of the CBTA, the common practice of border-crossing is a mixture of the former time-consuming procedure and the improved CBTA. The documentation procedures have been simplified at the border checkpoint. Although the related officials are not physically situated in one room (one window), the related offices are now located at the same building. Therefore, the documentation procedure is relatively less time-consuming. The implementation of a single stop policy is possible only at the Densavanh-Laobao border. For instance, physical inspection for the inward-flow of freight only takes place at the Lao border in the presence of related officials from both Laos and Vietnam. However, transport via other checkpoints such as at Nongkhai-Vientiane, Savannakhet-Mukdahane and Vangtao-Chongmek still has to go through two inspection stops at the borders of both Laos and Thailand. In terms of transport, there are mainly three types of transshipments: (1) relocating a container from truck A to truck B, (2) unloading goods from truck A and uploading them to truck B, and (3) changing the truck head (Figure 23). The second option is still the most frequently used choice of transshipment. The third mode requires the compatibility of the trucks from both countries and therefore is used the least.

Figure 23: The Transshipment Options at the Lao Side of Savannakhet-Mukdahan Checkpoint



Source: Author.

The following section will be dedicated to the hardware features of connectivity. In order to overcome the location disadvantage of Laos, the government, with support from neighboring countries and development partners, has focused on the construction of an international bridge crossing the Mekong River. This gives the country access to the sea via Thailand. The First Lao-Thai Friendship Bridge was built in 1994 with total cost at USD 30 million. The bridge is 1.2 kilometers long with two 3.5-meter-wide road lanes and two 1.5-meter-wide footpaths. The bridge was later equipped with a single-meter-gauge railway line in 2008. In addition, the second bridge was built in 2007 in Savannakhet, followed by a third bridge in Khammuane province and a fourth one in Borkeo district.

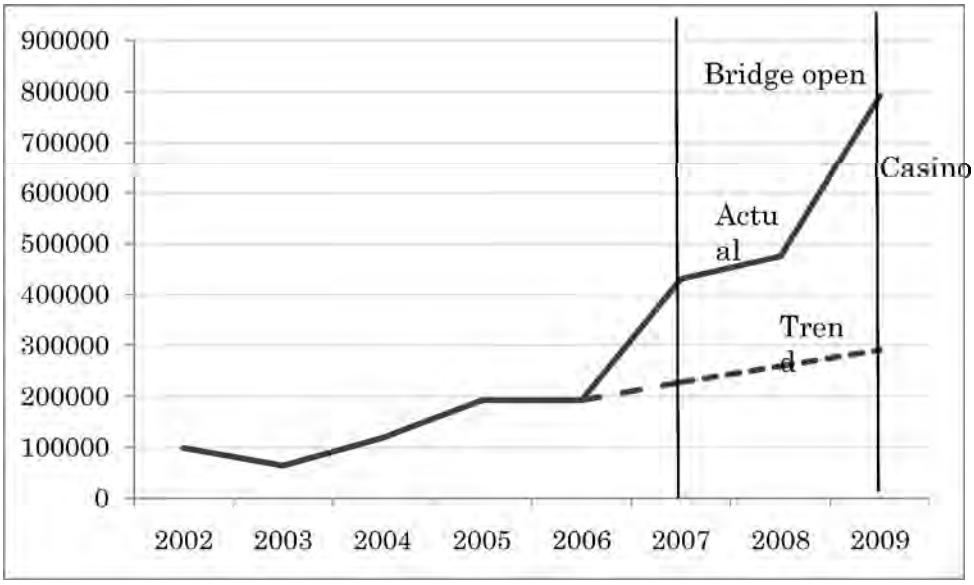
In addition, road and air transportation connectivity is also improving gradually. At present, there are three international airports located in Vientiane, Luangprabang and Champasack. These airports handle international traffic and provide basic customs, immigration and quarantine services. The airport in Savannakhet is another big airport but due to proximity to Vientiane, land transport is preferred. Wattay International Airport in Vientiane is the country's largest airport. It has a 3,000-meter-long asphalt runway. Lao Airlines, the national carrier, provides most of the services for domestic routes. Other domestic providers include Lao Air offering charter and airline services to selected routes especially in remote areas; Lao Westcoast Helicopter Service, a private helicopter service provider; and recently established Phongsavanh Airlines, a private low-cost carrier scheduled to begin service in 2012. Other carriers providing international flights to Laos include Thai Airways International, Vietnam Airlines, China Eastern Airlines, Bangkok Airways and Air Asia (of Malaysia).

A detailed discussion of the second bridge is provided in the following section as an example of the important role that constructing the international border-crossing bridge plays in economic development.

4.2.1. The Second Lao-Thai Friendship Bridge

The Second Lao-Thai Friendship Bridge (Second Bridge hereafter) opened to the public in early 2007. The construction cost was about USD 70 million, funded largely by loans from the Japan Bank for International Cooperation (JBIC) to Laos and Thailand. This was JBIC's first ODA loan for a cross-border infrastructure development project involving two countries. The bridge is 1.6 kilometers long and 12 meters wide with two traffic lanes. Completion of this bridge finalized the part of the EWEC in Laos. This is expected to play a major role in giving Laos access to seaports in neighboring countries. The expected benefits of the Second Bridge in particular and the EWEC in general are well-documented in various studies. The general conclusions on the benefits are a reduction in cost and time for cross-border activity, a contribution to job creation and a boost to local economies (Stone and Strutt, 2009; Menon and Warr, 2006). Other benefits include increased freight traffic, more transport operators and a greater number of tourists (Luanglatbandith, 2007). For instance, the number of people using the Second Bridge increased from 600,000 in 2007 to 1.5 million in 2009, and the number of cars passing over the bridge also increased from about 100,000 trips to almost 200,000 trips in the same period (Figure 24).

Figure 24: The Number of Tourism Arrivals in Savannakhet Province



Source: Lao National Tourism Administration, 2010.

The benefits of the Second Bridge on the tourism industry have been clearly observed. First, tourist arrivals increased substantially after the opening of the bridge. For instance, the number of tourists in Savannakhet increased about 28% p.a. from 2002 to 2006, reach 190,000 in 2006. However, the number reached 430,000 persons in 2007 after the opening of the bridge, and soared to 800,000 persons in 2009 after the opening of the casino. With the surge in tourist arrivals, the supporting tourism industries also expanded markedly in Savannakhet. The number of hotels and guesthouses increased from 72 in 2006 to 81 in 2007, and to 115 premises in 2009. Finally, the number of restaurants is also following a growth trend, increasing from just 53 in 2006 to 95 businesses in 2009. The Second Bridge and the casino will continue to fuel expansion of the tourism industry. The challenge will be the province's ability to absorb benefits from expansion and to promote secondary business activities. These will lead to greater benefits in income and employment.

4.2.2. Border Trade

Box 2: Impact of Border Trade on Local Livelihoods

From a household survey in Savannakhet and Bokeo provinces, it could be concluded that border trade helps to open a new and permanent source of income for people living near the border area. In addition, local people appear to enjoy better living conditions and accumulate wealth faster than people who live away from the border. Other observed benefits include promotion of entrepreneurship, encouragement of business-oriented production, support of progress in social development especially access to healthcare and education, and opportunities for transfers of know-how. The study argues that a formal setup (for example, an establishment of a border trade zone) does not guarantee the success of border trade. It needs a full range of support and incentives from flexible local authorities.

Source: Khonethapane, Insisienmay and Nolintha (2006).

Border trade has long been active in all of the studied provinces. This reflects the growing economy of the provinces and the parallel increase in demand for goods, many of which are imported from neighboring countries. Border trade refers to the trading activities by small and regular traders at the international checkpoint on both small and medium scales. Lao-Thai border trade involves various types of consumption goods, from clothing to food. Before the completion of the bridge, many traders often carried food by boat via the Mekong River for both Vientiane and Savannakhet. At present, traders use the new bridge and carry goods via both the public buses and personal cars. Similarly, goods brought in from Vietnam to

Savannakhet through this channel can be of any kind, including food items such as vegetables, garlic, clothes, fruit, noodles, cookies and plastic ware. This kind of trade is significant to the lives of local people in the border villages as well as to many other semi-rural and rural villages along national highway Route 9. Local people rely significantly on goods brought in via this channel because the prices of Vietnamese goods are lower than those from other origins. This fits with the situation of local people in the region who are poor. Larger traders normally use one to five pushcarts to transport their goods from the Lao Bao local market in Vietnam to Densavanh market of Laos for each crossing.

4.2.3. Logistic Park Development

In order to further develop the industrial sector in the country's capital and concretize the country's land-link initiative, Laos' first logistic park is planned to be established in Vientiane by 2015. The park will cover the existing Thanalaeng train station, the planned Vientiane train station, the planned new international airport, and Vientiane Industrial Park (a discussion on the industrial park is provided in Section 4.4). This comprehensive logistic park will contribute to a reduction of time and cost for the production of export-oriented goods in Laos. The park will also generate considerable benefits for import flows (Vientiane Times, 2010c). The government of Laos lacks the financial resources to invest in such a large project and hence is calling for investment by the development partner and the private sector. Interestingly, a project for the promotion of private investment in Vientiane's SEZ development includes the industrial park and the logistic park on the list of candidate projects of the Mekong-Japan Initiative (Japanese Ministry of Foreign Affairs, 2010). This will play an important role in speeding up development of the logistic park. In addition, the NEDA, the aid agency of the Thai government, has committed to providing financial assistance for the extension of the railway from Thanalaeng to the Vientiane train station in the form of grants (30%) and soft loans (70%) (ADB, 2009). Finally, the Chinese government is also eyeing the significance of this project and has agreed to provide financial assistance to develop a comprehensive railway system, originating from the Vientiane train station in this logistic park to the Lao-Chinese border. The railway extension will connect Vientiane with Luangprabang and then the Boten-Mohan border of Luangnamtha province in the northern region of Laos (Vientiane Times, 2010b). It is reported that 70% of the investment will be financed by the Chinese government, while 30% will come from the Lao-Chinese joint venture to invest in and operate the railway service. The success of such a comprehensive railway system will mark a new milestone for the infrastructure development of Laos and lead to a substantial time and cost savings in the transport of goods from Vientiane to the northern region of Laos. Laos will better serve the regional logistic service as the premier economic corridor for north-south and east-west linkage. The ability of the country to absorb the many opportunities will depend very much on the development of the domestic private sector and the improvement of competitiveness.

CONCLUSION AND POLICY RECOMMENDATIONS

The recent rapid growth of the Lao economy, together with the stable macroeconomics and politics, has created favorable conditions for the economic progress of major cities across Laos. Vientiane, Savanakhet and Champasack provinces are among the fastest-growing economies. This significant growth in the provincial economy is, to a large extent, an outcome of the government's policy at both the central and provincial level to attract FDI inflows into the potential sectors. The development of infrastructure such as cross-border bridges, highways and airports contributes significantly to improvement in connectivity across borders and within Laos. In addition, the software aspect of connectivity such as implementation of the Cross Border Transport Agreement has improved but at a slower pace. Another thrust in the promotion of FDI is the development of SEZs in major cities across Laos. The promotion of SEZs has received a great deal of support from the central government as well as the local government. Therefore, given the small economy of Laos, there are at present three active SEZs, but many more are in the pipeline for consideration by the government. Finally, these economic opportunities in major cities encourage substantial migration especially from rural to urban and from small to large cities.

The economic prosperity has translated into increased industrialization and urbanization, creating both opportunities and threats for city development. Traffic congestion is beginning to prevail in Vientiane Capital during the rush hour in both the morning and evening, especially over the past few years. The major reasons for the congestion are the rapid population growth, increase in vehicles, narrowness of the roads and insufficient number of roads. The traffic congestion is less of an issue for Kaysone Phomvihane and Pakse due to, in part, the provision of a bypass road in a timely manner. The provincial authorities in all of the studied cities have already taken note of the emerging problems and have planned responsive measures such as the widening of roads, upgrading of roads and construction of new city bypass roads.

In order to further promote the development of major cities without risking a loss of connectivity for the SEZs and local businesses with the external market, the study proposes the following recommendations.

1. The provincial urban development authority should incorporate, as much as possible, the findings from the existing studies into the development of the urban area and accommodating infrastructures. The ring-road project and public transport improvement and expansion for Vientiane Capital should be given priority in order to promptly address the traffic problem in Vientiane and further promote the industrialization and economic integration of the province.
2. The development of SEZs should be a carefully researched process, importantly driven from the real economic potential. The benefits from SEZ development might be better utilized by concentrating efforts on selected SEZ sites with the highest potential before expanding to other parts of the country. The trade-off between synergy and competition should be well understood before developing SEZs with proximity to each other.
3. The related authority should put more pressure on implementation of the Cross Border Transport Agreement for the Lao-Thai border in order to optimize the benefits of major infrastructure projects such as regional bridges and highways.
4. The upgrade of national highways is crucial for expanding the spill-over benefits from regional highway constructions and reducing province-province disparity.

APPENDIX 1: STATUS OF SAVAN-SENO SPECIAL ECONOMIC ZONE IN 2008 AND 2010

Sites	Situation in 2008	Current status in 2010
A	• TAGS is a developer • Under feasibility study • Investment by ST Group (Lao company)	• TAGS is a developer • Complete project design, survey on main roads inside the project site. • 12% completion of SEZA Office (Government budget) • Investment license granted to: -
B	• Developed not yet determined • Relocation of farmers solved • Invested by Japan logistics company	• Developed by government budget • Land exploration and clearance completes 20 ha. • Build earth road of 650 m • One-Stop-Service office constructed
C	• Developer: Pacific Stream Development • Japanese metal company from Manila • 50 ha for Savan Vegas Hotel & Casino	• 95% land exploration • Land development covers 49 ha of Phase 1 area and 16 ha of Phase 2 area. • A pave main access road with a drainage system constructed • Custom checkpoint is under construction • 22 KV high voltage distribution network of Phase 1 completed • 16 investors granted investment license • 2 investment prospect is under negotiation
D		• Complete project design • 67% land clearance • 74 houses construction (on-going) • Access road constructed • Electricity substation and 22 KV medium voltage distribution network installed
B1	• National land available	• No further progress

Source:
- Data on 2008 from Suzuki and Keola (2008).
- Current situation is from the author.

APPENDIX 2: COMPARISON OF INCENTIVES IN AND OUT OF SAVAN PARK SEZ

	FDI outside the SEZ	FDI in Savan Park
Profit tax	10%[7], 15%[8], 20%[9]	8% - 10%[10]
Personal income tax	10%	5%
Import duty	Exemption for import duties and taxes on raw materials and capital equipment	
Land lease period	50 - 75 years	maximum 75 and can be extended
Land lease price	Varying depending on the types of land, location and duration of the tenure.	• USD 0.40/ m2/ year (for more than 20,000 m2 and 75 years tenure with 12 years as a rebate) • USD 0.59/ m2/ year (for more than 20,000 m2 and 50 years tenure with 12 years rebate)

Source: Data on incentive outside SEZ is from Savannakhet provincial Department of Planning and Investment and incentives of Savan Park from Savan Pacifica Development Co, Ltd (as of August 2010).

[7] Zone1: Mountainous plateau zones with no economic infrastructure to facilitate investment (10 years exemption).

[8] Zone2: Mountainous plateau zones with a moderate level of economic infrastructure to accommodate investment (6 years exemption).

[9] Zone3: Mountainous plateau zones with good economic infrastructure available for investment (4 years exemption).

[10] corporate profit tax.

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