Chapter 4

Perspective of Savan=Seno Special Economic Zone and Vientiane Industrial Park in the Lao PDR

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1. Introduction

Greater Mekong Subregion (GMS) Cooperation Program implemented by Asian Development Bank has made the greatest efforts on improvement of transport sector. It had spent in total 8,057 billion US dollars (82% of total expenditure) into transport sector from 1994 to 2007. The Second largest expenditure was 1,728 US dollars into electricity sector (18%) or one fourth smaller than transport sector.

The Third GMS SUMIT Meeting was held in the end of March, 2008 at Vientiane, Laos, where leaders from the six Greater Mekong Subregion (GMS) nations agreed to endorse the Vientiane Plan of Action for GMS Development for 2008-2012, which highlights the importance of making substantial and early progress on transport and energy in the subregion. Transport sector has 6 trusts such as (1) complete key parts of the GMS transport network and improve links with regions and subregions, (2) transform transport corridors into economic corridors, (3) mobilize private sector participation in transport sector activities, (4) promote the development of modes other than road transport and completion between transport modes, (5) facilitate implementation of transport-related training programs, and (6) address transport-related negative impacts.

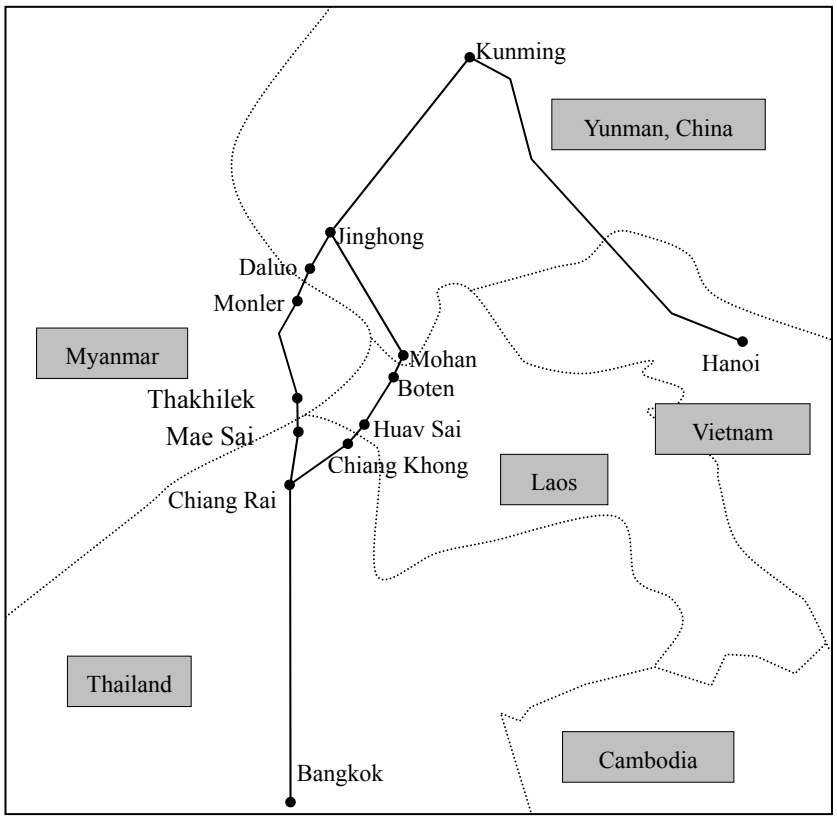
2. North-South Economic Corridor

North-South Economic Corridor is from Bangkok, Thailand through Chiang Rai, where branches off and leads to Lao route and Myanmar route. Then it leads to Hanoi, Vietnam through Kunming (Figure 1). Lao Route crosses the Mekong River by ferry between Chiang Khong (10 km far from Chiang Sen Port) and Huay Sai, Laos. It leads from Huay Sai, Bokeo Province through Luangnamtha to Boten, Laos. Then it leads from Mo Han though Jing Hong to Kunming. On the other hand, Myanmar route leads from Chiang Rai through Mae Sai, Thailand to Thakhilek, Myanmar. Then it leads from Mainler (Monler) through Daluo to Kunming. The distance between Bangkok and Kunming is 1,850 km. The distance between Kunming and Chongquing is 850 km. The completion of North-South Economic Corridor will make Bangkok

connect to Chongquing, where both cities have big car industry cluster. Chongquing locates at the upper stream of the Yangtze River. Therefore industrial artery from Bangkok through Chongquing, namely inland part of China to coastal area in China will be formed.

The Fourth Mekong International Bridge between Chiang Khong, Thailand and Huay Sai, Laos (full length of 630 meter) will start its construction on June, 2009, and plans to complete in 2011. It costs 59 million US dollars, which are split by Chinese Government and Thai Government in half (Suzuki [2009]).

Figure 1 North-South Economic Corridor

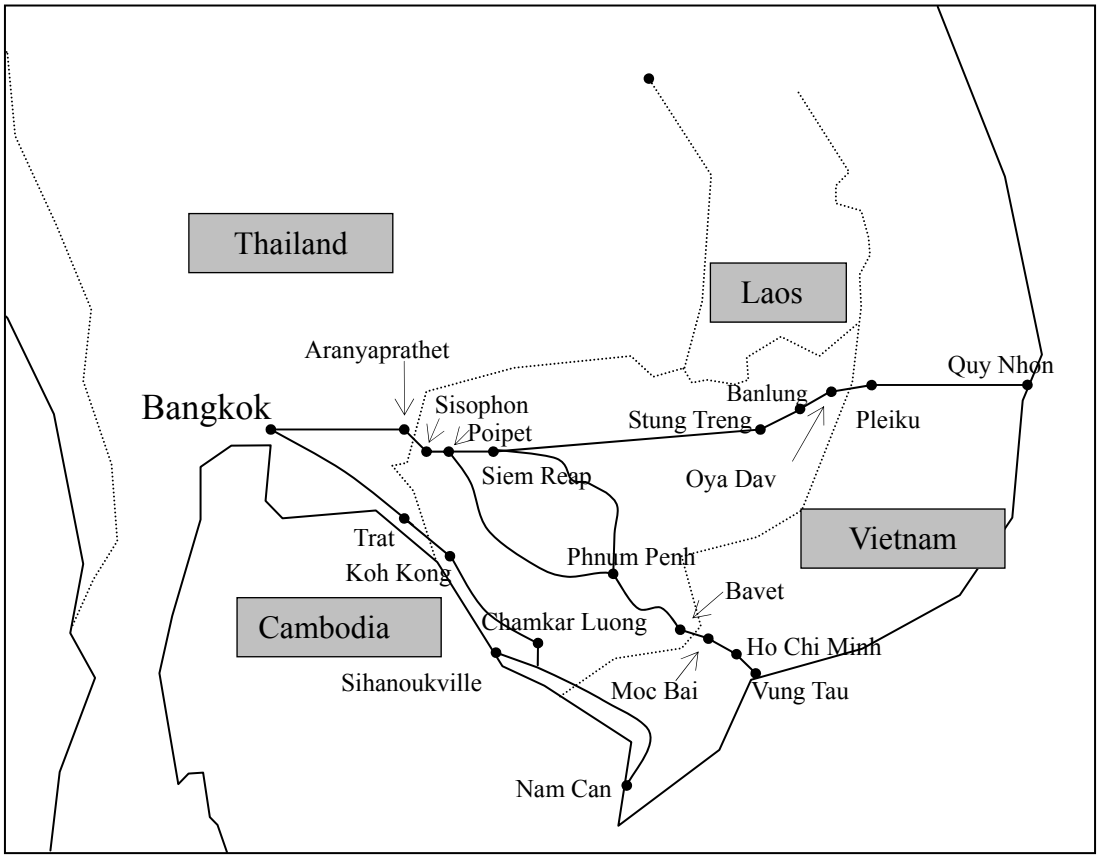


3. Southern Economic Corridor

Southern Economic Corridor connects Thailand through Cambodia to Vietnam by three routes (Figure 2). Northern Sub-corridor leads from Bangkok, Thailand through Aranyaprathet to Poipet, Cambodia. It branches off Sisophon, and enters National Road No. 6. It leads from Siem Reap through Stung Treng, to Banlung, Oya Dav (Cambodia) to Pleiku and Quy Nhon (Vietnam). The volume of traffic is much because of many tourist buses to Angkor Wat (Kawada[2008]). The road between

Banlung and the border of Vietnam is under construction by Vietnamese companies.[1]

Figure 2 Three Routes of Southern Economic Corridor



(Source) The Author

Central Sub-corridor leads from Bangkok through Aranyaprathet, Thailand to Poipet and Sisophon, Cambodia. It branches off Sisophon, and enters National Road No. 5. It leads through Phnum Penh to Ho Chi Minh and finally Vung Tau, Vietnam. This route is used to carry materials or capital goods. The section between Sisophon and Phnum Penh is under construction to widen the width.[2]

The total distance of Southern Coastal Sub-Corridor is 924 km (ADB [2007]), from Bangkok through Trat (Thailand) and Koh Kong (Cambodia) to Nam Can on the south of Vietnam.

4. East-West Economic Corridor

East-West Economic Corridor has in total 1450 km distance from Da Nang, through Lao

[1] Survey by Naomi Hatsukano, Researcher, Institute of Developing Economy
[2] Survey by Naomi Hatsukano, Researcher, Institute of Developing Economy

Bao (Vietnam) to Dan Savan and Savannakhet (Laos) and Mukdahan and Phisanulok (Thiland) to Myawaddy and Mawlamyine (Myanmar). East-West Economic Corridor has completed except the section inside Myanmar. Special economic zones in Mukdahan, Savannakhet, Trat, Lao Bao, etc. have been established.

5. Savan=Seno Economic Zone

Savan=Seno Economic Zone in Laos was established by three Prime Minister's Decrees (No. 2 of 2002, No. 148 of 2003 and No. 177 of 2003). The categories of business activities are planned to be developed in the SEZ include the followings:

1) Export Processing Zone,
2) Free Trade Zone, and
3) Free Service and Logistic Center (which should include tourism, banking and other activities).

Site A is located near the Second Mekong International Bridge which was constructed by use of Yen loan provided by Japan Bank for International Cooperation (JBIC). The area is 305 hectares, where Thai Airport Ground Service is conducting feasibility study. The area of Site B has only 20 hectares, where Japan Logitem has started operation since 2008 and Double A (Thai Company) plans to set up its factory. Site C (Table 1)。 Pacific Stream Development (Malaysia Company) is implementing feasibility study for Site C (220 hectares). ST Group (Lao company) and Macao company have constructed Savan Vegas Hotel & Casino, and been running casino at 50 hectares beside Site C since 2008. Site B1 has not yet made any progress for development. Generally speaking, development speed of Savan=Seno Special Economic Zone has been very slow even after the Second Mekong International Bridge was constructed. It seems that Japanese companies do not regard Savan=Seno SEZ as a suitable place for factory site. It generally costs a great deal that Japanese managers or employees of Japanese companies are assigned from Japan to foreign countries. Therefore, they live in Thailand, Vietnam or China where their mother factories operate, from where they come to work to factories at Savannakhet periodically (for example once a week). However, there is no regular flight between Vietnam and Savannakhet, or between China and Savannakhet. Fortunately regular flights are available for three times a week between Savannakhet and Bangkok, and Savannakhet and Vientiane. In case that Japanese businessmen live at Savannakhet, living amenity such as super markets, gulf course, sport gym, karaoke, drinking bar, Japanese restaurant,

international standard of general hospital, international elementary and junior high schools for their children, etc. are necessary.

While, regular flights between Bangkok and Vientiane are available for three times daily and twice daily between Hanoi and Vientiane. Thus, foreign companies tend to prefer Vientiane (which is a center of politics, economy, finance, information, etc.) to Savannakhet as sites proposed for their factories.

Table 1 Savan=Seno Special Economic Zone

	Location	Area	Present Situation
Site A	Km 6	305ha	● Developer：TAGS 270ha ● Under feasibility study ● ST Group (running Duty Free Shop in Laos. Head office is in front of Wattai Airport) 35ha
Site B	Km 28	20 ha	● Developer：not yet determined ● Japan Logistics 3ha ● Relocation of framers solved
Site C	Km 10	220ha+50ha	● Developer：Pacific Stream Development (Malaysian company) ● May 18, 2007 MOU ● Under construction ● Japanese metal company from Manila ● 50ha：Savan Vegas Hotel & Casino constructed by Joint venture ST Group and Macao company ● Running Casino
Site B1	Km 25	200ha	National land available

(Source) The Author

6. Alternative Route to Bangkok=Hanoi

Although the construction of East West Economic Corridor has completed and it has connected Vietnam to Laos and Thailand, the traffic volume for the Second Mekong International Bridge is estimated at about 100 cars or so daily. The inflow of foreign direct investment to Sava=Seno SPZ has not had much indication to increase. The reason seems to be mainly due to geographical characteristics of Savannakhet.

There exist at least two routes to connect Bangkok to Hanoi. The First route is via Savannakhet. Its total distance is 1577 km (Bangkok→Mukhdahan→Second Mekong International Bridge→Savannakhet→[East West Economic Corridor]→Dan Savan→Lao Bao →Don Ha→[National Road No. 12]→Hanoi). [3] **The Second route from Bangkok to Hanoi is via Thakek. Total distance is 1312 km. This route is an alternative one not via Savannakhet (i.e. Bangkok→Nakhon Phanom→[by ferry]→Thakek→[National Road No. 8]→Naphao→ Chalo→Vinh→Hanoi). The Second route from Bangkok to Hanoi via Thakek is 265 km by one way shorter than the First route via Savannakhet. The former is 530 km by round trip shorter than the latter. In fact, cargo between Bangkok and Hanoi is usually carried by the Second route via Thakek (Table 2 and Figure 3)。**

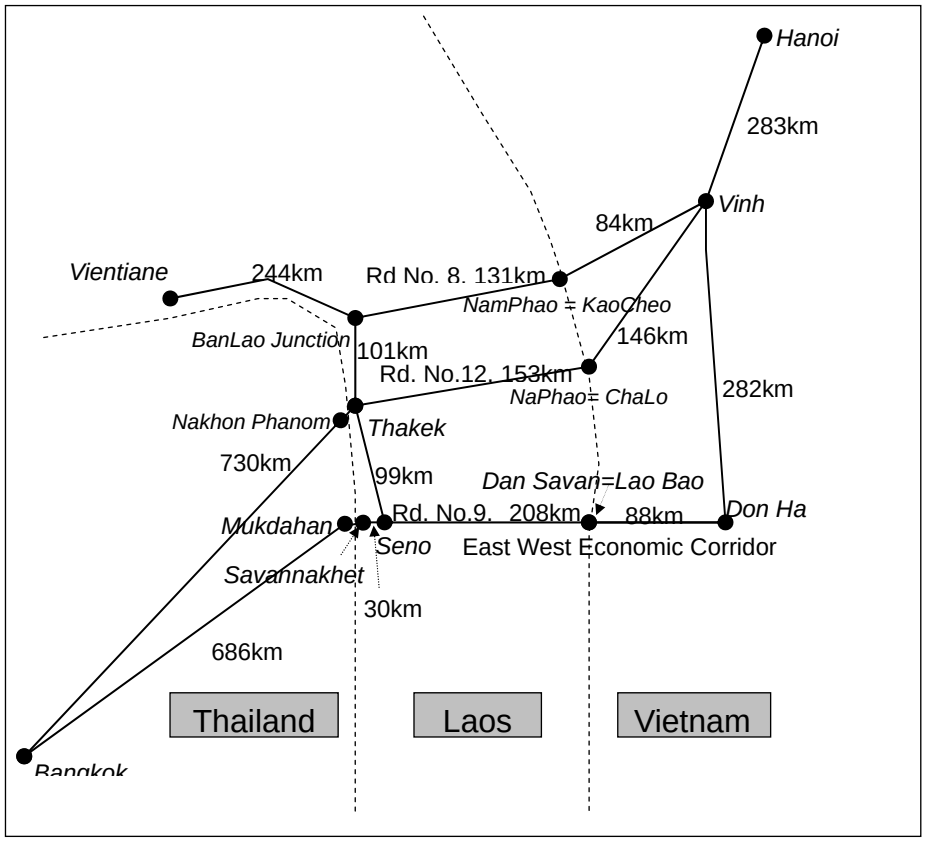
Table 2 Two Bangkok=Hanoi Routes

	National Road	Distance km
(1) BKK→Savannakhet→Hanoi		**Total 1577**
BKK→Mukdahan	R2	
	R207	686
	R2169	
	R212	
Savannakhet→Dan Savan	R9	238
Lao Bao→Don Ha	R9	88
Don Ha→Hanoi	R1	565
(2) BKK→Thakek→Hanoi		**Total 1312**
BKK→Nakhon Phanom	R1	
	R2	
	R23	730
	R213	
	R22	
Thakek→Na Phao	R12	153
Chalo→Vinh	R8	146
Vinh→Hanoi	R1	283
(3)=(1)-(2)		**One way 235**
		Round trip 470

(Source) The Author

[3] Trial implemented by Sankyu Inc. on January 2007.

Figure 3 Two Bangkok=Hanoi Routes and Two Vientiane=Hanoi Routes



(Source) The Author

In case of carrying on land cargo Between Vientiane to Hanoi, forwarders usually never adopt the route via Savannakhet. The First route via Savannakhet has 1305 km (i.e. Vientiane→Savannakhet→to Dan Savan→Lao=Vietnam border→Lao Bao→Don Ha→[National Road No. 1]→Hanoi). The Second route via Ban Lao Junction has 742 km (i.e. Vientiane→[National Road No. 13]→Ban Lao Junction→[National Road No. 8]→Nam Phao [Laos]→Kao Cheo [Vietnam]→Hanoi). The Second route from Vientiane to Hanoi via Ban Lao Junction is 563 km by one way shorter than the First route via Savannakhet. The former is 1126 km by round trip shorter than the latter. The Second route from Vientiane to Hanoi via Ban Lao Junction can save time and fuel very much. (Table 3)。

Table 4 Vientiane=Hanoi Routes

	National road	Distance km
(1) VTE→Seno (Savannakhet)→Hanoi		Total 1305
VTE→Seno (Savannakhet)	R13	444
Seno (Savannakhet)→Dan Savan	R9	208
Lao Bao→Don Ha	R9	88
Don Ha→Hanoi	R1	565
(2) VTE →Ban Lao Junction→Hanoi		Total 742
VTE →Ban Lao Junction	R13	244
Ban Lao Junction→Nam Phao	R8	131
Kao Cheo→Vinh	R8	84
Vinh→Hanoi	R1	283
(3)=(1)-(2)		One way 563
		Round trip 1126

(Source) The Author

In addition, traffic volume in Vietnamese roads is so large that cars or trucks can not drive with high speed. According to the report by Japan's Ministry of Economy, Trade and Industry (Ministry of Economy, Trade and Industry [2008]), average speed of the traffic in Lao roads is 53 km/h. While, that on Vietnamese roads is only 34 km/h. In order to save time, it is better not to drive in Vietnam. Concerning the route via Savannakhet from Bangkok to Hanoi, total road distance in Vietnam is 653 km. While, concerning the route via Thakek from Bangkok to Hanoi, it is only 429 km. The difference is 224 km, where traffic can drive with higher speed on road in Laos.

Table 5 Two Bangkok=Ho Chi Minh Routes

	National Road	Distance km
(1) BKK→Savannakhet→Ho Chi Minh		**Total 2200**
BKK→Mukdahan	R2	
	R207	686
	R2169	
	R212	
Savannakhet→Dan Savan	R9	238
Lao Bao→Don Ha	R9	88
Don Ha→Ho Chi Minh	R1	1188
(2) BKK→Trat→Ho Chi Minh		**Total 924**
(3)=(1)-(2)		**One way 1276**
		Round trip 2552

(Source) The Author

Japan's Ministry of Economy, Trade and Industry ran a trial of cargo transport via Savannakhet, Laos between Bangkok and Ho Chi Minh. According to the report, the total distance between them is 2200 km. The total distance of an alternative route (Southern Coastal Sub-Corridor) from Bangkok to Ho Chi Minh via Trat and Koh Kong (Cambodia) is only 924 km (Table 5). The latter (Southern Coastal Sub-Corridor) is 1276 km by one way shorter than the former route via Savannakhet. It is 2552 km by round trip shorter than the former (the route via Savannakhet). If Southern Coastal Sub-Corridor is completed, the volume of cargo distribution from Bangkok to Ho Chi Minh via Savannakhet will decrease drastically.

Therfore, Savan=Seno SPZ is some way off cargo distribution network between Bangkok and Hanoi, and between Bangkok and Ho Chi Minh. That is why the traffic volume via East West Economic Corridor and Second Mekong International Bridge has not increased so far. It is mineral exploitation companies such as Lanexane Minerals Limited, factories established in Lao Bao Industrial Estate, or companies using Da Nang Port that receive benefit from East West Economic Corridor and Second Mekong International Bridge. Thus, it is natural that only 100 cars and trucks or so per day should pass Second Mekong International Bridge. Industrial parks in Vientiane seem to have more potential as factory sites. In addition, establishment of industrial parks in Thakek should also be taken into consideration owed to its location advantage.

7. Industrial Parks in Vientiane

Availability for factory sites in Vientiane is critically imperative in order to invite Sub-Regionally complementary type of companies. There is no doubt that Vientiane Capital and Vientiane province have the best investment environment in Laos from the view points of politics, economy, information, finance, banking, culture, infrastructure like electricity, water supply, road, telecommunication, education, law, amenity like foreign food restaurants, golf courses, gym, mini marts, drinking bars, speedy import and export procedures, etc. Therefore, industrial parks have attracted a great deal of public attention.

Present Vientiane Industrial Park is located at KM 18 from the center of Vientiane Capital along National Road 13N (Figure 4). It is only 15 km from the Mekong International Bridge, through Thanaleang Railroad Station. It has greater location advantage for export and import activities.

The total area of planed Vientiane Industrial Park is estimated at more than 2000, among which 55 hectares have already been occupied by 12 companies (Table 6). Although electricity is provided to 55 hectares in Vientiane Industrial park, it is not available for the rest of the areas. Roads inside Vientiane Industrial Park are unpaved, and roads connecting to the Mekong International Bride are unpaved and are covered with water during rainy season. It is difficult for companies to operate regular economic activities with just in time under such inadequate equipped infrastructure. Some part in the Vientiane Industrial Park is desired to be established with well equipped infrastructure. But rental price should be cheaper than that of industrial parks in Cambodia, Vietnam, etc., because factories established in inland location far from the seaports must spend more time and cost to import materials and export their products. In addition, customs service must improve in order that companies to complete export and import procedure within two hours from and to Vientiane Industrial Park. At present, transport cost is very high because of the empty carriage for return trips, and consolidated service is not available. Logistic park also needs to be established in order to solve these problems.

Figure 4 Vientiane Industrial Park

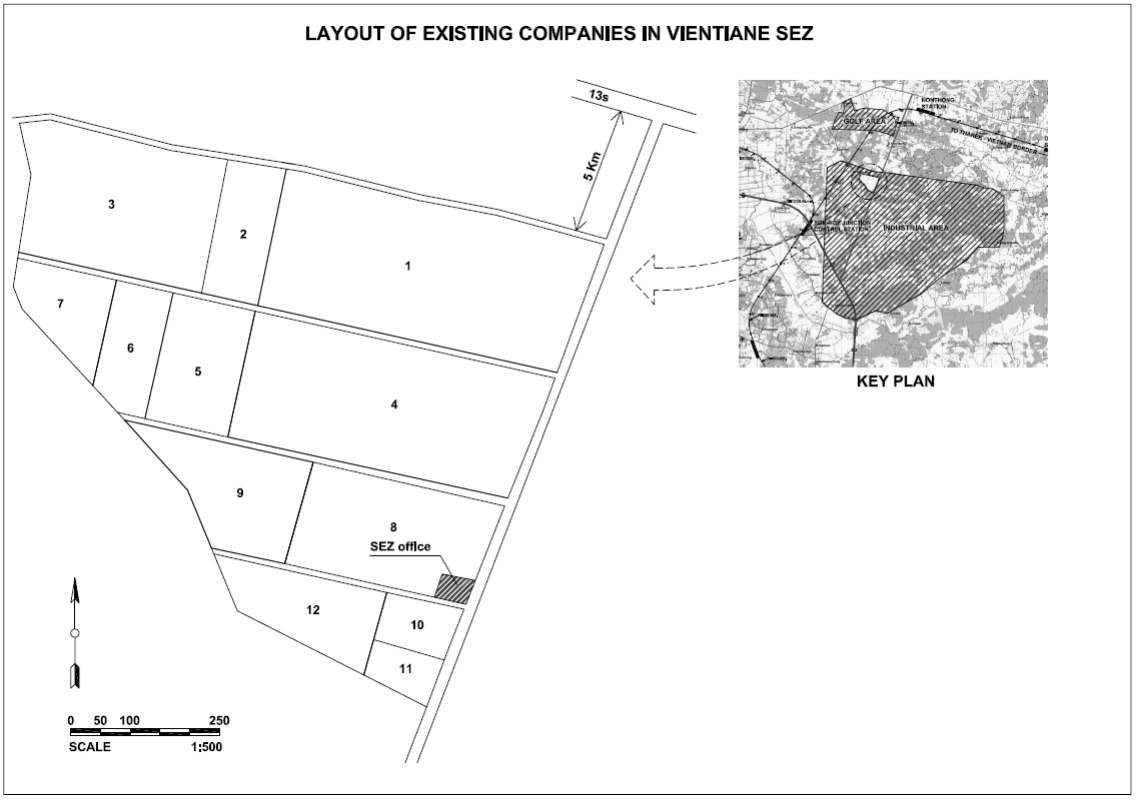


Table 6 List of companies in Vientiane Industrial Park

Name	Sector	Area	Nationality
1. Concrete Factory KM21	Cement/Concrete	12.10	Laos
2. Sirimongkhoun Factory	Steel bar	2.13	Laos
3. Electricite du Laos (EDL)	Nammang 3 Substation	7.15	Laos
4. Lao Furniture Industry Factory	Wood products	10.04	Laos
5. Vientiane Food State Enterprise	Rice warehouse	3.00	Laos
6. Lao Alloy Company	Alloy products	2.15	Laos/China
7. Hougheuang Lao-Viet Factory	Steel bar/Roof tiles	2.10	Vietnam
8. Vilatin Steel Factory	Steel mill	5.66	Vietnam
9. White Charcoal Factory	White charcoal	3.88	Laos
10. Lao-Russian Vehicle Assembly Factory	Vehicle assembly	2.00	Laos/Vietnam/Russia
11. Vongsane Steel Factory	Steel bar	0.91	Laos
12. Lao Silicon	Silicon	3.47	Laos
Total		54.59	

(Source) Japan Oversea Development Cooperation (JODC) and Pacific Consultants International (PCI) [2008], *Basic Study on Vientiane Export Processing Zone (VEPZ) and Vientiane Logistics Park (VLP) Development.*

8. Dilemma and Option of Infrastructure Developments in Laos

Kuchiki (2007) put infrastructure development, capacity building and innovation as pre-requisites for industrial cluster development in Sequences. While whether or not sequences matter may not be so obvious, it is almost certain that they are necessary for modern economic activities, especially industrialization. It is also obvious that someone would have to pay to have them installed in a sustainable way. For those with strong characteristics of public and quasi public goods, potential benefiters or people living with in certain boundaries such as cities, provinces and countries are generally the ones that have to bear the costs.

As a consequence, numbers of people with in these geographical areas, in other word population densities, are likely to play crucial roles in what public goods may be provided. We argue that in a country where small numbers of people are scattering over relatively larger area like Laos, nation-wide development of sufficient infrastructure for

industrialization would be unlikely or very difficult. We will show in the following, statistics based on nation-wide surveys, to support our claim before arriving at our proposal that concentrating limited resources on certain small geographical areas i.e. industrial parks, special economic zones developments can be a effective option to foster economic activities, especially secondary ones with in the country.

8.1 Population Distribution

Laos' total land area of 236,800 square kilometers is divided into 18 provinces, which are further divided to 142 districts and then 9006 villages according population and housing survey in 2005. Simple average size of the districts is 1,667.6 square kilometers or about 2.6 times the size of Singapore. Sizes of population in these 142 districts range from about 4,000 to 150,000 persons. 71% of them have less than or equal to 50,000, while only 2% or 4 districts are populated more than 100,000 persons.

Table 7 Urbanization by Provinces

Population Sizes	Number of Districts
up to 10,000	6
10,001 to 20,000	21
20,001 to 30,000	40
30,001 to 40,000	20
40,001 to 50,000	14
50,001 to 60,000	15
60,001 to 70,000	11
70,001 to 80,000	5
80,001 to 90,000	5
90,001 to 100,000	1
100,001 to 200,000	4

Source: Source: Population and Housing Census 2005.

Besides Vientiane Capital, which is still a medium size one by regional standards, there is virtually no cities in Laos. In Indochinese peninsula, only Laos does not have any first level administrative boundaries, or provinces in Lao case, with population exceeding one million. Population density for the whole country is 24

persons per square kilometer, increasing from 15 persons in 1995, but still by far the lowest in the region. 13 provinces have population densities less than 25 persons per square kilometer, 5 provinces have between 24 to 40 persons, while only the capital has over 170 persons per square kilometer according to the same census.

Table 8 Urbanization by Provinces (%)

	Urban	Rural with Roads	Rural without Roads
Northern Region			
Phongsaly	12.6	29	58.5
Louangnamtha	21.8	56	22.2
Oudomxay	15.2	45.8	39
Bokeo	13.7	53.9	32.4
Louangphabang	18.8	49.7	31.4
Houaphanh	11.8	51	37.2
Xayyabouly	22.7	67.2	10.1
Central Region			
Vientiane Capital	81.6	17.4	0.1
Xiengkhuang	21.1	61	18
Vientiane	23.6	68.5	8
Bolikhamxay	26.3	57.6	16
Khammouane	21.3	50.6	28.1
Savannakhet	22.4	60.6	16.9
Xaysomboon SR	17.5	48.2	34.4
Southern Region			
Saravane	8.6	75.8	15.6
Xekong	21.3	54.6	24.1
Champasak	20.5	51	28.5
Attapeu	17	38.4	44.6

Source: Population and Housing Census 2005.

While population density in the capital is 7 times bigger than the national average, only 3 of 10 most populated districts are in the capital. Therefore, rather than sizes of the population, degree of concentration of people in urban areas seems to be the main reason for this big difference. As in Table 8, urbanization rate in the Capital is 81.6% while they are between just 8.6 to 26.3% in other 17 provinces. Further more, between 8 to 58.5% of population in provinces other than Vientiane Capital are living in rural area without road accesses.

8.2 Road

Two primary sources are available to examine provincial road accessibility in Laos. According to Lao Expenditure and Consumption Survey in 2002/03 (Henceforth LECS

3), a sample survey, many villages are more than several kilometers from nearest roads. Situations are far worse in Northern and Southern mountainous regions, where the average distances from roads are longer than 10 km. Besides the Capital where all surveyed villages are reachable in rainy season, about 8% in Vientiane province (next to the capital) and up to about 78% in other provinces are only reachable during dry season.

Table 9 Road Accessibility by Provinces (% or km)

	Average Distance to Nearest Road	Reachable in Dry Season	Reachable in Rainy Season	Average Distance to Public Transport
Northern Region				
Phongsaly	16	32	27	19
Louangnamtha	16	47	34	23
Oudomxay	7	51	26	15
Bokeo	8	76	44	10
Louangphabang	10	53	51	11
Houaphanh	9	41	28	19
Xayyabouly	2	77	71	4
Central Region				
Vientiane Capital	0	100	100	0
Xiengkhuang	8	83	41	18
Vientiane	2	93	92	4
Bolikhamxay	5	74	63	5
Khammouane	1	78	54	5
Savannakhet	1	96	64	7
Xaysomboon SR	-	-	54	22
Southern Region				
Saravane	1	83	65	8
Xekong	12	74	58	21
Champasak	2	64	52	3
Attapeu	3	85	53	25

Source: Lao Expenditure and Consumption Survey 2002/03.

Previous Table 8 showing statistics on urbanization from population and housing census in 2005 also provided figures on how road network are under developed in Laos. While 0.1% of rural population living in rural areas without roads in the Capital, it is 8% in Vientiane province and between about 15 to 58% in other provinces. 6 provinces have more than 30% of its population living in rural areas with road accesses. Even for those with roads, when the nearest roads are more than 10 km away, they are not likely to be of any help to modern economic activities.

8.3 Electricity

Access to electricity is far better in the capital than the rest. 94.6% of the population are

connected to national grid in Vientiane Capital, while only between 17.4% and 66% do so in other provinces. Quite large percentages of population are still not electrified in other provinces.

Table 10 Electricity Accessibility by Provinces

	National Grid	In-house Generator	Battery	Not Electrified
Northern Region				
Phongsaly	11.8	1	18.5	67.5
Louangnamtha	28.5	1.6	6.1	62.5
Oudomxay	17.4	2.6	4.9	73.4
Bokeo	26.6	1.7	6.6	61.3
Louangphabang	32.9	1.8	6.6	55.8
Houaphanh	27	0.8	15.1	54.4
Xayyabouly	33	1.4	7	57.4
Central Region				
Vientiane Capital	94.8	0.3	0.7	2.1
Xiengkhuang	22.4	5.6	8.4	62.8
Vientiane	76	0.5	5.2	17.7
Bolikhamxay	55.9	0.3	7.8	34.7
Khammouane	63.7	0.3	4.6	30.1
Savannakhet	53.3	0.5	6.6	38.5
Xaysomboon SR	39.8	2.5	12.6	44.2
Southern Region				
Saravane	42.4	0.8	5.2	50.4
Xekong	32.1	0.8	8.5	57.4
Champasak	49.7	0.8	8	39.8
Attapeu	19.2	0.2	3.9	75.3

Source: Population and Housing Census 2005.

There is however very good reason to why electrification rate is low in the country which electricity is one of the main exports. On one hand, exporting electricity to neighboring country is highly profitable due to large demands. On the other hand, supplying electricity to small communities scattered over large area of Laos can hardly be done in profitable ways. Even in the capital, new houses as well as factories along small road without electric poles still have to pay for installment costs of necessary to bring electricity from the main roads. For many far away from existing grid, off-grid electrifications making use of small scale solar power generators, car batteries are among few options left. While these off-grid electrifications can partly be the solution for households' demands for electricity, they are generally not sufficient both in terms of quantity and quality for modern economic activities.

8.4 Water

Accesses to safe water remain problems to be solved nation-wide, including Vientiane Capital. More than 50% of capital's population still does not have access to running water. As a consequence, about 53% of people in the capital still have to rely on water from wells. Situations are far worse in other provinces where people having access to running water are just more or less than about 10%.

Due to abundant water resources that it posses together with small size and degree of concentration of population, this low accessibility to running water may not translate to low accessibility to safe water for the moment. They are undoubtedly posing big problems to economic, especially industrial ones. As a matter of fact, many garment factories, the largest manufacturing industry in Laos, use underground water instead of running water in their production activities. The insufficient running water network is likely to increase initial and concurrent costs for businesses.

Table 11 Water Accessibility by Provinces

	Running Water	Well	River	Mounitain
Northern Region				
Phongsaly	7	5	20.3	65.8
Louangnamtha	10.1	21.6	18.4	48.3
Oudomxay	9.5	12.8	31.3	44.7
Bokeo	7.3	27.2	10.2	52.5
Louangphabang	12.1	4.4	34.8	46.4
Houaphanh	5.4	11.8	32.4	48.8
Xayyabouly	3.8	44.1	25.7	25.6
Central Region				
Vientiane Capital	42.5	53.5	1.5	0.2
Xiengkhuang	6	46.3	16.2	30.6
Vientiane	8	63.4	13	14
Bolikhamxay	6.1	63	15.7	13.6
Khammouane	8.8	65.5	20.8	3.1
Savannakhet	9.4	68.8	14.7	5.3
Xaysomboon SR	9.3	9.9	25.3	54.5
Southern Region				
Saravane	10.6	53.8	28.5	6.2
Xekong	11.8	30.2	22.9	33.6
Champasak	8.1	55.6	32.2	2.8
Attapeu	9.2	51.6	35.3	3

Source: Population and Housing Census 2005.

8.5 Education

Education, including primary ones, is the key to both capacity building and innovation. Providing universal education for people in the country has however been

one of the most difficult challenges for any governments ruling Laos since 1893. The situation has improved significantly since 1975, especially for primary education. The progress remains slow for education about primary ones, as many villages still do not have secondary schools.

According to population and housing census in 2005, only the capital has the percentage of people, 6 of ages and above, that have never been to schools as single digit. From about 13 to 47% or provincial populations has never been to school in the rest 17 provinces. Only capital has more than 10% of its people completed lower secondary schools, out of which only about 4% managed to graduate from universities.

Table 12 Primary Education Accessibility by Provinces

	Primary School in Village*	Secondary School in Village*	Never been to School	Primary School	Lower Secondary School	Upper Secondary School	University
Northern Region							
Phongsaly	95	0	47.7	8	2.9	1.3	0.3
Louangnamtha	75	4	40.5	10.6	4.2	2.5	0.5
Oudomxay	78	16	37.3	11	3.7	1.8	0.4
Bokeo	56	5	34	12.4	4.6	2.6	0.5
Louangphabang	78	4	26.9	13.8	4.6	4.1	0.5
Houaphanh	88	3	29	13.2	3.9	1.2	0.3
Xayyabouly	94	10	14.5	30.5	7.2	2.9	0.5
Central Region							
Vientiane Capital	88	26	5.6	15.4	10.3	15.1	4.1
Xiengkhuang	88	9	21.8	14.8	7.4	2.6	0.6
Vientiane	73	14	13.7	18.6	8.7	6.6	0.9
Bolikhamxay	88	6	15.6	19.5	6.2	3.8	0.6
Khammouane	84	7	23.2	14.5	5.5	3.7	0.6
Savannakhet	75	9	28.1	13.8	5.5	4.5	0.5
Xaysomboon SR	91	6	20.2	14.2	6.1	2.6	1
Southern Region							
Saravane	63	7	34.8	11.7	3.5	1.9	0.3
Xekong	65	7	36.8	8	2.7	1.5	0.8
Champasak	77	5	15.3	18.6	6.7	5.5	0.6
Attapeu	89	22	32.4	9.4	3.7	2.2	0.6

Source: Population and Housing Census (2005).

* Lao Expenditure and Consumption Survey 2002/03.

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