

## APPENDICES

### APPENDIX 1

#### INVESTMENT PROMOTION

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### INVESTMENT PROMOTION

In Appendix 1, present situation of investment promotion in NBR and SKR is analyzed. The purpose of the analysis in Appendix 1 is to clarify issues and problems on investment promotion in CBR (both NBR and SKR), and to prepare necessary recommendations for NBR and SKR respectively to promote investment. The structure of Appendix 1 is shown in Figure A1.1.

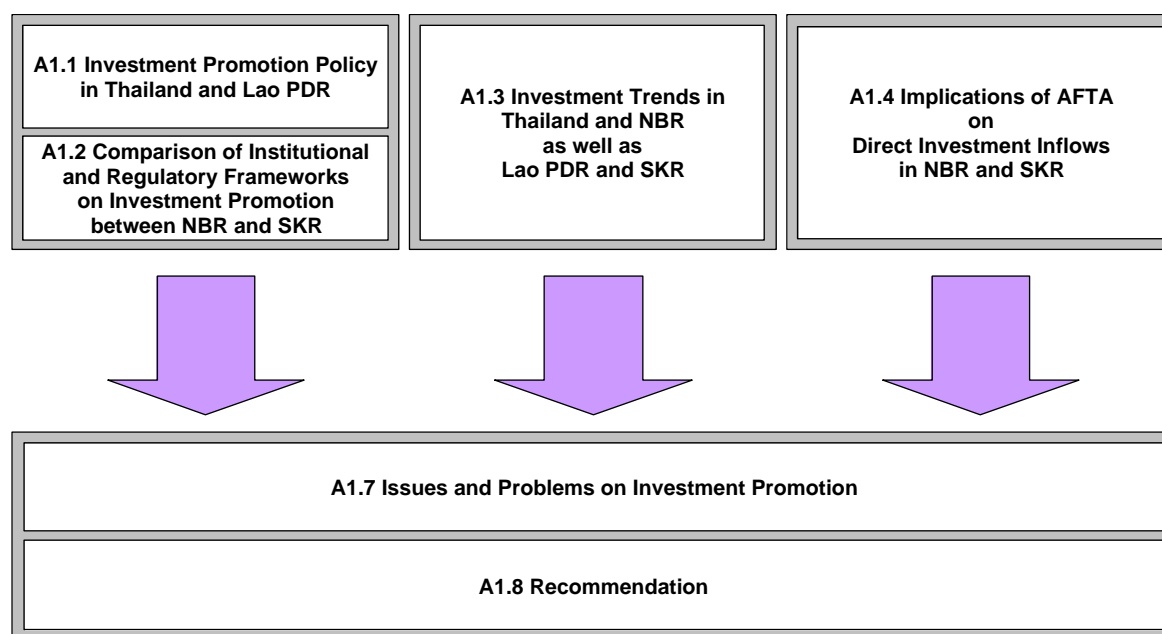


Figure A1.1 Structure of Appendix 1 Investment Promotion

A1.1 is the description of investment policies in Thailand and Lao PDR. In A1.2, investment promotion frameworks in the two countries are compared so that one can sense the difference between the investment climates in NBR and SKR. A1.3 is the data section showing the historical investment trends in the two countries as well as NBR and SKR. A1.4 presents implications of AFTA in the context of investment promotion in NBR and SKR. A1.5 is the summary of issues and problems in NBR and SKR for promoting investment. Finally, the directions for improving investment promotion activities in NBR and SKR are presented in A1.6.

## **A1.1 Investment Promotion Policy in Thailand and Lao PDR**

The Thai government, more specifically the Board of Investment (BOI), revised its investment policy in 2000. In Lao PDR, its investment policy is gradually improving in recent years. Both countries' investment policies are reviewed in A1.1, so that a comparison of institutional and regulatory frameworks on investment promotion between NBR and SKR can be done in A1.2.

### **A1.1.1 Investment Promotion Policy of Thailand**

#### **Legal Aspects**

Investment promotion policy of Thailand is based on the Investment Promotion Act, which was enacted in 1977 and amended in 1991. Since the amendment in 1991, there have been several announcements on policies and criteria for investment promotion. On August 1, 2000, BOI announced adjustments of policies and criteria for investment promotion<sup>1</sup>. The adjustment was made in order to relieve the fiscal burden of the government and respond to the current and future economic and investment situation of Thailand. With this announcement, the Board of Investment Announcement No. 1/2536 dated April 9, 1993 was repealed. Moreover, if any announcement of BOI or the Office of BOI (OBOI) conflicts with this announcement, this announcement is to prevail.

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<sup>1</sup> Board of Investment Announcement No. 1/2543 and NO. 2/2543.

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### **Objectives of Investment Promotion Policy**

There are 6 policy objectives as follows:

- To enhance efficiency and effectiveness of tax privileges by granting them to projects that actually benefit the economy (Accordingly, promoted entities must report the operating results of their promoted projects to BOI for review prior to the application of tax and duty privileges for that year.);
- To promote development of quality and production standards in Thai industries and to enhance the competitiveness of Thai industries in the world market (For this purpose, every promoted project that has investment capital of 10 million Baht and upwards (excluding land and working capital) must obtain ISO 9000 certification or similar international certification.);
- To promote development of Thai industries in line with international trade and investment agreements (Previous conditions on exports and use of local material are repealed.);
- To specially promote regions or areas with low income and inadequate investment facilities by giving maximum tax and duty privileges to these regions or areas;
- To give importance to small and medium industries by applying a minimum level of investment capital of 1 million Baht (excluding cost of land and working capital) for projects eligible for promotion; and
- To put priority on activities in agriculture and agricultural products, projects related to technological and human resource development, public utilities and infrastructure, environmental protection and conservation and targeted industries.

## Criteria for Project Approval

Criteria for project approval are based on fairness and transparency. BOI applies the criteria shown in Table A1.1, in determining the suitability of a project for its investment promotion privileges.

**Table A1.1 Criteria for Project Approval**

<b>For a project with investment capital (excluding cost of land and working capital) not exceeding 500 million baht</b>	
Value added	Not less than 20 % of sales revenue (Exceptions: Projects that manufacture electronic products and parts or process agricultural produce, and projects granted special approval by BOI)
Ratio of liability to registered capital	Not exceed 3 to 1 for a newly established project (Expansion projects are considered on a case by case basis.)
Production process and machinery	Modern production process and new machinery are used. (In cases where old machinery is used, its efficiency must be certified by reliable institutions and BOI's approval must be obtained.)
Environmental protection system	Adequate environmental protection systems are installed. (For projects with a potential environmental threat, BOI prescribes special conditions on both the location of the project and the manner of pollution treatment.)
<b>For a project with investment capital (excluding cost of land and working capital) exceeding 500 million baht</b>	
Value added	The same criteria applied to the projects with investment capital (excluding cost of land and working capital) not exceeding 500 million baht are used.
Ratio of liability to registered capital	
Production process and machinery	
Environmental protection system	
Project's feasibility	A feasibility study report must be submitted as prescribed by BOI.
<b>For a concession project or privatisation project of a state enterprise (Criteria are based on the cabinet's decision dated 25 May 1998.)</b>	
A project of state enterprise	No promotion granted
A Build Transfer Operate or Build Operate Transfer concession project by private sector	The state agency owning the project must submit its project to BOI for consideration prior to any invitation to bid. Bidders are informed any promotional privilege entitled to them, prior to the bidding. In principle, BOI will not consider a project where the private sector pays for a concession, unless such payment is deemed to represent a reasonable investment for the state.
A Build Own Operate project including a lease by the private sector or rental payment to the state	Normal criteria are used.
A privatisation project	Only expansions after the privatisation are considered for promotion.

Source: BOI.

## Criteria for Shareholding by Foreign Investors

Limitation of foreign shareholding in manufacturing activities is relaxed. The criteria shown in Table A1.2 are applied.

**Table A1.2 Criteria for Shareholding by Foreign Investors**

A project in agriculture, animal husbandry, fishery, mineral exploration and mining, and service business under Schedule One of the Foreign Business Act B.E. 2542	Thai nationals must hold shares totalling not less than 51% of the registered capital.
A manufacturing project in any zone	Foreign investors may hold a majority or all shares in the promoted project.
BOI may specifically fix the shareholding of foreign investors on some promoted projects when it is deemed appropriate.	

Source: BOI.

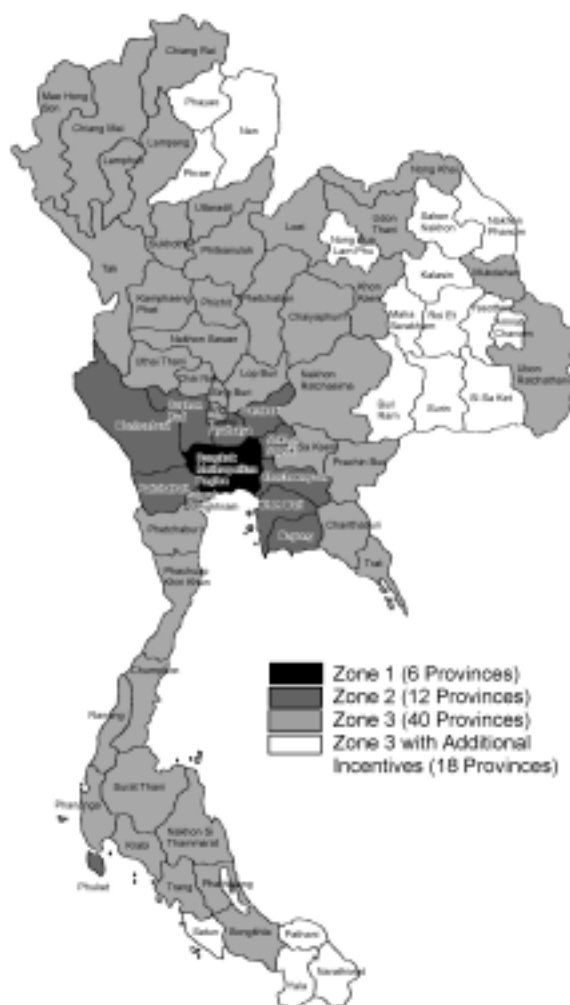
## Zoning for Investment Promotion

There are three investment zones based on economic factors such as the level of income and the available infrastructure in each province (Table A1.3 and Figure A1.2).

**Table A1.3 Investment Zones**

Zone 1 (6 provinces)	Bangkok, Smut Prakan, Samut Sakhon, Pathum Thani, Nonthaburi and Nakhon Pathom
Zone 2 (12 provinces)	Samut Songkhram, Ratchaburi, Kanchanaburi, Suphanburi, AngThong, Ayutthaya, Saraburi, Nakhon Nayok, Chachoengsao, Chon Buri, Rayong and Phuket
Zone 3 (58 provinces)	The remaining 58 provinces with low income and less developed infrastructure All areas in the Zone 3 provinces are designated as Investment Promotion Zones.

Source: BOI.



**Figure A1.2 Investment Zoning**

## Tax and Duty Privileges

Tax and duty privileges for approved investment projects have been enforced as shown in Table A1.4.

**Table A1.4 Tax and Duty Privileges**

	Reduction of import duty on machinery	Exemption of corporate income tax	Exemption of import duty on raw or essential materials used in manufacturing of export proucts
Zone 1	50% for machinery subject to import duty of not less than 10 %	3 years for projects located within industrial estates or promoted industrial zones  Conditions: For a project with capital investment of 10 million baht or more excluding cost of land and working capital, it has to obtain ISO 9000 or similar international standard certification within 2 years from its start up date, otherwise the corporate income tax exemption will be reduced by 1 year.	1 year
Zone 2	50% for machinery subject to import duty of not less than 10 %	3 years, increased to 5 years for projects located within industrial estates or promoted industrial zones  Conditions: For a project with capital investment of 10 million baht or more excluding cost of land and working capital, it has to obtain ISO 9000 or similar international standard certification within 2 years from its start up date, otherwise the corporate income tax exemption will be reduced by 1 year.	1 year
Zone 3	100%	8 years  Conditions: For a project with capital investment of 10 million baht or more excluding cost of land and working capital, it has to obtain ISO 9000 or similar international standard certification within 2 years from its start up date, otherwise the corporate income tax exemption will be reduced by 1 year.	5 years
Additional privileges for Zone 3			
40 Provinces	Nong Khai, Ubon Ratchathani, Chaiyaphum, Mukdahan, Udon Thani, Loei, Khon Kaen, Nakhon Ratchasima, Phtchabun, Pichit, Sukhothai, Chiang Rai, Mae Hong Son, Uttaradit, Tak, Phisanulok, Kamphaeng Phet, Lamphang, Chiang Mai, Lamphun, Trat, Chanthaburi, Prachuab Khiri Khan, Phetchaburi, Prachin Buri, Lop Buri, Sing Buri, Chai Nat, Uthai Thani, Nakhon Sawan, Sa Kaew, Phangnga, Songkhla, Krabi, Surat Thani, Chumphon, Trang, Phattalung, Nakhon Si Thammarat and Ranong		
	A project located within industrial estates or promoted industrial zones	50% reduction of corporate tax for 5 years after the exemption period Double deduction from taxable income of transportation, electricity and water costs for 10 years from the date of first sales.	
	A project located outside industrial estates or promoted industrial zones	Deduction of infrastructure installation and construction cost from net profit: 25% of the project's infrastructure installation or construction cost can be deducted. Deduction can be made from net profit of any year within 10 years from the date of first sales. One or more years can be chosen for such deduction. The deduction is additional to normal depreciation.	
18 Provinces	Si Sa Ket, Nong Bualamphu, Surin, Yasothon, Maha Sarakham, Nakhon Phanom, Roi Et, Kalasin, Sakhon Nakhon, Buri Ram, Amnat Charoen, Phrae, Phayao, Nan, Sathun, Pattani, Yala, and Narathiwat		
	A project located within the 18 provinces	50% reduction of corporate tax for 5 years after the exemption period Double deduction from taxable income of transportation, electricity and water costs for 10 years from the date of first sales. Deduction of infrastructure installation and construction cost from net profit: 25% of the project's infrastructure installation or construction cost can be deducted. Deduction can be made from net profit of any year within 10 years from the date of first sales. One or more years can be chosen for such deduction. The deduction is additional to normal depreciation.	

Source: BOI.

## Priority Investment Activities

While the above tax and duty privileges are applied based on the location of each project under the specified conditions regardless of the type of investment activities, privileges for priority investment activities are granted to the five types of project activities shown in Table 5, regardless of their locations. The privileges for priority projects are also shown in Table A1.5. The details of priority project activities are indicated in the list of activities eligible for investment promotion in BOI Announcement No. 2/2543.

**Table A1.5 Types of Priority Projects and Privileges**

Types of Priority Projects	(1) Agriculture and agricultural products (2) Direct involvement in technological and human resource development (3) Public utilities and infrastructure (4) Environmental protection and conservation (5) Targeted industries
Privileges	Exemption of import duty on machinery regardless of location Corporate income tax exemption for 8 years, regardless of location Other privileges entitled for each Zone

Source: BOI.

### Factory Relocation

Existing activities in the Central area can be granted promotion status by BOI, if they relocate to the other regions. There are four conditions for obtaining promotion status shown in Table A1.6. Privileges for factory relocation are equal to that of a new investment project to the respective zone, either Zone 2 or Zone 3.

**Table A1.6 Conditions for Obtaining Promotion Status on Factory Relocation**

(1) The operation must relocate from Zone 1 to Zone 2, or from Zone 1 or Zone 2 to Zone 3.
(2) The operation must relocate to industrial estates or promoted industrial zones.
(3) The type of activities must be one included in the list of activities eligible for promotion, and the size of the investment must be in accordance with that specified by BOI.
(4) The existing operation must be closed down and the operation at the relocated location must be started within 2 years from the date of receiving the promotion certificate.

Source: BOI.

### Requirement to Report Operating Results

All promoted projects must report their annual operating results to BOI for review prior to BOI granting tax and duty privileges for that year.

### Exemptions

Some exceptions for the application of the privileges for promoted projects have been prepared in order to manage the transitional process between the previous investment promotion policy and the current one.

## **A1.1.2 Investment Promotion Policy of Lao PDR**

### **Legal Aspects**

The current investment promotion policy of Lao PDR is based on the Law on the Promotion and Management of Foreign Investment in the Lao People's Democratic Republic, which came into force on 20 June 1994. The law prescribes (1) prohibited investment fields, (2) conditions for investing in Lao PDR, (3) possible forms of investment, (4) benefits, rights and obligations of foreign investors, and (5) the organization of foreign investment management. By this law, the foreign investment law of the Lao PDR No. 07/PSA dated 19 April 1988 was replaced. Detailed regulations for the implementation of the Law on the Promotion and Management of Foreign Investment are subject to Presidential Decree to be issued.

### **Objectives of Investment Promotion Policy**

Although objectives of investment promotion are not clearly specified in the Law on the Promotion and Management of Foreign Investment, the current investment promotion policy is aiming at generating incomes and creating job opportunities in the country by attracting investments, and as a result, boosting development and economic growth.

### **Forms of foreign investment**

There are two forms of foreign investment, (1) joint venture with one or more domestic Lao investors and (2) wholly foreign owned enterprise. Foreign investors in a joint venture must contribute at least 30% of the total equity to that joint venture.

### **Criteria for Project Approval**

Criteria for project approval are not indicated. However, when a potential investor contacts with the Foreign Investment Management Committee (FIMC), FIMC will offer recommendation for alteration or modification of the investment project based on the needs of the country, government requirements and other feasibility factors. Foreign investors may not invest in the fields that are detrimental to national security, the natural environment, public health or the national culture.

### **Zoning for Investment Promotion**

Currently, investment promotion zones are not specified.

## Benefits, Rights and Obligations, Including Tax and Duty Privileges

Investment incentives in Lao PDR according to the Law on the Promotion and Management of Foreign Investment in the Lao People's Democratic Republic can be summarized in Table A1.7. Some of the incentives stated in the law are neither conclusive nor definitive. Partly due to such description, the investment incentives are currently viewed as less transparent and consistent by existing enterprises in Lao PDR.

**Table A1.7 Benefits, Rights and Obligations on Foreign Investment Projects**

<b>Benefits</b>	
1	Protection of foreign investments and the properties of foreign investors
2	No interference of the Lao government in the business management of foreign investors' enterprises
3	Facilitation of entry into, travel within, stay within and exit from Lao territory of foreign investors, their personnel and family members
4	Exemption from import duties of raw materials and intermediate components for re-export purposes
5	Exemption from export duties of all exported finished products
6	Reduction of import duties for raw materials and intermediate components for import substitution purposes in accordance with the applicable incentive policies
7	Special privileges and benefits for investments of large scales and significant positive impacts on socio-economy, including reduction (or exemption) from the profit taxes of 20%, and/or reduction (or exemption) from the import duties of 1%
<b>Rights</b>	
1	Right to employ skilled and expert foreign personnel with the approval of the Lao government
2	Right (or obligation) to open accounts both in Lao currency and in foreign convertible currency in the banks in Lao PDR
3	Right for foreign investors to repatriate earnings and capital from their investments other countries
4	Right for foreign personnel of foreign investments to repatriate their earnings after taxes
5	Right (or obligation) to pay import duties on equipment, means of production, spare parts and other materials used in the operation at a uniform flat rate of 1% of imported values
6	Right to submit disputes to economic arbitration authority of Lao PDR or any other mechanism for dispute resolution which disputants can agree upon
<b>Obligations</b>	
1	Obligation for foreign investors to give priority to Lao citizens in recruiting and hiring employees
2	Obligation for foreign investors to upgrade the skills of Lao employees in foreign invested enterprises
3	Obligation for foreign investors and their foreign personnel to pay personal income taxes at a flat rate of 10% of incomes earned in Lao PDR
4	Obligation for foreign invested enterprises to get periodic audit by the Lao government's financial authorities
5	Obligation for foreign investments to pay annual profit taxes at a uniform flat rate of 20%
6	Obligation for foreign investments to pay sector specific taxes, royalties, duties and fees prescribed in project agreements with the Lao government and/or in accordance with the applicable laws and regulations
7	Obligation for foreign investors to reserve funds from corporate profits after taxes, for the operation and development of their enterprises
8	Obligation for foreign investors to take measures necessary for environmental protection as well as health and safety of their workers and the public
9	Obligation for foreign investments to contribute to the social insurance and welfare programs for workers

Source: FIMC.

## Priority Investment Activities

In the investment guidebook, *A Guide to Doing Business in Laos*, the Lao government indicates selected potentially attractive sectors instead of priority investment activities. Such sectors are generally capital intensive and export oriented. Among them are mining, energy, agriculture and livestock, light manufacturing including wood processing, transportation infrastructure, tourism and service.

## One-stop-service of FIMC

FIMC assists, licenses, and monitors all the foreign investment projects through its one-stop-service. A foreign investment project can be legally established in Lao

PDR only upon receiving a written foreign investment license granted by FIMC. Within 60 days of the submission of a completed application with supporting documentation, FIMC notifies its licensing decision. In the mean time, concerned ministries and provincial authorities are consulted by FIMC on the foreign investment project applied. Within 90 days of receiving the foreign investment license from FIMC, a foreign investor has to register its license and start its investment in conformity with the feasibility study, the terms and conditions of the license.

The window of the one-stop-service is Investment Service Division (ISD). ISD has three service categories, information service, visa service and registration service. The information service section provides the following information and services: (1) Guidance and advise on how-to fill in application forms; (2) Reference service regarding the ministries concerned; (3) Information regarding investment incentives; (4) Information on the investment service fee and the investment registration charge; and (5) Processing of filled application forms for screening by Screening Division (SD). The visa service section provides issuance service of visas for investors. The registration service section provides investors with its service after the approval of applications by SD. However, the one-stop-service of ISD or FIMC is far from a real one-stop-service in terms of the availability of information and the reach of services provided.

## **A1.2 Comparison of Institutional and Regulatory Frameworks on Investment Promotion between NBR and SKR**

### **A1.2.1 Viewpoints of Investors**

From the viewpoint of potential investors, the institutional and regulatory framework on investment promotion (hereafter, the investment promotion framework) in a country where they are to invest is one of the key factors for their decisions due to its significant economic impact on their businesses. Other important factors may be labor cost and availability, materials cost and availability, marketing and sales cost including transportation cost, management cost including the cost of environmental protection, and the size of target market covered by the operation site to be established. However, those factors cannot be considered without taking into account the investment promotion framework, since such framework has strong influences on them. Also, when properly prepared, an investment promotion framework can mitigate disadvantages of the concerned region on those factors. Therefore, the discussion in this section is focused only on the investment promotion framework.

When an investor looks for his/her investment site, he/she will review the possible investment destinations all over the world and select the most attractive place. In this sense, a comparative analysis of investment destinations in the world or Asia may be appropriate. However, in general, Thailand is so far successfully attracting foreign direct investments. Based on this fact, it will be acceptable to consider that Thailand itself is one of the attractive investment destinations in Asia. Accordingly, if the investment climates of NBR and SKR are currently comparable to the popular investment destinations in Thailand, the two regions must be able to attract direct investments. Regarding this point, an analysis based on the direct investment data of BOI of Thailand is done in the later section of this chapter. Therefore, the analysis of this section is focused only on the comparison of the two regions, NBR and SKR, in terms of the investment promotion framework.

### **A1.2.2 Comparison of Regulatory Frameworks**

If an investor is looking for an investment site within NBR and SKR, he/she may select either NBR or SKR by a comparison of the two regions in terms of the attractiveness based on his/her perceived benefits from the investment promotion frameworks of the two regions. With this in mind, the investment promotion

frameworks in NBR of Thailand and SKR of Lao PDR are compared first in Table A1.8. (Although there may be other institutional and regulatory arrangements having influence on the decisions of potential investors than the investment promotion framework, those issues are to be discussed in other parts of the reports, sector by sector or issue by issue.)

First of all, NBR is more open than SKR in terms of the acceptance of investment projects. In Thailand, if any investor, regardless of the country origin, wants to establish his/her company, he/she can register and establish it either with or without the status of a BOI-certified company. On the other hand, in Lao PDR, no foreign investor can establish his/her company without an investment license by FIMC.

Second, the investment promotion policy in NBR is more transparent than that of SKR. In Lao PDR, both the criteria for project approval and the investment incentives additional to the uniform tax and duty privileges are applied by FIMC on a case by case basis without any objectively specified guidelines.

**Table A1.8 Comparison of Investment Promotion Frameworks**

	Thailand	Lao PDR
Basic attitude toward direct investment	On the registration basis Selective for granting incentives	On the approval basis Selective for approving investments
Objectives of investment promotion	To promote international competitiveness of Thai industries To promote regions or areas with low income and inadequate investment facilities To promote small and medium scale industries To promote strategically important target industries	To offset shortage of domestic capital for the national economic development by foreign capital To increase earnings from export by encouraging export oriented investments To obtain technologies and technical know-how in the country
Institution for investment promotion	Board of Investment (BOI) under the Prime Minister's Office	Foreign Investment Management Committee (FIMC) under the Prime Minister's Office
Criteria for project approval	Clearly stated from the aspects of value-added, ratio of liability to registered capital, production process and machinery, environmental protection system and project's feasibility Objectiveness and transparency of the criteria sustained	Not clearly indicated Objectiveness and transparency of the criteria not sustained
Incentives	Clearly specified tax and duty privileges with quantifiable terms, based on the zoning for investment promotion Stressing on fairness and transparency	Uniform quantifiable tax and duty privileges in the country Special privileges and benefits available for investments having significant positive impacts on the socio-economy Criteria not transparent for granting special privileges and benefits

Source: Prepared by Study Team based on the information provided by BOI and FIMC.

Table A1.9 is a comparison of tax privileges for companies under BOI and FIMC within NBR and SKR. In the short run, tax privileges for companies in NBR are more

attractive mainly due to 100 % corporate income tax exemption for 8 years and some further corporate income tax deductions after the tax exemption period. Also, the business tax rate of 3 % in Thailand is lower than turnover tax rates in Lao PDR which vary company by company according to the decision of the Lao government, although business tax or turnover tax is not a tax privilege based on the investment promotion framework. Currently, BOI-certified companies in NBR are granted the tax privilege of import duty exemption for 5 years on raw materials used in manufacturing of export products, while companies approved by FIMC are granted import duty exemption without any time limitation on raw materials used for export products. However, when the import tax elimination by Common Effective Preferential Tariff (CEPT) Scheme for the ASEAN Free Trade Area (AFTA) is materialized by 2010, the effectiveness of the tax privilege of import duty exemption may become insignificant.

Table A1.9 Comparison of Tax Privileges for Companies under BOI and FIMC

	NBR		SKR
	Mukdahan	Nakhon Phanom, Sakhon Nakhon, Kalasin	Savannakhet, Khammouan
Reduction of import duty on machinery	100%	100%	99%
Corporate income tax rate	30%	30%	20%
Exemption of corporate income tax	100% exemption for 8 years (on the condition of obtaining ISO with in 2 years of operation)		100% exemption for 8 years (on the condition of obtaining ISO with in 2 years of operation)
	<u>For a project located within industrial estates or promoted industrial zones:</u>	<u>For a project located outside industrial estates or promoted industrial zones:</u>	50% reduction for 5 years after the exemption period
	50% reduction for 5 years after the exemption period	Deduction of 25% of infrastructure installation and construction cost from net profit in addition to normal depreciation	
	Double deduction from taxable income of transportation, electricity and water costs for 10 years from the date of first sales	(Deduction can be made from net profit of any year within 10 years from the date of first sales, and one or more years can be chosen for such deduction.)	Double deduction from taxable income of transportation, electricity and water costs for 10 years from the date of first sales
Exemption of import duty on raw materials used in manufacturing of export products	100% exemption for 5 years	100% exemption for 5 years	100% exemption without any limitation
Business tax rate	3% of sales	3% of sales	Variable rate is applied com by company.
Vale added tax	7%	7%	

## Notes:

- \* Corporate income tax rate in Thailand
- \* Corporate income tax rate for foreign investment projects is 20% in Lao PDR
- However, corporate income tax rates for domestic companies in Lao PDR may be higher than 20%.
- \* The certificate of ISO9000 is required for a company with capital investment of 10 million baht or more excluding cost of land and wo to be eligible for 8 full years of corporate income tax exemption under B
- \* Business tax rate and Value added tax rate are equally applied to all the companies in Thailand.
- \* Business tax (or Turnover tax) rate in Lao PDR varies company by company.

Source: Prepared by Study Team based on the information provided by BOI and FIMC.

## **A1.3 Investment Trends in Thailand and NBR as well as Lao PDR and SKR**

Here in this section, trends of direct investment in Thailand and NBR as well as Lao PDR and SKR are reviewed.

### **A1.3.1 Investment Trend in Thailand**

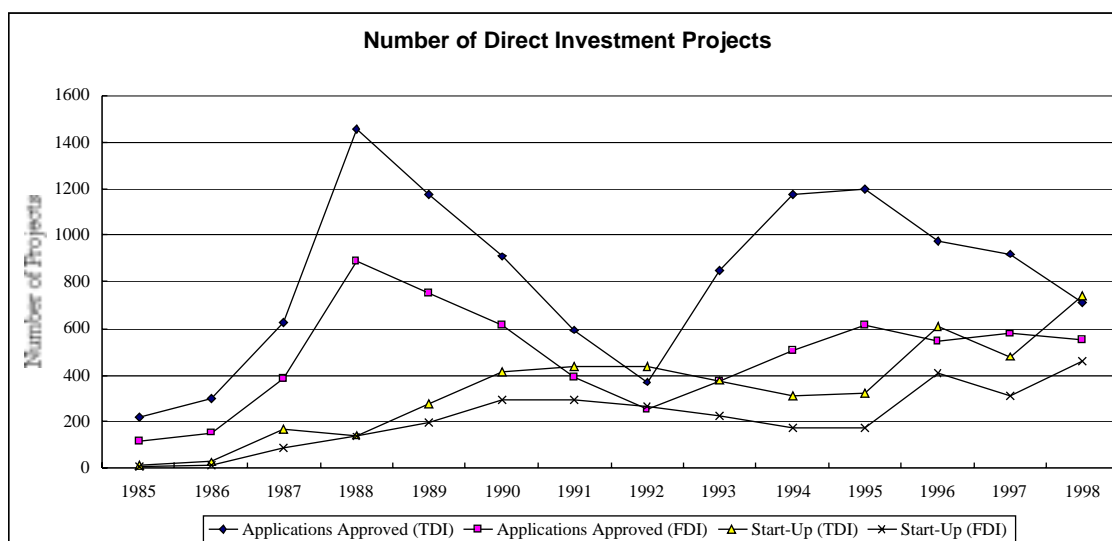
#### **Direct Investment Trends in Thailand**

In Thailand, the number of foreign direct investment (FDI) project applications approved has been relatively stable, although the number of direct investment (TDI) project applications approved has been highly fluctuated due to the fluctuation in the number of domestic direct investment (DDI) project applications approved (Figure A1.3 (1) and (2)). The recent decrease in the number of DDI project applications approved may be attributed to the economic crisis occurred in 1997. However, the decrease in the number of TDI project applications approved from 1988 until 1992 was a mixed result of various contributing factors, according to the Japanese expert attached to BOI.

#### **Regional Distribution of Direct Investment Projects**

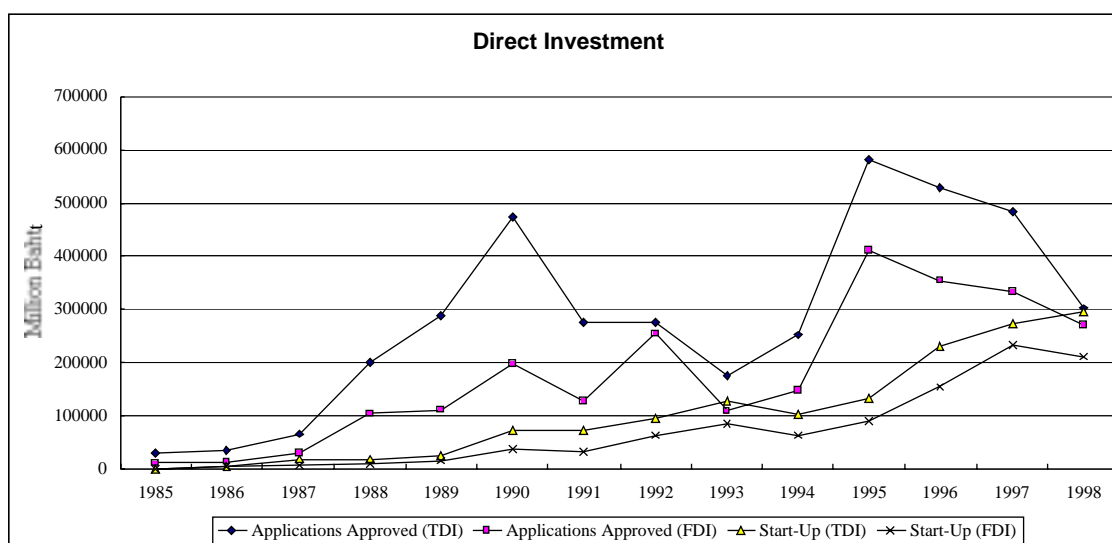
In terms of the regional distribution of direct investment, Zone 3 seems to be divided into two groups. One is a group of provinces attracting relatively large number of direct investment projects. Among this group are Rayong, Prachinburi, Chonburi, Nakhon Ratchasima, Khon Kaen, Lampoon, Chiangmai, Petchaburi, Songkhla and Suratthani. The rest provinces in Zone 3 generally fall into the other group that cannot attract many direct investment projects, although the grouping is based not on a clear and objective distinction but rather on a judgement of the study team. As shown in Table A1.10 and Figure A1.4, there have been few direct investment projects approved by BOI in the four provinces of NBR, Mukdahan, Nakhon Phanom, Sakon Nakhon and Kalasin.

After the economic crisis, direct investment projects approved increased in Zone 1. Also, the number of direct investment projects approved in Zone 2 increased from 156 in 1998 to 174 in 1999. Zone 3 as a whole is facing a decreasing trend in the number of direct investment projects approved. However, some provinces in Zone 3 such as Nakhon Ratchasima and Petchaburi, show an indication of recovery in terms of the number of direct investment projects.



Foreign Direct Investment (FDI) data reported by BOI includes projects which have at least one foreign equity share.  
Source: BOI.

**Figure A1.3(1) Direct Investment Trends in Thailand**



Foreign Direct Investment (FDI) data reported by BOI includes projects which have at least one foreign equity share.  
Source: BOI.

**Figure A1.3(2) Direct Investment Trends in Thailand**

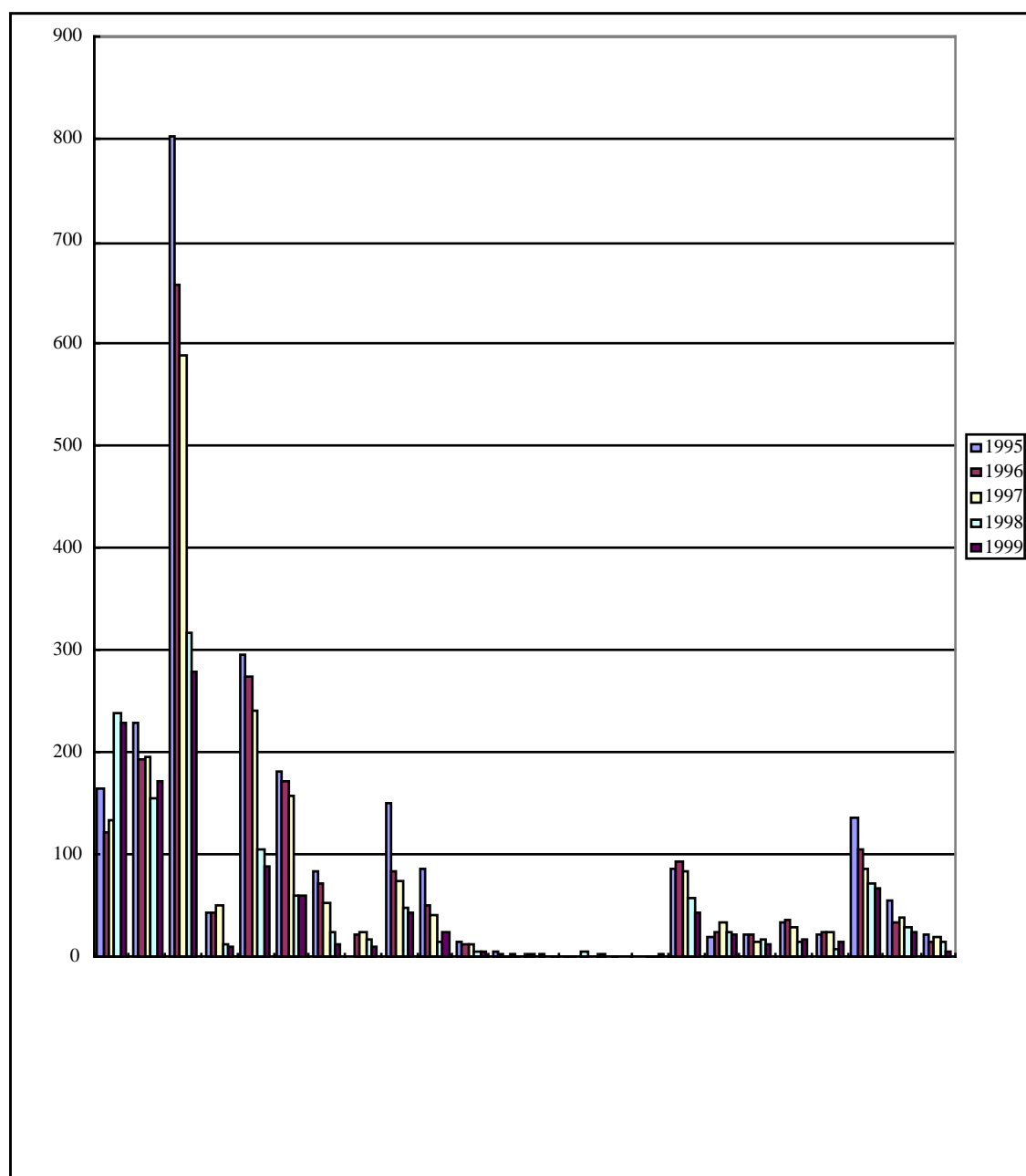
## Investment Promotion

Table A1.10 Regional Distribution of Direct Investment in Thailand

Number of Direct Investment Projects Approved						(Number of projects)
	1995	1996	1997	1998	1999	1985-98 Total
<b>Zone 1</b>	165	123	135	238	230	891
<b>Zone 2</b>	230	193	196	156	174	949
<b>Zone 3</b>	804	658	589	319	280	2650
<b>Central Region</b>	45	45	50	11	10	161
<b>Eastern Region</b>	296	275	240	106	89	1006
Rayong	182	173	157	60	62	634
Prachinburi	84	73	53	24	13	247
Chonburi*		22	24	17	10	73
<b>Northeastern Region</b>	152	85	75	48	42	400
Nakhon Ratchasima	88	51	41	14	24	218
Khon Kaen	15	11	13	5	6	50
Ubon Ratchathani	5	3	1	4	1	14
<b>Mukdahan</b>	4	0	2	0	1	7
<b>Nakhon Phanom</b>	1	1	0	5	0	7
<b>Sakon Nakhon</b>	2	0	1	0	0	3
<b>Kalasin</b>	0	0	1	1	2	4
<b>Northern Region</b>	87	94	83	59	42	365
Lampoon	19	24	34	25	23	125
Chiangmai	23	22	16	18	11	90
<b>Western Region</b>	33	37	30	14	17	131
Petchaburi	22	24	24	9	16	95
<b>Southern Region</b>	138	106	87	73	67	471
Songkhla	57	35	39	30	26	187
Suratthani	22	15	21	15	7	80
<b>Total</b>	1199	974	920	713	684	4490

Direct Investment Approved						(Unit: Million Baht)
	1995	1996	1997	1998	1999	1985-98 Total
<b>Zone 1</b>	29,790	32,200	63,643	77,035	42,241	244,909
<b>Zone 2</b>	100,775	96,643	97,212	46,872	39,613	381,115
<b>Zone 3</b>	452,894	400,585	322,036	179,477	74,947	1,429,939
<b>Central Region</b>	12,714	8,619	12,074	7,356	10,34	41,797
<b>Eastern Region</b>	362,231	298,038	184,638	127,072	23,262	995,241
Rayong	326,386	247,385	141,371	80,093	17,707	812,942
Prachinburi	29,736	44,030	23,606	39,516	743	137,631
Chonburi*		6,140	18,002	7,095	4,363	35,600
<b>Northeastern Region</b>	30,988	14,614	12,933	5,553	31,250	95,338
Nakhon Ratchasima	24,202	6,114	8,800	621	4,426	44,163
Khon Kaen	1,340	1,157	1,440	328	145	4,410
Ubon Ratchathani	1,653	399	10	59	44	2,165
<b>Mukdahan</b>	197	0	1,305	0	33	1,535
<b>Nakhon Phanom</b>	30	200	0	581	0	811
<b>Sakon Nakhon</b>	380	0	41	0	0	421
<b>Kalasin</b>	0	0	470	11	534	1,015
<b>Northern Region</b>	10,333	11,933	11,787	7,143	5,322	46,718
Lampoon	3,285	4,371	3,287	5,282	4,285	20,510
Chiangmai	2,480	1,362	1,626	279	902	6,649
<b>Western Region</b>	17,369	31,033	36,090	23,776	1,321	109,589
Petchaburi	3,651	8,730	4,226	600	1,302	18,509
<b>Southern Region</b>	12,268	34,468	61,194	9,106	7,935	124,971
Songkhla	6,052	7,740	53,655	5,098	3,875	76,420
Suratthani	2,603	881	3,852	1,247	1,627	10,210
<b>Total</b>	583,458	529,428	482,892	303,385	156,803	2,055,966

\* Chonburi is divided into two zones, Zone 2 and Zone 3. Investment projects in Chonburi Zone 2 only are included in Zone 2.  
Source: BOI Annual Report 1995, 1996, 1997, 1998, 1999 and BOI Quarterly Report.



\* Chonburi is divided into two zones, Zone 2 and Zone 3. Investment projects in Chonburi Zone 2 only are included in Zone 2.  
Source: BOI Annual Report 1995, 1996, 1997, 1998, 1999 and BOI Quarterly Report.

**Figure A1.4 Number of Direct Investment Projects Approved**

## Foreign Direct Investment Projects by Sector After the Economic Crisis

Distribution of FDI projects by sector has not changed significantly (Table A1.11). However, the number of FDI projects approved in the light industries/textiles sub sector and the electric and electronics products sub sector increased since 1998. The number of FDI projects approved in the service sector has also increased since 1998.

**Table A1.11 Foreign Direct Investment Projects Approved by BOI by Sector**

Number of Projects				(Number of Projects)				
	1997	1998	1999	2000 (Jan-Jun)	1997	1998	1999	2000 (Jan-Jun)
Agricultural Products	52	56	55	43	10.1%	11.5%	10.6%	12.2%
Minerals and Ceramics	22	9	9	9	4.3%	1.9%	1.7%	2.6%
Light Industries / Textiles	40	68	66	58	7.8%	14.0%	12.8%	16.5%
Metal Products and Machinery	149	70	109	76	28.9%	14.4%	21.1%	21.6%
Electric and Electronics Products	92	114	127	69	17.9%	23.5%	24.6%	19.6%
Chemicals and Paper	89	70	69	58	17.3%	14.4%	13.3%	16.5%
Services	71	98	82	39	13.8%	20.2%	15.9%	11.1%
Total	515	485	517	352	100.0%	100.0%	100.0%	100.0%

Investment				(Unit: Million Baht)				
	1997	1998	1999	2000 (Jan-Jun)	1997	1998	1999	2000 (Jan-Jun)
Agricultural Products	7,871.4	12,609.5	11,666.7	17,426.3	2.6%	4.9%	8.6%	22.6%
Minerals and Ceramics	9,420.5	951.2	480.8	1,482.6	3.1%	0.4%	0.4%	1.9%
Light Industries / Textiles	5,478.4	9,720.8	8,515.8	10,735.4	1.8%	3.8%	6.3%	13.9%
Metal Products and Machinery	28,303.4	9,465.8	12,542.7	8,774.8	9.4%	3.7%	9.2%	11.4%
Electric and Electronics Products	29,871.8	59,307.9	57,169.1	17,127.7	9.9%	23.3%	42.0%	22.2%
Chemicals and Paper	134,254.3	46,331.1	35,995.5	19,364.0	44.7%	18.2%	26.5%	25.1%
Services	85,452.1	116,683.6	9,689.3	2,202.0	28.4%	45.7%	7.1%	2.9%
Total	300,651.9	255,069.9	136,059.9	77,112.8	100.0%	100.0%	100.0%	100.0%

Note: Foreign direct investment projects refer to projects with foreign capital of at least 10%.  
Source: International Affairs Division, BOI, As of July 20, 2000.

## Foreign Direct Investment Projects by Country Origin

Table A1.12 shows the trends of FDI projects by major countries from 1985 to 1998. In terms of the number of FDI projects by country origin, Japan, Taiwan, US, Singapore, Hong Kong and UK are the top six countries (Figure A1.5). Among the Asian countries, Taiwan, Singapore, Hong Kong, Malaysia, Korea and India are the major source of FDI into Thailand.

Table A1.12 Foreign Direct Investment Projects Approved by BOI by Country

Number of Foreign Direct Investment Projects Approved															
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1985-98
Japan	20	38	137	265	224	180	142	88	125	190	284	256	255	192	2,396
Taiwan	15	21	102	308	214	146	69	44	60	88	102	66	62	77	1,374
Hong Kong	14	19	32	86	65	67	38	20	25	26	23	12	13	20	460
Korea	0	2	7	36	26	30	22	12	14	13	16	21	20	15	234
Singapore	5	9	18	59	47	34	32	20	33	54	51	57	53	60	532
Malaysia	8	12	7	25	16	13	11	7	18	29	31	25	39	28	269
India	2	10	9	17	21	24	4	19	14	11	14	14	8	18	185
USA	23	21	34	106	68	72	51	29	42	56	59	53	67	86	767
Australia	6	4	12	19	17	10	7	7	8	16	10	8	19	15	158
UK	9	14	16	44	31	36	22	16	26	29	24	28	39	35	369
Germany	4	5	7	17	21	8	10	3	16	14	12	20	23	27	187
Netherlands	2	2	5	3	11	10	11	5	12	8	10	18	14	25	136

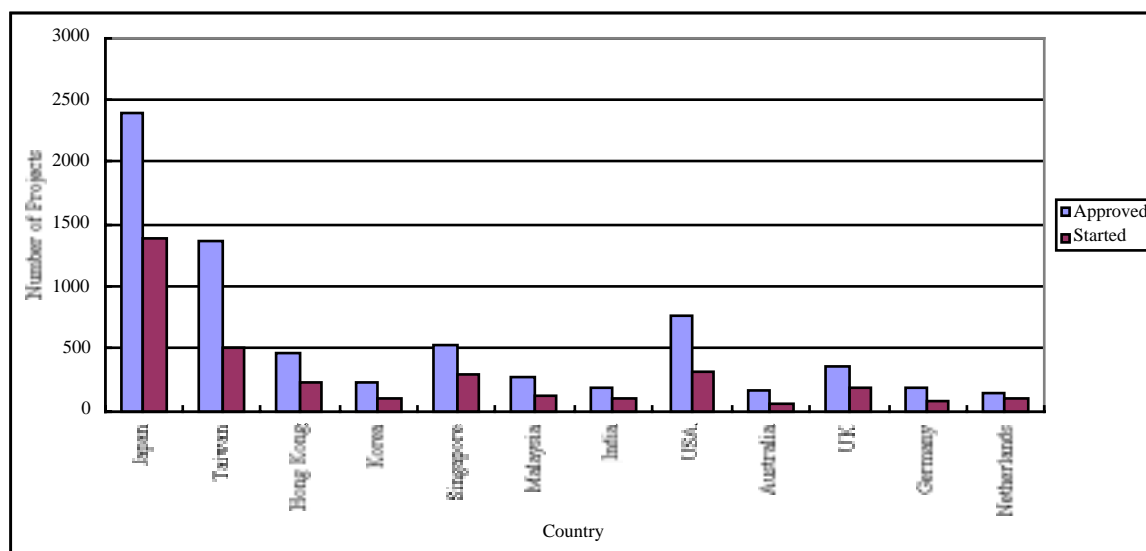
Foreign Direct Investment Approved (Unit: Million Baht)															
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1985-98
Japan	2,093	14,583	24,829	77,019	90,633	69,231	44,908	49,972	68,497	64,276	196,613	158,906	163,683	67,960	1,093,203
Taiwan	563	1,811	7,696	21,498	22,305	19,567	14,587	7,393	5,328	11,937	45,098	69,630	12,998	10,608	251,019
Hong Kong	445	1,533	3,216	11,416	14,430	183,412	8,677	3,548	3,151	5,308	6,009	4,169	1,572	5,946	252,832
Korea	0	23	333	2,758	4,387	6,889	1,241	707	804	740	42,467	22,291	3,965	2,038	88,643
Singapore	207	3,481	1,645	6,924	10,570	15,115	15,902	12,247	5,905	14,263	38,055	47,152	73,150	12,247	256,863
Malaysia	634	826	281	2,475	1,819	2,567	3,938	9,667	1,501	1,719	5,445	2,039	5,589	6,136	44,636
India	402	1,489	942	2,132	9,050	10,520	501	7,241	8,139	3,687	10,195	8,777	1,638	10,448	75,161
USA	11,582	4,311	4,431	17,028	14,123	27,913	28,849	31,321	10,919	32,915	64,335	70,108	89,673	23,020	430,528
Australia	291	308	984	1,325	2,342	10,811	1,111	1,801	1,593	2,157	16,940	1,436	5,251	2,944	49,294
UK	1,550	5,117	2,643	8,387	12,493	9,888	22,647	15,189	19,245	4,933	7,520	14,786	46,687	31,585	202,670
Germany	169	774	337	3,513	3,220	10,280	1,207	7,697	4,012	4,873	4,352	8,155	14,892	13,160	76,641
Netherlands	320	202	364	250	1,852	3,943	6,529	58,258	1,146	2,005	3,100	23,260	6,519	88,424	196,172

Foreign Direct Investment (FDI) data from 1985 till 1998 reported by BOI includes projects which have at least one foreign equity share.

Foreign Direct Investment (FDI) data from 1999 till 2000 reported by BOI includes projects which have at least 10% foreign equity share.

As of May 10, 1999

Source: BOI.



Foreign Direct Investment (FDI) data reported by BOI includes projects which have at least one foreign equity share.

As of May 10, 1999

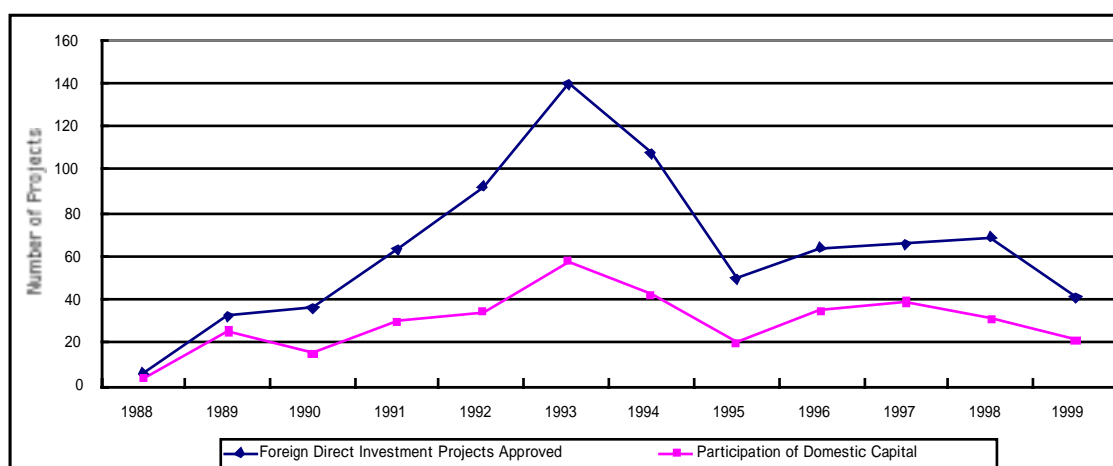
Source: BOI

Figure A1.5 Number of Foreign Direct Investment Projects by Country (1985-1998)

### A1.3.2 Investment Trend in Lao PDR

#### Direct Investment Trends

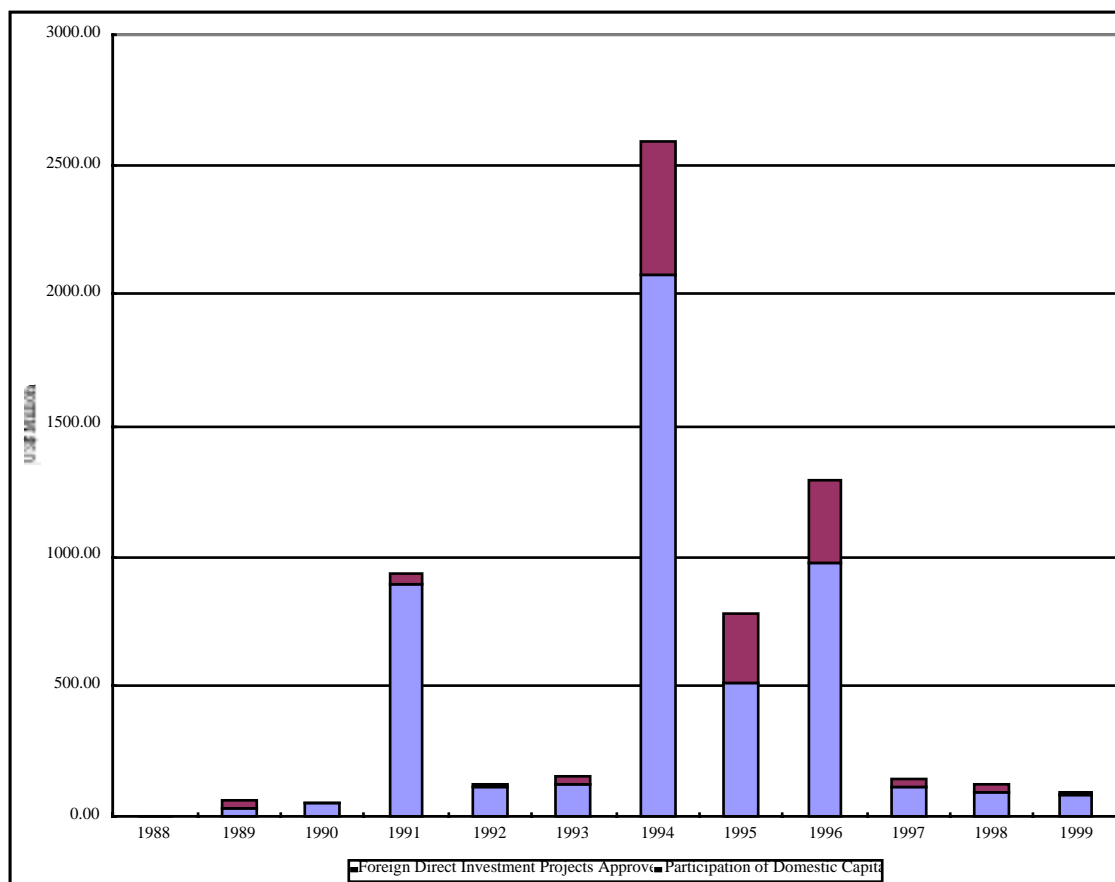
The number of FDI projects approved in Lao PDR increased from 32 in 1989 to 140 in 1993 and dropped to 50 in 1995 (Figure A1.6). In 1999, the number of FDI projects approved again decreased to 41 from 69 in 1998.



Note: FDI projects from Dec. 7 1988 to Mar. 29 2000 are included.  
Source: FIMC.

**Figure A1.6 Foreign Direct Investment Projects Approved in Lao PDR**

Figure A1.7 shows the total volume of capital invested in FDI projects in each year from 1988 to 1999. Capital participation by Lao companies is also indicated in Figure A1.7. There were large FDI projects in each of the four years, 1991, 1994, 1995 and 1996.



Note: FDI projects from Dec. 7 1988 to Mar. 29 2000 are included.  
Source: FIMC.

**Figure A1.7 Foreign Direct Investment Approved and Domestic Capital Participation in Lao PDR**

### Investment in SKR

The number of FDI projects in SKR is limited (Table A1.13).

**Table A1.13 Foreign Direct Investment Projects Approved in SKR (1993-99)**

	(Number of Projects)						
	1993	1994	1995	1996	1997	1998	1999
Savannakhet	6	3	2	2	6	1	1
Khammouan	1	1	3	2	0	1	2

	(Unit: US\$ Million)						
	1993	1994	1995	1996	1997	1998	1999
Savannakhet	3.74	3.70	11.00	0.92	4.09	0.81	1.74
Khammouan	1.94	1.00	7.40	0.90	0.00	0.10	3.88

Source: FIMC.

## Foreign Direct Investment Projects by Sector

The manufacturing sector projects, Textiles & Garment, Industry & Handicraft and Wood Industry, account for 32% of the total foreign direct investment projects in Lao PDR (Table A1.14). Although Lao PDR is considered to have abundant agricultural resources, foreign investment projects in the agribusiness sector are limited to 84 projects in total.

**Table A1.14 Foreign Direct Investment Projects in Lao PDR by Sector**

	(Number of Projects)											
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Agribusiness			3	6	12	21	7	3	6	11	8	7
Textile & Garment		1	8	10	19	11	7	6	4	4	7	2
Industry & Handicraft		6	3	10	17	34	17	8	13	11	9	6
Wood Industry	2	4	3	7	5	5	5	1	2	2	1	
Mining, Oil	1	4	2	2	2	5	3	7	1	2	3	1
Trading	1	12	8	11	12	21	14	4	11	7	5	5
Hotel, Tourism			3	6	4	5	6	1	3	2	4	
Banking, Insurance		1		1	3	3	1	1	1			1
Consultancy	1	3	3	4	3	5	4			2	7	1
Services	1		2	3	9	18	23	14	20	20	20	17
Construction		1			5	9	16	3		2	2	1
Telecomm., Transport			1	2	1	3	2	1	2	2	2	
Electric power				1			3	1	1			
Grand Total	6	32	36	63	92	140	108	50	64	65	68	41
	(Unit: US\$ Million)											
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Agribusiness			0.44	9.77	14.24	16.33	6.79	5.10	1.89	6.32	7.91	61.81
Textile & Garment		0.08	9.30	5.72	12.68	9.89	11.39	13.14	2.69	2.56	5.08	0.90
Industry & Handicraft		3.70	2.29	10.50	20.26	53.39	14.41	25.39	319.95	10.58	5.58	7.61
Wood Industry	0.45	1.85	2.01	2.79	34.51	6.83	22.37	0.58	12.00	82.13	2.50	
Mining, Oil	0.25	22.65	29.50	5.08	3.36	18.04	9.56	26.20	0.50	14.00	8.34	1.98
Trading	2.00	7.26	1.42	23.83	2.71	6.17	7.41	0.38	7.98	4.82	1.07	2.50
Hotel, Tourism			0.78	95.84	5.98	4.32	279.32	0.29	211.72	0.52	1.86	
Banking, Insurance		25.80		2.00	15.00	15.00	5.00	5.00	6.00			10.00
Consultancy	0.03	2.47	0.32	0.16	0.12	1.22	0.38			0.38	1.93	0.10
Services	0.03		0.06	0.34	2.07	6.77	3.99	11.38	6.71	17.25	9.47	7.79
Construction		0.24			18.03	13.89	19.33	6.00		2.75	3.53	1.00
Telecomm., Transport			5.00	0.81	0.20	0.74	62.80	0.06	491.84	0.90	75.30	
Electric power				773.00			2152.00	688.30	231.82			
Grand Total	2.75	64.06	51.12	929.84	129.15	152.58	2594.74	781.81	1293.09	142.22	122.57	93.70

Note: Data from Dec. 7 1988 to Sep. 8 1999 are included.

Source: FIMC.

## Foreign Direct Investment Projects by Country Origin

Thailand is in the first place in terms of the number of FDI projects in Lao PDR. There are 253 FDI projects from Thailand (Table A1.15). That is about a 30% of the total FDI projects in Lao PDR. France in the second place followed by China, Australia and US. FDI projects from France, China, Australia and US account for 86, 68, 44 and 43 respectively. In Lao PDR, Japanese FDI projects are limited. The number of Japanese FDI projects in Lao PDR is only 26. There are 19 Vietnamese FDI projects.

**Table A1.15 Foreign Direct Investment Projects in Lao PDR by Country / Territory**

	(Number of Projects)												
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Thailand	3	21	8	22	35	51	45	16	18	12	15	7	253
France	2	3	5	2	11	18	9	6	11	4	11	4	86
China				5	7	15	11	10	6	4	6	4	68
Australia		2	3	3	7	9	6	4	1	6	3		44
US	1		6	5	4	5	6	2	4	4	2	4	43
Taiwan			3	5	6	7	6	1	1	2	3	1	35
South Korea				2	2	3	5	1	6	3	5	5	32
Japan			1		1	1	2	3	4	8	5	1	26
Hong Kong				5	4	7	4						20
Malaysia					4	3	1	1	2	5	2	1	19
Vietnam			1	1	1	5	2			2	2	5	19
UK		2	1		1	4	1	1	4	1	2	1	18
Russia		1	3	5	2		2		1		1		15
Singapore			1	1	2	4		1	1	2	2	1	15
Canada		1	1		1	4	1			1	1	1	11
Germany				1	1	1	3			1	1		8
Sweden			1		1		2			3			7
Belgium				1				1		2		1	6
Denmark		2		1					2		1		6
Italy				2			1				2	1	6
Holland						1		1	1			1	4
Austria				1				1		1			3
Finland									1			2	3
New Zealand					1	1						1	3
Norway										2	1		3
Switzerland				1		1					1		3
Bangladesh										1	1		2
India			1							1			2
Cambodia											1		1
Indonesia					1								1
International										1			1
Macao			1										1
Myanmar									1				1
North Korea								1					1
Ukraine							1						1
Sub Total	6	32	36	63	92	140	108	50	64	66	69	41	767
Lao PDR	3	25	15	30	34	58	42	20	35	39	31	21	353

Note: Date from Dec. 7 1988 to Sep. 8 1999 are included.

Source: FIMC.

## **A1.4 Implications of AFTA on Direct Investment Inflows in NBR and SKR**

In A1.3, direct investment trends in Thailand and Lao PDR were reviewed. Past investment trends showed low popularity of NBR and SKR as investment destinations. However, the historical trends of direct investment do not always continue in the future. It may get either better or worse. At this point, there is one important factor having a strong influence on the future investment trends of NBR and SKR. That is the realization of ASEAN Free Trade Area (AFTA). Implications of AFTA on direct investment inflows in NBR and SKR are discussed in this section.

### **A1.4.1 AFTA**

The agreement on the establishment of AFTA was first signed at the Fourth Summit Meeting held in Singapore in 1992. The member countries of ASEAN currently consist of 10 countries, namely, Thailand, Indonesia, Malaysia, Philippines, Singapore, Brunei, Viet Nam, Lao PDR, Burma and Cambodia. The objective of AFTA is to increase the ASEAN region's competitive advantage as a production base geared for the world market, by liberalizing trade through the elimination of tariffs and non-tariff barriers among the ASEAN members.<sup>2</sup> AFTA will promote intra-ASEAN trade and investment flows. There are three measures for realizing AFTA: the Common Effective Preferential Tariff (CEPT) Scheme, the ASEAN Industrial Co-operation (AICO) Scheme and ASEAN Investment Area (AIA).

The CEPT agreement requires that "tariff rates levied on a wide range of products traded within ASEAN are reduced to 0-5%."<sup>3</sup> Also, "quantitative restrictions and other non-tariff barriers are to be eliminated." The target of the realization of AFTA was moved forward. AFTA is to be completed by the year 2002. The timetable of tariff reduction varies country by country (Table A1.16). For the original six ASEAN countries, 100% of items in the Inclusion list would have tariffs of 0-5% by 2002. The ultimate target of AFTA is the elimination of all import duties. It was agreed by the ASEAN leaders that all import duties are to be eliminated by 2010 for the six original members and by 2015 for the new members. However, there is some flexibility for sensitive products.

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<sup>2</sup> Web site of ASEAN.

<sup>3</sup> A wide range of products mean the products included in the Inclusion List.

**Table A1.16 Timetable of Tariff Reduction**

<b>Country</b>	<b>Target Year</b>
Indonesia, Malaysia, Philippine Singapore, Thailand, Brunei	2002
Viet Nam	2006
Lao PDR	2008
Burma	2008
Cambodia	2010

Source: ASEAN Secretariat.

The AICO Scheme is the agreement in which CEPT (0~5% tariff) is applied for the trade items granted AICO certification (COE), before the completion of the CEPT Scheme. The AIA Scheme is intending to promote direct investment not only from outside but also within ASEAN. It was agreed that national treatment is extended to ASEAN investors under AIA by 2003.

#### **A1.4.2 Expected Effects of AFTA**

With the reduced tariff rates and liberalized investment procedures, AFTA will improve investment climates of various places within ASEAN. AFTA becomes a two-edged blade for NBR and SKR. AFTA is applied uniformly to all the places in each ASEAN country. For example, the cost of an imported raw material into Thailand will be reduced due to the tariff reduction, but such tariff reduction is equally applied not only for NBR but also the Eastern Seaboard. By promoting intra-ASEAN trade, AFTA seems to increase attractiveness of investment destinations to which raw materials and products produced within ASEAN can be brought easily and at low transportation costs. In this regard, AFTA generally strengthens the attractiveness of currently attractive investment destinations in ASEAN, but not necessarily improves relative attractiveness of the places currently getting little direct investment within ASEAN. By analyzing some business types, the implications of AFTA for NBR and SKR can be explained.

##### **Business Type 1: Raw Materials from NBR and SKR to ASEAN Market**

In one case, NBR and SKR will be considered mainly as a source of raw materials by the manufacturers located in the Central, Eastern and Lower Northeastern regions of Thailand. By locating in the Central, Eastern and Lower Northeastern regions, manufacturers will be able to choose raw materials of lower prices either from domestic providers or those in other ASEAN countries. Therefore, producers of raw

materials in NBR and SKR will have to compete with imported low tariff materials under AFTA. The competition will become fierce. Also, since intra-ASEAN trade is encouraged by AFTA, production sites near to the seaports become more attractive to the manufacturers. There will be little incentive for the manufacturers to move their manufacturing sites to NBR or SKR. In this case, the expected investment in NBR and SKR is, at best, to set up raw materials collection stations and preliminary processing activities.

### **Business Type 2: Raw Materials from NBR and SKR to Indochina Market**

Another case is that NBR and SKR become manufacturing site targeting the Indochina market by utilizing raw materials available in the two regions. Because NBR and SKR are located in the middle of the Indochina region, the two regions have a good access to the market. However, AFTA may affect NBR and SKR negatively, for example, by increasing attractiveness of the coastal (or port) areas in Viet Nam. If the raw materials are readily available at comparable prices from other ASEAN countries, there is no reason for setting up manufacturing sites in the inland places such as NBR and SKR. In general, infrastructure for manufacturing operation will be better at the coastal areas in Viet Nam than in NBR and SKR.

### **Business Type 3: Raw Materials from NBR and SKR to Non ASEAN Market**

If there are products using raw materials only available in NBR and SKR, investors may be interested in exporting such products overseas, not only within ASEAN but also non-ASEAN countries including Japan, US and European countries. However, the raw materials processing sites do not have to be within NBR and SKR under AFTA, because the raw materials produced in NBR and SKR can be transported freely with very low tariff rates within ASEAN.

### **Business Type 4: NBR and SKR Market**

If there are investors targeting the NBR and SKR market, they may want to set up their operation sites in the two regions in the future. Currently the market of NBR and SKR alone is too small to satisfy the economic scale of a factory. AFTA will rather encourage trade inflows into NBR and SKR from other areas within ASEAN.

Although the above analysis of the four business types may not cover all the business possibilities in NBR and SKR, it seems there are few reasons to say AFTA will encourage direct investment in the two regions.

### **A1.4.3 Importance of Immediate Cooperation between NBR and SKR**

In spite of the pessimistic view of the implications of AFTA for NBR and SKR, the two regions still have opportunities to attract direct investment. Because the full realization of AFTA will take time, if the two regions create an attractive investment environment before that, they may be able to successfully invite investment projects. More specifically, if the tariffs on raw materials and processed goods between Thailand and Lao PDR become very low, the cost of business operations involving manufacturing processes in both of NBR and SKR will be lowered. If such an arrangement is done before the completion of AFTA, NBR and SKR become more attractive than any other places for the businesses targeting the Indochina market. Accelerated elimination of non-tariff barriers between Thailand and Lao PDR is also critical for creating an advantageous investment environment in NBR and SKR. Although AFTA will be realized sooner or later, the short period of the special bilateral trade arrangement before the completion of AFTA can change the future of NBR and SKR.

## **A1.5 Issues and Problems on Investment Promotion**

As a result of the analyses on investment promotion in NBR of Thailand and SKR of Lao PDR, and the movement toward AFTA, issues and problems on investment promotion for the two regions are listed in this section.

### **A1.5.1 NBR (Thailand)**

#### **Regional Gap of Investment**

Investment promotion activities in Thailand are well organized by BOI, and Thailand has been attracting many investment projects successfully. However, it does not mean that all the provinces can attract investment projects. The four provinces in NBR are ones getting little direct investment.

Since BOI's investment promotion activities are organized from the viewpoint of the central government, regionally focused investment promotion activities tend to be weak in BOI. In order for BOI to conduct regionally focused investment promotion activities, BOI needs some uniform and transparent criteria for selecting regions where such promotion activities are applied.

#### **Limitation Tax Incentive System**

The current investment incentives in Thailand are designed mainly to reduce corporate income tax burden. For some regions where a lower profitability from business operation is generally expected in comparison to other regions, the current incentives do not work effectively. Incentives for reducing business costs or increasing the profit margin may be effective in such regions.

In the short run, production capacities of existing companies in Thailand are generally exceeding the demands due to the effect of the economic crisis in 1997. It is not expected to have aggressive direct investment in the Northeastern region (including NBR) targeting the domestic market.

#### **Barriers and Constraints in CBR**

One of the strengths of the border provinces including NBR is immediately available raw materials from adjoining countries. Nevertheless, such strength is practically weakened by import tariffs, non-tariff barriers and regulations on the handling of certain materials. One example of the regulations negatively affecting materials

procurement from Lao PDR is the complicated registration requirement for precious wood.

Presently, there is no counter measure for NBR mitigating negative impact of AFTA. When AFTA is fully realized, it will be more difficult for the Thai government to change NBR into an attractive investment destination.

### **A1.5.2 Lao PDR**

#### **Conservative Attitude of FIMC**

The investment promotion activities of FIMC are improving and the investment incentives are comparable to that of Thailand. Nevertheless, the application of investment incentives as well as regulations by FIMC and the Lao government is neither transparent nor objective. That can be a cause of unnecessary skepticism of potential investors.

FIMC's basic stance for managing FDI projects is selective for issuing investment licenses. That approach may be suitable for certain kinds of FDI projects including mining projects and power projects. However, for manufacturing and service sectors in general, it may be more appropriate to use an approach used in Thailand. That is to liberalize registration of FDI projects first and then selectively promote preferable projects with investment incentives.

In order for the Lao government to improve its policies, it has to modify laws and regulations. Currently, various policy changes of the government are made without notices to companies in operation in Lao PDR, and the companies are suffering from operational problems caused by unexpected sudden policy changes. Potential investors may see this situation as an unattractive investment climate.

Since the reality of doing business in Lao PDR has not been well presented to the world, potential investors, even Thai investors, do not know much about business environment in Lao PDR. Accordingly, potential investors tend to be skeptical for investing in Lao PDR.

#### **Insufficient Infrastructure**

Even if the institutional framework of foreign investment promotion are well developed, the current underdeveloped infrastructure and service facilities for investors may have negative effects on inviting FDI projects into Lao PDR.

### **Influence by AFTA**

For Lao PDR, participation of AFTA is unavoidable, and it seems AFTA will bring negative impact more than positive one to the country in the aspect of investment promotion. In order to mitigate the negative impact of AFTA and increase attractiveness of SKR as an investment destination, the process of tariff as well as non-tariff barrier elimination between Lao PDR and Thailand has to be accelerated.

## A1.6 Recommendation

So far, investment promotion policies, past investment trends, implications of AFTA, and issues and problems in NBR of Thailand as well as SKR of Lao PDR are analyzed in this chapter. As a result of the analysis, some modifications of the government policies seem to be effective for promoting investment in NBR and SKR. Also, some mechanisms seem necessary for NBR and SKR to promote direct investment. Here in this section, recommended actions on investment promotion in NBR and SKR are discussed.

### A1.6.1 NBR

Table A1.17 shows the recommended 8 functions for promoting investment into NBR. The 8 functions are: (1)Collection, accumulation and updating of basic information on NBR, (2)Marketing of NBR, (3)Granting investment incentives as a special incentive scheme for border area, (4)Facilitation and lobbying for the trade policy improvement, (5)Investment information service on SKR to Thai investors, (6)Cultivation of potential investors, (7)Comprehensive business support and (8)Management of the entire investment promotion activities. Additional explanation is put on each function.

#### Basic information on NBR

In order to promote NBR as an investment destination, the people in charge of promotion activities need to understand what is happening in NBR and must be able to explain the present economic and geographic situation of NBR to potential investors. In other words, it is important for an investment promotion institution of NBR to collect, accumulate and update basic information of NBR so that it can share such information with potential investors<sup>4</sup>. In Thailand, useful economic as well as geographic data for investors generally exist in some forms, but are not readily available to potential investors because most of such data is dispersedly stored into many different institutions and government agencies. If basic economic and geographic data on NBR are consolidated into one information source, that will be an advantage of NBR for attracting direct investment.

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<sup>4</sup> The organizational set up of the investment promotion institution of NBR has not been determined.

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**Table A1.17 Recommended Functions for Investment Promotion in NBR**

Function	Purpose	Representatives of the contents to be included	Responsibility
1. Collection, accumulation and updating of basic information on NBR	To know and share with potential investors on what is happening in NBR	Economic data and information of NBR Geographic information including infrastructure with detailed maps Resource information (Human, agricultural and natural resources)	NBR or the 4 provinces
2. Marketing of NBR	To have NBR well known to the world	Advertisement of NBR Creation of a bright image of NBR Contacts with walk-in investors through the NBR marketing and investment office to be established in Bangkok	NBR or the 4 provinces
3. Granting investment incentives as a special incentive scheme for border area	To increase attractiveness of NBR as the investment destination	Additional incentives to the current BOI incentives including subsidies for fuel and energy, Free labor movement treatment on Lao workers, and VAT exemption	Two border provinces (Nakhon Phanom and Mukdahan) in cooperation with the central government including BOI
4. Facilitation and lobbying for the trade policy improvement	To create advantageous business environment for NBR with the facilitation of vertical cooperation between NBR and SKR	Reduction of tariffs and elimination of non tariff barriers	NBR or the 4 provinces
5. Investment information service on SKR to Thai investors	To create advantageous business environment for NBR with the facilitation of vertical cooperation between NBR and SKR	Support for potential investors who are interested in SKR by providing investment information on SKR	NBR or the 4 provinces with BOI
6. Cultivation of potential investors	To directly stimulate investment needs	Direct contacts with potential investors through round table meetings and individual interviews with focuses on specific industrial sub sectors	NBR or the 4 provinces
7. Comprehensive business support	To increase successful business enterprises in NBR	Finance service for investment projects Finance service for export and import activities Credit guarantee service Incubation service for entrepreneurs Provision of testing and research facilities/equipment for public use General advisory service for business and management Information service on publicly provided technical and finance assistance services	NBR or the 4 provinces
8. Management of the entire investment promotion activities	To introduce a strategic view and efficiently organise each individual investment promotion activities	Management and administrative function on all of the above functions	NBR or the 4 provinces

Source: Study Team.

## Marketing of NBR

According to the companies contacted with the study team, many of them located in and around Bangkok do not know much about NBR. That is partially because there is little information on NBR's economic activities available in Bangkok. Without having a function of selling NBR as an attractive investment destination to those who are outside NBR, the investment promotion activities of NBR become passive. More proactive promotion activities are necessary for NBR. This function cannot be taken care of by BOI, because BOI is not a dedicated investment promotion agent for NBR.

## Introduction of New Investment Incentives

### Limitation of Current BOI Incentive System

The current incentives granted by BOI in NBR are not effective enough to promote direct investment in NBR, because the expected profits from direct investment projects in NBR generally seem very small. Since BOI's incentives are designed to

be more beneficial to the companies with higher profits, those incentives are not so attractive to the companies to be invested in NBR due to their low profit margins expected. Therefore, some additional investment incentives, which will decrease operational costs of companies and accordingly increase profit margins, are required for effective investment promotion in NBR.

Here, although the target area of this study is NBR (and SKR in Lao PDR), it is not possible to prepare a national policy specially targeting only for NBR, from the viewpoint of national equity. Because BOI is a central government agency, it cannot single out NBR as an exception in its nation wide investment promotion policy. There has to be a nationally acceptable logic for promoting NBR as one of the promoted areas based on that logic. For example, the logic can be a special investment incentive scheme for border areas<sup>5</sup>. Since border provinces tend to be marginalized in Thailand, the logic may be applicable nation wide in that sense. However, it is difficult to find valid new incentives directly affecting only the companies approved by BOI.

#### Necessity of New Incentives for Investment Promotion for NBR

There is another policy approach by granting subsidy to the border provinces, for preparing investment incentives other than the incentive scheme of BOI. In this case, new investment incentives to be introduced are not granted only to the companies with BOI approvals, but available indirectly to all the companies in the border provinces.

#### New Incentive 1: New Reduction of Consumer Price of Fuel

There are some indicative examples of such incentives. One is to reduce the consumer price of fuel in the border provinces to some extent lower than that of the Central region. The reduced portion of the fuel price is paid to the fuel retailers by the subsidy granted to the office of the provincial governor from the central government. By this arrangement, although the fuel price for its consumers is reduced, the fuel retailers in the border provinces can still get the same level of sales revenues as that of the fuel retailers in the Central region according to their sales volume with the subsidy for fuel from the government. If the fuel price in the border provinces is lowered, the cost of doing business in the border provinces will be

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<sup>5</sup> The definition of border area or border provinces has to be clearly determined at the beginning of the discussion of the new incentive scheme because the definition will affect the boundary of the promoted area.

decreased due to the reduced transportation cost. This approach seems more effective for improving the investment climate of border area including NBR, because there are some side effects such as the increase of fuel sales in the border provinces caused by the increase of incoming fuel consumers from other provinces. This type of policy arrangement can be on the temporary basis with a sunset clause.

#### New Incentive 2: Reduction of Electricity Price

In addition to the transportation cost, the high cost of electric power is also another disadvantage of the companies located in the border provinces. For the price of electric energy, a similar arrangement to the fuel subsidy can be done. The operational cost or production cost of the companies in the border provinces may be reduced to a competitive level with that of the companies in the Central region by such subsidies. However, for each subsidy, the appropriate extent of the subsidy has to be studied and discussed among the interested parties.

#### New Incentive 3: Freer Labor Movement and Registration System

Another possible benefit in the border provinces, which can be created by a government policy, is the freer labor movement from the other side of the Mekong. The freer labor movement will reduce the labor cost for the companies in border provinces. Here, one thing to be noted is that such a freer labor movement neither lowers the minimum wage nor reduces employment opportunities of the Thai workers in the border provinces, when new regulations on the minimum wage rate for foreign labor and foreign labor employment are prepared. In order for the Thai government to control incoming foreign laborers, there has to be some tracking mechanism for them. The tracking mechanism may include introduction of a mandatory registration system of foreign workers by their employers and issuance of restricted work permits in the border provinces for foreign workers.

The other indirect investment incentive in the border provinces may be the full exemption of the value-added tax (VAT) in those provinces. If VAT is exempted, costs of all the products are reduced by 7% of the product prices in the border provinces. Although the administrative arrangement for VAT exemption is not simple, this arrangement will not only create capital inflows into but also mobilize capital resource of the local people within the border provinces.

The above new investment incentives will increase attractiveness of the border provinces of NBR, Nakhon Phanom and Mukdahan.

### **Facilitation of Tariff and Nontariff Barrier Restructuring on Raw Materials**

In order to increase attractiveness of NBR as an investment destination, tariffs and non tariff barriers on raw materials have to be reduced as quickly as possible. By reducing tariffs and non tariff barriers on raw materials, raw materials from SKR and other provinces in Lao PDR will become available at low prices in NBR. Currently, the tariff reduction along with the agreement on the Common Effective Preferential Tariff (CEPT) scheme for AFTA is under way in Thailand. However, even with the CEPT scheme, the tariff rates on live animals, prepared foodstuffs, wood, agricultural products, base metals will be still higher in Thailand than in other ASEAN countries for at least a few years. High tariff rates on raw materials will impede the vertical industrial cooperation between NBR and SKR, since the abundant raw materials in SKR can not be fully utilized in NBR. The later the vertical industrial cooperation starts between NBR and SKR, the more difficult for resource based industries to be successful due to the existence of external competitors such as Chinese and Vietnamese. Therefore, representatives of industries in NBR and/or an investment promotion institution of NBR need to facilitate restructuring of tariffs and non tariff barriers on raw materials from Lao PDR.

### **Investment Information Service on SKR**

Although various kinds of agricultural as well as natural resources are available in SKR, investors counting on such resources are limited in SKR at present. Since increase of companies exporting primarily processed agricultural products to Thailand will have positive effects on the industrial development of NBR, the Thai government should support investment promotion activities of SKR from the aspect of investment information. BOI may be a suitable institution for investment information service on SKR, since it has contacts with major investors and companies in Thailand.

### **Cultivation of Potential Investors**

The function recommended as "marketing of NBR" is targeting for all the potential investors, while the function recommended here, "cultivation of potential investors" is a more focused promotion approach to specific potential investors. Through PLANET study and other industrial studies on NBR, prospective industrial sub sectors in NBR can be selected to some extent. It will be rational to have investment promotion activities targeting those prospective sub sectors. Frequent and tenacious contacts with hospitality may affect the decisions of potential investors. In some

cases, a more focused, pin-point approach such as proactively inviting a few prospective companies to NBR can be considered.

### **Comprehensive Business Support**

Investors, including entrepreneurs and companies, need various kinds of support services. Among them are finance service for investment projects, finance service for export and import, credit guarantee service, incubation service, low cost service for testing and research facilities, general advisory service for business and management, and information service on publicly provided technical and finance services. The support services listed above exist in Thailand in terms of the schemes. Nevertheless, the accessibility of the services to the service users is poor particularly in rural areas such as NBR. There are at least three aspects for improving the accessibility of the services: (1)increasing service channels and improving service networks, (2)modifying conditions so that eligible service users will increase, (3)educating potential service users so that they can properly use support services.

Ideally, providers of those services should be co-located so that investors can find suitable service for their needs in one place. The concept of Industrial Platform, presented by the study team, is in this direction. In order for Industrial Platform to be effective, there need to be a central registration center for publicly available technical and financial support services covering the entire Thailand. If registration of public support services to the central registration center becomes mandatory, the effectiveness of Industrial Platform will be strengthened.

### **Necessity of a Managing Body of Investment Promotion Measures**

There are many ideas for strengthening investment promotion activities in NBR as recommended above. However, those ideas can be materialized, only when a solid managing body of the entire investment promotion measures is established and practically functioning. Without the managing body, various measures cannot be consolidated into a strategic framework of investment promotion, and sustainability of each promotion measure will be deteriorated. Accordingly, the effectiveness of investment promotion measures will be undermined.

### **A1.6.2 SKR**

As mentioned in A1.4, the current investment climate in Lao PDR is not so attractive to investors. Particularly, the institutional aspect regarding the private sector development and basic infrastructure are underdeveloped. Since issues on infrastructure are mainly mentioned in other part of this study, A1.6.2 focuses on issues on the institutional aspect related to foreign direct investment.

#### **Improvement of Investment Climate in Lao PDR**

Before the preparation of SKR specific investment promotion measures, the country's institutional investment climate as a whole has to be improved to a more transparent, open and investor friendly one. The keys to improving the investment climate in Lao PDR are strengthening objectiveness and transparency in FIMC's foreign investment management, openness to foreign investment projects, and no surprise at changes in the government policies.

First, FIMC's general guideline for granting investment incentives should be indicated clearly by showing objectively specified criteria. The source of the transparency problem is not the substances of the investment incentives to be granted to FDI projects, but FIMC's case-by-case approach for granting its incentives. Regardless of FIMC's actual internal criteria for granting incentives, investors see its decisions as subjective ones, because FIMC does not clearly indicate its concrete criteria for granting investment incentives. It may be effective to prepare a table indicating the relationship between the characteristics of FDI projects and the investment incentives to be granted as done by BOI in Thailand.

Second, FIMC's stance for FDI projects should be changed to a more liberal one. Presently, each FDI project needs to go through the screening process of FIMC to get a business license. This process can be changed into a simple registration process based on the reporting of investors. FIMC needs to be selective for granting investment incentives, but does not have to be selective for registering foreign direct investment projects except for certain fields of prohibited activities stated in its investment guide.

Third, the Lao government should give announcements of policy changes reasonably long before the dates of their enforcement. Presently, companies can neither foresee nor prepare for policy changes of the Lao government because the

government policies are changed suddenly and frequently. As a result, companies cannot have long term business plans.

In addition, the officials preparing the government policies for the private sector need to learn about the structure and operation of private companies. A certain combination of the government policies may easily terminate the lives of companies.

### Investment Promotion for SKR

The investment promotion activities for SKR should be strengthened in addition to the improvement of the general investment climate. For SKR, the immediate target is NBR's business environment. If the investment incentives in SKR are less attractive than that of NBR, SKR will not be able to compete with NBR in terms of attracting direct investment projects. Therefore, at least, the functions recommended to the investment promotion in NBR have to be covered by the institution (or institutions) in charge of the investment promotion for SKR. Table A1.18 shows the recommended functions for investment promotion on SKR.

**Table A1.18 Recommended Functions for Investment Promotion on SKR**

Function	Purpose	Representatives of the contents to be included	Responsibility
1. Collection, accumulation and updating of basic information on Lao PDR and SKR	To know and share with potential investors on what is happening in Lao PDR and SKR	Economic data and information of Lao PDR and SKR Geographic information including infrastructure with detailed maps Resource information (Human, agricultural and natural resources)	FIMC or the 2 provinces of SKR
2. Marketing of Lao PDR and SKR	To have Lao PDR and SKR well known to the world	Advertisement of Lao PDR and SKR Creation of a bright image of Lao PDR and SKR Contacts with walk-in investors through FIMC	FIMC or the 2 provinces of SKR
3. Granting investment incentives as a special incentive scheme for SKR	To increase attractiveness of SKR as the investment destination To provide investment incentives which creates a comparable investment climate in SKR with that of NBR	Additional incentives to the current FIMC incentives including free labor movement treatment on Thai workers, excise tax exemption	The 2 provinces of SKR in cooperation with the central government including FIMC
4. Facilitation and lobbying for the trade policy improvement	To create advantageous business environment for SKR with the facilitation of vertical cooperation between SKR and NBR	Reduction of tariffs and elimination of non tariff barriers	The 2 provinces of SKR
5. Investment information service on SKR to Thai investors	To create advantageous business environment for SKR with the facilitation of vertical cooperation between SKR and NBR	Support for potential Thai investors who are interested in SKR by providing investment information on SKR in Thailand Provision of basic information on SKR by FIMC and the 2 provinces of SKR	FIMC or the 2 provinces of SKR in cooperation with NBR and BOI
6. Cultivation of potential investors	To directly stimulate investment needs	Direct contacts with potential investors through round table meetings and individual interviews with focuses on specific industrial sub sectors	FIMC or the 2 provinces of SKR
7. Selective business support	To increase successful business enterprises in SKR	General advisory service for business and management Information service on publicly provided technical and finance assistance services	FIMC or the 2 provinces of SKR in cooperation with BOI
8. Management of the entire investment promotion activities	To introduce a strategic view and efficiently organise each individual investment promotion activities	Management and administrative function on all of the above functions	SKR or the 2 provinces of SKR

Source: Study Team.

The functions listed are generally the same as the ones recommended for NBR. However, the function of business support has to be limited in SKR due to the availability of technical human as well as capital resources.

## APPENDIX 2

# BUSINESS DEVELOPMENT IN CBR

## APPENDIX 2

### BUSINESS DEVELOPMENT IN CBR

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In Appendix 2, Thai investors' view on CBR (NBR and SKR) as a potential investment destination is presented based on the information obtained through company interviews. The purpose of Appendix 2 is to find out illustrative examples of present and future business development in CBR, and to present possible business development patterns in CBR.

#### **A2.1 Potentials and Business Opportunities in CBR**

##### **A2.1.1 Significance of Thai Investors as Information Source**

###### **Thai Investors as Potential Investors to NBR and SKR**

First, Thai investors are viewed as highly potential investors to both NBR and SKR. In Thailand, although there have been many foreign investment projects since mid 80s, foreign investments are limited in the Northeastern region except for a few provinces such as Nakhon Ratchasima and Khon Kaen. The current major business entities in the Northeastern region including NBR are Thai companies. Also, in Lao PDR, Thai investors play an important role. Roughly 33% of foreign investment projects are Thai investors since 1988, while investment projects by French, the second largest investing country in Lao PDR, account for only 11%.

###### **Appropriateness of Thai Investors**

Second, Thai investors can be a good representative of potential investors in NBR and SKR. Of course, investors from other countries may have different preferences or tendencies from that of Thai investors in conducting business. However, it is natural to consider that Thai investors share their views on investment potentials in

NBR and SKR with other foreign investors to a reasonable extent. Thai investors' perspective on the CBR market and resources available in NBR and SKR may be more or less similar to that of investors from other countries.

### **A2.1.2 Criteria for Selecting Interviewees (Companies as Potential Investors)**

Interviewees were selected from the companies operated in Thailand as well as in Lao PDR. Since entrepreneurs also start their business from scratch, potential investors may not necessarily be companies in operation. However, because it is not easy to find entrepreneurs about to start their business, interviews are planned focusing only on the companies in operation.

A few industrial sub sectors were selected as high priority targets for the interviews. Among them are agro processing, food processing, wood processing and wood working, transport related services including repair shops, and construction materials and related services. Selection of the high priority targets is based on the results of several participatory workshops, the information collected by the study team, and the hypothesis underlying the economic development of NBR and SKR. In spite of the selection of the high priority targets, it does not mean other sub sectors than the targets are excluded from the analysis on investment promotion. In fact, some interviews were with companies in other industrial sub sectors.

### **A2.1.3 Summary of Interview Results**

#### **Companies with Footholds in the Northeastern Region in Thailand**

There are some companies already selling their products to the Indochinese countries<sup>1</sup> from the footholds in the Northeastern region of Thailand, and they see NBR and SKR as potential investment destinations. In many cases, such companies are originally established in the Northeastern region. A core market for such companies is usually the Northeastern region.

#### **Companies with their Headquarters in the Central Region in Thailand**

Companies with their headquarters located in and around the Central region tend to see NBR and SKR as a source of raw materials used for their business. At best, NBR and SKR can be stations for primary processing of raw materials for such companies. To this end, primary processing of agricultural products including

vegetables and fruits can be done in NBR and SKR. A company interviewed has started corn-canning operation in Nakhon Phanom.

In some cases, interviewees in the Central region admitted that they could not tell how they would be able to develop business relationships with NBR and SKR, because they did not know well about the potentials of NBR and SKR. In particular, SKR is unknown to many of the Thai companies interviewed. Even in the cases of the companies in the Northeastern region, they generally do not have much information on business in Lao PDR.

### **Export-Oriented Companies**

For producing export products to overseas including Japan, US, European countries and Asian countries other than the Indochinese countries, NBR and SKR are generally viewed as disadvantaged because of the distance to the sea ports either in Thailand or Viet Nam. However, an interviewee in Khon Kaen is currently exporting their products to Japan, and another interviewee in Ubon Ratchathani is exporting its poultry products to the countries in Europe and Japan. Both companies are established by local persons in their hometowns.

### **Niche Products**

For some products utilizing local natural resources and special knowledge such as natural medicines, investors with such special knowledge may see NBR and SKR as a suitable investment destination for their product development and production. According to an interviewee in Ubon Ratchathani, natural herbs grown in the Indochinese countries are abundant and some of them are highly valued in the world market. His company is currently importing natural herbs from Lao PDR and Cambodia through the traders located in the border towns with the two countries.

### **Products Sold Locally**

For some products mainly sold in the local market of NBR and SKR, small and medium scale operations may be feasible. Some customized and/or relatively heavy product used in the local area is the key concept of this type of operations. However, production of such products requires certain amount of capital investment that may be

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<sup>1</sup> Lao PDR, Viet Nam, Myanmar and Cambodia.

considered as relatively high capital investment by small and medium scale companies.

### **Interaction between SKR and NBR**

In SKR, there may be a possibility of creating demand for new products to the Laotian. An example is long life milk products. Raw milk can be produced in SKR. If the processing of milk is done in NBR or the Northeastern region, long life milk products, which is a relatively new product to the Laotian, can be widely introduced in Lao PDR. At present, because the demand for milk in Lao PDR is very small, setting up a milk processing operation in Lao PDR may not be feasible. In this regard, Thai milk companies with milk processing facilities in the Northeastern region are the potential investors, since they can utilize their existing processing facilities without additional capital investment.

Although NBR and SKR are generally considered as disadvantageous for manufacturing products due to the long distance from the seaports and to customers, there may be a chance of assembling products with certain characteristics in the two regions at competitive production costs. Required characteristics of products for such assembly operation are: a light-weight product, a large production volume, a simple assembly product and a labor-intensive product. In addition to that, the following conditions may be required. First, a main manufacturing site exists near NBR and SKR, preferably in Thailand, and the quality of the products assembled in the manufacturing site in NBR or SKR can be assured in the main factory before shipping to the customers. Second, the inexpensive labor of Lao PDR (a minimum wage rate of 40 Baht per day per worker) is available in the new manufacturing site in NBR or SKR. In this case, the role of the new factory in NBR or SKR is a dedicated manufacturing site of a high volume, labor intensive product which can never be produced in the main factory with a positive profit margin due to the labor cost.

Details of major interview results are described in A2.1.4~A2.1.10.

#### **A2.1.4 Case 1: Sanitary Ceramics Products**

##### **Unique Style and Market**

In Thailand and the other Indochinese countries, sanitary ceramics products have a common unique style which is different from that of European countries. That unique style of the products has created a niche market in the Indochinese countries. Thai sanitary ceramics companies are the major producers of such products. There are a few relatively large sanitary ceramics companies in the Central region of Thailand, and one middle size company in Khon Kaen. The Khon Kaen based company has been in operation for 10 years. Its major market has been the Northeastern region, and it also started selling its products to Lao PDR, Cambodia and Myanmar 5~6 years ago. The company is currently producing 160,000 pieces annually. Out of 160,000 pieces, more than 8,000 pieces are sold in Lao PDR, and 1,000~2,000 each in Myanmar and Cambodia. The sales in Myanmar and Cambodia are increasing gradually. Product prices of the company are from 130 to 200 Baht per piece, which are the lowest among the competitors'.<sup>2</sup>

##### **Marketing of Ceramic Products**

Although some Bangkok based companies are selling their products to Viet Nam through the East-West Corridor, the company has not started selling its products in Viet Nam due to the limited capacity of marketing. The company depends only on roughly 300 sales agents as its sales channels. Out of 300, about 10 agents located in border cities are selling the products to the adjacent countries. Lacking direct sales channels, the company does not have much information on the Indochinese market. By strengthening the marketing activities, the company will be able to not only increase its sales in Myanmar and Cambodia but also expand its market to Viet Nam.

Based on the above findings, an industrial zone in either NBR or SKR can be a good investment destination for the company. According to the managing director of the company, the Vietnamese market is near from NBR and SKR, inexpensive labor is available in the two regions, and some of the critical raw materials such as limestone and gypsum exist in SKR. In fact, the company is currently getting 240 ton of limestone a year from Tak, and gypsum is used for molds. Other raw materials are kaolin and clay from Lampang, and silica from Rayong and Chanthaburi.

## **A2.1.5 Case 2: Milk Industry**

### **Promising Milk Market in Thailand**

The Thai liquid milk market consists of ultra-heat-treated (UHT) milk (67%), pasteurized milk (30%) and other milk (3%) in 1999. In the year, total liquid milk consumption amounted to 198 million liters. Although UHT milk is still dominant in the Thai milk market, the Thai government announced a policy that schools should provide pupils with pasteurized milk instead of UHT milk where possible. Raw milk cannot be transported for more than 2 hours in the room temperature. If raw milk is maintained at 4 degree, long distance transportation for 6 to 8 hours is possible. However, in that case, refrigeration trucks are used and it is a costly operation for companies. Therefore, as the milk market demand shifts from UHT to pasteurized milk, milk processing operation sites move closer to the market places. In the Northeastern region of Thailand, there are a good number of milk processing sites and distribution centers covering the entire region. In this regard, the liquid milk market in the Northeastern Thailand is highly promising.

### **Developing Milk Market in Lao PDR**

In comparison to the Thai market, the Lao milk market is still limited. The market is expected to expand in the future. However, because the current Lao milk market is too small to set up an independent milk processing factory, only the companies already having their processing facilities will be able to enter the market in this situation. A Saraburi based milk company has a plan to enter the Lao milk market with its UHT milk. The company intends to initiate contract farming under the milk farming agreements with Lao farmers in Khammouan. Since the company has milk processing facilities in Saraburi, the raw milk collected in Khammouan can be processed without additional investment in the processing facilities. Although it takes 8 to 10 hours between Khammouan and Saraburi (about 600 km), the raw milk cooled down to a low temperature in Khammouan can be transported in insulated boxes without any quality problem, according to the chairman of the company. After processing, the milk is to be sent back to Khammouan as packaged UHT milk.

In the long run, when the milk production in Khammouan exceeds the local market demand, the surplus may be able to be exported to the Thai market. Since the milk

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<sup>2</sup> High-end products are sold at more than 600 Baht per piece.

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production cost in Lao PDR will be considerably lower than that in Thailand, the milk produced in Lao PDR will be competitive in the Thai market.

### **Investment and Marketing Strategy**

For materializing this idea, the company has a plan to establish a dairy farming training center and a demonstration farm in Khammouan. The chairman recognizes that the Lao farmers need training before entering contract farming. According to the training plan, 20 farming families can be trained in one term. The expected training period for a family is 6 to 12 months in the training center. During the training period, the families live in a dormitory in the training center because the dairy farming training requires fulltime commitment of the trainees. The key factor to the success of the demonstration farm is whether it can secure the minimum requirement of raw milk from its own farm and stabilize its milk processing operation, even if the contract farmers do not follow the farming agreements with the company.

There is an obstacle to overcome before establishing the training center. It seems difficult to find a source of financing to procure milk cows for the center, demonstration farm and contract farmers to be graduated from the center. In the training plan, at least 700 cows have to be prepared. However, because milk cows are expensive (30,000 to 40,000 Baht per cow), the plan would be infeasible with a normal bank loan. In this regard, some soft loans may be necessary.

## **A2.1.6 Case 3: Agro Processing**

### **Contract Farming of Fruits and Vegetables**

Agro processing companies view NBR and SKR as a future source of fruits and vegetables for their operation. A Nakhon Pathom based food processing company has already established a corn-canning factory in Nakhon Phanom. The company is planning to expand its canned corn production by contract farming with farmers. The company has already made contracts with two large farms and is in the process of its extension activities for organizing farmers. The company intends to produce 60,000 tons of canned corn in 2003. Since corn is harvested three times a year from November to August, other agricultural products should be introduced to stabilize the factory operation through the year. When the canned corn production reaches full operation, other fruits such as mango may be introduced into the contract farming.

In the initial phase, the company sets up 5 to 6 collection stations in the province for collecting corns from the contract farmers. Currently, the company is contracting with a transportation company for its corn collection and transportation. However, relatively large farmers can take charge of the transportation function by using their own trucks. The company intends to have 25 to 30 collection stations in the future.

### **Potentials and Constraints**

According to the company, Nakhon Phanom and Sakon Nakhon are suitable for growing fruits and vegetables, because irrigation schemes are available in these provinces. In fact, the land is fertile along the Mekong River in the Upper Northeastern region. The company is intending to have farmers shift their tobacco production to corn production. Khammouan in SKR is also viewed as suitable for agriculture.

In order for the company to be successful in contract farming, farming agreements have to be regarded and kept by the farmers. Fortunately, the company has accumulated know-how of drafting agreements for 8 years through the experience of its contracts with pineapple farmers in Nakhon Pathom. According to the extension officer in the company, although Thai farmers sometimes break contracts, the company can educate farmers with the contracts, in which once they break the agreement, they cannot enter new contracts any more. The company usually spends more than a few years to make contracts with farmers.

## **A2.1.7 Case 4: Rubber**

### **Potentials of Rubber Industries in CBR**

The rubber industry in Thailand is now paying attention to the Northeastern region for their rubber plantation. Rubber plantation in Thailand has been and is prevalent in the Southern region and the Eastern region. Nevertheless, a research shows that some areas are suitable for rubber plantation in the Northeastern region. According to a Samut Prakan based leading latex company, the Northeastern region is better than the Southern region in terms of rubber plantation. Latex can not be tapped on rainy days, although rubber trees need sufficient rainfall and water. In the Northeastern region, rubber farmers can tap twenty more days in a year than those in the Southern region on average.

There is another reason why the rubber industry is interested in the Northeastern region. The rainy season gradually moves from the North to the South in Thailand. If there is rubber plantations in the Northeastern region, the industry may be able to stabilize the supply of latex through the year. In fact, some rubber plantations have already been started in the Northeastern region including NBR.

### **Rubber Plantation and Products**

The Samut Prakan based latex company plans to promote rubber plantation in NBR on the contract basis with farmers. The company is to establish mini factories in NBR for the collection and primary processing of latex. After the primary processing, latex is brought to the main factories located in the Eastern region. By using preservatives, the quality of latex can be maintained for 3 to 4 days before the secondary processing.

Natural rubber products are divided into two categories. One is latex product, and the other is rubber sheets and blocks. In the past, crude rubber sheets were used for producing rubber sheets and blocks, but recently, natural rubber latex is used for the production of rubber sheets and blocks in large rubber producers in Thailand. Therefore, the use of latex seems to be expanded.

### **Down Stream Linkage of Rubber in Thailand**

Furthermore, the domestic demand for latex and natural rubber products seems to be expanding due to the production strategies of the down stream industries of natural rubber in Thailand. Therefore, the market aspect of natural rubber latex may not be a problem for rubber business development in Thailand. However, the problem is the risk of farmers newly entering rubber plantation. Because latex cannot be tapped for the first 7 years of planting, rubber plantation farmers may face financial difficulties during the period. While there is a one time financial support by the Thai government for the re-plantation of rubber trees, there is no government support for new rubber plantations.

## **A2.1.8 Case 5: Herbal Medicine**

### **Herbal Plantation and Herbal Medicine Processing**

An Ubon Ratchathani based herbal medicine company has recently purchased roughly 100 Rai of land in Warin district of Ubon Ratchathani for its herbal plantation and herbal medicine processing. This is a part of its business expansion plan. At present, the company is growing 90% of the herbs used for its herbal medicine production. For the rest 10%, the company buys naturally grown herbs from the Indochinese countries including Lao PDR and Cambodia through Thai border traders. According to the president of the company, Indochinese countries are rich in natural herbs, but people in those countries pay little attention to the herbs for commercial production due to the lack of academic, technical and market knowledge in herbal medicine. So, it is not difficult for someone with knowledge in herbs to get high value natural herbs at very low prices in, for example, Lao PDR and Cambodia. Furthermore, natural herbs can be sold at higher prices than the planted ones.

### **Potential of Herbal Markets**

Presently, China is the largest exporter of herbs in the world followed by Viet Nam. However, since the world market for herbal medicines is now growing, there will be an opportunity for Thai herbal medicine companies to expand their businesses targeting for the world market. This view is substantiated by the corporate behavior of a multi national German medical company. The German company is now planning to export herbal medicines from Thailand.

### **Competition in Indochinese Herbal Market**

In spite of the above favorable market situation for the Thai herbal medicine companies, the Ubon Ratchathani based company is concerned about a growing threat of the Vietnamese herbal medicine industry. In Viet Nam, the government is promoting its herbal medicine industry with a strong public support, and the Vietnamese companies are also getting natural herbs from Lao PDR. Unlike in Viet Nam, there is no specific public assistance for the herbal medicine industry in Thailand. Without public support, the Thai herbal medicine companies may not be able to compete with the Vietnamese. The president of the Ubon based company urged the necessity of prompt action on the public support for herbal research and sales promotion in the world market.

Regarding the investment prospects of the herbal medicine companies in NBR or SKR, the president considers that these two areas are attractive as an investment destination. Although currently he does not have any plan to have another factory in NBR or SKR, he expressed his interest in the industrial zones in the two areas, especially in Mukdahan. According to him, Mukdahan will be better than Ubon Ratchathani for exporting products in the near future due to the development of the East West corridor. SKR is rather viewed as a major source of herbs since the herbs in this area are better than that of the Southern areas in Lao PDR.

### **A2.1.9 Case 6: High Volume, Lightweight, Labor-intensive Products**

#### **Lightweight Labor Intensive Products**

Potentials of NBR and SKR as an investment destination are not only for resource based industries, but also for the production of high volume, lightweight, labor intensive products. There is a prototype factory in Vientiane. A Lamphun based Japanese coil manufacturer, producing small transformers and trigger coils for strobe light units in cameras, established a factory in Vientiane to produce a very high volume, low margin coil one year ago<sup>3</sup>. Only one product model is produced in the Vientiane factory, but the production volume of the model is 6 million pieces per month. The major purpose of this factory is reduction of production cost for its low margin product.

#### **Labor Cost**

According to the managing director of the company, the product produced in Vientiane factory would not be profitable, if produced in the Lamphun factory. While the minimum wage rate in Thailand is 130 Baht per worker a day, the labor cost in Lao PDR is 40 Baht per worker a day. Although the skill level of Lao workers is generally less attractive than that of Thai workers, Lao workers' low wage rate is attractive and in some cases critical for low margin products which cannot be produced profitably in Thailand. Particularly for small lightweight products, the transportation cost can be negligible in the total production cost. In that case, the labor cost becomes more important than the transportation cost.

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<sup>3</sup> The Lamphun based company is a joint venture between Japanese and Thai.

### **Simple Production Line**

However, not all companies producing high volume, lightweight, labor intensive products, can enjoy the inexpensive labor in Lao PDR. Only the companies with simple production processes can fully utilize the Lao workers now. Simple production processes are reasonable in regard to the current production skill of general Lao workers. By keeping production process as simple as possible, a factory in Lao PDR can maximize its profit. In order to maintain a simple production process in the newly established factory, the company must have its major production sites in other places than Lao PDR in the short run. In the case of the Vientiane coil factory, the Lamphun factory is the main factory, producing 200 to 300 product models a month. Furthermore, the quality of all the products produced in the Vientiane factory is finally assured in the Lamphun factory before sending to the customers, although there is an inspection process in the Vientiane factory, too.

### **Thai-Lao Satellite Factory Business Model**

Having analyzed the above example, it may be a good way of cost reduction for manufacturing companies of lightweight products in Thailand to have a satellite factory dedicated to a high volume, labor intensive, simple product in SKR.

There are some other benefits for a Thai based company to have a satellite factory in SKR. First, if a Thai person is designated to the factory manager in SKR, he/she can communicate in Thai because many Lao workers understand Thai. The manager of the coil factory in Vientiane is also a Thai national. Second, the maintenance staff trained in the main factory in Thailand can be sent periodically to the factory in SKR without any language barriers. Since there are only a small number of technicians and engineers in Lao PDR, foreign technical staff who can communicate well with Lao workers is the key for the smooth operation. Third, because SKR is adjacent to Thailand, top managers in the Thai factory can quickly go to the factory in SKR by air, if necessary. Fourth, if the products are produced in the factory in SKR, with the raw materials from the affiliated Thai factory and exported to that Thai factory again, the receipt for the products exported can offset the payment for the imported raw materials. Such internal transactions will improve asset and liability management, and minimize working capital requirement for the company.

## **A2.1.10 Case 7: Wood Processing and Wood Working Industry**

### **Wood Processing Industries in NBR**

There are Thai flooring manufacturers using lumber from Lao PDR. In many cases, those companies are purchasing lumber through wood processing companies located in the border provinces such as Mukdahan and Nakhon Phanom. However, the flooring production is generally done near Bangkok because the main markets for flooring products are overseas. According to a large flooring manufacturer located in Pathumthanee, NBR is not attractive in terms of their processing site because supplies and maintenance services are not readily available in the area.

### **Government Policy on Wood Industries**

With regard to high value added wood working industry, the current government policies and regulations on precious wood are discouraging. Due to the complicated registration procedures of precious wood, there are few woodworking factories using high-grade lumber in Thailand.

There are furniture producers using rubber wood. However, the rubber wood used for furniture mainly comes from the Southern region of Thailand. Therefore, most of them are located in the Central region.

## **A2.2 Possible Business Development Patterns in NBR and SKR**

Based on the interview results and the analysis on the implications of AFTA, three business development patterns are found for NBR and SKR. They are (1) Resource Development and Processing Oriented Business Development, (2) Border Trader Led Business Development, and (3) Satellite Factory Type Business Development. Validity of those business development patterns has not been proved. They are rather hypotheses presented by the study team. Nevertheless, indicating such business development patterns may help NBR and SKR prepare their own investment promotion strategies. Since those patterns are just examples of business development in NBR and SKR, there will be other business development patterns.

### **A2.2.1 Resource Development and Processing Oriented Business Development**

#### **Development Pattern**

The development pattern of the resource development and processing oriented business is shown in Figure A2.1. Here, "resource" mainly means agricultural produce including vegetables, fruits and milk. In this business development pattern, a Thai investor invests his/her capital in SKR with his/her technologies in raw materials production, first. At Stage 1, workers in SKR are trained by the Thai investor so that they can properly produce raw materials. This training process may be done in a training center set up by the investor. (There may be a case in which fund from official development assistance can be used for setting up the training center.) When raw materials are produced in SKR, they are transported to NBR or somewhere in the Northeastern region of Thailand for processing. It is most likely that such a Thai investor owns his/her processing site in the Northeastern region. After processing the raw materials, final products are transported to SKR or somewhere in Lao PDR for sale. At the Stage 2, the processing site moves to SKR. When the Lao market for the final products expands, it becomes feasible to have a processing site in SKR. Raw materials can be processed without transporting to Thailand at this stage. Stage 3 is the time to expand the target market to the Northeastern Thailand. With fertile land and cheap labor, the final products produced in SKR will be competitive in Thailand. In the long run, the target market can be expanded to the Indochinese countries because SKR is located in the middle of the Indochinese region. This is Stage 4.

## Phased Transfer of Operation from Thailand to SKR

The key to the success of this business development pattern is the phased transfer of the operation site from Thailand to SKR, and phased market expansion from the Lao market to the Indochinese market. However, in order for this business development pattern to be realistic, tariffs on unprocessed as well as processed agricultural products have to be reduced between Thailand and Lao PDR as quickly as possible. Also, import restrictions on processed agricultural products by the Lao government have to be eliminated.

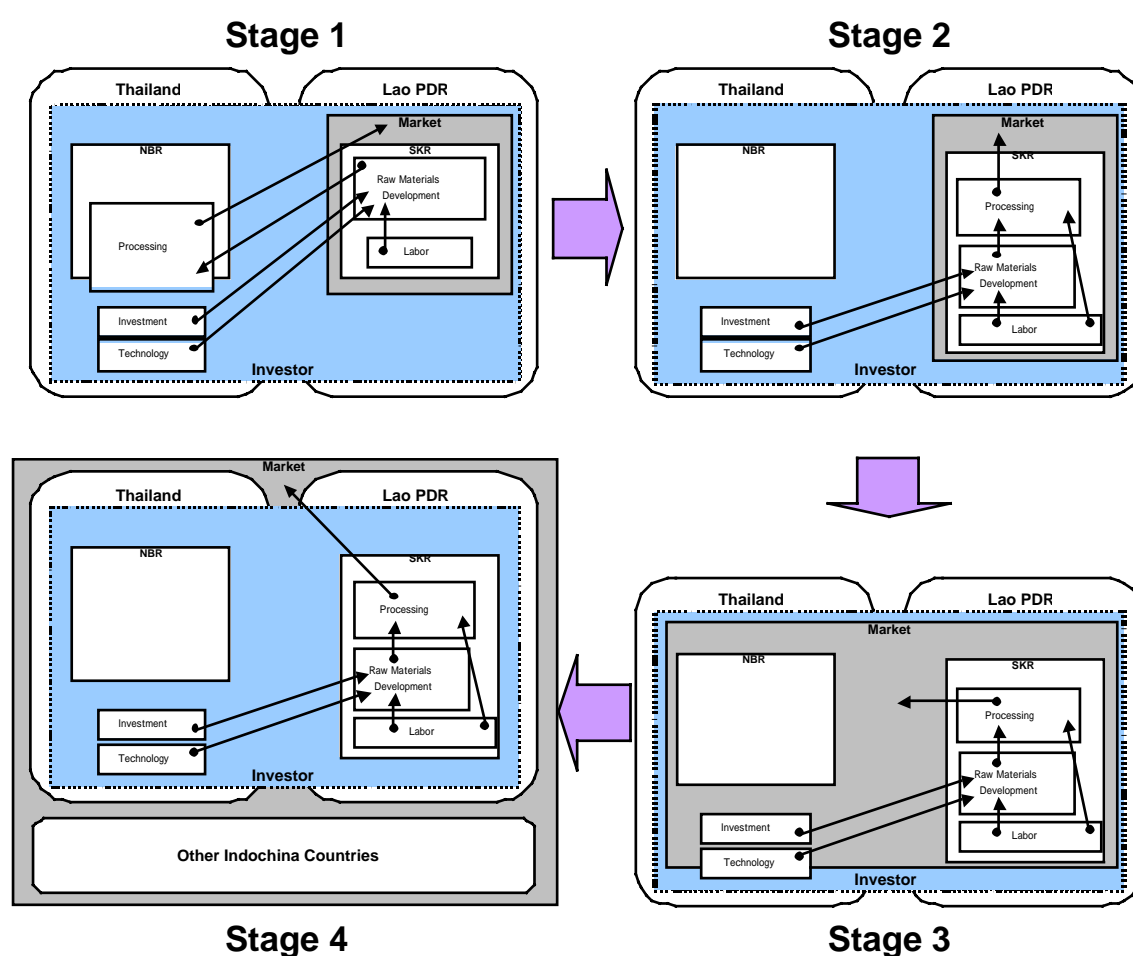


Figure A2.1 Resource Development and Processing Oriented Business Development

## A2.2.2 Border Trader Led Business Development

The development pattern of the border trader led business is shown in Figure A2.2.

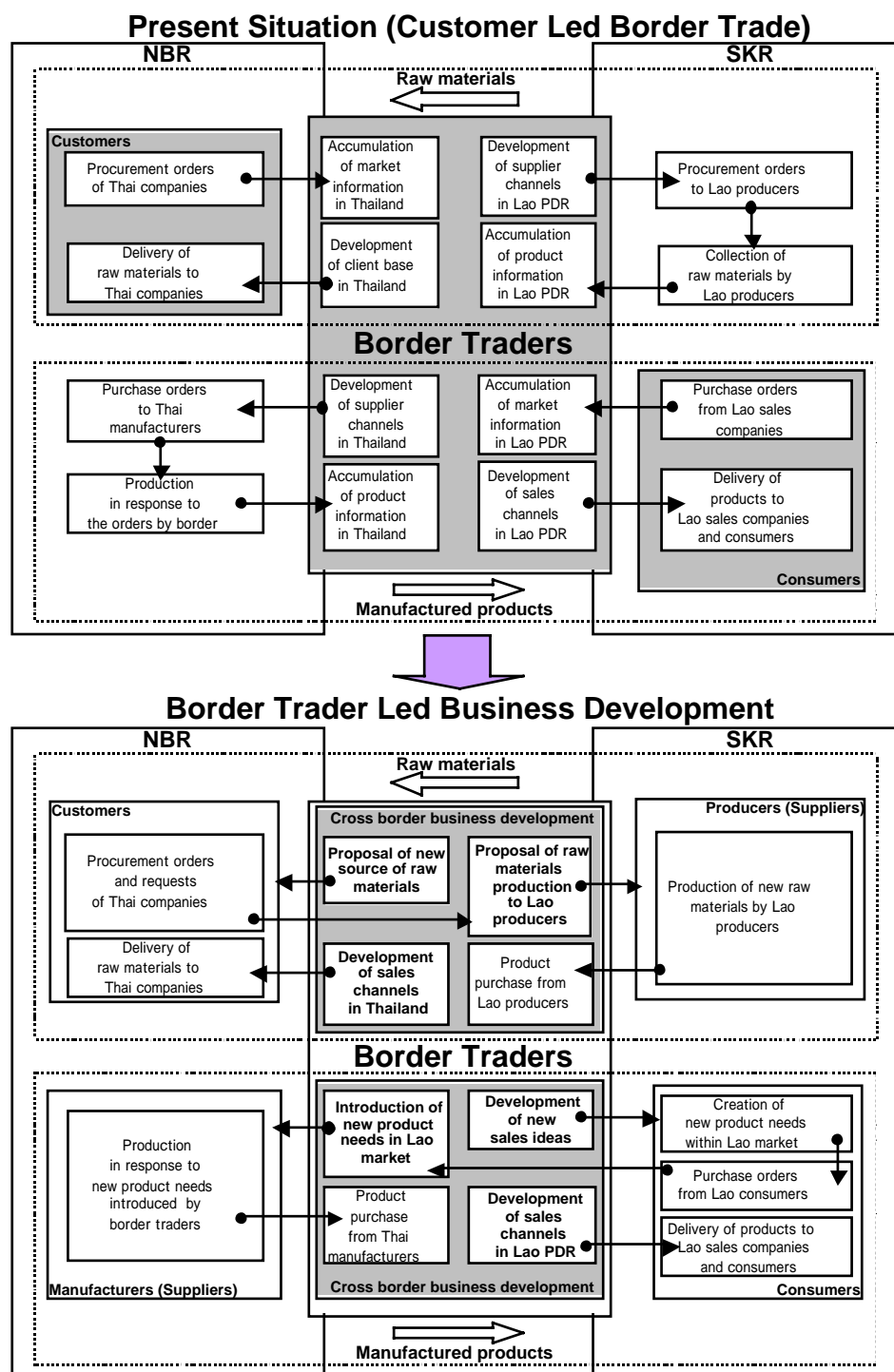


Figure A2.2 Border Trader Led Business Development

## Border Traders as Keypersons

Through many interviews with companies in the Northeastern region, it was recognized that border traders have been playing a key role in the business development in NBR and SKR. In many cases, Thai companies do not know well about the business in Lao PDR, even though they sell their products to Lao PDR. That is because the border traders take the role of middlemen for the trade from and to Lao PDR. The border traders know not only market needs but also suppliers' capacity to some extent in both the Thai side and the Lao side. Nevertheless, border traders' business activities seem still reactive to customer behaviors. By utilizing such market and trade information, they can be proactive business developers.

## From Traders to Manufacturers

Furthermore, there is a possibility that border traders become producers of manufacturing products in Lao PDR (Figure A2.3). Presently, border traders are just trading raw materials and manufactured products between Thailand and Lao PDR. Customers of manufactured products, particularly durable goods, need repair service for those products after purchasing. While there are many relatively skillful repair shops in Thailand, good repair shops are hardly found in Lao PDR at present. If border traders start providing repair service in Lao PDR, it will be convenient to customers in Lao PDR and well accepted by them.

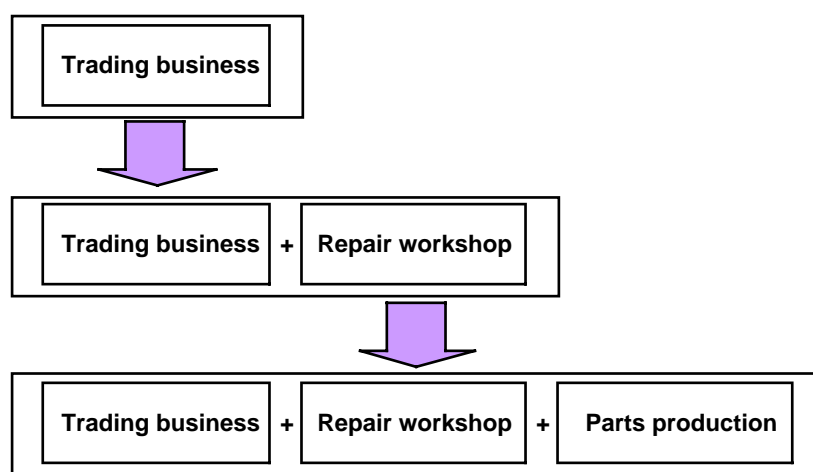


Figure A2.3 From Border Trader to Parts Manufacturer

By providing repair service, the border traders will be able to accumulate and obtain skills and knowledge in repair work. The skills and knowledge in repair work can be a basis of manufacturing activities. When the basis for manufacturing activities is prepared in the business of the border traders, they may be able to initiate production of simple parts with technical assistance from the manufacturers in Thailand. Since the Lao consumer market is very small, sales competition is not fierce for the moment. That situation creates an opportunity for border traders to be repair shops and parts manufacturers. In this way, border traders can develop their operation from just trading business to manufacturing and sales with repair work.

This business development pattern will be materialized, only if the border traders see the above development picture. It is necessary to give an input of the business development pattern to border traders.

### **A2.2.3 Satellite Factory Type Business Development**

#### **Limited Profitability in Current Factories in Thailand**

Currently, there are many manufacturing companies in Thailand. Those companies produce various kinds of products ranging from high margin to low margin. Sometimes product lines include loss-making models, which have to be produced to satisfy requests from valued customers. Mass production type factories tend to have a few marginal profit or loss-making models. Losses due to the production of negative margin products can be covered by the profits earned from the production of high profit products, but if there is a way to change negative margin products into profitable ones, most companies will try it. That is the basic concept of "satellite factory operation".

#### **Production Transfer to Satellite Factory in Lao PDR**

As shown in Figure A2.4, if the labor cost is reduced for some loss making products, they may become profitable. Since the wage rate in Lao PDR (around 40 Baht) is almost one third of the minimum wage of 130 Baht in Thailand, a Thai company can decrease its labor cost by establishing factories in Lao PDR<sup>4</sup>.

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<sup>4</sup> If free movement of workers between NBR and SKR is realized, low labor cost factories can be established in NBR, too.

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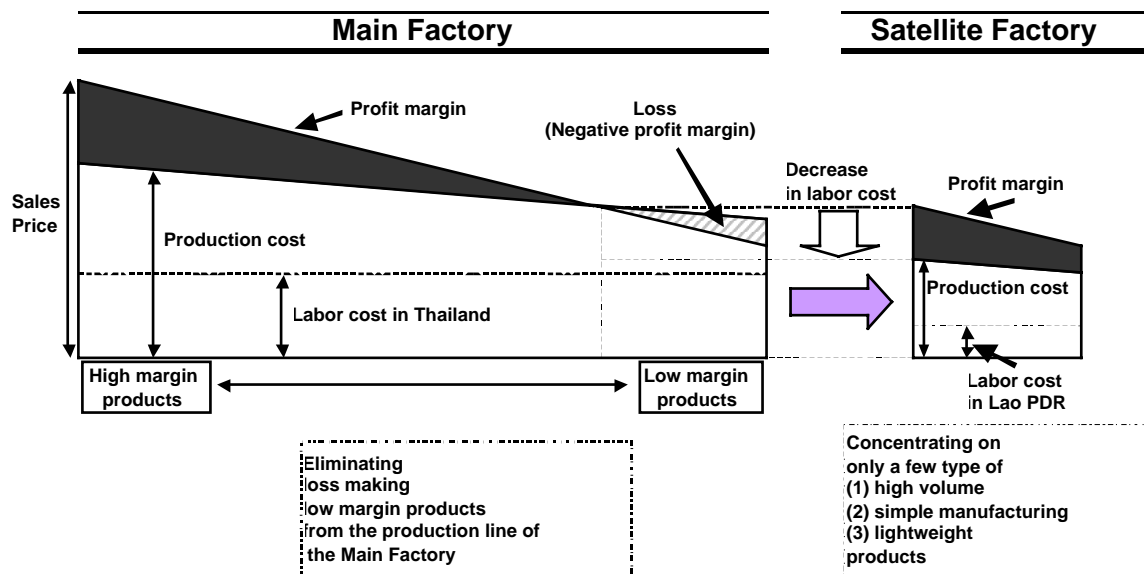


Figure A2.4 Establishment of Satellite Factory

### Keys to Success of Satellite Factory

However, there are some requirements for a successful factory operation in Lao PDR. Generally, Lao workers are unskilled and not used to factory work. They are not suitable for the production lines with complicated processes. Therefore, the product models produced in the Lao factory have to be simple, and the production process needs to be simplified so that the Lao workers can properly follow the work instruction. This is the first requirement to be satisfied in the Lao factory.

The second requirement is a high production volume of the product model to be produced in the Lao factory. Because the Lao workers are not adaptable to frequent changes of the production process, the production volume of the model produced has to be high enough to continue the same production process for months.

The third requirement is the quality assurance regime for the products produced in the Lao factory. It is not expected to have quality assurance staff in the Lao factory, since the factory has to keep its labor cost at the lowest level. That is why the Lao factory is defined as a satellite factory. One solution for assuring the quality of the Lao factory products is to utilize the quality assurance staff of the main factory, in this case in Thailand. That is possible by sending products from the satellite factory to the main factory. At this point, there is a question about the transportation cost of

the products between the two factories. If the weight of the product model is heavy, transportation cost goes up, and consequently, the Lao factory operation becomes unprofitable. Similarly, if the product is bulky, it is not suitable for the production in the Lao factory. So, the product model needs to be lightweight and compact. Such type of products is called as a "gram product." For minimizing the throughput time of the product, the two factories should be located as close as possible. In this regard, SKR is one of the most appropriate locations for establishing satellite factories for the companies in Thailand.

Presently, there is one example of the satellite factory, producing small coil products in Vientiane. This type of factories will be increased in the near future in Lao PDR.

## APPENDIX 3

# INTERNATIONAL TRANSPORTATION

## APPENDIX 3

### INTERNATIONAL TRANSPORTATION

#### A3.1 Review of Impacts of the First Mekong Bridge and Potentials of the Second Mekong International Bridge

##### A3.1.1 Impact of First Mekong Bridge

###### Project Outline

The First Mekong Bridge (Figure A3.1), also called as "Friendship Bridge," was constructed by the assistance from AIDAB (Australian International Development Assistance Bureau) in 1994. The Bridge became the first over the Mekong and replaced the existing ferry service. It connects Nong Khai Province in Thailand and Ta Naleng (Vientiane) in Lao PDR. Table A3.1 shows the outline of the Bridge.

**Table A3.1 Specification of First Mekong Bridge**

Cost	A\$42million <sup>1)</sup>
Bridge type	Prestressed single box girder
Width	12.7m for two lanes of road traffic and foot paths with provision for a future railway
Length of bridge	1,174m
Main span length	105m
Width of river channel	640m
Navigation clearance above high water level	10m
Construction commencement	October 1991
Open to traffic	April 1994

Note:1) A\$42million=US\$ 25 million = 983 million Baht  
= 197 billion Kip = 2.75 billion Yen (as of July 2000)

Source: Friendship Bridge Administration

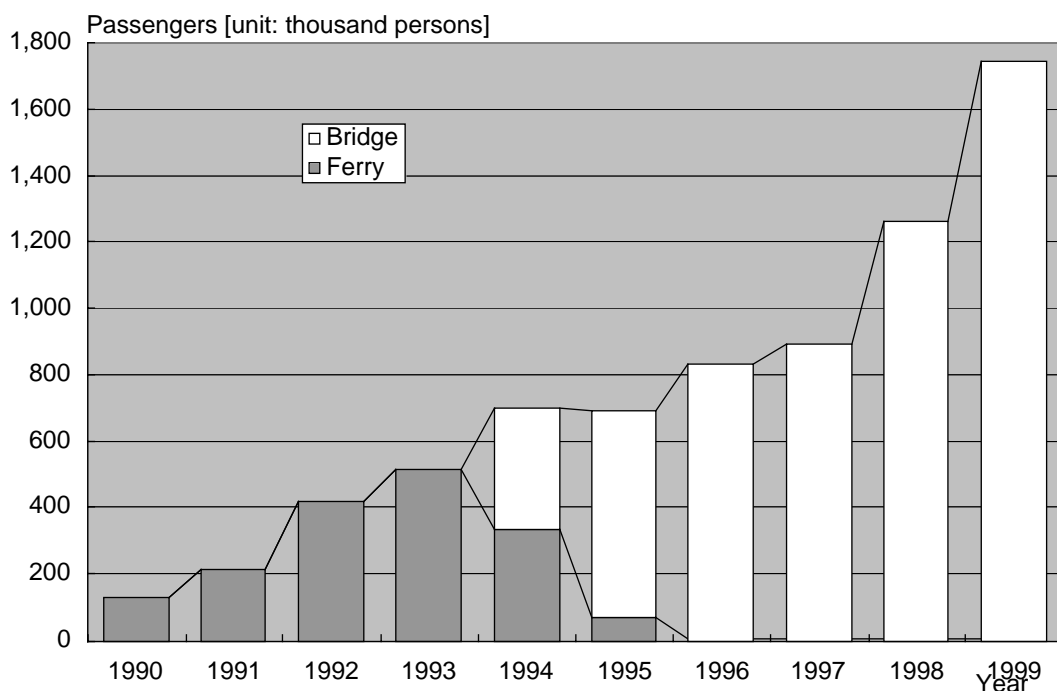
Source: Friendship Bridge Administration



**Figure A3.1 First Mekong Bridge**

### **Influence on Transportation**

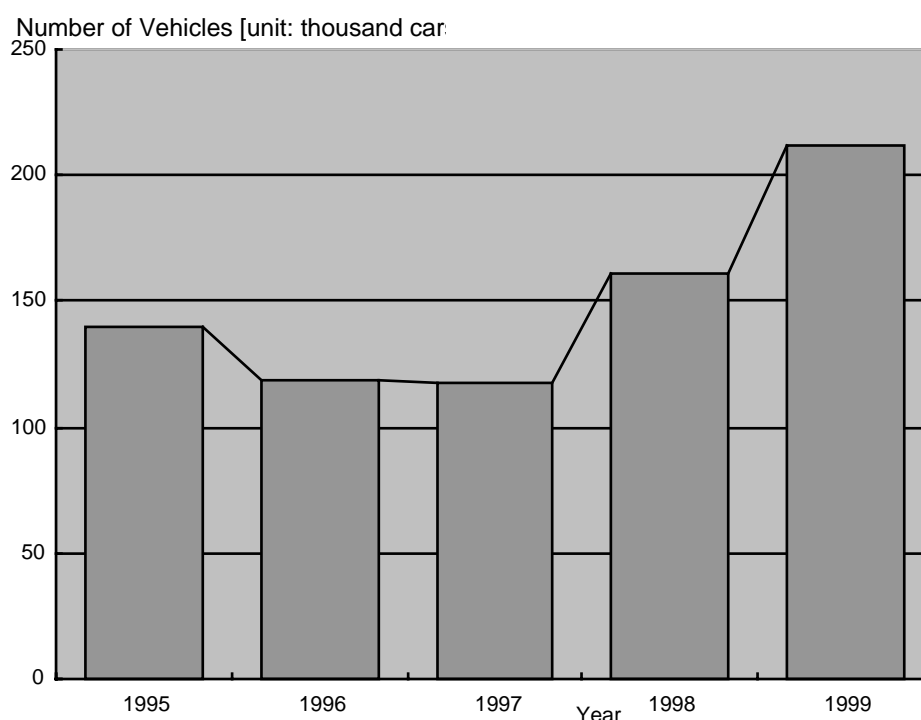
Before the completion of the Bridge, people could pass the Mekong by ferries for 30 minutes. The bridge reduced passing time dramatically but the immigration and custom clearance time remained the same. Figure A3.2 shows the passengers crossed the Mekong at Nong Khai - Vientiane border.



Source: "Study on the usage and operations of the Mekong Bridge River Friendship Bridge (1997)" and "The study for improving of logistics for East-West Corridor in GMS (2000)"

**Figure A3.2 Passengers over the Mekong at Nong Khai Border**

In average, the number of passengers grows at 30-40% recently. The bridge contributes to absorb this high growth of passenger movements.



Source: Vientiane Municipality

**Figure A3.3 Traffic Volume over the Bridge**

(Both directions)

The traffic volume on the bridge is shown in above Figure A3.3. The volume decreased in 1996 and 1997. After 1997, the traffic volume increased gradually. In 1999, the total volume was recorded for 211,541 vehicles for both directions. The number was equivalent to 290 vehicles per day per direction. This means the traffic flow is still far less than the bridge capacity.

The freight into Laos has final destination in Vientiane or its hinterland. Particularly, the Ta Naleng warehouse becomes the final destination. Little freight goes to Khammouan and Savannakhet through the bridge.

The bridge was also designed to be a section of railway between Vientiane and Nong Khai. Although SRT constructed a railway link on Thai side, the Lao side has no progress in railway construction due to a failure of PFI project.

## Local Impact

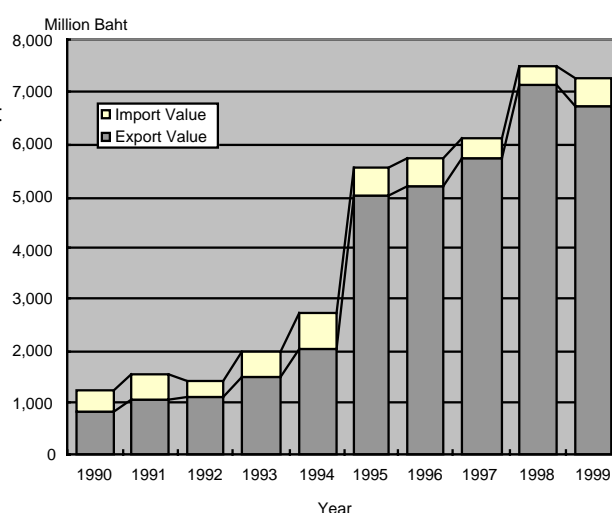
### Trade

As the traffic and passenger volumes over the bridge grow, the trade also increased as in Table A3.2 and Figure A3.4. The trade volume dramatically increased by the bridge, especially the export from Thailand to Laos. During the economic crises, the volume increased nominally. Import from Laos to Thailand is almost 10% and has not increased by the bridge.

**Table A3.2 Trade at Friendship Bridge**

Unit: Million Baht

Year	Export Value	Import Value	Trade Volume	Growth Rate
1990	810	420	1,230	
1991	1,074	454	1,528	24%
1992	1,096	354	1,450	-5%
1993	1,523	452	1,975	36%
1994	2,054	659	2,713	37%
1995	5,015	519	5,534	104%
1996	5,207	507	5,714	3%
1997	5,706	399	6,104	7%
1998	7,136	368	7,504	23%
1999	6,728	520	7,248	-3%
Total	36,348	4,652	41,000	



**Figure A3.4 Trade at Friendship Bridge**

Source : Nong Khai Customs House

The bridge contributes to supply more convenient and reliable passing measures over the Mekong. As shown above, trade volume and number of passengers are growing.

The woods and its products had been the traditionally traded commodities, but the trade volume of woods on the Nong Khai route declined after bridge completion.

### Land Use and Foreign Direct Investment

The impact on the land use and foreign direct investment are not as much as expected. The Lao side originally had more than ten factories of import- and export-oriented along the route between the bridge and Vientiane City. The types of factories are mostly clothing or lumber processing.

After 1994, four factories were newly established along the road from the bridge to Vientiane City. The number, four, of new factories and the amount of foreign investment are much less than the initially expected number.

Even for a new factory, their products are exported mainly by air to Bangkok. The surface transportation via the bridge was not a critical factor, but it improved overall environment such as commuting of Thai foremen.

On the Nong Khai side, remarkable impact on land use is not observed because the bridge did not promote new FDI, except service sector, in and around Nong Khai. The travel related service business, such as visa application agents and tourist hotels, are growing in the city.

#### Tourism and Accommodation Facility

For tourism development, the Bridge had a large impact to attract tourists to Vientiane. Not only Thai tourists, but also other foreign tourists began to visit Vientiane via the Friendship Bridge. The bridge enabled tourists to visit Vientiane from Nong Khai on high-decker buses (so called "VIP Buses"). Now, the tourists can visit Vientiane from Nong Khai on a day trip.

Despite the economic recession in Thailand, Nong Khai City had a boom of hotel opening after the bridge construction (See Table A3.3). The room capacity has been quadrupled by the bridge opening.

**Table A3.3 Hotels in Nong Khai**

Hotel	Number of rooms	Year opened	Distance from bridge (km)
NongKhai Grand	130	1994	2.0
Mae-Khong	200	1996	1.5
Thai-Lao	70	1997	1.0
Tip	110	1998	2.0

Source : JICA Study Team

For the first three years from 1994, the tourism agents in Nong Khai increased from 4 to 20 companies. However, it decreased to 10-12 companies in 2001. A typical agent has 3-4 guides and the main trip travels between Nong Khai and Vientiane or Viet Nam. The 30% of tourists are foreign and others are Thai.

On the Vientiane side, the same boom happened. A couple of new hotels for international tourists opened in the city.

Thus, the bridge had a large impact on tourism development. Nong Khai side functions as a base for trips to Vientiane and beyond. Vientiane became more attractive and accessible by foreign tourists not only by air but also by surface route.

Truck drivers also require hotels. Large part of trucks that cross the bridge bring import goods from Thailand to Laos. Most trucks depart Bangkok in the night so as to arrive at Nong Khai in morning. Otherwise, the drivers are required to stay overnight on Nong Khai side to wait for the business hours of bridge and customs. After unloading their cargoes at the Ta Naleng on Lao side, many drivers return Nong Khai to stay overnight.

#### Agriculture

Although the export promotion of produces from Laos to Thailand was expected, the impacts have been observed to be small. One of the reasons is the existing traditional river surface route is preferred to avoid taxation. Therefore, the bridge did not influence market price of produces in Nong Khai. The bridge had little impact on local agricultural market.

#### Overall Impact

The local impacts by the Bridge are observed in many aspects on both sides. At the time of opening, the attitude of Lao side was relatively conservative for foreign investment and foreigners. Consequently, it did not attract foreign direct investment as expected. On the other hand, large impacts have been found in trade and tourism.

#### **Regional Impacts**

Different from local impacts, the regional impacts have not been observed clearly. One of the reasons is the limited area of hinterland behind Vientiane City. Although Vientiane is the capital of Laos, the city does not work as a distribution hub of the whole country. In addition, the domestic route from Vientiane to the northern area has not been well developed. The First Bridge was not developed as a part of integrated regional route such as the East West Corridor.

Thus, the bridge replaced the function of ferries but it did not change the distribution pattern of Laos.

### A3.1.2 Potential Impact by Second Mekong International Bridge

#### Project Outline

Based on a feasibility study supported by Asian Development Bank, the Second Mekong International Bridge<sup>1</sup> (Second Bridge) is now under preparation to open in 2005-6 with the financial assistance from JBIC (Japan Bank for International Cooperation). As this bridge connects Mukdahan and Savannakhet, its completion will influence the total area of CBR. Figures A3.5 and A3.6 indicate the location of the bridge.

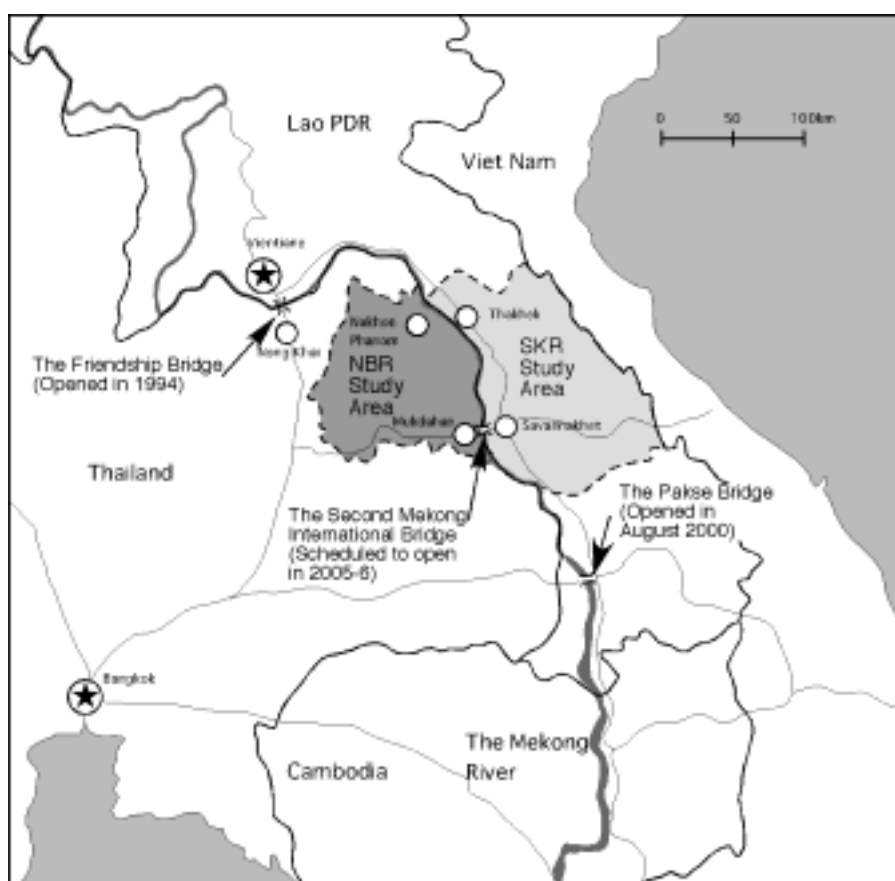
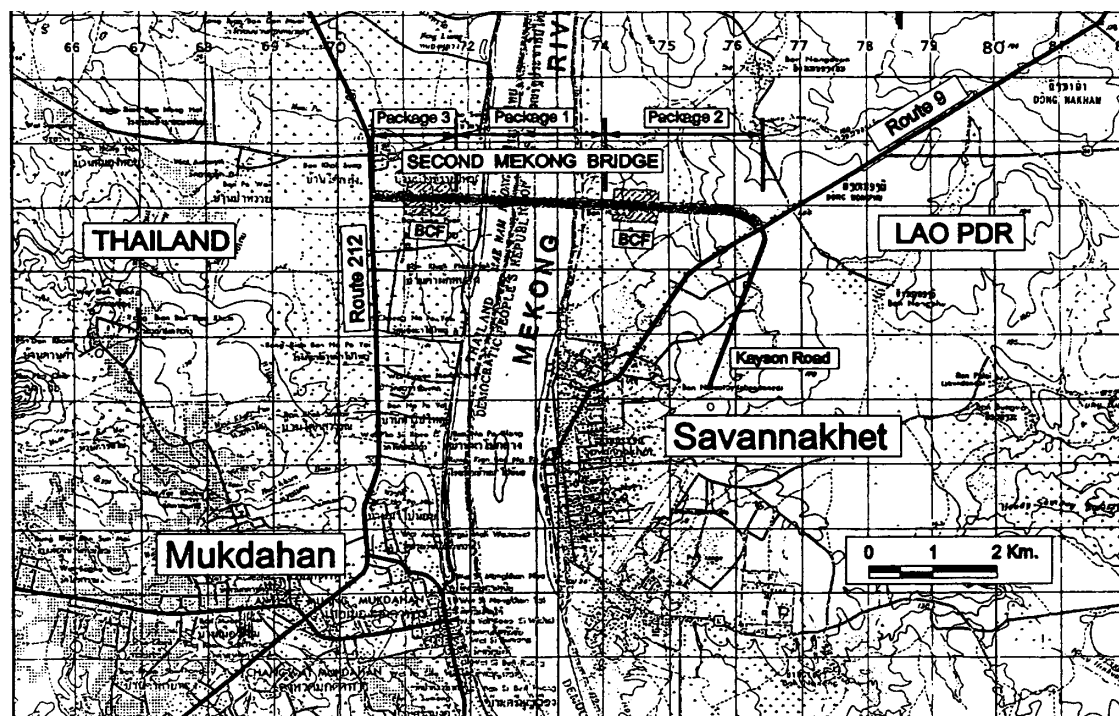


Figure A3.5 Location of Three Bridges over the Mekong

<sup>1</sup> This bridge will be the third one to cross the Mekong following the Pakse Bridge in Lao PDR. As an international bridge, the bridge will be the second one.



Source: JICA Detailed Design Study.

**Figure A3.6 Location of the Second Mekong International Bridge**

The current ferry service carries the passengers and vehicles as follows.

**Table A3.4 Passengers and Vehicles between Mukdahan and Savannakhet**

From Thailand to Laos		1996	1997	1998	1999
Passengers	(person)		44,059	35,815	45,793
Vehicle	(unit)	3,438	6,728	9,644	10,912
Car, Pick-up	(unit)	92	217	316	600
Boat	(voyage)		1,247	1,542	1,691
Goods	(ton)		44,059	35,815	45,793
From Laos to Thailand		1996	1997	1998	1999
Passengers	(person)		62,835	62,529	72,865
Vehicle	(unit)	2,401	3,783	2,656	7,407
Car, Pick-up	(unit)	33	68	97	193
Boat	(voyage)		1,790	1,886	1,973
Goods	(ton)	41,909	44,688	21,500	66,575

Source: JICA Short Term Mission.

**Table A3.5 Passengers and Vehicles at Borders**

**Passenger(1999)**

Thai-Lao border unit: person

Thai side	Lao side	From Thailand to Laos	From Laos to Thailand	Total
Nong Kha	Vientiane	859,147	884,773	1,743,920
Nakhon Phanom	Tha Khek	34,378	35,405	69,783
Mukdahan	Savannakhet	45,793	72,865	118,658
Ubon Ratchathani	Pakse	49,008	51,936	100,944

Viet Nam-Lao border unit: person

Lao side	Viet Nam side	From Laos to Viet Nam	From Viet Nam to Laos	Total
Dene Savanh	Lao Bao	2,437	1,580	4,017

**Vehicle(1999)**

Thai-Lao border unit: vehicle

Thai side	Lao side	From Thailand to Laos	From Laos to Thailand	Total
Nong Kha	Vientiane	105,274	106,267	211,541
Mukdahan	Savannakhet	10,912	7,407	18,319
Ubon Ratchathani	Pakse	10,102	6,188	16,290

Viet Nam-Lao border unit: vehicle

Lao side	Viet Nam side	From Laos to Viet Nam	From Viet Nam to Laos	Total
Dene Savanh	Lao Bao	14,106	7,813	21,919

Source: JICA short-term mission,  
Chong Mek Custom House, Nakhon Phanom Immigration Office(Thailand)

The volume of passengers and vehicles between Mukdahan and Savannakhet are less than 10% of the current traffic volume over the First Mekong Bridge (See Table A3.4 and Figure A3.2). Although the current traffic movement between Mukdahan and Savannakhet is limited, the rehabilitated Route 9 in Lao PDR will multiply the current volume. From the regional point of view, the Second Bridge is much more meaningful when it is combined with the rehabilitation project of the Route 9.

**Short-term and Local Impacts**

From the short-term and local point of view, the Second Bridge will provide the following positive impacts:

- During construction, the contractors require support services from the local community. (Food, labor, accommodation and local contracts.)

- The bridge will save the time for passengers and vehicles.
- The bridge will improve the emergency medical service.

In contrast, the Bridge has potential negative impacts on the local community as follows.

Before and during construction:

- Involuntary relocation will be required.
- Minor pollution will be identified in water quality, air quality, aquatic life, noise and vibration.
- There will be construction accidents.

After construction:

- Local people will lose temporary jobs as construction workers.
- Local people will lose servicing opportunity for construction workers.
- The confusion of traffic rule will cause traffic accidents because the position of steering wheels is different between Thailand and Laos.
- The increased toll to pass the Mekong will burden local peddlers.

### **Long-term and Regional Impacts**

The following positive impacts by the Second Bridge and East-West Corridor are expected in the long-term and regional point of view:

- Improved access will attract direct investment from abroad and Bangkok Metropolitan Region.
- The Corridor will increase the opportunity for tourism.
- The Corridor will create new employment opportunities in transportation and trade sector.
- Local people will be able to sell their products to drivers.

On the other hand, the East-West Corridor may have potential negative impacts on the region in the long run as follows:

- Labor force will emigrate out of the rural area and over concentrated in the urban area close to the border.
- Heavy trucks will pass through the small communities along the road.

- Communicable diseases will risk the human health. The corridor has significant impacts on the transmission of STD, especially HIV/AIDS.
- Epidemic among animals will expand more rapidly.
- Increased transit traffic will leave some burden on local government. (e.g. solid waste and road maintenance.)
- Improved access for logging will increase the risk of environmental degradation and alienation of common land.
- Improved cross-border transportation may cause trafficking of local women and children.
- Exposure to different culture will influence the tradition of communities.

### **A3.1.3 Potential Negative Impacts and Mitigating Measures**

The Bridge and the Corridor will also provide some negative impacts on the both sides. The Lao side is especially vulnerable if directly exposed to the outer environment.

#### **Short-term Impacts**

- Involuntary relocation

Current bridge plan requires negligible number of dwellings to be removed but the residents are not necessary to move. Appropriate compensation program is necessary.

- Environment pollution

The Initial Environmental Examination (IEE) by the JICA D/D Study showed that the pollution on natural environment is minor. For further detail, the Environmental Impact Assessment (EIA) will be required.

- Construction accidents

The construction workers need preventive education for safety in workers' native languages.

- Loss of temporary jobs

Construction workers will consist of Thai, Lao and Vietnamese people. The workers from outside of the region will return to their homeland after completion. It is recommended that the temporarily hired locals are prioritized to work for new border related jobs. (e.g. duty free shops, bus drivers and warehouse workers.)

- Loss of servicing opportunity for construction workers

New business chances for service industry will be found along the bridge connection road. Existing service establishments will be encouraged to relocate.

- Traffic accidents

The lane changeover at grade will be installed on the Thai side. Not only to drivers, additional traffic safety education to the residents will be required.

- Increased charge

The bridge toll for passengers should be set at nominal increase from the current ferry fare.

### **Long-term Impacts**

- Emigration from region

Development of secondary towns along the Route 9 should be encouraged rather than to concentrate on the urban center along the Mekong. The service sector along the road can absorb the surplus labor from agricultural sector.

- Passing heavy trucks

In addition to development of the national highways, the many access roads should be developed for community use. In the future, some sections of bypass will be required.

- Communicable human diseases, STD and HIV/AIDS

The developed roads will improve the access for health facilities. The preventive education and awareness campaign for construction workers and local people are necessary. The health education for truckers and travelers is effective to control diseases.

- Animal epidemic

Education and expansion of veterinary services will be needed.

- Burden on local government

It is reasonable to charge tolls on heavy trucks for the purpose of road maintenance and regional development. The current taxation system is not good enough to finance various means to mitigate potential negative impacts in the region.

- Risk of environmental degradation

The Lao Government is encouraged to improve management system on logging and forestry. The introduction of GIS by the above fund will be also effective for the purpose.

- Trafficking of local women and children.

The UNDP in Bangkok launched a program to combat trafficking of women and children in the GMS. The Lao ministries are necessary to cooperate the program. The telecommunications system along the EWC is too weak to report criminal activity. The telecommunications systems, as well as power lines, should be installed along the route.

- Exposure to different culture

The mutual cultural education among the countries will mitigate the potential cultural conflicts. At the same time, people should be educated to be proud of each traditional culture at school and society.

## **A3.2 Institutional Framework on Cross-Border Movement of Goods and People**

### **A3.2.1 ASEAN Framework**

The Association of Southeast Asian Nations (ASEAN) countries has been preparing agreements for the facilitation of international goods movement. These agreements include as follows:

- Agreement on the Recognition of Domestic Driving Licenses by ASEAN Countries (Kuala Lumpur, 9 July 1985);
- Draft ASEAN Framework Agreement on Facilitation of Goods in Transit (31 March, 1998);
- Draft Agreement on the Recognition of Commercial Vehicle Inspection Certificates for Goods and Public Services Vehicles; and
- Draft ASEAN Framework Agreement on Multimodal Transport.

Among them, the most important agreement is the "Framework Agreement on the Facilitation of Goods in Transit" (listed second above). The Agreement consists of nine protocols. Among the nine, two protocols, Protocol 3 Types and Quantity of Road Vehicles and Protocol 4 Technical Requirements of Vehicles, have been ratified by the representative of each country. Other protocols are currently under negotiations.

### **A3.2.2 GMS Agreement on Transportation**

#### **Subregional Transport Forum (STF)**

GMS Economic Cooperation program to serve as an advisory body to the Ministerial-Level Conference in 1995. The roles and functions of the STF are summarized below:

- Provide a vehicle for the coordination of project planning at the macro level (e.g., studies covering multiple countries)
- Provide a mechanism for facilitating the implementation of priority subregional project.

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- Provide a venue for addressing software issues (e.g., issues related to driver and vehicle registration, route licensing, axle-load regulation, and design standard).
- Provide the financing of subregional projects by the governments, the various aid agencies, and the private sector.
- Facilitate training projects and other human resources development initiatives in the transport sector.
- Provide vehicle dissemination and exchange of information on transport related matters.

The GMS Transport Sector Study and Resource Paper for the Second Meeting of the Subregional Transport, financed by the Asian Development Bank (ADB), identified various problems and obstacles to prevent free movement of goods and people as below:

- Identify and assess priority transport-related cross-border issues,
- Assess the viability of existing international conventions or agreements as possible "solutions" or "responses" to the priority issues,
- Identify and assess issues that are "not" addressed by existing international conventions or agreements, and
- Identify implementation requirements for addressing priority issues.

The Study<sup>2</sup> by ADB summarized various constraints on the cross-border movement of the goods and people as follows:

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<sup>2</sup> Cross-Border Movement of Goods and People in the Greater Mekong Subregion, PADECO, Sep 1998, T.A. No. 5749-REG

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**Table A3.6 Summary of Constraints**

Constraints	Descriptions
(1) Constrains related to vehicles	Limited commercial operating rights for cross-border transport Limited mutual recognition of vehicle registration and roadworthiness certificates Inconsistent technical standards and specifications Inconsistent traffic rules and signage Limited mutual recognition of drivers' licenses Limited mutual recognition of third party liability Restrictive regimes for the temporary importation of vehicles
(2) Constrains related to goods	Need for future customs facilitation Multi-stop processing of goods Quarantine on plants and animals Compulsory quality control checks Special regimes for certain categories of goods
(3) Constrains related to persons	Passports, visas, and border permits Health controls Regulations concerning personal effects and currency
(4) Constrains related to infrastructure	Inconsistent road and bridge design standards Absence of formal standardization of road signs and traffic signals Absence of a consistent road user charge regime Inadequate border crossing facilities Rail transport operating arrangements
(5) Other constraints	Lack of harmonization of documents and formats Discriminatory national laws and regulations

Source: Cross-Border Movement of Goods and People in the Greater Mekong Subregion, PADECO Co., Ltd., September 1998

In order to enhance trade and investment, the Study summarized the need for a framework to facilitate the cross-border movement of goods and people in the GMS as follows:

- Large number of barriers to the free movement of goods and people in the GMS,
- Complex web of the existing bilateral agreement between GMS countries related to cross-border movements,
- General reluctance of the GMS countries to proceed immediately with accession to the applicable international conventions, and

- Need for a practical approach, in the short to medium term, to streamline regulations and reduce nonphysical impediments to cross-border movements.

It is important to mitigate of the institutional barriers to facilitate the freer flow of goods and people. The Sixth Meeting on Subregional Cooperation, held in Kunming in August 1996, noted progress made in the GMS efforts to mitigate institutional barriers to cross-border movements of goods and people. The Third Meeting of the Subregional Transport Forum held in Kunming in December 1996 concluded that the basic Framework should be a model for bilateral and/or multilateral initiative in the subregion for minimizing institutional barriers.

Lao PDR, Thailand and Viet Nam signed "Agreement Between and Among the Governments of the Lao People's Democratic Republic, the Kingdom of Thailand, and the Socialist Republic of Viet Nam for Facilitation of Cross-Border Transport of Goods and People" ("Tripartite Agreement") on November 26, 1999. This Framework should be a model for GMS agreement to minimize institutional barriers and enhancement of the cross-border movement of goods and people. The agreement comprised 15 Annexes and three Protocols. The agreement includes 1) Facilitation of Border Crossing Formalities, 2) Cross-Border Movement of Goods, 3) Requirements for the Admittance of Road Vehicles, 4) Exchange of Commercial Traffic rights, 5) Infrastructure, 6) Institutional Framework and 7) Miscellaneous Provisions. The agreement is comprehensive approach to facilitate cross-border movements for goods and people.

The Study<sup>3</sup> financed by ADB prepared the Annexes and Protocols for the Trilateral Agreement and finalized the Agreements, Annexes and Protocols. The consultants team prepared a draft Annexes and protocols for the agreement and planed to have a meeting among Lao PDR, Thailand and Viet Nam on November 2000 on this matter.

**In the regional or subregional level, the member countries discuss two similar agreements for goods movement. The GMS Framework should no be inconsistent with the Framework now under preparation by the ASEAN. The comparison between ASEAN and GMS agreements on transportation sector is summarized below:**

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<sup>3</sup> Facilitating the Cross-Border Movement of Goods and People in the Greater Mekong Subregion, PADECO Co, Ltd.

**Table A3.7 Comparison between Two Frameworks**

	Regional Level (ASEAN)	Sub-regional Level (GMS)
Agreement	ASEAN Framework Agreement on the Facilitation of Goods in Transit	Framework for Facilitation of the Cross-border Movement of Goods and People in the Greater Mekong Subregion
Member countries	ASEAN member countries (Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, Singapore, Thailand, Viet Nam)	Cambodia, China, Lao PDR, Myanmar, Thailand, Viet Nam
Objectives	<p>To facilitate transportation of goods in transit, to support the implementation of the ASEAN Free Trade Area, and to further integrate the region's economies;</p> <p>To simplify and harmonize transport, trade and customs regulations and requirements for the purpose of facilitation of goods in transit; and</p> <p>To establish an effective, efficient, integrated and harmonized transit transport system in ASEAN</p>	<p>To facilitate the cross-border transport of goods and people between and among the Contracting Parties</p> <p>To simplify and harmonize legislation, regulation, procedures, and requirements relating to the cross-border transport of goods and people; and</p> <p>To promote multi-modal transport.</p>
Characteristics	<p>Transit routes are designated based on ASEAN highway project.</p> <p>The framework is guided and the following international/regional engagements made:</p> <p>International Conventions:</p> <p>Harmonization of Frontier Control of Goods (1982),</p> <p>Road Traffic (1968)</p> <p>Road sign and Signals(1969),</p> <p>Simplification and harmonization of Custom Procedures</p> <p>ASEAN agreement</p> <p>Commercial Vehicle Inspection Certificate (1988),</p> <p>Domestic Driving License (1985)</p>	<p>Construction or reconstruction of the roads linking the countries is carried out within the framework of national public works programs or with international financing.</p> <p>Single-window inspection and Single-stop inspection.</p> <p>A driving time regulation by 2004 on the designated routes and entry/exit points.</p> <p>Transport operators established in one Contracting party may undertake any transport operation in, to, from or across the territory of another Contracting Parties.</p>
Institutional Setting	<p>National Transit Transport Coordination Committees</p> <p>Regional Transit Transport Coordinating Board</p>	<p>National Transport Facilitation Committees</p> <p>Joint Committees</p>

Source: ASEAN Secretariats, ADB

### **A3.2.3 Bilateral Level**

#### **Thailand and Lao PDR**

Thailand and Lao PDR signed "Transit Transport Agreement" in Vientiane on June 1, 1978. The agreement has been renewed annually ever since. "Memorandum of Understanding" was signed in January 1996 to amend 1978 Agreement. It addressed following matters<sup>4</sup>:

- Authorization of temporary agreements broadening the scope of transport services between Ta Naleng and Eastern Seaboard ports and cargo movements between Mukdahan and Savannakhet;
- Permission for Lao transporters to conduct certain passenger transport operation in Thailand;
- Exemption of tax on Lao cargoes transiting Thailand; and
- Mutual recognition of driver's licenses.

The Agreement on road transport was signed between Thailand and Lao PDR in March 1999 and stressed on the following points:

- Grant to each other the right to transport goods and passengers;
- Authorize the use of vehicles of transport operators duly licensed to provide international transport services;
- Goods in transit shall be exempt from customs duties and taxes levied; and
- Thailand and Lao PDR shall determine the routes for operating international road transport.

#### **Lao PDR and Viet Nam**

As 15 May 1991 sub-agreement between Viet Nam and Lao PDR on the control and management of road transport includes a protocol on the management of inland transport vehicle crossing between the two countries. It regulates the following aspects:

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<sup>4</sup> East-West Transport Corridor Study, Maunsell etc., December 1996, TA-5586 REG

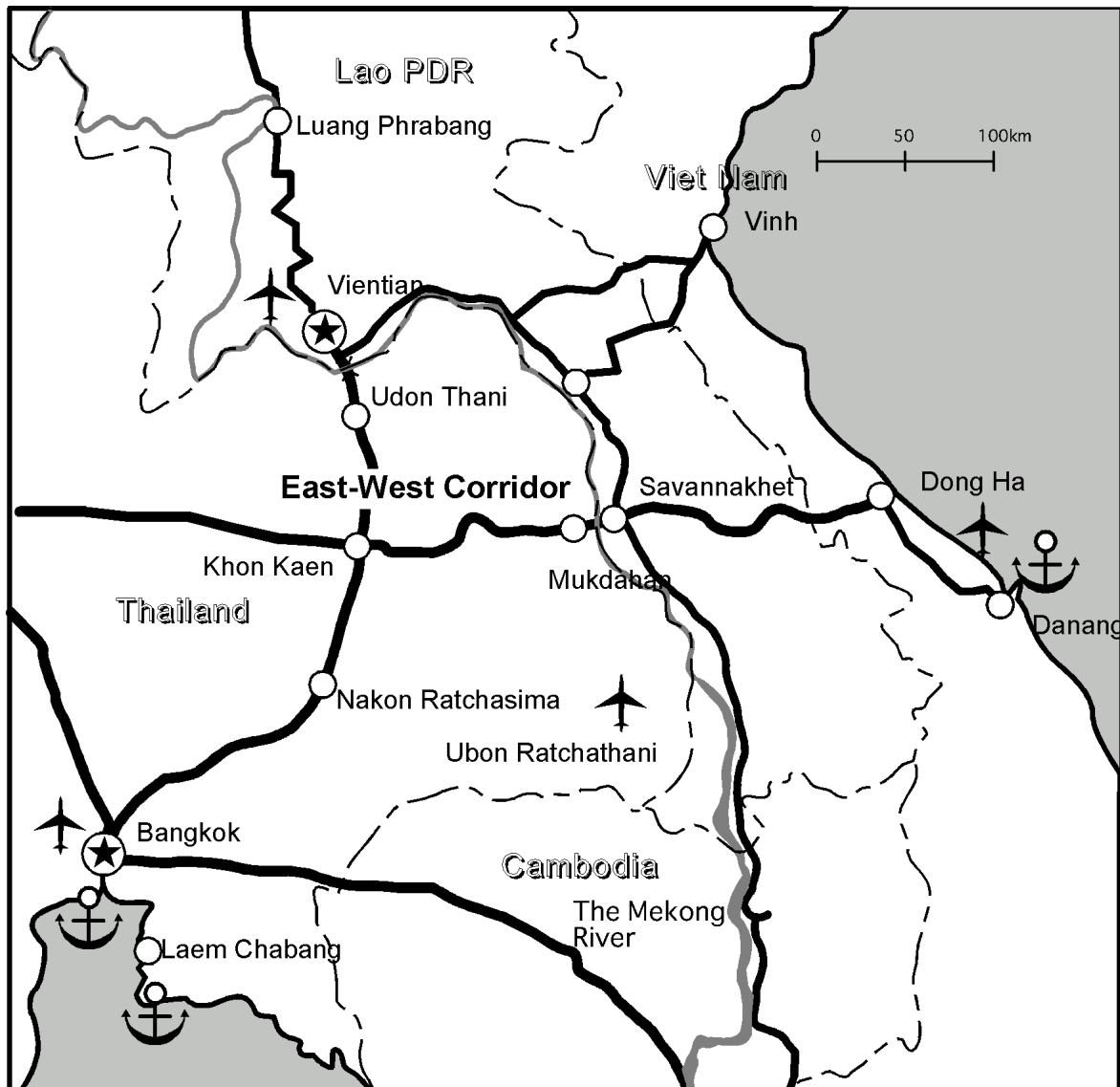
- The management of inland transport, with bilateral trade permitted to move on the vehicles of either country;
- Licensing categories, with each driver and vehicles required to be appropriately licensed in one of the two countries, and the vehicle to carry a license plate showing its country of registration;
- Types of transport;
- Crossing points and permitted routing, with vehicles and drivers permitted to move freely between any origin in one country and any destination in the other country, utilizing an agreed set of border crossing points;
- Citizenship of the drivers, requiring that they be a national of one of the two countries and carry a valid driver's license issued by their country of origin plus a valid laissez passer ( a driving permit issued by the host country is not required);

Insurance and liability, with the driver and vehicle bound by all laws applicable to aliens in the host country.

In 1994, the Transit Agreement between the Government of the Lao People's Democratic Republic and the Government of Viet Nam authorized vehicles from one country to travel on certain roads of the other country. The maximum duration of the stay in the other country ranges from 15 to 30 days. The required documentation includes a transit carnet and evidence that the vehicle is registered to conduct business in both countries. Insurance is optional. The documents are to be issued by the respective transport ministries.

### A3.3 Regional Transport System

The transportation network in the northeastern Thailand, Lao PDR and the central Viet Nam is shown as follows:



Legend:





- |   |   |
|---|---|
|  Capital City  |  Major Port            |
|  ASEAN Highway |  International Airport |

Figure A3.7 Transportation Network around CBR

The major national highways are designated as the ASEAN Highways, which link to the member countries. The ASEAN highway network could be the part of ASEAN agreement on the Facilities of Goods in Transit of Protocol 1 of Designated Route of Goods in Transit and GMS agreement. ASEAN highway network includes 21 routes. The minimum standard of the ASEAN Highways is determined as follows:

Special Standard (Controlled Access Motorway)

- Class 1 Standard Four Lane Highway
- Class 2 Two Lane Highway

Standard Highway

- Class 3 Standard Two Lane Highway

### A3.3.1 National Highway Network

The national highway network in Thailand is well developed with high standards including road network in the Northeastern Thailand. In Laos, the road network developed from the north to the south. Route No13 connects Vientiane, the capital of Lao PDR, to Pakse. The east west link is not developed well because of the mountainous topology and small population in area. The comparison of the national highway network in NBR and SKR is summarized below:

**Table A3.8 National Highway Network in CBR**

	Unit	Thailand				Lao PDR	
		Kalasin	Sakon Nakhon	Phanom	Mukdahan	Khammouan	Savannakhet
National highway	km	665.8	952.9	577.6	364.4	416.0	579.0
Area	km <sup>2</sup>	5,947.0	9,606.0	5,513.0	4,340.0	16,315.0	21,774.0
Population	thousands	948.0	1,090.2	711.1	330.4	294.8	726.8
Road Density	km/km <sup>2</sup>	0.11	0.10	0.10	0.08	0.03	0.03
	km/thousand person	0.70	0.87	0.81	1.10	1.41	0.80

Source: Department Highway in Thailand  
Ministry of Communications, Transport, Post and Construction  
JICA Study Team

NBR has denser road network than SKR and road length per person has the approximately same in the NBR and the SKR. The national highways in the both study areas have been paved by the asphalt or concrete.

### **A3.3.2 Railway Network**

There is no railway network in the study area. The existing railway network shows that the Northeastern line, which is composed with two lines from Bangkok to Ubon Ratchathani and from Bangkok to Nong Khai, is extended into the northeastern Thailand. Those lines are opened in 1930 and 1958, respectively.

### **A3.3.3 Airport and Airline Services**

There are two airports (Sakon Nakhon and Nakhon Phanom) in the NBR and one airport (Savannakhet) in the SKR. Bangkok airport is gateway to Thailand and Indochina countries. Bangkok airport reached 23 million passengers in 1997 and Sakon Nakhon and Nakhon Phanom airports handle about 40 thousand passengers.

There are three major international airports (Bangkok, Vientiane, and Da Nang) in the region. The airline routes have established between Bangkok to Vientiane and Bangkok to Da Nang via Ubon Ratchathani.

### **A3.3.4 River Transport**

The Mekong River is the navigable inland waterway in the area. The river transport has developed upper stream of the Mekong River. A rapid, Khong Falls, between Pakse and the Cambodian border prevents river transport between CBR and the lower Mekong.

The river transport is major means of transport at the border region to move goods people between Thailand and Lao PDR. There are 13 border points located along the Mekong River.

### **A3.3.5 Regional Comparison of Port Infrastructure**

Thailand has two major ports, Bangkok and Laem Chabang near Bangkok area. Da Nang port is major port in the central part of Viet Nam. The ports in Thailand has equipped with container handling facilities, while the Da Nang port has no container handling facility. The port facilities and handling volumes are shown as follows:

**Table A3.9 Comparison of Port Facilities**

Port Facility	Unit	Thailand		Vietnam Danang (Tien Sa)
		Laem Chabang	Bangkok	
Length of Piers	m	2,228	66,591	897
Depth at Piers	m	14~6.5	8.5~9.0	12
Total yard area	m <sup>2</sup>	-	-	115,000
Total warehouse area	m <sup>2</sup>	-	520,322	20,290
Machine equipment				
Crane (50ton~10ton)	unit	16	60	-

Source: Port Authority of Thailand  
Danang Port Authority

The major maritime trade point of Thailand is at the river port of Bangkok (Klong Toey), located on the Cho Phraya river. The port has 18 berths in its two wharves, East Quay and West Quay. Laem Chabang port started operation in January 1991, under the Port Authority of Thailand (PAT) and handles container cargoes. Laem Chabang port has three container terminals, two agri-bulk terminals, one general cargo terminal, and one coastal terminal and can be handle ships up to 50,000 DWT.

Da Nang port was originally constructed as a US marine port and converted to a commercial port. Da Nang port consists of two ports, Han port (river port) and Tien Sa port (seaport). The Tian Sa jetties can accommodate the vessels of 30,000 DWT. The existing port development has been constrained by the narrow cargo handling area and weak access road to the city center. Da Nang port has progressed through the construction of specialized container heavy-lift pier and breakwater in the Tien Sa jetties. The handling volume of the Bangkok, Laem Chabang and Da Nang ports is in the following Table A3.10.

Total handling of Bangkok port had decreased since 1995 when it reached 18,156 thousand tons, especially containerized import cargo. The Laem Chabang port, however, containerized cargoes has increased 1.81 times during 1996-1998. It shows the containerized cargo has shifted from Bangkok to Laem Chabang port, which equipped more sophisticated container handling systems. In 1997, the Laem Chabang port has gone beyond container handling volume at the first time and continued to ahead of the container handling volume.

**Table A3.10 Handling Volume in Three Ports**

(Year 1998)				
Items	Unit	Thailand		Vietnam Danang (Tien Sa)
		Laem Chabang	Bangkok	
Port handling				
Import				
General Cargo	thousand ton	192.3	1,858.6	-
Containerized cargo	thousand ton	4,008.7	3,459.2	-
Total	thousand ton	4,201.0	5,317.7	400
Export	thousand ton			
General Cargo	thousand ton	1,005.1	280.0	-
Containerized cargo	thousand ton	8,546.8	7,325.3	-
Total	thousand ton	9,551.9	7,325.3	410
Domestic	thousand ton	-	-	390
Total handling	thousand ton	13,752.9	12,643.0	1,200
Containerized cargo				
Import				
Containerized cargo	TEU	690,016	531,693	-
Transshipment	TEU	8,055	-	-
Export				
Containerized cargo	TEU	719,123	582,063	-
Transshipment	TEU	7,508	-	-

Source: Port Authority of Thailand  
Danang Port Authority

The handling of the Da Nang port has reached at 1.2 million tons in 1998. It is pointed out that the Da Nang port is a progress of the upgrade its capacity to 3.6 million per year.

## A3.4 International Trade and Traffic Flows

### A3.4.1 Trade between Thailand and Lao PDR

Table A3.10 shows the trade value among Thailand, Lao PDR and Viet Nam.

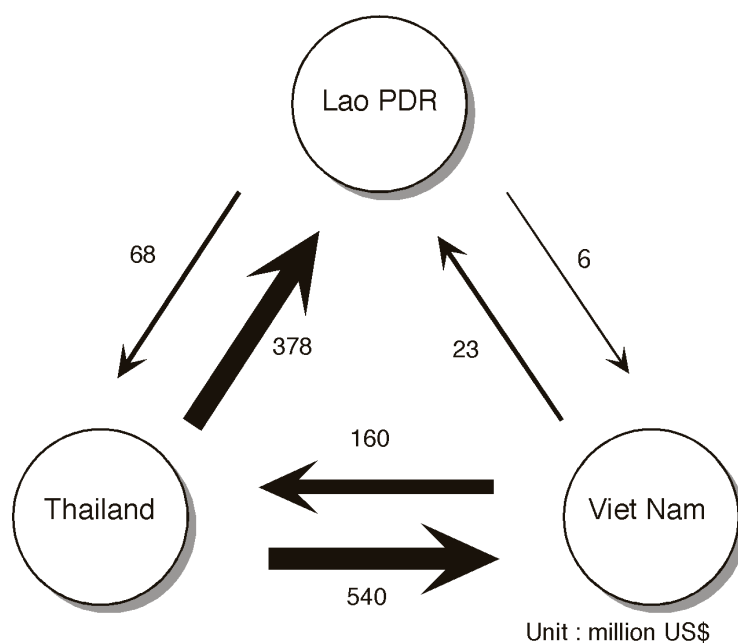
**Table A3.11 Trade Relationship among Three Countries**

Export <sup>1)</sup> (1997)					(unit: US\$ million)	
From	To			Total Exports	Total exports to other two countries(%)	
	Thailand	Lao PDR	Viet Nam			
Thailand	-	378	540	57,538	1.6	
Lao PDR <sup>2)</sup>	68	-	6	107	69.2	
Viet Nam	160	23	-	8,722	2.1	
Total	228	401	546	57,645		

Note: 1)FOB base

2)October 1997-September 1998

Source: Thailand and Viet Nam: *Direction of Trade Statistics Yearbook 1998* , IMF  
Lao PDR: Department of Customs, Ministry of Finance



**Figure A3.8 Trade Relationship among Three Countries**

Thailand's export to Lao PDR has accounted for only 0.7 % in 1998, yet Laos's exports to Thailand is 64 %. Thailand is the largest important trade partner for Lao PDR, yet Lao PDR is not important trade partner for Thailand

### A3.4.2 Border Trade and Commodity Flow between Thailand and Lao PDR

The Table A3.9 indicates the major trading items between the two countries. As the most commodities are carried not by air but by surface, the volume in trade is very close with the number of surface border trade.

**Table A3.12 Major Trade Commodities between Thailand and Lao PDR**

Major export items from Thailand to Lao PDR			Major import items from Lao PDR to Thailand		
(Items)	US\$ million (Year 1999)	Proportion (%)	(Items)	US\$ million (Year 1999)	Proportion (%)
1. Motor cars, motor vehicle, parts and accessories	134.0	32.6	1. Wood in rough, sawn or chipped wood	36.8	65.3
2. Refine fuels	40.4	9.9	2. Other metals waste and scrap	3.6	6.3
3. Iron or steel products	14.7	3.6	3. Wood Products	2.7	4.8
4. Beverage	11.5	2.8	4. Coal	1.7	3.0
5. Chemical products	18.1	4.4	5. Jewellery including silver bars and gold	0.8	1.4
6. Microwave oven and electric instantaneous	13.2	3.2	6. Raw hide and leathers	0.7	1.2
7. Cement	12.0	2.9			
<b>Total</b>	<b>411.0</b>	<b>59.4</b>	<b>Total</b>	<b>56.3</b>	<b>82.0</b>

The border trade locations between Thailand and Lao PDR are limited to 13 points along the Mekong (see Table A3.10 and Figure A3.8). There are four border trade points, Tha Uten, Nakhon Phanom, That Phanom and Mukdahan, in CBR. The volume of cross-border trade has been increasing since 1991, except 1998, and reached 41,473 million Baht in 1999, which is more than ten times larger than that of 1991, while the total trade value has grown only 1.5 times during the same period. Mukdahan border point has handled 16,000 million Baht in 1999, followed by Nong Khai border point of 13,000 million Baht. The four border points in the study area handle 48.3 percent of total cross-border traded value.

**Table A3.13 Border Trade Volume**

(Unit: Million Baht.)

	1991			1995			1999			Growth Rate (% p.a)
	Import	Export	Total	Import	Export	Total	Import	Export	Total	
Thailand and Laos	1,624.7	2,014.6	3,639.3	1,934.1	7,916.8	9,850.9	8,316.3	33,157.5	41,473.8	153.7
Nong Khai	448.8	1,630.7	2,079.5	449.2	4,560.5	5,009.7	2,097.2	11,317.0	13,414.2	70.1
Bung Kan	0.0	0.0	0.0	25.8	104.0	129.8	459.3	1,918.4	2,377.7	4,052
Tha Uten	0.0	0.0	0.0	0.0	0.0	0.0	3.7	37.7	41.4	-
That Phanom	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.7	-
Nakhon Phanom	259.1	34.6	293.7	658.3	552.7	1,211.0	2,097.2	1,927.2	4,024.4	283.4
Mukdahan	723.0	180.9	903.9	262.3	1,667.1	1,929.4	1,459.2	14,515.1	15,974.3	388.2
Tha Li	2.3	0.0	2.3	11.6	22.9	34.5	47.6	350.8	398.4	501.3
Chiang Khan	1.8	0.0	1.8	46.5	20.6	67.1	138.6	19.5	158.1	179.9
Phibun Mungsahan	155.8	111.1	266.9	369.3	469.1	838.4	715.9	1,665.1	2,381.0	74.1
Khemarat	3.6	8.9	12.5	2.0	3.9	5.9	15.2	44.1	59.3	27.6
Chiang Saen	1.1	4.1	5.2	31.6	373.0	404.6	917.2	696.4	1,613.6	1322.7
Chiang Khong	29.2	44.3	73.5	77.5	143.0	220.5	295.2	626.5	921.7	167.2
Tung Chang			0.0				69.3	39.7	109.0	-

Source: Customs Department, Ministry of Finance (Thailand)

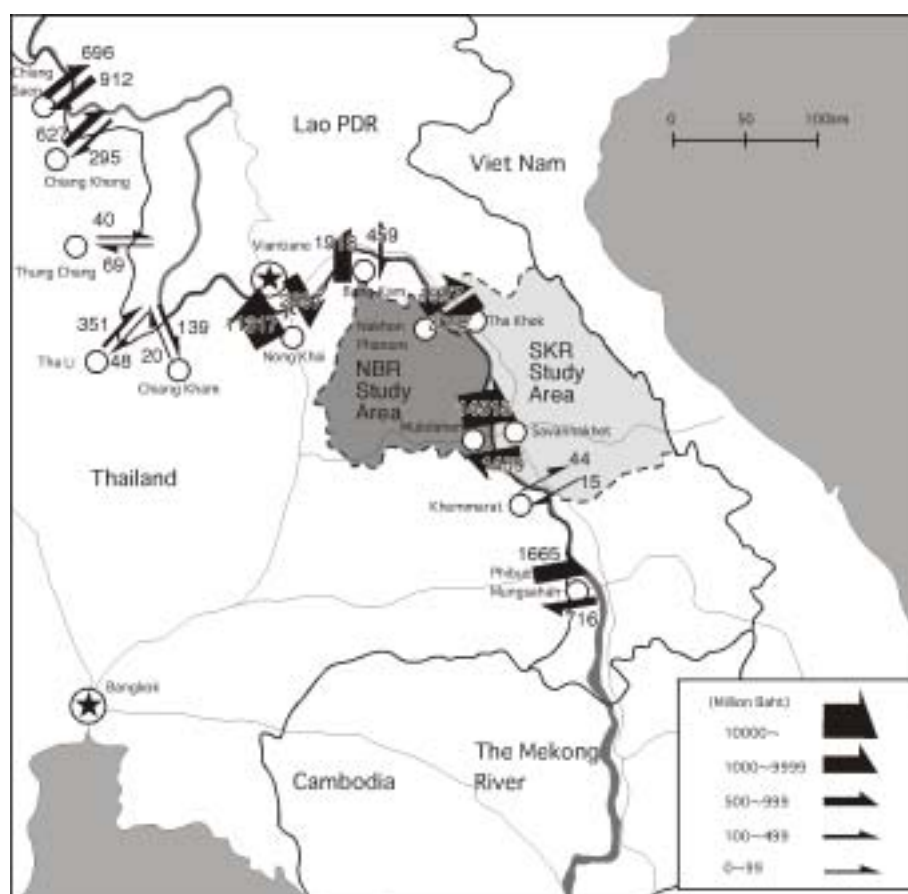


Figure A3.9 Border Trade between Thailand and Lao PDR

### A3.4.3 Transit Cargo

Since Lao PDR is a landlocked country, the country's trade depends on the land transportation and seaports in Thailand and Viet Nam. Especially, the ports around Bangkok are practically functioning as outer ports of Lao PDR. Although any transit cargo has been exempt from duty in principle, there are several issues in transportation and procedural aspects.

Table A3.14 shows that almost half of the cargo over the Friendship Bridge was import from other countries than Thailand. In contrast, the export thorough the bridge to third countries accounted for 82% of total amount.

**Table A3.14 Import and Export by Lao PDR at Nong Khai – Vientiane Border**

unit: million Baht

Year	Import from		Export to	
	Thailand	Other Countries	Thailand	Other Countries
1989	958	1,053	358	320
1990	1,056	1,119	441	299
1991	1,516	1,496	463	595
1992	1,934	1,690	359	796
1993	3,286	2,657	352	1,322
1994	4,222	2,938	663	1,872
1995	4,841	4,297	492	2,353
1996	5,131	5,122	495	2,322

Source: Nong Khai Custom Office

#### A3.4.4 Flow of People

The passenger flow on the cross-border point is summarized in Table A3.14.

**Table A3.15 Passenger Flow**

unit: person

Cross-Border Locations	Passengers
Nong Khai	1,743,920
Nakhon Phanom	69,783
Mukdahan	118,658
Ubon Ratchathani	100,944

Source: Custom House

Nong Khai border point recorded 1,743.9 thousands person in 1999, followed by the Mukdahan border point of 118.7 thousands. The number includes border pass holder and foreign passport holder.

It should be noted that the number is not including illegal trade and personal movement. The illegal trade is estimated approximately 20 to 30 percent of the total trade value<sup>5</sup>.

<sup>5</sup> Interview from Mukdahan customhouse.

### **A3.5 Potentials and Constraints**

The study area has left behind economic development last 30 years and characterized by the remoteness from seaport and major urban centers. The Gross Provincial Products (GPP) is lower than that of national average in Thailand. Agricultural is the major economic activities in both countries and rice is the dominant crop. There is no mining activity and manufacturing sector is limited in Thailand. In Lao PDR, the logging and mining activities are in progress at the limited area.

NBR has contributed to the national economic development through supply of inexpensive labor force to Bangkok and other industrial area. The agricultural sector produce export goods of rice and tapioca, yet there is little room for improving productivity. The industrial activities are constrained by remote seaport and markets, associated with high transportation costs. In Lao PDR, national development activities have just started.

The Second Mekong International Bridge (Second Bridge) between Mukdahan and Savannakhet will directly contribute to development of the study area in three ways:

- 1) Improving accessibility to ports in Bangkok, Laem Chabang, and Da Nang,
- 2) Reducing the transportation costs and
- 3) Promoting movement of goods and people.

Although the Second Bridge has not been commenced its construction yet, the study area's potential and constraint should be taken into account.

#### **A3.5.1 Potentials**

##### **Reduction of Transportation Times and Costs**

The Second Mekong International Bridge will reduce the traveling time to the Vietnamese port and improve land transportation among Thailand, Lao PDR and Viet Nam. The land transportation provides flexible and reliable services with cheap costs and reduces transportation time.

The change in transportation system will open up the study area for new development opportunities. The promising industries include trade, transportation and manufacturing sectors, which could not be established in the study area before.

Those sectors will directly benefit from bridge construction because of efficient transportation system.

### **Improving Mobility of Goods and People among Thailand, Laos and Viet Nam**

The trade among Thailand, Lao PDR and Viet Nam is expected to increase after the second Mekong Bridge opening. Since the bridge will reduce transportation costs, the new commodities that could not be traded before the bridge construction will be started trading. The items include fresh sea fish, vegetable, fruits, flower etc. In addition, some commodities transported on the sea between Thailand and Viet Nam will be switched to land transportation.

The mobilized goods and people will enhance rural development in the study area because the people in the rural area have more opportunity to sell their products through markets and to buy goods in cheaper prices. Moreover, the job opportunity of rural people will improve through the commercial and service activities.

### **Promotion of Economic Development**

The Second Bridge will promote establishment of new industrial activities, accumulation of commercial activities and provision of new tourist route. The reduced transportation costs and times will induce new industries to the study area. Service sector activities such as trade and transportation have an advantage in the study area and those industries handle commodities from other countries. Moreover, new tourist routes will be identified to connect Thailand, Lao PDR, and Viet Nam through the bridge. In order to support those economic activities, the governments should provide infrastructure services. To minimize infrastructure investment costs, there is a possibility to provide infrastructure with coordination with Thailand and Lao PDR.

### **Establishment of Border Economic Region**

The border area could develop as one unit of economic zone. The study area should establish important functions within the national development framework. In Lao PDR, the study area should play a role of an economic center and a national distribution hub. In Thailand, it should be a gateway to the Viet Nam and China markets.

### **A3.5.2 Constraints**

In order to achieve future development activities, following constraints are noticed. These constraints of the development can be solved by mutual understanding and cooperation of the related countries.

#### **Unclear Financial Source for Road Maintenance**

Despite the importance of connecting Thailand, Lao PDR and Viet Nam with road linkage in good maintenance condition, the rule of maintenance cost sharing is currently uncertain among the three. Particularly, the Route 9 in Lao PDR will be the most important road connection in the East-West Corridor but no agreement has been reached regarding the cost sharing. As the current financial sources for road maintenance mainly depends on gasoline tax on each country, a foreign vehicle passing through other countries is practically exempt from maintenance duty. In addition, the gasoline tax has not been operated as a special account. This is especially significant for heavy trucks, which damage the roads with their heavy axles. One of the solutions for this constraint is to collect tolls from heavy trucks as user charges. Collected tolls should be allocated to maintain roads as well as to mitigate negative local impacts by the East-West Corridor.

#### **Increase of Vehicle Pollution**

Apparently, the increased traffic causes pollution problems in air along the Route 9 in Lao PDR. To mitigate such problems, an agreement should be established to minimize pollution. As described above, the collected tolls can be used as the sources to alleviate the environmental problems.

#### **Institutional Barrier for Trade**

The previous ADB study has already pointed out many institutional barriers to prevent freer flow of goods and people. A framework of negotiation scheme has been established among the related countries. Nevertheless, the actual implementation schedule to reduce such institutional barriers is currently open.

#### **Health Problems**

Control of the diseases at border-area is the one of the issues for the agreement. There are many problems of the health check of the border area.

## A3.6 Development Program for International Projects and Programs

### A3.6.1 Description of Projects

#### Cross-Border Projects

Several cross-border transportation projects are proposed by the ADB and are difficult to implement because of insufficient funding, low economic viability, etc. In this section, the progress of these project are reviewed as follows:

**Table A3.16 Cross-Border Projects**

Project Name	Location	Scope	Progress
R1 Bangkok-Phnom Penh-Ho-Chi Minh-Vung Tau Road Improvement Project	Thailand, Cambodia and Viet Nam	The project will improve road connection linking Bangkok, Phnom Penh, Ho Chi Minh City and Vung Tau.	The study of detailed engineering design, procurement assistance and environmental and social impact analysis was carried out under ADB technical assistance scheme between Phnom Penh and Ho Chi Minh City. In the Thai Corridor, Bangkok-Phnom Sarakham section has already upgraded to a four-lane highway.
R3 Chiang Rai-Kunming Road Improvement Project	Yunnan Province, Myanmar, Lao PDR and Thailand	The project intends to improve road connection between and among Yunnan Province, Myanmar, Lao PDR and Thailand.	Each country has implemented the improvement of the project, yet some parts are still at feasibility study stage. Chinese section and Thai sections have been undertaken by the each government.
R6 Southern Lao PDR-Sihanoukville Road Improvement Project	Lao PDR, Cambodia	The primary aim of the Project would be to provide Lao PDR with an outlet to/inlet from the sea through a third country and in the long term to provide Cambodia with direct access to China through Lao PDR.	The World Bank improved between Thakhek to Pakse section. Under the Seventh Road Improvement project, it is proposed to upgrade Pakse and Chongmek section. In Cambodian side, USAID will assist Route 6 and Route 6A.

Source: Subregional Transport Sector Study for the Greater Mekong Subregion, Final Report, Asian Development Bank, 1995

**Viet Nam Projects**

The Vietnamese government has implemented the East-West Corridor development projects. The progress of the projects is summarized below:

**(1) Highway Development**

The East-West Corridor, which runs from the border of Lao PDR to the Dong Ha, has now rehabilitated under ADB program and expects to finish in 2005. The completed highway will be four-lane highway with asphalt pavement. National highway No1A from Dong Ha to Da Nang is rehabilitated under World Bank finance. The section between Hue and Da Nang passes through the Haivan Pass with steep slopes and curves. Vietnamese government has decided to construct a tunnel with JBIC funds.

**(2) Port**

The Da Nang port expects to handle goods from the northeastern Thailand and Lao PDR and served as an enhancement of regional development. The existing port was originally constructed as US navy bases in 1965 and repair every ten years, yet it is not sufficient to handle future cargoes from other countries. The Vietnamese government decided to expand port facilities under JBIC loan from 1998. The expansion project is designed to build breakwater, basin, container yard and facilitation of container handling equipment.

**A3.6.2 Comparison of Socio-economic Activities of the International Routes**

In order to clarify regional impacts of the East-West Corridor, three routes, East-West Corridor, Ho Chi Minh City-Phnom Penh-Bangkok Road connection, Bangkok-Vientiane road, are selected to compare in terms of these population, GDP, per capita GDP and area by provincial data. The East-West Corridor traverses three provinces (Quang Tri, Thua Thien-Hue and Quang Nam-Da Nang) in Viet Nam, one province (Savannakhet) in Lao PDR, and six provinces (Mukdahan, Kalasin, Khon Kaen, Phetchabun, Prisanulok and Sukhothai) in Thailand and two provinces (Karen and Mon) in Myanmar. The Bangkok-Vientiane route traverses six provinces (Bangkok, Pathum Thani, Sara Buri, Nakhon Ratchasima, Khon Kaen, Udon Thani and Nong Khai) in Thailand and Vientiane province in Lao PDR. Bangkok-Ho Chi Minh road traverses three provinces (Nonthaburi, Chachoengsao and Prachin Buri) in Thailand, eight provinces (Banteay, Meanchey, Battambang, Pursat, Kompong

Chhnang, Kandal, Prey Veng and Svay Rieng) in Cambodia, and four provinces (T.P. Ho Chi Minh, Tay Ninh, Dong Nai, Vung Tau-Con Dao) in Viet Nam.

**Table A3.17 Comparison of the Highway**

Name of route	Length (km)	Population (million)	GDP per capita (US\$)	GDP (million US\$)	Area (km <sup>2</sup> )
East-West Corrido	1,451	12.5	985	6,400	144,760
Bangkok-Nong Khai-Viangcha	544	14.0	3,495	48,924	61,030
Ho Chi Minh-Phnum Penh-Bangko	981	27.8	1,625	43,481	80,841

Source: Thailand in Figure, 1991

Socio-Economic Statistical Data of 61 Province and Cities in Vietn

World Bank Data for Cambodia and Myanm

ADB data for Cambodi

Note: Data for Thailand, Vietnam, Myanmar and Laos are 1991

Data for Cambodia are 1991

The East-West Corridor is extended to Viet Nam, Lao PDR, Thailand and Myanmar with length of 1,451 km with a combined influence area of about 144 thousand square kilometer and population of about 12.5 million persons. The influential area of the East-West corridor is larger than other two routes, while population and combined GDP are the smallest among three routes. Bangkok-Vientiane route has recorded the highest GDP per capita of US\$ 3,495 and combined GDP US\$ 48,924 million because it runs most part in Thailand. Ho Chi Minh-Phnom Penh-Bangkok route has 27.8 million persons with an influence area of 80 thousand square kilometer. The combined GDP is about US\$ 43 billion, which is similar to that of Bangkok-Vientiane route of US\$ 49 billions. The route connects two economic centers (Bangkok and Ho Chi Minh City) via Phnom Penh, which is capital of the Cambodia, by highway and it may have greater impact on the economic activities along the route.

## A3.7 Comparison of Transportation Costs and Times

One of the purposes of the Second Mekong Bridge is to reduce transportation costs and times and to improve Lao PDR access to a port or ports in Viet Nam<sup>6</sup>. This section intends to quantify the reduction times and costs based on the existing data.

### A3.7.1 Sea Transportation Costs

In order to compare sea transport costs, the container transport costs, both 20 feet and 40 feet, could show the standard cost of the sea freight. The study team has carried out interview survey of sea transportation costs on September 2000 from several shipping agents and freight forwarders. The average costs from the Laem Chabang Port in Thailand to USA, Japan, Singapore and Europe are shown in below:

**Table A3.18 Average Sea Transportation Costs**  
From Laem Chabang Port in Thailand (Unit: US\$)

Type of Container	To USA	To Japan	To Singapore	To Europe
<b>20 feet</b>				
A	4,050	800	300	2,100
B	4,070	700	350	-
C	4,775	912	504	2,190
Average	4,298	804	385	2,145
<b>40 feet</b>				
A	5,295	1,200	500	4,200
B	4,880	1,000	650	-
C	6,360	1,470	910	3,476
Average	5,512	1,223	687	3,838
Shipping duration	17-20days	10-14days	3days	22-25days

Source: JICA study team interview on September 20

There is no data available of sea freight costs at the Da Nang Port but it is pointed out that the sea transport costs are 50 percent higher from Da Nang than from Bangkok port<sup>7</sup>. Since the shipping costs are not directly related to distance, other factors such as frequency of ship services, size of vessel, competition among shipping companies and traffic volume, are important. Port charges include wharf, container movement and terminal charges. The cost structure of Laem Chabang and Bangkok port is shown in the following table:

<sup>6</sup> Subregional Transport Sector Study for the Greater Mekong Subregion, Final Report, 1995

<sup>7</sup> East-West Transport Corridor Study, Final Report Volume 2, Maunsell in association with SMEC, Sinclair Knight Merz, CDRI and TEDI, December 1996

**Table A3.19 Port Charge in Bangkok Port**

(Unit: Bath)			
Type of container	Wharf handling charge	Terminal charge	Bill of Landing
20 feet	1,250	2,600	500
40 feet	2,500	3,900	500

Source: Interview to Shipping Company

The port charge is approximately US\$ 110 for 20 feet container and US\$ 177 for 40 feet container. Those cost are same in Bangkok and Laem Chabang ports. The port charge in Viet Nam has determined by the Decision No. 12/VGCP-CNTD.DV dated Oct. 28, 1997 for international cargo ships. Vietnamese ports are divided into three areas: north, central and south. The government has adopted different port tariff based on port location, especially international container cargo handling. The terminal handling charges are similar in Thailand and Viet Nam<sup>8</sup>. It is pointed out that the port charges are underestimated the true costs of the container handling cost in Central Viet Nam because it may not be true the cost is same as Bangkok and Laem Chabang ports, which operate efficiently by using container handling facilities.

### A3.7.2 Land Transport Costs

Land transport costs will depend on several factors such as distance, road condition, vehicle seed, size and type of transported goods. For comparison of land transport costs, distance could be one of important factor to determine land transport costs. Table-16 show the distance from major city centers in the Northeast region to Bangkok, Laem Chabang and Da Nang ports.

The results of the comparison show that the study area will reduce the distance to Vietnamese seaport that is Da Nang port, by 185 km in Mukdahan. Those reductions of transport distance would be reduction of the transportation costs and times. It is clear that the Second Mekong Bridge will improve remoteness of the study area

<sup>8</sup> East-West Transport Corridor Study, Final Report Volume 2, Maunsell in association with SMEC, Sinclair Knight Merz, CDRI and TEDI, December 1996

**Table A3.20 Distance of Land Transportation**

	(Unit:km)			
	Bangkok	Laem Chabang	Da Nang	Difference
<b>Laos</b>				
Vientiane	630	691	1060	369
Savanakel	644	705	520	-185
Pakse	749	810	767	-43
<b>Thailand</b>				
Udon Thani	564	625	800	175
Khon Kaen	449	510	717	207
Kalasin	519	580	642	62
Sakon Nahhor	647	708	641	-67
Nakhon Phanom	740	801	626	-175
Mukdahan	642	703	522	-181
Roi Et	512	573	684	111
Ubon Ratchathan	629	690	633	-57
Nakhon Ratchasima	259	320	905	585

Source: Driving Distance Chart, Thailand  
JICA Study Team

In order to compare the land transportation costs for 20 feet container, the study team interviewed several transportation companies and the results are summarized below:

**Table A3.21 Land Transportation Costs**

	(Unit: US\$ Per 100 km)		
Type of container	Thailand	Lao PDR	Vietnam
20 feet	92	71	100
40 feet	120	92	150

Source: Thailand and Lao PDR quoted by JICA study team on September 2000  
Vietnam calculated based on the Decision 36/VGCP-CNTDDV of May 8, 1997

### A3.7.3 Comparison of Transportation Cost and Time

To clarify the advantages of the Da Nang port, it should compare the transportation costs and times from the study area to the Laem Chabang port in Thailand and the Da Nang port in Viet Nam. The conditions for the comparison study are shown below:

- Transport goods: 20 feet container
- Land transportation cost: See Table A3.21 Land Transportation Costs
- Transport speed:

After the bridge opening, the road upgrading in Lao PDR and Viet Nam also will have been completed. The transportation speed for the container trucks are assumed as follows:

**Table A3.22 Transportation Speed**

Country	Classifications	Speed (km/h)
Thailand	National highway one digit	60
	National highway two digit	50
	National highway three digit	40
Lao PDR	Route 13	50
	Route 9	40
	Other road	30
Viet Nam	Route 1A	40
	Route 9	40

Source: JICA Study Team

Table A3.23 shows the results of the comparison.

The results show that the area along the Mekong River has improved access to the seaport in terms of costs and times. In Mukdahan, the difference is 4.5 hours or 26 percent of transport time reduction and US\$196.8 or 30 percent in transport cost reduction. It could be concluded that there are advantages to use Vietnamese port from three provinces (Mukdahan, Sakon Nakhon and Nakhon Phanom) in Thailand and two provinces (Khammouan and Savannakhet) in Lao PDR, yet those advantages are disappeared without the three governments' cooperation on reducing non-tariff barriers. The other factors may influence to future selection of ports and routes.

The most important factors are custom procedures and taxation, and import duties on transit goods. The interview from Thai transportation companies pointed out that the government of Lao PDR and Viet Nam often change custom clearance regulations and procedures and the transit goods tax on its value in Lao PDR and Viet Nam. Thailand has introduced complete Electronic Data Interchange (EDI) custom clearance procedure. Therefore, the openness of the custom clearance system could be large impact on the selection of routes and ports.

Table A3.23 Results of Comparison

From	To	Unit	Thailand	Lao PDR	Vietnam	Total
<b>Lao PDR</b> Vientiane	Laem Chabang	US\$	621.9	8.5	-	630.4
		Hour	12.0	0.5	-	12.5
	Danang	US\$	-	553.8	280.0	833.8
		Hour	-	16.8	7.0	23.8
Savannaket	Laem Chabang	US\$	648.6	-	-	648.6
		Hour	18.2	-	-	18.2
	Danang	US\$	-	198.8	280.0	478.8
		Hour	-	6.0	7.0	13.0
Pakse	Laem Chabang	US\$	634.8	85.2	-	720.0
		Hour	15.4	3.0	-	18.4
	Danang	US\$	-	345.8	280.0	625.8
		Hour	-	10.9	7.0	17.9
<b>Thailand</b> Mukdahan	Laem Chabang	US\$	648.6	-	-	648.6
		Hour	17.6	-	-	17.6
	Danang	US\$	-	171.8	280.0	451.8
		Hour	-	6.1	7.0	13.1
Sakon Nakhon	Laem Chabang	US\$	651.4	-	-	651.4
		Hour	16.1	-	-	16.1
	Danang	US\$	111.3	170.4	280.0	561.7
		Hour	3.0	6.0	7.0	16.0
Nakon Phanom	Laem Chabang	US\$	736.9	-	-	736.9
		Hour	18.4	-	-	18.4
	Danang	US\$	97.5	170.4	280.0	547.9
		Hour	2.9	6.0	7.0	15.9
Kalasin	Laem Chabang	US\$	533.6	-	-	533.6
		Hour	12.9	-	-	12.9
	Danang	US\$	112.2	170.4	280.0	562.6
		Hour	2.4	6.0	7.0	15.4
Khon Kaen	Laem Chabang	US\$	469.2	-	-	469.2
		Hour	11.2	-	-	11.2
	Danang	US\$	181.2	170.4	280.0	631.6
		Hour	3.9	6.0	7.0	16.9
Udon Thani	Laem Chabang	US\$	575.0	-	-	575.0
		Hour	13.1	-	-	13.1
	Danang	US\$	257.6	170.4	280.0	708.0
		Hour	5.6	6.0	7.0	18.6
Ubon Ratchathani	Laem Chabang	US\$	634.8	-	-	634.8
		Hour	15.4	-	-	15.4
	Danang	US\$	104.0	170.4	280.0	554.4
		Hour	2.8	6.0	7.0	15.8
Nakhon Ratchasima	Laem Chabang	US\$	294.4	-	-	294.4
		Hour	8.0	-	-	8.0
	Danang	US\$	352.4	170.4	280.0	802.8
		Hour	9.6	6.0	7.0	22.6

Source: JICA Study Team

The next important aspect is the Da Nang port. The Da Nang port has improved its capacity to 3.6 million tons per year by 2005 to handle cargoes from Laos PDR and the northeastern Thailand. The port charge is approximately same as Laem Chabang or Bangkok ports. The important factors for selection of route are physical

capacity, level of services of sea transportation and efficiency of the port operation in the Vietnamese's ports.

The study, however, could show that the land transportation would benefit to trade between or among three countries, especially Thailand and Viet Nam. It could reduce transportation time from 2 weeks by ship to 2-3 days by truck and reduce transportation costs as well. It is possible that the trade between two countries will shift to land transportation and induce trade volume. Therefore, Thailand and Viet Nam will gain from the East-West Corridor and the Second Mekong Bridge construction.

## A3.8 Recommendations

### A3.8.1 Establishment of Transportation Companies

According to the Article 22 (Market Access) of Agreement<sup>9</sup> paragraph (1), the "any transport operator properly licensed for cross-border transport operations in its Home Country according to the requirements of Annex 9, shall be entitled to undertake cross-border transport operations under the Agreement". The agreement also regulates the "price setting for cross-border transport will be free and determined by the market forces, but subject to antitrust restrictions and supervision of the Joint Committee so as to avoid excessively high or low pricing".

It implies that the transportation company should be operated by the private sector and free from any market intervention from the government except for excessively high or low pricing. However, the situations in the land transportation sectors among the three countries are different in one another. Land transportation is private hand in Thailand, except the Express Transportation Organization (ETO), and many private transportation companies are operated in the markets. The Lao PDR has not yet developed at same level of Thailand and trucks operated by the country are relatively old. In Viet Nam, eight state-owned freight transport enterprises provide transport services.<sup>10</sup>

In Lao PDR, it is difficult to compete with other countries like Thailand and Viet Nam due to insufficient private sector development. There is a reason to intervene the government sector in the transportation sector to accomplishment of safe and efficient transport system in the country. The government should provide some incentive to establish international freight companies to operate in international goods transport. The following table shows that the some examples to establish transportation companies which are operated in East-West Corridor.

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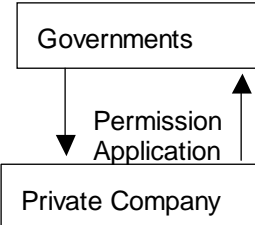
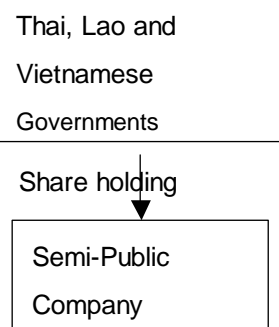
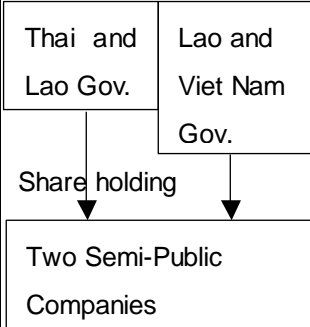
<sup>9</sup> Facilitation of Cross-Border Transport of Goods and People, 26 November 1999

<sup>10</sup> The Study on the National Transport Development Strategy in the Socialist Republic of Vietnam, Interim (1) Report, June 1999, p3-28, JICA, Almec Corporation and Pacific Consultants International

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**International Transportation**

**Table A3.24 Transportation Companies**

Alternative	Alternative A	Alternative B	Alternative C
Type of Business Establishment	Private companies	Joint share holding company by three countries	Joint share holding companies by two countries
Competition	Any private companies can enter the market if they obtain the qualifications form the governments.	There is no competition because only one company allows the through transportation of goods.	The competition is limited to the two joint venture companies.
Organization			
Advantage	Any private company can enter the market. The efficient and flexible services can be provided by the private sector. The market determines the transportation costs.	The goods will be transported according to the regulation and rules set by the governments. The transportation costs are determined by the company.	There will be certain competition between two companies. The two companies determine the transportation costs.
Disadvantage	The quality of the services can not be the same.	The transportation costs will be high because of monopoly of the transportation companies. The agreement among the government will be difficult.	The transportation costs will be high because of the oligopoly of the transportation companies. The agreement between the government will be rather difficult.
Evaluation	Better		Good

Source: JICA Study Team

### A3.8.2 Establishment of Operation and Maintenance Methods

The Second Mekong Bridge will be a toll bridge as the First Mekong Bridge at Nong Khai-Vientiane. For the bridge section, the toll will be collected from the vehicles that use the bridge, depending on the type of the vehicles. The collected toll will be used for the maintenance of the bridge.

The establishment of the maintenance and rehabilitation for the highways is the most important issues, especially route No. 9 of Laos PDR. The international routes, which are determined by the Protocol 1 of the Tripartite Agreement, admit foreign vehicles to enter another country. The foreign vehicles, therefore, has to pay maintenance costs as a user charge base on the international highways. The collected toll should be spent for the maintenance and rehabilitation of the international highways. Without proper maintenance of the highway, the economic benefits will be declined sharply.

Thailand and Viet Nam has already established maintenance and rehabilitation of the highway, but Lao Government has faced with the problems of insufficient financial resources. There is a need for three countries to establish maintenance methods of the highway.

### **Maintenance and Rehabilitation Methods**

Lao PDR should establish regulation of the maximum load per axle that is consistent with pavement design standard. This regulation to control the overloaded trucks and vehicles entering the highway

According to the Article 20 of Tripartite Agreement, "Protocol 1 defines permissible routes, and points of entry and exit for cross-border transport of goods and People", it should designate routes and exit and entry points for the international routes. For the maintenance, Article 25 mentioned that "the Contracting Parties will ensure that the argued roads as safe, secure, and in good condition. They undertake to carry out the necessary repairs".

Therefore, the respective government should maintain the roads as primarily responsible organization, but the agreement does not mention whether the government has a right to collect toll for highway maintenance. Table A3.25 compares the road maintenance system for Route 9. Then, the joint maintenance system for Route 9 is proposed as a priority project in Chapter 7.

**International Transportation**

**Table A3.25 Comparison of Road Maintenance Method**

Alternative	Alternative A	Alternative B	Alternative C
Descriptions	The East-West corridor is same as the national highway. The maintenance costs for the highway should come from respective government resources.	The foreign vehicles enter into the country should pay the toll.	The East-West corridor is like toll way. All vehicles enter into the corridor should pay the toll.
Organization in charge of the maintenance	Department of Highway (Thailand)  Department of Transport (Lao PDR)  Ministry of Transport (Viet Nam)	Department of Highway (Thailand)  Department of Transport (Lao PDR)  Ministry of Transport (Viet Nam)	A new organization that is responsible for maintenance and rehabilitation of the East-West Corridor should be established.
Source of maintenance costs	Government budget	Government budget and toll fee	Toll fee
Operation of the East-West Corridor	Same as national highway	Semi-access controlled	Access controlled
Advantages	The total transportation costs for using the highway are lower than other alternatives.  Operation of the highway is same as the national highway.	The maintenance costs were shared by user charge and government budget.  Operation of the highway is similar to the national highway.  The foreign vehicle also has to share the maintenance costs.	The East-West corridor is maintained in good conditions.  The monitoring of the money spending is easy.  The government can rent space to private sector for the commercial activities, such as gas stand, restaurant, small market etc.
Disadvantages	There is no system to collect maintenance costs.  The government should find another resources to cover maintenance costs.	There is a system to check spending of the collected money from other countries.	The highway can not use local people and short trip vehicles.  Another rural highway is required to serve local people.
Evaluation		Good	Better

Source: JICA Study Team

**Private involvement**

The roles of the private sector should be identified for the maintenance and operation of the East-West Corridor because the government will fail to provide flexible services with cheap costs. The one area of private sector involvement is operation of the bridge and highway. The government could establish another organization, jointed with the private sector, to take care of the problems.

The government could concede development right to the private sector as BOT base. The government determined the land use and regulates sporadic development along the East-West Corridor and reserve for certain areas for development for commercial activities and amusement part etc. The government can sell the development right to the private sector to cover the maintenance and rehabilitation costs as well as regional development costs.

**A3.8.3 Establishment of Transportation Facilities**

In order to establish the distribution functions in the region, the study area should have distribution facilities. The following figure shows important distribution facilities and locations

**Inland container Depot**

An Inland container depot is to minimize transportation costs, increase efficiency and reduces the truck traffic flow into the Bangkok area. The establishment of an Inland container depot will enhance export-oriented industries in the northeastern Thailand. It should have truck terminal, railway connection to the ports and customhouse.

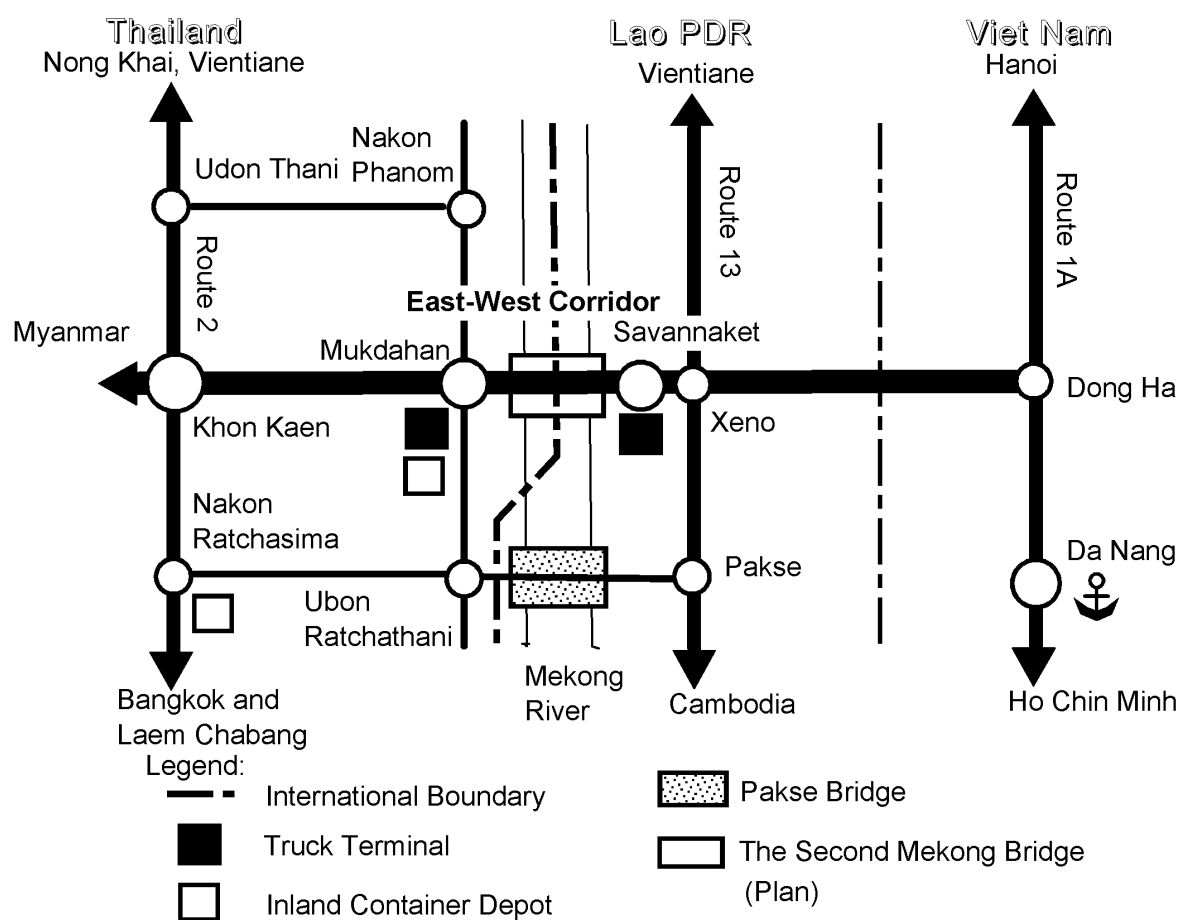
- Location: Mukdahan

**Truck Terminal**

The truck terminal should handle international cargoes as well as domestic cargoes. The customhouse also is located in the area.

- Locations
- Mukdahan (Thailand)
- Savannakhet and Lao Bao (Laos PDR)

# International Transportation



**Figure A3.10 Location of Truck Terminal and Inland Container Depots**

## APPENDIX 4

### TOURISM DEVELOPMENT

## APPENDIX 4

### TOURISM DEVELOPMENT

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#### **A4.1 Present Condition of Tourism in CBR**

##### **A4.1.1 Tourism Resources and Product of NBR**

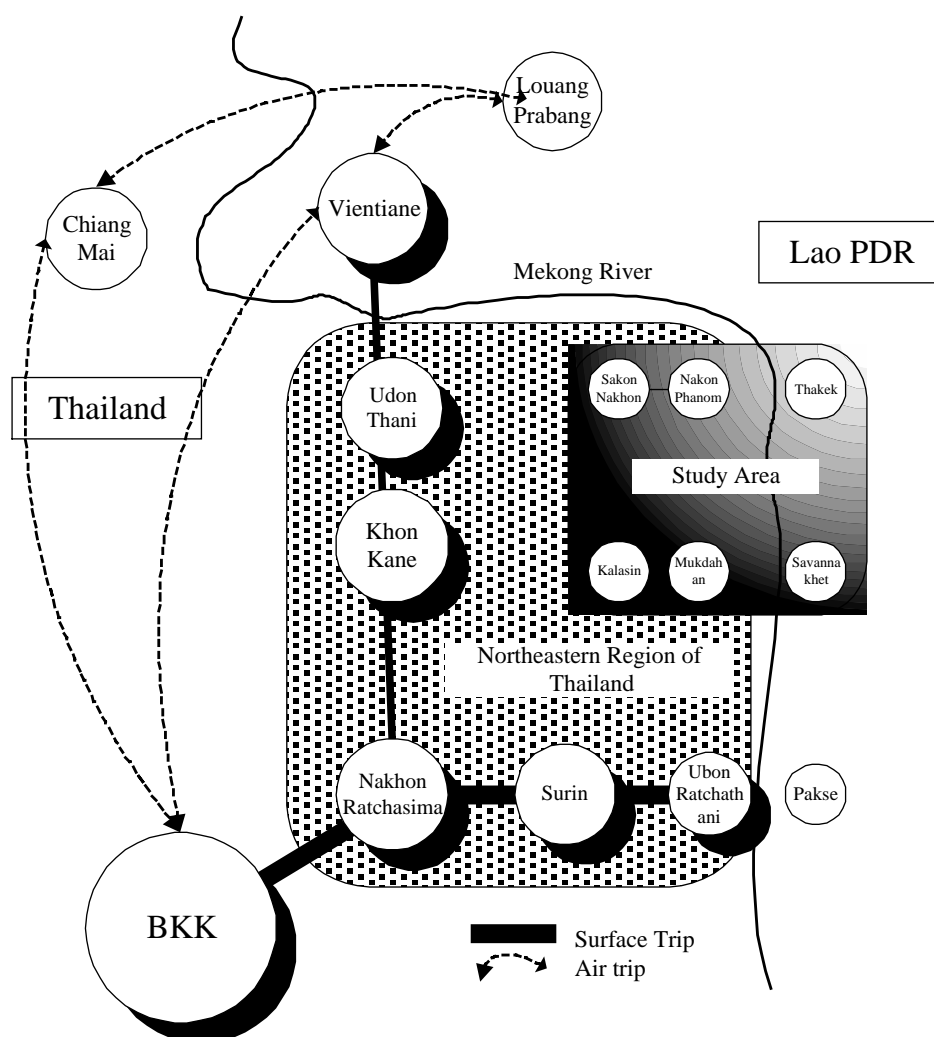
Thailand is reputed tourism destination with 8 million international tourists, increased by annual rate of 6%. Nevertheless, the NBR is attracting limited number of international tourist. Major international tourist flows in the northeastern region of Thailand are east – west route (Nakhon Ratchasima-Ubon Ractchathani) and south – north route (Nakhon Ratchasima-Khon Kaen-Udon Thani) that uncross the Study Area as shown in Figure A4.1.

Major tourist attractions in the NBR are explained below by province.

##### **Nakhon Phanom Province**

Phra That Phanom temple, located 50 km south of provincial capital, built in AD 500, attracts thousands of domestic tourists from all over Thailand. A lot of devotees participate in homage paying fair held during 14<sup>th</sup> – 20<sup>th</sup> January, every year. 50-m high pagoda is the most revered shrines in the northeastern region and regularly attracts pilgrims.

Several temples are also scattered in the periphery of the province. Wat Okatsribuaban, Wat Srithep Praditthaaram, Wat Phra That Renu, Phra That Srikhun (Na Kae), Phra That Tha-Uthen, Phra That Prasit (80 km northwest) have respective attractions.



**Figure A4.1 Major International Tourist Route in the Northeastern Region**

Illuminated Boat Festival, held annually marking the end of the Ok Phansa (Buddhist Lent) by the launching of illuminated boats, is calling thousands of domestic tourists. Colorful street procession and cultural performances are made in the festival.

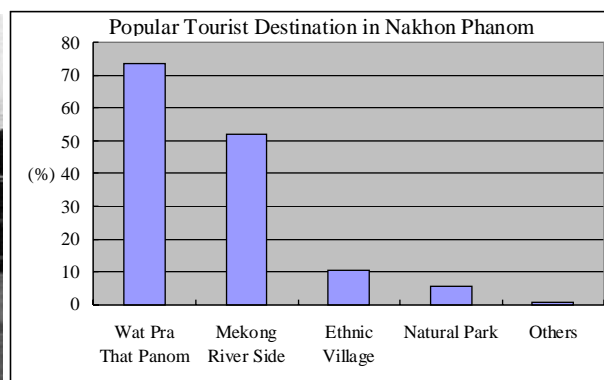
Renu Nakhon is located 52 km south of the capital and famous of Phu Thai ethnic minority group who still retain their ancient culture, namely form of dances and custom of the Bai Sri-Su-Kwan welcoming ceremony. Local products including woven cotton are the attractive souvenirs.

## Tourism Development

Mekong River promenade is scenic points for sunrise and water front view. Renovation of promenades and development of a festival park are being conducted by the provincial authority.

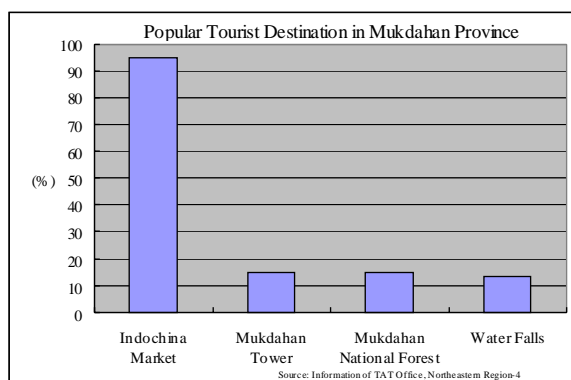
Phu Lungka National Park, located 92 km northwest of the capital near the border of Nong Khai province, is attracting Thai natural lovers by numerous wild flowers, orchid, trees, and Tad Kham waterfall.

The popular destinations of Nakhon Phanom Province are summarized in Figure A4.2.



Picture A4.1 View of River Bank Figure A4.2 Tourism Destination in Nakhon Phanom

## Mukdahan Province



PictureA4.2 Mukdahan Indochina Market Figure A4.3 Tourism Destination in Mukdahan

There is an Indochina market in the center of the city at Mekong riverbank. Various commodities and souvenirs such as silk, cotton, local products of Laos, carved ceramics from China and Viet Nam as well as glassware and mechanical equipment from Russia, etc. are sold not only for local people but for tourists. Renovation of the market, development of market center, is scheduled to implement during 2001 - 2004 by TAT.

National Parks, Mukdahan National Forest (17 km south of the city), Phu Sa Dok Bua Forest Park (20km southwest of the capital), Phu Mhu Forest Park (20km south of the capital), are presenting natural scenery attraction for tourists from local and neighboring provinces. Natural waterfalls and cave are also observed in the province. Access to the national parks/forests is well developed.

The Mukdahan Tower built in the center of the city is a new attraction for domestic tourist.

Destinations of Mukdahan Province are summarized in Figure A4.3.

### **Sakon Nakhon Province**

There are three famous temples, Wat Phra That Choeng Chum, Wat Pa Su Thawat, and Wat Phra That Narai Cheong Weng in the Capital City, attracting pilgrims and domestic tourists. Wat Phra That Choeng Chum is major sacred temple where pilgrims visit. Wat Phra That Narai Cheng Weng has Hindu temple with carved lintels portraying Siva and Vishnu built in 10-11<sup>th</sup> Century.

Sakon Nakhon City is famous for the wax castle festival attracting numerous domestic tourists. Four day festival shows wax castle processions, competitive boat racing in Nong Han Lake as well as traditional northeastern cultural performances.

Phu Phan National Park is covering parts of Sakon Nakhon, Nakhon Phanom, and Kalasin provinces, spreading over the mountainous area on provincial border.

Kud Na Kham Royal Art and Craft Center, located 75 km northwest of the provincial capital, is a training center for artisans of Sakon Nakhon. Under the auspices of Queen Sirikit's foundation, handicraft training is done. Training is demonstrated to the visitors.

## Kalasin Province

Phu Thai minority village is the new destination as the village tour for the domestic and international tourists. The village, located 70 km east of the provincial capital near the boundary of Mukdahan province, preserves the old life style, using peculiar language and clothing.

Phrae Wa, a fabric-weaving group and famous as the producer of the characterized silk weavings, is receiving visits of domestic tourists. They live 40 km north of the provincial capital.

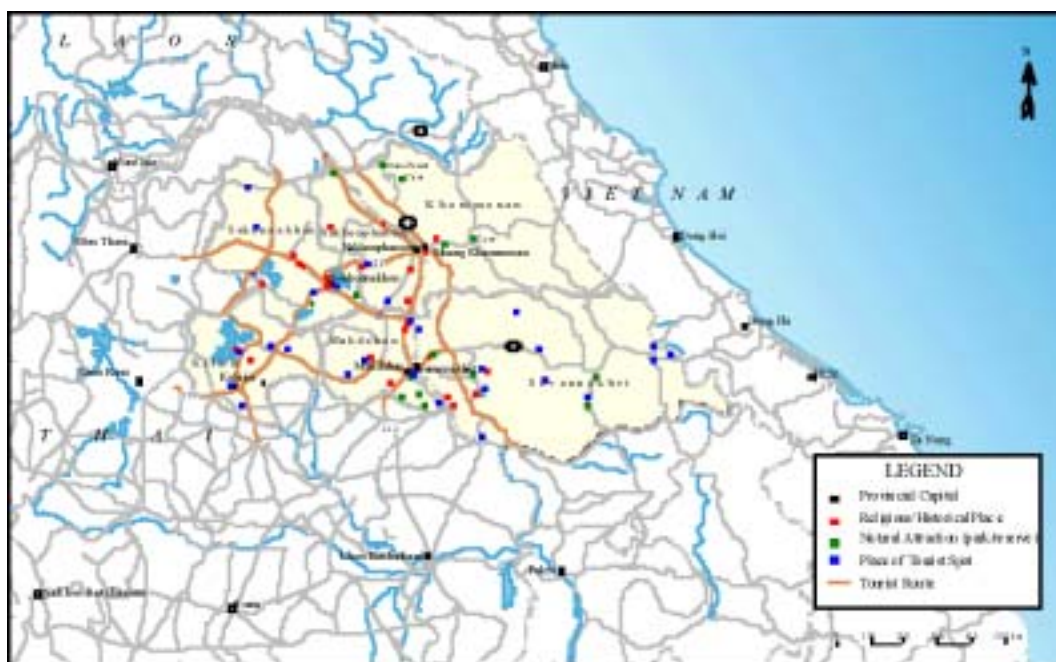
Local people visit on an artificial earth dam of Lam Pao for the recreational purpose, located 20 km north of the provincial capital.

Dinosaur Museum, located 30 km north of the provincial capital, presently decorates 6 dinosaurs fossil and becomes a new destination for the Thai tourist. Construction project of 72 imitation dinosaurs is under progress celebrating His Majesty of King's 72 years birthday anniversary.

The distribution of major tourism resources in NBR is summarized in the table below and illustrated in Figure A4.4.

**Table A4.1 Summary of Tourism Resource in the Study Area**

Province	International Tourist Spot	Major Domestic Tourist Spot	Domestic Tourist Spot
Nakhon Phanom	<ul style="list-style-type: none"> <li>Mekong River Scenery</li> <li>Renu Nakhon minority village</li> </ul>	<ul style="list-style-type: none"> <li>Wat Phra That Phanom</li> <li>Illumination boat festival</li> </ul>	<ul style="list-style-type: none"> <li>Other temples</li> <li>Phu Lungka National Park</li> </ul>
Mukdahan	<ul style="list-style-type: none"> <li>Mekong River Scenery</li> <li>Indo-China Market</li> </ul>	<ul style="list-style-type: none"> <li>Mukdahan National Park: natural art stone</li> </ul>	<ul style="list-style-type: none"> <li>Mukdahan tower</li> <li>Other national forest/parks: cave, waterfall</li> </ul>
Sakon Nakhon		<ul style="list-style-type: none"> <li>Wax castle festival</li> <li>Temples: Wat Phra That Chum, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Phu Phan national park</li> <li>Kud Na Kham Art &amp; Craft Center</li> <li>Nong Han Lake</li> </ul>
Kalasin	<ul style="list-style-type: none"> <li>Phu Thai minority village</li> </ul>	<ul style="list-style-type: none"> <li>Dinosaur museum</li> </ul>	<ul style="list-style-type: none"> <li>Phrae Wa Fabric-weaving group</li> <li>Lam Pao Reservoir (Dok Khet Beach)</li> </ul>



**Figure A4.4 Tourism Resources Distribution in the Study area**

### **A4.1.2 Tourism Resources and Product in SKR**

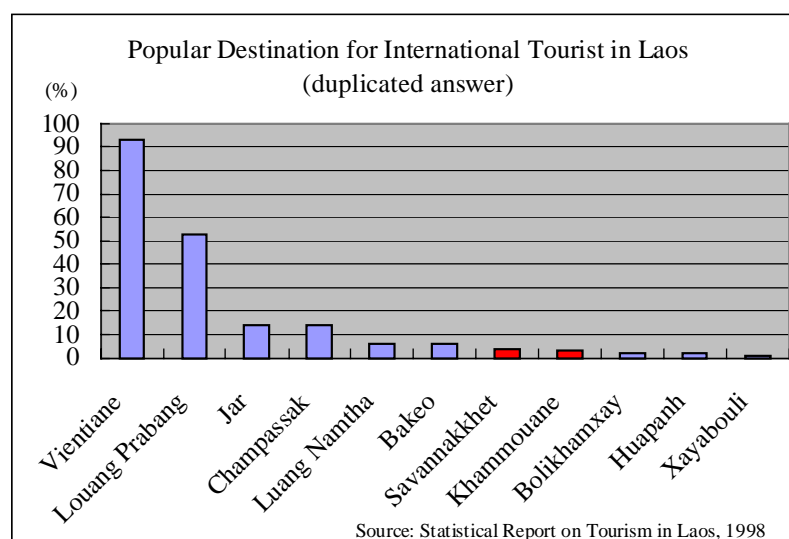
The purpose of tourist visited on Lao PDR is 1) nature visiting, 2) local life observation, 3) culture learning, etc. that differs from tourism observed in ordinal tourism destination.<sup>1</sup> It means Lao PDR is considered as an eco-tourism destination by the international tourists, in lieu of ordinal sightseeing tourism.

Major tourism resources in Lao PDR are 1) the Capital Vientiane, 2) City of Luang Prabang, the World Heritage with old Lao style buildings and temples, 3) Jar highland with Jar pot, 4) Wat Phu Khmer heritage, a candidate for the World Heritage, 5) Boloben highland in Champasak Province. More than 50 % of tourist arrivals of Lao PDR visited Luang Prabang, and 15 % on Jar highland and Champasak Province respectively as shown in Figure A4.5.

Savannakhet and Khammouan Province in SKR, receiving approximately 3-4 % of the total international tourist arrivals, are not the major destinations for the international tourist, where limited tourism resources are found as summarized below.

Tourism destination distribution in SKR is presented in Figure A4.4.

<sup>1</sup> Statistical report on Tourism in Laos (1998) reported that international tourist shows main interest on 1) nature (72%), 2) people (54%), 3) culture (35%), etc.



**Figure A4.5 Tourist Arrival by Destination in Lao PDR**

### Khammouan Province

Nakai-nam Nature Reserve: natural forest and mountainous scenery in natural forest is preserved. The access road to Nakai-nam from Thakhek, the provincial capital, is not in good condition. Large lorries carrying lumbers are congesting on Route 12, the solo access to Nakai-nam.

Phouhinpoon Nature Reserve : A spectacled landscape with Lime Stone mountain is attractive. Stone Forest located in the northern edge of the nature reserve can be accessed by Route 8. Natural caves with underground stream are observed throughout the nature reserve.

Ethnic group of Saolang, who cultivates the slash and burn agriculture near the Vietnamese border, is peculiar.

Pha That Sikhottabong built with 29-m height Stupa during the 14 century in Thakhek City is attracting some foreign tourists.

French colonial style buildings are seen in the center of the Thakhek city. Waterfront of Mekong River and the colonial style buildings there shows attractive atmosphere for tourists. Preservation and restoration of the buildings, improvement of town and waterfront landscape are necessary for the tourism development in Thakhek.

### **Savannakhet Province**

Temples such as That Ing Hang Stupa, scenery spots, dinosaurs footprint, Ho Chi Minh route, etc. are not accessible due to the condition of Route 9.

Eco-tourism is carried out in Dong Phouyueng Preservation Forest by the support of Ministry of Forest.<sup>2</sup>

Ethnic group of Nong and Xepoh, who cultivates the slash and burn agriculture near the Vietnamese border, is peculiar.

There is Khmer heritage of Heuan Hin Ruin located in the 50-km south from Savannakhet. Size of the heritage is rather limited.

French colonial style buildings are seen in the center of the Savannakhet city. Waterfront of Mekong river and the colonial style buildings shows attractive atmosphere for tourists as same as Thakhek.

Accommodation is not developed to receive the international tourist neither in Savannakhet nor Thakhek.

Terminal area of ferryboat, connecting Savannakhet and Mukdahan will be redeveloped after the completion of Mekong Bridge.

### **A4.1.3 Tourism Market Trend**

#### **Thailand**

As described before, Thailand is the second biggest tourist destination in the world thanks to the developments of tourism resorts such as Pattaya, Charm/Hoahin and Phuket, and urban resort of Bangkok and Chiang Mai. Its tourism demand shows strong and steady growth as shown below. International tourist demand in Thailand is 8,650,000 tourist arrivals (Figure 2.3.6) and 68,300,000 tourist-night in 1999, generating large foreign currency earnings of US\$5.9 billion.

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<sup>2</sup> Five day trekking visit on local villages, observation of dinosaur footprint, and camping in the forest.

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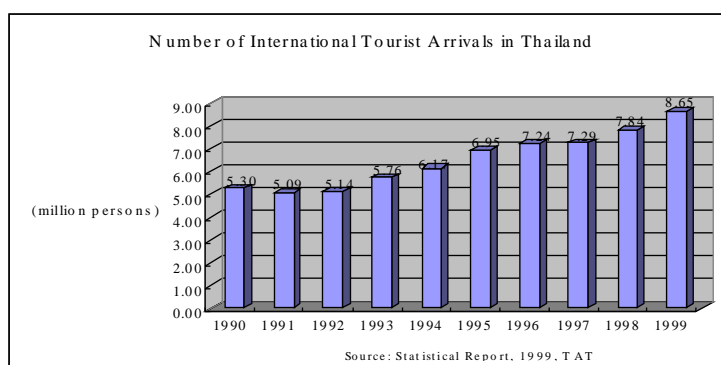


Figure A4.6 International Tourist Arrivals in Thailand (1990-1999)

Major tourism market of Thailand are Asian countries of Japan, Malaysia, China, Singapore, etc. and Europe and American countries recorded rather longer length of stay and high tourism receipt as shown in the tables below

Table A4.2 Tourism Market of Thailand

Top Ten Market by Tourist Nights (in 1999)

Nationality	Tourist-Nights		Length of Stay (day)	Receipts (million US\$)
	Nights	(%)		
1 Japan	6,533,321	10%	6.1	498
2 Germany	6,168,600	9%	15.8	428
3 UK	6,075,985	9%	11.8	445
4 China	5,194,214	8%	6.4	420
5 USA	3,989,289	6%	8.6	376
6 Malaysia	3,497,136	5%	3.5	354
7 Taiwan	3,424,797	5%	6.5	342
8 Singapore	2,294,331	3%	4.3	284
9 Korea	1,767,050	3%	5.2	140
10 Hong Kong	1,134,924	2%	4.6	303
Total	68,293,242	100%	8.0	5,934

Top Ten Market by Tourist Arrivals (in 1999)

Nationality	Tourist Arrivals	
	Persons	(%)
1 Japan	1,064,539	12%
2 Malaysia	991,060	11%
3 China	775,626	9%
4 Singapore	604,867	7%
5 Taiwan	557,629	6%
6 Hong Kong	429,944	5%
7 UK	425,688	5%
8 USA	417,860	5%
9 Germany	375,345	4%
10 Korea	338,039	4%
Total	8,651,260	100%

Source: TAT, 1999 data

Concerning the NBR, domestic tourist is predominant as described before. Each province of the NBR is receiving approximately 50,000 – 200,000 accommodated tourist arrivals from the domestic market as shown below, while 1,000 – 2,000 international tourists arrives in the province.

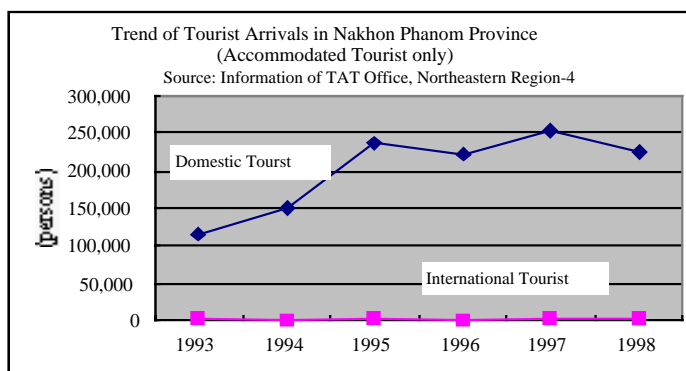
**Table A4.3 Present Tourist Demand of the Study Area**

	Study Area			
	Nakhon Phanom	Mukdaharn	Sakon Nakhon	Kalasin
1 Accommodated Guest Arrival (Tourist)				
1) Thai	270,000	80,000	630,000	150,000
2) Foreigner	<b>2,170</b>	<b>1,362</b>	n.a..	<b>1,200</b>
3) Total	272,170	81,362	-	151,200

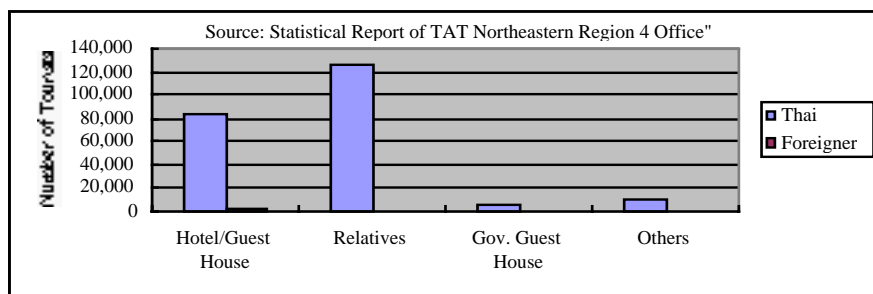
Source: Foreign tourist of Mukdaharn & Kalasin is as of 1998 from the information of TAT Office Northeastern Region 3 and 4.

The other data is as of 1997 based on "Northeast Tourism Development Plan, TAT, 1997"

Figure A4.7 shows the trend of accommodated tourist arrivals of Nakhon Phanom Province by annual rate of 14 % during the past 5 years.

**Figure A4.7 Number of Tourist Arrivals in Nakhon Phanom Province**

Approximately 80,000 domestic tourists accommodates in hotel/guest house, while more than 12,000 stays relatives/friend houses as shown in Figure A4.8.

**Figure A4.8 Guest Arrivals by Type of Accommodation (Nakhon Phanom)**

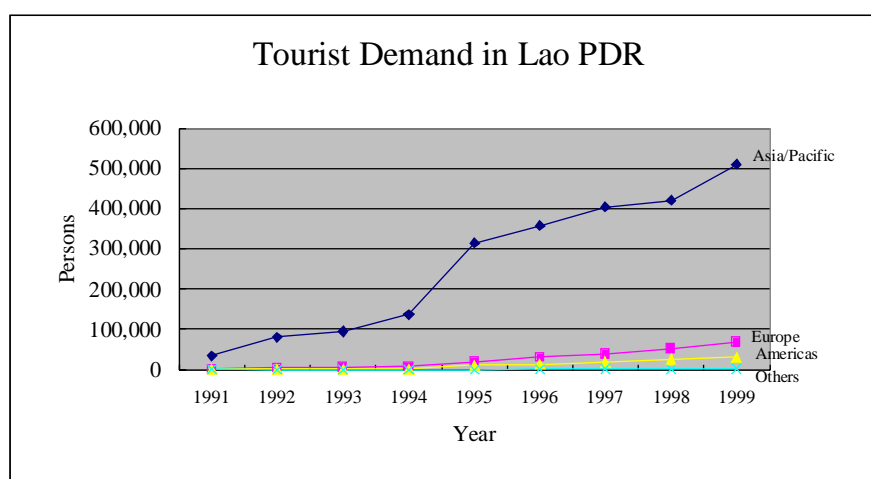
## Lao PDR

In 1998, 610,000 tourist arrivals in Lao PDR was recorded. Approximately 510,000 tourists were from Asia/Pacific region as shown in the table below and Figure A4.9. Thai and Viet Nam tourists are dominant tourists recording 270,000 and 80,000 tourists arrivals respectively. Tourist demand of Lao PDR has increased by rate of 15 % annually from 1995 till 1999.

**Table A4.4 Tourist Arrivals in Lao PDR by Region**

(unit: persons)						
Year	Asia/Pacific	Europe	America	Africa/ Middle	Total	(%)
1991	33,937	2,214	822	640	37,613	11
1992	81,022	4,496	2,009	44	87,571	25
1993	94,836	5,986	2,061	63	102,946	30
1994	136,114	8,019	1,837	185	146,155	42
1995	314,470	20,635	11,019	336	346,460	100
1996	357,692	30,582	14,102	624	403,000	116
1997	403,781	38,583	18,213	2,624	463,201	134
1998	421,196	52,076	25,326	1,602	500,200	144
1999	510,703	68,564	31,780	3,231	614,278	177

Source: Statistical Report on Tourism in Laos, NTA



**Figure A4.9 Number of Tourist Arrivals in Lao PDR**

60 % of tourists arrived at Lao PDR are day-tripper and accommodated tourist is only 40 % as shown in the table below. While the day-tripper arrived from Thailand and Viet Nam, who crossed the border by the border pass for the daily commercial/business purpose, most of accommodated tourists visited for leisure and

vacation. Indian and southern Asian tourists come for the purpose of temporary stay of visa renewal.

**Table A4.5 Tourist Arrivals in Lao PDR by Day-tripper and Accommodated Tourist, 1998**

(unit: persons)

Nationality	Accommodated Tourist	Day Tripper	Visa Extension	Total
Thailand	38,100	234,995	0	273,095
Vietnam	21,369	56,849	0	78,218
China	7,251	8,551	0	15,802
Myanmar	4,768	0	0	4,768
Subtotal	71,488	300,395	0	371,883
India	2,864	0	5,950	8,814
Other Asian	39,032	0	1,467	40,499
Subtotal	41,896	0	7,417	49,313
Europe/ America/etc.	79,004	0	0	79,004
Total	192,388	300,395	7,417	500,200
	38%	60%	1%	100%

Note: Tourist entered by border pass is assumed as day tripper.

Source: Statistical Report on Tourism in Laos, NTA

Tourism market of Lao PDR is shown in the table below. Thailand, Viet Nam, USA, Europe countries are the main markets and Japan is the fifth market with approximately 13,000 tourist arrivals in 1998.

**Table A4.6 Tourism Market of Lao PDR by Country, 1998**

Top Ten Market (in 1998)

Nationality	Accommodated Tourist		Day Tripper		Total	
	Persons	(%)	Persons	(%)	Persons	(%)
1 Thailand	38,100	20%	234,995	78%	273,095	55%
2 Vietnam	21,369	11%	56,849	19%	78,218	16%
3 USA	20,174	10%	0		20,174	4%
4 France	17,863	9%	0		17,863	4%
5 Japan	12,936	7%	0		12,936	3%
6 Australia	9,579	5%	0		9,579	2%
7 UK	8,902	5%	0		8,902	2%
8 Germany	7,529	4%	0		7,529	2%
9 China	7,251	4%	8,551	3%	15,802	3%
10 Myanmar	4,768	2%	0		4,768	1%
Total Tourist	192,388	100%	300,395	100%	500,200	100%

Note: Tourist entered by border pass is assumed as day tripper.

Source: Statistical Report on Tourism in Laos, NTA

Tourist arrivals in the Study area, Khammouan and Savannakhet provinces, is approximately 170,000 as shown in the table below. Out of 170,000, day-tripper is approximately 150,000 from Thailand and Viet Nam embarked by border pass for

daily business, while accommodated tourist is approximately 20,000. 40 % of 20,000 is Thai tourist and 60 % or 12,000 is from the other countries.

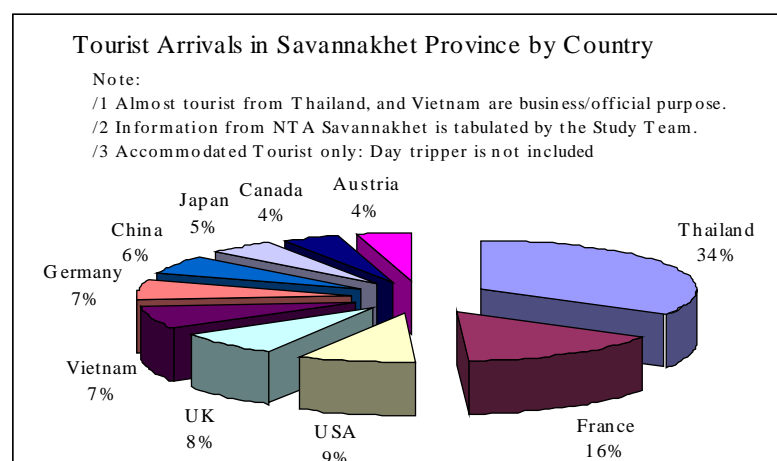
**Table A4.7 Tourist Arrivals in the Study Area (1998)**

(unit: persons)

Item	Lao PDR	Study Area		
		Savannakhet	Khammouane	Total
1 Accommodated tourist	192,388	16,740	2,860	19,600
2 Day tripper	300,395	128,100	21,500	149,600
3 Tourist for visa extension	7,417	0	0	0
Total	500,200	144,840	24,360	169,200

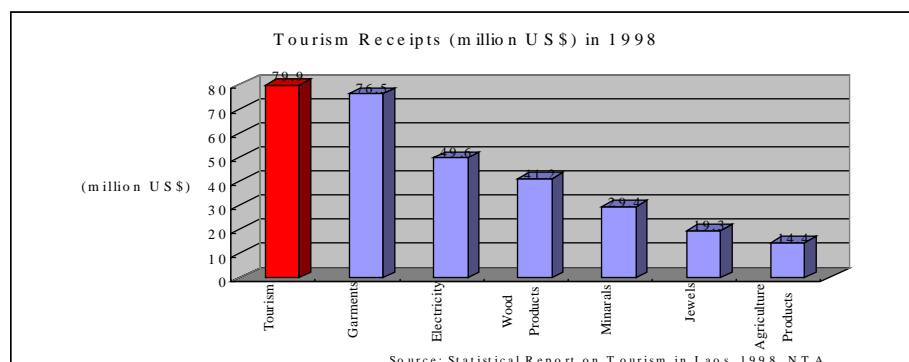
Source: Statistical Report on Tourism in Laos, NTA

Accommodated tourists in the Study Area come from Thailand, Europe, USA, Viet Nam, and China as shown in Figure A4.10.



**Figure A4.10 Tourism Market of the Study Area by Country (accommodated tourist)**

Expenditure and length of stay of the international tourist in Lao PDR was 90 US\$ per day and 5 days in average. US\$ 80 million is estimated as the total tourism receipt based on the accommodated tourist arrivals of 190,000 in 1998. Accordingly, tourism industry is the largest foreign currency earner for Lao PDR as shown in Figure A4.11.

**Figure A4.11 Tourism Receipts Comparing with Other Industry**

#### A4.1.4 Tourism Facilities and Services

##### NBR

There are several accommodations in as shown below. There is at least one hotel with the international standard in each province.

**Table A4.8 Present Accommodation in the Study Area (as of 1996)**

	Study Area				BKK	Nakorn Ratchasima
	Nakhon Phanom	Mukdaharn	Sakon Nakhon	Kalasin		
1) Establishments	8	11	24	5	207	35
2) Rooms	595	790	767	286	55381	3,131
3) Occupancy Rate (%)	33.3	28.0	n.a.	42.8	54.8	40.6

Source: Sakon Nakhon: Northeast Tourism Development Plan, TAT, 1997

Others: Statistical Report 1998, TAT and Information of TAT Office, Northeastern Region-3, 4

##### Transportation Facility

There are three alternatives to access the Study Area from Bangkok.

##### Air

Two domestic airports, Nakhon Phanom and Sakon Nakhon, are used for civil aviation. From Nakhon Phanom, approximately 1.5 hour drive is enough to reach Mukdaharn by Route 212, which are well paved for speedy drive. Khon Kaen airport is also utilized to access to Kalasin.

## Road

Road network is well developed in the Study Area. Routes 22, 212 213, and 2042 with all weather pavement connects four provincial capitals in the Study Area. It is also easy to access to major domestic airports of Khon Kaen, Ubon Ratchathani, and Udon Thani through Routes 22, 213, 209, and 212 from NBR. However, in case of traffic demand increase, road traffic congestion will be foreseen on routes of 209, 212, 213, and 2042, which were developed as 2-lane carriage with limited traffic capacity.

## Railroad

There are two railroad services in the northeastern Thailand; one is north direction line connecting BKK with Nong Khai through Nakhon Ratchasima, Khon Kaen, and Udon Thani, the other is east direction line from BKK to Ubon Ratchathani through Nakhon Ratchasima, and Surin. Two express services are available everyday with the comfortable compartment.

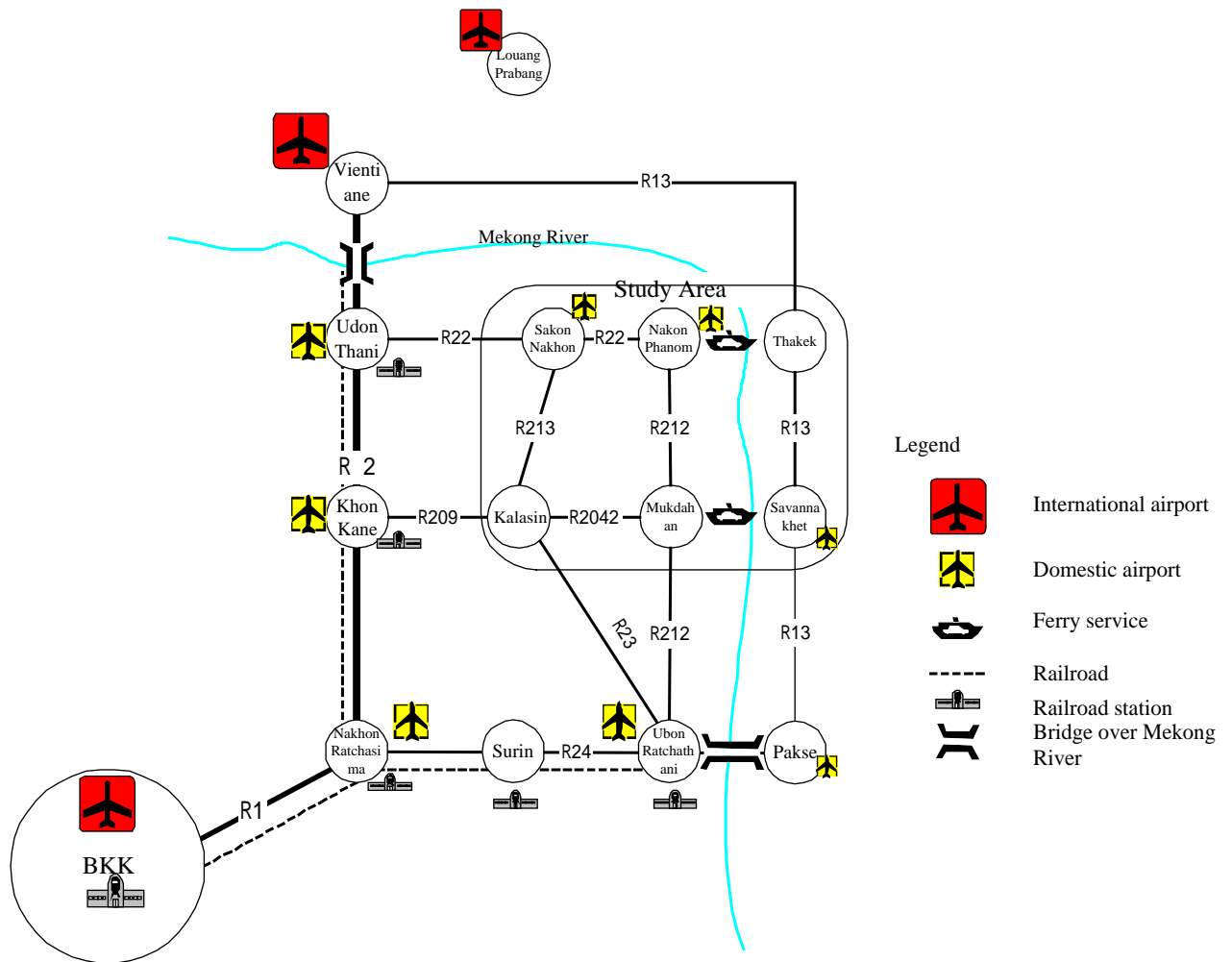
Transportation services in NBR are currently developed well and convenient for the international tourists with reasonable price.

Road distance table and present transportation network in the northeastern region of Thailand is illustrated in Figure A4.12.

**Table A4.9 Road Distance Table**

BKK	Nakhon Ratchasima	Khon Kaen	Udon Thani	Nong kai	Surin	Kalasin	Sakon Nakhon	Nakhon Phanom	Mukdahan
260									
450	190								
565	305	115							
615	355	165	51						
457	198	256	373	422					
520	260	77	193	245	184				
645	390	205	160	210	312	128			
740	480	300	253	305	350	220	93		
640	383	185	278	329	246	166	199	104	

(Unit: km)



**Figure A4.12 Present Transportation Network in the Northeast Thailand**

Utilizing the well-developed road network in the Study Area, 97 % of domestic tourists arrive to NBR by private cars and 21 % by bus, while only 2% utilize air service. 23 % of the international tourists, on the other hand, utilizes air transportation and less bus share is seen in Figure A4.13.

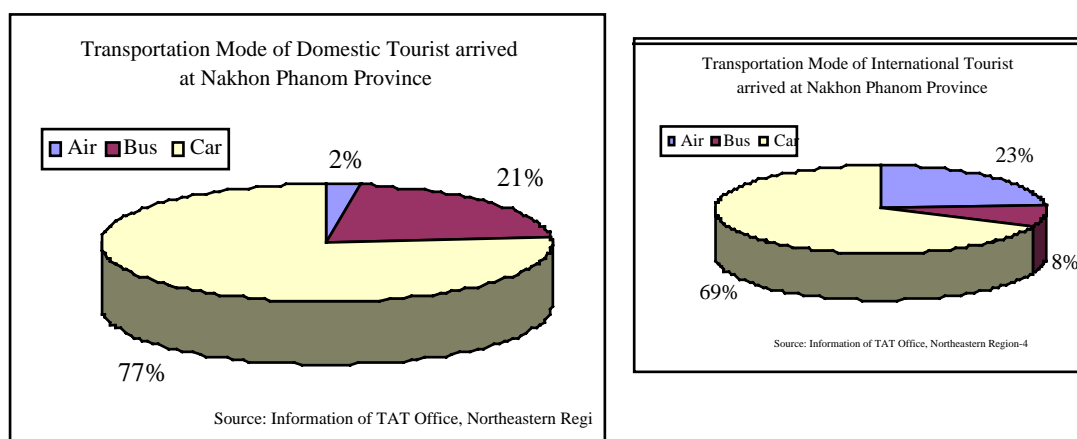


Figure A4.13 Transportation Mode of Tourist in the Study Area

## SKR

Although several accommodations exist in Khammouan and Savannakhet Provinces, hotel facility as well as service is too poor to serve the international tourist. Upgrading of accommodations is problem to be sorted out urgently.

Table A4.10 Developed Accommodation in Lao PDR and the Study Area

	Lao PDR	Vientiane Municipality	Louang Prabang	Khammouane	Savannakhet
1 Hotel					
1) No	81	24	11	4	8
2) Rooms	2780	1,303	316	108	247
3) Beds	4828	2,429	411	176	385
	100%	50%	9%	4%	8%
2 Guest House					
1) No	226	57	34	7	14
2) Rooms	2239	796	223	88	177
3) Beds	3831	1,275	350	123	274
	100%	33%	9%	3%	7%
3 Total					
1) No	307	81	45	11	22
2) Rooms	5,019	2,099	539	196	424
3) Beds	8,659	3,704	761	299	659
	100%	43%	9%	3%	8%

Source: Statistical Report on Tourism in Laos, NTA

It is 4 hour drive from Vientiane to Thakhek by Route 13. Route 13, improved by the assistance of ADB and Japanese government, has good enough pavement as well as road sign for tourists, though resting facility is not developed. Tourist can reach Savannakhet by 2 hours from Thakhek by Route 13, though an improvement work is continuously carrying out.

The improvement work was started on Route 9, trunk road connecting Savannakhet with Viet Nam border.<sup>3</sup>

#### **A4.1.5 Existing Plan for Tourism Development in the Study Area**

##### **Tourism and Employment Creation Plan under Social Investment Project (SIP)**

This project has more than 100 subprograms servicing not only for major tourism destination but also rural area by the cooperation of JBIC financial assistance. Followings are being carried out in the project by TAT.

- Piers rehabilitation in the Mekong River is under construction in Mukdahan.
- Road Construction and Landscape Improvement of Mano Phirom Beach in Mukdahan
- Piers rehabilitation in the Mekong River is under construction in Nakhon Phanom.
- Rehabilitation and environmental conservation of national park in Nakhon Phanom
- Rehabilitation of Indo-China market in Mukdahan is also included in the next stage of the project and expected to implement in 2002.

##### **Northeast Tourism Development Plan, TAT, 1997**

This tourism master plan studied a framework of tourism development in the northeast Thailand. Several projects/programs as shown below were proposed to be implemented for the promotion of the tourism industry in Isan.

Two projects were already implemented presently and marketing promotion is partially carried out.

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<sup>3</sup> Even presently, many international tourists, especially French tourists, tried to cross on Route 9 unsuccessfully.

**Table A4.11 Projects/ Programs Proposed by Existing Plan for Northeast Thailand**

Item	Details	Location	Cost	Completion
New Tourist Site				
1 Mekong World Project	Science museum	Nong Khai or Mukdahan	more than 1,000 mil	in Kalasin
2 Dinosaur Park	Science museum	Khone Kaen		
3 Science Park		Central province of the Isan	60 mil Baht	
4 Cultural Arts Center		Udon Thani	50 mil Baht	
Plan of Creating Characteristic Tourism				
5 Manual of Isan Tourism				in Kalasin
6 Training Guideline for Isan Tourism				
7 Development of Phra That Phanom	Promenade, information center, car parking, etc.	Nakhon Phanom	20 million Baht	
8 Dong Mun Village	Culture village	Surin	5 million	
9 Phu Thai Village	Culture village	Sakon Nakhon		
10 Phu Rua Park	Nature study facility	Loei	3 million	
Tourist Route Improvement				
11 Loei-Nong Khai- Nakhon Phanom Route	R 211, 212 improvement			
12 Mekong River Boating	50-80 capacity boat cruising			
Isan Civilization Route				
13 Ban Chiang World		Udon Thani		
14 Khmer Cultural route				
Village Culture Tourism				
15 Handicraft village route		Srin, etc.		
Renovation of Tourist Spot				
16 Dok Kher Beach		Kalasin		
17 Pa Nang Koi Waterfall		Kalasin		
18 Pu Phra Park		Kalasin		
19 Observation stand for boat festival		Mukdahan		
Tourism Facility/Activity Development				
19 Kong Beach	Beach utilization in dry season	Nakhon Phanom		
20 Road improvement	R211,212,209, 2042,2116			
21 Indochina Tourism Center				
Tourism Marketing				

Source: Northeast Tourism Development Plan, TAT, 1997

### Feasibility Study for Area Development for Tourism in Laos

This study, made by TAT in 2000, is the technical assistance to Lao PDR aiming at the development of tourism destination in Lao side for Thai tourists. The development of Stone Forest area in Khammouan Province of Lao PDR was discussed. The development of visitor center in the scenic spots in the stone forest was proposed.

## A4.2 Analysis of Tourism Development Potential in CBR

### A4.2.1 Evaluation of Tourism Development Potential of NBR

Tourism development potential of Thai Study Area is evaluated based on the present situation described before and summarized in the upper part of Table A4.12.

Overall evaluation result concerning the present tourism condition of NBR is summarized in the lower part of Table A4.12.

#### Strength of NBR Tourism

- Tourism products, services and facilities are well developed for domestic tourists and could be the seed of further promotion of tourism in NBR.
- Peculiar social resource such as the northeastern culture and ethnic minority group could be the attraction for prospective eco-tourism.
- Transportation infrastructure such as highway and airport necessary for tourism promotion is well developed basically in and around the Study Area.
- Renowned Mekong River is the attractions for the international tourists, although it is niche market.

#### Weaknesses of NBR Tourism

- The Study area is excluded from major international tourist route of the northeastern region of Thailand
- Tourism resources in the Study Area have insufficient competitiveness for international tourism market except for the name of Mekong River.

#### Opportunity of NBR Tourism

- The Study Area is located on the GMS East-West Corridor. After the development of Mekong Bridge at Mukdahan City, the international tourists on Mekong tour are expected to pass through the area.
- Eco-tourism will expand as the new stream. The international tourists as well as residents of the capital area will popularize village tour on ethnic minority group, weaving group.
- Domestic tourism demand will be increased steadily in accordance with the growth of Thai economy and domestic tourist arrivals in the Study Area will also be increased accordingly. Religious facility, festival, Mekong river scenery will call a lot of pilgrims, lovers of festivals and events.

**Tourism Development**

**Table A4.12 Evaluation of Tourism Development Potential of Thai Study Area**

(Tourism resources & product)

Item	Major Attraction	Tourism Development Potential	
1)	Religious facility	Pilgrims visit sacred temples from all over Thailand.	NP & SN (Potential as major domestic tourism) Wat Phra That Phanom in Nakhon Phanom & Wat Phra That Choeng Chum in Sakon Nakhon attracts Thai pilgrims from all over the country.
2)	Heritage	10-11 <sup>th</sup> Century built Hindu temple of Wat Phra That Narai Cheng Weng in Sakon Nakhon has carved interior.	SN (Potential as local domestic tourism) Khmer archeological relics, scattered on the bottom corridor from Phimai near Nakhon Ratchasima of Thailand to Wat Phu near Pakse of Lao PDR, are the most attractive tourism resources in the northeastern Thailand. Wat Phra That Narai Cheng Weng is located isolated from the corridor.
3)	Festival	Illumination boat festival in Nakhon Phanom and wax castle festival in Sakon Nakhon attract a lot of <u>the domestic tourists</u> .	NP & SN (Potential as international and major domestic tourism) Illumination boat and wax castle festivals have the potential as international tourist destination by upgrading and networking with the dragon boat race festival in Nakhon Ratchasima and the elephant carnival in Surin, famous festival for the <u>international and domestic</u> tourism market in the northeastern Thailand.
4)	Natural resources	National park, forest, waterfall, cave, and dam lake are attracting local domestic tourists from neighboring provinces.	SN, K, M (Potential as local domestic tourism) A relatively hilly environment in the northeastern Thailand can attract domestic tourists from neighboring provinces.
5)	Eco-tourism	Village tours on ethnic minority group, weaving group are carried out in Nakhon Phanom and Kalasin.	NP, K (Potential as international and major domestic tourism) Village tours on ethnic group will be promotable for the international tourists and BKK residents in future.
6)	Amusement	Indochina market in Mukdahan is the destination not only for domestic but international tourists.	M (Potential as international and major domestic tourism) Indochina market will become one of the most attractive tourism destinations for the domestic and international tourists.
		Dinosaur Museum is a new destination of domestic tourists.	K (Potential as major domestic tourism) Dinosaur Museum will continue to be a destination of domestic tourists.
7)	Others	Mekong River side promenade is developed in the Nakhon Phanom City.	NP, M (Potential as international and major domestic tourism) Nakhon Phanom and Mukdahan and Nong Khai cities are facing Mekong River scenery in the northeastern Thailand.

(Tourism Facility)

Present Condition	Evaluation
<ul style="list-style-type: none"> <li>Hotels developed in the Mekong riverfront can cope with the domestic tourists from BKK area as well as international tourists.</li> <li>Transportation facilities such as road network and air service are developed well in the Study Area.</li> </ul>	<ul style="list-style-type: none"> <li>Service and facilities should be improved gradually in accordance with the tourism demand increase and quality upgrading requirement.</li> <li>Improvement of transportation facilities, especially local road network, will be necessary in accordance with the tourist traffic increase.</li> </ul>

Note: NP – Nakhon Phanom SN – Sakon Nakhon K – Kalasin M - Mukdahan

### **A4.2.2 Principles of Tourism Promotion in NBR**

On the basis of the discussion above, the domestic tourist will continue to be major tourist target in the Study Area, therefore tourism development will be a focus on the promotion of the domestic tourist. Festival/event tourism, and Buddhist pilgrim tourism will be effective and practical measures for the promotion. New tourism product provision shall be also advantageous for the increase of domestic tourist arrivals. Prospective increasing Thai tourist, for instance, will request the crossing tour of the Mekong River and visiting on religious facilities and untouched natural beauty in Lao side.

For the promotion of international tourist arrivals, measures to call the international Mekong Tour tourist on the GMS East-West Corridor to the Study Area will be proposed. For that purpose, an introduction of new tourism products in the corridor will be inevitable. Tourism Free Zone (TFZ) will be one of contribution for the international tourist arrivals promotion. Integration and cooperation method between Thailand, Lao PDR, and Viet Nam in the field of tourism development should be discussed intensively in the Tripartite Technical Cooperation Scheme the Study Area<sup>1</sup>.

### **A4.2.3 Tourist Arrivals Projection in NBR**

Two opportunities are foreseen in the projection of future tourist demand. 1) increase of Thai domestic tourist arrivals, 2) increase of international tourist arrivals.

#### Thai Domestic Tourist,

The domestic tourists arrived at Nakhon Phanom, Mukdahan, Sakon Nakhon, and Kalasin provinces will sharply increase thanks to the economic growth of Thailand. Present 1,100,000 domestic tourist arrivals in NBR is projected to be doubled by the target year 2020 as explained in the table below.

Tours on festivals, religious facilities, natural attractions, etc. will be more popularized by domestic tourists.

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<sup>1</sup> According to TAT, a VISA Free Zone at the Golden Triangle, inclusive of Chiang Mai, Chiang Rai, Nan, and Payao provinces in Thai side, has been studied by TAT. The ASEAN NTOs Fund has been established for the purpose of joint activity and cooperation in the tourism promotion.

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### International Tourist

After the GMS East-West Corridor is opened, the international tourist crossing Viet Nam to Thailand through Lao PDR will visit on the tourist destination in NBR. Despite limited annual 4,000 visitors at present, approximately 30,000 - 40,000 international tourist arrivals is projected in 2020 as shown below.

**Table A4.13 Projection of Future Tourism Demand in CBR**

Item	Present Tourist (1997)	Future Demand in 2020	
		Demand	Assumption
Domestic Tourist	NP: 270,000 Md: 80,000 SN: 630,000 Ka: 150,000 Total 1,130,000	NP: 630,000 Md: 190,000 SN: 1,050,000 Ka: 350,000 Total 2,200,000	Projected on the basis of "National Tourism Development Plan, TAT, 1997" Average increase rate 2000-2006: 4.3%/Y 2006-2020: 2.1%/Y
International Tourist	App. 4,000 tourists in 1998	App. 36,000 tourists in 2020	<u>E-W Corridor Mekong Tour</u> 1998 13,000 (estimated potential)/ <u>1</u> 2020:50,000 (3.8 times: increasing rate of 6.2 %/y <u>2</u> ) 25,000: half of 50,000, is assumed to accommodate in Thai side <u>Increase of existing int. demand</u> 3,000 x 3.8 times: increasing rate of 6.2 %/y =11,000 <u>Total</u> International tourist arrivals in 2020: 36,000 (25,000+11,000)
Total	App.1,130,000	App.2,200,000	

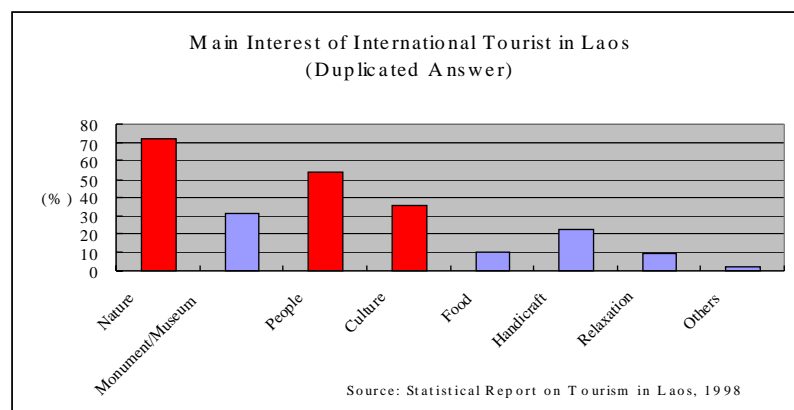
- Note: 1 According to the statistics of Tourism Authority of Thailand (TAT), it is estimated that approximately 40,000 tourists from France, USA, UK and Japan, made excursion from Viet Nam to Thailand by air presently. Assuming 1/3 of the excursion moves by Route 9 starting from Hue of Viet Nam to BKK through the Study area, 13,000 international tourists are projected to enter into the Study area.
- 2 Assumed that 6.2 % of average annual increasing rate of the international tourist arrivals in Thailand, PRC, Myanmar, Laos, Viet Nam Cambodia during 2000-2007, projected in "Pre-Investment Study for the Greater Mekong Subregion East-West Economic Corridor, ADB Study Team" will continue.
- 3 NP: Nakhon Phanom Md: Mukdahan SN: Sakon Nakhon Ka: Kalasin

## **A4.2.4 Evaluation of Tourism Development Potential of SKR**

Overall evaluation result concerning the present tourism condition of Lao Study Area is summarized below.

### **Strength of SKR Tourism**

- Characteristic natural and cultural resources in SKR will be the resources for newly promoting eco-tourism among the international tourists.



**Figure A4.14 Interests in Lao PDR for International Tourist**

### **Weaknesses of SKR Tourism**

- Lao PDR tourism is less renowned among international tourists. Further, the Study Area, Savannakhet and Khammouan provinces are not the major tourism destinations in Laos, though Vientiane, Luang Prabang, Jar Plain, and Champasak are popular destinations for international tourists.
- Some accident and incidents concerning the international tourists in Lao PDR were reported recently.
- Road and air transportation should be improved for comfortable and safety tourism.
- Service quality of tourism industry especially in accommodations should be improved.
- Institutional and legal aspects for tourism industry administration/promotion are not well developed.

### **Opportunity of SKR Tourism**

- SKR is located in the center of Mekong tour route, which will be promoted after the completion of Mekong Bridge. Thailand – Laos (the Study Area) – Viet Nam tour route will be promoted in the near future.

## A4.2.5 Tourism Demand Projection in SKR

For the increase of tourist arrivals in SKR, there are two opportunities; 1) introduction of Mekong tour tourist and 2) introduction of increasing Thai domestic tourist.

Thai tourist, who visited Nakhon Phanom, Mukdahan, and Sakon Nakhon provinces of Thailand, could call on the SKR through Mekong Bridge for the sightseeing of untouched nature and religious resources. Assuming that 10 % of 1,800,000 tourist arrivals of Nakhon Phanom, Mukdahan, Sakon Nakhon provinces in 2020, 180,000 Thai tourists is projected to be new international tourists for the SKR as summarized below.

International tourist on Mekong tour route will be guided to the tourism resources of natural forest, cave, ethnic village, temples, war memorials, etc. in the Study Area. Approximately 70,000 international tourists is estimated to visit in 2020.

**Table A4.14 Future Tourism Demand in Savannakhet, Khammouan**

Item	Present Demand	Future Demand in 2020	
		Demand	Assumption
Thai Tourist	App. 8,000 tourists in 1998	App. 180,000 tourists in 2020	10% of 1,850,000 Thai domestic tourist arrivals in Mukdahan, Nakhon Phanom & Sakon Nakhon is assumed to move into Lao side.
Other International Tourist	App.12,000 tourists in 1998	70,000 tourists in 2020	<u>E-W Corridor Mekong Tour</u> 1998:13,000 (estimated potential)/1 2020:50,000 (3.8 times: increasing rate of 6.2 %/y ) /2 25,000: half of 50,000 is assumed to accommodate in Laos side <u>Existing demand</u> 12,000 x 3.8 times: increasing rate of 6.2 %/y =45,000 <u>Total</u> International tourist arrivals in 2020: 70,000 (25,000+45,000)
Total	21,000	250,000	

Note: /1 According to the statistics of Tourism Authority of Thailand (TAT), it is estimated that approximately 40,000 tourists from France, USA, UK and Japan, made excursion from Viet Nam to Thailand by air presently. Assuming 1/3 of the excursion moves by Route 9 starting from Hue of Viet Nam to BKK through Savannakhet, 13,000 international tourists are projected to pass in the Study area.

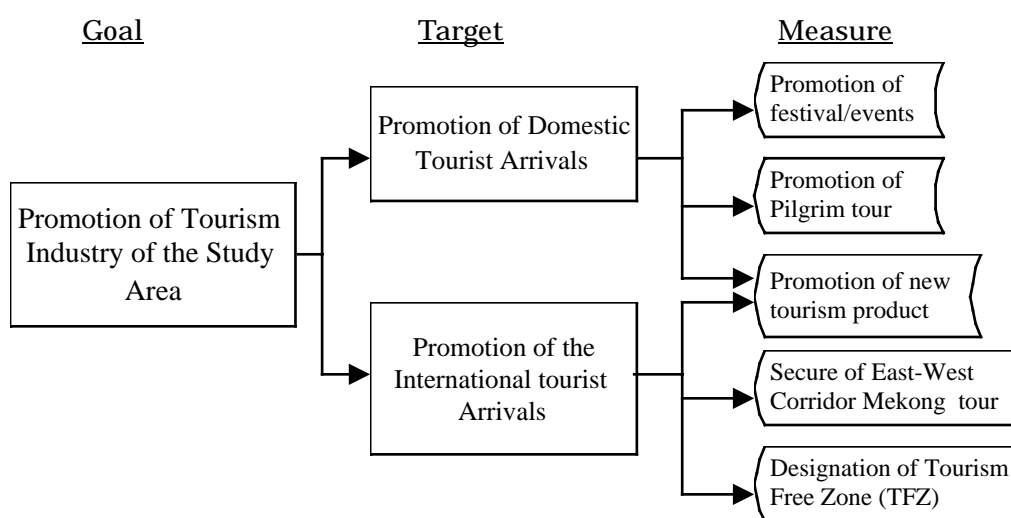
/2 Assumed that 6.2 % of average annual increasing rate of the international tourist arrivals in Thailand, PRC, Myanmar, Laos, Viet Nam Cambodia during 2000-2007, projected in "Pre-Investment Study for the Greater Mekong Subregion East-West Economic Corridor, ADB Study Team" will continue.

## A4.3 Tourism Development Idea for CBR

### A4.3.1 NBR

#### Basic Ideas for Tourism Development in NBR

In order to achieve the tourism promotion target, five (5) measures are proposed as shown in the chart below.



**Figure A4.15 Basic Ideas for Tourism Development of the Study Area**

#### Proposal of Projects/Programs

Necessary projects/programs to implement the measures are elaborated hereunder and summarized in Figure A4.16.

#### Promotion as major festivals in the northeastern Thailand

The following table shows festival/event calendar performed in the northeastern Thailand.

Elephant carnival in Surin, long boat race in Nakhon Ratchasima, illuminated boat show in Nakhon Phanom, and Wax castle festival in Sakon Nakhon are celebrated during 10 day period on November annually. This period could be promoted as the intensive festival season when major festivals can be enjoyable in the northeastern

Thailand. To become one of the major festivals, Nakhon Phanom illumination boat festival and wax castle festival in Sakon Nakhon shall be upgraded and enhanced to call tourists from the capital area of Thailand. Joint cultural performance with Lao PDR and Viet Nam, which have varieties of ethnic folk dances and songs, will be effective measures for the upgrading and expansion of the festival.

**Table A4.15 Major Festivals/Events in the Northeastern Thailand**

Period	Place	Performance
14-20 Jan.	Pra That Phanom Temple	Annual seven-day fair for devotees with local entertainment
11-13 April	Khon Kaen	Part of Songkran, northeastern folk entertainment
15-21 July	Ubon Ratchathani	Carved beeswax candle exhibition
Nov. at the end of Buddhist Lent	Sakon Nakhon	Wax festival and competitive boat racing, traditional northeastern cultural performances
Nov. at the end of Buddhist Lent	Nakhon Phanom	Illuminated boat, colorful street procession, cultural performances
12-14 Nov.	Nakhon Ratchasima	Long boat race, local art and culture performances
18-19 Nov.	Surin	Elephant spectacular carnival

Note: /1 Date of festival/event **accounts for** the year of 2000.

/2 Following festivals and events are the destination for the domestic tourists.

(Kalasin)

1. Pong Lang ( a kind of musical instrument) and Phrae Wa (handwoven cloth and embroidery) Festival, and the Red Cross Fair

2. Phrae Wa: Queen of Silk Fair

(Nakhon Phanom)

1. Phra That Phanom Homage Paying Fair, Phra That Phanom Temple

2. Khong River Triathlon, Hat Sai Thong Si Khotrabun

3. Phra That Ranu Nakhon Homage Paying

(Sakon Nakhon)

1. So remembrance Festival

2. Phra That Choeng Chum Homage Paying Fair

(Mukdahan)

1. The Red Cross Fair and the Gathering of Thai People in Mukdahan and Sweet Tamarind Fair

2. Mukdahan Song Phang Khong Songkran Festival

Following measures will be significant for the success of festival.

- Excursive tourism product visiting on major festivals of Elephant carnival in Surin, long boat race in Nakhon Ratchasima, illuminated boat show in Nakhon Phanom, wax castle festival in Sakon Nakhon shall be prepared.
- Festival should be promoted by the local participation. A number of illuminated boats to demonstrate in the festival shall be increased by the cooperation of community, school unit, local enterprise, etc.

- Festival should be principally participated and enjoyed by the local community, who are proud of the local culture.
- Chances to participate in a part of festival is necessary for tourist.

#### Development of supporting facilities for the promotion of festival

Although the province in Nakhon Phanom City is developing the water front event park and promenade, it is insufficient for upgrading and expansion of festival. As explained in the demand projection paragraph, double of present tourist arrivals is expected to come to the festival and supporting facilities will be insufficient to receive the large number of tourists. Improvement and development of festival-park, observation place/stand for illumination boat, wax castle float, promenade for cultural performance parade, etc. will be necessary.

In addition, road improvement will be necessary to cope with the peak traffic of tourists during festival season. Mekong river side roads, Route 212 and east-west road crossing Mukdahan, Kalasin, Khon Kaen, Route 209 and 2042, should be upgraded and increase the traffic capacity.

#### Promotion of pilgrim tour

Pilgrim tour in Thailand will be expanded in accordance with the increase of domestic tourism demand. Nationally famous temples, Wat Phra That Phanom in Nakhon Phanom, Wat Phra That Coeng Chum in Sakon Nakhon, are the destinations for pilgrims from whole country.

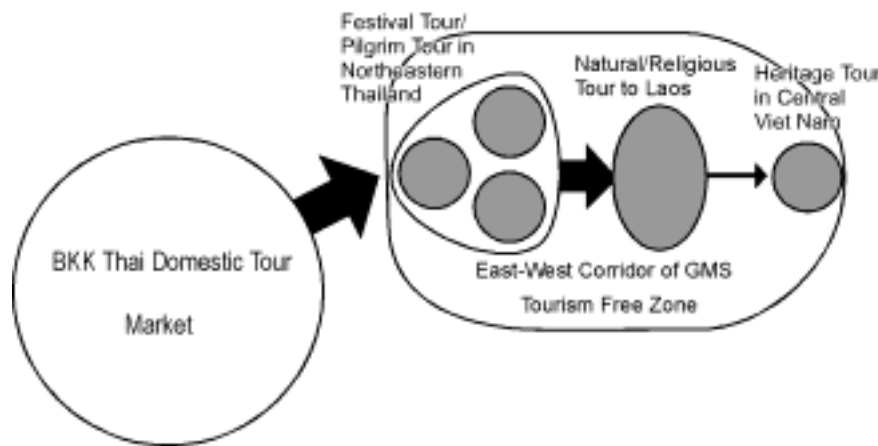
Pilgrim tour can be expanded by means of following development of tourism products.

- Joint tour with festival tour
- Excursion visiting on temples located in Lao side

### Development of Thai-Lao-Viet Nam tour

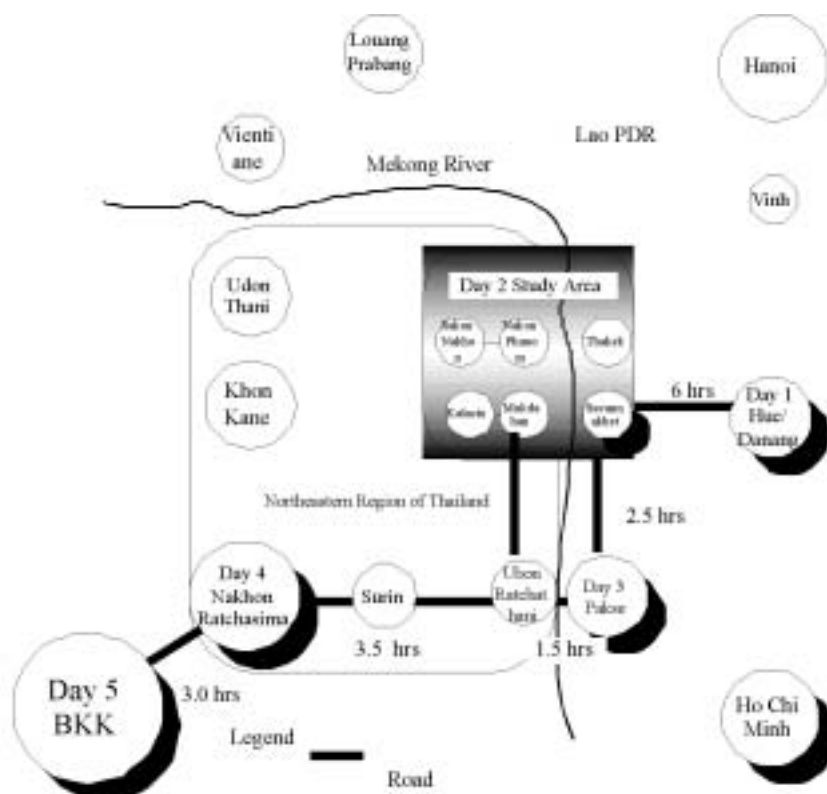
If the festival and pilgrim tours in the Study Area, nature sightseeing as well as religious tour in Savannakhet and Khammouan, and heritage tours in Hue/Da Nang of Viet Nam are integratedly produced as shown in Figure 2.3.17, a high value added tour can be planned. The realization of this cross boarder excursion will be advantageous for the increase of tourist arrivals in the Study Area. Tourism Free Zone covering those three areas will make this excursion easy, safely, and free as described hereinafter.

**Figure A4.16 Conceptual Idea for Excursion Crossing Three Tourism Area**



### Promotion of eco-tourism

Tour visiting on the ethnic minority village and silk weaving group in Kalasin and Nakhon Phanom provinces should be promoted further considering that the eco-tourism is becoming popular among the international tourists as well as urban residents of Thailand. Although village tour is niche market, it will be effective for the income generation of villagers. Careful attention should be paid for preservation of their culture when the village tour is promoted.



**Figure A4.17 Alternative Route of GMS E-W Tour Corridor**

#### Improvement of Indochina Market

Improvement project of the Mukdahan Indochina Market planned by TAT is the most important for the promotion of the international tourist arrivals and domestic tourists. Development of car parking, public toilet, event center, amenities, as well as

promenade with English signboard, etc. will renovate the inconvenient condition of the present situation of the market.

Improved Indochina Market will play significant role in the international tourists promotion.

#### Development of new tourism product

After the construction of the Second Mekong International Bridge and improvement of Route 9 of Lao PDR, the international tourists, who cruise on the GMS East-West corridor between Hue to Bangkok through the CBR as shown in Figure A4.17, will be increased drastically. To seize the increasing international tourists, new tourism products shall be developed utilizing following tourism resources:

- Mekong River scenery
- Mekong River Cruising (Nakhon Phanom to Mukdahan)
- Festivals event
- Indochina Market
- Ethnic village ( Ethnic minority culture )
- A series of heritages in the south bottom corridor of the Northeastern Thailand

#### Designation of Tourism Free Zone (TFZ)

Tourism Free Zone (TFZ) covering GMS East-West Corridor can be proposed as shown Figure A4.18 for the purpose of the promotion of the international tourist arrivals. Following measures can be proposed for the TFZ.

- Incentives for tourism industry FDI in TFZ

Considering that tourism sector requires sustainable private participation, foreign direct investment (FDI) is the most important and additional incentives to be applied for tourism FDI will be effective to accelerate FDI in the GMS East-West Corridor Tourism Free Zone. Especially, the development of accommodations and supporting facilities will require the incentives for the tourism FDI. A certain

condition concerning investment value or development scale and quality should be discussed for entitle of incentives.

- Immigration control

It is desirable that the immigration control should be more flexible, in order to promote the international Mekong Tour.

Integrated immigration examination could be made at the entry point of TFZ of the East-West Corridor. Passport control including Lao PDR as well as Viet Nam, for instance, will be done at the one stop service office for the convenience of the international tourist.

Visa-waiver entry is also attractive for international tourists. At least, multi-visa issuance for the Mekong tour international tourist should be simplified.

Deregulation concerning activity of Thai tour operator in Laos is also important.

Cooperation of tourism marketing

National Tourism Organizations of Thailand, Lao PDR and Viet Nam will cooperatively work out the marketing activity for the promotion of the international tourist arrivals of Mekong Tour.

Familiarization trip for travel writers and tour operators, enhancement of advertisement, introductory seminar of GMS East-West Corridor Mekong Tour in Bangkok, etc. will be carried out by means of joint program.

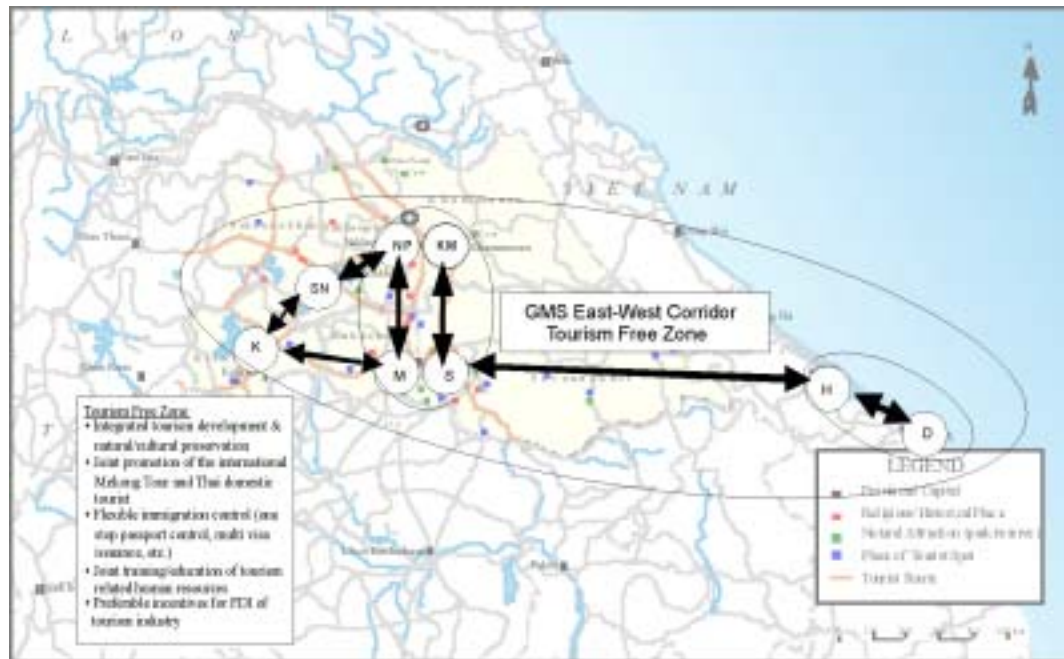


Figure A4.18 Concept of the TFZ for the East-West Corridor of GMS

### Development Priority

Cost, effectiveness, sustainability, and urgency are analyzed on the proposed projects/programs as shown below.

High priorities are given to the upgrading of festival and development of new tourism production for the international tourist. Integration of festival tour with pilgrim tour, development of tourism product of Thai-Lao-Viet Nam tour for the domestic tourist, flexible immigration control, and cooperative marketing are the second priority projects/programs.

**Table A4.16 Evaluation and Rating of Projects/Programs for NBR**

Project/Program	Cost (Government expenditure)	Effective ness/1	Urgency	Score	Rating
1 Upgrading of festivals				6	<b>A</b>
2 Development of supporting facilities for upgrading/expansion of festival	-			4	B
3 Integration of festival tour with pilgrim tour				5	B
4 Development of tourism production of Thai-Lao-Viet Nam tour for domestic tourist				5	B
5 Promotion of eco-tourism: village tour				4	C
6 Improvement of Indochina Market	-			4	C
7 Development of new tourism product for the international tourist				6	<b>A</b>
8 Incentives for tourism industry FDI in TFZ				4	C
9 Flexible immigration control				5	B
10 Cooperation of marketing				5	B

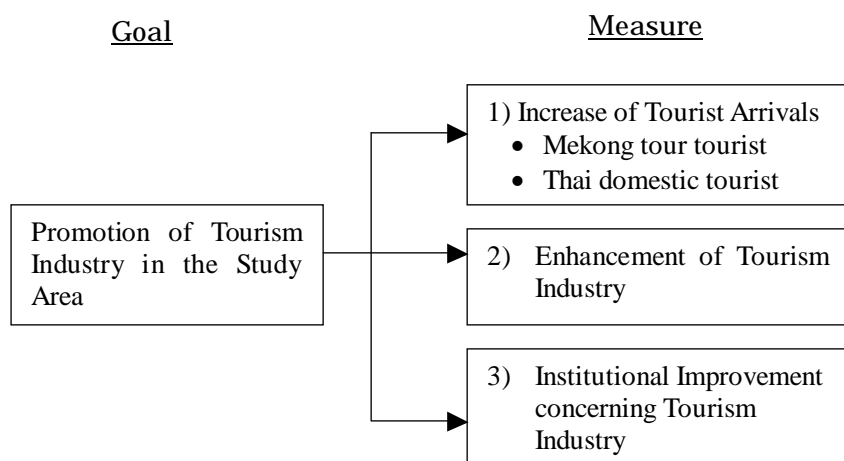
Legend      Cost:      nominal cost      costly      - very costly  
                  Effectiveness:      direct effect      indirect effect  
                  Urgency:      very urgent      urgent  
                  Score:      +2,      +1

Note    /1    Effectiveness for increase of tourist arrivals.

### A4.3.2 SKR

#### Development Needs

Three measures as shown below were discussed in order to promote the tourism industry in the study area.



## **Projects/Programs**

Necessary projects and programs to implement the measures for the tourism development are conceived and proposed in the Figure A4.19.

### Development of tourist attractions along Route 9

Ethnic village for culture-tourism, Ho Chi Minh route (battlefield), nature reserves, dinosaur footprint, etc. will be new tourist destinations along Route 9. Considering that more than six (6) hours necessary for the bus trip from Savannakhet to Hue, two resting stations will be necessary assuming two hour drive is the maximum for comfortable tour of the international tourist. In the resting station, a visitor center with sanitary toilet, information devices, kiosk, short trail, etc. shall be developed paying due attention to the sustainability of the natural environment.

### Renovation of colonial buildings and landscape

Considering that existing colonial buildings and landscape in the center of Thakhek and Savannakhet Cities have the potential as the tourism resources attracting the international tourists, renovation of the building façade of and pedestrian deck will be a effective for the tourism promotion in SKR.

### Development of water front park and Savannakhet

Existing ferry terminal area, which will be functionless after construction of Mekong bridge, could be renovated as the water front park. Attractive water front restaurant, amusement center, water front greenery park, etc. will be facilitated in the park.

### Preservation of religious facility in Thakhek

Religious facilities in Thakhek and Savannakhet cities shall be preserved in proper manner. Especially, Pha That Sikhottabong in Thakhek City is suffering from the bank erosion of Mekong River. Bank protection work should be made urgently to preserve the premises of Wat.

### Tourism Free Zone

Designation of Tourism Free Zone (TFZ) for the East-West Corridor of GMS will be effective for the promotion of tourism industry in the Study Area. Following proposals will be discussed for the zone.

- Integrated tourism development & natural/cultural preservation
- Joint promotion of the international Mekong Tour and Thai domestic tourist
- Comprehensive tourism management (one stop visa control for the international tourist)
- Joint training/education of tourism related human resources
- Preferential incentives for FDI of tourism industry

Concept of the TFZ for the East-West Corridor of GMS should be examined among GMS countries, especially, Lao, Thailand , and Viet Nam.

A conceptual map of TFZ is presented in Figure A4.18.

### Development of souvenirs

To make the tourism industry high value added, tourism related service industry should be developed and enhanced. Souvenir development is an important for the tourism industry. There are lots of typical local products suitable for the souvenirs in the Study Area. Sophisticatedly designed souvenir made of local products as explained below is necessary to attract the international tourists' attention.

- Sophisticated logo mark is necessary for value added product.
- Wrapping materials should be clean with high quality, but simple.
- Many choices should be prepared for tourist.
- Sanitary condition should be guaranteed especially for food souvenir.

### Training of local human resources

Properly qualified manpower is essential in all places of tourism industry for promotion of tourism. Presently in-house and on the job training is predominant in tourism industry of the Study Area even some short training courses were provided by NTA. Those training should be expanded gradually in line with the increase of international tourists.

- Cooperative training and education by GMS countries will contribute to the integrated tourism development of the East-West Corridor of GMS.
- The training in Kansang Pakpasak School in Vientiane will be effective for the training of tour operator, guide, tour agent, hotel staff and manager when new programs is developed in addition to current cooking course.
- Tourism training center or institute proposed by “National Tourism Development Plan for Lao PDR, 1998” will be effective for integrated fostering of human resources of the tourism industry.

### Development of high grade accommodation

Development of high-grade accommodation in Savannakhet and Thakhek cities will be essential for the promotion of international tourists in consideration of poor current condition. After the completion of improvement of Route 9, which will connect the Study Area with central Viet Nam tourism core, Hue and Da Nang, the international tourists, especially western Europe and American tourists who are interested in the Indochina cross boarder trip, are expected to make east-west trip from the central Viet Nam to Bangkok through CBR. As Figure A4.17 shows an alternative trip route, the international tourists will stop over a night in CBR, so that upgraded accommodation should be developed to cope with the requirement of the international tourists.

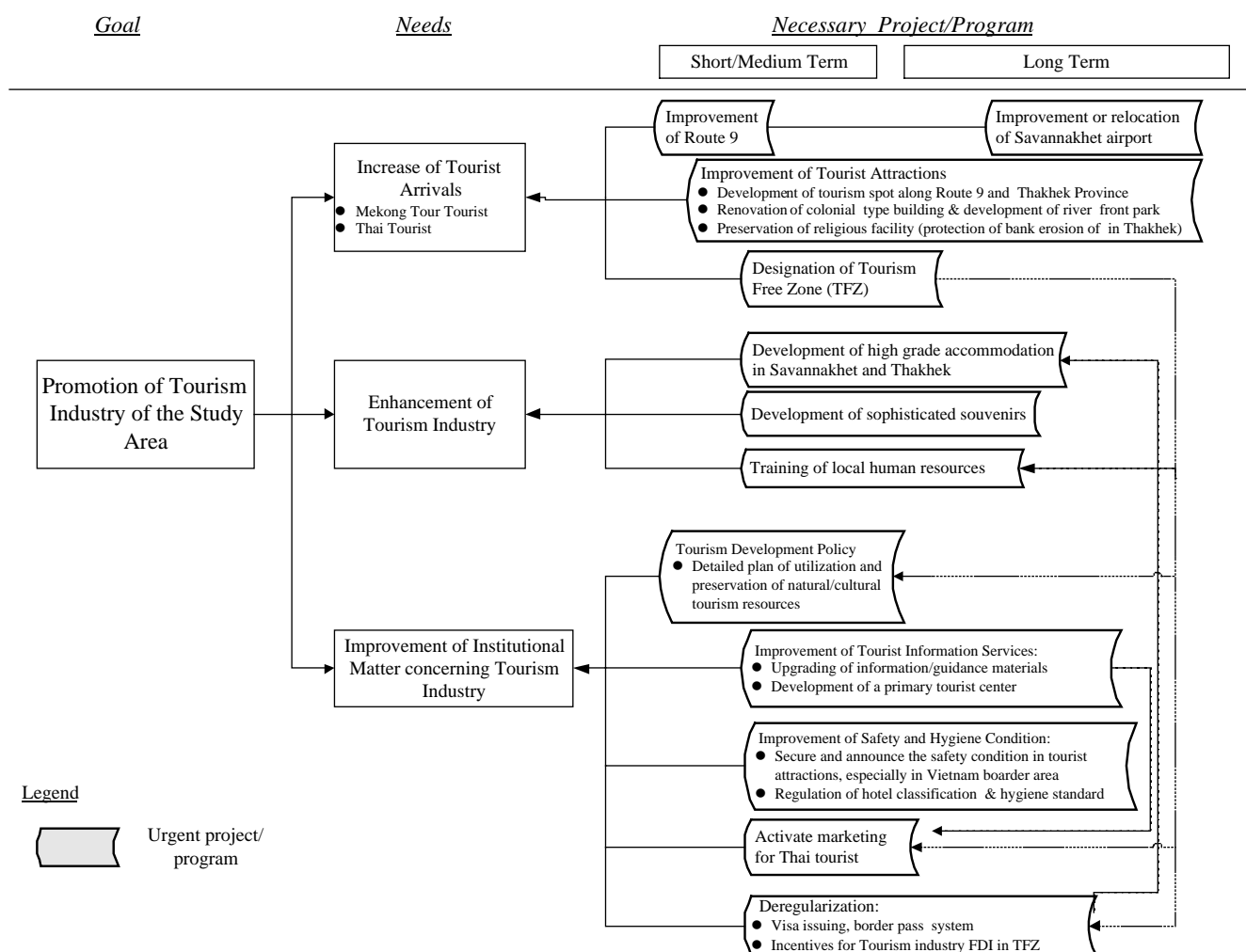


Figure A4.19 Necessary Projects and Programs

### Tourism development policy in SKR

Development pressure of tourism industry will become stronger in accordance with the increase of tourism demand of Thai domestic tour and Mekong tour. In case that coordination between the development and nature reserve is not be well made, tourism development will not be successful. Therefore, development policy is most necessary prior to the commencement of development activity.

Preliminary proposal for the development of the Study Area formulated based on the following concept is shown Figure A4.20.

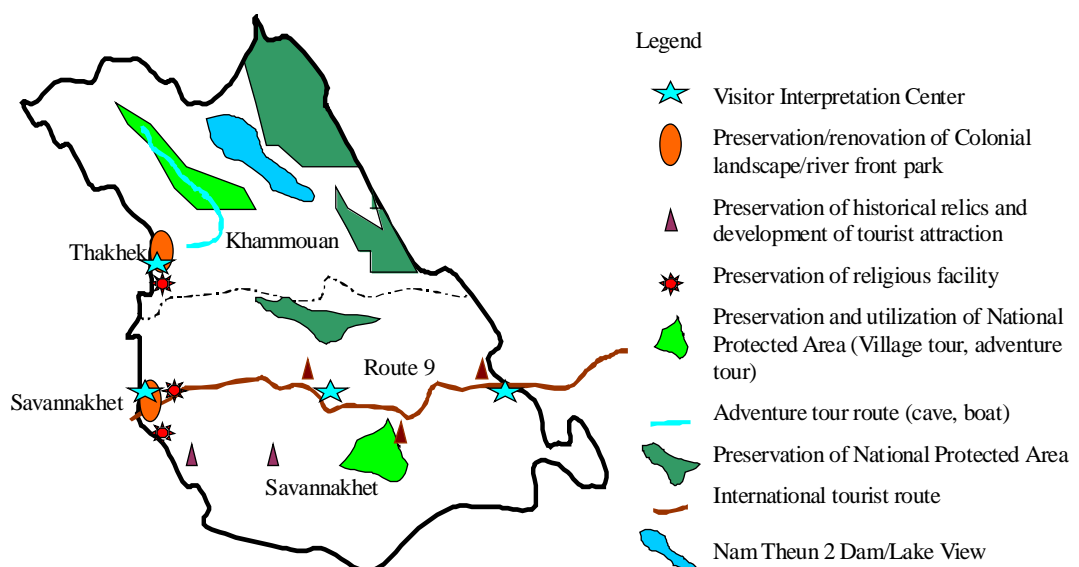
- Provincial capital, Savannakhet and Thakhek will be the tourism center, where town landscape be renovated/developed.

- Since the Route 9 will be the main route for the international tourist, visitor centers and tourist attractions will be developed.
- Main visitor center will be developed at the appropriate location where a new bridge scenery can be seen. Savannakhet Export Zone (SFZ) under study by JICA is one of suitable locations for the visitor center. Visitor center will play as the information/guide center as well as emergency contact point.
- National protected area shall be preserved at the maximum extent with some recognition of utilization for eco-tourism.
- Religious tour shall be promoted for Thai tourist in the city of Savannakhet and Thakhek.

#### Activation of tourism marketing

Marketing strategy was already directed by “National Tourism Marketing Plan of Lao PDR, August 1999”. Sales mission to Bangkok and participation to Mekong tourism forum are the most desirable for the promotion of tourism industry of the Study Area.

Organization of familiarization trip on SKR by travel writers and tour operators of Thailand will be effective for the marketing. Brochures and explanatory map specified for tour operators will be necessary for the successful marketing.



**Figure A4.20 Tourism Development Concept for SKR**

Improvement of safety and sanitary condition

Security and sanitary condition are the essential for the international tourist promotion. Principle concern of unexploded ammunition near Ho Chi Minh Trail should be cleared and announced to the relevant tour agent in Thailand and market countries.

Hygiene conditions of accommodation, restaurant, public toilet, etc. are also important. Standard for hygiene condition for those tourism facilities will be discussed when the hotel classification system is determined<sup>4</sup>.

Immigration control

The immigration control should be more flexible, in order to promote the international Mekong Tour and call the Thai tourist to SKR.

- Integrated immigration examination could be made at the entry point of TFZ of the East-West Corridor. Passport control, for instance, will be done at the one stop service office for the convenience of the international tourist.
- Visa waiver entry is also attractive for international tourist. At least, multi-visa issuance for the Mekong tour international tourist should be simplified.
- The deregulation concerning activity of Thai tour operator in Laos is also important.

FDI incentives

Incentives to be applied for tourism FDI in the Study Area will be effective measures. Accommodation, supporting facilities will require the incentives. A certain condition concerning investment value or development scale and quality should be discussed for entitle of incentives.

**A4.3.3 Development Priority**

Cost, effectiveness, sustainability, and urgency are analyzed for the proposed projects/programs as shown below.

High priority are given to the development of tourist attractions along Route 9, the determination of TFZ, the study of policy for tourism development of the Study Area, and development of high grade accommodation in Savannakhet and Thakhek cities. Preservation of religious facility and development of sophisticated souvenirs are the

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<sup>4</sup> NTA has not developed rate classification system concerning accommodation yet.

## Tourism Development

second priority project/program. Institutional improvement such as the safety and hygiene improvement, tourism marketing, deregulation of immigration control and preparation of FDI incentives for the tourism industry are also given second priority.

**Table A4.17 Evaluation and Rating of Projects/Programs for SKR**

	Project/Program	Cost (Government expenditure)	Effective ness/2	Urgency	Score	Rating
1	Development of tourist attractions along Route 9				5	<b>A</b>
2	Renovation of colonial buildings/landscape	-			2	<b>D</b>
3	Protection of river bank of Pha That Sikhottabong Temple	-			4	<b>B</b>
4	Improvement/relocation of Savannakhet Airport	-			3	<b>D</b>
5	Development of water front park	-			2	<b>D</b>
6	Tourism Free Zone				5	<b>A</b>
7	Development of high grade accommodation in Savannakhet & Thakhek				5	<b>A</b>
8	Development of souvenirs				4	<b>B</b>
9	Training of local human resources	- /1			2	<b>D</b>
10	Study of Tourism development policy of the Study Area				5	<b>A</b>
11	Improvement of tourist information services				3	<b>C</b>
12	Improvement of safety and hygiene condition				4	<b>B</b>
13	Activation of tourism marketing				4	<b>B</b>
14	Deregulation of immigration control				4	<b>B</b>
15	FDI incentives				4	<b>B</b>

Legend      Cost:                  nominal cost      costly                  - very costly  
                  Effectiveness:      direct effect      indirect effect  
                  Urgency:              very urgent      urgent  
                  Score:                  +2,                  +1

Note /1      Assuming a new tourism training center or institute is developed.

/2      Effectiveness for increase of tourist arrivals.