Appendix-1

RESULTS OF INVESTMENT DEMAND SURVEY

Appendix 1 RESULTS OF INVESTMENT DEMAND SURVEY

1 Survey Methodology

Investment demand survey has been conducted in Thailand and Vietnam. In addition, the data collected in the past survey of Lao companies have been analyzed to complement the surveys in Thailand and Vietnam.

(1) Survey in Thailand

The survey questionnaire was sent by fax in early July 2000 to the selected 531 Japanese invested enterprises operating in Thailand and registered as members of the Japanese Chamber of Commerce, Bangkok. 78 enterprises responded by return fax. The composition by industrial category is shown as follows.

Category	Number of Companies	Number of Responses	Response Rate (%)
Machinery	71	14	14.1
Textile and apparel	52	5	9.6
Food processing	54	7	13.0
Transportation	75	9	12.0
Chemical	88	17	19.3
Electricity	161	21	13.0
Communication	30	5	16.7
Total	531	78	14.7

The Study Team interviewed several enterprises which showed interests in SEZ development in Savannakhet in their answers to questionnaire, by visiting in person or over the telephone.

(2) Survey in Vietnam

The questionnaire, similar to that of Thailand, was prepared for the survey of enterprises operating in and around Da Nang City in Vietnam. 50 major enterprises were selected from various sources and interviewed in accordance with the questionnaire during early and mid July 2000. The composition by industrial category is shown as follows:

Category	Number of Responses					
Food processing	5					
Textile and apparel	5					
Wood products	4					
Machinery and	6					
electric						
Other	13					
manufacturing						
Construction	5					
Trade and transport	12					
Total	50					

Further, the Study Team interviewed a few companies which had already some business connections with Lao PDR and showed interests in investing in the country in their answers to the questionnaire.

(3) Survey of Lao Enterprises

A detailed questionnaire survey was conducted in February - March 2000 by the Ministry of Commerce and Tourism and a JICA expert attached to the Ministry, for the purpose of understanding current situation of the major manufacturing and export enterprises in Lao PDR. Three hundred companies operating in four major industrial cities, i.e. Vientiane, Thakhek, Savannakhet, and Pakse, were selected for the survey. Of 300 enterprises surveyed, 191 responded and the composition by industrial category is shown below:

Category	Vientiane	Thakhek	Savannakhet	Pakse	Total
Garment	21	0	3	0	24
Sawn mills	0	7	4	3	14
Wood processing	19	3	1	5	28
Handicraft	9	0	1	2	12
Rice mills	1	1	2	2	6
Mining	5	0	2	2	9
Agriculture	8	1	3	2	14
Trading	2	0	3	2	7
Light industries	47	8	9	13	77
Total	112	20	28	31	191

The Study Team re-arranged some parts of the results of the survey in order to analyze investment environment of Lao PDR and Savannakhet in particular.

2 Findings

(1) Thai Enterprises

Evaluation of Investment Environment

Japanese-invested enterprises operating in Thailand rate the investment climate of Lao PDR as not so favorable in general. While they consider "labor cost is cheap" in the country, almost all factors of investment environment are lowly evaluated. Especially, "market size", "current economic situation", "road condition and network", and "financial and banking system" receive unfavorable ratings.

No significant differences are observed between industrial sectors, though textile and apparel sector's evaluation is relatively favorable.

However, it was found in the interview survey that even the companies, which gave positive responses in the questionnaire survey, had quite limited knowledge on Lao PDR, implying that the evaluation above is mainly based on their "impression", rather than experience or study.

Important factors for investment

More than half of surveyed enterprises answer that "political and social stability", "market size", "economic condition", and "quality of labor" are important when making a decision for foreign direct investment. This implies that Lao PDR is in a disadvantageous position in attracting FDI because the country receives low ratings for these factors.

Although "cheap labor", in which Lao PDR has an advantage, does not seem critical for the enterprises to make FDI in total, textile and apparel, and communication sectors think it important, compared to other sectors.

Relation with Lao PDR

At the moment, only a third of the 78 respondents have any kind of business relations with Lao PDR, with 20 enterprises exporting their products to Lao PDR. In the future, however, more than two-thirds show interests in having some business connection with the country, with 4 companies having intention to set up a factory.

Interests in SEZ

Of 78 respondents to the questionnaire survey, 20 enterprises showed interests in SEZ development in Savannakhet. Those enterprises are classified by subsector into:

Category	Nos. of Enterprises
Agriculture & marine product	1
Chemicals	1
Textile & Garment	4
Machinery	7
Transportation	5
Electric & Electronics	2

Facilities and Incentives for SEZ

"Free zone with no import/export duty for manufacturing and assembling" is the most desired facility in SEZ, with 68% of the surveyed enterprises preferring it, followed by "bonded warehouse" (42%).

Three most important incentives for the SEZ, according to the survey results, are "simplification of procedure", "improvement of power and water supply", and "fiscal incentives".

(2) Vietnamese Enterprises

Evaluation of Investment Environment

Vietnamese enterprises operating in the Da Nang area consider investment climate of Lao PDR as more favorable than Thai enterprises do, even though they do not give high scores. They consider "political condition is stable" and "labor cost is cheap" in Lao PDR, while "road condition and network" and "quality of labor" are most lowly rated.

It was found in the interview survey that unlike in Japanese-invested enterprises in Thailand, Vietnamese respondents had reasonably good knowledge of Lao situation and it is likely that they made the evaluation in accordance with their experience in doing some business with Lao PDR.

Important Factors for Investment

44 out of 50 enterprises answer that "political and social stability" is important when setting up a new overseas factory, also giving "fiscal

incentives" and "economic condition" much importance. Enterprises producing wood products say that "availability of raw materials" is most important.

Like the survey in Thailand, availability of "cheap labor" does not appear to be critical as only 30% of the respondents consider it as important. However, again like in Thailand, textile and apparel sector attach more importance to cheap labor than other sectors do.

Relation with Lao PDR

25 out of 50 surveyed enterprises like to export their products to Lao PDR in the future, although only 3 enterprises have intention to have a factory in Lao PDR. Two of them are from the textile and apparel sector.

Interests in SEZ

Of 50 surveyed companies in Da Nang, 36 enterprises or 72% gave positive responses, showing interests, more or less, in SEZ development in Savannakhet. Many of them showed their plan of setting up factories in the SEZ by giving specific features of the factory such as main products, area, number of employees, etc.

However, it is found through the interview that their intention to set up factories in Lao PDR is not so serious as seen in the questionnaire survey. They generally assess the Lao investment environment as not favorable. Especially, it appears that Vietnamese investors prefer using Vietnamese workers if they are to make an investment in Lao PDR because their evaluation of Lao workers is relatively low.

Facilities and Incentives for SEZ

"Free zone with no value added tax for marketing and shipping" is the most desired facility in SEZ, with 80% of the surveyed enterprises preferring it. Especially, all of trade and transport companies and wood product manufacturers permit that this facility is necessary. "Free zone with no import/export duty for manufacturing and assembling" comes next supported by 69% of the respondents.

Three most important incentives for SEZ, according to the survey results, are similar to the result of the survey in Thailand; "simplification of procedure", "fiscal incentives" and "improvement of telecommunications" in this order.

(3) Lao Enterprises

Problems in Business

Out of 191 surveyed enterprises, 53 enterprises or 28% list "financing" as a major problem in doing their business. Other problems include "supply of raw material" (23%), "sales" (17%), and "technology development" (17%). Enterprises located in Savannakhet, 28 in total, also say "financing" is the problematic issue.

Problems in Employment

31% of total enterprises admit that their employees' "skills are poor", and 29% have difficulty in "recruiting factory workers". "Quick turnover (job hopping)" (28%) is another problem in employment management.

Desired Support

Of all surveyed enterprises, 79 enterprises or 41% list "financial support for export" as the desired governmental support program to the private sector. This result coincides with their response regarding problems in business where "financing" is a major constraint. "Foreign market information services" (30%), "training service for business administration" (24%) and "expansion of bank financing" (22%) are other programs they most require. It is found that Lao enterprises seek foreign market access but face difficulty in terms of financing, market information and human resources.

Enterprises in Savannakhet show a similar tendency, requesting for "financial support for export" and "foreign market information services", and so on. In addition, "deregulation in plant and equipment investment" is also desired.

Joint venture between Lao and foreign enterprises, 37 in total, too, show generally the similar results, though they take more "training service for technology development" and "improvement of laws and regulation" as desired support programs.

Tables for ANNEX I

(1) Thai Enterprises

Table A.1.1 Evaluation of Lao Investment Environment

		Evaluation of Lao Investment Environment (Highest=1 Lowest=5); Average Score									
	Total	Political	Economic	Geographi-	Size of	Consistency	Fiscal	Administra-			
	No.	condition	condition	cal location	local	of policy	incentives	tion			
					market						
All	78	3.4	3.9	3.8	4.2	3.3	3.5	3.6			
Agro-industry	7	3.3	4.0	3.7	4.1	3.3	3.1	3.3			
Textile & apparel	5	3.0	3.0	3.2	3.4	3.0	2.6	2.8			
Chemical	17	3.6	3.9	3.6	4.3	3.4	3.6	3.7			
Electric	21	3.9	4.3	4.2	4.6	3.5	3.9	3.9			
Machinery	14	3.1	4.2	4.0	4.2	3.2	3.2	3.6			
Transport	9	2.7	3.6	4.0	4.1	3.1	3.3	3.6			
Communication	5	3.3	3.3	3.5	4.0	3.3	3.3	3.5			

		Evaluation c	of Lao Investr	ment Environ	ment (Highe:	st=1 Lowest=	5); Average	Score
	Total	Labor cost Labor		Power Water		Telecom-	Road	Financial
	No.		quality	supply	supply	munication	condition	system
All	78	1.7	3.1	3.2	3.2	3.7	3.9	3.9
Agro-industry	7	2.0	3.3	2.6	3.0	3.7	4.1	4.0
Textile & apparel	5	1.8	2.8	2.8	2.8	2.6	3.0	2.8
Chemical	17	1.6	3.5	3.4	3.1	3.7	3.8	3.8
Electric	21	1.7	3.1	3.1	3.2	3.8	4.2	3.9
Machinery	14	1.5	2.8	3.3	3.4	4.0	4.2	4.3
Transport	9	2.0	3.1	3.2	3.0	3.5	4.0	3.8
Communication	5	1.3	3.0	3.3	3.3	3.5	3.5	3.5

Table A.1.2 Important Factors for Investment

		Important Fa	ectors for Inv	estment					
	Total	Political	Economic	Market size	Distance	Fiscal	Parent	Supporting	Raw
	No.	and socail	condition		from	incentives	company	company	materials
	%	stability			markets				
All	78	68	44	49	13	18	3	7	25
	100.0	93.2	60.3	67.1	17.8	24.7	4.1	9.6	34.2
Agro-industry	7	7	4	3	1	2	0	0	5
	100.0	100.0	57.1	42.9	14.3	28.6	0.0	0.0	71.4
Textile &	5	5	2	2	0	0	0	0	3
apparel	100.0	100.0	40.0	40.0	0.0	0.0	0.0	0.0	60.0
Chemical	17	15	11	13	4	5	1	0	8
	100.0	88.2	64.7	76.5	23.5	29.4	5.9	0.0	47.1
Electric	21	17	10	13	1	5	0	4	6
	100.0	89.5	52.6	68.4	5.3	26.3	0.0	21.1	31.6
Machinery	14	13	10	9	5	5	2	1	3
	100.0	92.9	71.4	64.3	35.7	35.7	14.3	7.1	21.4
Transport	9	7	5	7	1	1	0	2	0
	100.0	100.0	71.4	100.0	14.3	14.3	0.0	28.6	0.0
Communication	5	4	2	2	1	0	0	0	0
	100.0	100.0	50.0	50.0	25.0	0.0	0.0	0.0	0.0

		Important Fa	actors for Inv	estment				
	Total	Cheap labor	Quality	Partner for	Electricity	Water	Industrial	Living
	No.		labor	JV/tech		supply	estate	condition
	%			tie-up				for expats
All	78	26	35	15	13	12	7	10
	100.0	35.6	47.9	20.5	17.8	16.4	9.6	13.7
Agro-industry	7	2	2	0	_	5	1	1
	100.0	28.6	28.6	0.0	42.9	71.4	14.3	14.3
Textile &	5	3	4	1	2	1	0	1
apparel	100.0	60.0	80.0	20.0	40.0	20.0	0.0	20.0
Chemical	17	1	6	5	2	3	3	1
	100.0	5.9	35.3	29.4	11.8	17.6	17.6	5.9
Electric	21	9	13	1	5	3	2	4
	100.0	47.4	68.4	5.3	26.3	15.8	10.5	21.1
Machinery	14	6	6	4	1	0	1	1
	100.0	42.9	42.9	28.6	7.1	0.0	7.1	7.1
Transport	9	2	1	4	0	0	0	1
	100.0	28.6	14.3	57.1	0.0	0.0	0.0	14.3
Communication	5	3	3	0	0	0	0	1
	100.0	75.0	75.0	0.0	0.0	0.0	0.0	25.0

Table A.1.3 Relation with Lao PDR at Present

		Relation W	ith Laos (Pro	esent)								
	Total	Import raw	Export	Receive	Have Lao	Have	Hold share	Have	Conduct	Ве	No	Other
	No.	materials	products	trainees	employees	factory in	of Lao	technical	investment	requested	connection	
	%					Laos	company	tie-up	survey	to invest		
All	78	0	20	0	2	0	0	0	4	2	34	1
	100.0	0.0	35.1	0.0	3.5	0.0	0.0	0.0	7.0	3.5	59.6	1.8
Agro-industry	7	0	1	0	0	0	0	0	0	0	3	0
	100.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75.0	0.0
Textile &	5	0	1	0	0	0	0	0	1	0	1	0
apparel	100.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	33.3	0.0	33.3	0.0
Chemical	17	0	1	0	0	0	0	0	0	0	11	0
	100.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91.7	0.0
Electric	21	0	6	0	0	0	0	0	0	0	12	0
	100.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	0.0
Machinery	14	0	6	0	1	0	0	0	2	1	3	0
	100.0	0.0	60.0	0.0	10.0	0.0	0.0	0.0	20.0	10.0	30.0	0.0
Transport	9	0	4	0	1	0	0	0	1	1	3	1
	100.0	0.0	50.0	0.0	12.5	0.0	0.0	0.0	12.5	12.5	37.5	12.5
Communication	5	0	1	0	0	0	0	0	0	0	1	0
	100.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0

Table A.1.4 Relation with Lao PDR in the Future

		Relation W	ith Laos (Fu	ture)								
	Total	Import raw	Export	Receive	Have Lao	Have	Hold share	Have	Conduct	Be	No	Other
	No.	materials	products	trainees	employees	factory in	of Lao	technical	investment	requested	connection	
	%					Laos	company	tie-up	survey	to invest		
All	78	4	10	3	2	4	4	6	8	3	18	2
	100.0	10.3	25.6	7.7	5.1	10.3	10.3	15.4	20.5	7.7	46.2	5.1
Agro-industry	7	0	0	1	0	0	1	1	1	0	3	0
	100.0	0.0	0.0	25.0	0.0	0.0	25.0	25.0	25.0	0.0	75.0	0.0
Textile &	5	0	0	0	0	2	0	1	3	0	0	0
apparel	100.0	0.0	0.0	0.0	0.0	66.7	0.0	33.3	100.0	0.0	0.0	0.0
Chemical	17	0	4	0	0	0	0	0	0	0	7	0
	100.0	0.0	36.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.6	0.0
Electric	21	2	3	1	1	1	1	1	2	1	5	2
	100.0	20.0	30.0	10.0	10.0	10.0	10.0	10.0	20.0	10.0	50.0	20.0
Machinery	14	1	2	1	1	1	1	1	0	1	2	0
	100.0	20.0	40.0	20.0	20.0	20.0	20.0	20.0	0.0	20.0	40.0	0.0
Transport	9	1	1	0	0	0	1	2	1	1	1	0
•	100.0	20.0	20.0	0.0	0.0	0.0	20.0	40.0	20.0	20.0	20.0	0.0
Communication	5	0	0	0	0	0	0	0	1	0	0	0
	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0

Table A.1.5 Interests in Savannakhet SEZ

		Interst in SEZ	Z
	Total	Yes,	No, not
	No.	interested	interested
	%		
All	78	20	58
	100.0	25.6	74.4
Agro-industry	7	1	6
	100.0	14.3	85.7
Textile &	5	4	1
apparel	100.0	80.0	20.0
Chemical	17	1	16
	100.0	5.9	94.1
Electric	21	2	19
	100.0	9.5	90.5
Machinery	14	8	6
	100.0	57.1	42.9
Transport	9	4	5
	100.0	44.4	55.6
Communication	5	0	5
	100.0	0.0	100.0

Table A.1.6 Desired Facilities for SEZ

		Facility Desi	ired				
	Total	Free zone -	Free zone -	Bonded	Marketing	Cargo	Other
	No.	duty free	no VAT	warehouse	center	terminal	
	%						
All	78	13	7	8	6	6	2
	100.0	68.4	36.8	42.1	31.6	31.6	10.5
Agro-industry	7	0	0	0	0	0	0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Textile &	5	4	4	1	0	0	0
apparel	100.0	100.0	100.0	25.0	0.0	0.0	0.0
Chemical	17	1	1	1	0	0	0
	100.0	100.0	100.0	100.0	0.0	0.0	0.0
Electric	21	2	1	2	1	0	0
	100.0	100.0	50.0	100.0	50.0	0.0	0.0
Machinery	14	3	1	2	3	3	2
	100.0	37.5	12.5	25.0	37.5	37.5	25.0
Transport	9	3	0	2	2	3	0
	100.0	75.0	0.0	50.0	50.0	75.0	0.0
Communication	5	0	0	0	0	0	0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table A.1.7 Desired Incentives for SEZ

		Incentives D	centives Desired								
	Total	Fiscal	Removal of	-	Improved	Improved	Quality				
	No.	incentives	govt	procedure	telecommun	power and	labor/				
	%		intervention		ication	water	training				
						supply					
All	78	39	17	45	21	45	21				
	100.0	60.9	26.6	70.3	32.8	70.3	32.8				
Agro-industry	7	4	3	3	1	6	4				
	100.0	66.7	50.0	50.0	16.7	100.0	66.7				
Textile &	5	3	1	4	4	3	0				
apparel	100.0	60.0	20.0	80.0	80.0	60.0	0.0				
Chemical	17	8	4	7	1	9	5				
	100.0	66.7	33.3	58.3	8.3	75.0	41.7				
Electric	21	12	2	12	4	13	6				
	100.0	70.6	11.8	70.6	23.5	76.5	35.3				
Machinery	14	7	5	12	6	9	2				
	100.0	50.0	35.7	85.7	42.9	64.3	14.3				
Transport	9	5	1	5	3	3	3				
	100.0	71.4	14.3	71.4	42.9	42.9	42.9				
Communication	5	0	1	2	2	2	1				
	100.0	0.0	33.3	66.7	66.7	66.7	33.3				

(2) Vietnamese Enterprises

Table A.1.8 Evaluation of Lao Investment Environment

		Evaluation of	of Lao Invest	ment Enviror	nment (Highe	st=1 Lowest	=5); Average	Score
	Total	Political	Economic	Geographi-	Size of	Consistency	Fiscal	Adminis-
	No.	condition	condition	cal location	local	of policy	incentives	tration
					market			
All	50	1.6	3.0	2.4	3.1	3.1	3.0	3.3
Food, beverage	5	1.0	2.6	2.4	3.8	2.4	2.8	2.2
Textile & apparel	5	1.6	2.8	2.6	2.6	2.8	2.5	3.2
Wood products	4	1.0	2.0	1.8	3.0	3.0	3.0	3.5
Machinery & elec.	6	2.3	3.3	2.5	2.7	3.0	3.3	3.3
Other manufacturing	13	2.0	3.3	2.1	3.2	3.5	3.0	3.6
Construction	5	1.0	2.6	2.4	3.2	3.4	2.8	3.6
Trade & transport	12	1.6	3.1	2.8	3.3	3.1	3.0	3.2

		Evaluation of	of Lao Invest	ment Enviror	nment (Highe	st=1 Lowest	=5); Average	Score
	Total	Labor cost	Labor	Power	Water	Telecom-	Road	Financial
	No.		quality	supply	supply	munication	condition	system
All	50	2.1	3.7	3.0	3.0	3.0	3.9	3.2
Food, beverage	5	2.8	4.0	3.4	3.8	3.8	4.0	2.8
Textile & apparel	5	2.2	3.2	2.8	2.6	3.4	3.6	3.4
Wood products	4	2.5	3.3	2.8	2.8	2.0	3.3	3.0
Machinery & elec.	6	2.3	4.2	3.8	3.0	3.0	3.7	3.0
Other manufacturing	13	1.7	3.7	3.0	3.2	3.3	4.2	3.5
Construction	5	1.0	3.4	2.8	2.8	2.6	3.8	3.4
Trade & transport	12	2.3	3.8	2.8	2.8	2.6	4.0	2.9

Table A.1.9 Important Factors for Investment

		Important Fa	actors for Inv	estment					
	Total	Political	Economic	Market size	Distance	Fiscal	Parent	Supporting	Raw
	No.	and social	condition		from	incentives	company	company	materials
	%	stability			markets				
All	50	44	33	27	9	34	1	9	25
	100.0	88.0	66.0	54.0	18.0	68.0	2.0	18.0	50.0
Food, beverage	5	5	2	2	2	4	0	1	3
& tobacco	100.0	100.0	40.0	40.0	40.0	80.0	0.0	20.0	60.0
Textile, apparel	5	4	2	4	1	3	0	1	2
& leather	100.0	80.0	40.0	80.0	20.0	60.0	0.0	20.0	40.0
Wood & wood	4	4	3	1	1	4	0	0	4
products	100.0	100.0	75.0	25.0	25.0	100.0	0.0	0.0	100.0
Macinery &	6	4	5	3	1	3	0	0	3
electrics	100.0	66.7	83.3	50.0	16.7	50.0	0.0	0.0	50.0
Other	13	10	9	9	2	9	0	4	6
manufacturing	100.0	76.9	69.2	69.2	15.4	69.2	0.0	30.8	46.2
Construction	5	5	4	2	0	3	1	1	1
	100.0	100.0	80.0	40.0	0.0	60.0	20.0	20.0	20.0
Trade &	12	12	8	6	2	8	0	2	6
transport	100.0	100.0	66.7	50.0	16.7	66.7	0.0	16.7	50.0

		Important Fa	actors for Inv	estment				
	Total	Cheap labor	Quality	Partner for	Electricity	Water	Industrial	Living
	No.		labor	JV/tech		supply	estate	condition
	%			tie-up				for expats
All	50	15	11	22	7	6	2	1
	100.0	30.0	22.0	44.0	14.0	12.0	4.0	2.0
Food, beverage	5	2	1	2	0	0	0	0
& tobacco	100.0	40.0	20.0	40.0	0.0	0.0	0.0	0.0
Textile, apparel	5	4	0	0	2	1	1	0
& leather	100.0	80.0	0.0	0.0	40.0	20.0	20.0	0.0
Wood & wood	4	1	0	2	0	0	0	0
products	100.0	25.0	0.0	50.0	0.0	0.0	0.0	0.0
Macinery &	6	0	1	4	2	2	0	1
electrics	100.0	0.0	16.7	66.7	33.3	33.3	0.0	16.7
Other	13	3	5	7	1	0	0	0
manufacturing	100.0	23.1	38.5	53.8	7.7	0.0	0.0	0.0
Construction	5	2	3	3	0	0	0	0
	100.0	40.0	60.0	60.0	0.0	0.0	0.0	0.0
Trade &	12	3	1	4	2	3	1	0
transport	100.0	25.0	8.3	33.3	16.7	25.0	8.3	0.0

Table A.1.10 Relation with Lao PDR at Present

		Relation W	ith Laos (Pro	esent)								
	Total	Import raw	Export	Receive	Have Lao	Have	Hold share	Have	Conduct	Be	No	Other
	No.	materials	products	trainees	employees	factory in	of Lao	technical	investment	requested	connection	
	%					Laos	company	tie-up	survey	to invest		
All	50	8	16	0	0	0	0	2	2	3	21	7
	100.0	17.0	34.0	0.0	0.0	0.0	0.0	4.3	4.3	6.4	44.7	14.9
Food, beverage	5	1	2	0	0	0	0	0	1	1	1	1
& tobacco	100.0	20.0	40.0	0.0	0.0	0.0	0.0	0.0	20.0	20.0	20.0	20.0
Textile, apparel	5	0	1	0	0	0	0	0	1	1	2	0
& leather	100.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	20.0	20.0	40.0	0.0
Wood & wood	4	2	2	0	0	0	0	1	0	0	0	0
products	100.0	66.7	66.7	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0
Macinery &	6	1	1	0	0	0	0	1	0	0	3	1
electrics	100.0	20.0	20.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	60.0	20.0
Other	13	1	3	0	0	0	0	0	0	0	10	1
manufacturing	100.0	7.7	23.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.9	7.7
Construction	5	0	2	0	0	0	0	0	0	1	2	1
	100.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	40.0	20.0
Trade &	12	3	5	0	0	0	0	0	0	0	3	3
transport	100.0	27.3	45.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.3	27.3

Table A.1.11 Relation with Lao PDR in the Future

		Relation W	ith Laos (Fu	ture)								
	Total	Import raw	Export	Receive	Have Lao	Have	Hold share	Have	Conduct	Be	No	Other
	No.	materials	products	trainees	employees	factory in	of Lao	technical	investment	requested	connection	
	%					Laos	company	tie-up	survey	to invest		
All	50	6	25	0	0	3	0	2	2	1	10	4
	100.0	13.3	55.6	0.0	0.0	6.7	0.0	4.4	4.4	2.2	22.2	8.9
Food, beverage	5	1	2	0	0	0	0	0	1	1	2	1
& tobacco	100.0	20.0	40.0	0.0	0.0	0.0	0.0	0.0	20.0	20.0	40.0	20.0
Textile, apparel	5	0	2	0	0	2	0	0	1	0	1	0
& leather	100.0	0.0	40.0	0.0	0.0	40.0	0.0	0.0	20.0	0.0	20.0	0.0
Wood & wood	4	3	2	0	0	0	0	1	0	0	0	0
products	100.0	75.0	50.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0
Macinery &	6	0	3	0	0	0	0	0	0	0	1	0
electrics	100.0	0.0	75.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0
Other	13	0	9	0	0	1	0	0	0	0	3	0
manufacturing	100.0	0.0	75.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	25.0	0.0
Construction	5	0	2	0	0	0	0	1	0	0	0	1
	100.0	0.0	50.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	25.0
Trade &	12	2	5	0	0	0	0	0	0	0	3	2
transport	100.0	18.2	45.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.3	18.2

Table A.1.12 Interests in Savannakhet SEZ

		Interst in SEZ				
	Total	Yes,	No, not			
	No.	intersted	interested			
	%					
All	50	36	14			
	100.0	72.0	28.0			
Food, beverage	5	3	2			
& tobacco	100.0	60.0	40.0			
Textile, apparel	5	2	3			
& leather	100.0	40.0	60.0			
Wood & wood	4	4	0			
products	100.0	100.0	0.0			
Macinery &	6	4	2			
electrics	100.0	66.7	33.3			
Other	13	9	4			
manufacturing	100.0	69.2	30.8			
Construction	5	4	1			
	100.0	80.0	20.0			
Trade &	12	10	2			
transport	100.0	83.3	16.7			

Table A.1.13 Desired Facilities for SEZ

		Facility Desi	red				
	Total	Free zone -	Free zone -	Bonded	Marketing	Cargo	Other
	No.	duty free	no VAT	warehouse	center	terminal	
	%						
All	50	24	28	3	10	5	1
	100.0	68.6	80.0	8.6	28.6	14.3	2.9
Food, beverage	5	3	2	1	2	1	0
& tobacco	100.0	100.0	66.7	33.3	66.7	33.3	0.0
Textile, apparel	5	2	1	1	0	0	0
& leather	100.0	100.0	50.0	50.0	0.0	0.0	0.0
Wood & wood	4	3	4	0	0	0	0
products	100.0	75.0	100.0	0.0	0.0	0.0	0.0
Macinery &	6	3	3	0	2	0	0
electrics	100.0	75.0	75.0	0.0	50.0	0.0	0.0
Other	13	8	6	0	2	0	1
manufacturing	100.0	88.9	66.7	0.0	22.2	0.0	11.1
Construction	5	2	2	1	1	0	0
	100.0	66.7	66.7	33.3	33.3	0.0	0.0
Trade &	12	3	10	0	3	4	0
transport	100.0	30.0	100.0	0.0	30.0	40.0	0.0

Table A.1.14 Desired Incentives for SEZ

		Incentives D	entives Desired									
	Total	Fiscal	Removal of	Simplified	Improved	Improved	Quality	Locaiton				
	No.	incentives	govt	procedure	telecommun	power and	labor/	(proximity				
	%		intervention		ication	water	training	to Vietnam)				
						supply						
All	50	37	0	44	29	12	12	17				
	100.0	74.0	0.0	88.0	58.0	24.0	24.0	34.0				
Food, beverage	5	3	0	5	2	2	1	2				
& tobacco	100.0	60.0	0.0	100.0	40.0	40.0	20.0	40.0				
Textile, apparel	5	4	0	4	4	0	1	2				
& leather	100.0	80.0	0.0	80.0	80.0	0.0	20.0	40.0				
Wood & wood	4	4	0	3	2	1	1	1				
products	100.0	100.0	0.0	75.0	50.0	25.0	25.0	25.0				
Macinery &	6	5	0	6	2	2	1	2				
electrics	100.0	83.3	0.0	100.0	33.3	33.3	16.7	33.3				
Other	13	9	0	12	6	4	3	5				
manufacturing	100.0	69.2	0.0	92.3	46.2	30.8	23.1	38.5				
Construction	5	3	0	5	5	0	1	1				
	100.0	60.0	0.0	100.0	100.0	0.0	20.0	20.0				
Trade &	12	9	0	9	8	3	4	4				
transport	100.0	75.0	0.0	75.0	66.7	25.0	33.3	33.3				

(3) Lao Enterprises

Table A.1.15 Problems in Business

		Problems in	Business						
	Total	Sales	Productions	Technology	Financing	Recruiting	Outside	Raw	Plant &
	Nos.			development		& training	manufac-	material	eqpmt
	(%)						turer	supply	investment
All	191	33	29	32	53	16	2	43	16
	100.0	17.3	15.2	16.8	27.7	8.4	1.0	22.5	8.4
Vientiane	112	20	14	23	28	9	1	20	12
	100.0	17.9	12.5	20.5	25.0	8.0	0.9	17.9	10.7
Thakhek	20	4	3	3	6	1	0	9	0
	100.0	20.0	15.0	15.0	30.0	5.0	0.0	45.0	0.0
Savannakhet	28	3	6	2	9	3	0	6	0
	100.0	10.7	21.4	7.1	32.1	10.7	0.0	21.4	0.0
Pakse	31	6	6	4	10	3	1	8	4
	100.0	19.4	19.4	12.9	32.3	9.7	3.2	25.8	12.9

		Problems in	Business					
	Total	Distribution	Information	Export	Govt	Tax	Others	No
	Nos.		access		regulation			problem
	(%)							
All	191	21	9	15	16	18	8	6
	100.0	11.0	4.7	7.9	8.4	9.4	4.2	3.1
Vientiane	112	8	6	13	12	9	5	2
	100.0	7.1	5.4	11.6	10.7	8.0	4.5	1.8
Thakhek	20	4	1	1	2	7	0	2
	100.0	20.0	5.0	5.0	10.0	35.0	0.0	10.0
Savannakhet	28	3	2	1	1	0	0	0
	100.0	10.7	7.1	3.6	3.6	0.0	0.0	0.0
Pakse	31	6	0	0	1	2	3	2
	100.0	19.4	0.0	0.0	3.2	6.5	9.7	6.5

Table A.1.16 Problems in Employment

		Problems in	n Employm	ent							
	Total	Recruiting	Recruiting	Recruiting	Recruiting	Rise of	Quick	Training	Poor skills	Finding	Others
	no.	factory	engineers	clerks	managers	wages	turnover			replace-	
	(%)	workers					employees			ments	
All	191	55	34	4	15	20	54	21	60	7	5
	100.0	28.8	17.8	2.1	7.9	10.5	28.3	11.0	31.4	3.7	2.6
Vientiane	112	29	23	3	9	12	25	13	33	4	5
	100.0	25.9	20.5	2.7	8.0	10.7	22.3	11.6	29.5	3.6	4.5
Thakhek	20	_	1	0	1	2	7	1	15	2	0
	100.0	40.0	5.0	0.0	5.0	10.0	35.0	5.0	75.0	10.0	0.0
Savannakhet	28	9	5	0	_	2	10	2	4	0	0
	100.0	32.1	17.9	0.0	7.1	7.1	35.7	7.1	14.3	0.0	0.0
Pakse	31	9	5	1	3	4	12	5	8	1	0
	100.0	29.0	16.1	3.2	9.7	12.9	38.7	16.1	25.8	3.2	0.0

Table A.1.17 Needed Support by the Government

		Needed Go	vt Support						
	Total	Develop	Deregula-	Expand	Financial	Foreign	Technology	Manage-	Business
		industrial	tion in	bank	support for	mkt info	info service	ment info	training
		estate	investment	financing	export	servie		service	
A11	191	31	34	41	79	57	25	21	45
	100.0	16.2	17.8	21.5	41.4	29.8	13.1	11.0	23.6
Vientiane	112	12	16	17	49	38	15	10	21
	100.0	10.7	14.3	15.2	43.8	33.9	13.4	8.9	18.8
Thakhek	20	7	7	4	8	5	3	5	8
	100.0	35.0	35.0	20.0	40.0	25.0	15.0	25.0	40.0
Savannakhet	28	5	6	6	7	7	3	1	6
	100.0	17.9	21.4	21.4	25.0	25.0	10.7	3.6	21.4
Pakse	31	7	5	14	15	7	4	5	10
	100.0	22.6	16.1	45.2	48.4	22.6	12.9	16.1	32.3

		Needed Go	vt Support					
	Total	Tech	Improve	Simplify	Improve	Improve	Promote	Others
		develop-	laws and	admimnistr	infra for	water	business	
		ment	regulations	ation	transport	supply &	assoc	
		training				sewage		
A11	191	21	23	22	8	5	8	1
	100.0	11.0	12.0	11.5	4.2	2.6	4.2	0.5
Vientiane	112	13	18	15	5	2	5	1
	100.0	11.6	16.1	13.4	4.5	1.8	4.5	0.9
Thakhek	20	2	3	1	0	1	2	0
	100.0	10.0	15.0	5.0	0.0	5.0	10.0	0.0
Savannakhet	28	1	0	1	0	0	0	0
	100.0	3.6	0.0	3.6	0.0	0.0	0.0	0.0
Pakse	31	5	2	5	3	2	1	0
	100.0	16.1	6.5	16.1	9.7	6.5	3.2	0.0

Appendix-2 ASIAN EXPERIENCES

Appendix 2 ASIAN EXPERIENCES

1. ESZ in China

(1) Outline

Table A.2.1 Outline of Chinese ESZ

Name of Scheme	Economic Special Zones
Year of Introduction	1980 (Guangdong Province)
Objectives	To develop international cooperation and technological exchange
	To promote the construction of the socialistic modernization
Applied Location	Shenzhen, Shantou, Xiamen and Zhuhai
Basic Principles	1) Utilization of FDI for economic development
	2) Economic activities based on market-economy mechanism
	3) Approval of broad autonomy of ESZ Committee
	4) Approval of incentives to FDI
Major Applicable	1) "Regulation on Economic Special Zones in Guangdong
Laws	Province" (1980) is the first authorized law to regulate the
	establishment of ESZ.
	2) Following it, many provisions were enacted for the purpose of
	administering and operating ESZ. In Shenzhen City, for
	example, "Provision on administering properties"(1983),
	"Detailed Provision on administering the enterprise
	registration" (1984) and "Provision on the adjustment,
	reduction and exemption of land use fees"(1984) were
	established. On the ministries level, such decrees as "Provision
	for administering foreign and joint venture bank in ESZ"(1985)
	and "Provision for administering export/import goods,
	transportation, accompanied luggage, parcel post in ESZ"
	(1986) were also enacted.
	3) Tentative Provision is a provision which is tentatively
	established with the purpose for applying it to the national economy in the future. "Tentative Provision on the labor
	remuneration" (1981), "Tentative Provision for administering
	the enterprise registration" (1981), "Tentative Provision on
	administering immigration control"(1981) of Guangdong
	Province and "Tentative Provision on land administration"
	(1981), "Tentative Provision on introducing foreign
	technology" (1984) of Shenzhen are among these tentative
	provisions. "Prime Minister's Tentative Provision on the
	reduction or exemption of corporate tax and integrated tax of
	industry and commerce, applied to ESZ "(1984) is also one
	example of national level legislation of the same nature.

Name of Scheme	Economic Special Zones
	•
Name of Scheme Investment Incentives	Economic Special Zones 1) Corporate tax reduction to 15%, with a grace period of 2 years after starting making profit and successive reduction to 7.5% in the following 3 years. (Applied only to the enterprises in the operation for more than 10 years in manufacturing, transport, agriculture, forestry, livestock breeding, etc. For service industries with the investment of more than US\$5million, a grace period of 1 year and 7.5% rate for succeeding 2 year may be applied.) 2) Possible reduction or exemption of inhabitant's tax 3) Exemption of remittance tax for repatriation of dividend derived from Joint Venture operation 4) Withholding tax at a flat rate of 10% on dividend, interest, rent, license royalty for non-resident corporation 5) Exemption of business tax on imported manufacturing facilities, materials, parts or transport measures. Reduction to half of a normal rate on mineral ores, tobacco or liquor. No incentive given to commercial/transport/service industries 6) Exemption of business tax on exporting goods 7) Land leasing period and rent (1981) Manufacturing: 30 years: RMP10-30/m² Commercial (including restaurant): 20 years: RMP70-200
	7) Land leasing period and rent (1981) Manufacturing: 30 years: RMP10-30/m²
	for the following 3 years Land rent reconsidered in every 3 years
Similarity to and	1) Most of the characteristics of other EPZ in Asia applied to
Difference from other	Chinese ESZ
Asian SEZ	2) Manufacturing, agriculture, livestock farming, aquaculture, tourism, housing and construction, Hi-tech research and manufacturing are among the industries that foreign investment is approved, while in other Asian EPZ only manufacturing is approved for investment in general.
	3) The area of ESZ is rather wide comparing with other EPZ because the aim of ESZ includes the urban development planning.
	4) ESZ aims not only the invitation of FDI but also the diffusion of experiences and achievement of ESZ to all over the countries.
	5) ESZ was planned as a part of Chinese political strategies for unification of the country.

(2) Historical Background

As implied in Chinese language of "Economic Special Zones", the aim of Chinese SEZ was that the country would implement a trial, in the limited region, introducing the market-oriented economy while keeping the political regime of socialism. SEZ prepared infrastructure, relatively cheap and abundant manpower, economical land, investment incentives, legislation and the potentially huge domestic market. The investment incentives themselves were not new, and most of them were already common among other similar schemes of Asian countries (e.g., Hong Kong and Taiwan), which were looking for their economic hinterland due to rapid hike in labor costs in their home countries. They, naturally, were the first respondent to utilize such a Chinese new scheme. Hong Kong enterprises have already had long time business relations with Chinese enterprises in Shenzhen. Many of them even had their own subsidiaries or own factories there. Taiwan liberated its peoples' visits to Mainland China in 1985 soon after China decided to open up the country and set up the Foreign Investment Law in 1979 and the Regulation on ESZ in Guangdong Province in 1980. The application of ESZ scheme was quite timely.

There were many disturbances between foreign investors and the Chinese authority or Chinese private corporations in the following years, because both private and public sectors in China those days were not familiar with the so-called international business practices, especially in maintaining contracts. Technology level was low, and sense of quality was lacking. Workers and management were used to work only for fulfilling the required or ordered quantity. Nevertheless, Chinese workers were fast learners and so was the management.

Only after the supporting industries in ESZ developed, or at least started to develop, and when the stable operation in ESZ was secured, other developed countries such as Japan, US, EU countries, Korea followed to invest in ESZ. An accumulation effect of manufacturing then took place.

(3) Current Situation

Nowadays, Shenzhen is famous for its production of office equipment and electronics parts/components. It is said that all the necessary parts for up-to-date copying machines can be gathered within two to three days there. Shenzhen ESZ is known as a successful model of the Socialism Market Economy. It is noted, however, there began an argument whether ESZ

should be demolished or not. The main reason for such an argument is that a success of Shenzhen ESZ brought about the effect of widening the economic gaps between ESZ area and other areas. Further, following the entry of China into WTO, discriminatory policies as ESZ will become less sustainable under the free trade regime.

Nevertheless, Shenzhen ESZ accumulated so far FDI of US\$ 20 billion in more than 15,000 projects. Those FDI produce 68% of all Shenzhen's industrial output and 85% of total exports, provide 2 million jobs and bear one third of the government revenue. Shenzhen ESZ aims to attract US\$ 20 billion more in next five years and, by 2010, it targets to realize the per capita GDP of US\$ 10,000- for the population of 5.5 million. The future goals of Shenzhen ESZ are to become a high-tech industrial city, an international port city, China's export and major economic growth center and regional financial center. Shenzhen ESZ seems to go into a new era.

The current situation of four ESZ in China, namely Shenzhen, Shantou, Xiamen and Zhuhai, are summarized in the Table A.2.2.

Table A.2.2 Current Situation of Chinese ESZ

	Shenzhen	Shanton	Xiamen	Zhuhai
1 000		The state of the s	Р Р	
Location	Guangdong Province	Guangdong Province	Fujian Province	Guangdong Province
SEZ area	327.5 square km	234 square km	1,516 square km (Region)	1,630 square km (Region)
Population	3.79 million (1997)	1.0 million	1.21 million	643.7 thousand
Natural resources	Over 30 species fishes, 15 metallic	Rich in fish resources, high production	Sunshine beaches, mountains and	Rich in aquatic and mineral
	minerals, 12 non-metallic minerals, 900	of fruits and vegetables	local culture	resources such as porcelain clay,
	mineral deposits, Fresh-water marble sand,			gaolin, potash feldapar and
	Guanine, Lime stone			quartz stones. Close to Nanhai oil field.
GDP	RMB 143.6 billion (1999)	RMB 17.0 billion (1996)	RMB 45.8 billion (or US\$5.52	RMB 17.5 billion (1996)
	(US\$4,000 per capita)		billion) (1999)	
Industrial output	RMB 125.55 billion (1997)	RMB 21.1 billion (1996)	RMB 69.88 billion (1999)	
Industrial export	RMB 68.04 billion (1997)			
FDI source	70% from Hong Kong (16,300 projects),	Hong Kong, Taiwan, Japan, Thailand,	60 of the 1,000 top multi-national	Hong Kong, Macau, Taiwan,
	Taiwan, Japan, the US, EU	Singapore and the UK	firms in Xiamen	Japan, the US, EU
FDI fields	Manufacturing of telecommunication tools,	Manufacturing of electronics, watches,	Electronics, electrical appliances,	Electronics, garments, footwear,
	electronics, light building materials and	pharmaceuticals, footwear, garments,	textiles and garments, footwear,	toys, plastics and materials
	machinery, real estate, commerce, hotels	chemicals, machinery, food	chemical, property, tourism and	manufacturing, tourism and
		processing, ceramics, real estate,	building materials	property
		hotels, tourism and infrastructure		
FDI amount	US\$2.75 billion in 1999	US\$8.46 billion (Up to 1995)	US\$13.5 billion (up to 1997),	US\$3.0 billion (1990s)
			US\$ 1.29 billion in 1999	
Approved FDI	1,558 projects in 1999	3,825 foreign firms (up to 1995)	More than 4,000 projects (up to	340 projects (1998)
			1997), 209 projects in 1999	
Exports of SEZ	US\$11.51 billion (1999): 80% designated	US\$488.74 million (1995)	US\$3.54 billion (1999)	US\$ 6.8 billion (1998)
	to or transshipped via Hong Kong			
Import of SEZ	US\$ 11.04	US\$646.21 million (1995)	US\$2.6 billion (1999)	

	Shenzhen	Shantou	Xiamen	Zhuhai
Transportation	Guangzhou - Kowloon Railway,	Shantou International Airport (direct	Dongdu Port (two 50,000-ton	Zhuhai Port (Two 20,000-ton
	Guangzhou - Shenzhen expressway, Eight	to Hong Kong, Singapore, Bangkok,	berths, two 30,000-ton berths,	berths, 100,000-ton coal
	port areas, Huangtian International Airport	Kuala Lumpur and Kuching), Shantou	four 10,000-ton berths), Yingtan	terminal, 100,000-ton minerals
		Port	- Xiamen Railway, Xiamen	clocks, 80,000-ton cereal and
			International Airport (direct to	edible oil berth, etc.). Connected
			Hong Kong, Japan, Singapore)	by highway to Macau and
				Shenzhen, Zhuhai Airport
				(domestic)
Electric power	Electric supply is reliable in SEZ	Huaneng Power Plant generates		800,000KWH
		3.4MW annually.		
Telecommunication	Telecommunication Generally well-developed	204,000 lines telephone, 63,000	A program-controlled automatic	A coaxial and microwave
S		mobile phone users	telephone exchange system	system. 93% of families installed
				telephone lines.
Other features	48 foreign bank branches, Shenzhen Stock	Establishing Free Trade Zone of 2.34	Same dialect as Taiwan, 3	Corporate tax rate of 15%
	Exchange (44 Chinese firms stocks listed)	square km 81993)	million tourist per year,	

2. EPZ in Thailand

(1) Outline

Table A.2.3 Outline of Thai EPZ

Name of Scheme	Export Processing Zones
Year of Introduction	1977
Location	For whole country (11 EPZs as of August 2000)
Basic principles	1) To facilitate the industrial development
	2) To exploit FDI by providing with industrial estate, where
	necessary infrastructures are completed.
	3) To promote exports and technology transfer.
	4) To develop remote or under-developed regions
	(Decentralization of industries).
Major Applicable Laws	Investment Promotion Act B.E. 2520 (1977), amended by
	Investment Promotion Act (No.2) B.E. 2534 (1991)
	Industrial Estate Authority of Thailand Act B.E. 2522 (1979),
	amended by IEAT Act (Second Edition, 1991) and IEAT Act
	(Third Edition, 1996)
Investment Incentives	(For promotional industries, given by BOI)
	No or a reduction to one-half of import duty on machinery
	Maximum 10% reduction of import duty on raw materials
	Exemption of payment of income tax
	Royalties, dividend - Exemption from computation of taxable
	income
	Approval of foreign ownership of land
	Hiring foreign personnel beyond the regulation
	Further incentives for investment into certain location
	Guarantee on remittance of foreign currencies
	Exports promotion incentives
	- No import duty on raw materials
	- No import duty on the items for re-export
	- No export duty on the items produced or assembled by the
	promoted enterprises
	- Reduction of corporate tax
	(For enterprise in EPZ, given by IEAT)
	- No surcharge, excise tax and VAT on machinery, parts, components, bi-products and raw materials
	NATE 1 C 1
	- No export duty, VAI and excise tax for export goods - Exemption or refund of taxes and duties for local goods
	utilized for production
	unitzea for production

Name of Scheme	Export Processing Zones
Similarity to and	Combined incentives of BOI and IEAT for exporting companies
Difference from the	are not much different from other Asian countries.
other Asian SEZ	In new concept of EPZ, trading and services can be located in
	EPZ and entitled to enjoy almost same privileges as
	manufacturing companies. This is the similar concept to the
	Philippines' Clark and Subic EPZ, where the trading, services
	and tourism are permitted to get incentives.
Types of Industries,	(1) Industries which;
Trade and Services	i) Operate in EPZs prior to 4 January 1997
eligible for incentives	ii) Are promoted by the BOI
in EPZ	iii) Are considered priority industries by the Ministry of
III EFZ	
	Industry
	iv) Are approved by IEAT Board
	v) Are specified by the government to operate within the Industrial Estates
	vi) Have been requested by organizations or the
	government to coordinate and support the
	establishment of Industrial Estate for the purpose of
	such industries
	vii) Manufacture the products to be used in
	telecommunications, computing, information services
	and multimedia services in both the hardware and
	software modes
	(2) Trades which;
	i) Purchase and sell the industrial products
	ii) Purchase and sell the products to be used in
	manufacturing
	iii) Collect, store and distribute the industrial products and
	the products of ii)
	iv) Pack and re-pack the products
	(3) Services which engage in;
	i) Warehousing and transportation
	ii) Trade fair, exhibition and symposium
	iii) Maintenance and other engineering jobs for machines
	and equipment
	iv) Research and development
	· -
	v) Telecommunication services, computing services, information services and multimedia services
	supporting business, trade and services

(2) Historical Background

In 1977, EPZ was set up under "Investment Promotion Act B.E. 2520 (1977)" and "Industrial Estate Authority of Thailand Act B.E. 2520(1977)" (IEAT Act 1977). Section 36 of IEAT Act 1977 stipulates that "EPZ" means an area designated for industrial activities or other activities beneficial to or connected with industrial activities for the purpose of exporting products. IEAT's strategy to provide the foreign investors with well arranged and equipped industrial estates at the strategic location worked out, and the numbers of Industrial Estates run by IEAT rose to 29. Among 29 industrial estates, there are 11 EPZs as shown below.

Table A.2.4 Distribution of IEAT Industrial Estates and EPZ

	Indu	ıstrial Estate	
	General Industrial Zone (GIZ) only	EPZ + GIZ	Total
Zone 1	2	4	6
Zone 2	8	4	12
Zone 3	8	3	11

Note: Zone 1: Bangkok and 6 central provinces Zone 2: 10 Provinces surrounding Zone 1

Zone 3: Other 60 Provinces

Source: Brochure of IEAT

In 1996, the definition of EPZ was amended by IEAT Act 1996 to read that "EPZ means an area designated for industrial activities, trading or services for the purpose of exporting products and other activities beneficial to or connected with industrial activities or service for the purpose of exporting products". Following this amendment, 9 EPZs became new type of EPZ (NEPZ), where trading and services would be able to get the same incentives as manufacturing industries.

(3) Current Situation

IEAT is a state enterprise attached to the Ministry of Industry and an operating body of EPZ, being in charge of the land management, leasing and sale of properties in EPZ, supervision of working conditions, and implementation of other related business. On top of BOI incentives, IEAT also provide its own incentives, upon approval of BOI. FDI application and incentives are to be processed and examined by BOI and, with approval of BOI for such FDI, foreign investors may apply for the entry into EPZ when they wish, and receive a written permit of the Governor of IEAT. Through

entry into EPZ, foreign investors will automatically enjoy IEAT incentives stipulated under the IEAT Act. IEAT is entitled to inspect and certify activities of foreign investors in EPZ in order to fulfill incentive facilities in compliance with such rules, conditions and procedures as prescribed by BOI.

IEAT is to levy and collect the rents, service charges and management fees for facilities to cover its expenditures and debts or to reserve the funds for expansion of activities and investment. In other words, it is an independent financial entity responsible for profit and loss to be derived from their activities.

IEAT recently planned new type of Free Trade Zone (NFTZ) at coastal area. NFTZ was a combined scheme of the traditional FTZ (trading, warehousing, distribution and exhibition) and manufacturing. They planned to provide enterprises in NFTZ with the following incentives for capital goods, raw materials, parts, components, accessories, etc.

Imports: No import duty, VAT, excise tax and surcharge

Exports: No export duty, VAT and excise tax

Local Buying: No VAT

Local Sale: Those taxes and charges not exempted

For unknown reason, however, this scheme was not realized and, instead, the aforementioned amendment to EPZ was introduced. NEPZ and NFTZ are very similar and employ wider concept of exporting industries, including trading and services related to export activities.

3. EPZ in Vietnam

(1) Outline

Table A.2.5 Outline of Vietnamese EPZ

Name of Scheme	Export Processing Zones
Year of Introduction	1991
Applied Location	Tan Thuan (HCMC), Soc Son (Hanoi), Do Son (Hai Phong), An Don (Da Nang), Linh Trung (HCMC), Can Tho (Mekong Delta)
Basic Principles	 To expand economic co-operation with foreign countries (FDI) To support the cause of modernization and industrialization To develop the national economy on the basis of the efficient exploitation and utilization of national resources To promote exports
Major Applicable Laws	"Law on Foreign Investment in Vietnam" (November 1996) "Law on Amendments and Addition of a number of Articles to The Law on Foreign Investment" (July 2000) and relevant Government Decree (February 1997), "Regulation on Industrial Zones, export Processing Zones and High-Tech Zones" (1997) (Originally, "Regulation on Export processing Zones" of 1991 and "Regulation on Industrial Zones" of 1994)
Investment Incentives	No import duty on machinery, parts, components, moulds and materials for these, raw materials Approval of 100% foreign capital Corporate tax of 10% with 4 years tax holiday for manufacturing Corporate tax of 15% with 2 years tax holiday for service industries Refund of corporate tax for 3 years for re-investment Reduced remittance tax to 5% Approval of operation of foreign banks in EPZ
Similarity to and Difference from other Asian countries' SEZ	Development with foreign capitals from Hong Kong, Malaysia, Taiwan, except Can Tho. Goods transportation escorted by customs officer Only foreign companies or joint ventures for 100% exports allowed to enter into EPZ

(2) Historical Background

In planning EPZ, the Vietnamese Government studied EPZs in Taiwan, Singapore and China and tried to establish EPZs in a more attractive manner.

The first EPZ in Vietnam was approved in 1991 and, under the joint venture with Taiwan capital, Tan Thuan EPZ was developed. The industries entered into Tan Thuan were mainly of light industries such as wood processing, textile and clothing, beverage, plastics, etc. Following it, 5 more EPZs have been developed.

At the initial stage, FDI welcomed such development of EPZ, expecting to utilize the relatively cheap but industrious Vietnamese labors and to penetrate into domestic market with large potential, and the foreign investment application was counted to considerable numbers. Such eagerness of FDI, however, faded away soon as more problems appeared, mainly due to the strict and uncommon regulations of the Foreign Investment Law of Vietnam. The provisions such as the unanimity rule on the Board of Management of joint ventures, the obligation of profits allocation to social welfare and other purposes at the fixed rate or the prohibition of sale of business to anyone other than Vietnamese are among them.

Likewise, many arguments came out about the inefficient and non-transparent work and procedures of the customs and the restriction on hiring workers, as well as unnecessary and frequent inspections carried out by public officers. Affected by such arguments and combined with the economic crisis in Korea, Malaysia and Taiwan which were the major investors to Vietnam, many of the approved foreign investments were not materialized.

(3) Current Situation

The Board of Review, consisting of representatives from the Ministry of Finance, Ministry of Trade, National Bank, Customs Department and People's Committee, is set up in each EPZ to extend one-stop service for FDI approval and admission of entry into EPZ. EPZ is separated from the outside by fences, transportation of goods coming in and out of EPZ should be carried out in containers, cases or crates sealed by customs house and escorted by customs officers. Despite its common investment incentives and operation systems, there remain many vacancies in EPZ.

To improve such a situation, the Vietnamese government amended some clauses in the Foreign Investment Law in July 2000. However, the notorious clause of the unanimity principle on the Board still remains unchanged. At the same time, aiming to simplify and clarify the investment application

procedures, the Ministry of Planning became an authority responsible for developing and managing EPZ and Economic Zone (EZ).

The Vietnam's experience shows that it is vital for SEZ promotion to provide sufficient incentives, to establish competent investment laws, and to realize the correct manner for its implementation. Transparency is also quite important for investors.

Table A.2.6 Major Amendment to "Foreign Investment Law" made in July 2000

- (i) To protect the ownership of invested capital and other legal rights of foreign investors, the amendment provides clearer commitment of the Government.
- (ii) In the event that the interest of foreign companies or parties to joint ventures is damaged by a change in the provisions of the law in Vietnam, the State shall take fair measures to recover the damage, by showing the concrete measurement (It used to say only "take appropriate measures to protect".). The amendment even stipulates concrete measures to do so.
- (iii) Reduction of withholding remittance tax
- (iv) Shorter examination period of FDI application: from 60 days down to 30 days or 45 days
- (v) Unnecessary or extraordinary inspection by public officers is waived and restricted.

Besides EPZ development, Singapore and Indonesian enterprises and Quang Ninh Province in the north of Vietnam also established in 1996 an Economic Zone (EZ) at Mong Cai, which is located on the border with China. For developing EZ, the concept of so-called "New Mechanism" was adopted and Mong Cai EZ was designated to develop as an international logistics, trading and tourism center. There were plans for developing agricultural and fishery-processing industries for exports, as well as construction materials, clothing and machine manufacturing industries for Chinese markets. In Mong Cai EZ, tourism increased by 49% in 1998 and 36% in 1999 over the previous year and the export-import amount rose by 27% in 1998. Following Mong Cai, there have been 8 EZs, namely Lang Son, Lao Cai, Kien Giang, Cao Bang, Ha Tinh, Lao Bao, Kon Tum and Tay Ninh, established or approved at border areas and the central government allowed the local authorities to use 50-100% of local tax revenues for improving the infrastructures such as transportation, power and water supply.

The Industrial Zone Management Board of Vietnam is reported to have expressed their view that they now intend to the apply successful models of the New East Street Economic Zone in Shanghai and the Philippine's Subic Special Economic Zone at its planned Chu Lai Open Economic Zone. One of the key factors is that the success of the New East Street Economic Zone is largely attributable to its autonomy from the central government, with Shanghai authorities being responsible for the zone management. At the same time, the Industrial Zone Management Board proposed to extend the land-lease period from 50 years to 70 years at Chu Lai, to simplify the business start-up procedures, to allow companies to choose foreign legal systems and foreign arbitration to resolve dispute, to authorize the private development and operation of the zones, and to admit automatically whole-ownership and joint ventures of any proportions of foreign capitals.

It is also deemed vital for EPZ and EZ promotion in Vietnam that there should be no discretionary licensing and there should be automatic registration, free hiring and market-determined wages.

Table A.2.7 Vietnamese New Approach

- (1) Softer and freer approach to FDI (Revision of Foreign Investment Law in July 2000)
- (2) Vietnam intends to adopt the concept of:
 - i) New East Street Economic Zone in Shanghai
 - ii) Subic Bay Special Economic and Free Port Zone
 - iii) In the planned Chu Lai Open Economic Zone
- (3) Ministry of Planning became a management authority of EPZ and EZ
- (4) Reduction of export obligation from 100% to 80% to be recognized as EPZ enterprises

4. Ecozones in the Philippines

(1) Outline

Table A.2.8 Outline of the Philippines' Ecozones

Name of Scheme	Ecozones
Year of Introduction	1995
Applied Location	Baguio City EPZ, Luisita Industrial Park, Bataan EPZ and other 13 locations (4 public-owned and 11 private-owned)
Basic Principles	 To encourage, promote, induce and accelerate a sound and balanced industrial, economic and social development To provide jobs to the people especially those in the rural areas, increase their productivity and their individual and family income, and thereby improve the level and quality of their living condition
Major Applicable Laws	Special Economic Zone Act of 1995
Investment Incentives	 For Export Enterprise & Free Trade Enterprise, registered with PEZA Tax- and duty-free importation of capital equipment, raw materials, spare parts, supplies, breeding stocks and genetic materials Income tax holiday of 4 to a maximum 8 years for non-pioneer and pioneer projects respectively A special tax rate of 5% of gross income in lieu of all national and local taxes after the income tax holiday Tax credit for import substitution Exemption of wharf dues, export tax, import fees Tax credit on domestic capital equipment, breeding stocks and genetic materials Additional deduction for incremental labor expenses and training expenses Unrestricted use of consigned equipment Permanent resident status for foreign investors and immediate family Employment of foreign nationals Remittance of earnings without prior approval from the Philippine Central Bank For Ecozone Developers/Operators, Facilities, Utilities, Tourism and Domestic Market Enterprises A special tax rate of 5% of gross income in lieu of national and local taxes Additional deduction for training expenses Permanent resident status for foreign investors and immediate family Incentives under RA No. 6957 (Revised Build-Operate-Transfer Law) Other incentives available under executive order No. 226, as may be determined by the PETA Board
Similarity to and	be determined by the PEZA Board Feograps adopts the flet rate income tay system on the gross income
Similarity to and Difference from other Asian countries' SEZ	Ecozone adopts the flat rate income tax system on the gross income and provide the incentives for import substitute operation, use of domestic equipment and materials, increase of local labor use and training.

(2) Historical Background

The Omnibus Investment Code of 1987 was established as a general law, providing the most comprehensive list of investment incentives to qualified enterprises. According to the regulations of Omnibus Investment, the Board of Investment (BOI) is in charge of publishing Investment Priorities Plan (IPP), which determines the "priority investment area" annually. Investors who are going to invest in the priority investment areas are qualified to the incentives under the Omnibus Investment Code. This Code stipulated that the Philippine nationals must own at least 60% of capital and that minimum 60% of members of Board of Directors must be Philippine citizens, except for the exporting companies.

In contrast to this 1987 Code, Foreign Investment Law of 1991 was the first comprehensive law to open up the country's economy for FDI by regulating the areas, the form of investment, and the definition of "business" that FDI could engage. Under this law it became possible for FDI to hold 100% equity in any business area except otherwise listed in the Negative List and, unless foreign investors seek for incentives under the Omnibus Code of 1987, there is no need for them to go through BOI. They are only required to register with SEC.

With regard to incentives, the original terms of the Omnibus Investment Code of 1987 have been slightly altered by the succeeding laws. Presidential Decree No.66 enacted the rules for establishment of EPZ in the Philippines with wider incentives. The Special Economic Zone Act of 1995, by which SEZ or "Ecozone" has been established, has regulated the most favorable incentives, as shown in Table A.2.8.

(3) Situation of Ecozone

1) Establishment of Ecozone

The SEZ was established under the Republic Act (RA) No. 7916 (Special Economic Zone Act of 1995). The SEZ is called "Ecozone", and it is operated by an independent governmental organization, called the Philippine Economic Zone Authority (PEZA). PEZA's mission is to contribute for the national effort to accelerate employment generation, particularly in the countryside.

2) Types of Ecozone

Ecozone is defined as areas designated by the government for development of the balanced agricultural, industrial, commercial and tourism/recreational regions. It is also developed as an independent community with minimum government interference. There are several types of Ecozones as classified in Table A.2.9.

Table A.2.9 Types of Ecozones

- **Industrial Estates (IE):** Land developed for industrial use with basic infrastructure, pre-built factory buildings and residential housing
- Export Processing Zones (EPZ): Special IE where export-oriented enterprises are located. There are four in the Philippines.
- Free Trade Zones: Areas nearby ports of entry (seaports and airports). Imported goods may be unloaded, repacked, sorted and manipulated without being subject to import duties. ASEAN agreed to create FTZ by 2003.
- **Tourist & Recreational Centers:** Establishments that cater both local and foreign visitors to the Ecozones including hotels, resorts and sports facilities.

3) Types of enterprise located in Ecozone

Foreign and domestic enterprise located in Ecozone must register with PEZA. They are classified into different categories, according to their activities, and given different incentives. (Refer to Table A.2.10)

4) Incentives for Ecozone enterprise

Regarding the fiscal incentives, Ecozone primarily adopt such traditional measures as tax holiday and tax- and duty-free imports. It is notable that it adopts a special tax of 5% on gross income and that it deducts the training expenses from the profit. It also admits tax credit for import substitution and utilization of domestic equipment and materials, as noted in Table A.2.8.

Table A.2.10 Types of Ecozone Enterprise

- Export Enterprise: Manufacture, assemble or process products, which are 100% exported unless a lower percentage is approved by PEZA.
- Free Trade Enterprise: Imports and market tax- and duty-free goods within the free trade area in Ecozone
- **Service Enterprise:** Engaged in any one or combination of the activities such as customs brokerage, trucking/forwarding, janitorial, security, insurance and/or banking, consulting or any such services approved by PEZA.
- **Domestic Market Enterprise:** Manufacture, assemble or process the products which are not exported at least 50% for a period of three years if majority owned by Filipino and at least 70% if majority-owned by foreign nationals
- Pioneer Enterprise
- **Utilities Enterprise:** Contracted to provide light and power, water supply and distribution, communications and transportation systems in Ecozone.
- Facilities Enterprise: Contracted to build and maintain necessary infrastructures in Ecozone
- **Tourism Enterprise:** Operates tourist accommodation such as hotels, restaurants, and sport and recreational facilities in Ecozone
- **Ecozone Developer/Operator:** Develops, operates and maintains the Ecozone, all component sectors and all related infrastructure

5) Transparency of the conditions and charges necessary in Ecozone

It may be noteworthy that in Philippine SEZ, all the land and building leasing conditions and the property leasing, utilities and manpower rates are publicly disclosed in the printed matters, as well as the fees and charges necessary for registration application, certificates, permits or licenses. With this transparency, Ecozone may count the credibility from foreign investors.

(4) More integrated SEZ

Before Ecozone was established in 1995, the Subic Special Economic and Free Port Zone and Clark Special Economic Zone were designated by the Bases Conversion and Development Act in 1992 for creating the entire necessary industrial and social infrastructure in an integrated form, including housing, transport, recreational and commercial infrastructure in the initial design.

Details of those two zones are as follows.

1) The Subic Bay Special Economic and Free Port Zone (SBF)

SBF was established under a law separate from Ecozone to develop the Subic area into a self-sustaining industrial, commercial, financial and investment center in the Philippines. Its features are summarized below.

Features of the Subic Special Economic and Free Port Zone

• Space: approximately 4,100hectares

i) Industrial: 360

ii) Commercial/ Mixed Use: 90

iii) Tourism/ Recreation: 245

iv) Utilities: 68

v) Breen Buffer: 2,199

vi) Residential: 358

vii) Transportation: 325

viii) Community Facilities: 263

ix) Special Area: 193

• Work Force: 66,000 English-speaking workers

- **Operating Body:** The Subic Bay Metropolitan Authority (SBMA), which defines incentives
- **Airport:** Subic Bay International Airport (An Asian hub of Federal Express) with a 2,700-meter runway
- **Seaport:** The Subic Bay has space of 03.61 hectares and 15 meters deep. Subic General Cargo Port (41 ha depot) with one movable and one fixed pier, two berths, a cold storage facility, 22 warehouses, two open storage spaces and a container-stacking yard.
- Key Sites:
 - i) Central Business District: 181-hectare for commerce and tourism
 - ii) Subic Bay Industrial Park (SBIP): 153-hectare housing Aces, Taiwan Hitachi, Teco Electric, etc.
 - iii) Subic Commercial Complex: shopping malls, restaurant and entertainment
 - iv) Subic Tecno Park (STEP): 70-hectare Japanese industrial estate
 - v) Forest/Theme Park: Area for a low density and high value resort complex
 - vi) Redondo Peninsula: Scenic zone of 3,800 hectares for developing golf courses, resort hotels and restaurants
 - vii) Battan Techno Park (BTPI): 365-hectare
- **Number of Approved Projects:** 349 operational and 58 non-operational as of February 1999 (Total 407)
 - i) Manufacturing & Assembling: 84
 - ii) Tourism-related including Retailing, Hotels and Restaurants: 92

iii) Services including Freight Forwarding and Couriers: 40

iv) Insurance, Financial Services and Consultancy: 26

v) Schools: 6

vi) Transportation & Shipping: 17

vii) Project Management and IT Services: 27

viii) Estate Development and Management: 14

ix) Other Serves: 33

x) Warehousing & Transshipment: 58

xi) Utilities: 10

The Subic Industrial Park has been developed by the Subic Bay Development and Management Corporation (SBDMC), which is a joint venture among SBMA, China Development Corporation and Century Development Corporation (Taiwan). It is open to any light to medium, non-polluting business engaged in exports and houses electronics manufacturing and assembling, vehicle assembling, pharmaceutical manufacturing, software development and data processing, jewelry, garments, footwear, industrial and electrical equipment and toy manufacturing. The One-stop Export Shop has been in operation, and the Subic Telecommunications Co., Inc. has been set up to provide 100,000 lines

SBMZ distributes duty-free purchasing coupons equivalent to US\$100 to the inhabitants of neighboring areas every month for shopping in the commercial zone of SBF. In addition, any Philippine citizens can purchase goods at duty-free shops in SBF up to US\$25 at a time.

Incentives for SBF enterprises are defined by SBMA independently from PEZA as follows:

Incentives for Enterprises in the Subic Special Economic and Free Port Zone

- Right to invest up to 100% equity, to freely engage in any business, trade, manufacturing, financial or service activity except in those listed in the Foreign Investment Negative List
- Right to import and export freely all types of goods into and out of SBF, subject to certain laws and regulations
- Right to employ foreign nationals subject to evidence of unavailability of comparably-skilled Filipino within the Philippines
- Tax and duty free importation of raw materials, supplies, capital equipment and other items for consumption within SBF
- No foreign exchange control within SBF and full repatriation of profits is allowed

- Exemption from all national and local taxes such as VAT, franchise taxes, excise taxes, by paying a final tax of 5% of Gross Income Earned (GIE). To enjoy this privilege, the investors must export at least 70% of their production.
- Unlimited purchase and consumption of tax and duty free goods within the SBF

2) The Clark Special Economic Zone (CSEZ)

CSEZ was established under the Executive Order No.62 in 1993, which provides the same incentives and privileges as the Subic Special Economic and Free Port Zone and Ecozones. The features of CSEZ are summarized below.

Features of Clark Special Economic Zone

- **Concept:** New industrial town site and a major civil aviation complex for international passengers and cargo
- Operating Body: Clark Development Corporation (CDC), a government-owned and controlled corporation, autonomously operates, manages CSEZ and defines the investment climate under Executive Order No. 80. Clark International Airport Corporation independently operates Clark International Airport.
- Space: Approximately 34,000 hectares
- **Available Workers:** 6.69 million with literacy rate of 97%, equal male to female ratio, used to working in a cross-cultural environment
- Number of Jobs Available: 25,000
- Main Zone Area: 4,440 hectares for industrial areas, central business district, tourism and recreation areas and aviation complex (Civil aviation area: 2,200 hectares with two 3,200m runway and a terminal building for accommodating 1.5 million passengers annually, Industrial area: 1,020 hectares, Mimosa Leisure Estate: 188 hectares)
- **Sub Zone Area:** 29,213 hectares for agricultural projects, corporate farming, contract farming, agro-industries, leisure and theme parks or eco-tourism
- Number of Investor Firms: 269 (October 2000)
- **Major Investment Fields:** Electronics manufacturing, semi-conductor industries, quartz crystals, rubber tire production, tourism-related projects and others
- Features:
 - i) Strategic location (1 hour from Hong Kong, 2 hours from Taiwan, 4hours from Singapore, Japan, South Korea)
 - ii) Liberal incentive package

- iii) Availability of existing facilities (Facilities for aviation, industrial and commercial, infrastructure such as power station, telecommunication and water supply)
- iv) Land for long-term leasing
- v) One-Stop-Action-Center (OSAC) to facilitate the prompt evaluation and approval of proposed investment for CSEZ within a 30-day period, to ensure expeditious processing of export documents, and also to facilitate the immediate processing of permits, licenses and other pertinent documents by housing agencies desks of concerned government agencies.
- vi) Availability of skilled and English-speaking workers
- vii) Location of the future premier international airport: Inaugurated in 1998 as Clark International Airport with a capacity of 14 million passengers.
- Course of Future Development: Developing dry-port serving air cargo of domestic and international flights at the Clark airport as well as sea-bound cargo at the Subic seaport. Setting-up the closer linkage with SBF, other Ecozones in the region and the market, Metropolitan Manila.

At an initial stage, a joint venture of the CDC and private sector operated infrastructure sectors in the CSEZ and, after 2 years, the operation was privatized and it was admitted for a new company to participate in the operation.

For HRD, the CDC set up training center of its own and operates training courses for job seekers with assistance of the foreign investors located in the CSEZ. It also established Polytechnic under cooperation with the schools in neighboring areas to run 3-6 months vocational training courses. Testing Agency located in the CSEZ provides qualification tests to job seekers for the benefit of the CSEZ investors. Labor Services Department of the CSEZ is in charge of the preparation of candidate workers list for easier recruitment and also in charge of mediation for labor dispute within the CSEZ.

Appendix-3 CANDIDATE SITE CONDITIONS

Appendix 3 CANDIDATE SITE CONDITION

1 Topography and Geology in Savannakhet Province

(1) Topography

The undulation of the mountain range flows from the northwest towards southeast with the highest elevation of more than 2,000 m. Savannakhet is a fairly flat lowland province, 75% of which is under 250 m altitude and 25% of which is occupied with mountainous topography. Mild topography spreads with less than 8% slope in the western part of the province. Topography in the eastern part has a slope of more than 20%. More than 30% slope topography are also studded in the eastern part.

Figures A.3.1 and A.3.2 illustrate the distribution of the altitude and the distribution of the slope, respectively.

(2) Geology

The soil samples used in this Study are for the geological survey for the 2nd Mekong Bridge by JICA, and the simple geological survey for the Site C by MOIH.

The basic geological formation consists of a series of sedimentary rocks, the majority sandstone with mudstone and conglomerate, formed in the middle to upper Cretaceous about 65 to 100 million years ago. Typical rocks are fine-grained sandstone, siltstone, and mudstone in reddish brown color. This mudstone with reddish brown color was found around Zeno.

The mudstone is generally found in the upper-most part of the rock beds and the sandstone occurs underneath. N-value in the standard penetration test for the Mekong Bridge ranges from 10 to 20.

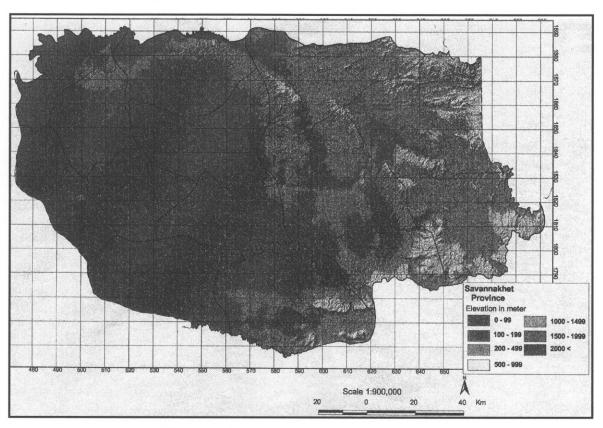


Figure A.3.1 Altitude Distribution Map

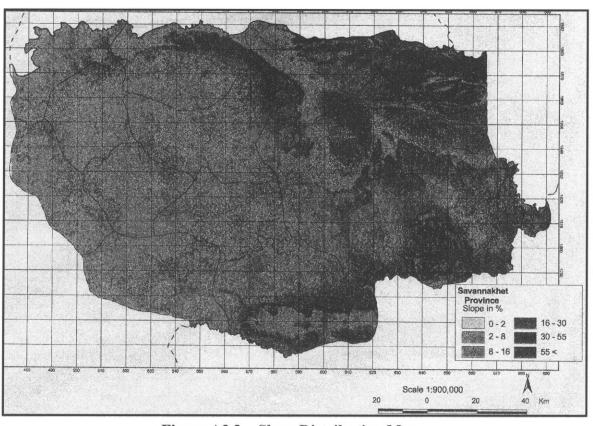


Figure A3.2 Slope Distribution Map