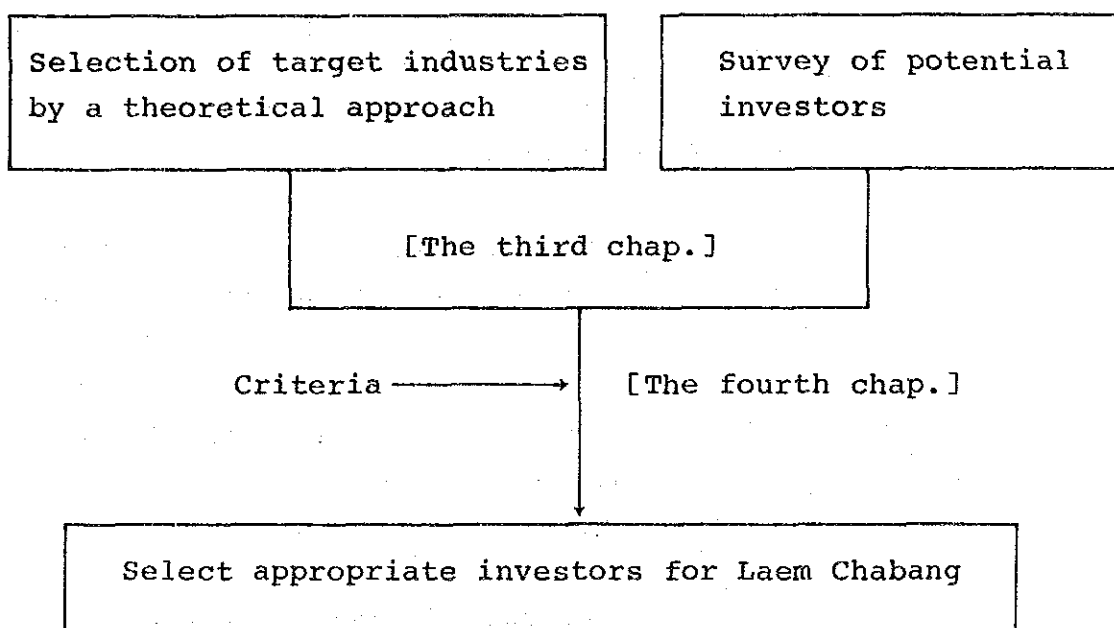


4. CRITERIA FOR SELECTION OF INVESTORS

As surveyed in the third chapter, the demands and the needs to invest in Laem Chabang were considerably large.

This chapter establishes the criteria to be followed by the IEAT in screening appropriate investors to be invited into Laem Chabang EPZ/GIE.

The third chapter studied the target industries and the potential investors. The relation of these two chapters is shown in the following figure.



4-1 STRUCTURE AND ITEMS OF THE CRITERIA

(1) CONCEPT OF THE CRITERIA

The criteria for investors, which are the BOI's ones for investment promotion project approval under the Investment Promotion Act., already exist.

They comprise fundamentally five categorized conditions for approval and five cases for non-approval, as shown in Table 4-1.

According to such criteria, the BOI will grant permission to invest to companies which it deems are suitable to the economy and level of technology of Thailand.

The BOI's criteria are somewhat different from the criteria studied; herein nevertheless, there are a few common factors between them, because the latter's functional scope is within the selection of investors who plan to locate in Laem Chabang.

The criteria for selecting investors (hereinafter referred to as "the Criteria") will have a close relationship with the IEAT's powers.

The IEAT has overall authority for industrial estate development, but its powers regarding the Criteria are as follows:

- 1) Designation of the categories and the sizes of the industrial activities.
- 2) Supervision of the living conditions of the industrial estate workers.
- 3) Control of industrial operations and all related activities, and persons utilizing the industrial estate land, in accordance with the rules, regulations, and laws, including those affecting public health and the environment.

In addition, the Criteria have to take into account two additional special factors. One is to maintain efficient operation and management of Laem Chabang and the other relates to Laem Chabang's development objectives.

Table 4-1 Criteria for Investment Promotion Project Approval

Criteria for Project Approval	
Necessary Conditions for Approval	Cases of Non-approval
<p>1. The market demand for such products, commodities or services is adequate to warrant the increased production. [Growth ability]</p>	<p>1. Where existing commercially viable firms already produce the products, commodities, or services without BOI promotional privileges. [Equality to privileges]</p>
<p>2. Production cost is low enough to compete successfully with imports. [Promotion of industries substituting for import]</p>	<p>2. Where the Board considers that such an activity, even if it eligible for promotion, can be operated with a reasonable rate of return and no longer needs promotional benefits. [promotion for self-independence]</p>
<p>3. The added value is not less than 20 percent of sales revenue, unless the the production is mainly for export. [High productivity]</p>	<p>3. Where, except in the case of production for export, the existing production capacity is adequate to serve domestic market demand for the next two years. [Protection of existing industry]</p>
<p>4. The ratio of debts to registered capital/equity does not exceed 5:1. [Financial soundness]</p>	<p>4. Where the project would use entirely imported raw materials and the production would be mainly for domestic distribution, and the existing import duty on the product already exceeded 40 percent. [Raise of local contents]</p>
<p>5. Level of utilization of national resources including capital and raw materials; foreign exchange and the amount of such remittances into Thailand; the technical level; and any other factors the Board deems appropriate.</p>	<p>5. Where the BOI supersedes the promotion of such an activity, or considers the project inappropriate for promotional privileges.</p>

As for Laem Chabang's efficient operation and management, the Criteria take into consideration in particular such factors as its land lot size, capacity of water supply, and waste water treatment. On the other hand, it is also an important factor not to decrease or damage the value and environment as an attractive industrial estate.

The most basic objective of the Laem Chabang project is to prepare the foundations for Thailand's consistent growth by improving its industrial structure and to realize a regionally balanced development in Thailand through promoting industrial decentralization of the Bangkok area.

According to these objectives, a theoretical approach to selecting the target industries is studied in the third chapter, and the Criteria that are consistent with the output of the study should be established.

Other factors, regarding the Laem Chabang's development objectives, should be added from the viewpoint of improving Thailand's level of industrial productivity and technology, since the third chapter's scope of study is limited only to selecting the target industries.

(2) STRUCTURE AND ITEMS OF THE CRITERIA

Based on the above-mentioned considerations, the Criteria have a structure as illustrated in Fig.4-1.

1) Structure

The Criteria involve 17 items that are classified into two groups: the first group with 4 types and 7 items and the second group with 4 types and 10 items. These two groups have different characters on the evaluation mechanism and the setting of the standard.

The first group, named "Screening-criteria", aims to maintain Laem Chabang's efficient operation and management, and belongs to the "absolute evaluation method". This is suitable for eliminating investors who cannot satisfy the required standards or conditions.

The second group, named "Targeting-criteria", derives from or relates to Laem Chabang's development objectives and belongs to the "relative evaluation method", thereby giving higher ranking to investors having comparative superiority. This is to say that the Criteria are capable of choosing desirable candidates out of a large number of potential investors.

2) Items

a. Screening-criteria

These criteria are divided into 4 types, operational, physical, environmental and social, according to their characteristics and contents.

Operational criteria's object is the starting schedule of industrial operation. Investors are expected to start operating within the designated term. If some of them plan to locate after the time limit, they have no approval for investment in Laem Chabang.

Physical criteria depend on Laem Chabang's land preparation system and capacity of utilities, such as water supply/treatment. The minimum size of the land lot deserves to be respectable, since it was established through an analysis of Laem Chabang's development cost and rational land use. As for the criteria regarding consumption and treatment of water, their conditions will be established considering the capacity of each of them.

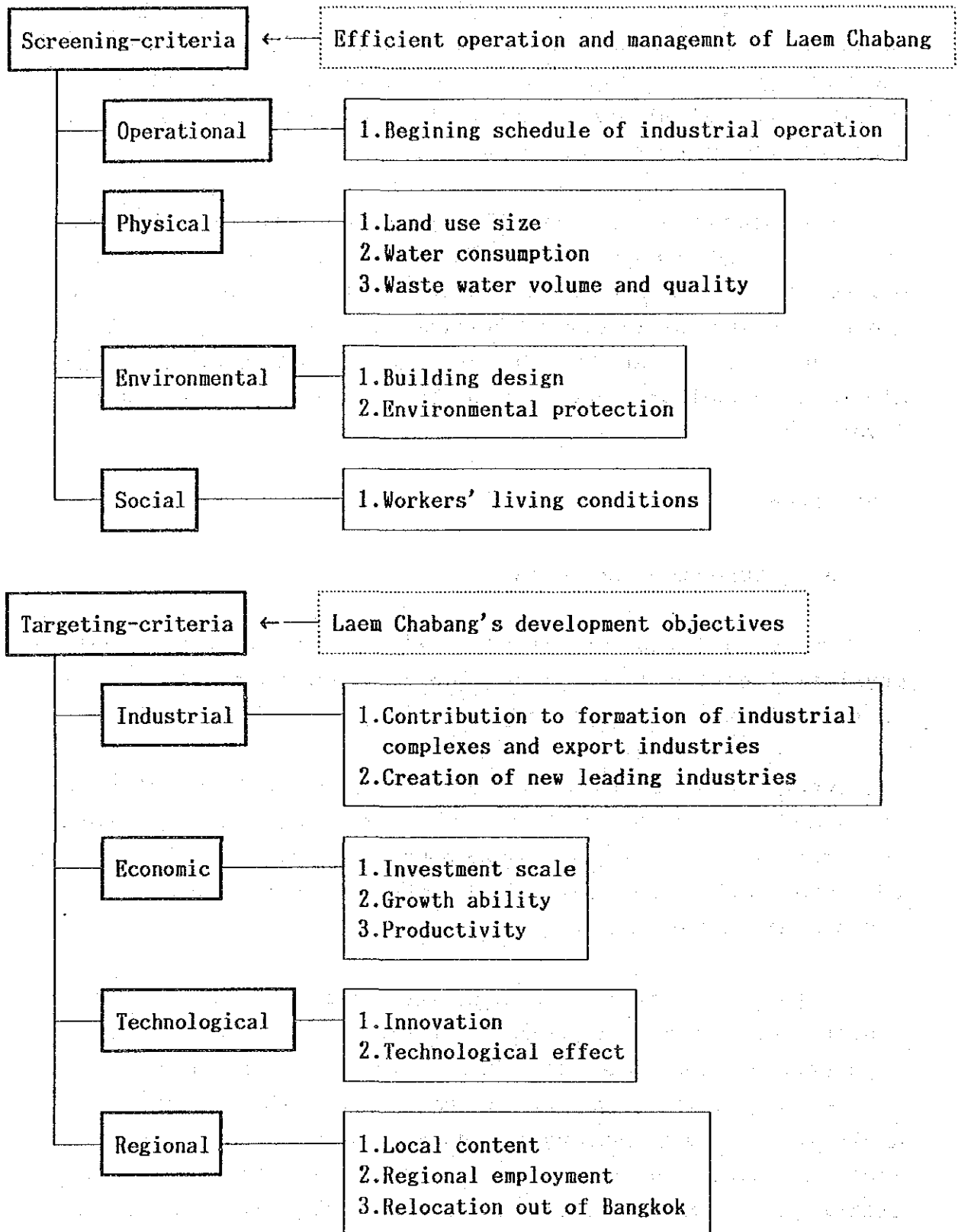


Figure 4-1 Structure of the Criteria for Selecting Investors

Environmental criteria check investors who build unsightly designed facilities, and thereby maintain Laem Chabang's beauty. They also check for environmental protection and eliminate investors who discharge toxic substances or very highly polluted and concentrated waste water and smoke without treating them adequately.

Social criteria are derived from the IEAT's power of supervision on the industrial estate workers' living conditions. Investors have to satisfy them with an ordinarily acceptable level in Thailand.

b. Targeting-criteria

These criteria are divided into 4 types: industrial, economic, technological, and regional.

Industrial criteria evaluate the investors' contribution to forming industrial complex/export industry positively and the investment for new leading industries, which are expected to play an important role in Thailand's future development.

Economic criteria evaluate the economic effect of investment by its scale. They also estimate the growth ability and productivity of the industrial field in which investors plan to invest.

Technological criteria prioritize investors who are equipped with the most advanced facilities and who hire many engineers or skilled workers, because such activities are expected to result in the innovation and improvement of Thailand's technology.

Regional criteria are composed of items not elsewhere classified, but are characterized together by their "locality or regionality". A high priority will be given to investors who use domestically originated raw materials

(rise of local content) and who employ many local people. The criterion, "relocation out of Bangkok", is meaningful where investors plan to build new facilities in Laem Chabang instead of scrapping their existing ones located in or around the Bangkok area.

4-2 CRITERIA FOR SELECTING INVESTORS

Items and standards of the two Criteria were designed, considering their characteristics, and their applied methods are studied in this section.

(1) DETAILED DESIGN OF CRITERIA ITEMS

1) Screening-criteria

It is very important that the criteria be as clear and as quantitative as possible, since the industries that cannot clear these criteria are difficult to locate in Laem Chabang. Table 4-2 exemplifies a detailed design of the itemized criteria.

The starting schedule of industrial operations must be within 3 years, while considering specific terms necessary for various procedures, constructions, etc.

Land-used size is a minimum of 2 rai. This area is based on the IEAT's experience, and maintenance of a good environment for the industrial estate itself.

Maximum allowable water consumption is $10 \text{ m}^3/\text{day}$ per rai, with maximum waste water volume being 70% of the water consumed, and based on Laem Chabang's capacity. The maximum density of discharged water, 500 ppm, is derived from the oxidation ditch system's capacity. The calculations and related considerations are shown in Table 4-2.

Table 4-2 Standards of the Screening-criteria

Composition of Criteria		Standards to be cleared by Investors
Category	Criteria	
Operational	1.Begining schedule of industrial operation	<i>Within 3 years</i> (considering specific term necessary for various procedure, construction, etc.)
Physical	1.Land use size	<i>Minimum size of 2 rai</i> (based on IEAT's experience and the maintenance of a good environment for the industrial estate itself) It is possible for investors to lease the land jointly in order to clear the above standard.
	2.Water consumption	<i>Maximum volume of 10 m³/day per rai</i> (basically dependent on the supply capacity) -derived from the following calculation $39,800(\text{m}^3/\text{day}) \div 3,410 (\text{rai}) = 11.67 \approx 10$ There seems to be cases in which increasing recycled water volume for use makes it possible to clear the above standard, otherwise investors increase the land area leased.
	3.Waste water volume quality	<i>Maximum 70% of water consumption</i> (dependent on the treatment capacity) -derived from the following calculation $29,400(\text{m}^3/\text{day}) \div 39,800(\text{m}^3/\text{day}) = 0.736 \approx 0.7$ <i>Maximum 500 ppm for discharged water density</i> (dependent on the oxidation ditch system's capacity) -derived from the following calculation $16,900(\text{kg}/\text{day}) \div 29,400(\text{m}^3/\text{day}) = 574 (\text{ppm}) \approx 500 (\text{ppm})$ Pre-treatment becomes necessary where discharged water density is higher than 500 ppm.
Environmental	1.Building design — color and shape	<i>Not to be an unsightly design</i> Investors have to explain the reason why they select the color and shape of buildings.
	— greenery distribution — other visual factors	<i>Minimum 20% of land area</i> (derived from the experience in IEAT and foreign countries such as Japan) Green area comprises greenery land and sporting/recreational facility's land. <i>Keeping harmony with the surrounding environment</i>
	2.Environmental protection — toxic substance	<i>Adequate treatment and disposal for such toxic substance as mercury, lead, cadmium, other heavy metals, cyanides, nitrogen oxide, sulfur oxide and so on</i>
Social	1.Workers' living conditions — worker's housing plan	<i>Having a housing plan for employee by their residential situation and wages, including utilization of Lach Chabang's housing project</i>

Data shown in Tables 4-3 to 4-7 indicate the water consumption volume of industries in Japan in 1985 and what type of industry can clear the maximum standard of $10 \text{ m}^3/\text{day}$ per rai. They also seem to be useful for judging whether the water-using plan proposed by investors is reasonable or not.

These data shows that apparel, wood products, and machinery industries can satisfy the standard of water consumption, less than $10 \text{ m}^3/\text{day}$ per rai, but the number of such industries is not so many.

Recycled water ratio to total volume is shown in the tables. This index will be useful and an indicator for advising the decrease of consumption of daily supplied water by increasing recycled water where investors propose to use more water than $10 \text{ m}^3/\text{day}$ per rai.

Building area ratio to land area is also useful for determining appropriate water consumption according to the actual situations of factory's operation (operating rate) and land use.

In addition to the above items, investors are expected to construct buildings with aesthetic designs (or not with unsightly design) and to prepare greenery areas of more than 20% of the land area. This was concluded from the experiences of the IEAT and foreign countries, such as Japan.

Investors are also expected to construct buildings in such a way that they maintain harmony with the surrounding environment, and to adequately dispose of toxic substances by themselves.

Table 4-3 Daily Water Use Volume per rai by Types of Industries - 1
(calculated from the Japanese factories)

	Daily use per rai		Recycled water / Total volume (%)	Building area / Land area (%)
	Total volume (m ³)	Daily supplied (m ³)		
TOTAL	166.3	42.3	74.5	25.0
12 Food manufacturing	92.8	58.8	36.5	27.3
121 Live-stock products	50.6	46.3	8.4	20.2
122 Seafood processing	49.0	47.7	2.5	32.6
123 Canned and preserved fruit and vegetable	65.2	63.7	2.4	32.8
124 Seasonings	186.2	102.8	44.7	33.9
125 Sugar processing	184.2	106.1	42.4	10.0
126 Flour and grain mill products	13.2	8.8	33.4	37.4
127 Bakery and confectionery products	61.3	28.9	52.8	34.2
128 Animal and vegetable oils and fats	316.4	62.3	80.3	25.5
129 Miscellaneous food and related products	81.2	68.8	15.2	32.1
13 Beverage feed and tobacco	63.8	39.1	38.6	32.6
131 Soft drinks and carbonated water	61.3	58.4	4.6	30.7
132 Alcoholic beverage	65.0	43.2	33.5	31.1
133 Tea and coffee	578.4	31.5	94.5	35.4
134 Manufactured ice	80.1	80.1	0.0	50.5
135 Prepared animal feeds and organic fertilizers	19.0	16.6	12.8	31.8
136 Tobacco manufactures	15.8	15.1	4.4	41.2
14 Textile mills products	92.4	73.2	20.8	37.8
141 Silk reeling plants	33.4	32.2	3.4	32.0
142 Spinning mills	114.8	73.6	35.8	37.7
143 Twisting and bulky yarns	56.2	49.7	11.5	37.3
144 Woven fabric mills	66.4	54.0	18.7	38.4
145 Knitting mills	32.6	32.2	1.0	33.8
146 Dyed and finished textiles	184.2	169.9	7.7	43.6
147 Ropes and nettings	7.6	7.6	0.0	37.9
148 Lace and other textile goods	13.0	13.0	0.0	21.7
149 Miscellaneous textile mills products	38.8	31.8	18.0	36.0
15 Apparel and other finished products	7.3	7.3	3.3	33.6
151 Outer garment except Japanese style	7.4	7.4	0.2	32.4
152 White shirts and underwear	5.6	5.6	0.0	29.5
153 Hats	13.2	13.2	0.0	53.0
154 Fur apparel and apparel accessories	11.1	11.1	0.0	42.6
155 Miscellaneous textile, apparel, etc.	7.6	7.6	0.0	34.7
159 Miscellaneous fabricated textile products	8.0	6.8	14.4	39.5
16 Lumber and wood products except furniture	5.3	4.5	14.4	24.7
161 Sawing and planing mills and wood products	2.6	2.5	3.0	18.8
162 Plywood and prefab-wood products	7.7	6.4	16.2	29.9
163 Wooden containers	2.4	2.4	4.3	29.8
164 Wooden footwear	x	x	x	x
169 Miscellaneous wood products	x	x	x	x

Source: Report of the 1985 Japan Industrial Survey (Establishment more than 30 persons)

Table 4-4 Daily Water Use Volume per rai by Types of Industries - 2
(calculated from the Japanese factories)

	Daily use per rai		Recycled water / Total volume (%)	Building area/ Land area (%)
	Total volume (m ³)	Daily supplied (m ³)		
17 Furniture and fixtures	4.8	4.5	6.3	32.7
171 Furniture	4.6	4.2	7.3	32.2
172 Furniture for religious purposes	6.0	6.0	0.0	37.2
173 Sliding doors and screens	4.7	4.7	0.0	37.4
179 Miscellaneous furniture and fixtures	8.2	8.1	1.6	36.4
18 Pulp paper and paper products	455.6	264.9	41.8	26.3
181 Pulp	427.8	314.0	28.5	10.1
182 Paper	721.5	405.0	43.8	20.6
183 Coated and glazed paper	76.9	64.5	16.1	28.6
184 Paper products	5.1	5.1	1.2	38.2
185 Paper containers	9.3	9.0	2.6	42.0
189 Other paper and paper worked products	209.2	152.1	27.2	34.9
19 Publishing printing and allies industries	39.2	21.4	44.6	44.2
191 Newspaper industry	243.5	58.0	76.0	48.6
192 Publishing industry	20.7	17.4	17.6	50.3
193 Printing except mimeograph printing	25.1	18.9	24.2	42.9
194 Plate making for printing	37.3	37.3	0.0	47.7
195 Book-binding and printed matters	6.5	6.5	0.1	49.9
199 Service industries related to printing trade	x	x	x	x
20 Chemical and allied products	436.0	86.4	80.1	15.6
201 Chemical fertilizers	275.1	100.7	63.3	22.5
202 Industrial inorganic chemicals	235.8	76.6	67.5	14.6
203 Industrial organic chemicals	681.1	86.5	87.3	12.0
204 Chemical fibres	466.2	210.8	54.7	23.6
205 Soaps detergents, paints, etc.	117.5	29.1	75.2	22.9
206 Drugs and medicines	160.8	50.6	68.5	16.3
209 Miscellaneous chemical and allied products	130.0	50.0	61.5	18.3
21 Petroleum and coal products	159.4	22.0	86.2	2.7
211 Petroleum refining	167.9	21.8	87.0	2.1
212 Lubricating oils and greases	13.8	7.7	43.7	20.2
213 Coke	107.0	29.3	72.6	4.5
214 Briquettes and briquette balls	4.5	4.5	0.0	51.8
215 Paving materials	32.6	31.9	2.2	21.1
219 Miscellaneous petroleum and coal products	66.3	6.5	90.1	7.2
22 Plastic products not elsewhere classified	83.9	33.7	59.8	30.4
221 Plastic plates, bars, pipes, tubes, etc.	157.9	41.4	73.7	31.3
222 Plastic films, etc.	95.7	42.8	55.3	28.3
223 Industrial plastic products	57.6	25.8	55.2	31.8
224 Foamed and reinforced plastic products	35.3	26.5	24.7	30.1
225 Compounding plastic materials	117.9	31.6	73.1	24.8
229 Miscellaneous plastic products	67.1	29.5	55.9	33.0

Source: Report of the 1985 Japan Industrial Survey (Establishment more than 30 persons)

Table 4-5 Daily Water Use Volume per rai by Types of Industries - 3
(calculated from the Japanese factories)

	Daily use per rai		Recycled water /	Building area /
	Total volume (m ³)	Daily supplied (m ³)	Total volume (%)	Land area (%)
23 Rubber products	110.5	29.3	73.4	36.4
231 Tyres and inner tubes	149.0	31.6	78.7	38.3
232 Rubber and plastic footwear	26.7	24.8	7.3	38.3
233 Industrial rubber products	104.4	27.2	73.8	35.7
239 Miscellaneous rubber products	62.5	32.7	47.5	29.8
24 Leather tanning and products and fur skins	25.3	23.8	5.1	32.7
241 Leather tanning and finishing	65.2	63.7	2.2	40.2
242 Mechanical leather products	x	x	x	x
243 Boot and shoe cut stock and findings	5.8	5.8	0.0	34.8
244 Leather footwear	10.1	8.0	20.6	29.8
245 Leather gloves and mittens	1.6	1.6	0.0	36.3
246 Luggage	4.0	3.7	9.5	23.1
247 Handbags and small leather goods	5.4	5.4	0.0	28.9
248 Fur skins	51.5	51.5	0.0	45.5
249 Miscellaneous leather products	x	x	x	x
25 Ceramic stone and clay products	49.7	14.2	71.4	19.4
251 Glass and its products	167.6	32.9	80.3	32.4
252 Cement and its products	42.0	11.0	73.8	12.7
253 Structural clay products	3.1	3.0	7.2	30.1
254 Pottery and related products	13.4	9.2	31.0	39.3
255 Clay refractories	36.2	12.8	64.7	29.9
256 Carbon and graphite products	35.9	16.5	53.9	20.2
257 Abrasive products	40.1	17.0	57.6	15.2
258 Aggregate and stone products	28.6	11.6	59.4	9.4
259 Other ceramic stone and clay products	41.5	20.0	51.8	22.3
26 Iron and steel	331.8	34.0	89.7	21.1
261 Iron industries with blast furnaces	405.0	37.5	90.7	16.7
262 Iron smelting without blast furnaces	170.0	48.5	71.4	12.1
263 Steel with rolling facilities	475.2	38.0	92.0	25.5
264 Steel materials and rolling mills	112.6	26.2	76.7	33.3
265 Coated steel	80.3	31.4	60.8	38.6
266 Steel forgings and casting	66.6	16.5	75.2	27.8
267 Iron castings	46.9	16.3	65.1	32.7
269 Miscellaneous iron and steel	14.8	4.8	67.6	32.8

Source: Report of the 1985 Japan Industrial Survey (Establishment more than 30 persons)

Table 4-6 Daily Water Use Volume per rai by Types of Industries - 4
(calculated from the Japanese factories)

	Daily use per rai		Recycled water / Total volume (%)	Building area / Land area (%)
	Total volume (m ³)	Daily supplied (m ³)		
27 Non-ferrous metals and products	110.1	32.7	70.3	22.0
271 Primary non-ferrous metals smelting	86.5	39.2	54.6	12.4
272 Secondary non-ferrous metals smelting	99.3	20.0	79.8	20.1
273 Non-ferrous metals rolling mills	174.9	43.3	75.2	30.8
274 Non-ferrous foundries	35.3	13.9	60.2	31.5
275 Electric wire and cable	85.1	19.3	77.3	31.7
279 Miscellaneous non-ferrous metal products	215.2	36.4	83.0	17.3
28 Fabricated metal products	27.5	14.1	48.8	33.7
281 Tin cans and other plated sheet products	12.7	12.4	3.2	46.8
282 Tableware, cutlery hand tools, etc.	12.4	9.8	20.6	33.1
283 Heating apparatus and plumbing supplies	12.5	9.3	25.0	33.6
284 Fabricated metal products	29.1	11.6	59.9	31.5
285 Stamped and pressed products	32.7	16.3	50.2	36.6
286 Powder metallurgy, plating and heat treating	58.5	36.2	37.8	36.9
287 Fabricated wire products	18.2	17.7	2.6	39.9
288 Bolts, nuts, rivets screws and wood screws	19.1	14.7	23.1	40.3
289 Miscellaneous fabricated metal products	14.9	12.3	16.9	33.9
29 General machinery	23.2	8.6	62.6	31.2
291 Boilers, engines and turbines	59.2	15.4	74.0	32.2
292 Agricultural machinery and equipment	21.6	8.1	62.5	36.4
293 Construction and mining machine	16.6	6.7	59.9	27.2
294 Metal working machinery	20.9	8.5	58.9	32.0
295 Textile machinery	12.9	11.6	9.8	38.0
296 Special industry machinery	11.7	7.8	33.0	32.9
297 General industry machinery and equipment	18.5	5.4	70.3	29.5
298 Office equipment and household machines	26.3	9.9	62.1	31.2
299 Miscellaneous machinery and machine parts	24.3	11.6	52.2	32.7
30 Electrical machinery equipment and supplies	61.9	19.3	68.6	28.7
301 Electrical generator, etc.	20.2	9.4	53.5	30.6
302 Household electric appliances	45.3	23.7	47.4	35.5
303 Electric bulbs and lighting fixtures	37.9	13.0	65.5	31.7
304 Communication equipment and related products	24.0	10.7	54.9	28.9
305 Computer equipment and accessories	107.9	14.6	86.4	26.2
306 Electronic equipment	35.4	11.6	67.3	29.3
307 Electric measuring instruments	8.4	8.2	2.1	25.2
308 Various electronic parts	128.7	36.1	71.8	25.7
309 Other electrical machinery	60.5	23.5	61.0	25.9

Source: Report of the 1985 Japan Industrial Survey (Establishment more than 30 persons)

Table 4-7 Daily Water Use Volume per rai by Types of Industries - 5
(calculated from the Japanese factories)

	Daily use per rai		Recycled water / Total volume (%)	Building area/ Land area (%)
	Total volume (m ³)	Daily supplied (m ³)		
31 Transportation equipment	123.8	10.6	91.4	29.9
311 Motor vehicles, parts and accessories	170.7	12.7	92.5	32.9
312 Railroad equipment and parts	31.4	4.9	84.2	42.0
313 Bicycles and parts	16.8	13.6	19.6	40.0
314 Ship building and repair and marine engine	7.6	4.6	39.3	20.8
315 Aircraft and parts	15.4	7.5	51.2	18.8
319 Miscellaneous transportation equipment	9.4	5.3	43.4	32.1
32 Precision instruments and machinery	28.1	17.4	37.7	28.1
321 Measuring instruments, etc.	25.4	11.0	56.4	33.2
322 Surveying instruments	13.4	13.4	0.0	21.7
323 Medical instruments and apparatus	50.7	28.5	43.5	27.6
324 Physical and chemical instruments	2.7	2.7	0.0	32.8
325 Optical instruments and lenses	19.6	16.1	17.7	25.4
326 Ophthalmic goods including frames	40.5	26.9	33.8	29.4
327 Watches, clocks and parts	26.1	16.7	35.7	27.4
33 Ordnance	1.0	1.0	0.4	2.4
34 Miscellaneous manufacturing industries	28.4	12.0	57.4	30.1
341 Precious metal products	17.2	17.2	0.0	30.2
342 Musical instruments and phonograph records	56.8	24.7	56.5	37.7
343 Toys and sporting goods	8.4	7.9	6.6	28.4
344 Pens, pencils and stationery	18.9	11.3	40.3	29.5
345 Costume jewellery, etc.	17.7	12.6	28.9	33.8
346 Lacquer ware	3.4	3.4	0.4	31.9
348 Other manufacturing 1	13.1	10.2	21.7	27.9
349 Other manufacturing 2	45.6	10.2	77.3	27.3

Source: Report of the 1985 Japan Industrial Survey (Establishment more than 30 persons)

As for the worker's housing plan, the investors are to have a housing plan for employees in accordance with their residential situation and wages. It is possible and desirable for the investors to utilize Laem Chabang's housing project.

2) Targeting-criteria

As for the targeting-criteria, detailed design means not to establish conditions to be met, but to establish to prioritize selection of investors capable of entering Laem Chabang's industrial estate.

a. Industrial criteria

i. Contribution to forming industrial complexes

This has to have close relation to the output of the third chapter's study, thereby giving high priority to investors who plan to locate the following industries:

Basic material industries	- Iron and steel rolling mills
	- Nonferrous metal rolling mills

Assembly industries	- Copy machine
	- Personal computer and allied equipment such as disk drive, printer, etc.
	- Telecommunication equipment such as facsimile etc.
	- Agricultural machinery and other machinery

Parts and component	- Mechanical parts for automobile, etc. and electronic parts - Supporting industries such as high precision machining, mold and die, heat treatment, and electroplating - Engineering plastic product
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Resource-processing	- Agro-based, sea food processing, etc.
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Export industries (with a high export ratio)

All of these industries are not given the same ranking of priority and evaluation. The highest and first ranking is distributed to agro-based (resource-processing) and mold/die industries, the second for machinery assembly and parts, etc. and the third for other industries, taking into account Thailand's industrial policies, desirable pattern of industrial development, and demands of industrial location.

ii. Contribution to forming export industry

The highest ranking is given to investors who plan to export over 61% of their products, considering Thailand's export promotion policy. (Although it designates industries with export ratios of over 80% as "Export Industries", this study sets the highest ranking lower than its standard.)

iii. Contribution to creating a new leading industry

This item functions to give some additional ranking points to the above mentioned industries, where their factory does not exist or only a few exist in

Thailand. The points are distributed according to the number of existing factories categorized into the above mentioned industries.

b. Economic criteria

i. Investment scale

The average ranking is set based on the averaged investment scale derived from the Industrial Survey of Thailand.

According to the data in 1984, the averaged book value of building, equipment and machinery per factory is approximately 4.5 million baht in the manufacturing sector total. Supposing the depreciation rate as 50%, and considering price inflation to some extent, the initial amount of the investment can be estimated to be approximately 100 million baht, which is regarded as an average ranking.

ii. Growth ability

The average ranking is the annual growth rate of 4%, which was established based on the targeted rate (approximately 5%) by the Sixth Plan.

iii. Productivity (Value added ratio to gross output)

The average ranking is set based on the average of manufacturing sector total derived from the Industrial Survey of Thailand as well as the investment scale.

Average value added, excluding wages ratio to gross output, amounted to 27.8% in 1984. The reason that wages are subtracted from value added is to make an evaluation suitable for the purpose of this item, by

indicating the preparation of equipment and machinery, etc. in the manufacturing sector. (See Table 4-8 to 4-12)

c. Technological criteria

i. Innovation

It is difficult to set a quantitative standard on this item, and then the highest ranking is given to investors who plan to introduce the most advanced technology (equipment).

ii. Technological effect

The training of engineers is one of the most important issues for the development of Thailand's industrial technology, and then higher ranking should be given to companies with a high employment ratio of engineers and skilled labor to the total. The highest ranking is over 10% of the engineers and skilled labor ratio, considering the actual situations in Thailand.

d. Regional criteria

i. Local content

This item is also important in forming industrial complexes. The highest ranking is given where over 75% of raw materials is prepared locally within Thailand. This standard is set, considering Thailand's industrial policies executed by the MOI and BOI.

ii. Regional employment

This item attaches greater importance to employing people who live around Laem Chabang. The highest ranking is given to investors who plan to employ local people for more than 95% of the total work force.

iii. Relocation out of Bangkok

The highest ranking is given to investors who plan to build new factories in Laem Chabang, while scrapping existing ones located in the Bangkok area.

According to the function of these targeting-criteria, their item standards have been designed in such a way that there are some differences among investors during evaluation. This study has adopted the "Point-marking evaluation method".

This method distributes points among the standard items with different characters through weighting and ranking them, and thereby produces total points to prioritize investors.

The weight total was fixed at 10 points, which were distributed among the items, considering, first, their comparative importances from the viewpoint of the effect of industrial location, and second, their mutual balance, while not giving large weight to the items that were not covered by the application form and dependent on the objective data such as statistics.

The highest rank was fixed at 10 points, which were divided into five ranks. Thus, the highest evaluation is 100 points (weight total: 10 points, highest rank: 10 points) in this study.

Table 4-13 is the evaluation sheet for targeting-criteria. The content of standard items was established specifically, considering their characters and purpose.

The content of average ranking points (6 points in evaluation base points) was set according to the characters of items, but as for the quantitative items, it

Table 4-8 Two types of Value Added Ratio in Manufacturing Industries in Thailand 1984 - 1

[Classification in four figures of code NO.]

[Remark: Value added B = Value added - Wages and salaries]

Code	Types of Industry	Value added ratio to Value of gross output	
		A (%)	B (%)
	Total	35.6	27.8
~3121	Food products	26.5	20.8
~3142	Beverage, feed and tobacco products	59.7	53.2
321	Textile and its products	31.4	18.6
322	Apparel and other textile finished products	30.3	12.6
323	Leather tanning and its products	78.4	76.1
331	Lumber and wood products	31.7	19.0
332	Wooden furniture and fixtures	45.6	30.6
341	Pulp, paper and paper products	38.4	29.8
342	Publishing, printing and allied industries	49.6	31.3
351~2	Chemicals and allied products	31.9	22.4
353	Petroleum refineries	7.1	5.8
355	Rubber products	33.9	24.7
356	Plastic products	28.8	24.5
361~9	Ceramic, stone and clay products	47.7	36.9
371	Iron and steel	35.2	26.2
372	Non-ferrous metals and products	33.5	20.6
381	Fabricated metal products	27.1	19.1
382	General machinery	28.7	19.1
383	Electrical machinery, equipment and supplies	29.6	23.7
384	Transportation equipment	39.7	31.0
385	Precision instruments and machinery	74.7	29.6
390	Miscellaneous manufacturing industries	34.2	21.9

Source: Report of the 1985 Industrial Survey (Establishment more than 20 persons)

Table 4-9 Two types of Value Added Ratio in Manufacturing Industries in Thailand 1984 - 2

[Classification in four figures of code NO.]

[Remark: Value added B = Value added - Wages and salaries]

Code	Types of industry	Value added ratio to Value of gross output	
		A (%)	B (%)
TOTAL		35.6	27.8
31111	Slaughtering	20.6	12.1
31119	Other meat products	81.6	76.8
31121	Dairies	30.8	24.3
31122	Milk factories	32.8	26.7
31123	Ice-cream	57.1	40.7
31131	Canning of fruit and vegetables	50.7	35.8
31132	Soy sauce and soy curds	D	D
31139	Fruit and vegetables products	43.9	34.5
31141	Canning of fish	22.0	15.6
31142	Fish sauce	47.7	39.3
31149	Other sea foods products	20.9	11.8
31151	Oils and fats	16.2	13.1
31161	Rice mills	22.8	18.0
31162	Drying of maize	D	D
31164	Tapioca mills	15.1	12.7
31171	Bakeries	48.0	29.3
31172	Biscuits	31.1	27.4
31173	Noodles and similar products	29.9	12.8
31181	Sugar factories	32.9	26.7
31190	Confectionery	20.7	14.1
31212	Manufactured ice	27.4	18.0
31219	Other food products	44.5	37.4
31220	Prepared animal feeds	20.0	17.9
31310	Distilling, rectifying and blending spirits	79.4	72.3
31340	Soft drinks and carbonated waters	75.2	62.4
31411	Tobacco curing	42.9	20.6
31420	Tobacco products	78.6	72.3

Source: Report of the 1985 Industrial Survey (Establishment more than 20 persons)

Table 4-10 Two types of Value Added Ratio in Manufacturing Industries in Thailand 1984 - 3

[Classification in four figures of code NO.]

[Remark: Value added B = Value added - Wages and salaries]

Code	Types of industry	Value added ratio to Value of gross output	
		A (%)	B (%)
32111	Silk reeling	D	D
32112	Cotton ginning	3.5	2.1
32113	Spinning of cotton and man-made fibres	33.0	23.9
32114	Silk weaving	52.4	32.3
32115	Weaving of cotton and man-made fibres	31.2	18.6
32116	Jute mills	38.0	20.8
32117	Textile printing	36.2	21.9
32118	Textile finishing	15.1	7.3
32119	Otherspinning and weaving	39.2	26.3
32120	Made-up textile goods	40.1	18.1
32130	Knitting mills	28.4	14.0
32150	Cordage, rope and twine	38.9	22.7
32201	Men's and boys' clothes	27.6	8.7
32202	Women's, girls' and infants clothes	43.1	26.7
32203	Headgear	52.6	27.5
32209	Other wearing apparel and accessories	29.0	11.1
32310	Tanneries, leather finishing, fur dressing	83.6	82.3
32330	Leather and leather substitutes products	37.3	26.6
33111	Sawmills and planing mills	30.3	18.9
33112	Veneer, plywood and veneered panel	32.5	18.5
33120	Wooden and cane containers, etc.	70.1	52.9
33201	Wood furniture, fixture and flooring	45.3	31.1
33202	Rattan furniture	51.3	21.6
34111	Pulp, paper and paperboard by machine	37.4	31.0
34120	Containers and boxes of paper and paperboard	33.7	15.3
34190	Pulp, paper and paperboard articles	42.7	33.7
34201	Printing and publishing of newspaper	58.6	31.2
34204	Printing other printed matters than newspapers	61.3	41.2
34207	Printing	32.4	21.2

Source: Report of the 1985 Industrial Survey (Establishment more than 20 persons)

Table 4-11 Two types of Value Added Ratio in Manufacturing Industries in Thailand 1984 - 4

[Classification in four figures of code NO.]

[Remark: Value added B = Value added - Wages and salaries]

Code	Types of industry	Value added ratio to Value of gross output	
		A (%)	B (%)
35111	Basic industrial chemicals	29.8	23.1
35112	Charcoal	72.3	49.8
35120	Fertilizers and pesticides	25.4	18.8
35130	Synthetic resins, plastic materials and artificial fibres	28.5	25.8
35210	Paints, varnishes and lacquers	42.2	34.7
35220	Drugs and medicine	34.6	16.4
35231	Soap and cleaning preparation	38.3	32.4
35292	Glues	29.7	24.0
35294	Matches	42.3	24.8
35299	Other chemical products	27.7	18.4
35300	Petroleum refineries	7.1	5.8
35510	Tyre and tube industries	39.8	29.1
35591	Rubber sheets and block rubber	13.5	10.9
35592	Rubber footwear	39.1	19.5
35599	Other rubber products	28.0	23.2
35601	Plastic containers	20.2	12.1
35609	Other plastic products	28.9	24.6
36100	Pottery	52.4	24.4
36200	Glass and glass products	39.2	21.1
36910	Structural clay products	65.1	23.7
36921	Cement	54.5	46.2
36922	Lime and plaster	70.1	51.9
36991	Concrete products	33.1	22.8
36992	Asbestos-cement products	35.7	22.3
36999	Other non-metallic mineral products	56.1	37.4
37110	Iron and steel works and rolling mills	34.9	26.3
37120	Iron and steel foundries	38.6	25.8
37200	Non-ferrous metal basic industries	33.5	20.6

Source: Report of the 1985 Industrial Survey (Establishment more than 20 persons)

Table 4-12 Two types of Value Added Ratio in Manufacturing Industries in Thailand 1984 - 5

[Classification in four figures of code NO.]

[Remark: Value added B = Value added - Wages and salaries]

Code	Types of industry	Value added ratio to Value of gross output	
		A (%)	B (%)
38110	Cutlery, hand tools and general hardware	47.4	30.7
38120	Furniture and fixture primarily of metal	44.5	35.2
38130	Structural metal products	28.2	18.0
38191	Metal cans and shipping containers	28.8	20.1
38192	Wire and wire products	16.4	11.1
38198	Coating, engraving and allied services	14.0	10.8
38199	Other fabricated metal products	35.1	23.6
38220	Agricultural machinery and equipment	41.9	23.6
38240	Special industrial machinery and equipment	50.0	35.4
38292	Airconditioning machines	24.5	16.4
38298	Repair shops	54.4	38.6
38299	Other machinery except electrical	36.4	13.5
38310	Electrical industrial machinery and apparatus	42.3	36.3
38320	Radio, television and communication equipment and apparatus	30.7	20.8
38330	Electrical appliances and housewares	15.6	12.1
38392	Electric accumulators and batteries	41.9	29.4
38393	Electrical lamps	51.4	33.1
38399	Other electrical apparatus and supplies	30.2	25.1
38411	Building and repairing of steel ships	49.1	30.5
38412	Building and repairing of wooden boats	44.4	14.7
38419	Other shipbuilding and repairing	26.6	12.5
38431	Assembly of automobiles	50.9	35.7
38432	Motor vehicle bodies	21.5	10.5
38439	Other motor vehicle industries	34.9	28.0
38440	Motorcycles, tricycles and bicycles	33.2	29.5
38500	Precision instruments and machinery	74.7	29.6
39011	Cutting and polishing of gem stones	11.8	5.6
39012	Jewellery	10.5	6.1
39013	Silverware and nielloware	30.1	7.1
39030	Sporting and athletic goods	24.6	16.7
39090	Industries not elsewhere classified	51.5	34.9

Source: Report of the 1985 Industrial Survey (Establishment more than 20 persons)

Table 4-13 Evaluation Sheet of the Targeting-Criteria

Division	Criteria	Weight for Evaluation	Evaluation Base Point				
			10	8	6	4	2
Industrial	1. Contribution to formation of industrial complex ■ Standard Item Category of Industry	1.0	Agro-based Mold/die, etc.	Assembly Parts Component Basic raw material	Others	-	-
	2. Export industry development ■ Standard Item Ratio: Export/Gross output	0.5	61%~	41~60%	21~40%	1~20%	0%
	2. Creation of new leading industry ■ Standard Item Number of existing factories in the same type of designated industry	1.0	0~3	4~6	7~12	13~20	20~
Economic	1. Investment scale ■ Standard Items Amount of investment for building, equipment and machinery	1.0	501~ Mill. baht	201~500 Mill. baht	101~200 Mill. baht	51~100 Mill. baht	~50 Mill. baht
	2. Growth ability ■ Standard Item Production growth rate/year in the long range	0.5	7%~	5~6%	4%	3%	~2%
	3. Productivity ■ Standard Item Ratio: Value added excluding wages / Gross output	0.5	41%~	31~40%	26~30%	21~26%	~20%
Technologica	1. Innovation ■ Standard Item Level of technology	1.0	Most advanced	Moderate advanced	Other		
	2. Technological effect ■ Standard Item Ratio: Engineer and skilled labor/Total employment	1.5	10%~	7~10%	5~6%	3~4%	~2%
Regional	1. Local content ■ Standard Item Ratio: Locally originated raw material/Total input	1.5	75%~	61~74%	41~60%	21~40%	~20%
	2. Regional employment ■ Standard Item Ratio: Locally employed persons/Total employment	0.5	95%~	91~94%	81~90%	71~80%	~60%
	3. Relocation out of Bangkok ■ Standard Item Location pattern relating to existing factory in Bangkok Area	1.0	Scrap & build	Expansion	Other		

was fixed based on averaged data derived from the Industrial Survey of Thailand, and other information related to export and investment promotion policies within the country.

The lowest number of ranking points is, in general, two, but may be six points in some criteria. This is in these cases because 6 points are equal to the average of industries total and if the lowest ranking is 2 points many of the average investors would face disadvantages during the evaluation.

Table 4-14 shows an example of the evaluation, so that the targeting-criteria can be easily understood. Supposing two companies' names as "A" and "B", the total evaluation points are calculated by multiplication of the evaluation points of each standard item by the corresponding weight. "A" company which assembles machinery scores a total of 69 points. "B" company processing agro-based products scores a total of 76 points.

(2) FUNCTION OF THE CRITERIA

It seems to be more practical and smooth to provide the Criteria on the application form to the IEAT, therefore allowing them to cover the items as thoroughly as possible.

Table 4-15 shows the items covered by the IEAT's and other representative application forms, such as that of the DIW (Department of Industrial Works), Tukuba and Kasima industrial estate in Ibaraki Prefecture of Japan. IEAT's form covers many items related to the Criteria, but needs the addition of some other items, such as building design, protective methods for the environment, a housing plan and employment by regional origin.

There are some items which remain difficult to cover using the application form; therefore they should be judged independently, based on industrial and economic indicators, etc., as shown in Table 4-16.

In addition, the following will be taken into consideration as functions of the Criteria;

1. To use them flexibly; especially the item of water consumption in the screening-criteria, consideration of progress in the industrial location and the remaining water supply volume
2. To use targeting-criteria to cope with changes in actual socio-economic situation and the tempo of industrial location, including change of weight among criteria and item standards
3. To prepare special incentives for investors prioritized by the targeting-criteria evaluation
4. To select desirable investors taking into account another factors, because the Criteria items cannot cover the all situations related to selecting them

Table 4-14 Examples of Evaluation by Targeting Criteria

(1) Example of Company A

Standard Items for Criteria	I : Evaluation Point		II Weight for Evalu- ation	I × II Points Marked
	"A" company's factory operation plan	Point		
I-1-1 Category of industry	Machinery assembly	8	1.0	8.0
I-1-2 Export-ratio	75%	10	0.5	5.0
I-2 Number of existing factories	15	4	1.0	4.0
E-1 Amount of investment	400 Mill. Baht	8	1.0	8.0
E-2 Growth ability (rate)	5%	8	0.5	4.0
E-3 Productivity	28.2%	6	0.5	3.0
T-1 Innovation=Level of technology	Other	6	1.0	6.0
T-2 Engineer/skilled labor ratio	3.5%	4	1.5	6.0
R-1 Local content	65%	8	1.5	12.0
R-2 Local employment ratio	95%	10	0.5	5.0
R-3 Location pattern	Expansion	8	1.0	8.0
TOTAL POINT				69.0

(2) Example of company B

Standard Items for Criteria	I : Evaluation Point		II Weight for Evalu- ation	I × II Points Marked
	"B" company's factory operation plan	Point		
I-1-1 Category of industry	Agro-based	10	1.0	10.0
I-1-2 Export-ratio	40%	6	0.5	3.0
I-2 Number of existing factories	30	2	1.0	2.0
E-1 Amount of investment	150 Mill. Baht	6	1.0	6.0
E-2 Growth ability (rate)	7%	10	0.5	5.0
E-3 Productivity	38.5%	8	0.5	4.0
T-1 Innovation=Level of technology	Moderate advanced	8	1.0	8.0
T-2 Engineer/skilled labor ratio	6%	6	1.5	9.0
R-1 Local content	80%	10	1.5	15.0
R-2 Local employment ratio	93%	8	0.5	4.0
R-3 Location pattern	Scrap & build	10	1.0	10.0
TOTAL POINT				76.0

Table 4-15 Comparative List of Application Items

Application Items	Application to				Remarks
	IEAT	DIW	TUKUBA	KASIMA	
<u>1. Identification of applicant</u> 1-1 Name, address, type of applicant, etc. 1-2 Copies of relevant certification 1-3 Profiles of existing operations 1-4 Sales, profit and net income 1-5 Tax payment	■	■	■	■	1. IEAT Industrial Estate Authority of Thailand 2. DIW Department of Industrial Works (Ministry of Industry) 3. TUKUBA and KASIMA Industrial estates developed in Ibaraki Prefecture of Japan. 4. Symbol ■ It is distributed where the application form covers items listed on the left side.
<u>2. Land, building and machine installation</u> 2-1 Place, zone, and area 2-2 Pattern of site reservation 2-3 Land use plan 2-4 Building characteristics 2-5 Machine installation	■	■	■	■	
<u>3. Details of operation</u> 3-1 Type of business activities 3-2 Pattern of location 3-3 Reason of location 3-4 Construction and operation schedule 3-5 Production schedule 3-6 Local and export market 3-7 Working hours and days 3-8 Production process 3-9 Raw material consumption by origin 3-10 Local content ratio 3-11 Cargo by transport means	■	■	■	■	
<u>4. Manpower</u> 4-1 Total employment 4-2 Employment by job classification 4-3 Regional employment 4-4 Foreign personnel 4-5 Technology transfer and job training plans	■	■	■	■	
<u>5. Financial plan</u> 5-1 Details of registered capital 5-2 Loan or credit funds 5-3 Investment cost	■	■	■	■	
<u>6. Investment promotion status</u>	■				
<u>7. Utilities and other facilities</u> 7-1 Electricity 7-2 Telephone 7-3 Water supply 7-4 Waste-water treatment 7-5 Garbage disposal 7-6 Disposal of other waste 7-7 Protective measures for environment 7-8 Others	■	■	■	■	
<u>8. Request for bonded warehouse</u>	■				

Table 4-16 Mutual Relation between Items of the Criteria and IEAT's Application Form

Composition of Criteria			Items capable of being judged from IEAT's application form	Items judged by industrial and economic indicators, etc.
Division	Category	Criteria	<input checked="" type="checkbox"/> existing items <input type="checkbox"/> items to be added	
Screening	Operational	1. Beginning schedule of industrial operation	<input checked="" type="checkbox"/> Construction and operation schedule	
	Physical	1. Land use size	<input checked="" type="checkbox"/> Area required	
		2. Water consumption	<input checked="" type="checkbox"/> Water supply	
		3. Waste water volume and quality	<input checked="" type="checkbox"/> Waste-water treatment (waste-water density)	
	Environmental	1. Building design	<input type="checkbox"/> Building design	
		2. Environmental protection	<input checked="" type="checkbox"/> Garbage disposal <input type="checkbox"/> Protective method for environment	
	Social	1. Workers' living conditions	<input type="checkbox"/> Housing plan for the employee	
	Targeting	Industrial	1. Contribution to formation of industrial complexes and export industries	<input checked="" type="checkbox"/> Production items <input checked="" type="checkbox"/> Local and export market
2. Creation of new leading industry				Data of Industrial Survey, etc.
Economic		1. Investment scale	<input checked="" type="checkbox"/> Investment cost	
		2. Growth ability		Growth rate targeted by the Plan
		3. Productivity		Data of Industrial Survey
Technological		1. Innovation	<input checked="" type="checkbox"/> Production process	
		2. Technological effect	<input checked="" type="checkbox"/> Employment by job classification	
Regional		1. Local content	<input checked="" type="checkbox"/> Raw materials' consumption by origin <input checked="" type="checkbox"/> Local content ratio	
		2. Regional employment	<input type="checkbox"/> Employment by regional origin	
		3. Relocation out of Bangkok	<input checked="" type="checkbox"/> Reason of location	

5. INVESTMENT PROMOTION STRATEGIES AND INCENTIVES FOR THE LAEM CHABANG EPZ/GIE

5-1 INVESTMENT PROMOTION STRATEGIES FOR THE LAEM CHABANG EPZ/GIE

(1) PRESENT SITUATION OF PROMOTION BY IEAT

1) Outline

Generally, investment in industries is sensitive to business fluctuations. Therefore, investment may increase without particular promotion activities in good times. However, past experience shows that a noticeable number of enterprises await investments in bad times or even when they see any tendency of depression. Thus, it is very important not only to aggressively solicit promotion activities in bad times, but also to promote them in good times or at least to establish a system that enables the promotion activities to be performed. For example, 37 of all 50 states of the United States are establishing offices in Japan to invite investment of Japanese enterprises. They are also developing active invitation activities in Korea and Taiwan.

Currently, IEAT allocates almost no personnel or funds for the promotion of industrial estates. The allocation of resources is heavily skewed toward engineering. Although the importance of these functions is obvious, the neglect of sales promotion has often resulted in loss of benefit opportunities, i.e. the opportunities which exist but are not captured to its fullest extent under the present system of IEAT.

2) Current Organization

Fig. 5-1 shows the current organizational structure of the IEAT which has a strong emphasis toward the planning and the implementation. The section which is responsible for the

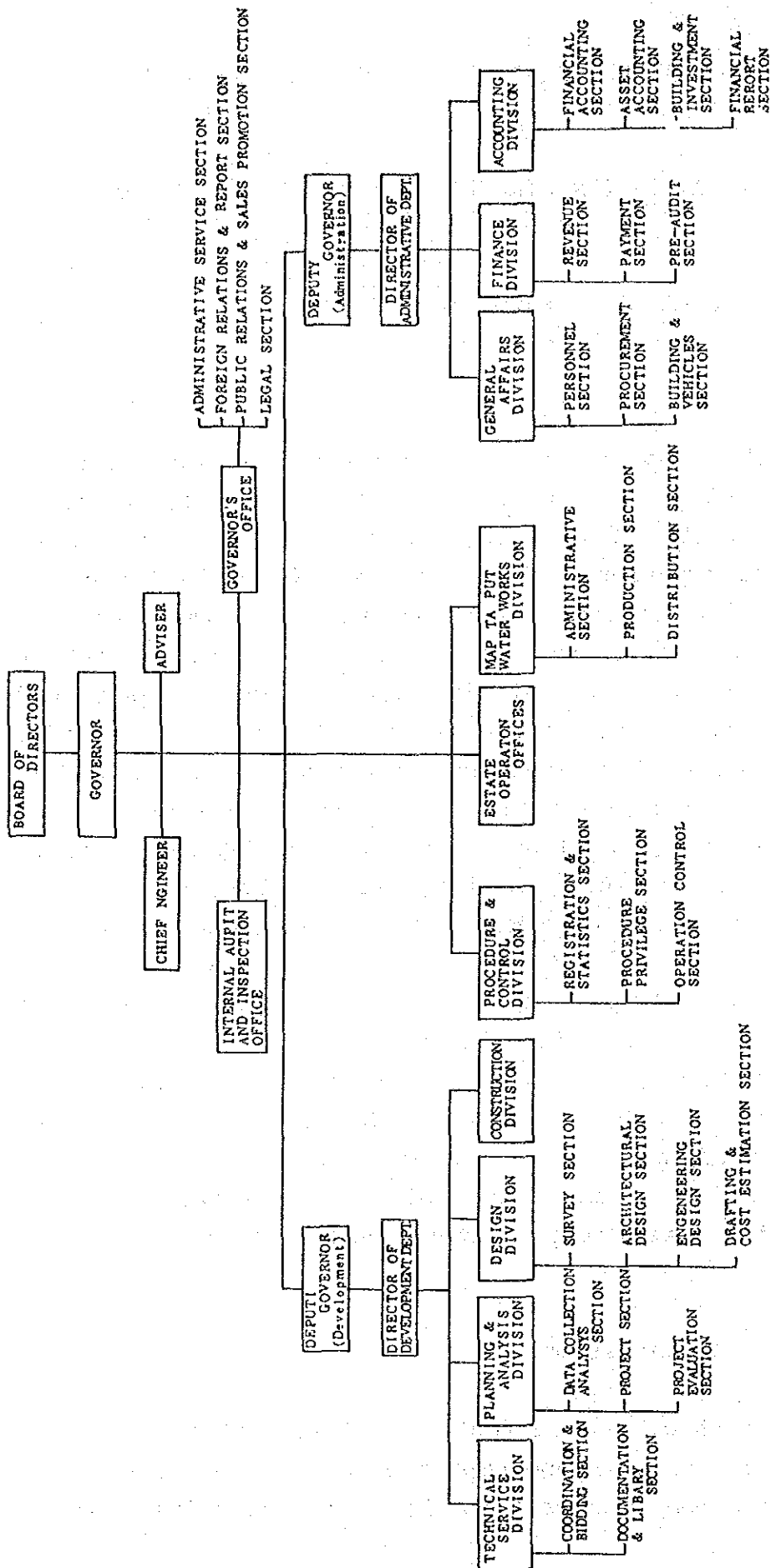


Fig. 5-1 Organization of IEAT

promotion and sales of the industrial estates established by the IEAT is "Public Relation & Sales Section" which is annexed to the governor. The section is in charge of three functions;

- 1) Public Relations
- 2) Sales
- 3) Production of Promotional Materials

The organization chart does not depict the section at the same level of authority with other divisions or does not give the same importance.

3) Personnel

The current number of the staff members in the IEAT totals 280, among which the Public Relation and Sales Section share only 10 staff members. Within the section for the promotion of the industrial estates, only one is in charge, excluding the section chief who has to oversee the other activities as well. Any product which is produced and sold in free market is required to go through three stages of planning & design, production, and marketing. If a producer is weak at any stage or fails to allocate a sufficient resource, it is bound to face difficulties in sales of a product. This also holds true with industrial estates development. Even if an estate is completed, no income can be generated without sales. Moreover, the interests incurred during the period between the completion and sale is an additional cost for a developer. The importance of selling the estate at the earliest date is more than obvious. The current ratio of marketing personnel to the whole organization, i.e. 1 : 272 is judged to be too low and is only the reflection of not realizing unseen costs of holding unutilized assets. Thus the first step for the improvement of the IEAT should start with reallocating human resources to attaining more efficient operations.

4) Budget for the IEAT

The IEAT budget consists of two parts:

- a. recurrent budget,
- b. development budget.

The first covers the activities of the headquarters and the operations of industrial estates, and the second covers the construction of industrial estates. The budgets are first evaluated by the sub-committee for budget then approved by the board of directors. The development budget requires further approval from the cabinet.

The amount of financial allocation to the marketing section is insufficient for effective promotion activities, just as the personnel allocation is not enough. Annual budget of approximately 1.75 million bahts which only shares 2.1% of the total budget in 1985 can only cover a few advertisements and publications a year (Table 5-1). The Table 5-2 shows the budget for the promotional activities by the IEAT. The total unutilized real asset for the IEAT is 260 million bahts as of September 1987. The interest rate for the finance of the investment in the IEAT is 7-8%. Thus the annual interest for the debt for the unutilized assets is 18 to 20 million bahts. It should be noted that once a plot is sold, the interest payment of such kind can be offset forever. In order to achieve such a prompt disposal of estates, the IEAT must invest more in promotion and marketing.

5) Promotional Activities

The public relations for the completed industrial estates dominate the activities of the PR & SALES DIV. of the IEAT. The major activities are ;

Table 5-1 Promotion Budget and Other Expenses

million Bahts

	1984	1985	1986	1987	1988
PROMOTION BUDGET (A)	0.328	0.514	0.919	1.409	1.755
IEAT BUDGET (B)	44.209	52.757	60.45	70.92	82.489
INTEREST PAYMENT (C)	5.43	19.472	47.518	50.641	70.404
(A) / (B)	0.7%	1.0%	1.5%	2.0%	2.1%
(A) / (C)	6.0%	2.6%	1.9%	2.8%	2.5%

Source: IEAT

Table 5-2 Budget for Promotion for Existing I.E.

	1984	1985	1986	1987	1988
- Head office	0.327	0.309	0.406	0.357	0.864
- Bang Chan I.E.	-	-	-	-	0.003
- Lad Kra Bang I.E.	0.001	-	0.001	0.003	0.002
- Bang Poo I.E.	-	-	-	-	0.013
- Lam Pun I.E.	-	0.083	0.485	0.384	0.059
- Bang Plee I.E.	-	-	-	-	0.002
- Songlila I.E.	-	-	-	-	-
- Samutsakorn I.E.	-	-	-	-	-
- Map Ta Phut Project	-	0.122	0.027	0.445	0.311
- Leam Chabang Project	-	-	-	0.220	0.501
Total	0.328	0.514	0.919	1.409	1.755

- a) Publications, e.g. brochure and investor guide booklet for the industrial estates,
- b) Video production for audio-visual presentation for the potential investors,
- c) Advertisement through newspapers in Thai and English,
- d) Seminar for potential investors within Thailand.

What is lacking in these activities is a direct marketing approach to the potential investors. The activities a) and b) are only materials and the appeals to potential investors, and c) and d) are indirect and not as strong as direct contact sales. There is a lack of approaches to foreign investors, although they constitute the major group of the investors. There are no activities to establish marketing channels. Interviews with some companies which recently decided to invest in Thailand revealed that many of the companies were not aware of the special incentives attached to the Northern Industrial Estate. This shows the lack of effort on the IEAT to provide information to potential investors.

Since the personal and direct information based upon mutual trust has the most decisive impact upon the investment decision-making, the establishing of the market channels should be a central objective for the IEAT. However, the manufacturing sector consists of numerous sub-sectors and further more individual companies. Therefore random approaches to any company produce little results. It is vital to study sub-sectors to determine the likelihood of investment and what sub-sector would benefit the most in terms of the national economy as a whole.

For expanding marketing channels, it is efficient to establish outside agents, whether formally contracted or personally connected. Formal agents may prove to be more economical for overseas promotion and informal agents may be more effective for domestic promotion in Thailand.

(2) PROMOTION STRATEGIES AND PROGRAMS

1) General Policy

The promotion of industrial estates is not any different from that of ordinary products. The strategies, procedures, and organization for the promotion should be similar in nature. It requires aggressive salesmanship and the development of marketing channels. For efficient and successful marketing of industrial estates, the promotional activities should be assessed from cost effectiveness and the organization must be structured to maintain the vitality in sales activities for industrial estates.

On the other hand, there is a peculiarity arising from the nature of industrial estates. Once developed, industrial estates have a limit on the number of lots to be sold, according to the size of a particular industrial estate. Financial performance is all the better if the given amount of factory lots can be contracted out immediately. Therefore, the first priority for promoting industrial estates should be given to "How fast can they be sold?". An efficient approach to prepare an effective promotion program is first to classify the targets of promotion into groups, to determine promotional activities for each group on the basis of cost-effectiveness and finally to schedule them.

2) Target Grouping for Promotion

Depending on who the promotional activities are aimed at, the method and means of conducting promotional activities should differ to meet the needs of each target group. There are roughly three target groups:

- a) Investors
- b) Intermediate Institutions
- c) Journalists

Obviously, the investors are the primary concern for investment promotion for any industrial estate. The problem is how to identify the investors who are ubiquitous throughout the world. In order to reach investors effectively, it is often more efficient to go through intermediate channels. Intermediate institutions refer to consultants, chambers of commerce, commercial attaches from embassies, bankers, lawyers, etc. These people who deal directly or indirectly with investments also require information on industrial estates. Association with journalists can provide access to mass-media, thereby reaching a large number of investors at one time.

3) Promotional Activities

Promotional activities are listed below according to the target groups as follows ;

Investors

- Marketing surveys
- Data bases
- Promotional tours
- Seminars
- Direct visits
- Sector surveys

Intermediate institutions

- Study tours
- Seminars
- Individual meetings

Journalists

- Journalist tours
- News releases
- Advertisements

Common Activities

- News Letters
- Pamphlets
- Investors guides
- Video/slides
- Events

Market Survey/Data Bases

In conjunction with this study, a survey on potential investors was conducted in Japan and Thailand. The survey covered most of major companies in both countries, totaling 10,000 in Japan and 1,000 in Thailand. It would be more desirable if the coverage could be extended to other major investor countries such as USA and Taiwan in a simpler format. These replies should be stored in a data base which has been constructed as part of this study to be used as potential client list for contacting for seminars or direct visits.

A crucial task in maintaining a data base is how to keep up the latest information for the entries. New information should be fed into the data base constantly so that the user can appreciate the data base. It may be an idea to evaluate the data collection as an achievement of promotion officers in order to keep the system workable.

News letters

After identifying potential investors, the emphasis will shift to how to keep the investors' attention till the completion of the Laem Chabang I.E. One way to achieve the purpose is to circulate a news letter regularly. The news letter should report the progress of the construction, profiles of companies which have invested in the Laem Chabang I.E., etc.

Promotion tours

It is essential for any investors to visit the site before they reach any decision on investment. Therefore, the IEAT can systematically provide tours with a guide and information for investors to visit relevant spots such as the industrial estate, housing, urban facilities, port, and utilities. The tour also provides invaluable opportunities to get acquainted with potential investors.

Seminars

Seminars are conducted as the final presentation of our current study on the Laem Chabang I.E. They are an effective tool to make accesses to potential investors and intermediaries in a short period of time. They should be held on some relevant occasions in accordance with the progress of the Laem Chabang I.E. They can be also tailored to focus on the same group of people such as bankers or investors from a certain country.

Sector studies

Based upon the results of this study on target industries, the effort to maintain the latest information on investment needs should be continued. As it is dealt in details in Sec. 5-3, the sector surveys should be undertaken to identify the investment needs by sectors as well as sectoral priorities in respect of national development goals. The studies should be ingrained as a part of on-going promotion activities, maintaining close contact with the industries. The outcomes of the studies should serve as invaluable guidance for the promotion.

Direct Visits

After all any promotion would boil down to personal direct contacts with could-be clients. This type of

activities is the most crucial of all the promotion activities. The other activities are in a sense tools to supplement this direct sale contact to increase its efficiency. The purchase or lease contract of industrial plots belongs to decision-making of a long term prospect. Investors make such a decision after thorough studies and contemplation. To win the confidence of the potential investor is the first key in this business and it takes time and effort to attain such a relationship with them.

Individual Meetings with Intermediate Institutions

Intermediate institutions can broaden the marketing channels with relatively small costs. Since individual contacts with prospective investors consume time and man power, the number of visits in a given period is very much limited although its impact is the largest. Hence, establishing intermediaries has much more widespread effects in reaching potential investors. These people who serve as intermediaries need the information as part of their duties, thus are willing to absorb the information on the Laem Chabang I.E.

Journalist Tours

Mass media is a powerful communication in modern days to reach a number of individuals immediately at once. It is possible to organize special tours to invite foreign journalists to Thailand to visit the Laem Chabang I.E., free of expense but to ask them to write a special feature on the Laem Chabang I.E. in exchange. This would save much advertisement cost, and would also have more impact on readers.

News Release

The news on the progress of the Laem Chabang I.E. bring a similar impact to a journalist tour and does not incur any apparent cost at all. The events and ceremonies related to the Laem Chabang I.E. should be assessed in light of news value and must be effectively utilized to maintain the public attention to the project. Some events can be arranged to bring attention of the public.

Advertisement

In contrast to the above-mentioned public relation tactics, advertising is the use of mass media with cost. It has an advantage of sending information in any manner that the IEAT wishes. However, it costs much more. The costs of advertisement in newspapers for the size of 1/6 of a full page both in Japan and Thailand are compared below.

CIRCULATION	JAPAN	THAILAND
MORE THAN ONE MILLION	US\$ 7000	N.A.
LESS THAN ONE MILLION	US\$ 1800	US\$ 300

It clearly depicts much higher costs in Japan. Empirically, the response to advertisements on industrial estates is not large unless it is combined well with other means of public relations.

Pamphlet/Investors Guide/Video

As a part of this study, pamphlets have already been created in three language versions, Thai, English, and Japanese, to be used as reference in answering the questionnaires. Investor guide video and slides have not been made yet. Investor guides should carry information on the Laem Chabang I.E., its surrounding area, labor situation, utilities, etc. to suffice to conduct a feasibility study on investment. Such an investor guide is necessary before starting to accept applications for the Laem Chabang I.E. The video and slides on the Laem Chabang I.E. are effective for potential investors who do not have much knowledge on the project. The slides are useful for a large audience and the video has more impact on smaller groups of people.

Events

In order to gain public attention and familiarization, it is quite useful to create some events to celebrate the project. At Tsukuba Science Park, an EXPO on science and technology was held in prior to the opening of the industrial estate. It not only brought an enormous attention of the public, but also generated a surplus of funds at the end. It is not always possible to achieve double purposes, but at least some event can be arranged to bring public attention to the Laem Chabang I.E. Such an event could be a symposium, contest, seminar etc. One advantage of the Laem Chabang I.E. is that it is located close to Pattaya which is one of the largest resorts in Asia. Combined with attractions and accommodation capacity in Pattaya, it is quite feasible to create such events for the Laem Chabang I.E.

4) Schedule of Promotion Activities

Table 5-3 shows the schedule of the promotion activities recommended above. It was made in relation to the

Table 5-3 Promotion Schedule

1 9 8 8	1 9 8 9	1 9 9 0
Pamphlet	Video	Video
Investors guide	News letter	
Questionnaire survey Construct of Date base Sector survey		Questionnaire survey Date base
Promotion tour	Mediators promotion tour	Journalist tour Opening ceremony
	Acceptance of Applications	Start of Plant construction Moving into

construction schedule in order to bring about a maximum effect to attract investors to the Laem Chabang I.E. As is obvious from the Table 5-3, the promotional activities must be concentrated in 1990 when the Laem Chabang I.E. opens. To achieve the target, some activities must be started well in advance. Such activities are video-making and the follow-ups on the first market survey conducted in conjunction with the current study.

5-2 INCENTIVES FOR INDUSTRIAL PROMOTION IN THE LAEM CHABANG INDUSTRIAL ESTATE

(1) FRAMEWORK OF INCENTIVES AND REGULATIONS

As each country has its own industrial development policy, its government attempts to attract finance and develop some industries deemed important for fulfilling the national development goals. Most governments have established the laws and regulations related to investment. The total statutory framework related to investment consists of three major components;

- 1) Basic guarantee on corporate activities,
- 2) Incentives to solicit investment,
- 3) Regulations on corporate activities.

The schematic structure of incentives and regulations is shown in Fig. 5-2. Basic guarantee facilitates the mutual understanding between a local government and foreign companies on their activities to seek profit and maximize profits under legal protection by the local government. Among various incentives, those related to taxes provide the most significant cost savings for investors. Other incentives also provide protections and financial assistances for productions. Regulations are imposed to confine the corporate activities within the framework of national interests. The relaxation of regulations, on the

other hand, serves as incentives for investors, especially for foreign investors. The most significant concession for foreign investors would be lifting of the restriction of foreign ownership of equities.

(2) OBJECTIVES OF INCENTIVES

The incentives for the investment, whether they are tax exemptions or relaxation of some regulations, have certain policy goals. The goals are interrelated, but on some occasions present contradictions to one another. The major goals for the investment incentives are as follows:

- 1) development of target sectors,
- 2) development of rural areas,
- 3) securing foreign capital inflows,
- 4) development of export industries -- long term strategy to secure foreign exchange, thus restoring trade balance, and
- 5) transfer of technology.

1) Development of Target Sectors

A government normally has development priorities for certain sectors and areas where more than ordinary resources are to be allocated. Many countries have pursued the development of heavy industries which supply basic inputs to other down-stream industries and targeted the automobile industry as the zenith of the machinery industry. As a late-comer of industrialization, Japan has set the first example achieving these goals. Korea has closely followed the example though the surrounding situations differed. Other countries in Asia had similar policies, but could not easily embark upon full-fledged programs. Steel industry is looked upon as the key industry among basic industries but the risk and competition are often too large. All the countries are competing to nationalize the automobile industry, which is the king of consumer goods. However, the industry requires an

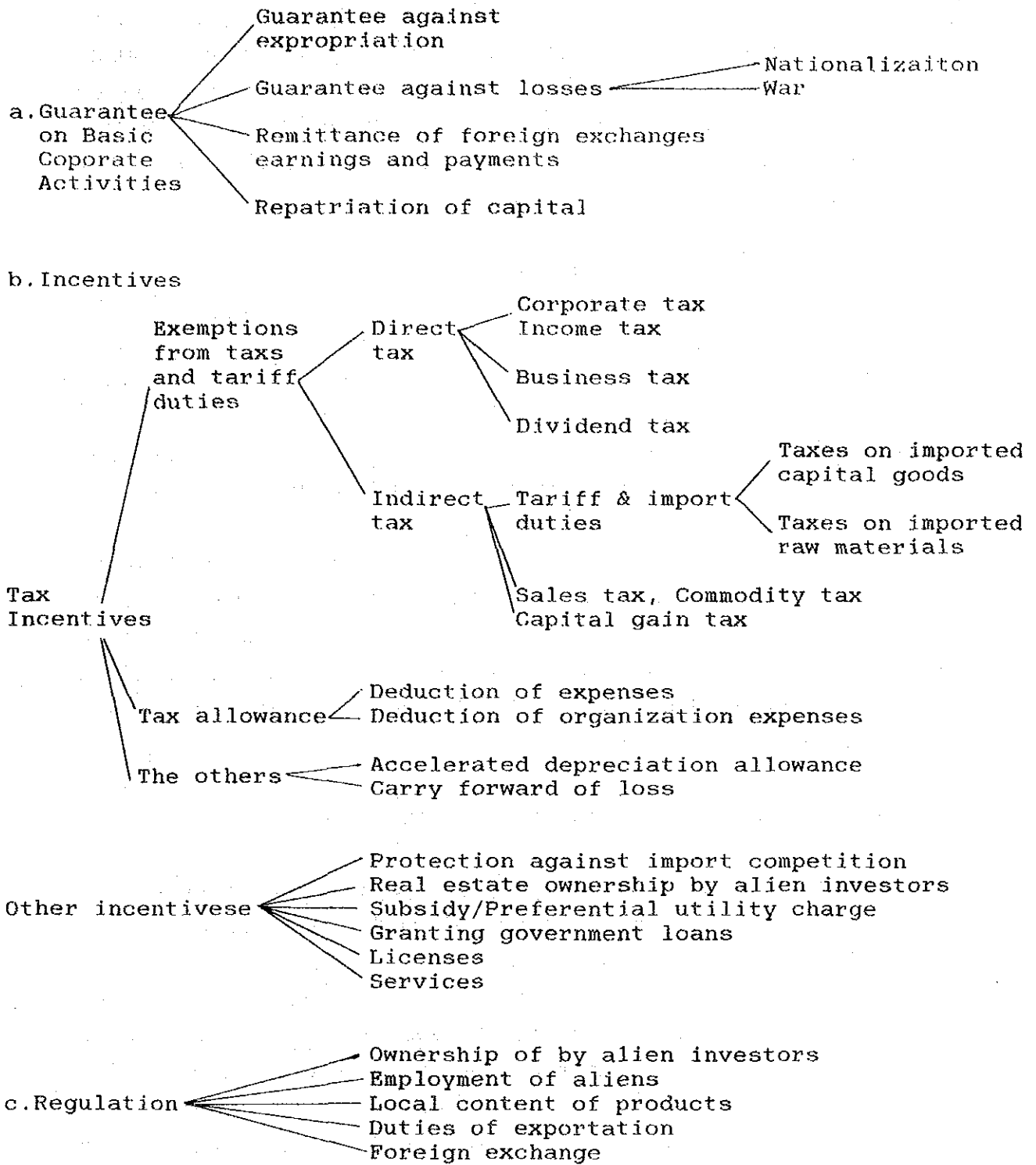


Fig. 5-2 Incentives & Regulations

enormous base of supporting industries ranging from rubber, chemical, steel and various parts productions. Many countries which attempted its nationalization were obliged to stop its promotion in the early 1980's when the market stagnation could not justify the further nationalization of automotive parts.

2) Development of Rural Areas

As in the case of Bangkok, urbanization is a common phenomenon in the world. It is causing many problems, such as slums, paralysis of urban functions, etc. Investments in rural areas could enjoy cheaper labor, but otherwise face many disadvantages, such as inadequate level of infrastructures, poor access to a major city, and low living standards. Incentives are provided often to counter-balance these drawbacks. Thailand and Malaysia both provide such special privileges to investors but without large achievements. The revision of incentives in 1987 in Thailand further stresses this goal of rural development covering a wider area.

3) Securing Foreign Capital Inflows

In developing countries, domestic investments generally exceed domestic savings, which is called I-S Gap. Foreign capital inflows, whether public assistances or direct private investments, fill the I-S Gap. Without the foreign capital inflows naturally, the investment level must come down to the level of domestic savings, thereby decelerating the economic growth. The inflow of private capitals to developing countries tended to decrease in the 1980's because of the problem of accumulated debts and the international economic depression. At the macroeconomic policy level, securing sufficient foreign capitals is a very critical issue for developing countries, in particular, for a country with a heavy reliance on foreign investments like

Malaysia. Malaysia's move to improve investment incentives in 1986 reflects its intriguing economic situation.

4) Development of Export Industries

Industrialization in developing countries was initiated with import substitution for its political practicality to realize the local production. In reality, however, import substitution resulted in higher economic costs of the products and local production remained mere assembly work. The criticism for the import substitution became stronger in the 1970s. The trade structure in developing countries traditionally consists of the export of primary products and the import of industrial goods with constant trade deficits. When the accumulated foreign debts became a critical issue in the developing countries, the earning of foreign exchange has obsessed the government policy makers. Hence the developing countries started to induce foreign capitals and endeavored to develop export industries. Coupled with the world economic downturn, these motives compelled the local government to grant more relaxed regulations to incoming foreign companies.

5) Transfer of Technology

It was not long ago that people began to realize that the core of industrialization lies not in raw materials and machines, but in technologies. The technologies, though quite ambiguous and intangible, belong to all the processes related to manufacturing, ranging from research and design to production lines. When foreign investors manufacture overseas, they are forced to transfer the technologies directly related to production, but some are reluctant to transfer some upstream technologies, such as production management and quality control. That is partly because of the companies' attempt to safeguard their technical knowhows or unwillingness to invest time and money to technology transfer and partly because of lack of technology absorption

capacity of local counterpart. Once overseas production is started, a gradual transfer of technologies is inevitable by the law of economics in order to increase the competitiveness. Some countries tried to transfer technologies by restricting the posts to be allowed to be manned by foreign staffs. However, such measures prevented the technological transfer in some cases. In the age of rapid progress in technology, it is more practical to foster communications and training to prompt the transfer of technology.

(3) INVESTORS' VIEW

Naturally, the investors view the incentives and regulations differently from the policy makers. Although the incentives on the tax exemptions may appear to be the largest attraction to some investors, other investors may not give much importance to such a privilege. Priorities differ depending on whether they are foreign or local investors.

1) Basic Protection of Investment

For foreign investors who have to isolate their production assets from the protection of their own country, their first concern is the basic protection of their investments. The minimum protection that investors seek from a host country is that their investment be safeguarded from expropriation, be it nationalization or unlawful take-over. Though such cases happen very rarely, investors tend to be very timid about political risks. There are always some uncertainties associated with investments no matter how well planned they may be. Political risks, though small in probability, are big and uncontrollable to investors. Unlike other elements related to investments, political control is beyond the control of any individual firm. Even without recourse to direct nationalization, foreign J/Vs can easily be upheld by means of foreign

exchange control. Therefore, the issue of the next importance for investors is the remittance of profits and disinvestment. Even having assurance for these issues of basic protection of basic rights on corporate activities, investors would further question how long that assurance could last. Thus the political stability becomes the most important criteria for investment decision making. After all these conditions are cleared, then investors would look at other conditions in choosing their overseas production base. Even after then they still often place importance to the political climate and attitude of a local government.

2) Financial Incentives

Among various incentives, financial incentives are complicated because they include tax exemptions, reductions of corporate income tax, sales tax, import duties, etc. Among the financial incentives, corporate income tax exemption may appear to be the most straight forward in its application and the largest on improving corporate financial position. However, for some companies like multinational corporations, income tax exemption plays much less role in giving a final push to their decision making. Multinational corporations, in particular, can easily transfer the profits accruing to the products by means of pricing of parts or products, thereby reducing the profits to the minimum to evade taxes. What they cannot escape among tax obligations are those taxes levied on sales, materials, parts, machinery, etc. For local investors, however, the exemption of direct taxes means just as much as the other incentives. For export industries, local or foreign, the exemption of import duties on materials and machinery is the most important incentive to compete on an equal footing with producers in other countries.

3) Foreign Ownership

For foreign investors, the biggest concern in overseas

operation could be the restrictions on equity ownership. A local government may hope to impose such restrictions to encourage local participation in market opportunities and prompt technology transfer. Foreign investors, on the other hand, may wish to hold a majority of shares to avoid possible malfunctioning of the management or to protect the manufacturing technology.

The restrictions on foreign ownership are adopted by many developing countries, and few countries are excluded. In the current situation of the Thai economy, above restrictions are inevitable. However, to relax such restrictions, the Thai government prepared the EPZ.

(4) INVESTMENT PROMOTION POLICY IN THAILAND

The origin of the current industrial policy in Thailand dates back to 1960 when the first investment promotion act was established. Prior to 1960, the manufacturing sector in Thailand was dominated by national companies and had come to a standstill due to the adverse effects of the monopolies, such as inefficient management. The investment promotion act, which was amended in 1962, made a complete turnaround in the industrial policy, giving priorities to private concerns, import substitution, and open door policy to foreign investments. This change in the industrial policy set forth a basis for rapid industrialization in Thailand. In fact, during the period of 1960 - 1986, the proportion of the manufacturing sector to national economy in its value-added contribution increased from 12% to 22%, equaling the agricultural sector.

The investment promotion policy which derives its origin in 1960 has undergone some changes over the period. In general the change was directed to more selective promotion policies, both sector and area-wise. The level of

incentives increased throughout the 1970s and early the 1980s and reduced to a certain extent after 1986. This shows the Thai government's self-adjustment to ever-changing investment climate in the world. Fig 5-3 shows the changes in investment policies in Thailand over the period after 1960.

1) History of Investment Policies in Thailand

The Investment Promotion Act set forth in 1960 was amended in 1962 to empower the BOI to grant Promoted Companies with certain privileges.

According to Promotion Act of 1962, the Promoted Companies were given 5-year exemption on corporate income tax. They were also given concessions on business taxes and duties levied on imported machinery, equipment, spare parts, and materials necessary for the start-up. The Promoted Companies were categorized into three groups according to their importance to the national economy. The group A was granted full exemptions, whereas the groups B and C were given 50% and 33.33% reductions, respectively. Exporting companies were granted exemption or reduction on export tax and business tax.

The amendment in 1967 abolished these differences and unified them into one group, giving a 33.33% reduction of taxes on the initial investment. Newly admitted Promoted Companies could no longer enjoy the privilege on duty exemption on imported materials.

In 1972, the Thai Government made an announcement on investment promotion policy which is better suited to the national development needs. The new amendment placed emphasis on export promotion and rural development by diverting investments from Bangkok. The BOI was given a right to grant corporate income tax exemption between 3 to 8 years in accordance to its assessment of projects. Foreign

J/Vs were allowed to include supplementary income to the current account to receive tax exemption if the government of their original country granted such exemption. Privileges on import duties were introduced again to promote export industries and additional incentives were provided to the promoted companies located in the promoted areas outside Bangkok. Exporting companies were exempted either from import duties on raw materials and intermediate goods or business tax on re-exports. In addition, 2% of the annual increment in export F.O.B. value was deducted from tax. The promoted companies locating their factories away from Bangkok were granted a maximum of 50% reduction on business tax and import duties on raw materials for 5 years. They were also allowed to enjoy double tax deduction of expenses incurred on electricity, water, and transportation for a period that the BOI set. A maximum of 25% of investments on facilities were allowed to be deducted from the income of any single or several years within 10 years from the initiation of factory operation. In addition to 5-year corporate income exemption, another maximum of 5 years of 50% reduction was permitted. For the promoted products, the business tax was reduced up to 90% for 5 years. In conclusion, the industrialization policy in Thailand clearly manifested for the first time the pursuit of the development of export industries and the dispersion of industries to rural areas from Bangkok area.

The amendment in 1977 also endorsed the BOI with more authorities to decide on the terms for reduction on duties on imported machinery and raw materials. It also granted the power to impose a ban on certain imports and extra duties on imports. Institutionally also the BOI was reinforced by having the Prime Minister as the chairman and including other ministers as its members. The BOI was now empowered to induce industrial development at its discretion. Another policy to be noted is a hefty privilege to the promoted areas. Chiang Mai, Khon Kaen, Nakon Rachasima, Songkla were announced to be the promoted areas in 1983.

After experiencing a down-turn in the early part of the 1980s, the Thai economy has been experiencing an unprecedented investment boom since 1986. In response to such an intense investment zeal, the Thai government announced the revision of the investment incentives according to the regions in September, 1986. Previously, the promoted companies were given additional privileges if they are located in the promoted areas which are away from Bangkok. After the revision, promoted companies locating its facilities in Bangkok were disentitled from the previous incentives and those in the surrounding areas were entitled with less privileges. On the other hand, the promoted areas which enjoy the full privileges were expanded from the previous four provinces to all the areas excluding Bangkok and its vicinity. In other words, the dispersion of industries to less developed areas was further emphasized by this revision. In the beginning of 1989, it is planned to expand the underprivileged areas surrounding Bangkok in order to further decentralize industries away from Bangkok.

2) Current Legal Framework

One of the major characteristics of the incentive scheme in Thailand is that the law does not differentiate between foreigners and locals in granting the status of the Promoted Companies. Another feature is that it strongly emphasizes the policy of dispersing industries to remote and less developed areas. Foreign companies, however, are restricted in business activities by the Alien Business Act 1972, National Executive Council Announcement No.281 and in its land ownership by Land Law BE 2497. Foreign workers' entry to the country is regulated by the Working of Aliens Act BE 2521.

In accordance to the framework of investment incentives, regulations and guarantee, the current legal framework of Thailand is outlined as follows;

a. Basic Guarantee on Corporate Activities

* National Guarantee

- a) Against nationalization
- b) Against competition of new national enterprises
- c) Against national monopolization of the sale of products similar to those produced by promoted person
- d) Against price control
- e) Permission to export
- f) Against imports by government agencies or state enterprises with taxes exempted

* Remittance of Foreign Exchange

- a) Remittance of earnings or profits is permitted
- b) Remittance may be restricted by the Bank of Thailand if required by the balance of payment situation. In such a case, however, no restriction is imposed on the annual remittance equivalent to a maximum of 20% of the paid-up capital if two years have passed after the entry of the capital. No restriction is imposed on the annual remittance of dividends equivalent to a maximum of 15% of the capital.

b. Incentives to Solicit Investment

Different levels of incentives are applied to the investments in the following three regions.

AREA 1	AREA 2	Area 3
Bangkok and Samprakarn	Nakorn Patom, Non Tabri, Patom Tani, and Sam Kaen	The other 67 provinces

* Corporate Income Tax Exemption

AREA 1	AREA 2	AREA 3
<p>No exemption except that those satisfying at least two conditions below,</p> <p>1) Not less than 80% export ratio</p> <p>2) Not less than US\$ 2 million of net foreign exchange earnings or savings</p> <p>3) No fewer than 200 full-time employees</p> <p>will be granted a three-year exemption.</p>	<p>Three-year exemption with an extension of up to five years for projects satisfying more than one of the conditions below,</p> <p>1) Not less than US\$ 1 million of foreign exchange earnings or savings</p> <p>2) Agro-based activities with the use of domestic agricultural products as the main raw material or not less than 60% of total value of raw material input from local supplies</p> <p>3) No fewer than 200 full-time employees</p> <p>4) If the BOI deems it important for national economy</p>	<p>Four-year exemption with an extension of up to five years for projects satisfying more than one of the same conditions 1) to 4) set forth for the AREA 2. and reduction of corporate income tax by 50% for five years following the exemption period</p>

* Import Duty on Machinery

AREA 1	AREA 2	AREA 3
No exemption except that those satisfying at least one of the conditions below, 1) Not less than 80% export ratio 2) Spare parts manufacturing 3) To be located in an industrial estate	50% reduction but a full exemption for projects satisfying more than one of the conditions below, 1) Not less than 80% export ratio 2) Spare parts manufacturing 3) To be located in an industrial estate	Full exemption

Exemption of imported machinery is only admitted by the BOI in the cases set forth below;

- 1) The machinery of the same level does not exist in Thailand or is not produced sufficiently
- 2) It cannot be produced or assembled domestically
- 3) The machinery cannot be substituted by man power economically
- 4) The machinery is new and deemed useful for production

The exemption does not include the spare parts.

* Busies Tax

AREA 1	AREA 2	AREA 3
No exemption	No exemption	90% exemption from the first year to generate income

* Withholding Tax

Exemption of up to 5 years on withholding tax on goodwill, royalties, or fees remitted abroad

* Dividend Tax

Exemption from taxable income of dividends derived from promoted companies during the income tax exemption period

* Tax Deduction

AREA 1	AREA 2	AREA 3
None	None	Double deduction of transport, electricity, water costs from the first year of income generation

* Other Privileges

Protection Measures (Subject to justification and needs)

- i) Imposition of surcharge on foreign products at a rate not exceeding 50% of the CIF value for a period not more than 1 year at a time
- ii) Import ban on competitive products
- iii) Authority by the Chairman to order any assisting action or tax relief measures for the benefit of promoted projects

c. Relaxation on Regulations

a) Land Ownership

To own land for carrying out promoted activities

b) Work Permit

i) To bring in foreign nationals to undertake investment feasibility studies

ii) To bring in foreign technicians and experts to work on promoted projects

d. Promoted Fields

Under the Investment Promotion Act, 1977, the BOI may approve the promotion of investment projects in agriculture, animal husbandry, fishery, mineral exploration and mining, manufacturing and service sectors when it considers that:

a) Such products, commodities or services are not available in the country, or not in sufficient quantity, or not produced by a modern process.

b) Such products, commodities or services are important and beneficial to the economic and social development, and the security of the country, and,

c) Such investment projects are economically and technologically appropriate, and have adequate preventive measures against damage to the environment.

e. Criteria for Project Approval

In approving promoted projects, the BOI applies the following criteria in the assessment.

- a) The size of the market demand must be adequate for the proposed increase of production capacity.
- b) The production cost is low enough to compete successfully with imports at an import duty protection rate not exceeding 30% or the existing rate, whichever is higher.
- c) The value added is not less than 20% of sales revenue unless the production is mainly for export.
- d) The ratio of debts to registered capital in the case of a new company or debts to equity or registered capital, whichever is lower, in the case of an existing company does not exceed 5:1.
- e) Modern production processes and new machinery are employed, except in a case where efficiency thereof is certified by a reliable institution and the BOI so approves.
- f) Investment projects in any of the following cases will not be considered for promotion :
 - i) There are already in existence commercially viable firms producing such products, commodities, or services without promotional privileges.
 - ii) The BOI considers that such an activity, even though eligible for promotion, can operate with a reasonable rate of return and no longer needs promotion.
 - iii) Except production for export, the existing production capacity is adequate to serve the domestic market demand within the next two years.

iv) The project would use entirely imported raw materials, the production would be mainly for domestic distribution, and the import duty for the product thereof already exceeds the rate of 40%.

v) There is an announcement by the BOI to suspend the promotion of such an activity or the BOI considers the project inappropriate for promotional privileges.

(5) COMPARISON WITH OTHER ASIAN COUNTRIES

1) Corporate Tax Exemption and Foreign Equity Participation

Thailand provides 3 to 8 years of corporate income tax exemption to the promoted projects at the discretion of the BOI. The factories located in the promotion zones are assessed more generously than those located in the vicinities of Bangkok. The length of the exemption in Thailand ranks the third to Singapore and Malaysia which offer a maximum of 10 years of tax exemption, followed by 6 years in the Philippines, 5 years in Korea, and 2 years in China. Hong Kong, where the corporate income tax rate is very low, provide neither such corporate income tax exemption, nor any privileges in particular. Indonesia abolished such exemption scheme in 1984. However, the maximum of 8 years in Thailand is applicable only in the promotion zones where the infrastructures and other urban facilities are less developed. Therefore, the comparative advantage in Thailand must be discounted to a certain extent. Foreign equity participation ratio, another major concern of foreign companies, also differs depending on the countries. Singapore and Hong Kong are the most lenient in this aspect, allowing 100% equity holding by a foreigner. Malaysia requires 50% export ratio for a full foreign equity ownership. At the export ratio of 50%, Indonesia allow 49%

of foreign equity ownership, and the Philippines and China allow 49% and 25%, respectively.

Fig 5-4. indicates each country's position in respect of the investment incentives, namely, corporate income exemption and foreign equity ownership ceiling. It clearly shows the preeminence of Singapore over other countries with 10 year corporate tax exemption and 100% foreign equity ownership. Malaysia ranks the second with 10-year corporate tax exemption and 100% foreign equity ownership under a condition to export more than 50%. Thailand may rank the next with 8-year corporate income tax exemption and 50% foreign equity ownership at the export ratio of 50%. The other countries follow in the order of the Philippines, Korea, Indonesia, China according to Fig 5-4.

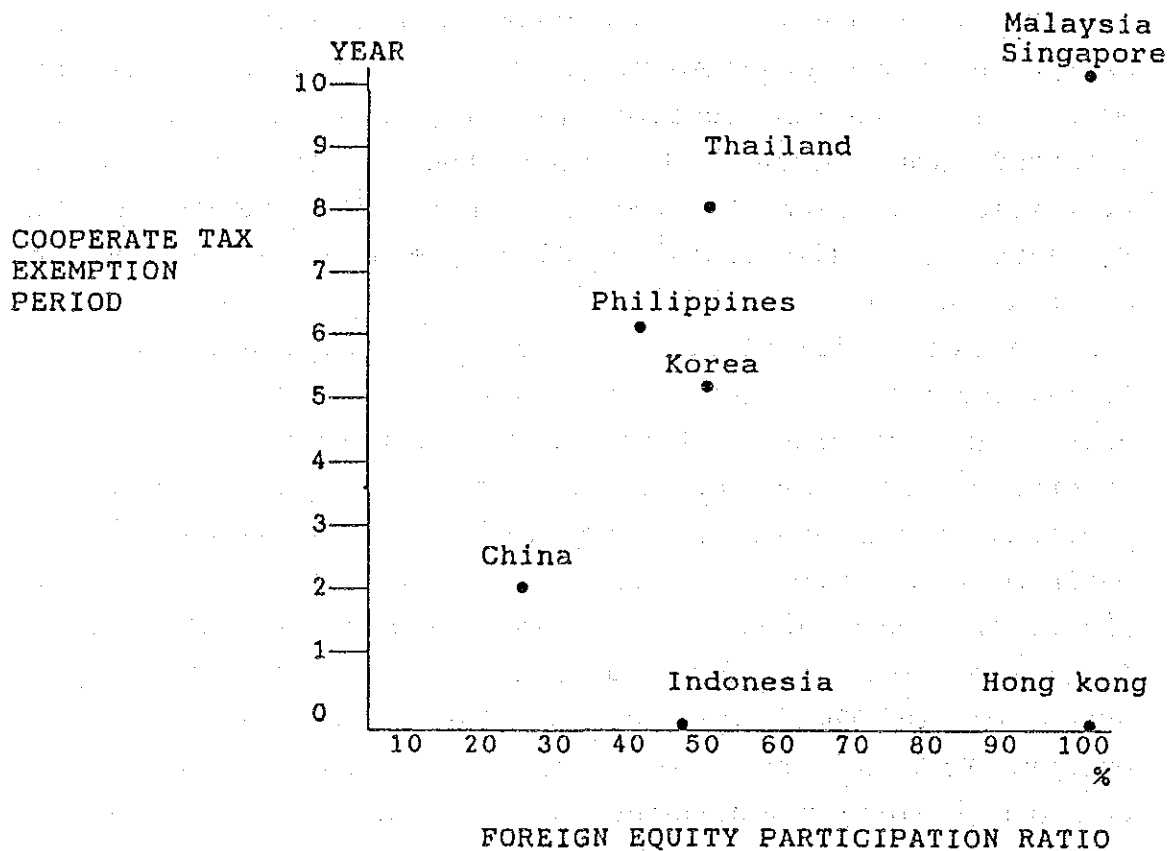


Fig. 5-4 International Comparison of Incentives

2) Corporate Income Tax

According to the level of corporate income tax, Hong Kong ranks first with 16.5%, Korea and Taiwan second with 16.5% - 27.5% and 15% - 30%, respectively, followed by the Philippines with 25% - 35%, China with 30%, Singapore with 33 %, Thailand with 35% and Malaysia with 45%. In the case of Thailand, a publicly listed company is levied a lower rate of 30%. Although it is difficult to judge which country offers the lower tax rate, Thailand has an average level of taxation.

3) Import Duties

There are no import duties on machinery in Hong Kong and Singapore. The other countries give exemption of import duties on machinery to certain companies, whether they are called pioneer industry or promoted companies. Thailand in general gives a full exemption to export industries (more than 80% export) and at least 50% reduction to general industries located outside Bangkok area and a full exemption in the promotion zones.

There are no import duties on raw materials in Hong Kong. Other countries in general give exemption of import duties on raw materials to export industries. Thailand gives reduction of import duties and up to 90% reduction in business tax to other industries when they are located in the investment promotion zones.

4) Other tax incentives

The comparison of incentives among countries is complicated by the diversity of tax incentives offered, in addition to the primary incentive of the exemption of corporate income tax. Thailand also offers tax deduction of transport, electricity, and water. Such extra tax deductions are provided for investment in Singapore, Malaysia, and the Philippines, whereas Thailand does not offer such incentive.

5) Work Permits

It is difficult to compare the levels of freedom to employ foreign workers since obtaining working visas rests in the hands of the immigration office. It seems that Hong Kong is the most generous because no such restriction is stipulated in law or in practice. Korea and Taiwan do not have any restriction, either. Thailand, Indonesia, Malaysia, Singapore, and China pose some restrictions to encourage the employment of local people where possible. Even if the posts for foreigners are allowed, Malaysia and Indonesia require companies to provide training programs to replace the posts eventually by local staffs.

(6) INCENTIVES FOR THE LAEM CHABANG I.E.

The cabinet has decided the incentives for the Laem Chabang I.E. as follows;

Import duties: Exemption or reduction of import duties on machinery, spare parts, and raw materials

Corporate tax: 3-8 years exemption followed by 50% reduction for 5 years

Business Tax : Maximum 90% reduction for 5 years

Tax deduction: Double tax deduction of utilities cost since the first year of income generation for 10 years

One-stop-service: One-stop-service by IEAT for investment procedure

The incentives for the Laem Chabang I.E. are generally the averages of the investment promotion zones. Judging from the level of the infrastructures provided at the Laem Chabang I.E. including the port and the access to Bangkok, the incentives are quite adequate. However, it is important to ensure that the surrounding areas of the Laem Chabang I.E. along the way to Pataya should not be given any

advantage. Otherwise, it may cause a delay in filling the Laem Chabang I.E. The Laem Chabang I.E. should serve as the core of the industrialization of the area and enjoy the benefits accruing to the development of the Eastern Sea Board Development Program. In order to ensure the development of the Laem Chabang I.E., the government should watch the balance of comparative advantages between the Laem Chabang I.E. and its surrounding areas.

(7) RECOMMENDATIONS ON INCENTIVES FOR THE LAEM CHABANG I.E.

Currently Thailand is undergoing an unprecedented investment boom. Therefore, the Laem Chabang I.E. requires no further incentives. The question is how long the investment boom of the current magnitude can last and how well the investment to the Laem Chabang I.E. can serve to the country's economy. When these problems are solved, the industrialization in Thailand will continue at a remarkable rate.

The current concentrated investment has overheated the country's capacities in many aspects. Above all, serious bottle-necks are observed in

- 1) Lack of engineers and managers
- 2) Lack of industrial plots
- 3) Elongation of receiving promoted project status

All these problems lead to delays in starting up factories, which undermines the industrialization to a great extent. In other words, the ways to shorten the lead time required for establishing factories and starting the operation will best serve to induce investments. The management of the Laem Chabang I.E. can cope with the lack of qualified man power by providing training, recruiting, mediating man power for the incoming companies. If the lack of industrial plots continues even after the completion of the Laem Chabang I.E., its expansion may be sought immediately. To speed up

the investment application process, the procedure must be streamlined and one-stop-service must be reinforced.

Simplification of the Incentives

Currently, incentives are given to the promoted companies in return for their contribution to export expansion. At the same time, the BOI must monitor their activities to ensure their conformity with the specified requirements. More than 1400 companies have been designated as "promoted company" in Thailand since 1960. The rapid industrialization will add about 200 companies each year, especially in the export industries. The further industrialization also will expand the manufacturing sector toward linkage industries, i.e. extending to more parts and components production from sheer assembly work. These parts and components manufacturers, so to speak supporting industries, are expected to form a basis to support export industries especially of machinery and electronics apparatus. In Sept. 1988, the BOI announced a revision in the incentive scheme which includes granting import duty exemption to supporting industries as well as exporting industries. The revision clearly reflects the recognition of the importance of supporting industries by the Thai government. However, the evaluation of supporting industries involves great difficulty and the monitoring will require further efforts. Excessive monitoring may suffocate manufacturing activities. Privileges to supporting industries may prompt irrational division of manufacturing processes in an attempt to receive incentives.

Industrialization will inevitably accompany the diversification and increase in the inter-relations among manufacturers. High tariff rates become an obstacle for the development of internationally competitive manufacturing sector although it is difficult to reduce tariff instantly in the country where 1/4 of the government revenue derives from import duties.

The current incentive scheme in Thailand provides protection measures and limits the entry of certain products. This system originates in the idea to restrict over-competition in a limited market. However, in an international market where price and quality differentiations are the only way to penetrate the market, more competition must be encouraged. There are already some conflicts, such as in electric home appliances industry, where new entry for export-oriented production clashes with the established companies of domestic market-oriented production.

It is easily foreseen that the above situations will intensify along with the further industrialization. To avoid overloaded administration and give fair competitive grounds it is advisable to give a uniform tax exemption to an industry or at least a sector gradually.

Selective Use of Incentives

In the long run, import duties should be lowered uniformly and incentives should be simplified to induce more of the private sectors' own initiatives. For the short term, it may be beneficial to strengthen a certain strategic sector to form the basis of the industrialization in Thailand.

Malaysia presents a good example of such a case, having succeeded in attracting a number of semiconductor manufacturers mainly from the USA. Though the investment conditions for the industry in Thailand may surpass those in Malaysia, it is difficult for those companies which have already invested heavily in Malaysia to reinvest in Thailand. The costs and time required to transfer technologies for the production of semiconductors are too large for the marginal differences in comparative advantage. Actually some semiconductor companies are re-investing in Malaysia for the expansion. The

concentration of semiconductor industry has also created a ripple effect to other industries, fostering some supporting industries such as precision mold manufacture. It is imperative for Thailand to build an industrial base now when the investment climate is quite favorable to the country. If the industrialization continues at the current rate and the wages overshoot, Thailand may be outdone by other countries in comparative advantages for investments. Concentrating such efforts on some strategic industries deserves further investigation. For instance, most of the Asian countries, except the city countries, have set the automotive industry as a target industry. Every country pushes the localization of automobile production, but, at the moment it stagnates at initial levels due to a limited market size and the lack of supporting industries. Without strong policies to induce concentrated investment in the sector, the further localization cannot be expected. Thailand, which ranks next to Korea and Taiwan in terms of the domestic market and technology level, has a good chance for pursuing the localization of the automotive industry. It is important in doing so to ensure that localization promote international competitiveness. Otherwise, Thai industry may be segregated from international markets only to impose the economic costs on the local consumers. In any case, the promotion of selected industry involves risks of hampering the development in the long term or that of other sectors. Therefore, it requires a thorough investigation of the possibility and risks.

5-3 REORGANIZATION PROPOSAL FOR THE LAEM CHABANG INDUSTRIAL ESTATE

At present, the functions and organization of the IEAT are structured to conform mainly to the construction of industrial estates. Besides the industrial estates developed by IEAT, already 8 private industrial estates are in operation and the same number of industrial estates are

under implementation. Now the need for the involvement of IEAT is questioned. Obviously, the IEAT plays a very significant role in taking risks for the development of industrial estates in less developed regions such as the Northern Industrial Estate. Should the IEAT be specializing only in unpopular industrial estates? The answer is NO. Ideally, the IEAT must assume a strategically leading role in the industrialization of Thailand and, at the same time, maintain its operation profitable. In being able to achieve the goal, the proposal starts with redefinition of the "Objectives".

(1) REDEFINITION OF OBJECTIVES

Judging from the original objectives of the IEAT, the ultimate goal of the IEAT is not merely to develop industrial estates, but is to ;

promote the industrialization in Thailand in accordance to the national development objectives such as 1) advancing the manufacturing sector to higher technology and higher value-added, and 2) dispersing the manufacturing sector to rural areas.

To achieve the above goal, the IEAT has the measures of;

- i) provision of industrial estates and related facilities,
- ii) provision of services to promote investment and assist investors in conducting profitable activities.

The present structure of the Thai manufacturing sector is dominated by essential goods production, namely food, textiles and housing related products. However, the current investment trends indicate that the manufacturing sector will expand more into electronics, electric appliances,

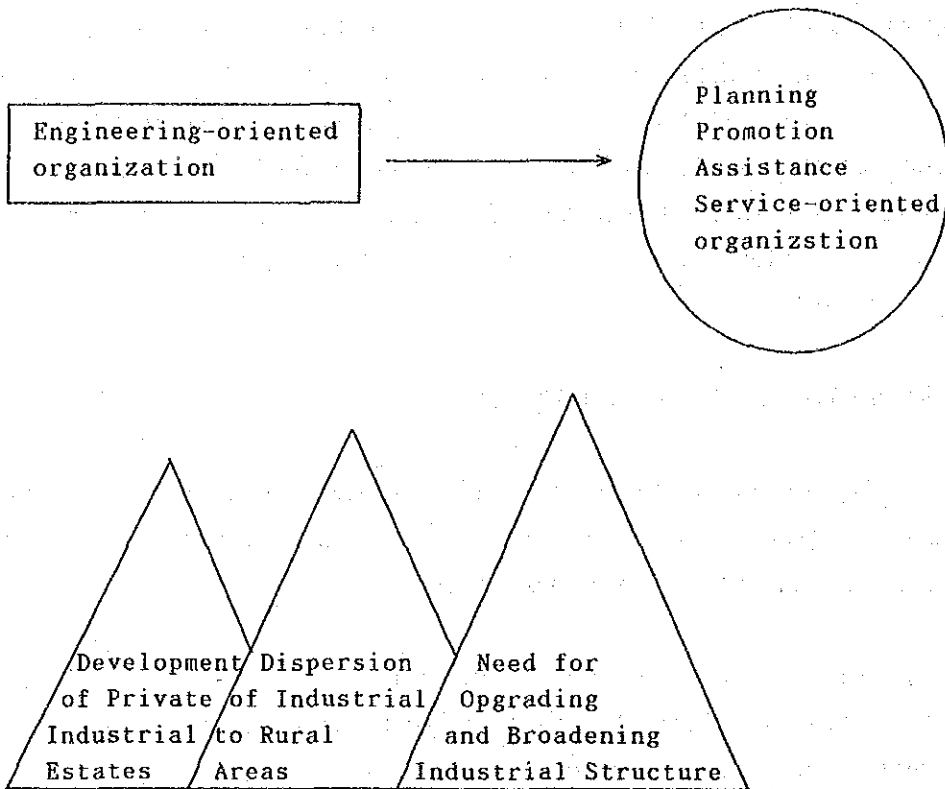


Fig. 5-5 Redefinition of IEAT's Objectives

transport machinery, office machinery, precision equipment, and computer related products which form a core of the manufacturing sector in industrialized countries. Needless to say, manufacturing of the above-mentioned machinery could bring higher value-added to economy but requires higher technology and more sophisticated management system. Nevertheless, in these fields of production, the Thai manufacturers conduct only the final stage of production process, i.e. assembly work which only produces small margins of value-added. In order to capture the latent part of high value-added, the Thai manufacturing sector must expand to upstream processes of manufacturing process, first components and parts production, second tool and machinery production or material production. The first step is to expand the bases of supporting industries to produce components and parts. This expansion requires technologies of a different category including production control and quality control. This expansion of the industrial bases can be induced by urging the agglomeration of target industries. The IEAT can offer a place and services required to induce such agglomeration at an industrial estate.

Another important role of the IEAT is to prompt the decentralization of the industries from the crowded Bangkok area. The dispersion of industries is clearly recognized as one of the chief goals of the national development which aims to correct regional income differences. At the same time, it will serve to maintain the international competitiveness of Thailand as industrial base in the long run. Bangkok is on the verge of paralysis due to over-concentration. But, in the short run, the locations surrounding Bangkok still continue to appear more attractive to entrepreneurs for their advantages in commercial functions and accesses to urban facilities and related industries.

The Eastern Seaboard Development Program is the first major breakthrough to the decentralization of industrial development and will serve as a gateway for developments of other parts of the country. The IEAT must act as a catalysis for dispersing industries, therefore the promotion of carefully planned local industrial estates will become a more and more vital task for the IEAT.

In mobilizing the resources available at the IEAT, it requires the restructuring of the organization to bring out its maximum effects in the shortest period.

(2) RESTRUCTURING THE IEAT

The decentralization of the industrial activities from heavily congested Bangkok metropolitan areas is one of major goals of the Sixth Plan. It is an urgent task which is addressed in many policy statements. The IEAT which is capable of providing industrial lands must contribute to achieving this goal as a public corporation. However, the IEAT, by itself, cannot provide all the infrastructures which are needed to start local industries. It must coordinate with other agencies to provide road network, telecommunications, electricity and water supply as a package. It is true that the whole set of infrastructures may not be sufficient. The industrial locations must be strategically chosen to meet the needs of the society. Moreover, the industrialization in Thailand must be directed to increasing its competitiveness by advancing the manufacturing technologies and by broadening the bases of the industries in terms of products, parts supplies and operations. The IEAT must enhance its capabilities in such research and study field to be able to lay down an overall strategy of industrial locations in Thailand.

To be able to assume such sophisticated responsibility to guide a desirable direction of industrialization, the IEAT must have an aim to study and coordinate activities

related to industrial locations and promoting target industries.

The Policy and Coordination Section, a special branch to concentrate on the industrial location planning and monitoring, is suggested.

Another important aspect of the IEAT's activities is the fact that its activities are closely related with operations of manufacturers. It must be recognized that an industrial location, no matter how carefully planned, remains just an empty land without successfully established industries. Though the importance attached to the engineering aspects of the IEAT activities should not be disregarded, more emphasis should be placed upon the promotion and servicing to the customers. Promotion is an essential activity to ensure the occupation of a developed industrial estate at its earliest date. By doing so, the project's both financial and economic return on investment can be maximized. Promotion, on the other hand, serves as a sensor for the planning work of industrial locations. The promotion requires day-to-day interactions with the private sectors. The current promotion activities should be reorganized to assume a more positive approach by studying target sectors and analyzing the needs and demands for industrial locations. Once a factory is located in a designated industrial estate like the Laem Chabang I.E., not only the investors, but also the IEAT should be concerned with its smooth starting and successful operation. The reason is because the successful operations of the preceding investments show the best examples and the demonstration effects to the investments to follow.

To be able to conduct such positive promotion and services to occupants, it would require two branches i.e.

- 1) Setting up the Customers Service Division, and
- 2) Reinforcing the Sales and Promotion as Division.

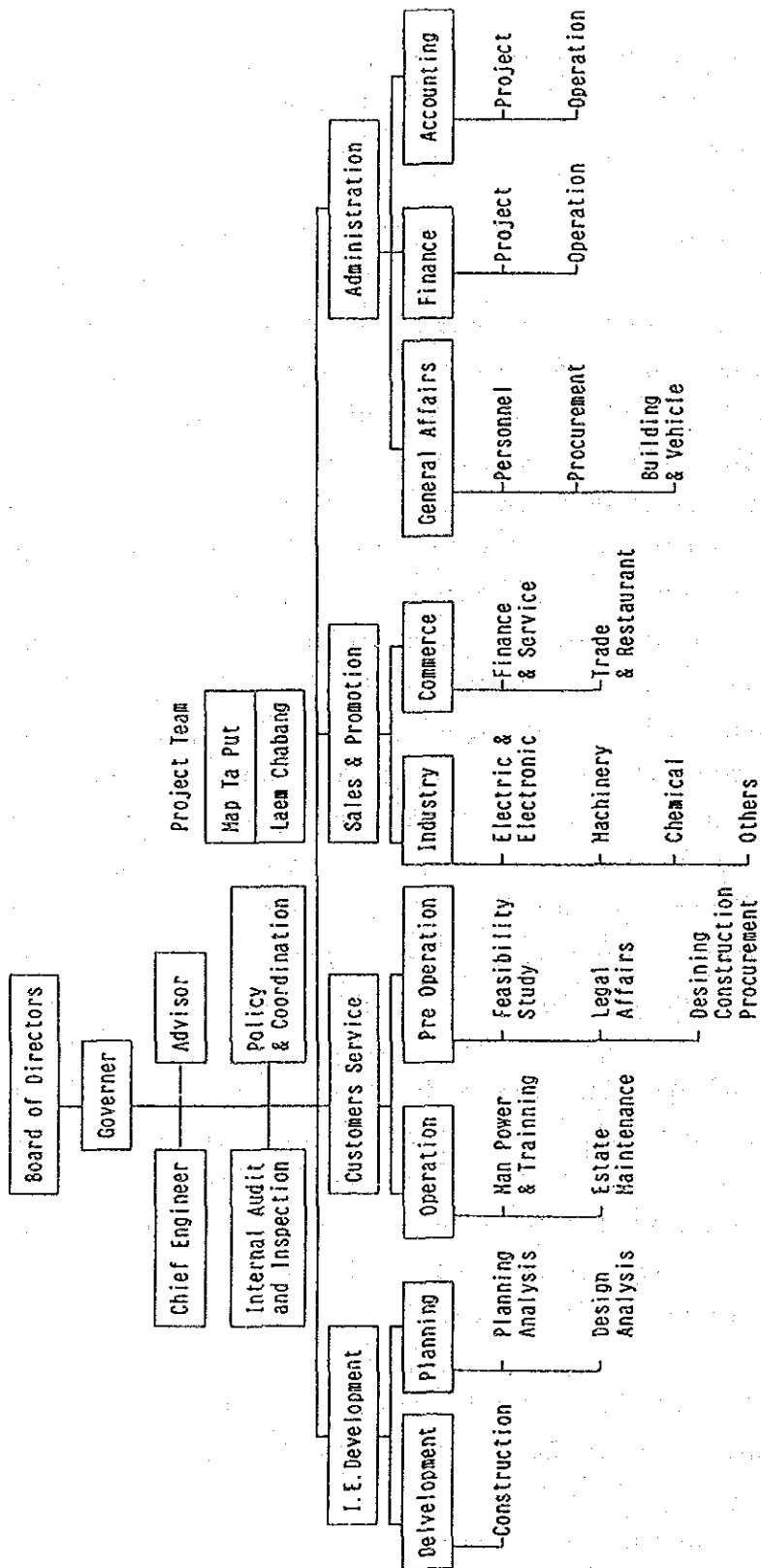


Fig. 5-6 Organization Plan of IEAT

Policy and Coordination Division

Currently, there is no institution which specializes in the research and study on industrialization in Thailand. As the industrialization progresses at the current rate, it is becoming aware of the needs to monitor and study the balanced development of the manufacturing sector to ensure efficient use of available resources and manpower. As mentioned earlier, the IEAT cannot alone provide the full set of infrastructures necessary for the development of a specific region. The IEAT must work together with other ministries or agencies to provide road networks, electricity, water supply, telecommunications, etc to foster industrial development. It is essential to coordinate with other agencies to urge all developments to take place in a harmonious manner.

Although the need to establish such an institution is obvious, it is not economically feasible to have an independent body at present in Thailand. By having such a function within the IEAT, the costs can be minimized with some other sections partly undertaking their duties. For example, the Sales and Promotion Division, as we discuss later, could act as an arm to collect the most up-to-date information on the investment activities by private sectors through its daily contacts with investors. Therefore, the proposed Policy and Coordination Division can concentrate on planning work and coordinations with only core staff.

The envisaged activities of the Policy and Coordination Division are delineated in Fig. 5-6 in detail.

Customers Service Division

In accepting investments in industrial estates, the IEAT assumes the attitude of a passive institution whose activities end with an investment decision. Taking into account of an increasingly important role of the IEAT in

	Function	Activities
Policy Coordination	Policy making & Monitoring of industrial location & Sector Development	<ul style="list-style-type: none"> -Data Collection of industrial Location -Master Plan Making & updating -Coordination with Other related Authorities -Coordination within IEAT on total activities -Target Industry Development Study & Policy making

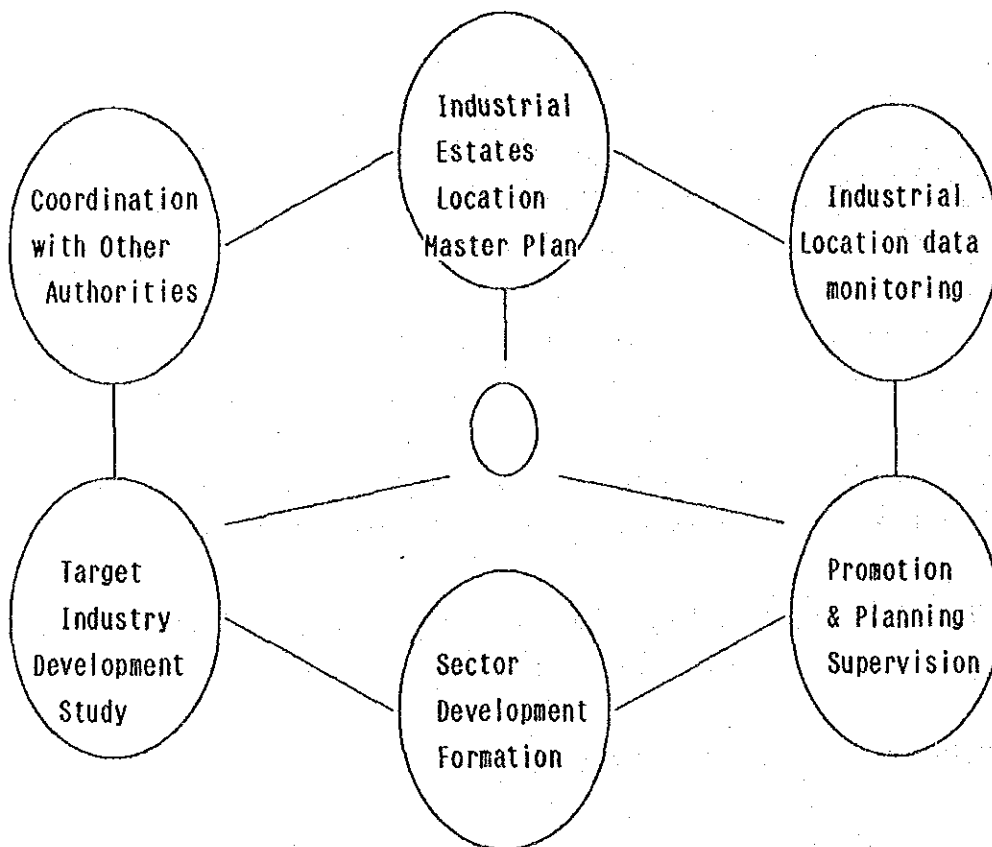


Fig. 5-7 Functions and Activities of Policy Coordination Section

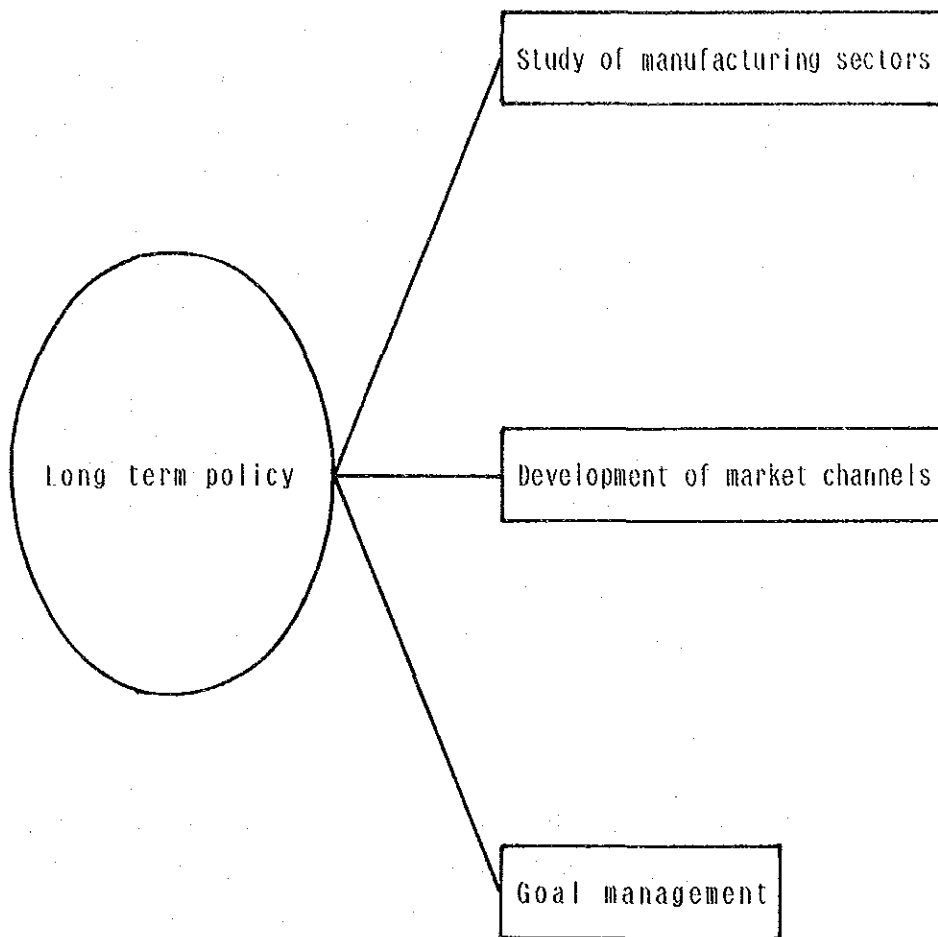


Fig. 5-8 Long Term Marketing Program

decentralizing industries and the associated difficulties, the IEAT should assume more positive roles in establishing industries in designated areas. The Customers Service Division is proposed to add an function of providing "Before and After-Service" to the investors to ensure their operations to take off smoothly. The division should be staffed with experts capable of assisting firms in establishing factories and of acting as a trouble shooter. The expertise deemed to be of most importance to investors are ;

- Feasibility Study
- Legal Affairs concerning licence, incentives, taxes and trades
- Design and construction of factories
- Procurement of equipment and material and trades
- Securing and training manpower
- Other management, in general

The provision of such expertise is extremely useful to foreign firms which are not familiar with local conditions. The lead time which is presently prolonged due to the investment boom can be cut short through such an assistance. The IEAT's industrial estates would become the first priority for the investors, thus financial performance of the IEAT will be improved. However, ensuring the successful operation is not solely for the benefit of the investors , but for the local economy as well. It helps to avoid the loss of employment opportunities and to start the industrialization. This type of activities will serve as another arm to collect information on the corporate activities of the latest quality.

Reinforcement of Sales and Promotion as a Division

The current promotion activities of the IEAT are analogous to that of a small shop with one clerk sitting and waiting on customers. There is no investment to develop

marketing channels. As is the case for the operation of factories, the marketing requires both current and investment costs as well. The situation cannot be improved by merely expanding the number of staff. It must expand its marketing functions to undertake long term marketing programs and transform the sales management to attain more efficiency.

1) Sector Division of Promotion

Marketing begins with marketing research to grasp the exact needs of their clients by their attributes, such as nationality, industry type, and size. The principal is the same for the industrial promotion. However, the diversity and complicate interrelations of final and intermediate goods of manufacturing activities make it almost totally elusive to a layman. Still more when it comes to investment activities of individual companies, the access to the latest information faces more difficulties because of the confidential nature of investment activities. To be able to conduct such activities, the promotion should be divided into sectors such as electronics, and machinery of priority to concentrate on sector analysis which leads to aggressive promotion (Fig 5-9).

As the level of industrial activities goes up, enhancing the environment of the industrial location becomes more and more an important factor for investment decision. As the securing engineers and workers will encounter more difficulties, the amenities for the employees becomes a more crucial element for them. The commercial and service activities must be introduced in time for the commence of factory operations. The promotion activities for commercial and service activities must be included in the promotion division.

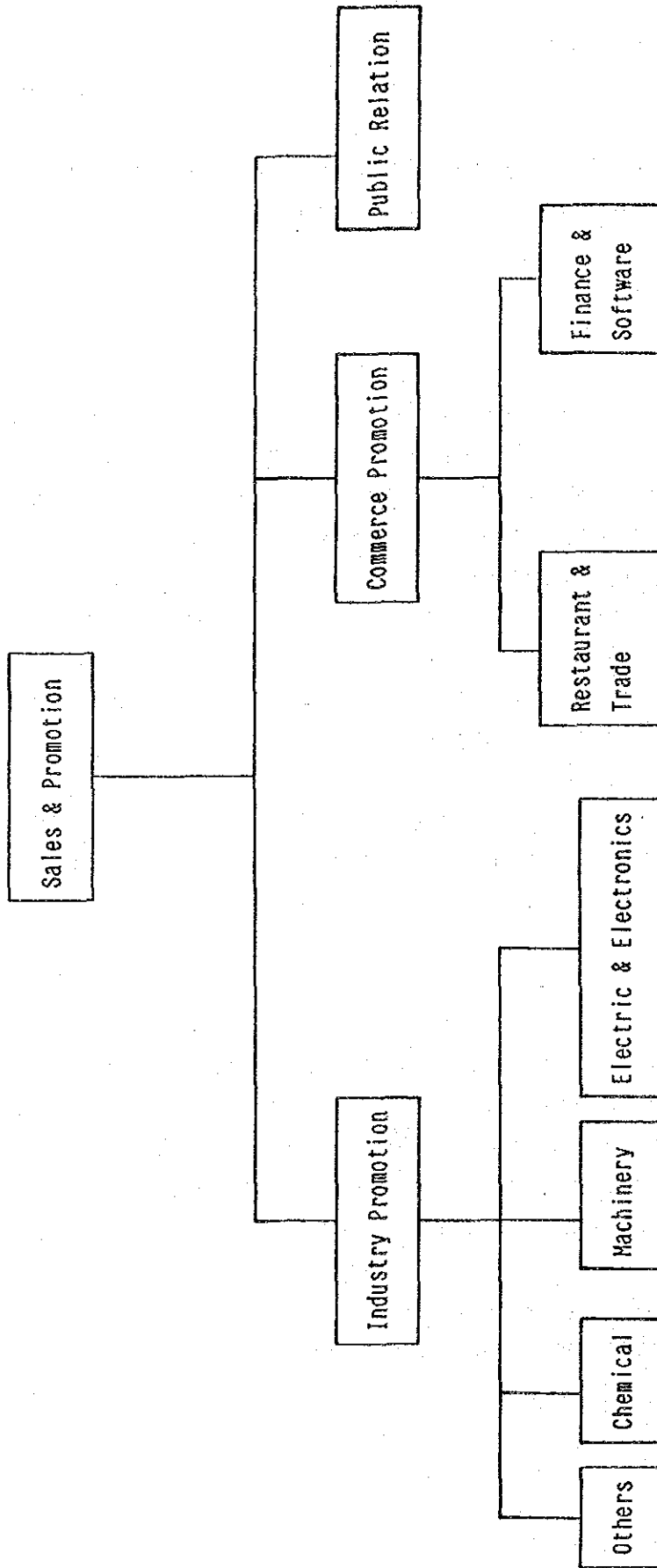


Fig. 5-9 Organization of Sales & Promotion

2) Developing Market Channels

The second improvement should be made to invest more for developing marketing channels. The cases of investment promotion by foreign countries show that promotion offices staffed with officers specializing in specific sectors have successfully achieved attraction of investments. The officers concentrate on the developing personal connections on a long term basis to gain the confidence of the persons in charge of investment decisions. After all, marketing and promotion rest on personal trust on persons in charge. Another important channel for the promotion is intermediate institutions and people such as bankers, consultants, commercial attaches and journalists. Since it is rather costly to extend marketing internationally, promotion should utilize these intermediate institution which also need information on industrial estates and can provide crucial initial access to potential investors from abroad.

3) Goal Management

The promotion is an activity where individual dedication by officers in charge makes a great difference in its performance. Ireland Development Authority has 20 investment offices all over the world. Ireland, whose economy cannot survive without foreign investments, makes vigorous efforts in investment promotion. Each office is given a target every year on an employment generation basis. The officers are driven to marketing to attain the goal. To conduct marketing effectively, some form of "Goal Management" should be introduced to commit the officers to promotion. Goal Management works most efficiently with the provision of incentives. Such a scheme may not comply with the management rules of a public corporation. In that case, direct promotion may be subcontracted to a private firm. Given incentives, the promotion officers will surely use their resources and connections to the maximum.

4) Who Is To Undertake Promotion?

If the aggressive promotion management does not prove to be acceptable to the IEAT, one alternative is to subcontract direct sales activities to a private firm, whether a PR company or a consultant. It would be more economical in the long run since the IEAT does not have to increase its personnel and can give a fixed term of a contract around at the completion of an industrial estate. It also gives an option to the IEAT to change marketing firms if the contracted firm proves ineffective. However, the detachment of promotion activities will derive the IEAT of the direct access to investors, thereby hindering its information collection functions.

Especially in the case of overseas investment promotion, it costs too much to establish an office and appoint officers just for a few industrial estates. The solution could be to appoint an agent for a short period. The agent method will dispense the IEAT with the overhead costs and the initial investment to develop connections if an agent with a good knowledge on industrial circles and connections is correctly selected. In any case, the costs and benefits must be carefully studied in undertaking such an approach.

