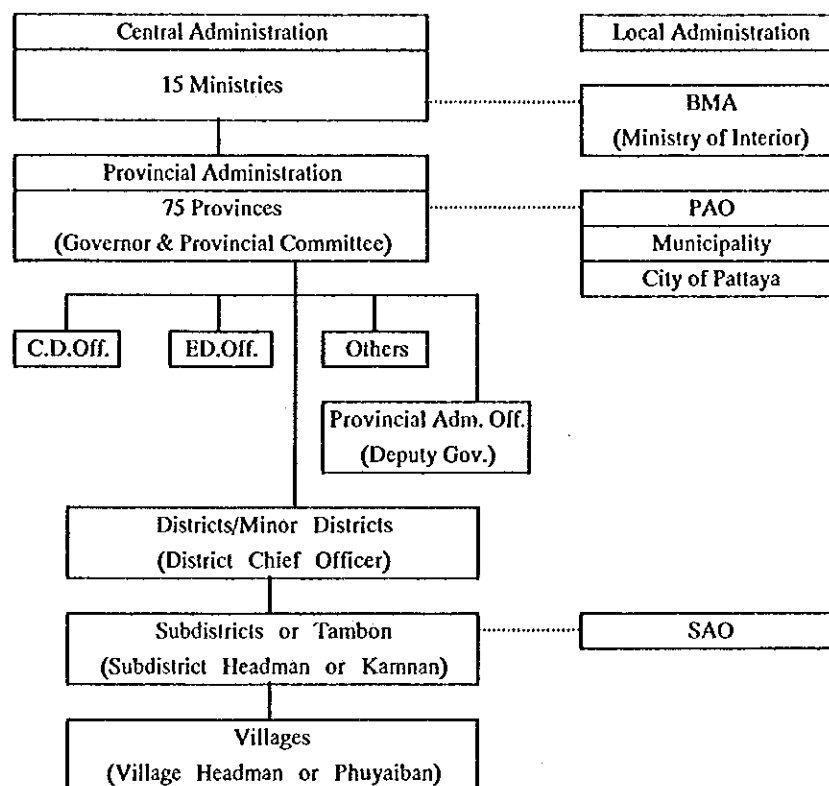


2.2.2 Public Administration System In the Region

2.2.2.1 Organization

The public administration system in Thailand is highly centralized and has tight control over local administration. The current local administration system has been developed and operated under the National Public Administration Act of 1991, which mandates the local administration system to be managed in a multi-tier structure consisting three organizations, namely central administration, provincial administration, and local administration (see Figure 2.2-1).

Figure 2.2-1. THAI PUBLIC ADMINISTRATION



(1) Central administration

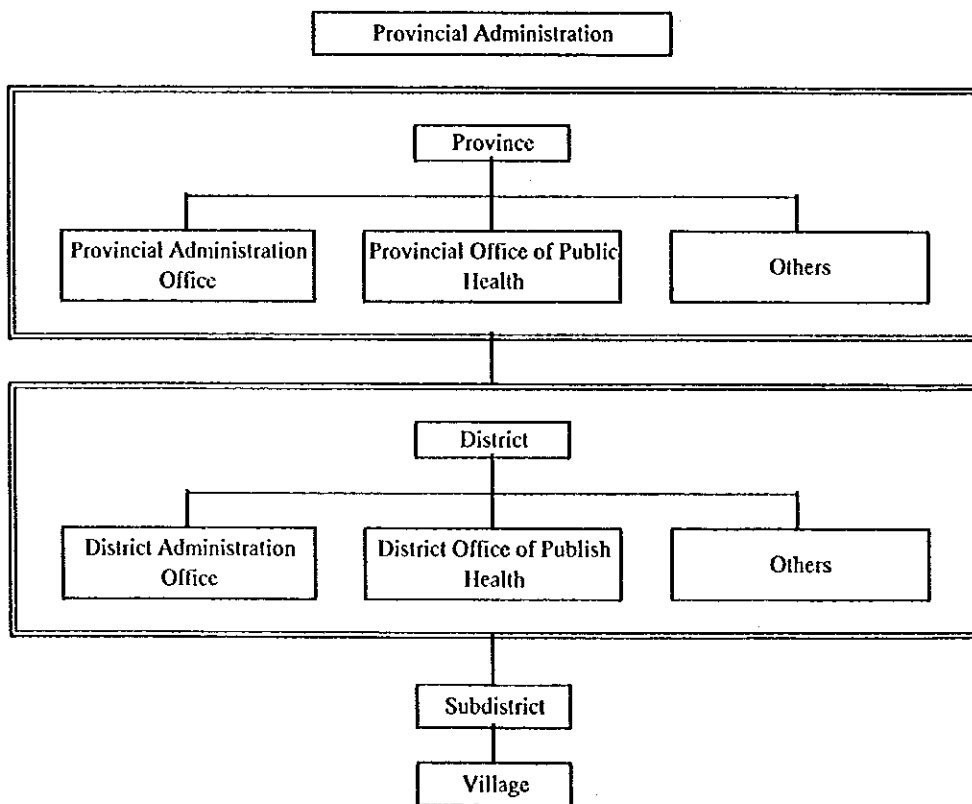
This represents the central government consisting of 15 ministries, each of which contains departments, offices, bureaus, divisions and subdivisions. Some departments have local branches, e.g., 11 Industrial Promotion Centers

(IPCs) operated throughout the country and under the Department of Industrial Promotion (DIP), the Ministry of Industry.

(2) Provincial administration

This structural element is made up of local organizations of the central government (15 ministries), each of which is delegated from its supervising ministry a specific level of power and authority, role and budget. In fact, each ministry has its local organization in all provinces except for Bangkok, totaling 75 provinces, and uses them as local arms to implement its policy. The provincial administration structure consists of five layers, as shown in Figure 2.2-2. It is headed by a provincial governor who is appointed by the Minister of Interior. District chief officers, the head of each district, are also appointed by the ministry (MOI), while headmen of sub-districts and villages are elected by local residents. Each layer of provincial administration is principally operated and managed under the budget allocated by each ministry.

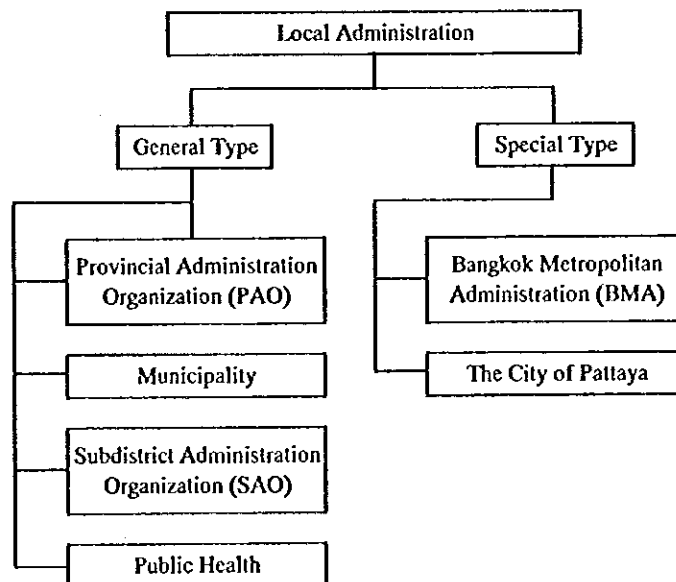
Figure 2.2-2. PROVINCIAL ADMINISTRATION SYSTEM



(3) Local administration

This is a mechanism to allow local people to participate in the local policymaking and implementation process. As shown in 2.2-3, the local administration structure is roughly classified into two types, special administration organizations in Bangkok and Pataya, and local governing organizations in other areas. Typical examples are provincial administration organizations (PAOs) and sub-district administration organizations (SAOs). The PAO is essentially a provincial council consisting of 18~36 members elected by local people. The provincial governor serves as the PAO's chairman. Similarly, the SAO is a local assembly to discuss various issues related to each sub-district and its development as well as budget allocation. In fact, the local administration structure has its own financial sources (12~13 related to local tax and public charge) in addition to those allocated from the central government. Recently, the central government has been raising the ratio of transfer payment to local governments from its revenues and the local administration system is expected to play an increasingly important role.

Figure 2.2-3. LOCAL ADMINISTRATION SYSTEM



Thus, the local government system in Thailand is primarily operated by the central administration structure, with two other structures (provincial and

local) playing their vital roles. Table 2.2-1 shows administrative units in each of the four provinces as of 1999.

Table 2.2-1. ADMINISTRATIVE DIVISIONS BY CHANGWAT: 1999

Changwat (Province)	Amphoe (District)	King amphoes (Sub-district)	Tet-sa-ban (Municipality)	Su-kha-ban (Sanitary district)	Tambon (Sub-district)	Muban (Village)
Chaiyaphum	14	1	1	19	124	1,273
Nakhon Ratchasima	24	3	4	42	289	3,212
Buri Ram	17	3	2	22	189	2,287
Surin	13	2	1	13	159	1,912

Note: Putting an English word in parentheses

Source: Bureau of Registration Administration, Department of Local Administration, Ministry of Interior

2.2.2.2 Local organization of MOI

The MOI has Provincial Industrial Offices (PIO) within provincial governor's office (Provincial Administration Office) in 75 prefectures, excepting Bangkok Metropolis. The PIOs are under supervision of the Office of Permanent Secretary and their general managers are appointed by the permanent secretary of the MOI. The PIOs are primarily responsible for regulation and supervision of factories (e.g., factory registration, and advice and guidance on safety and waste disposal), and industrial development has become their responsibility only a few years ago as full-time staff was assigned. At present, one or two PIO staff handles work related to industrial development and is responsible for development of local industries as the policy and planning officer. Generally, they work in cooperation with the Industrial Promotion Center (IPC), regional arm of the DOP and report to the IPC having jurisdiction over their province. (see Figure 2.2-4)

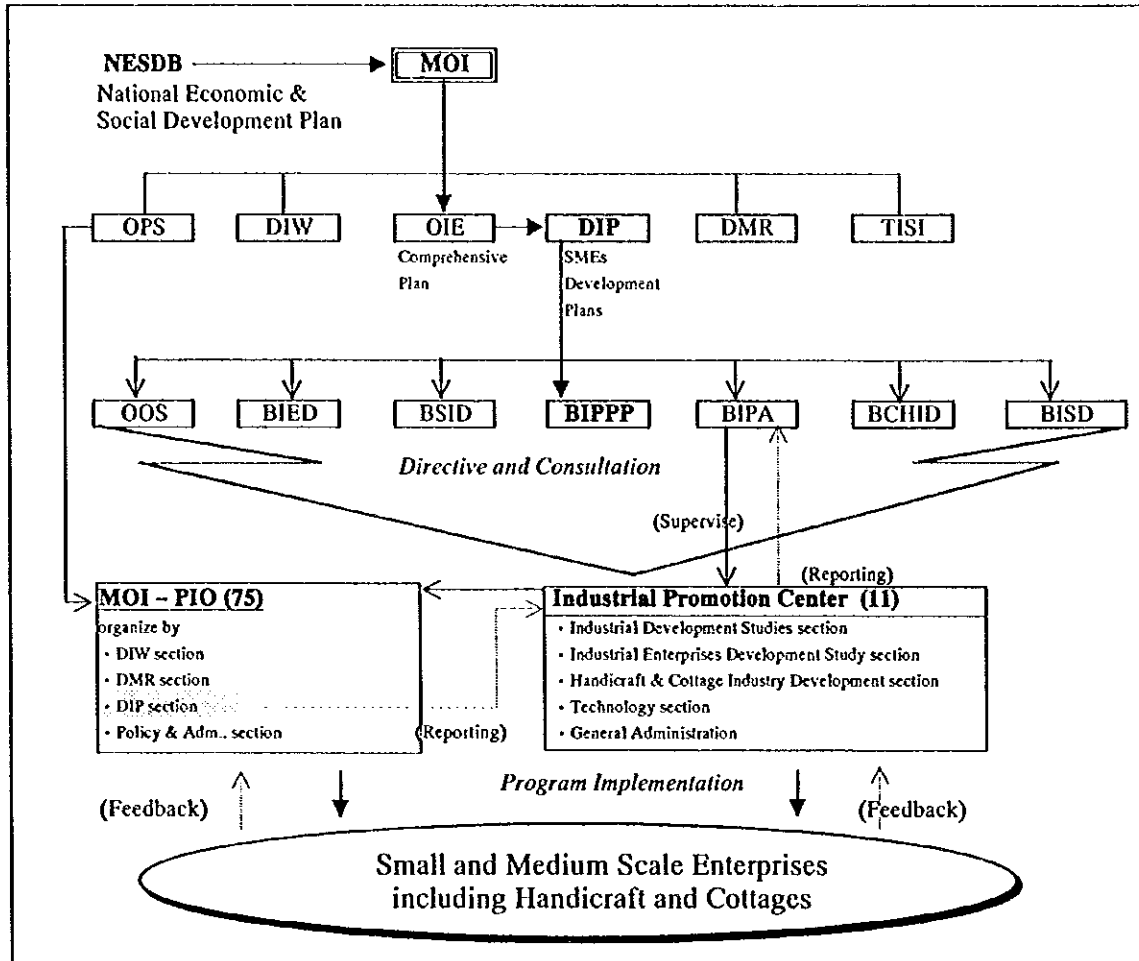
There are eleven IPCs throughout the country, responsible for implementation of actual programs related to local industrial development. Their size varies according to each region they serve, with a varying scope and type of service being provided, while the following duties are generally responsibility of all the IPCs:

- i) Fostering and support for regional industries; and
- ii) Fostering and support for microenterprises and cottage industries (e.g., technical and financial assistance).

The largest IPC is located in Chang Mai and employs 130 staff including part-time staff. Five IPCs in Chang Mai, Khon Kaen, Sphan Buri, Chon Buri and Songkhla are positioned as key centers, and each has more than 50 staff and consists of five sections. Other six centers have 12-20 staff each and 3-4 sections (see Figure 2.2-5). While the eleven IPCs cover all the provinces except for Bangkok, each IPC's jurisdiction was determined by the DIP according to its own criteria, different from the provincial clusters classified under the leadership of NESDB and used in this study.

Among the four target provinces, Chaiphum and Nakhon Ratchasima are classified into IPC Region 6, and Buri Ram and Surin belong to IPC Region 7. Neither province has key IPC. Thus, any industrial promotion program designed for the provincial cluster needs to be implemented through the two IPCs. Obviously, it will become critical to ensure smooth policy implementation by addressing the issues related to the difference between the NESDB classification and the MOI-DIP classification.

Figure 2.2-4. SYSTEMATIC FLOW OF POLICY MAKING AND IMPLEMENTATION OF INDUSTRIAL DEVELOPMENT



Remarks;

NESDB :National Economic and Social Development Board

MOI : Ministry of Industry

OPS : Office of the Permanent Secretary

DMR : Department of Mineral Resources

DIW : Department of Industrial Works

OIE : Office of Industrial Economics

DIP : Department of Industrial Promotion

TISI : Thai Industrial Standard Institute

BIPPP : Bureau of Industrial Promotion Policy and Planing

OOS : Office of the Secretary

BIPA : Bureau of Industrial Promotion Administration

BIED : Bureau of Industrial Enterprise Development

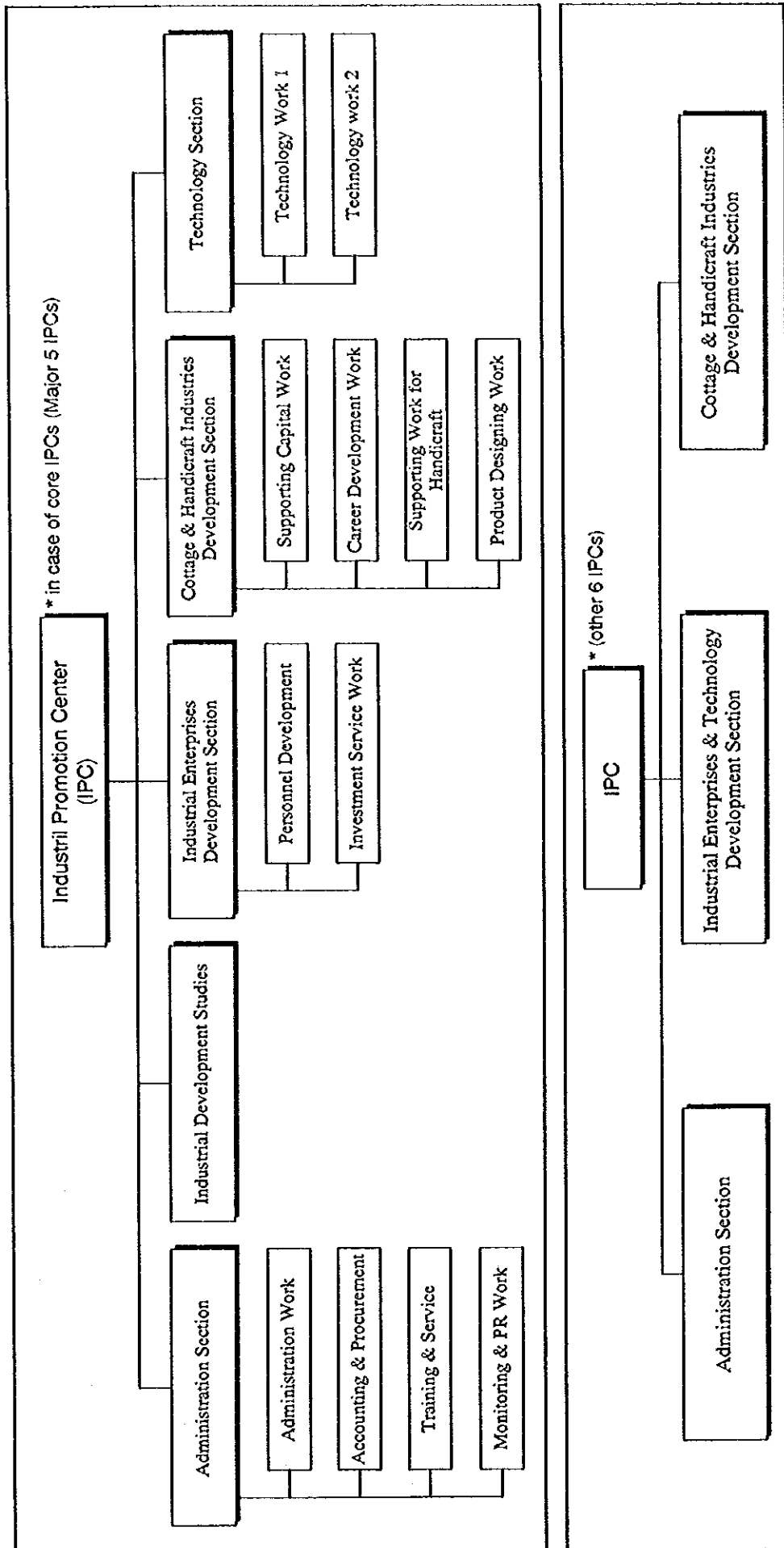
BSID : Bureau of Supporting Industries Development

BISD : Bureau of Industrial Sectors Development

BCHID : Bureau of Cottage and Handicraft Industries Development

Source: MOI

Figure 2.2-5. ORGANIZATION CHART OF IPC



Source: DIP

2.2.2.3 Relation between the Public and Private Sector In the Region

(1) Private business organizations

A leading business organization in Thailand, the Federation of Thai Industries (FTI), the Thai Chamber of Commerce (TCC), and the Thai Bankers Association (TBA) maintain local chapters in all the target provinces. In particular, the FTC and the CC have large membership in Nakhon Ratchasima where a larger number of business establishments operates. Membership and its breakdown of the FTC in the four provinces are summarized below.

Table 2.2-2. NUMBER OF FTI MEMBER

	No. of Member	Business of Major Member
Nakhon Ratchasima	122	Food processing Machinery
Buri Ram	39	Rice mill, construction materials
Surin	52	Rice mill, construction materials
Chaiyaphum	32	Food processing

(2) Joint Public/Private Consultative Committee

As a forum for local business people to offer their opinions to the central government, the provincial governor's office operates the Joint Public/Private Consultative Committee (generally referred to as KORLOROR, the abbreviation for the organization's name in Thai). This provincial KORLOROR is usually held every other month.

At the provincial KORLORO, representatives of local business organizations and the central government discuss economic issues related to their province or region, and the results of discussion are reported to the central KORLORO chaired by the Prime Minister (NESDB serves as the secretariat). The public sector is represented by the provincial office of the Ministry of Industry and the IPC, while representatives of local chapters of three key business organizations (FTI, the Chamber of Commerce and the Bankers' Association) attend at the committee. Nevertheless, few representatives of small businesses (including micro-enterprises) participate and their opinion is rarely heard or reflected in the committee's discussion. At present, evaluation on the KORLORO system and its role is divided. Meanwhile, one of the major issues for regional industrial development

is to find the way to effectively organize SMSs and MEs who dominate local industries and reflect their opinions in actual development efforts.

2.2.3 Financial Assistance System

2.2.3.1 Financial assistance system for SMEs

Since the economic crisis occurred in July 1997, as triggered by the devaluation of the baht, the Thai government exposed many SMEs to the harsh business environment, e.g., plummeted domestic sales and unfavorable lending attitude of commercial banks against SME loans. In response, the government decided and executed an emergency loan program in December 1998 to provide a total of 40 billion bahts (later increased to 98 billion bahts) through government financial institutions (SFIs) for SMEs which qualify under any of the following: ① those who are unable to obtain new loans from commercial banks while maintaining good credit standing; ② those who require funds to repay outstanding debts; or ③ those who are behind repayment schedule by 3 to 6 months due to the shortage of liquid assets but are expected to regain confidence once a new repayment plan is established.

In August 1998, the government decided and announced a package of economic measures entitled "Measures to Encourage Private Investment." They contain various financial assistance measures directed to SMEs as follows:

① Measure to encourage capital investment

The establishment of a venture capital fund totaling 1 billion bahts.

② Measures to improve financial access

- 1) Expansion of Small Industry Credit Guarantee Corporation (SICGC) (capital increase, expansion of organization and service range, and business reengineering)
- 2) Expansion of Small Industry Finance Corporation (SIFC) (capital increase, expansion of organization and qualified borrowers, and the strengthening of the ability to review loan applications)
- 3) The Establishment of the Financial Advisory Center

These measures are summarized in Table 2.2-3.

Table 2.2-3. MEASURES ANNOUNCED ON AUG. 10, 1999 AND THEIR PRESENT SITUATION

Items	Contents of measures	Present situations
1. Fund for Venture Capital Investment in SMEs	<ul style="list-style-type: none"> - MOF has allocated 1 bil. Baht fund drawn from structural adjustment loans. - This will be a closed-end fund with a life of 10 years. - The primary objectives are to strengthen the competitiveness, management, and financing capability of SMEs. - A committee will be established to set up the investment policy of the fund. - A separate committee will be set up to select a private company to manage this. 	<ul style="list-style-type: none"> - Policy Development Committee was set up by MOF and MOI and investment policy drafted is under discussion among the concerned authorities. - The Selecting Committee is working to select the best fund manager. - The fund is expected to start its business operation by the end of March.
2. Restructuring the Small Industry Credit Guarantee Corporation (SICGC)	<ul style="list-style-type: none"> - SICGC will be recapitalized by 4 bil. Baht in 1999 and by another 4 bil. Baht in 2003. - The scope of services will be expanded to cover enterprises that own fixed assets up to 100 mil. Baht, up from the present ceiling of 50 mil. Baht. - The maximum credit guarantee will also be enlarged from current level of 10 mil. Baht to 20 mil. Baht. - The initial credit guarantee fee will be reduced from 2.0 - 2.75 % to 1.75%. - The internal operation will be improved to increase the effectiveness of credit guarantee system. A credit guarantee evaluation committee and an internal auditing committee will be appointed to increase transparency and efficiency. - A detailed plan for branch expansion, including establishment of 4 regional Branches will be prepared. - The management and staff will be improved to enhance the effectiveness of SICGC. - Guidelines for compensation will be revised to allow financial institutions to receive compensation from SICGC much earlier than before. 	<ul style="list-style-type: none"> - No Baht is paid in as of the middle of March and no re-capitalization done. - Expansion of the scope of guarantee services was made to cover enterprises with net fixed assets of less than 100 mil. Baht in Sept., 1999. - The amount of the maximum guarantee was changed to 20 mil. Baht in Oct. - The guarantee fee was brought down to 1.75% in Sept., 1999. - Three Committees for the NPLs management, the fund investment and the audit were set up in Sept., 1999. - 2 branches are to be set up by June, 2000 and another 2 by the end of 2000. - Branch offices are thought to be located in IPC offices. - More staff will be employed for credit evaluation and collection (13 to 55) - Credit guarantee guidelines will be revised for compensation and promotion of revised guarantee service as well.
3. Restructuring the Small Industry Finance Corporation (SIFC)	<ul style="list-style-type: none"> - SIFC will be recapitalized by 2.5 bil. Baht in 1999 and by another 5 bil. Baht in 2003. - SIFC will expand the scope of its services to cover SMEs that own fixed assets including land up to 100 mil. Baht, up from the current ceiling of 50 mil. Baht. - The loan ceiling will be increased for each customer from 25 mil. Baht to 50 mil. Baht. - SIFC will strengthen the credit evaluation, approval and monitoring process to improve the quality of the loan portfolio. - It will develop the use of agency loans in addition to the current direct loans. - The management structure, management and staff will be improved to enhance the effectiveness of SIFC. - It will expand its branch network (six in 1999 and eleven subsequently). - It will introduce advisory services to assist customers in upgrading their operations and financial management. - It will consider the possibility of joint investment with target customer groups. 	<ul style="list-style-type: none"> - 1 bil. Baht was paid in and the remaining 1.5 bil. Baht is expected to be paid in by the end of March. - The scope of services was changed to cover SMEs with fixed assets of less than 100 mil. Baht in Oct., 99. - The loan ceiling was brought up to 50 mil. Baht in Oct., 99. - Agency loan will be tested in 2000 for regular operation from 2001. - SIFC has 6 branches by opening of 5 branches in 1999 and another 5 are to be opened in the near future. - One stop windows were set up in the head office and branches as well - The possibility of joint investment seems to be studied by the concerned authorities. No movement on this could not be heard.
4. Establishing Financial Advisory Centers for SMEs (SFAC)	<ul style="list-style-type: none"> - The centers will provide financial services to SMEs as well as collect financial data regarding SMEs to assist with the formulation of SME policy. - The centers will operate for two year beginning in Oct., 1999. - The Cabinet has mandated the MOF to provide not more than 100 mil. Baht. 	<ul style="list-style-type: none"> - SFAC was established on Oct. 10, 1999, with a financial support of 100 mil. Baht by MOF and in cooperation with MOI, TCC, FTI, TBA and DSIC. - 11 SFAC provincial offices've been opened (another 14 offices to be opened) - SFACs are scheduled to operate for two years.

(Sources) MOF, MOI, SICGC, SIFC

2.2.3.2 Current state of financial service and its availability in the target provinces

(1) Types of financial institutions in the target provinces and the number of branches

As shown in Table 2.2-4, commercial banks and governmental Specialized Financial Institutions (SFIs) have a large number of branches in the target provinces. It should be noted, however, that there are no financial institutions based in rural regions, including financial companies.

Among SFIs, SIFC established a branch in Nakhon Ratchasima in November, 1999, and SICGC is scheduled to open its first branch there. Both are measures conformed to the government policy. IFCT (Industrial Finance Corporation of Thailand) is planned to open Provincial Office (PO) in Chaiyaphum in July, 2000, in addition to the Nakhon Ratchasima Branch and Surin PO.

On the other hand, BAAC (Bank for Agriculture and Agricultural Cooperatives), which mission is to promote agriculture, and GSB (Government Savings Bank) established to promote savings operate 48 and 40 branch offices respectively in the target provinces.

(2) Lending activities by the financial institutions in the target provinces

The special features about their current lending activities can be pointed out as follows;

1) Commercial banks

The current state of lending by commercial banks, including the breakdown by sector, is summarized in Table 2.2-5.

- a. The commerce sector accounts for major portions of commercial lending in all the provinces.
- b. Nakhon Ratchasima has the largest share in the amount of loan extended, accounting for 60% of the total loans made in the four provinces, followed by Buri Ram, Surin and Chaiyaphum.
- c. Lending to the mining sector in Buri Ram is relatively large, probably because gravel pit and quarry mining constitutes a major industry in the province.

**Table 2.2-4. NUMBER OF CBs AND SFIs IN FOUR PROVINCES
(AS OF THE END OF 1998)**

Name of CB & SFIs	Total in North-Eastern Region	Nakhon Ratchasima	Chaiyaphum	Buri Ram	Surin
Commercial Banks					
Krung Thai Bank	111	17	7	8	4
Bangkok Bank	87	17	4	6	5
Thai Farmers Bank	74	12	4	4	3
Siam Commercial Bank	63	11	5	2	2
Bank of Ayudhaya	61	8	2	3	2
Thai Metropolitan Bank	43	12	1	4	1
Sri Nakorn Bank	23	5	-	2	1
Thai Bank	17	3	1	-	1
Bangkok Commercial Bank	15	1	-	1	1
Nakorn Liang Bank	13	3	-	2	1
Bank of Asia	12	2	1	-	1
Nakornthon Bank	9	4	-	-	-
Rattanasin Bank	5	2	-	-	-
Thai Thani Bank	4	2	-	-	-
Sub-total	537	99	25	32	22
Special Financial Institutions					
BAAC	154	20	11	10	7
GSB	131	20	6	8	6
IFCT	6	1	(1)*	-	1
SIFC	2	(1)*	-	-	-
SICGC	-	(1)*	-	-	-
Sub-total	293	42	17	18	14
Total	830	141	42	50	36

(Source) BOT

- (Note)
1. SIFC opened Nakhon Ratchasima Branch in Nov., 1999.
 2. SICGC is scheduled to open Nakhon Ratchasima Branch in April, 2000.
 3. IFCT will open Provincial Office in Chaiyaphum in July, 2000.

Table 2.2-5. LOAN AMOUNT OF CBs TO FOUR PROVINCES IN 1998

(Unit; mil. Baht, %)

Type of Industry	Nakhon Ratchasima			Chaiyaphum			Buri Ram			Surin			Total		
	Amount	%*	%	Amount	%*	%	Amount	%*	%	Amount	%*	%	Amount	%*	%
Agriculture	3,036.2	55.0	6.7	631.4	11.4	8.2	1,423.8	25.8	11.6	433.4	7.8	4.6	5,524.8	100	7.4
Mining	174.0	42.7	0.4	1.2	0.3	0.0	179.5	44.0	1.5	53.2	13.0	4.3	407.9	100	0.5
Industrial Work	6,437.8	66.7	14.2	850.7	8.8	11.1	1,374.9	14.2	11.2	992.5	10.3	10.5	9,655.9	100	12.9
Construction Work	3,165.4	49.0	7.0	1,151.2	17.8	15.0	1,204.0	18.6	9.8	942.7	14.6	10.0	6,463.3	100	8.6
Commerce	16,217.6	61.1	35.7	2,263.0	8.5	29.5	4,608.8	17.4	37.4	3,465.9	13.1	36.8	26,555.3	100	35.5
Banking	347.3	29.6	0.8	184.3	15.7	2.4	309.9	26.4	2.5	331.7	28.3	3.5	1,173.2	100	1.6
Real Estate	2,434.8	73.3	5.4	348.1	10.5	4.5	360.7	10.9	2.9	177.1	5.3	1.9	3,320.7	100	4.4
Public Utility	1,419.5	86.1	3.1	144.2	8.7	1.9	42.5	2.6	0.3	42.7	2.6	0.4	1,648.9	100	2.2
Service	3,351.4	68.2	7.4	311.6	6.3	4.1	861.5	17.5	7.0	389.1	7.9	4.1	4,913.6	100	6.6
Personal Use	8,791.1	59.5	19.4	1,796.0	12.1	23.4	1,955.1	13.2	15.9	2,241.7	15.2	23.8	14,783.9	100	19.8
Total	45,375.0	60.7	100	7,681.5	10.3	100	12,320.7	16.5	100	9,420.2	12.6	100	74,797.4	100	100

(Source) BOT

2) SFIs

Lending activities of SFIs to SMEs in the target provinces are summarized in Table 2.2-6.

i) BAAC (see Table 2.2-7)

- a. In the four provinces, more than 80% of BAAC's loans go to farmers and the remaining percentage to agricultural cooperatives. According to BAAC, it extends loans to 87% of farmers in the entire region, including loans made through agricultural cooperatives. The service coverage indicates that BAAC provides loans for most farmers who are qualified to borrow.
- b. Nakhon Ratchasima accounts for 43% of BAAC loans made in the four provinces, lower than commercial bank loans. This is considered to appear to reflect industrial structure in each province and because BAAC is limited to extend loans only to farmers and agricultural cooperatives.

Incidentally, the scopes of eligible clients and financing were expanded by the revisions of BAAC's Act in 1999 as follows;

- The definition of farmer includes his spouse, parents and children.
- Non-agriculture loans were available for the activities of manufacturing, commerce and service sectors.
- Loans for the purpose of receiving training for farming techniques and improving standards of living, such as the purchase of household goods.
- Lending to joint ventures by farmers and non-farmers.
- The loan limit was raised from 5 million Baht to 15 million Baht. [Reference] BAAC was approved to extend agricultural-related loans by its Law revision in 1993. The types of business extended loans since then are shown in 2.2-8.

**Table 2.2-6. LOAN AND GUARANTEE FOR SMEs IN 1999 BY SFIs
IN FOUR PROVINCES**

	IFGT	SIFG	GSB	BAAC	SIGGG
Total Amount	18,501.0	560.9	20,267.6	77,593.0	77.4
For SMEs	11,051.0 (100)	560.9 (100)	576.9 (100)	1,184.0 (100)	77.4 (100)
in Northeastern	n.a.	191.1 (34.1)	59.4 (10.3)	n.a.	14.9 (19.3)
in Nakhon Ratchasima	538.3 (4.9)	40.5 (7.2)	0.7 (0.1)	30.0 (2.5)	2.0 (2.6)
in Buri Ram	25.0 (0.2)	3.0 (0.5)	4.2 (0.7)	13.6 (1.2)	-
in Surin	126.0 (1.1)	-	2.0 (0.3)	12.2 (1.0)	-
in Chaiyaphum	180.3 (1.6)	3.5 (0.7)	1.0 (0.2)	26.0 (2.2)	-
Remarks:	Amount of Loan Approval (provisional)	Amount of Loan Approval (provisional)	Amount of Loan Approval (provisional)	Amount of Loan Disbursement (provisional)	Amount of Guarantee (provisional)

(Sources) IFCT, SIFG, GSB, BAAC and SIGGG

Table 2.2-7. LOAN AMOUNT OF BAAC TO FOUR PROVINCES IN 1998

(Unit: mil. Baht, %)

	Nakhon Ratchasima			Chaiyaphum			Buri Ram			Surin			Total		
	Amount	%*	%	Amount	%*	%	Amount	%*	%	Amount	%*	%	Amount	%*	%
Farmer (Agriculturist)	4,214.7	41.0	77.5	2,116.9	20.6	82.3	1,954.1	19.0	82.3	1,987.7	19.3	87.4	10,273.4	100	81.2
Agricultural Cooperative	1,225.1	51.3	22.5	454.1	19.0	17.7	419.3	17.6	17.7	287.8	12.1	12.6	2,386.3	100	18.8
Group of Farmers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	5,439.9	43.0	100	2,570.9	20.3	100	2,373.4	18.7	100	2,275.5	18.0	100	12,659.7	100	100

(Source) BOT

Table 2.2-8. TYPES OF BUSINESS APPROVED BY BAAC IN FOUR PROVINCES

Nakhon Ratchasima	Buri Ram	Surin	Chaiyaphum
1. Manufacturing Sector 	1. Manufacturing Sector a) Icecream b) Confectionery c) <u>Brick</u> d) Cement Pillar e) Soil Sauce f) Sawing Machine g) Leather Product h) <u>Noodlework</u>	1. Manufacturing Sector a) <u>Cement Pillar</u> b) Rain Pipe c) <u>Bending Iron</u> e) Door & Window f) Unpolished Rice Processing g) <u>Furniture</u> h) Trailer i) Silver & Gold Paper j) Sneaker k) Steam Fish l) Meat Ball m) <u>Ice</u>	1. Manufacturin Sector a) Jar-cover b) Agricultural Equipment c) Printing e) Artificial Flower f) <u>Tube Ice</u> g) Bean Sprouts h) Constructio Material i) <u>Drinking Water</u> j) <u>Furniture</u> k) Weaving l) <u>Boiled-rice Noodle</u> m) Curtain n) <u>Brick</u>
2. Commercial Sector a) Trade	2. Commercial Sector a) Grocery b) Cooking Gas c) Wholesale d) Consumer Good e) Product Gathering f) Silk Business g) Car Accessary Shop h) Food Shop	2. Commercial Sector a) <u>Grocery</u> b) <u>Noodle Shop</u> c) Tailor d) Icecream e) Recycle Shop f) Boil-rice Noodle Shop g) Soft Drink h) Food Shop i) Fruit Shop j) Egg Shop k) Onion & Garlic Shop l) Herb Shop m) Vegetable n) Fresh Fish Shop o) <u>Food (Curry) Shop</u> p) Meat Ball Shop q) Soil Milk & Roast Chicken r) Fermented Fish s) Minimart t) Stationary Shop u) Lottery	2. Commercial Sector a) <u>Construction Material Shop</u> b) <u>Agricultural Equipment</u> c) <u>Minimart</u> d) Drug Store e) <u>Auto Parts Shop</u> f) <u>Grocery</u>
3. Service Sector a) <u>Beauty Salon</u> b) <u>Barber</u> c) Car Repair Shop d) <u>Motorcycle Repair Shop</u> e) <u>Garage</u>	3. Service Sector a) Moulding Plant b) Seat Repairing & Making Service c) Worker Dispatch Abroad Service d) Photo Shop e) <u>Tailor</u> f) Toilet Sanction Service g) Tube Works h) Goods Transport i) <u>Barber</u> j) Gas Station k) <u>Garage</u>	3. Service Sector a) <u>Car Repair Shop & Garage</u> b) <u>Motorcycle Repair Shop</u> c) Tractor Repair Shop d) Air Conditioner/Radio Repair Shop e) Transportation f) <u>Gas Station</u> g) Signboard h) <u>Tailor</u> i) <u>Barber</u> j) Electric Device Repair Shop k) Agri. Equipment Repair Shop l) Tire Repair Shop m) Jewellery Cutting	3. Service Sector a) House Reform b) <u>Car Repair Shop & Garage</u> c) Electrical Device Repair Shop d) Tire Repair Shop e) Gas Station f) Sawing g) Agri. Equipment Repair Shop h) Car Repair Shop i) <u>Tailor</u>

(Source) BAAC

(Note) A type of business underlined is one approved for loan in 1999 by BAAC.

ii) IFCT (see Table 2.2-9)

- a. Nakhon Ratchasima holds the highest share among other provinces, reflecting the fact that non-agriculture industries are thriving in the province.
- b. In Chaiyaphum, Buri Nam and Surin, IFCT loans are mainly directed to food processing and other agri-businesses.

**Table 2.2-9. LOAN AMOUNT OF IFCT IN FOUR PROVINCES
IN 1998 AND 1999**

(Unit: mil. Baht, %)

Type of Industry	Year	Nakhon Ratchasima		Chaiyaphum		Buri Ram		Surin		Total	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Food, Beverage & Cigarette	1998	228.0	80.4	1.5	0.5	54.0	19.0	-	-	283.5	100
	1999	291.5	65.4	105.0	23.6	-	-	49.0	11.0	445.5	100
Weaving, Knitting & Apparel and Leather Product	1998	2.0	100	-	-	-	-	-	-	2.0	100
	1999	18.5	96.4	0.7	3.6	-	-	-	-	19.2	100
Wood Work & Furniture	1998	-	-	-	-	-	-	-	-	-	-
	1999	15.0	100	-	-	-	-	-	-	15.0	100
Paper Product & Printing	1998	-	-	-	-	-	-	-	-	-	-
	1999	-	-	-	-	-	-	-	-	-	-
Chemical Product, Petroleum & Plastics	1998	-	-	-	-	-	-	-	-	-	-
	1999	60.0	100	-	-	-	-	-	-	60.0	100
Non-metal Product except Petroleum Product	1998	50.0	100	-	-	-	-	-	-	50.0	100
	1999	15.0	100	-	-	-	-	-	-	15.0	100
Base Metal Industry	1998	-	-	-	-	-	-	-	-	-	-
	1999	-	-	-	-	-	-	-	-	-	-
Metal Product, Machine & Equipment	1998	53.0	100	-	-	-	-	-	-	53.0	100
	1999	66.0	100	-	-	-	-	-	-	66.0	100
Agricultural Industry	1998	-	-	-	-	-	-	-	-	-	100
	1999	36.0	59.0	-	-	10.0	16.4	15.0	24.6	61.0	100
Hire Purchase of Machine & Equipment	1998	-	-	-	-	-	-	-	-	-	-
	1999	-	-	-	-	-	-	-	-	-	-
Others	1998	66.6	99.3	-	-	-	-	0.5	0.7	67.1	100
	1999	36.3	19.3	75.0	39.8	15.0	8.0	62.0	32.9	188.3	100
Total	1998	399.6	87.7	1.5	0.3	54.0	11.9	0.5	0.1	455.6	100
	1999	538.3	61.9	180.3	20.7	25.0	2.9	126.0	14.5	870.0	100

(Sources) IFCT

(Note) 1. The above figures are all for SMEs.

2. The figures in 1999 are provisional.

3. The approval in 1999 were made under the government finance plan to SMEs.

iii) SIFC

- a. SIFC, a governmental financial institution specialized for SMEs, is expected to do financing business for SMEs but its total loan amount is not so big.
- b. Under such a situation loan amount to Nakhon Ratchasima is the biggest among four provinces and loans for manufacturing sector of food, fertilizer and pesticide were approved.
- c. No loan approval was made for Surin in 1999. Loan approvals in Buri

Ram and Chaiyaphum were on related industries with agricultural products.

iv) GSB

- a. The major purpose of GSB is to promote savings and to lend this saving money to the state-owned enterprises and governmental financial institutions. The loan amounts to SMEs, therefore, is very small.
- b. Loan amounts to Buri Ram is the biggest and those of Surin, Chaiyaphum and Nakhon Ratchasima follow. The result is quite different from ones of the other financial institutions.
- c. The types of business extended loans in 1999 were wholesale and retail businesses and these were small loans.

v) SICGC

The amount of guarantee approval made in 1999 was small because the financial institutions brought in a few project due to NPLs problem. In the four provinces only the process industry of agricultural product in Nakhon Ratchasima was approved.

The interview survey of financial institutions reveals that they intend to boost SME loans partly because they feel obliged to cooperate with the government. However, they do not have any regional focus and are ready to extend loans to qualified applications.

3) Other financial support for SMEs

i) Ministry of Industry

The MOI's program, the Revolving Fund for Cottage and Handicraft Industries, was launched in 1993 to foster cottage and handicraft industries in rural areas by providing funds to individuals and groups. At present, the program provides loans at an interest rate of 6% per annum with the maximum repayment period of 10 years (including the grace period of 3 – 12 months). Each loan requires a guarantor. In addition to the revolving

fund, the MOI started a special loan program last year, which was designed to promote SMEs under the ministry's local industry promotion plan. The loan under the program is provided at 4% per year (3% for construction projects) with the loan period of 10 years (two-year grace period) and the borrower is required to pledge his land and/or buildings as collateral. The approvals in total and four provinces of both programs are shown in Table 2.2-10.

Table 2.2-10. THE APPROVAL IN TOTAL AND FOUR PROVINCES

(unit: thousand Baht)

	Year	Total	Korat	Chaiyaphum	Buri Ram	Surin
Revolving Fund	1998	n.a.	2,430	510	1,940	940
	1999	96,568	610	2,110	2,595	465
Special Loan	1999	16,500	10,000	-	1,000	-

(Sources) DIP, IPC-6, 7

ii) SMEs Financial Advisory Center (SFAC) in Nakhon Ratchasima

Last November SFAC opened its provincial office within the Suranaree University of Technology, which serves all four provinces. However, its presence is not known to some enterprises visited for the interview survey, although staff of Bankers Association (BA) and Federation of Thai Industry (FTI) know it. This is one example of poor recognition of government programs in the provinces. A small percentage of people in the public and private sectors knows details or the progress after the initial announcement through general media. The situation may reflect the fact that most government programs have still to produce tangible results.

iii) Provincial/Administration Office

Provincial/Administration office representing local community which are considered to be able to enjoy the most benefits through provincial industrial development have never extended any financial support to SMEs in their provinces mainly due to lack of fund and shortage of staff.

Table 2.2-11 is the statistics of the local finances in FY1998 in the four provinces. This shows there are many fund which Provincial/ Administration office can spend or utilize freely like general subsidies and savings carried over from the previous FY.

The above excuse of lack of fund is considered to mean that the ways to spend these funds were already decided and, therefore, Provincial/Administration office can not afford to take any financial support for SMEs.

2.2.3.3 Major Issues related to financial assistance

(1) Comments by SME borrowers

The study team visited private enterprises of varying sizes to ask about financial assistance programs operated by the government and SFIs. Major issues raised in their responses are summarized as follows.

1) The interest rates are still high

This comment was widely heard among SMEs, including workshop participants. In fact, some SMEs which export their products borrow money in foreign currency because of high interest rates for local currency loans.

2) Additional borrowing is not possible

SMEs which have outstanding loans complain about the limited line of credit.

3) Lack of financial access for cottage industries and microenterprises

These small businesses require to borrow a relatively small amount of fund, e.g., 100,000 to 200,000 bahts. On the other hand, commercial banks and IFCT do not provide small loans; IFCT sets the minimum amount of loan at 500,000 bahts. BAAC is only one financial institution to meet demand, and the MOI's revolving fund plays a supplemental role. SIFC is mandated to provide small loans but does not have any branch office in Chaiyaphum, Buri Ram and Surin where such demand is high.

Table 2.2-11. BUDGET OF FOUR PROVINCES (FY 1998)

	(Unit: Thousand Baht)			
	Nakhon Ratchasima	Buri Ram	Surin	Chaiyaphum
Incomes				
1. Regular incomes				
Taxes	1,171,729.7	475,577.4	442,073.9	380,185.3
Fee, fine and licencing	137,837.9	51,504.6	28,206.9	32,917.4
Assets	95,129.0	36,876.1	43,557.9	31,032.2
Utilities	18,901.0	2,872.2	6,400.8	4,628.6
Sundries	15,595.8	14,890.8	7,406.6	7,447.7
Sub-total	1,439,193.5	581,721.0	527,646.1	456,211.1
2. Extraordinary Incomes				
General subsidies	639,098.4	319,691.2	268,356.2	259,452.6
Subsidies for special activities	167,419.5	68,744.1	32,109.3	55,655.9
Savings	161,160.0	48,412.8	83,212.5	39,433.9
Loans	1,096.8	2,560.1	137.6	1,579.8
Provincial development fund	1,501.8	4,050.0	8,714.9	2,216.0
Sub-total	970,276.4	443,458.1	392,530.5	358,338.2
Total Incomes	2,409,470.0	1,025,179.2	920,176.7	814,549.3
Expenses				
1. Regular expenses				
Salaries	201,729.6	74,793.5	69,068.0	64,313.8
Salaries for temp. employees	98,697.8	39,856.6	25,944.9	30,172.0
Consumable materials	349,864.9	141,569.9	124,802.7	148,073.4
Utilities	15,004.4	2,172.9	2,496.4	3,684.8
Subsidies	40,488.1	9,695.2	11,884.3	15,723.5
Investment expenses	830,120.3	386,110.1	327,766.1	270,214.6
Others	15,563.7	7,793.1	834.7	8,057.0
Sub-total	1,551,468.9	661,991.4	562,797.1	540,239.1
2. Extraordinary expenses				
Expenses for specific activities	188,772.9	95,784.5	66,231.8	70,053.7
Expenses from savings	118,760.7	61,846.9	42,498.0	19,807.7
Expenses from loans	6,196.0	6,482.5	36,885.8	2,769.3
Others	192,755.4	22,209.2	20,164.0	6,608.5
Sub-total	506,485.0	186,323.1	165,779.6	99,239.2
3. Expenses from central budget				
Repayment of loan	10,728.6	4,548.9	4,672.2	5,447.2
Expenses of approved projects	14,445.3	4,044.0	10,462.4	3,680.9
Advance payment	11,317.7	1,698.7	2,314.0	3,784.0
Provisional relief fund	6,560.3	626.8	355.1	1,330.9
Others	423.9	200.2	103.3	767.5
Sub-total	43,475.8	11,118.6	17,907.1	15,010.6
Total expenses	2,101,429.7	859,433.1	746,483.8	654,488.9
Balance	+308,040.2	+165,746.2	+173,692.8	+160,060.4

(Source) Dept. of Local Administration, Ministry of Interior

- (Note)
1. General subsidy is the government subsidy provided to local in accordance with the number of population of that area at Baht 120/person/year. This subsidy could be used in any way to facilitate local administration work. There is no specific way of using.
 2. The saving amount in the previous FY can be carried over to the next FY as "Savings" and could be used freely by the local government.

4) Lack of advertisement

Some SMEs pointed out that they had no access to loan information, such as “what type of financial assistance is available from which bank,” “how to make an approach to the bank” or “which program is most suitable for my business plan.”

(2) Comments by financial institutions

Financial institutions are a mere intermediary in the banking system. They are only concerned about whether SME loans can be repaid within a specific period. This business principle is also applied to institutional lending. Many persons of financial institutions cited various reasons why they were reluctant to SME loans:

- 1) They tend to conceal financial figures;
- 2) Some of them do not produce financial statements and reports;
- 3) They often report incorrect figures;
- 4) Some operate for long years despite of insolvency;
- 5) They do not present detailed sales plan; and
- 6) The amount they wish to borrow is much larger than their asset value.

(3) Issues

Major issues related to financial assistance for SMEs are summarized as follows.

1) Need for a long-term and low-interest loan program

The interest rate of 5 – 6% per year is desirable, while the repayment period may remain unchanged.

2) Need for support by local community

While financial institutions express the intent to increase SME loans, they have no intention of giving priority to SMEs in rural regions and will review and accept or reject loan applications case by case. To secure loans for

SMEs in the target provinces, therefore, efforts are required on the project implementation side to motivate financial institutions to provide loans by effectively selling the project and its value. In particular, a provincial/administration office, as the representative of a local community, should devise a mechanism to unleash potential power of the local community toward the goal of fostering local industries and enabling them to build the thriving community.

3) Need for diverse channels for financial service

Although SFIs are moving to expand their operations and increase branch offices in rural regions, they still have a long way to go. In particular, SIFC and SICGC need to establish presence and public recognition among rural communities, business establishments and people.

4) Need for knowledge on financial service among government staff in charge of SME promotion

Staff of the MOI who is responsible for promotion of SMEs, particularly those of the IPOs and PIOs who have direct contact with SMEs, need to learn about the financial assistance programs for SMEs in order to provide consultation service for them when requested.

2.2.4 Investment Promotion

2.2.4.1 Investment Promotion Activities In the Target Provinces

In 1988, the BOI set up the Northeastern Region Investment and Economic Center 1 Nakhon Ratchasima, generally known as BOI Korat. The BOI Korat is one of the six regional offices of the BOI, covering 10 provinces in the northeastern region; Nakhon Ratchasima, Kohn Kaen, Udon Thani, Surin, Buri Ram, Chaiyaphum, Mahasarakham, Nong Khai, Loei, and Nong Bua Lamphu.

The BOI Korat has a staff of 8 persons including 1 director and 3 officers. It has mainly offered the following services to local entrepreneurs in these 10 provinces and potential investors.

BOI's services

(1) General Services

- Economics and investment information
- Introducing of an investment opportunities
- Match maker and support sub-contract manufacturing
- Coordinate with others related investment promotion organization

(2) Investment Promotion services

- Assistance in preparation of project application
- Assistance in changing to previously approved project
- Assistance with procedures involving foreign technicals/experts and land ownership by foreign enterprises
- Assistance with custom clearance for imported machinery and imported raw and essential material
- Facilitating in the installation process of electricity ,water supply and telephone system

(3) Investment Promotion Activities in Nakhon Ratchasima, Buri Ram, Surin and Chaiyaphum

1) Seminar and Workshop

- "New era of Investment Promotion"
- "Development of Linkage Industry"
- "Investment opportunity in Indochina"
- "Regional Investment in the Crisis Economic"
- "Thailand investment in the year 2000"
- Training of the operation process after BOI's approval projects
- Seminars / workshop on the decision making

2) Others Investment Promotion Activities

- Buyers meet Sellers Program
- Factory visit exchange program with the central entrepreneurs
- Factory visit program for the foreign investors
- Coordinated with the Department of Export Promotion in exhibit "Korat Outlet"

3) Information services

Almost the information is concern the BOI's approval company, investment potential and investment information from others related organization. Moreover, the BOI is currently making the regional information so call "INVESTMENT ENCYCLOPEDIA" which could be the basic information for the local and foreign investors. Thus, priority to the provincial area.

(4) Investment promotion Policy

The BOI will change the tax privilege policy by giving more intensive to the lower income and poor infrastructure facilities provinces and encourage the SMEs project by set up the minimum investment criteria to be 1 million Baht (Excluded land and working capital). Also, focusing on the Agro-based manufacturing.

Comparing the provincial cluster of Nakhon Ratchasima, Buri Ram, Surin and Chaiyaphum with the metropolitan areas in terms of raw materials, labor, infrastructure, and technology, this provincial cluster stands at advantage over Bangkok in availability of some agricultural /mineral resources and supply of cheap labor, while it fall behind Bangkok in supply of engineers and managers/supervisors, physical and social infrastructure, and development of new technology.

Among the four provinces included in this provincial cluster, Nakhon Ratchasima stands at comparative advantage over the other three provinces in access to Bangkok and physical and social infrastructure. Land prices are almost on the same level within the provincial cluster. Buri Ram, Surin, and Chaiyaphum seem to have difficulty in finding other advantages over Nakhon Ratchasima than lower wages and living costs, although there are a few indigenous resources like jasmine rice in Buri Ram and Surin, and potash in Chaiyaphum. Table 2.2-12 shows some different points on infrastructure which can be comparable in the target provinces and other major cities in Thailand.

As for market development, the provincial offices of the Ministry of Commerce have offered entrepreneurs several kinds of services. The Office of Permanent Secretary has informed agricultural producers of the prices of tapioca, rice, corn, and sugar. Such price information is faxed from Bangkok daily in case of tapioca, and weekly in rice, corn, and sugar. The Office of Internal Trade has offered government loans to several villages with many small shops to assist them in running and expanding their business. Each of those villages can borrow 30,000 bahts to 50,000 bahts. At present, nine villages have used those loans. They have no interest with the repayment term of three years. The Office of Internal Trade has held seminars and workshops for entrepreneurs. Its staffs have also given them guidance in accounting and marketing.

Table 2.2-12. INVESTMENT ENVIRONMENT BY PROVINCE (1/2)

Factors	Bangkok (BKK)	Ayuthaya (Central)	Kanchanaburi (West)	Chachoengsao (East)	Lamphun (North)
1 BOI zoning	Zone 1	Zone 2	Zone 2	Zone 2	Zone 3
2 Distance from BKK	-	76km	128km	82km	670km
3 Traffic from BKK	-	Car, Bus, Train	Car, Bus, Train	Car, Bus, Train	Car, Bus, Train, Airplane
4 Harbors	Deep-water port (Khlong-Toey)	-	-	Deep-water port (Laem chabang, Maptaput, Sattahip)	-
5 Airports	International airport (Don Muang)	-	-	-	International airport (Chiang Mai)
6 Water supply (m ³ , 1995)	1,405,200,000	6,269,891	5,880,208	11,495,391	-
7 Electricity consumption (10 ³ kWh, 1995)	20,231,869	1,626,250	497,164	1,164,728	-
8 No. of population per telephone (1998)	2.0 persons	13.2 persons	23.7 persons	14.7 persons	13.3 persons
9 No. of population per school (1996)	3,766.0 persons	1,458.5 persons	1,414.1 persons	1,594.6 persons	1,187.3 persons
10 No. of population per physician	998 persons	6,926 persons	8,277 persons	7,340 persons	9,418 persons
11 Minimum wages per day (Jan. 1998)	Baht 162	Baht 130	Baht 130	Baht 130	Baht 130
12 Selling price of industrial estates (general) per rai	Baht 3,500,000	Baht 2,200,000 - Baht 4,000,000	Baht 1,800,000	Baht 2,200,000 - Baht 4,000,000	Baht 1,600,000
13 Household income per month (1996)	Baht 21,550	Baht 11,376	Baht 10,230	Baht 11,820	Baht 8,735
14 Deposits per capita (1998)	Baht 538,955	Baht 50,070	Baht 24,825	Baht 55,764	Baht 17,739

Table 2.2-12. INVESTMENT ENVIRONMENT BY PROVINCE (2/2)

Factors	Songkhla (South)	Nakhon Ratchasima (North East)	Buri Ram (North East)	Surin (North East)	Chaiyaphum (North East)
1 BOI zoning	Zone 3	Zone 3	Zone 3	Zone 3	Zone 3
2 Distance from BKK	950km	259km	410km	457km	342km
3 Traffic from BKK	Car, Bus, Train, Airplane	Car, Bus, Train, Airplane	Car, Bus, Train, Airplane	Car, Bus, Train	Car, Bus, Train
4 Harbors	Deep-water port (Songkhla)	-	-	-	-
5 Airports	International airport (Hat Yai)	Domestic airport	Domestic airport	-	-
6 Water supply (m ³ , 1995)	-	12,163,216	5,709,346	6,553,371	8,584,093
7 Electricity consumption (10 ⁶ kWh, 1995)	-	1,259,487	239,542	216,584	205,728
8 No. of population per telephone (1998)	12.2 persons	29.6 persons	71.6 persons	79.7 persons	60.5 persons
9 No. of population per school (1996)	1,869.4 persons	1,617.7 persons	1,612.4 persons	1,630.2 persons	1,327.5 persons
10 No. of population per physician (1995)	2,265 persons	8,569 persons	16,571 persons	15,642 persons	16,816 persons
11 Minimum wages per day (Jan. 1998)	Baht 130	Baht 140	Baht 130	Baht 130	Baht 130
12 Selling prices of industrial estates (general) per rai	Baht 900,000	Baht 1,000,000	-	-	-
13 Household income per month (1996)	Baht 11,089	Baht 8,803	Baht 6,446	Baht 6,517	Baht 7,166
14 Deposits per capita (1998)	Baht 48,755	Baht 19,739	Baht 7,176	Baht 7,397	Baht 7,331

2.2.4.2 Problems

Examining the investment trends in the past and the promotional activities so far made, we can point out the following problems.

1. Investment in Buri Ram, Surin , and Chaiyaphum is not active.
2. Efforts for inviting investment from outside are insufficient.
3. Effective information systems are not developed.

The first point is mainly because these three provinces have other particular advantages than abundance of cheap labor force. Apparently, they are inferior to Nakhon Ratchasima in terms of access to the metropolitan area, physical and social infrastructure. Neither of the local government and the private sector have clear ideas of what kind of industries should be developed in their province. This is partly because these three 3 provinces have no government offices specializing in investment promotion like the BOI Korat.

As to the second problem, the two major reasons can be thought. At first, the BOI Korat has a limited budget for its activities, although it has some budget for making leaflets for introducing its services and holding seminars. The BOI Korat has looked to the headquarters in Bangkok for planning policies for its activities. It has not taken the initiative in carrying out any original campaigns with due regard to local needs for investment. Investment seminars have been held mainly in Nakhon Ratchasima, Khon Kaen, and Udon Thani. Secondly, the local government agencies including the BOI Korat have not clear ideas or policies of investment promotion. Indeed, they do understand the necessity of attracting more investment to their provinces, but when it comes to the particulars of this subject, they have no definite guidelines concerning what types and kinds of industries to invite to each of their provinces or how to attract investment for those specific industries.

The third problem is absence of integrated networks for a variety of information including investment promotion. At present, a host of organizations including the local government agencies have collected data and information concerning economy, industry, technology, production, sales, export, and investment in their own ways and formats. For that reason, investors have found difficulty in getting information they need effectively in

a short time. Opportunities of investment in the provinces are expected to increase if those data sources can be linked with one another via computer and communication lines.

2.2.5 Technical Support for Production and Management

2.2.5.1 Major Supporting Schemes and Activities of IPC

Ministry of Industry provides technical support for production and management through IPCs. Nakhon Ratchasima and Chaiyaphum are under IPC Region 6 (IPC6), and Buri Ram and Surin are IPC Region 7 (IPC7). IPC's supporting schemes are divided into two categories, training and no training schemes.

(1) Training Schemes

Among the training schemes, there are management training, technical training and vocational training schemes. Management training programs are taught by trainers from Bureau of Industrial Enterprise Development (BIED) as well as executives of leading local business enterprises. Major management training programs are CEFE (Competency-based Economies through Formation of Enterprise) training programs under the Small-Scale Industry Promotion Project (SSIPP) assisted by GTZ. The list of CEFE training programs is in Table 2.2-13.

Table 2.2-13. LIST OF CEFE TRAINING PROGRAMS

Program		Days required
For Potential and New Entrepreneurs		
Entrepreneurial Competencies Workshop	EC	4
Business Planning Workshop	BP	10
New Business Creation Full Course	NBC-FC	22
For Existing Entrepreneurs		
Small Business Management on Marketing Management	SBM-MM	4
Small Business Management on General Management	SBM-GM	4
Small Business Management on Production Management	SBM-PM	4
Small Business Management on Human Resource Management	SBM-HRM	4
Small Business Management on Financial Management	SBM-FM	4
Small Business Management for Cottage Industries	SBM-CI	5
Business Restructuring and Competency Enhancement Workshop	BRACE	7
Strategic Project Enhancement for Enterprise Development Workshop	SPEED	9
Business Planning Workshop	BP	10
For Support Organizations		
Appreciation Workshop	AW	
Training of Trainers Course	TOT	
Training of Consultants Workshop	TOC	
Training of Bank Loan Officers Workshop	TBO	
Strategic Planning Workshop	SPW	

Source: SSIPP CEFE Training Program information.

Technical training programs are provided by trainers from Bureau of Supporting Industries Development (BSID) and Bureau of Industrial Sector Development (BISD). Trainers for technical training are mainly faculty members of Rajamangala Institute of Technology (RIT) and Technical Colleges.

(2) Non-training Schemes

Non-training schemes include consulting service, information service (which includes study missions and exhibitions), and financing service¹.

(3) Promotion of Rural Industrial Development Project (PRID)

PRID is a project having training component and non-training component. Its major objective is to provide local people with training and to create employment opportunities for them in rural areas. In order to implement PRID, three parties, DIP (or NGOs on behalf of DIP), private companies and local people (local community groups) cooperate.

Roles of DIP are:

- a) To do publicity about PRID,
- b) To provide partial funds for the villagers' training managed jointly with the private sector, and
- c) To provide training site and production site for the early stage,

Roles of the private sector are:

- a) To assist in marketing,
- b) To provide training on production and management,
- c) To initiate investment, and
- d) To provide raw materials, production technologies and machinery.

Roles of rural community are:

¹ IPC's major financing scheme is called revolving fund. The fund is to be mentioned in 2.2.3. Therefore, it is not mentioned here in 2.2.5.

- a) To undertake production,
- b) To form cooperatives and invest for ownership.

Roles of NGOs are:

- a) To facilitate and coordinate activities, and
- b) To develop capacity of villagers and communities.

2.2.5.2 Training and Non-training Schemes by IPC6

IPC6 provides various training programs, consulting service, financial assistance and information service to business entities and entrepreneurs. IPC6 is operated by 13 government service officers, 8 permanent employees, and 27 temporary staff.

(1) Training Schemes

Training programs implemented by IPC6 from 1996 to 1999 are listed in Table 2.2-14. In Nakhon Ratchasima, number of training programs is increasing and participants are also increasing. Among the training programs, the training programs related to PRID are the major ones. Training programs under PRID are currently three types, basic production skill, skill upgrading, and business management. As the number of PRID projects increased from 1 project in 1997 to 6 in 1998 and 15 projects in 1999, the training programs for PRID also increased². However, the basic production skill program and the skill upgrading program will be integrated into one program from the year 2000.

Regarding the CEFÉ training programs, three programs are implemented in Nakhon Ratchasima. Those are:

- a) New Business Creation Full Course (NBC-FC) (22 days program),
- b) Training of Trainers Course (TOT) (12 days program), and
- c) Appreciation Workshop (AW) (2 days program).

² Among the 15 projects, there is one project in which NGO is involved.

Table 2.2-14. LIST OF TRAINING PROGRAMS IMPLEMENTED BY IPC6

	(Persons)							
	Nakhon Ratchasima				Chaiyaphum			
	1996	1997	1998	1999	1996	1997	1998	1999
Number of implementation	13	23	16	32	7	9	6	5
Technical training	5	2	1	3	1	0	1	1
BSID	3	2	1	2			1	1
IPC	1							
BISD	1			1	1			
Management training	2	5	3	8	0	1	1	0
BIED	1	3				1	1	
IPC	1	2	2	2				
JODC			1					
BIED (SSIPP)				3				
BIPA (AOTS)				2				
IRP (Seminar)				1				
Vocational training	6	15	1	3	6	8	6	4
PRID		1	11	18				
Basic production		1	9	10				
Skill upgrading			2	5				
Management				3				
Number of days spent	157	504	717	n.a.	193	275	n.a.	n.a.
Technical training	22	12	7	13	5	0	7	5
BSID	12	12	7	10			7	5
IPC	5							
BISD	5			3	5			
Management training	3	12	91	60	0	2	2	0
BIED	2	7				2	2	
IPC	1	5	90	3				
JODC			1					
BIED (SSIPP)				36				
BIPA (AOTS)				20				
IRP (Seminar)				1				
Vocational training	132	440	45	42	188	273	226	136
PRID		40	574	1181				
Basic production		40	504	690				
Skill upgrading			70	480				
Management				11				
Number of participants	247	572	1021	n.a.	124	152	160	101
Technical training	74	52	33	73	14	0	27	38
BSID	38	52	33	51			27	38
IPC	15							
BISD	21			22	14			
Management training	85	263	203	479	0	50	33	0
BIED	56	109				50	33	
IPC	29	154	189	83				
JODC			14					
BIED (SSIPP)				96				
BIPA (AOTS)				100				
IRP (Seminar)				200				
Vocational training	88	217	15	36	110	102	100	63
PRID		40	770	1447				
Basic production		40	680	1125				
Skill upgrading			90	234				
Management				88				

Source: IPC6 Annual report 1996, 1997, 1998 and 1999.

In addition to the training programs in Table 2.2-14, there is another training program called OJC (Off-Farm Job Creation Project of Small and Medium Size Enterprises in the North East of Thailand)³. This program is assisted by Belgium. The project period is from 1997 to 2000. With the assistance of BADC (Belgium Administration of Development Cooperation), and in collaboration with CARE International working with the staffs of IPC4, 6 and 7 in 3 provinces; Udon Thani, Nakorn Ratchasima and Buri Ram, DIP is implementing the project. An international NGO, CARE International, acts as the project coordinator. The objectives of OJC are upgrading of people's standard of living and transfer of knowledge and skills for rural development.

The businesses to be promoted by OJC are sub-contracting of garment works. The target during the 1997-2000 period is 65 businesses in 12 villages, and the actual performance so far was 52 businesses in 6 villages. The project's assistance strategy consists of components:

- a) Production skills,
- b) Market development,
- c) Marketing,
- d) Group management,
- e) Revolving fund,
- f) Product development,
- g) Financial management, and
- h) Entrepreneurship development.

Among the 8 components, marketing and product development components have not been implemented yet.

In Chaiyaphum, number of training programs are not increasing. PRID programs are not implemented in the province. As a rule, PRID programs are initiated with an investment plan by the private sector. Chaiyaphum may not attractive for business people in a sense.

³ The headquarter for OJC is in IPC4, Udonthani, and there are also project sites in Nakhon Ratchasima (IPC6) and Buri Ram (IPC7).

(2) Non-training schemes

Non-training schemes in IPC6 consists of consulting service, financial service, and information service. Under the Industrial Restructuring Programs (IRPs), IPC6 conducted one promotion seminar for IRP in 1999 and so far there are 20 clients for the consulting service program (IRP project-13). Under this scheme, IPC6 does only monitoring of consulting service. Five consultant teams from Suranaree University of Technology are providing actual consulting service. Since this consulting service is free of charge, presently, Consulting Fund (CF) is not used⁴. There were 13 applicants for CF in 1996. Out of 13 applicants, 6 successfully received funds, but because of the economic crisis, there was not CF applicant since 1997.

Training Fund (TF) has not been implemented in Nakhon Ratchasima.

2.2.5.3 Training and Non-training Schemes by IPC7

IPC7 is operated by 9 government service officers, 5 permanent employees, and 35 temporary staff.

(1) Training Schemes

Training programs implemented by IPC7 from 1996 to 1999 are listed in Table 2.2-15. In IPC7, the major training programs are PRID related ones. So far, IPC7 handled 40 PRID projects and 20 projects are in operation. In Buri Ram, 7 out of 17 projects started operation. In Surin, one out of 4 projects started production. There is one particular difference in PRID project operations between IPC6 and IPC7. While IPC6 tends to coordinate PRID projects by its self, IPC7 tend to use NGOs such as Population and Community Development Foundation (PDA) and Northeast Development Foundation (NET) as coordinators.

IPC7's other training programs are very limited. A few technical and management training programs were implemented in Buri Ram. There was no technical training programs implemented in Surin. IPC7 also provides

⁴ Consulting Fund(CF) requires the client company's own expense. That is 50% of the total expense.

vocational training programs. In Buri Ram, there are stable number of participants since 1997. In Surin, participants in vocational training programs are increasing since 1997, but the number of participants in 1999 is less than one third of that of Buri Ram in the same year.

IPC7 also has OJC projects in Buri Ram. In 1999, 15 training programs were implemented and 160 persons got trained in total.

(2) Non-training Schemes

As in IPC6, the consulting program under IRP project-13 is the major activities. There were six clients for TF in IPC7, but presently, it is not used because of the 50% of own expense by clients.

Table 2.2-15. LIST OF TRAINING PROGRAMS IMPLEMENTED BY IPC7

	(Persons)							
	Buriram				Surin			
	1996	1997	1998	1999	1996	1997	1998	1999
Number of implementation	0	46	28	34	0	2	4	9
Technical training	0	1	0	0	0	0	0	0
BSID								
IPC								
BISD		1						
Management training	0	0	1	2	0	0	0	2
BIED			1	1				1
IPC								
JODC								
BIED (SSIPP)								
BIPA (AOTS)				1				1
IRP (Seminar)								
Vocational training	0	15	16	14	0	2	3	5
PRID	0	30	11	18	0	0	1	2
Basic production		16	11	12				2
Skill upgrading		4		6			1	
Management		10						
Number of days spent	0	1985	991	1333	0	26	110	257
Technical training	0	5	0	0	0	0	0	0
BSID								
IPC								
BISD		5						
Management training	0	0	2	13	0	0	0	15
BIED			2	3				5
IPC								
JODC								
BIED (SSIPP)								
BIPA (AOTS)				10				10
IRP (Seminar)								
Vocational training	0	551	384	405	0	26	65	147
PRID	0	1429	605	915	0	0	45	95
Basic production		1300	605	645				95
Skill upgrading		66		270			45	
Management		63						
Number of participants	0	2124	1129	1571	0	22	134	299
Technical training	0	21	0	0	0	0	0	0
BSID								
IPC								
BISD		21						
Management training	0	0	24	85	0	0	0	73
BIED			24	32				25
IPC								
JODC								
BIED (SSIPP)								
BIPA (AOTS)				53				48
IRP (Seminar)								
Vocational training	0	213	175	291	0	22	64	79
PRID	0	1890	930	1195	0	0	70	147
Basic production		1450	930	810				147
Skill upgrading		100		385			70	
Management		340						

Source: IPC7 Annual report 1996, 1997, 1998 and 1999.

2.2.5.4 Problems regarding Technical Support for Production and Management

Although IPC6 and IPC7 are established in the project area and technical support schemes are prepared, performance of IPC6 and IPC7 does not seem high enough to promote industries.

First of all, most of the personnel in IPC6 and IPC7 are administrative staff of the government and do not have expertise in business management and production. Therefore, without calling up experts from responsible institutes, they cannot give immediate advice to client companies.

Second, the number of personnel in IPC is not enough to cover the schemes to be implemented. Each IPC is responsible for 4 or 5 provinces, while the number of core staff in each IPC is about 10.

Third, training as well as consulting needs of local companies are not well recognized and satisfied by the support. To some extent, this may have been caused as a result of insufficient staffing of IPC in terms of quantity and professional skills in business management.

Fourth, information on technical human resource in production and management is neither accumulated nor immediately available in IPC. In order for each IPC to find appropriate experts, it has to go through administrative channels of DIP to BSID, BISS or other bureaus, and such a process is time consuming. From the clients' viewpoint, IPC's flexibility and immediate response in the technical support are as important as its quality of service.

Fifth, coordination between IPC and other technical support institutions is not intensive. Recently, other institutions than IPC also started providing technical support for production and management. Among them are SUT, ISMED, BEI, AI, TI, TPA, FTPI and so forth. Although those institutions can technically provide technical support to companies all over the country, their priority may not always be the four provinces. That is because they are responsible for the entire country. In order to draw attention of those institutions to the four provinces, IPC6 and 7 need to actively communicate

with and convince them of the necessity of their assistance to the four provinces.

2.2.6 Human Resource of Each Province and Its Development

For developing industrial human resource of the project area, Nakhon Ratchasima, Buri Ram, Surin and Chaiyaphum, the current situation of human resource development in the area has to be studied. For supplying industrial human resource, there are two different recourse pools, new graduates of schools and unemployed workers who are already in the labor force. Because labor force can freely move across the country, there are always both labor inflows to and outflows from the project area. Regarding those who are unemployed, it is difficult to tell exactly how many have moved and are moving into the project area. However, it is generally said that considerable number of unemployed workers has returned to their home villages since the economic crisis hit the country. The number of new school graduates in the project area can be obtained from the educational statistics in each province, but many of them also go out from the area to Bangkok and other cities. Here in this section, quantity and quality of the present industrial human resource supply in the project area are examined to the extent statistical data and related information are available.

2.2.6.1 Present Situation of Education

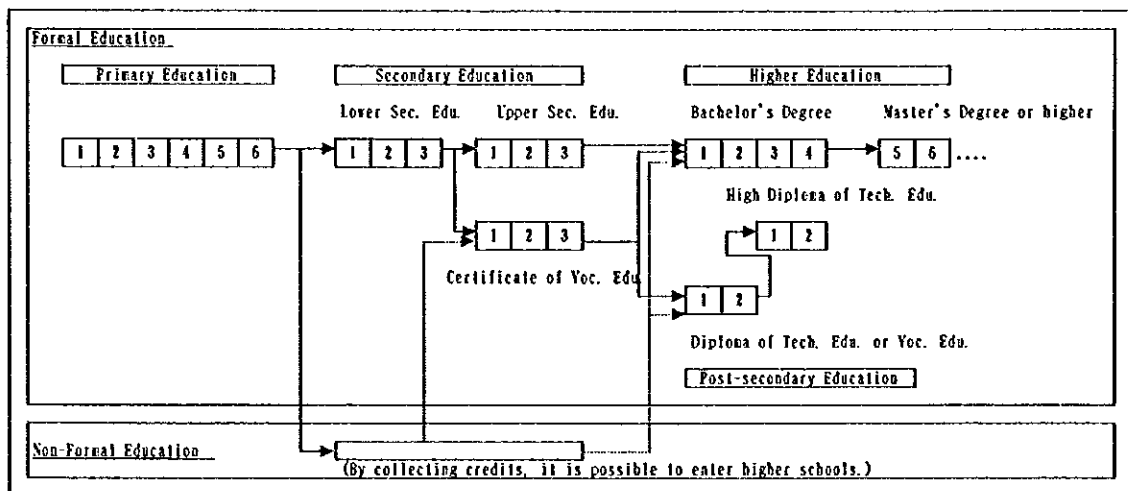
(1) Structure of Education in Thailand

According to National Education Act enacted in August 1999 (B.E.2542), formal education is divided into two levels, basic education and higher education. Basic education covers the education provided for 12 years before higher education and is free of charge. Higher education is divided into two levels, lower than degree level and degree level. Compulsory education is for 9 years covering elementary (primary) education and lower secondary education.

Vocational education is also provided by educational institutions, such as vocational, technical, polytechnic and occupational colleges, starting from the level of upper secondary education. Polytechnic colleges provide certificate level technical education, and occupational colleges provide

certificate level vocational education. Both technical and vocational colleges provide certificate level, diploma level and degree level education. In addition to the programs provided as formal education, there are non-formal vocational training programs. Vocational education and occupational training are provided in accordance with the Vocational Education Act and relevant laws.

Higher than upper secondary education is classified as higher education. Under this category, there are colleges and universities including vocational and technical colleges. The grades and corresponding education levels are shown in Figure 2.2-6.



Source: DOVE Statistics 1998 and interview with DOVE.

Figure 2.2-6. STRUCTURAL FLOW OF EDUCATION IN THAILAND

At present, education reform is in progress in Thailand. Major points of the reform are decentralization of education administration to the provincial level, integration of Ministry of Education and Ministry of University Affairs, and integration of the departments in Ministry of Education in charge of primary education and secondary education. The target year for the reform is 2002.

(2) Quantitative Comparison of Elementary and Secondary Education in the Four Provinces

Present situations of the elementary and secondary education in each province were compared quantitatively by using 5 indicators. They are:

- a) Percentage of elementary school students to the population in the respected area,
- b) Percentage of lower secondary school students to the population in the respected area,
- c) Percentage of upper secondary school students to the population in the respected area,
- d) Number of students per classroom, and
- e) Number of students per teacher.

Regarding the elementary and lower secondary education, quantitative data do not show meaningful differences among the four provinces. Regarding the percentage of elementary school students to the population, Nakhon Ratchasima (9.10%) is the lowest among the four provinces and Surin (10.34%) is the highest. However the difference is only 1.24%. Also, the percentage of secondary school students to the population in each of the four provinces is almost equal (Table 2.2-16). Ratios of students per classroom and students per teacher also indicate comparable conditions of the four provinces regarding elementary and secondary education (Table 2.2-17).

The indicators for the four provinces are also almost equal to that of the country.

Table 2.2-16. POPULATION AND NUMBER OF STUDENTS IN ELEMENTARY AND SECONDARY SCHOOLS

	Population*	Number of Students		
		Elementary	Lower secondary	Upper secondary
Thailand**	61, 248, 436	5, 935, 577	2, 420, 713	961, 815
Nakhon Ratchasima***	2, 605, 483	237, 153	104, 854	39, 506
Buriram	1, 476, 984	149, 686	62, 552	27, 885
Surin***	1, 320, 796	136, 524	85, 348	
Chaiyaphum	1, 096, 687	108, 023	45, 522	19, 922
		Elem. /Pop.	Lower S. /Pop.	Upper S. /Pop.
Thailand**		9.69%	3.95%	1.57%
Nakhon Ratchasima		9.10%	4.02%	1.52%
Buriram		10.13%	4.24%	1.89%
Surin		10.34%	6.46%	
Chaiyaphum		9.85%	4.15%	1.82%

* Data on population statistics from Statistical Yearbook Thailand 1998.

** Data on number of students in Thailand from Report of Education Statistics:

***Data on number of students in Nakhon Ratchasima and Surin

from Statistical Reports of Changwat 1998 Edition, Nakhon Ratchasima and S

Source: Statistical Reports of Changwat 1999 Edition, Buriram and Chaiyaphum.

Table 2.2-17. RATIOS OF STUDENTS PER CLASSROOM AND STUDENTS PER TEACHER

	Students / Classroom		Students / Teacher	
	Elementary	Secondary	Elementary	Secondary
Thailand*	23	35(L), 37(U)		
Nakhon Ratchasima**	23	35(L), 36(U)	20	22(L), 20(U)
Buriram	23	34	21	22
Surin**	24	35	20	25
Chaiyaphum	20	35	19	24

* Students / Classroom ratios in Thailand from Report of Education Statistics: Academic Year 1998

** Students / Classroom ratios in Nakhon Ratchasima and Surin

from Statistical Reports of Changwat 1998 Edition, Nakhon Ratchasima and Surin.

Source: Statistical Reports of Changwat 1999 Edition, Buriram and Chaiyaphum.

(3) Recent Trend in Educational Statistics in Nakhon Ratchasima and Buri Ram

For Nakhon Ratchasima and Buri Ram.

1) Nakhon Ratchasima

Number of elementary school students registered in Nakhon Ratchasima decreased from 262,768 in 1992 to 224,950 in 1999 (Table 2.2-18). In spite of the decrease in the number of students, the percentage of elementary school students to the population in the elementary school-age is 98% in 1999⁵. Number of students registered in lower secondary schools once increased from 69,719 in 1992 to 105,137 in 1997, and slightly decreased to 101,055 in 1999. Number of students registered in upper secondary schools increased from 31,940 in 1992 to 65,218 in 1999. The number of upper secondary school students has been doubled since 1992. Regarding the students registered in higher educational institutions, the number also increased from 11,480 in 1992 to 35,665 in 1998, and then decreased to 30,287 in 1999. 30,287 students account for 16% of the population in the higher education-age in Nakhon Ratchasima.

⁵ Educational Office of Nakhon Ratchasima.

Table 2.2-18. NUMBER OF STUDENTS REGISTERED IN NAKHON RATCHASIMA

	(Number of students)								
	1992	1993	1994	1995	1996	1997	1998	1999	Populatio in the school ag
Elementary	262,768	255,496	274,487	240,402	233,058	237,153	227,537	224,950	230,515
Lower Secondary	69,719	82,517	94,124	86,267	104,534	105,137	104,092	101,055	115,498
Upper Secondary	31,940	35,968	42,981	48,077	55,466	60,178	63,303	65,218	125,910
Higher Education	11,480	9,597	15,736	18,011	22,470	33,865	35,665	30,287	187,575
Changes									
(Base Year 1992=10)	1992	1993	1994	1995	1996	1997	1998	1999	
Elementary	100%	97%	104%	91%	89%	90%	87%	86%	
Lower Secondary	100%	118%	135%	124%	150%	151%	149%	145%	
Upper Secondary	100%	113%	135%	151%	174%	188%	198%	204%	
Higher Education	100%	84%	137%	157%	196%	295%	311%	264%	

Source: Educational Office of Nakhon Ratchasima.

In 1999, 95% of elementary schools graduates entered lower secondary schools, and 78% of lower secondary school graduates entered upper secondary schools including both general schools and vocational schools (Table 2.2-19). The ratio of upper secondary general school entrants to vocational school entrants was 71 to 29. Roughly two thirds of students entering upper secondary schools selected general schools in 1999.

Table 2.2-19. NUMBER OF STUDENTS ENTERING AND GRADUATING SCHOOLS 1998-1999 IN NAKHON RATCHASIMA

			1998	1999	1999
Elementary	Entrants	(1)	n. a.	40,637	
	Graduates	(2)	n. a.	37,409	(2)/(1) 92%
Lower secondary	Entrants	(3)	n. a.	35,479	(3)/(2) 95%
	Graduates	(4)	n. a.	31,412	(4)/(3) 89%
Upper secondary	Entrants	(5)	n. a.	24,509	(5)/(4) 78%
	General	(6)	11,756	17,286	(6)/(5) 71%
	Vocational	(7)	n. a.	7,223	(7)/(5) 29%
	Graduates	(8)	18,217	n. a.	
	General	(9)	11,408	n. a.	
	Vocational	(10)	6,809	n. a.	
Diploma	Entrants (Voc.)	(11)	n. a.	7,050	
	Graduates (Voc.)	(12)	8,026	n. a.	
Bachelor	Entrants (Voc.)	(13)	n. a.	1,890	
	Graduates (Voc.)	(14)	1,320	n. a.	

Source: Educational Office of Nakhon Ratchasima.

2) Buri Ram

Number of elementary school entrants has been stable ranging from 29,792 to 31,339 since 1995 (Table 2.2-20). Number of lower secondary school entrants has decreased since 1996⁶. The percentage of lower secondary school entrants to elementary school graduates in the respective year has also decreased since 1996. The percentage was 98% in 1996. However, it decreased to 75% in 1999. The percentage of graduates from lower secondary schools to entrants of those schools has increased to around 60% by 1998, but the percentage implies a high dropout rate in lower secondary schools.

Number of upper secondary school entrants has also decreased since 1997, and it was 7,992 in 1999. Although there was a decreasing trend in the number of upper secondary school entrants, the percentage of the upper secondary school entrants to the lower secondary school graduates in 1999 was 79%. The ratio of upper secondary general school entrants to upper secondary vocational school entrants was 76 to 24 in 1999. Roughly three fourths of upper secondary school entrants selected general schools in 1999.

⁶ In Table 1.2-5, entrants and graduates of the schools under General Education Commission in Buri Ram is not included. Therefore, the trends may be affected by that reason.

Table 2.2-20. NUMBER OF STUDENTS ENTERING AND GRADUATING SCHOOLS IN BURI RAM 1994-1999

		(Number of Students)					
		1994	1995	1996	1997	1998	1999
Elementary	Entrants	25,111	30,676	30,662	31,143	31,339	29,792
	Graduates	31,435	30,525	28,216	27,920	26,596	23,768
Lower secondary	Entrants	21,540	27,170	27,541	24,852	21,321	17,779
	Graduates	7,858	12,378	13,072	12,685	12,755	10,130
Upper secondary (Total)	Entrants	5,396	8,108	10,288	11,390	9,900	7,992
	Graduates	2,137	3,670	5,875	6,014	5,813	na
Upper sec. (General)	Entrants	4,274	6,817	8,410	8,829	7,786	6,076
	Graduates	1,453	2,902	4,679	5,144	4,739	2,450
Upper sec. (Vocational)	Entrants	1,122	1,291	1,878	2,561	2,114	1,916
	Graduates	684	768	1,196	870	1,074	na
Diploma (Vocational)	Entrants	374	406	539	1,077	884	1,130
	Graduates	243	306	450	468	637	na
Bachelor	Entrants	2,329	2,423	2,760	2,601	3,339	1,073
	Graduates	1,577	2,241	1,989	2,160	2,271	1,025
Master	Entrants	na	na	na	na	na	na
	Graduates	na	na	na	na	na	na
Others	Entrants	221	3,213	2,607	4,050	3,027	3,728
	Graduates	192	3,064	2,510	3,874	2,931	3,546

Note: *Not including data from Buriram Technopoly College (private) and Satuk Occupational College (Public) since both were opened recently.

*Not including data from General Education Commission since the data are not classified by educational level.

*Data from schools under General Education Commission in Buriram from 1995 to 1999 are shown in the table below.

Education Year	1995	1996	1997	1998	1999
Students	60,381	62,320	66,926	66,017	65,975

Source: Elementary Education Commission Buriram, Buriram Technical College, Buriram Agricultural and Technology College, Buriram Non-Formal Education Center, Buriram Skill Development Department, Rajabhat Institute Buriram, Buriram Polytechnic College.

(4) Technical, Vocational and Higher Education in the Four Provinces

The number of technical, vocational, polytechnic and occupational colleges implies the present situation of technical as well as vocational education in the four provinces (Table 2.2-21). Each of the four provinces has at least one technical college and one polytechnic college. Vocational colleges are located only in Nakhon Ratchasima and Surin. However, the difference between technical colleges and vocational colleges became unclear because identical faculties were established in both colleges in some cases. All of the four provinces have at least two occupational colleges in each province.

Educational environments in Buri Ram, Surin and Chaiyaphum in terms of the availability of higher education are similar, but not equivalent to that of Nakhon Ratchasima, in which there is Suranaree University of Technology, which is the only university for engineers in the four provinces. In addition to the colleges and Suranaree University, there are 3 campuses of Rajamangala Institute of Technology (RIT), former Institute of Technical and Vocational Education (ITVE), in the project area. Two of the three RIT campuses are in Nakhon Ratchasima, and the other is in Surin.

**Table 2.2-21. NUMBER OF COLLEGES AND UNIVERSITIES
IN EACH PROVINCE**

	Technical colleges	Vocational colleges	Polytechnic colleges	Occupational colleges	Rajamangala Institute of Technology	Universities
Nakhon Ratchasim	4	2	1	4	2	2
Buriram	2	0	1	2	0	0
Surin	1	1	1	4	1	0
Chaiyaphum	1	0	1	2	0	0
TOTAL	8	3	4	12	3	2

Source: DOVE, MOE.

Colleges are flexible in terms of their program development. However, vocational and technical education requires students take practical training as apprenticeship in companies at the final semester. If colleges cannot prepare practical training programs for their students, that will restrain developing new faculty department or teaching subjects. In Buri Ram, Surin and Chaiyaphum, there are not many companies that accept students as apprentices. Even in Nakhon Ratchasima, companies are not willing to accept students for practical training. As a result, the colleges are

constrained to expand teaching subjects and to develop new faculty departments. For Buri Ram, Surin and Chaiyaphum, limited varieties of sub sectors in the manufacturing sector also constrain the colleges to develop new faculty departments.

(5) Educational Background of Employees

In each of the four provinces, more than 82% of employed persons are either elementary school graduates or lower in terms of their educational background (Table 2.2-22). The share of employed persons with elementary or lower education background among those employed in Thailand is 71.4%. The share of low-educated employees among the total employees in the four provinces is more than 10% higher than that of the whole country. This tendency does not change so much when the share of employed persons with lower secondary education or lower is calculated for each of the four provinces and the whole country. For example, the rate for Nakhon Ratchasima, which has the lowest rate among the four provinces, is 90.1% while that of the whole country is 83.4%.

However, this does not mean people from the four provinces are less educated, because people from the four provinces can move freely out of those provinces. In the case of the four provinces, it should be natural to understand that there are few job opportunities for those having high educational backgrounds inside the provinces and as a result, many people with higher education have to go to other regions in order to get jobs. That results in the high share of low-educated employees among the total employees in the provinces.

Table 2.2-22. NUMBER OF EMPLOYED PERSONS BY LEVEL OF EDUCATION

	Employed persons	Elementary or lower	Lower secondary	Upper secondary	Vocational	University
Thailand	32,138,011	22,937,200	3,856,100	1,380,000	984,900	2,277,200
Nakhon Ratchasima*	1,391,101	1,169,249	94,492	44,709	26,888	42,235
Buriram**	543,424	446,390	54,896	18,007	1,978	10,658
Surin*	707,861	611,942	56,390	13,426	8,282	5,880
Chaiyaphum***	584,038	495,300	46,300	13,677	13,918	8,285

	Employed persons	Elementary or lower	Lower secondary	Upper secondary	Vocational	University
Thailand	100.00%	71.37%	12.00%	4.29%	3.06%	7.09%
Nakhon Ratchasima*	100.00%	84.05%	6.79%	3.21%	1.93%	3.04%
Buriram**	100.00%	82.14%	10.10%	3.31%	0.36%	1.96%
Surin*	100.00%	86.45%	7.97%	1.90%	1.17%	0.83%
Chaiyaphum***	100.00%	84.81%	7.93%	2.34%	2.38%	1.42%

* Data for Nakhon Ratchasima and Surin is as of the Labor Force Survey Round 3 in August 1997.

** Data for Buriram is as of the Labor Force Survey Round 4 in November 1998.

*** Data for Chaiyaphum are as of the Labor Force Survey Round 3 in August 1998.

Source: Statistical Yearbook Thailand 1998, Statistical Reports of Changwat 1999 Edition, Buriram and Chaiyaphum. Statistical Reports of Changwat 1998 Edition, Nakhon Ratchasima and Surin.

(6) Dual Vocational Training Program

In addition to the traditional formal education programs, there is a newly developed formal education program since 1990. That is the Dual Vocational Training program (DVT) with the assistance of GTZ. DVT is considered as a formal education, which means the programs under DVT have the duration of 3 years and the curricula include both general education subjects and vocational education subjects as provided in traditional technical or vocational colleges. Major differences between DVT and ordinary vocational education programs are:

- a) Flexibility of the curriculum development,
- b) Voluntary commitment of private companies for at least three years, and
- c) Focus on the working knowledge in the real companies.

DVT is expanding its scale. Presently, 17000 students are enrolled and 3500 companies are participating in DVT all over the country. The number of DVT graduates is already 11000.

Merits of DVT are:

- a) Lower tuition fees for students,
- b) A good opportunity for a student to see whether the company is suitable for him/her, and

- c) A means of recruitment for companies.

Demerits are:

- a) Participation of companies necessary on the voluntary commitment basis,
- b) Difficulty for delivering the programs in the locations where suitable companies do not exist, and
- c) A high dropout rate of students caused by the mismatches between their intentions and the companies' businesses.

There are 9 institutions implementing DVT in Nakhon Ratchasima, Buriram, Surin and Chaiyaphum (Table 2.2-23).

Table 2.2-23. DVT PROGRAMS OPERATED IN THE FOUR PROVINCES

Province	Institution	Number of Companies	Number of Students
Nakhon Ratchasima	Bua Yai Industrial & Community Education College	15	38
	Nakhon Ratchasima Polytechnic College	48	86
	Nakhon Ratchasima Technical College	241	297
	Nakhon Ratchasima Vocational College	8	123
	Suranaree Technical College	13	29
Buriram	Buriram Technical College	76	79
Surin	Surin Technical College	59	134
Chaiyaphum	Bamnej Narong Industrial & community Education College	4	21
	Chaiyaphum Technical College	91	148
Total		555	955

Source: DVT Office, DOVE.

(7) Qualitative Analysis of Education in the Four Provinces

Qualitative performance indicators for the education are not available in the educational statistics. An information source for analyzing quality of education is interviews and workshops conducted in the four provinces. Although such information is not objective in nature, it gives many useful implications. The following are representatives of the comments related to the performance of education or the assessment of human resource in the four provinces obtained through the interviews and workshops:

- a) Workers work hard.
- b) Local people are not used to business practices including the factory rules such as safety regulations and work hours.

- c) Local manufacturers are lacking the concept of improving product quality and production processes.
- d) People tend to weak in some subjects such as mathematics and science.
- e) Skilled workers are not sufficient for some industrial sub sectors such as medicine.
- f) Technical and vocational college graduates are weak in practical skills for production.
- g) Technical and vocational college graduates are not trained to proactively think for their work.
- h) Accountants are scarce.
- i) People who want to give their children good education do not want to live in the province, because there are very few good elementary and secondary schools.

Some issues such as work attitude, following rules, attitude of improving the present situation, knowledge of mathematics and science are important in the area of general (elementary and secondary) education. Technical skills including production and business skills, ability of judgement, and leadership are rather the issues to be handled in the technical, vocational or higher education. The comments indicate that not only general education but also technical, vocational and higher education need to be improved.

2.2.6.2 Present Situation of Skill Development by Department of Skill Development, Ministry of Labor and Social Welfare

Department of Skill Development (DSD), Ministry of Labor and Social Welfare, provides pre-employment training, skill upgrading training, and instructor training. All the training courses provided by DSD are free of charge, and the duration of training varies course by course. DSD also sets national skill standards and conducts skill testing as well as skill competitions. In addition to the three types of training courses and skill testing, DSD provides low-interest loans to those who take short-term training programs in other training institutions.

(1) Regional and Provincial Institutions of DSD

DSD conducts its training activities through three levels of institutions, namely, National Institute for Skill Development (NISD), Regional Institutes for Skill Development (RISD) and Provincial Centers for Skill Development (PCSD). There are 12 RISDs including one NISD in the country, and each RISD covers several PCSDs. RISDs including NISD provide basic as well as advanced training courses, whereas PCSDs mainly focus on basic training courses.

In the project area, there are one RISD and three PCSD:

- a) Nakhon Ratchasima RISD,
- b) Buri Ram PCSD,
- c) Surin PCSD, and
- d) Chaiyaphum PCSD.

(Nakhon Ratchasima RISD also covers Mahasarakam PCSD and Nakhon Nayok PCSD.)

RISD and PCSDs are well equipped in terms of the buildings and machinery for the training purpose by the assistance of ADB.

(2) Training Courses

1) Pre-employment Training Courses

The pre-employment training courses are originally for new entrants to labor market, but recently, unemployed workers also take the courses. Courses consist of 2-10 months of theoretical training in RISD or PCSD and 1-2 months of practical training at private companies after theoretical training.

2) Skill Upgrading Training Courses

The skill upgrading training courses are mainly targeted at those who are already in the labor market including laid off workers and unemployed. Those who completed the pre-employment training courses can also take the skill upgrading training courses regardless of their employment statuses. Private companies may request DSD for in-house training their workers in their own factories. Most of the courses require 60 hours or more of training.

3) Instructor Training Courses

The instructor training courses are mainly conducted in NISD. However, RISDs can also provide training courses when necessary.

According to Nakhon Ratchasima RISD, it can prepare new courses in about one month. The minimum requirement in terms of the number of trainees is 20 persons for each course. There are 45 full time instructors and 150 part time instructors in Nakhon Ratchasima RISD. Among the part time instructors, about 20 instructors are people in private companies. RIT and Rajabhat Institute also provide instructors.

(3) Results of Training

1) Number of workers trained or tested in Nakhon Ratchasima RISD

Number of workers who used services of Nakhon Ratchasima RISD increased from 1994 to 1997 (Table 2.2-24). Although the number once decreased by about a third in 1998, it recovered in 1999. Within the pre-employment training and skill upgrading training, training for welding and sheet metal working as well as electronics started in 1999.

2) Job opportunities after training

Although there is no comprehensive statistics for those who completed training courses, roughly 60-70% of trainees gets a job after training in the case of Nakhon Ratchasima RISD. The rest are to be self-employed. Before the economic crisis, more than 80% was able to get a job.

Since those who come to take training courses are unskilled people, it is advantageous for them to have certificates at their job search.

According to Nakhon Ratchasima RISD, in the past, almost 50% of trainees got a job in or around Nakhon Ratchasima. Until recently, job opportunities in the province had decreased because of the economic crisis.

**Table 2.2-24. NUMBER OF WORKERS TRAINED OR TESTED IN
NAKHON RATCHASIMA RISD**

		(Persons)						
		1994	1995	1996	1997	1998	1999	2000*
	Total	777	4490	8830	15955	9837	15753	2487
1.1	Pre-employment Training (Fiscal Budget)	35	763	2648	3422	2779	3374	446
●	Industrial workers	35	763	2648	3422	2779	2931	446
	1.1.1 Auto Mechanics		241	653	1008	675	983	84
	1.1.2 Construction Work	35	255	721	1186	885	689	125
	1.1.3 Mechanics for Factory		205	980	831	894	79	112
	1.1.4 Welding and Sheet Metal Work						905	
	1.1.5 Electrical Work		62	294	397	325	165	125
	1.1.6 Electronics						160	
●	Industrial Art Workers / Business and Service Sector Employee	0	0	0	0	0	393	0
	1.1.7 Industrial Art Work						368	
	1.1.8 Business and Service						25	
1.2	Pre-employment Training (World Bank Project)	0	0	0	0	0	2225	700
●	Industrial Workers	0	0	0	0	0	1275	225
	1.2.1 Auto Mechanics						475	75
	1.2.2 Construction Work						325	
	1.2.3 Mechanics for Factory							50
	1.2.4 Welding and Sheet Metal Work						350	
	1.2.5 Electrical Work						100	100
	1.2.6 Electronics						25	
●	Industrial Art Workers / Business and Service Sector Employee	0	0	0	0	0	950	475
	1.2.7 Industrial Art Work						575	475
	1.2.8 Business and Service						375	
2	Skill Upgrading Training	147	1111	928	2778	4127	5369	923
●	Industrial Workers	147	1111	928	2778	4127	5213	722
	2.1 Auto Mechanics	46	286	343	1213	1303	1421	120
	2.2 Construction Work		195	84	250	1054	518	
	2.3 Mechanics for Factory	20	234	288	1164	862	49	
	2.4 Welding and Sheet Metal Work						1572	
	2.5 Electrical Work	81	396	213	151	908	1653	602
	2.6 Electronics							
●	Industrial Art Workers / Business and Service Sector Employee	0	0	0	0	0	156	201
	2.7 Industrial Art Work						131	152
	2.8 Business and Service						25	49
3	Occupational Training in Rural Area	203	624	2282	0	0	0	0
	3.1 Auto Mechanics	127	75	1141				
	3.2 Construction Work		300	855				
	3.3 Mechanics for Factory							
	3.4 Welding and Sheet Metal Work							
	3.5 Electrical Work	76	249	286				
	3.6 Electronics							
4.1	Standard Testing	62	702	741	1315	1730	3371	248
●	Industrial Workers	62	702	741	1315	1730	3253	248
	4.1.1 Auto Mechanics		58	170	472	494	1089	113
	4.1.2 Construction Work	62	294	202	114	278	164	33
	4.1.3 Mechanics for Factory		150	271	475	768	41	43
	4.1.4 Welding and Sheet Metal Work						1745	
	4.1.5 Electrical Work		200	98	254	190	167	59
	4.1.6 Electronics						47	
●	Industrial Art Workers / Business and Service Sector Employee	0	0	0	0	0	118	0
	4.1.7 Industrial Art Work						118	
	4.1.8 Business and Service							
4.2	Standard Testing for Those seeking Job Abroad	0	0	284	0	0	48	22
	4.2.1 Auto Mechanics							1
	4.2.2 Construction Work			227			33	21
	4.2.3 Mechanics for Factory							
	4.2.4 Welding and Sheet Metal Work			57			4	
	4.2.5 Electrical Work						11	
	4.2.6 Electronics							
5	Special Training	330	1290	1947	8440	1201	1366	148

* Data for Year 2000 are as of December 1999.

Source: Regional Institute for Skill Development in Nakhon Ratchasima.

2.2.6.3 Qualitative Analysis of Human Resource in the Four Provinces

In order to evaluate quality of human resource in the four provinces, intensive interviews and workshops with the private companies, educational institutions and related government officers were conducted. According to the interview as well as workshop results, the human resource in the four provinces, in general, indicates common characteristics. Among them are:

- a) In terms of unskilled workers, they work hard and are good at doing routine work.
- b) Workers and technicians are generally weak in mathematics and science.
- c) Workers and technicians are passive in terms of the improvement activities in the factory.
- d) Workers are not used to follow company rules.
- e) Local people including management people are not used to logical thinking.
- f) Local people including management people do not know much about theories and concepts used in management.
- g) Local people including management people are not sensitive to product quality.

However, there are a few differences among the human resources of the four provinces including top managers and community leaders.

(1) Nakhon Ratchasima

There is no shortage of unskilled workers after the economic crisis in 1997. There are shortages in skilled workers and technicians for some industrial sub sectors such as medicine and metal works. On the other hand, skilled workers are available for wood works. Business accountants need to increase in number⁷.

There are leaders who organize FII and Chamber of Commerce in Nakhon Ratchasima. Although many companies in Nakhon Ratchasima have

⁷ FII Nakhon Ratchasima.

business connections with foreign countries, top managers of those companies are not familiar with modern management theories and methods.

Performance of the graduates of Suranaree University of Technology is not clear, but there is some excess supply of engineers.

(2) Buri Ram

Workers move to Bangkok area. Because there are limited number of companies operating in Buri Ram, shortage in skilled workers and technicians is not a major problem. However, skill levels of workers are low. Entrepreneurs are scarce, and they are not interested in learning modern management theories and technologies. Potential local investors have neither management skills nor opportunities to learn them.

(3) Surin

There are Cambodian workers in Surin. Unskilled workers are abundant, but investors and entrepreneurs are limited. Top managers of existing companies are not active for developing their business because of the depressed feeling caused by the past unsuccessful experiences. Surin is lacking a strong leader who can show Surin's development vision.

(4) Chaiyaphum

Many factory workers are also engaged in agriculture. Therefore, there are seasonal absentees in the factories. Because there are two large provinces, Khon Kaen and Nakhon Ratchasima, local investors tend to go to those provinces. Business leaders are not active for the development of Chaiyaphum. Top managers take old management style in their business without learning modern management technologies. They are not aware of the importance of product quality.

2.2.6.4 Problem of Human Resource Development

First of all, workers in the four provinces have a good reputation as workers for low cost, labor intensive industries. Workers are also abundant in the Northeast region including the four provinces. In general, it may be no problem in the field of industrial human resource development in the short

term, since the majority of existing and incoming industries are labor intensive industries in the four provinces. However, there are some companies addressing that quality of workers is not so high in terms of basic knowledge to be learned in elementary and/or secondary schools as well as discipline including punctuality and safety in the factory.

Problems exist, in the long run, in the area of skilled workers, technicians, engineers and managers. In this regard, the first problem common to the four provinces is that priority industrial sub sectors are not selected within the province. In order for human resource development efforts to be effective, there has to be a target toward which educational institutions train people. Here, the target means, for example, workers' skill levels to be achieved in selected industrial sub sectors. In the case of the development of industrial human resource, students or trainees cannot acquire practical skills for any specific industrial sub sectors from general technical or vocational training programs because each sub sector employs its specialized skills and knowledge.

The second problem is limited opportunities for the students to serve apprenticeship in actual companies. Students cannot learn industrial skills by just sitting in the classrooms or practicing in the school shops. They need work experience in the live companies. Technical and vocational colleges have to provide each of their students with practical training at least for a semester. However, the number of manufacturing companies which can accept apprentices are limited in the provinces except for Nakhon Ratchasima, and not many of the companies, even in Nakhon Ratchasima, are willing to accept students.

The third problem is that many college graduates move to other areas such as Bangkok. There are mainly two reasons. One is because job opportunities for them are not sufficient due to the limited number of companies in the four provinces. The other reason is that although there are job opportunities in the four provinces, students can get jobs at higher salary levels in and around Bangkok as a result of tighter supply of skilled workers or technicians there than in the four provinces.

The fourth problem is that students in the upper secondary school level tend not to want to join manufacturing companies just after graduation. Even if they are studying in the technical or vocational schools at the certificate level, many of them want to get higher education when possible.

The fifth problem is the one regarding business leaders. Executives of existing local companies and local entrepreneurs are not well educated on modern management methods and logic behind that. There are many local companies maintaining the traditional management style that cannot be accepted by foreign business partners. Since the industries in the four provinces become more dependent on the international market than before, it is increasingly important for executives of local companies to comprehend how foreign business partners behave.

The last and most important issue on the industrial development of the four provinces is the existence of leaders who can develop and show a vision for the development to the people. Each of the four provinces needs to have a vision for industrial development individually and/or collectively. The leaders may be local business leaders who coordinate opinions of the business society or community leaders. In either case, such leaders need to consolidate the opinions of various interest groups within the region into a clear direction. Without having such leaders, entrepreneurs may start new businesses, but steady and stabilized industrial development in each province will not be materialized.