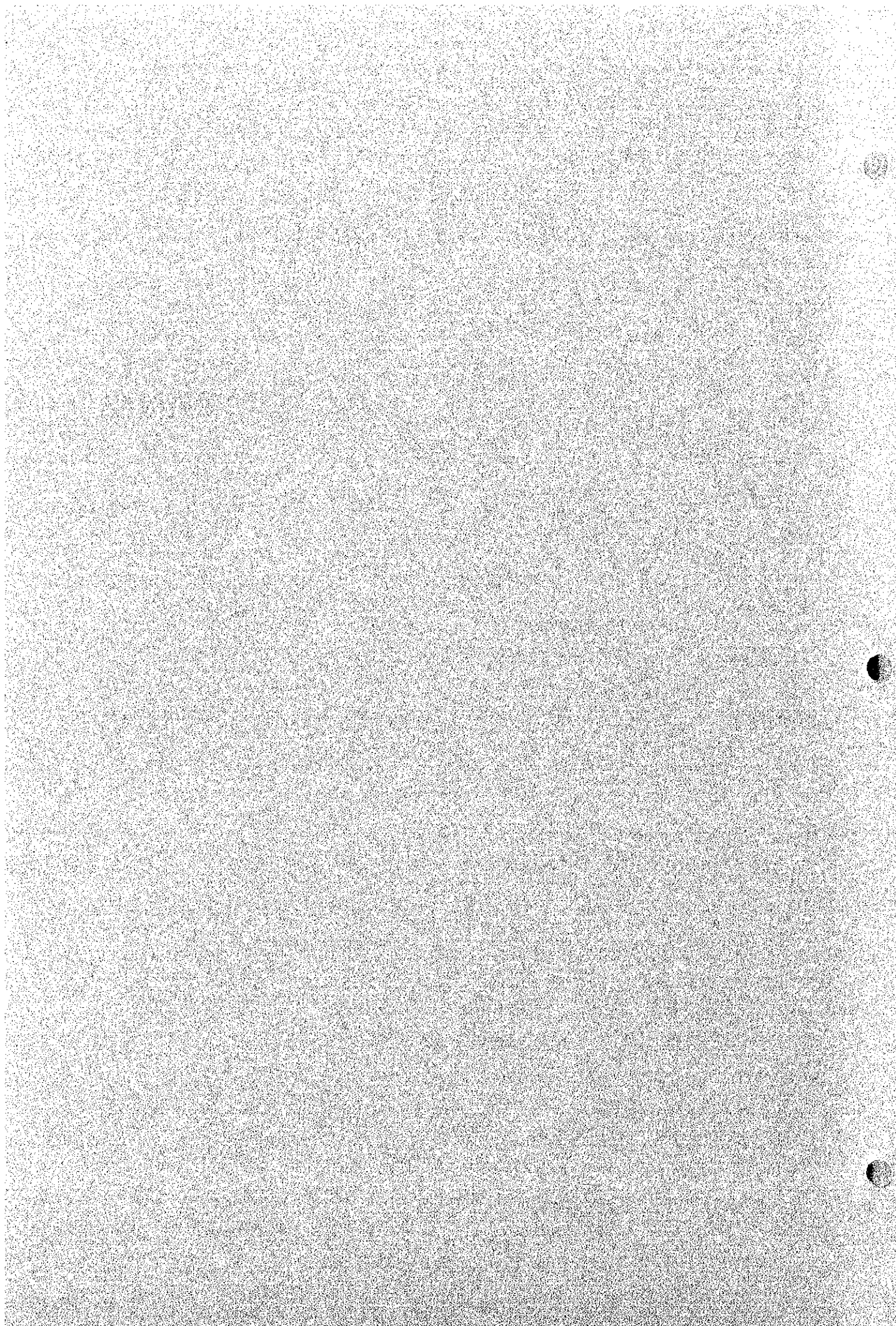
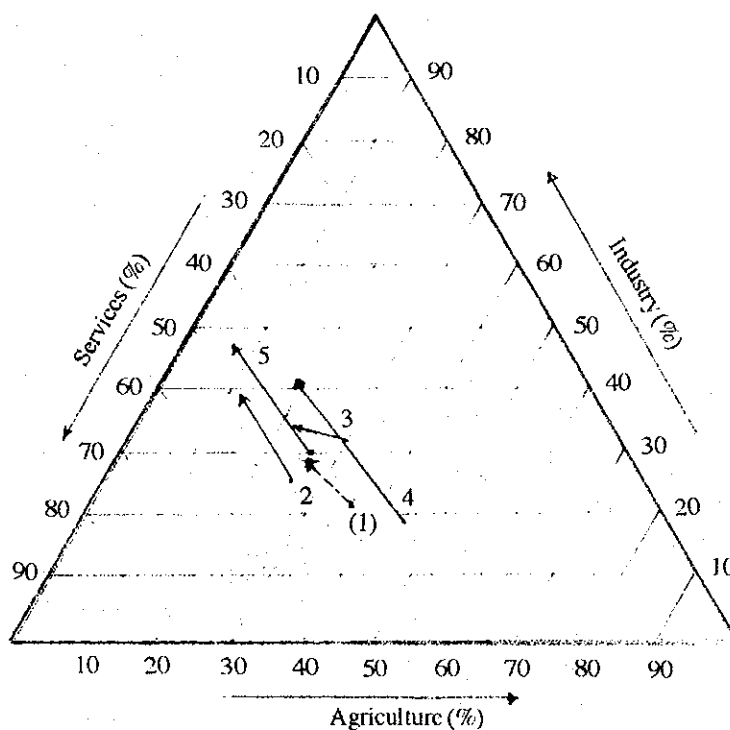


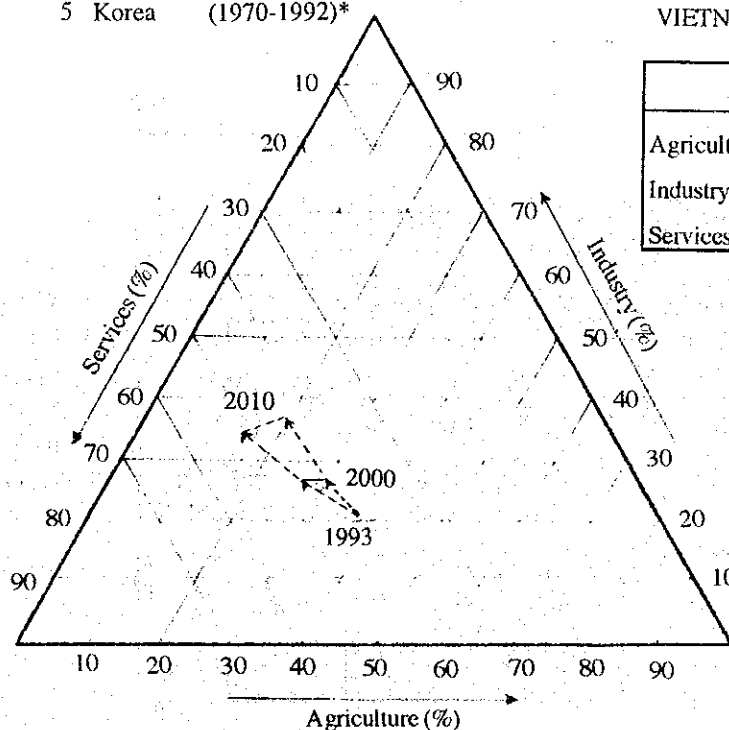
FIGURES





- (1) Vietnam (1993 - 2000)
- 2 Thailand (1970 - 1992) *
- 3 Philippines (1970 - 1992) *
- 4 Indonesia (1970 - 1992) *
- 5 Korea (1970-1992)*

* Source: World Development Report (1994)
(World Bank)

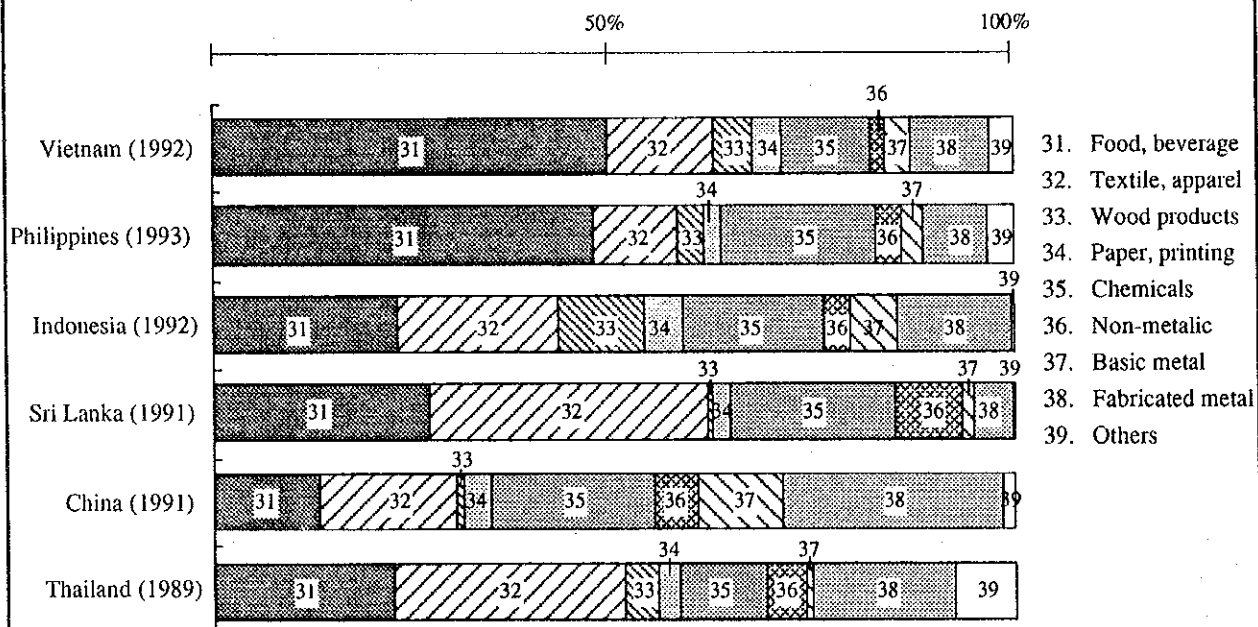
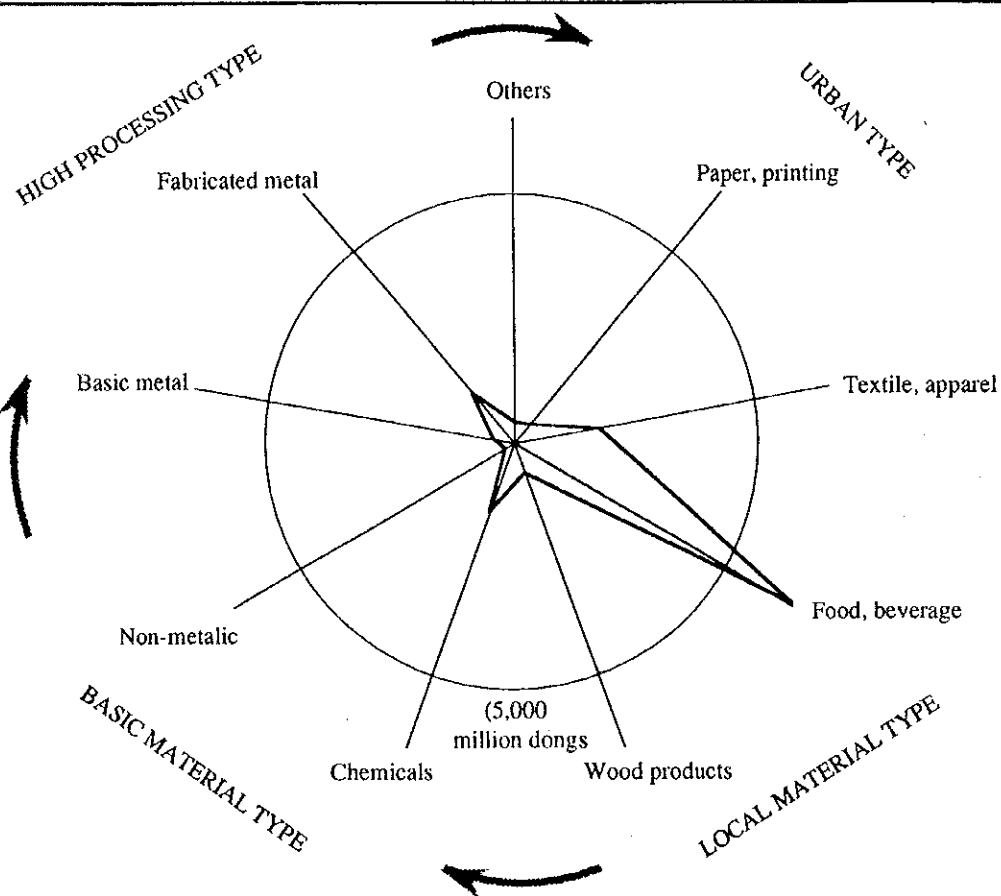


VIETNAM

(%)

	1993	2000	2010
Agriculture	37	26-30	15-20
Industry	21	25-26	33-37
Services	42	44-49	43-52

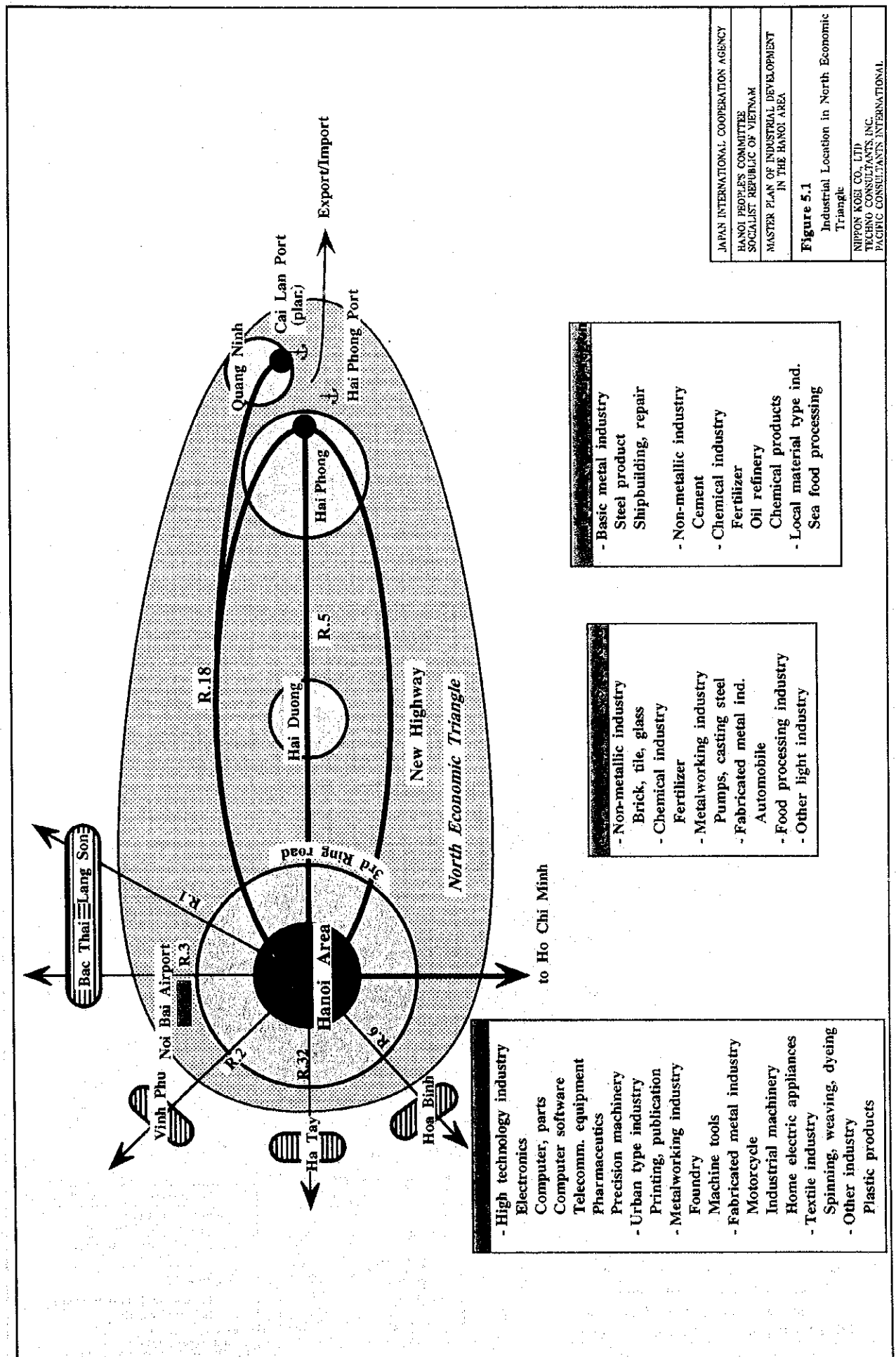
JAPAN INTERNATIONAL COOPERATION AGENCY
HANOI PEOPLE'S COMMITTEE
SOCIALIST REPUBLIC OF VIETNAM
MASTER PLAN OF INDUSTRIAL DEVELOPMENT IN THE HANOI AREA
Figure 2.1 Structure of Production
NIPPON KOEI CO., LTD TECHNO CONSULTANTS, INC. PACIFIC CONSULTANTS INTERNATIONAL



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 THE HANOI AREA




Figure 2.2
 Comparison of Industrial Structures

NIPPON KOEI CO., LTD.
 TECHNO CONSULTANTS, INC.
 PACIFIC CONSULTANTS INTERNATIONAL



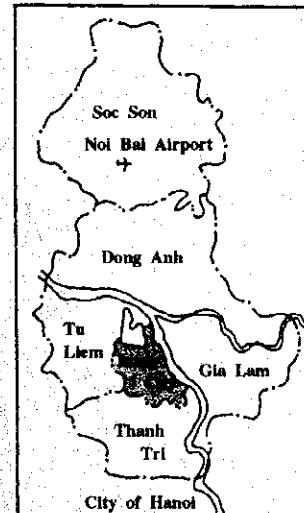
0 1 2 4 6 8 10km

NORTH

-  Urbanized Area(2010)
-  New Industrial Estate
-  Existing Industrial Estate

(Existing Industrial Areas)

1. Minh Khai-Vinh Tay : weaving, machinery
2. Truong Dinh : food, machinery
3. Van Dien-Phap Van : fertilizer, machinery
4. Thuong Dinh-Nguyen Trai : food, rubber, tobacco
5. Cau Dien-Mai Dich : food, chemical
6. Gia Lam-Yen Vien : machinery, wood product
7. Dong Anh : machinery, metal
8. Chem : construction materials, textile
9. Cau Buou : chemical, machinery



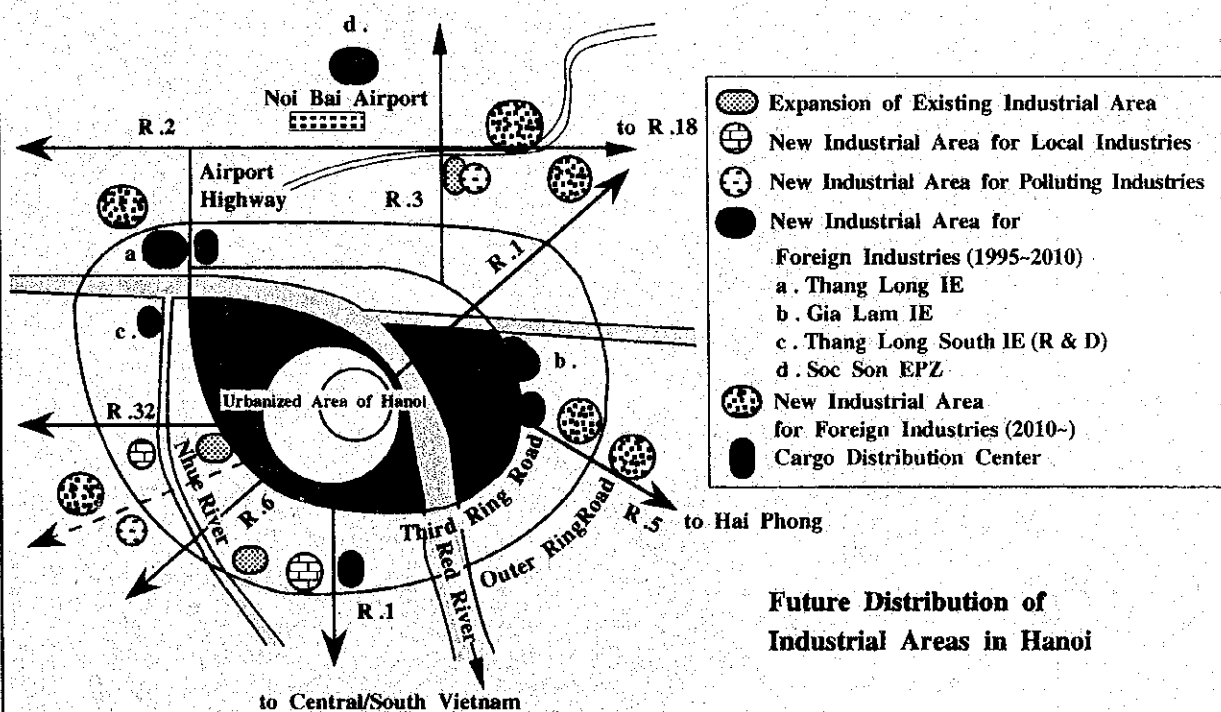
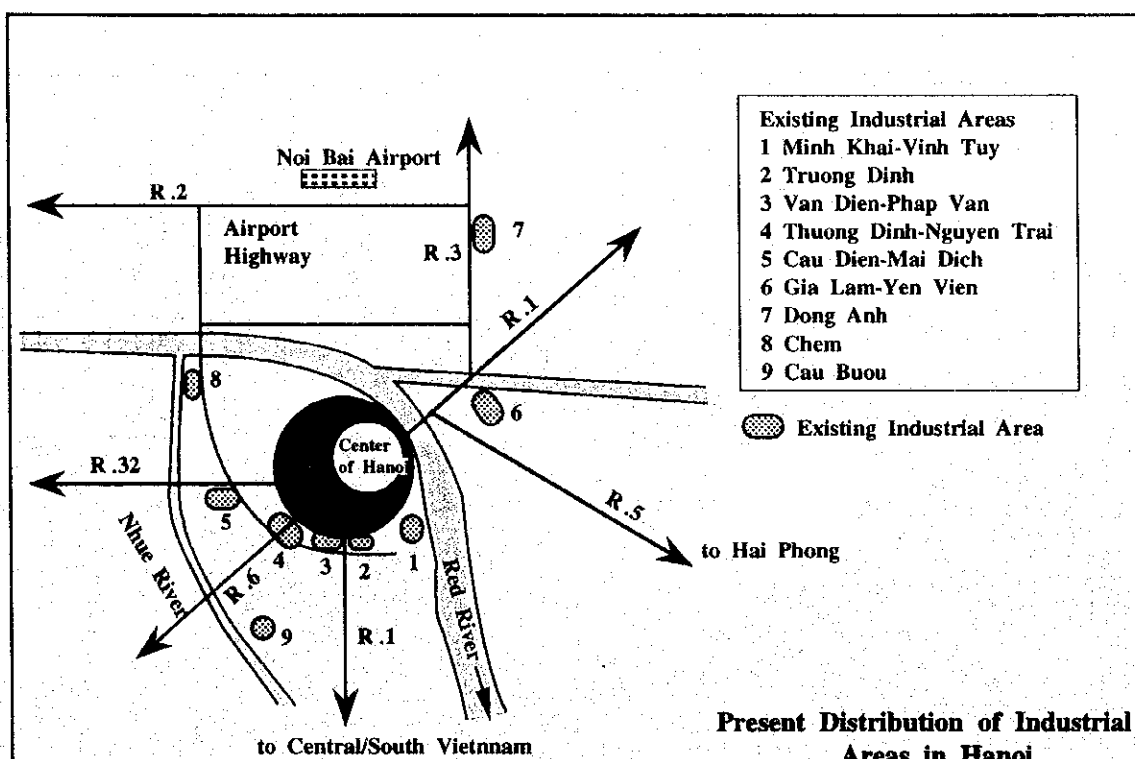
Note : The Outer Ring Road is proposed by the " Master Plan Study on Transport Development in the Northern Part of the Socialist Republic of VietNam, June 1994"

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IN THE HANOI AREA

Figure 5.2

Location of Industrial Area and
Industrial Estate

NIPPON KOEI CO., LTD.
TECHNO CONSULTANTS, INC.
PACIFIC CONSULTANTS INTERNATIONAL



JAPAN INTERNATIONAL COOPERATION AGENCY

HANOI PEOPLE'S COMMITTEE
SOCIALIST REPUBLIC OF VIETNAM

MASTER PLAN OF INDUSTRIAL DEVELOPMENT
IN THE HANOI AREA




Figure 5.3

Concept of Industrial Area Distribution
in Hanoi

NIPPON KOEI CO., LTD.
TECHNO CONSULTANTS, INC.
PACIFIC CONSULTANTS INTERNATIONAL

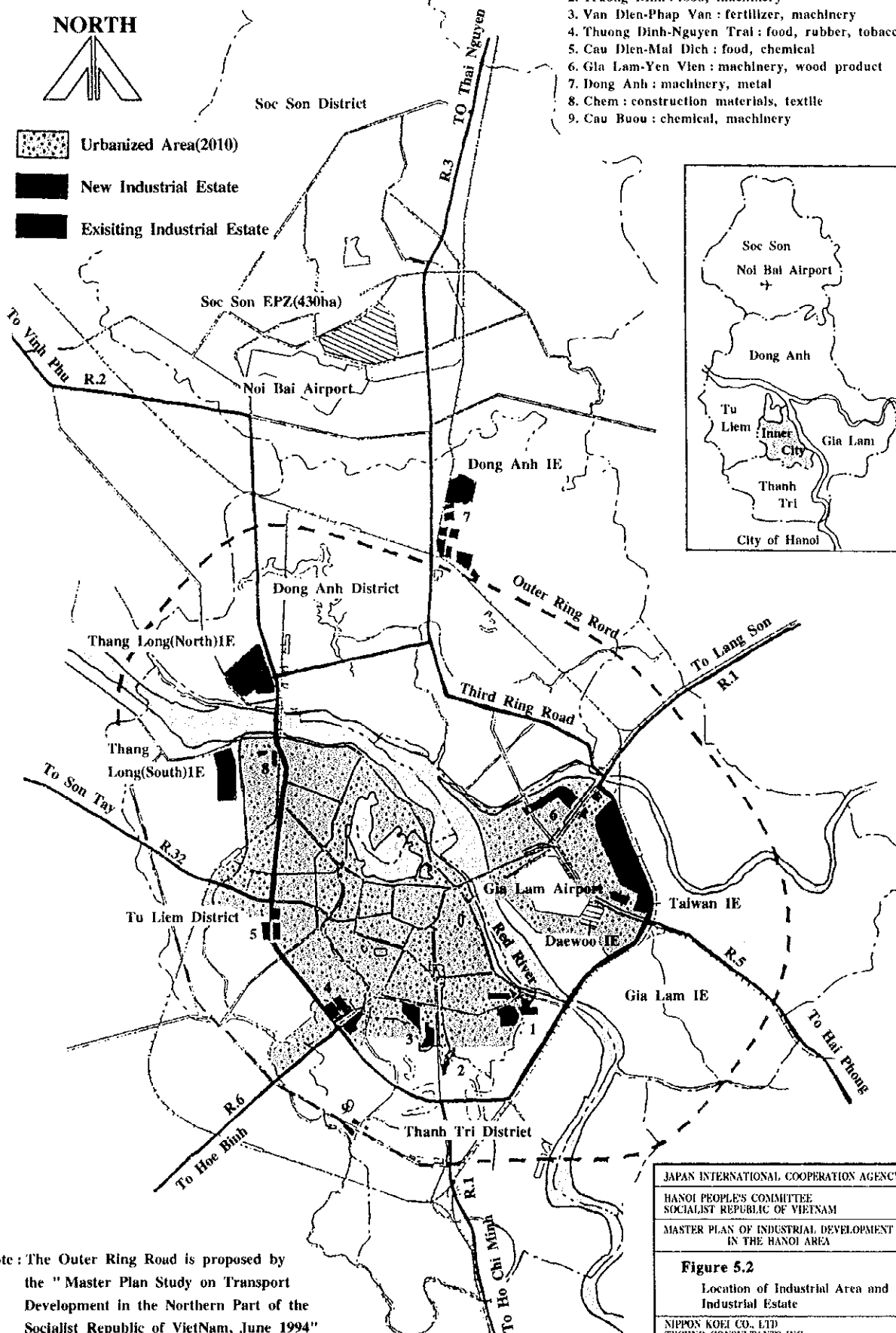
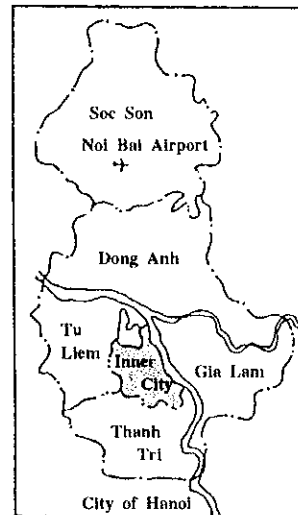
0 1 2 4 6 8 10km

NORTH

-  Urbanized Area(2010)
-  New Industrial Estate
-  Existing Industrial Estate

(Existing Industrial Areas)

1. Minh Khai-Vinh Tuy : weaving, machinery
2. Truong Dinh : food, machinery
3. Van Dlen-Phap Van : fertilizer, machinery
4. Thuong Dinh-Nguyen Trai : food, rubber, tobacco
5. Cau Dlen-Mai Dich : food, chemical
6. Gia Lam-Yen Vien : machinery, wood product
7. Dong Anh : machinery, metal
8. Chem : construction materials, textile
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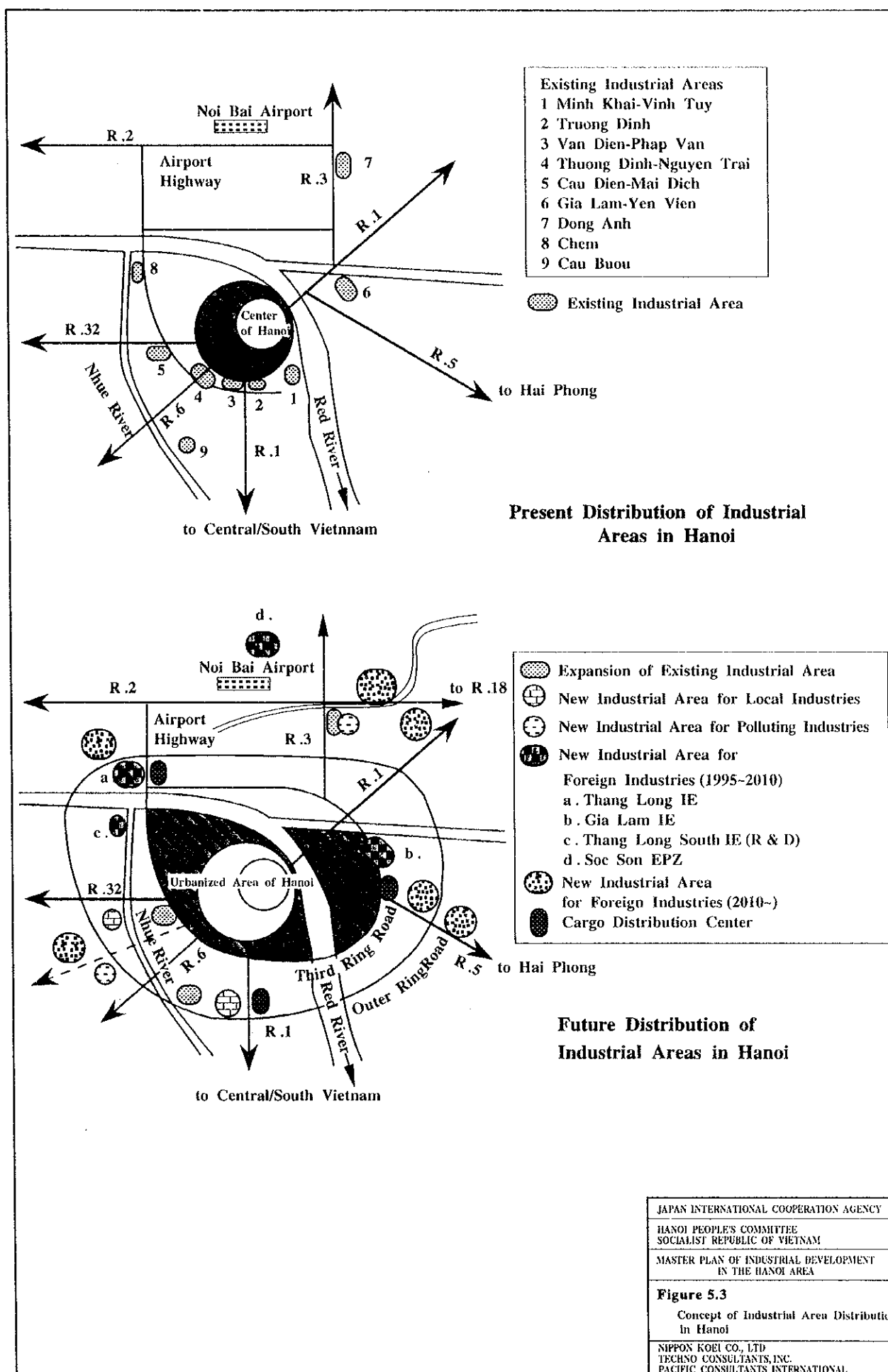
Note : The Outer Ring Road is proposed by the " Master Plan Study on Transport Development in the Northern Part of the Socialist Republic of VietNam, June 1994"

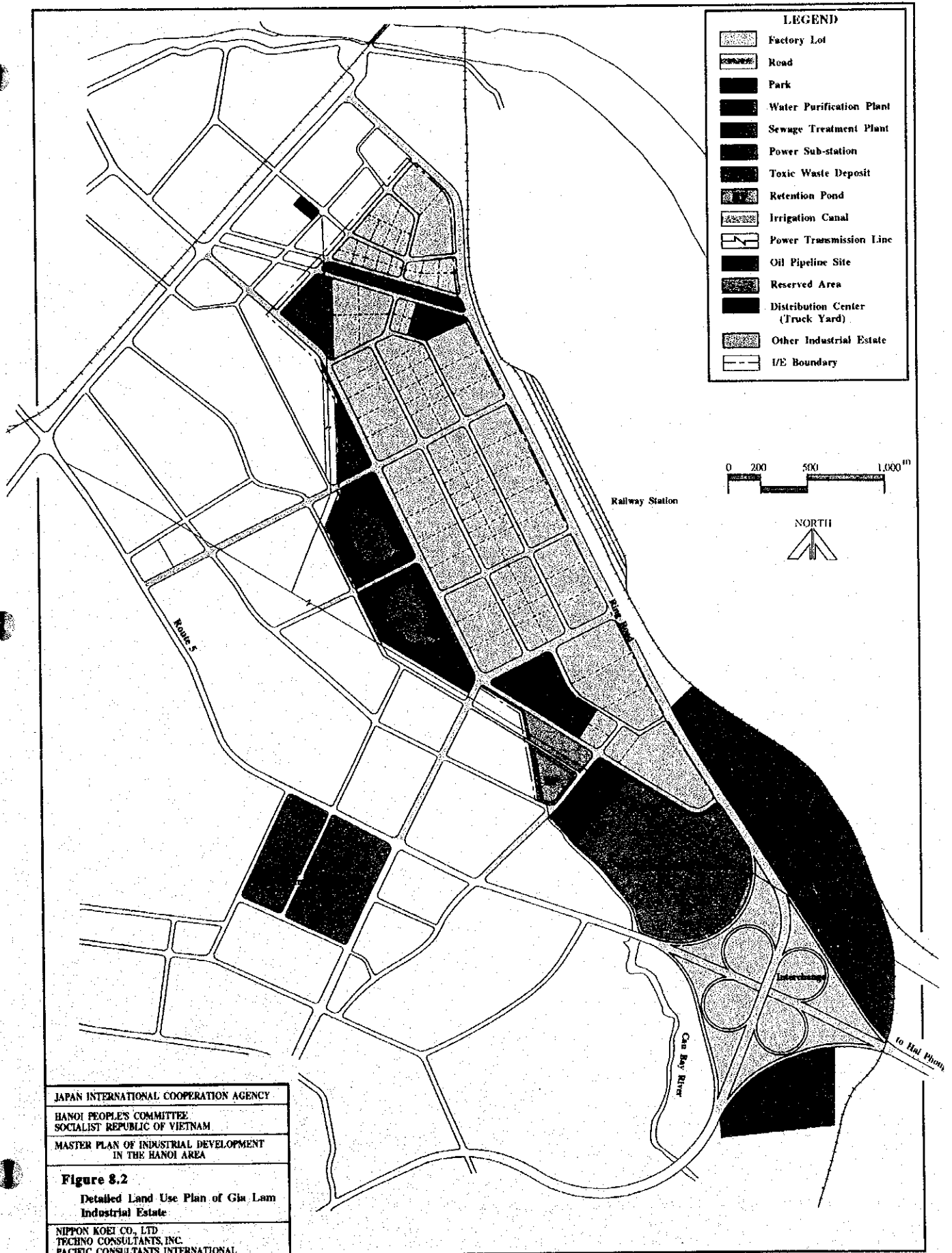
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SOCIALIST REPUBLIC OF VIETNAM
MASTER PLAN OF INDUSTRIAL DEVELOPMENT
IN THE HANOI AREA

Figure 5.2

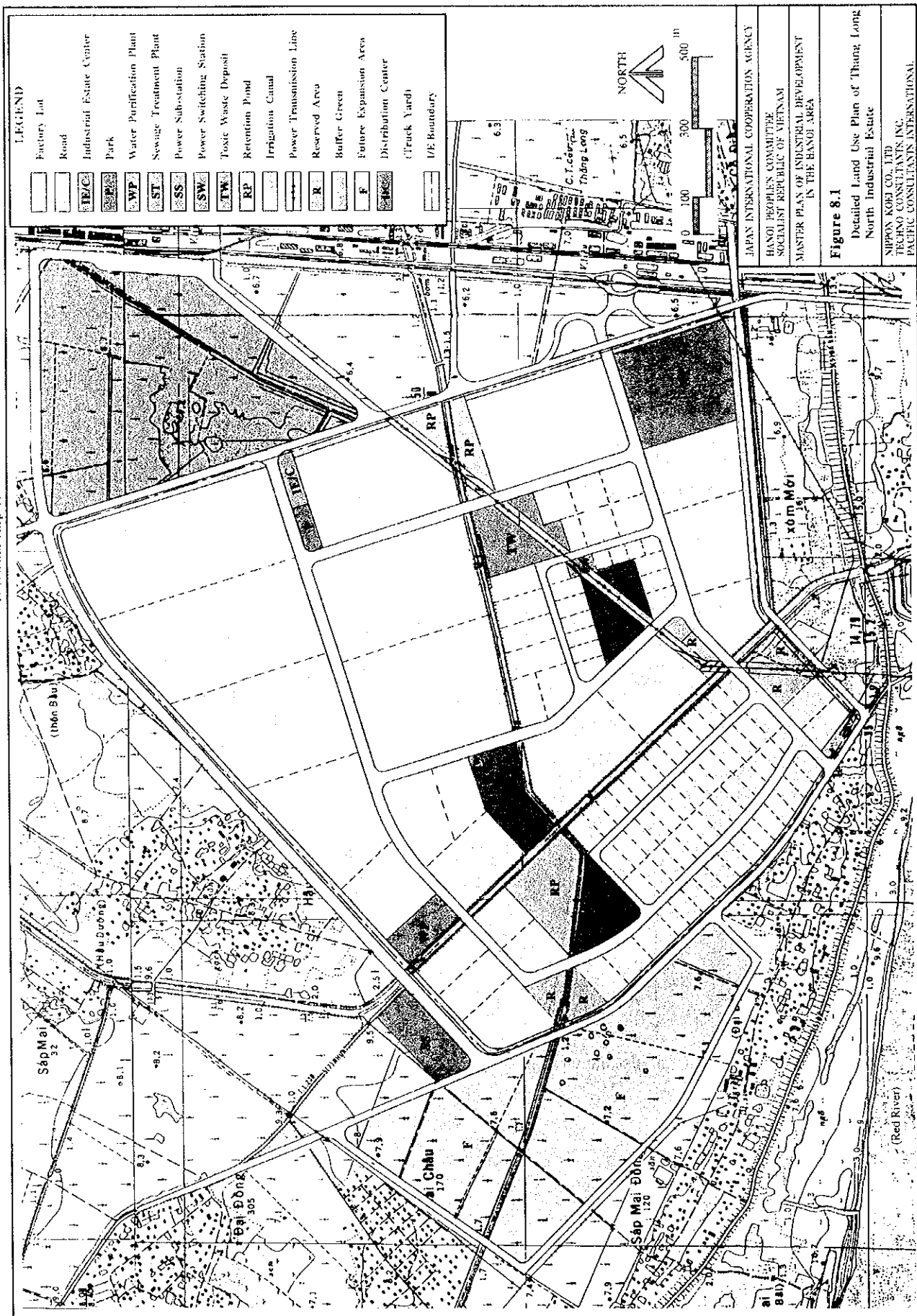
Location of Industrial Area and Industrial Estate

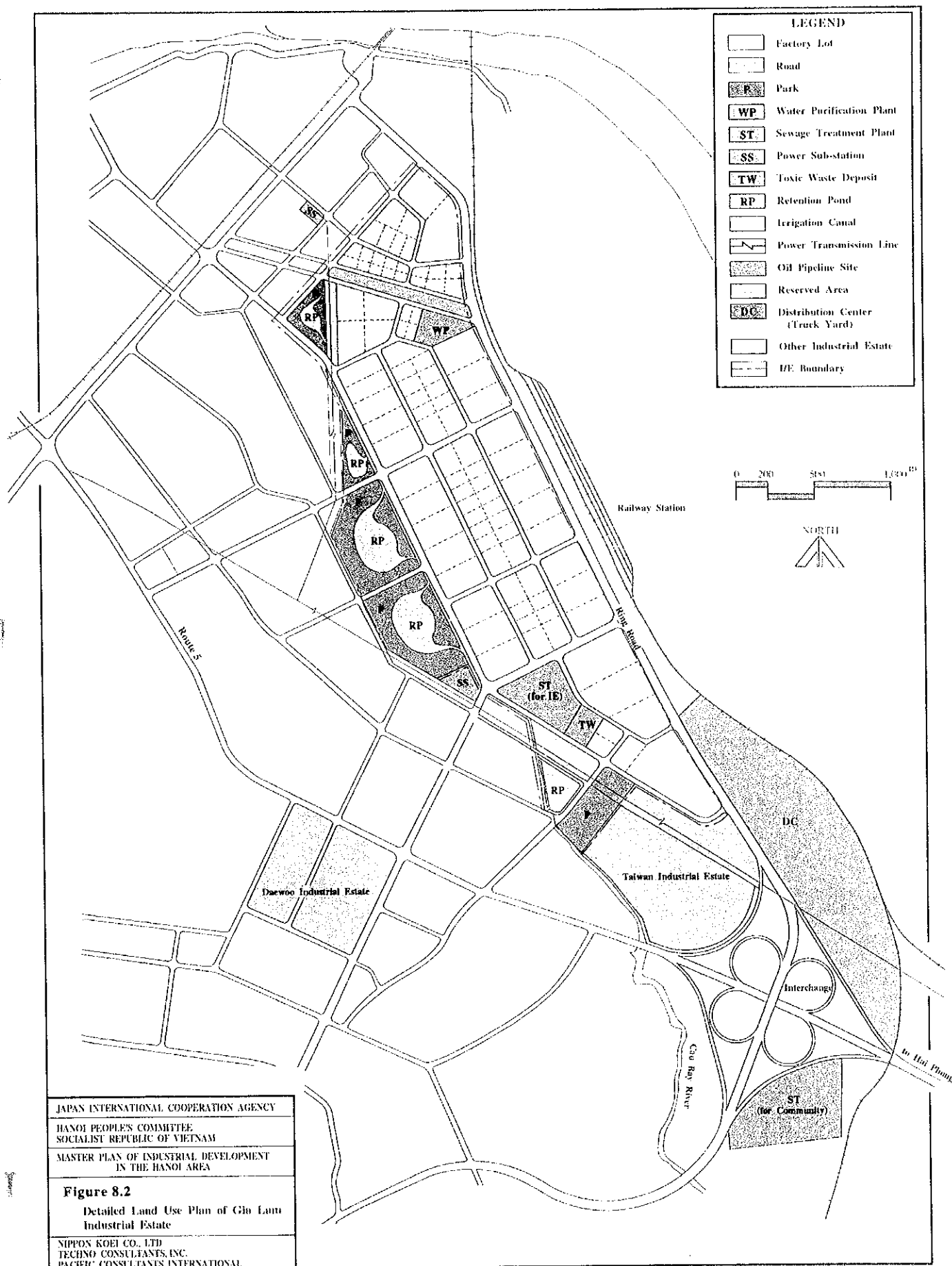
NIPPON KOEI CO., LTD.
TECHNO CONSULTANTS, INC.
PACIFIC CONSULTANTS INTERNATIONAL





To Noi Bai Airport





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 IN THE HANOI AREA

Figure 8.2
 Detailed Land Use Plan of Gio Lam
 Industrial Estate

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 TECHNO CONSULTANTS, INC.
 PACIFIC CONSULTANTS INTERNATIONAL



APPENDICES

APPENDIX

- A : OVERVIEW OF THE INDUSTRIAL SECTOR
- B : REFORMS FOR ACCELERATED INDUSTRIAL DEVELOPMENT
- C : INVESTMENT AND TRADE PROMOTION
- D : CONSTRAINTS COMMON TO EXISTING INDUSTRIES
- E : DIRECTION OF INDUSTRIAL DEVELOPMENT
- F : IMPROVEMENT OF EXISTING INDUSTRIES
- G : INVESTMENT DEMAND FOR INDUSTRIAL ESTATES
- H : MASTER PLAN FOR INDUSTRIAL ESTATES DEVELOPMENT
- I : PRE-INVESTMENT STUDY ON DEVELOPMENT OF SELECTED INDUSTRIAL ESTATES

APPENDIX-A

OVERVIEW OF THE INDUSTRIAL SECTOR

10/20/1993

20/20/1993 20/20/1993 20/20/1993

Table of Contents

		<u>Page</u>
A.1	INDUSTRIES IN VIETNAM	
	1) Gross Domestic Product	A-1
	2) Number of Enterprises	A-2
	3) Labor Force in the Industrial Sector	A-2
	4) Unemployment	A-3
	5) Foreign Investments	A-3
	6) Exports of Industrial Products.....	A-4
A.2	INDUSTRIES IN THE NORTH ECONOMIC TRIANGLE	
	1) Gross Output in NET.....	A-5
	2) Number of Enterprises in NET.....	A-5
	3) Labor Force in NET	A-5
	4) Foreign Investments in NET.....	A-5
A.3	INDUSTRIES IN THE HANOI AREA	
	1) State Enterprises.....	A-7
	2) Industrial Land	A-8
	3) Employment and Wages.....	A-8
	4) Sales Amount.....	A-9
	5) Production Cost.....	A-9
	6) Business Expansion	A-9

Tables

	<u>Page</u>
Table A.01 Gross Output of Industry	A-10
Table A.02 Gross Output by Type of Industry in 1993	A-11
Table A.03 Number of Industrial Establishments.....	A-12
Table A.04 Labor Force by Kind of Economic Activities.....	A-13
Table A.05 Foreign Direct Investments	A-14
Table A.06 Foreign Direct Investments by Economic Sector.....	A-15
Table A.07 Exports by Commodity Group	A-16
Table A.08 Economic Indicators of the North Economic Triangle.....	A-17
Table A.09 Gross Output of Local Enterprises.....	A-18
Table A.10 Number of Enterprises in the North Economic Triangle Zone.....	A-19
Table A.11 Labor Force of Local State Enterprises in the North Economic Triangle	A-20
Table A.12 Foreign Direct Investments by Region	A-21
Table A.13 Number of State Manufacturing Enterprises in the Hanoi Area.....	A-22
Table A.14 Categories and Types of Existing Industries in the Hanoi Area.....	A-23
Table A.15 Sales Amount by Categories and Types of Industry in the Hanoi Area.....	A-24
Table A.16 Central State Enterprises in the Hanoi Area.....	A-25
Table A.17 Founded Year by Types of Industries in the Hanoi Area.....	A-26
Table A.18 Factory Area by Categories of Industry in the Hanoi Area.....	A-27
Table A.19 Employees by Categories of Industry in the Hanoi Area.....	A-28
Table A.20 Employees by Categories and Types of Industry in the Hanoi Area.....	A-29
Table A.21 Female Employees by Types of Industries in the Hanoi Area.....	A-30
Table A.22 Employees' Average Age by Types of Industries in the Hanoi Area	A-31

Table A.23	Average Wages by Types of Industries in the Hanoi Area.....	A-32
Table A.24	Sales Amount by Categories of Industry in the Hanoi Area	A-33
Table A.25	Sales Amount per Employee in the Hanoi Area	A-34
Table A.26	Breakdown of Production Cost by Categories of Industry in the Hanoi Area	A-35
Table A.27	Markets of Products by Categories of Industry in the Hanoi Area.....	A-36
Table A.28	Intention of Business Expansion in the Hanoi Area.....	A-37

APPENDIX-A

OVERVIEW OF THE INDUSTRIAL SECTOR

A.1 Industries in Vietnam

1) Gross Domestic Product

The gross domestic product (GDP) of the industrial sector amounted to 37,535 billion dongs (approx. US\$ 3,410 million) in 1994, or 22.0% of total GDP of Vietnam (170,258 billion dongs), while the agricultural sector accounted for 29% and the services sector (incl. transportation, communications) for 49%. The gross output of the industrial sector has grown from 14,011 billion dongs in 1990 to 20,412 billion dongs (at 1989 constant price) in 1993, or at the average annual increase rate of 13.4%. The gross output of the manufacturing industry, exclusive of electricity, fuel and construction, amounted to 14,185 billion dongs in 1993, showing an average annual increase rate of about 11% in the past four years. The growth has been notable in the basic metal industry (ISIC:37), chemicals industry (ISIC:35) and non-metallic industry (ISIC:36), as shown in Table A.01.

The growth rate of the industrial sector has been much higher than the other sectors, and SPC expects that the industrial sector will account for 25-26% of total GDP in the year 2000. Notwithstanding the higher growth rate of the industrial sector attained in the past and expected to attain in the years to come, the contribution of the secondary sector to the national economy is still at the level of a couple of decades ago in the Southeast and East Asian countries, as noted in the table below.

	Vietnam		China		Korea		Thailand		Philippines		Indonesia	
	1993-2000		1970-1992		1970-1992		1970-1992		1970-1992		1970-1992	
Agricult.	37	26-30	n.a	27	26	8	26	12	30	22	45	19
Industry	21	25-26	n.a	34	29	45	25	39	32	33	19	40
Services	42	44-49	n.a	38	45	47	49	49	38	45	36	41

Source: Vietnam: SPC
Other country: World Bank, World Development Report, 1994

SPC predicts that the industrial sector will represent 33-37% of total GDP in the year 2010. Such a prediction appears to be reasonable, but it would be possible to expect a higher rate of contribution by the industrial sector in view of the present situation and the potential for growth in the sector.

Of the total gross output of the manufacturing sector in 1993 (14,185 billion dongs at 1989 constant prices), the food and foodstuff industries (ISIC:31) accounted

for 48%, and the textile, apparel and leather industries (ISIC:32) accounted for 14%. The contribution of the fabricated metal industries (ISIC:38) was about 11%, and the contribution of the basic metal (ISIC:37) and non-metallic (ISIC:36) industry was substantially low, 3.5% and 1.7%, respectively (Refer to Table A.01).

Industries in Vietnam consist of state enterprises (central state and local state) and non-state enterprises (private, cooperative and household). The production of central state enterprises amounted to 10,602 billion dong in 1993 (approx. 52% of total production), and local state enterprises produced 4,040 billion dong (approx. 20%). The production of non-state enterprises reached 5,769 billion dong (approx. 28%). By industrial category, central and local state enterprises constituted a major part in the basic metal industry (88%) and chemical industry (74%), while non-state enterprises shared a major portion in wood and wood product industry. About 55-70% of the food and beverage (ISIC:31), textile, apparel and leather (ISIC:32) and fabricated metal (ISIC:38) have been produced by central and local state enterprises (refer to Table A.02).

2) Number of Enterprises

A total of 463,500 industrial enterprises have been established in Vietnam by the end of 1993. The number of central state enterprises has been 522 and that of local state enterprises has been 1,508. The state enterprises, central and local, have been gradually decreasing in recent years. On the other hand, the number of private enterprises has been increasing steadily, and it reached 3,322 enterprises in 1993. About 81% of private enterprises are located in the southern regions (south northeast provinces and Mekong river delta provinces), while over 57% of central state enterprises are located in the northern region (North mountain-midland provinces and Red river delta provinces). Of the total number of central state manufacturing enterprises (445 establishments), about 34% are fabricated metals (ISIC:38), and 29% are food (ISIC:31) and textile, apparel and leather (ISIC:32) enterprises, as shown in Table A.03.

3) Labor Force in the Industrial Sector

The labor force by kind of economic activities is shown in Table A.04. As seen in the table, labor force engaged in "Agriculture" and "Forestry" (the "Primary Industry") has been constantly around 73% of the total labor force in Vietnam. However, the share of "Agriculture" and "Forestry" in GDP together accounts for less than 40%, indicating that the productivities of "Agriculture" and "Forestry" are much lower than the average productivity of the economy. "Industry" and "Construction"

(the "Secondary Industry") is just absorbing approximately 14% of the country's labor force. As the Secondary Industry has greater potentiality for absorbing labor force in comparison to the Primary industry, the development of the Secondary Industry is essential for improving the unemployment ratio, which is the one of the most serious socio-economic issues of Vietnam. Share of labor force in the tertiary sector still remains quite low, about 7%.

The labor force working in the state enterprises has been reducing in terms of both number and share in the total economic activities from 1985 to 1993. The number of workers and share of state enterprises reduced from 3.9 million to less than 3.0 million in 1993 and 14.8% to 9.1% during this period, respectively. This reduction in employment of the state enterprises is presumably reflecting the efforts of the Economic Reform to increase productivity. Similarly, significant reduction of the number of industrial establishments of the state enterprises was observed as shown in Table A.03.

4) Unemployment

Available basic data on unemployment in Vietnam are quite limitedly. According to the "Atlas Vietnam Population", about 4.3% of the economically active population is unemployed. The reported rate of unemployment is relatively low, and it is assumed that the excess workers have been absorbed by the agricultural sector. Although data are unavailable, the rate of under-employment is presumably high in and around the urban centers. The development of the industrial sector should be accelerated in order to increase employment opportunities and to reduce unemployment and under-employment rates.

5) Foreign Investment

After the Doi Moi policy was adopted in 1986, a market-oriented economy was introduced, opening the door to foreign investors. By the end of 1994, a total of 1,028 foreign direct investment projects have been registered (1,217 licenced but 189 cancelled), with a total invested capital amounting to US\$10.9 billion. Investments from NIES countries, i.e. Hong Kong, Taiwan, South Korea and Singapore, are notable accounting for 52% of the total invested capital. Investments from ASEAN countries (Malaysia, Thailand, Indonesia and the Philippines) accounted for about 9% of the total invested capital. The details are shown in Table A.05.

Sectoral distribution of the foreign direct investments as of end 1994 is shown in Table A.06. The Industrial sector occupied 58% of the total number of investments and 38.5% of total amount of invested capital.

6) Exports of Industrial Products

Exports of industrial products have been increasing steadily. During the 1985 - 1992 period, they recorded an annual average growth of 20.5 %, reaching US\$ 2,581 million in 1992. Among others, exports of "heavy industrial and mineral products" increased sharply or more than quadrupled during this period. From the point of view of the type of management, exports of products by the central state enterprises have been decreasing steadily while the local state enterprises supplemented the decrease. The details of the exports of manufactured goods are given in Table A.07.

A.2 Industries in the North Economic Triangle

The North Economic Triangle (NET) extends from Hanoi to southeast up to Hai Phong and Quang Ninh. NET has an area of about 10,900 km², accounting for 3.3% of the total area of the country. Population in NET is estimated to be around 7.3 million, or 10.3% of the total population of Vietnam, as shown in Table A.08.

1) Gross Output in NET

NET, comprising Hanoi, Hai Phong and Quang Ninh Province, is the second largest economic zone in the country. Though data on the distribution of the central state enterprises are unavailable, the gross output value of the local enterprises including local state and non - state enterprises (private, cooperative and private household enterprises) indicates that the gross outputs are 8.1% in NET as shown in Table A.09. This contribution is low if compared with the South Economic Triangle (SET) (33.6%). NET's gross output is attributable more to the central state enterprises.

2) Number of Enterprises in NET

A total of about 49,000 industrial enterprises have been established in NET by the end of 1993. The number of central state enterprises was 192 accounting for 37% of the total number of central state enterprises, and that of local state enterprises was 239 accounting for 16% of the total number of local state enterprises (refer to Table A.10). On the other hand, the number of private enterprises in NET was 222 accounting for only 7% of the total number of private enterprises.

3) Labor Force in NET

The labor force of local state enterprises in NET is shown in Table A.11. As seen in the table, the total labor force of local state enterprises has been decreasing steadily. It has decreased from 356,000 persons in 1990 to 256,000 persons in 1992, which accounted for slightly less than 15% of total labor force of local state enterprise in Vietnam.

4) Foreign Investments in NET

Regional/provincial distribution of the foreign investments is shown in Table A.12. As seen in the table, the Red River Delta accounted for 23.4% of the total number of investments in the country. If compared with SET, which received 55.4%

of total number of investment, the foreign direct investment in NET is still much to be expected.

A.3 Industries in the Hanoi Area

1) State Enterprises

It is reported that a total of 144 central state enterprises and 105 local state enterprises are located in the Hanoi area at the end of 1993 based on "Statistical Yearbook, 1994". The Study Team surveyed in 1994 a total of 154 central state enterprises and 70 local state (HPC) enterprises, on the basis of the enterprise list provided by HPC, as shown in Table A.13.

The number of enterprises surveyed by the Study Team represented about 35% of the total number central state manufacturing enterprises in Vietnam and 6% of local state manufacturing enterprises. By category of industry, the central state enterprises surveyed by the Study Team accounted for 73% of non-metallic industry (ISIC:36), 57% of paper and printing industry (ISIC:34), 47% of wood and wood product industry (ISIC:33), 38% of fabricated metal industry (ISIC:38) and 29% of chemical industry (ISIC:35) in Vietnam (refer to Table A.13). The results of survey by the Study Team therefore illustrate a picture of state enterprises in the Hanoi area, as well as state and local enterprises in Vietnam as a whole.

Of the 154 central state enterprises surveyed, 58 enterprises (38%) engage fabricated metal industry, with sales of 945 billion dong in 1993 (refer to Table A.14 and Table A.15). There are 17 chemical enterprises (sales 537 billion dong), 18 food, beverage and tobacco enterprises (sales 893 billion dong), 18 textile, apparel and leather enterprises (634 billion dong) and 11 non-metallic enterprises (179 billion dong) in the Hanoi area.

A number of government organizations are operating the central state enterprises in the Hanoi area. As shown in Table A.16, some 25 enterprises are operated by MLI, and 17 enterprises are managed by the MHI. The Ministry of Transportation (16 enterprises), Ministry of Defense (16 enterprises), Ministry of Agriculture and Foodstuff (10 enterprises) are also major sponsors for industrial operation in the Hanoi area. About two thirds of the central state enterprises were established before 1979. Though the number of new central state enterprises has been decreasing in recent years, some 22 enterprises have been established by the government organizations since 1990. It is also noted that the number of new local state enterprises has been decreasing, while that of new private enterprises is increasing even in the Hanoi area (refer to Table A.17).

2) Industrial Land

According to the questionnaire survey conducted by the Study Team, the total land used for industries in the Hanoi area is approximately 613 hectares (total of 215 enterprises out of the 234 surveyed enterprises), with an average land holding of 2.85 hectares per enterprise (Refer to Table A.18). Due to a higher proportion of the state enterprises in the Hanoi area as noted before, the average of land holding size is relatively large. By adding the land of non-surveyed enterprises and household establishments, the total area used for industrial activities in the Hanoi area is preliminarily estimated to be slightly less than 1,000 hectares in total.

3) Employment and Wages

The surveyed enterprises (234 factories) employed a total of about 82,000 persons, with an average employment of 350 persons per enterprise (Refer to Table A.19). The largest employment is offered by the textile, apparel and leather industry (ISIC:32; about 31,200 employees), followed by the fabricated metal industry (ISIC:38; about 20,800 employees). The central state enterprises (154 in number) employed a total of about 57,500 workers, with an average employment of some 370 workers per enterprise. The employment per enterprise is higher in central state enterprises. For instance, 18 central state enterprises in textile, apparel and leather industries employed 20,370 workers (1,132 persons per enterprise), while 17 local state and 2 private textile enterprises employed 10,400 workers (612 per enterprise) and 440 workers (220 per enterprise), respectively. The average employment of the fabricated metal industry is 253 in central state enterprises, 216 in local state enterprises and 170 in private enterprises (refer to Table A.20).

Female workers are relatively high in employment rate in the surveyed industries. More than one third of the central state enterprises are employing female workers for more than 50% of employees in respective factories. Proportion of female workers is higher in local state enterprises in general (refer to Table A.21). The rate of female workers is particularly high in textile and apparel industries. Further, it is noted that the average age of employees is relatively high in both central and local state enterprises, and comparatively lower in private enterprises (refer to Table A.22).

The level of wages is still relatively low in central and local state industries. For semi-skilled workers, the majority receive an average monthly salary of less than 300,000-400,000 dongs. Skilled workers' salary is slightly higher, but it is still less than 400,000-500,000 dongs per month, as shown in Table A.23. Most of the employees work 8-9 hours a day and 6 days a week. Overtime work is more frequent

in private enterprises. 64% of the existing factories are applying shift operations. For the most of enterprises, fringe benefits are less than 30% of wages.

4) Sales Amount

Sales amount per enterprise is about 14.6 billion dong on an average, as shown in Table A.24. It is higher in tobacco industry (ISIC:3314), beverage industry (ISIC:313), textile industry (321), rubber product industry (355) and electrical machinery industry (383), while it is lower in wood and wood product industry (33), paper and printing industry (34), and basic metal industry (372). On the other hand, sales amount per employee is higher in food, beverage and tobacco industry (ISIC:31), chemical industry (35) and fabricated metal industry (38). The per capita sales amount is lower in textile, apparel and leather industry (32), wood and printing industry (33) and basic metal industry (37). The average sales amount per employee is about 41.2 million dong a year, as shown in Table A.25. The sales amount per employee is higher in private enterprises and it is lower in local state enterprises.

5) Production Cost

For every category of factories surveyed through this Study, the cost of labors account for 10-15% of total production costs. Material costs are high in production, ranging from 57% to 75% of total production costs, according to the questionnaire survey (refer to Table A.26). On an average, about 87% of the products are marketed locally, and exports of products are relatively small, except for wood products (ISIC:331), textile, apparel and footwear (ISIC:321,322 and 324), other foodstuff (ISIC:312), as shown in Table A.27.

6) Business Expansion

All the private enterprises surveyed through this Study have intention to expand their business. On the other hand, about 16% of central state enterprises and 10% of local state enterprises clearly noted that they had no intention to expand their business, as shown in Table A.28. In general, the majority of the existing enterprises consider that their business can be expanded through improvement, renovation and/or expansion of their facilities for production. Most of local state enterprises and private enterprises are looking for technical cooperation and/or formation of joint ventures with foreign enterprises for expansion of their business.

Table A.01 Gross Output of Industry

(Billion dong)					
ISIC	Category	1990	1991	1992	1993* Av. Annual Increase (%)
31	Food, beverage	5,040.3	5,378.4	6,140.3	6,840.1 (48.2)
32	Textile, apparel	1,554.8	1,551.8	1,763.6	1,934.3 (13.6)
33	Wood products	572.7	595.7	610.9	607.2 (4.3)
34	Paper, printing	408.8	400.4	465.4	525.8 (3.7)
35	Chemicals	920.5	1,114.0	1,355.2	1,614.6 (11.4)
36	Non - metallic	146.1	178.3	205.0	238.6 (1.7)
37	Basic metal	218.7	319.3	406.4	490.4 (3.5)
38	Fabricated metal	1,194.8	1,182.1	1,295.2	1,536.5 (10.8)
39	Others	356.7	344.2	367.1	398.1 (2.8)
	(Sub total)	10,413.4	11,064.2	12,609.1	14,185.6 (100.0)
	Construction	1,000.2	1,165.1	1,383.5	1,601.0
	Electricity, fuel	2,597.5	3,241.8	4,124.3	4,625.4
	Total	14,011.1	15,471.1	18,116.9	20,412.0

Note: At 1989 constant prices

* : Figures in () indicate percentage against total manufacturing output

Sources: Statistical Yearbook, 1994

Table A.02 Gross Output by Types of Industry in 1993

		(Billion dong) (%)			
		Central State Enterprises	Local State Enterprises	Non - State Enterprises	Total
31	Food, beverage	2,270.2 (33.2)	2,117.1 (31.0)	2,452.8 (35.8)	6,840.1 (100.0)
32	Textile, apparel	861.0 (44.5)	412.3 (21.3)	661.0 (34.2)	1,934.3 (100.0)
33	Wood products	33.8 (5.6)	92.5 (15.2)	480.9 (79.2)	607.2 (100.0)
34	Paper, printing	211.3 (40.2)	199.3 (37.9)	115.2 (21.9)	525.8 (100.0)
35	Chemicals	759.4 (47.0)	432.0 (26.8)	423.2 (26.2)	1,614.6 (100.0)
36	Non - metallic	88.7 (37.2)	27.8 (11.7)	122.1 (51.1)	238.6 (100.0)
37	Basic metal	365.9 (74.6)	66.6 (13.6)	57.9 (11.8)	490.4 (100.0)
38	Fabricated metal	561.2 (36.5)	260.3 (16.9)	715.0 (46.6)	1,536.5 (100.0)
39	Others	20.1 (5.0)	150.8 (37.9)	227.2 (57.1)	398.1 (100.0)
	(Sub total)	5,171.6 (36.5)	3,758.7 (26.5)	5,255.3 (37.0)	14,185.6 (100.0)
	Construction	838.4 (52.4)	256.0 (16.0)	506.6 (31.6)	1,601.0 (100.0)
	Electricity, fuel	4,592.2 (99.3)	25.8 (0.6)	7.4 (0.1)	4,625.4 (100.0)
	Total	10,602.2 (51.9)	4,040.5 (19.8)	5,769.3 (28.3)	20,412.0 (100.0)

Note: At 1989 constant prices
Source: Statistical Yearbook 1994

Table A.03 Number of Industrial Establishments

	Central State Enterprises	Local State Enterprises	Private Enterprises	Cooperatives	Household Enterprises
(Year)					
1985	711	2,339	920	35,629	n.a
1990	589	2,173	770	13,086	376,900
1991	546	2,053	959	8,829	446,771
1992	537	1,731	1,114	5,723	368,000
1993	522	1,508	3,322	5,287	452,866
(By Province, 1993)					
North mountain & mid.	88	212	91	656	45,828
Red river delta	207	376	313	1,857	171,874
(Hanoi)	(144)	(105)	(132)	(841)	(13,497)
North central coast	19	216	75	1,276	85,589
South central coast	25	169	89	797	43,825
Central highland	6	47	57	59	8,502
North east south	165	328	1,133	607	33,457
(Ho Chi Minh)	(131)	(242)	(528)	(560)	(21,647)
Mekong river delta	9	160	1,564	35	63,791
Total	519 L1	1,508	3,322	5,287	452,866
(By Categories, 1993)					
31 Food, beverage	75	327			
32 Textile, apparel	52	172			
33 Wood products	19	96			
34 Paper, printing	35	111			
35 Chemicals	58	122			
36 Non - metallic	15	39			
37 Basic metal	20	19			
38 Fabricated metal	153	245			
39 Others	18	92			
(Sub total)	445	1,223			
Construction materials	66	259			
Electricity, fuel	11	26			
Total	522	1,508			

Note: L1 Not coincide with a total

Source: Statistical Yearbook, 1994

Table A.04 Labor Force by Kind of Economic Activities

		(unit : thousand persons)							
		1985		1990		1992		1993	
Material production sector									
Agriculture		18,808.0	72.3%	21,689.1	71.6%	22,998.3	72.3%	23,683.8	72.4%
Forestry		170.6	0.7%	205.9	0.7%	210.0	0.7%	214.4	0.7%
Sub-total		18,978.6	72.9%	21,895.0	72.3%	23,208.3	72.9%	23,898.2	73.0%
Industry		2,800.1	10.8%	3,392.0	11.2%	3,450.0	10.8%	3,521.8	10.8%
Construction		831.6	3.2%	817.7	2.7%	825.0	2.6%	848.3	2.6%
Sub-total		3,631.7	14.0%	4,209.7	13.9%	4,275.0	13.4%	4,370.1	13.4%
Transport		443.6	1.7%	475.5	1.6%	483.6	1.5%	496.1	1.5%
Postal service and telecommunication		35.7	0.1%	37.5	0.1%	50.7	0.2%	51.4	0.2%
Trade Material supply		1,117.4	4.3%	1,680.9	5.5%	1,735.0	5.5%	1,776.0	5.4%
Others		45.3	0.2%	30.3	0.1%	30.2	0.1%	30.6	0.1%
Sub-total		1,642.0	6.3%	2,224.2	7.3%	2,299.5	7.2%	2,354.1	7.2%
Total		24,252.3	93.2%	28,328.9	93.5%	29,782.8	93.6%	30,622.4	93.6%
Non material productive sector									
Housing public services tourism		227.0	0.9%	294.8	1.0%	301.2	0.9%	322.0	1.0%
Science		64.1	0.2%	52.5	0.2%	48.3	0.2%	48.1	0.1%
Education and tranning		682.9	2.6%	802.6	2.6%	825.2	2.6%	848.0	2.6%
Culture,Art		40.1	0.2%	45.4	0.1%	46.0	0.1%	46.1	0.1%
Health,ensurance,sport		277.0	1.1%	302.9	1.0%	318.1	1.0%	326.6	1.0%
Finance,banking and insurance		74.5	0.3%	91.2	0.3%	114.2	0.4%	117.3	0.4%
Sate management		289.4	1.1%	239.9	0.8%	240.0	0.8%	240.0	0.7%
Others		113.0	0.4%	136.3	0.4%	143.1	0.4%	145.8	0.4%
Total		1,768.0	6.8%	1,965.6	6.5%	2,036.1	6.4%	2,093.9	6.4%
Grand total		26,020.3	100.0%	30,294.5	100.0%	31,818.9	100.0%	32,716.3	100.0%
State enterprises									
Central		1,625.0	6.2%	1,343.1	4.4%	1,296.1	4.1%	1,242.1	3.8%
Local		2,234.2	8.6%	2,078.3	6.9%	1,847.6	5.8%	1,733.1	5.3%
Sub-total		3,859.2	14.8%	3,421.4	11.3%	3,143.7	9.9%	2,975.2	9.1%
Non-state		22,161.1	85.2%	26,873.1	88.7%	28,675.2	90.1%	29,741.1	90.9%
Total		26,020.3	100.0%	30,294.5	100.0%	31,818.9	100.0%	32,716.3	100.0%

Source : Prepared from Statistical Yearbook 1994

Table A.05 Foregin Direct Investments

As of End 1994

Countries	Number of Projects	Invested Capital (million US\$)
1) Taiwan	172	1,903
2) Hong Kong	175	1,858
3) Singapore	84	1,026
4) Republic of Korea	100	909
5) Japan	76	820
6) Australia	45	678
7) France	59	507
8) Malaysia	31	501
9) Switzerland	14	463
10) U.K.	16	401
11) Netherland	18	366
12) Thailand	45	233
13) Indonesia	11	160
14) U.S.A.	24	152
15) Russia	35	125
16) Canada	10	99
17) Belgium	7	81
18) Sweden	8	79
19) Island	9	74
20) Philippines	11	63
21) Bermuda	4	61
22) Denmark	3	46
23) Belorussia	1	38
24) Italy	4	28
25) Panama	7	27
26) Ukraine	5	27
27) Germany	7	24
28) New Zealand	3	23
29) Czechoslovakia	1	18
30) Chian	21	16
31) Poland	2	16
32) Austria	1	15
33) People's Dem.Rep.of Korea	1	13
34) U.A.E.	1	12
35) Other countries	1	9
36) Liechtenstein	1	8
37) Cuba	1	7
38) Luxembourg	1	6
39) Macao	2	3
40) Norway	3	2
41) Hungary	2	2
42) Brunei	1	2
43) Israel	1	2
44) Latvia	2	1
45) Laos	1	1
46) Argentina	1	0
TOTAL	1,028	10,905

Source: SCCI

Table A.06 Foreign Direct Investments by Economic Sector

As of End 1994

Econ. Sector	No. of Project	Share (%)	Invested Capital (million US\$)	Share (%)
Processing Industry	599	58.3	4,193	38.5
Hotel & Tourism	118	11.5	2,404	22.1
Mining, Oil & Gas	57	5.5	1,525	14.0
Construction	43	4.2	1,220	11.2
Real Estates	71	6.9	533	4.9
Agriculture & Forestry	32	3.1	264	2.4
Transp. & Communication	53	5.2	497	4.5
Finance & Banking	12	1.2	170	1.6
Fishery	21	2.0	58	0.5
Others	22	2.1	37	0.3
TOTAL	1028	100.0	10,901	100.0

Source: SCCI

Table A.07 Exports by Commodity Group

(unit : million US\$)

	1985		1989		1990		1991		1992	
By type of management										
Central	594.3	85.1%	1442.9	74.1%	1700.4	70.7%	1326.8	63.6%	1574.9	61.0%
Local	104.2	14.9%	503.1	25.9%	703.6	29.3%	760.3	36.4%	1005.8	39.0%
Total	698.5	100.0%	1,946.0	100.0%	2,404.0	100.0%	2087.1	100.0%	2580.7	100.0%
By commodity group										
Heavy industrial and mineral	62.9	9.0%	336.0	17.3%	616.9	25.7%	697.1	33.4%	954.8	37.0%
Craft goods	235.6	33.7%	584.2	30.0%	635.8	26.4%	300.1	14.4%	349.5	13.5%
Agricultural products	274.2	39.3%	706.6	36.3%	783.3	32.6%	628.0	30.1%	827.6	32.1%
Forest products	40.5	5.8%	111.0	5.7%	126.5	5.3%	175.5	8.4%	140.8	5.5%
Aquatic products	82.6	11.8%	206.2	10.6%	239.1	9.9%	285.4	13.7%	307.7	11.9%
Others	2.7	0.4%	2.0	0.1%	2.4	0.1%	1.0	0.0%	0.3	0.0%
	698.5	100.0%	1,946.0	100.0%	2,404.0	100.0%	2,087.1	100.0%	2,580.7	100.0%

Source: Prepared from data in the Statistical Yearbook.

Table A.08 Economic Indicators of the North Economic Triangle

	Area		Population (1992)	
	(sq. Km)	(%)	(1,000 per)	(%)
North Economic Triangle				
Hanoi	920.6	0.3%	2,154.9	3.0%
Hai Phong	1,503.5	0.5%	1,583.9	2.2%
Quang Ninh	5,938.6	1.8%	889.6	1.3%
Hai Hung	2,551.4	0.8%	2,658.0	3.7%
Sub-total	10,914.1	3.3%	7,286.4	10.3%
South Economic Triangle				
Ho Chi Minh City	2,090.3	0.6%	4,322.3	6.1%
Dong Nai Province	5,864.4	1.8%	1,762.9	2.5%
Ba Ria- Vung Tau Prov.	1,956.6	0.6%	657.1	0.9%
Sub-total	9,911.3	3.0%	6,742.3	9.5%
Other areas	310,288.2	93.7%	56,953.8	80.2%
Total	331,113.6	100.0%	70,982.5	100.0%

Source : Prepared from data in the Statistical Yearbook.

Table A.09 Gross Output of Local Enterprises

	Gross output of Local Enterprises (1992) (billion Dongs at constant price of 1989)					
	Local Gov.	(%)	Non-state	(%)	Total	(%)
North Economic Triangle						
Hanoi	221.6	6.1%	167.7	3.1%	389.3	4.3%
Hai Phong	89.6	2.5%	61.8	1.2%	151.4	1.7%
Quang Ninh	42.1	1.2%	30.4	0.6%	72.5	0.8%
Hai Hung	18.6	0.5%	92.8	1.7%	111.4	1.2%
Sub-total	371.9	10.3%	352.7	6.6%	724.6	8.1%
South Economic Triangle						
Ho Chi Minh City	1,003.4	27.7%	1,562.9	29.3%	2,566.3	28.6%
Dong Nai Province	149.1	4.1%	98.8	1.9%	247.9	2.8%
Ba Ria- Vung Tau Prov.	42.3	1.2%	151.8	2.8%	194.1	2.2%
Sub-total	1,194.8	33.0%	1813.5	34.0%	3,008.3	33.6%
Other areas	2,057.5	56.8%	3,171.8	59.4%	5,229.3	58.3%
Total	3,624.2	100.0%	5,338.0	100.0%	8,962.2	100.0%

Remarks : Central state enterprises, which produced 9,154.7 billion dongs in 1992, are not included in this table.

Source : Prepared from data in the Statistical Yearbook.

Table A.10 Number of Enterprises in the North Economic Triangle Zone

	Number of Enterprises (1993)											
	Central State		Local State		Cooperatives		Private		Private Household		Total	
		(%)		(%)		(%)		(%)		(%)		(%)
North Economic Triangle												
Hanoi	144	27.6%	105	7.0%	841	15.9%	132	4.0%	13,497	3.0%	14,719	3.2%
Hai Phong	21	4.0%	69	4.6%	251	4.7%	79	2.4%	5,351	1.2%	5,771	1.2%
Quang Ninh	13	2.5%	36	2.4%	177	3.4%	0	0.0%	6,220	1.4%	6,446	1.4%
Hai Hung	14	2.7%	29	1.9%	126	2.4%	11	0.3%	21,841	4.8%	22,021	4.8%
Sub-total	192	36.8%	239	15.9%	1,395	26.4%	222	6.7%	46,909	10.4%	48,957	10.6%
South Economic Triangle												
Ho Chi Minh City	131	25.1%	242	16.0%	560	10.6%	528	15.9%	21,647	4.8%	23,108	5.0%
Dong Nai Province	26	5.0%	31	2.1%	23	0.4%	267	8.0%	2,844	0.6%	3,191	0.7%
Ba Ria- Vung Tau Prov.	2	0.4%	7	0.5%	19	0.4%	13	0.4%	4,164	0.9%	4,205	0.9%
Sub-total	159	30.5%	280	18.6%	602	11.4%	808	24.3%	28,655	6.3%	30,504	6.6%
Other areas	171	32.7%	989	65.5%	3,290	62.2%	2,292	69.0%	377,302	83.3%	384,044	82.8%
Total	522	100.0%	1,508	100.0%	5,287	100.0%	3,322	100.0%	452,866	100.0%	463,505	100.0%

Source : Prepared from data in the Statistical Yearbook 1994.

Table A.11 Labor Force of Local State Enterprises in the North Economic Triangle

Labour Force of Local State Enterprises(1,000 Prs.)								
	1990	(%)	1991	(%)	1992	(%)	1993	(%)
North Economic Triangle								
Hanoi	156	7.5%	118	6.4%	107	6.2%	100	5.9%
Hai Phong	85	4.1%	63	3.4%	62	3.6%	59	3.5%
Quang Ninh	47	2.3%	36	1.9%	33	1.9%	31	1.8%
Hai Hung	68	3.3%	60	3.2%	54	3.1%	49	2.9%
Su-total	356	17.1%	277	15.0%	256	14.8%	239	14.0%
South Economic Triangle								
Ho Chi Minh City	178	8.6%	175	9.5%	172	9.9%	187	11.0%
Dong Nai Province	57	2.7%	45	2.4%	37	2.1%	67	3.9%
Ba Ria- Vung Tau Prov.	12	0.6%	20	1.1%	19	1.1%	18	1.1%
Sub-total	247	11.9%	240	13.0%	228	13.2%	272	16.0%
Other areas	1,475	71.0%	1,331	72.0%	1,249	72.1%	1,194	70.0%
Total	2,078	100.0%	1,848	100.0%	1,733	100.0%	1,705	100.0%

Source : Prepared from data in the Statistical Yearbook 1994

Table A.12 Foreign Direct Investments by Region

(As of End 1994)

Region/Province	Number of Licenced Project	Share
North Mountainous and Midland	39	3.8%
Red River Delta	241	23.4%
Hanoi	(178)	(17.3%)
Hai Phong	(34)	(3.3%)
Ha Tay	(12)	(1.2%)
Hai Hung	(9)	(0.9%)
Thai Binh	(4)	(0.4%)
Nam Ha	(2)	(0.2%)
Ninh Binh	(2)	(0.2%)
North Central Coast	20	1.9%
South Central Coast	64	6.3%
Central Highland	22	2.1%
North East South	569	55.4%
Ho Chi Minh	(384)	(37.4%)
Song Be	(42)	(4.1%)
Tay Ninh	(6)	(0.6%)
Dong Nai	(102)	(9.9%)
Ba Ria - Vung Tau	(35)	(3.4%)
Mekong River Delta	49	4.8%
Oil Block	24	2.3%
Total:	1,028	100.0%

Source: SCCI

Table A.13 Number of State Manufacturing Enterprises in Hanoi Area

		Central State Enterprises			Local State Enterprises		
		Vietnam	Hanoi Area		Vietnam	Hanoi Area	
		(1)	Surveyed (2)	%	(1)	Surveyed (2)	%
31	Food, beverage	75	18	(24.0)	327	8	(2.4)
32	Textile, apparel	52	18	(34.6)	172	17	(9.9)
33	Wood products	19	9	(47.4)	96	2	(2.1)
34	Paper, printing	35	20	(57.1)	111	4	(3.6)
35	Chemicals	58	17	(29.3)	122	5	(4.1)
36	Non - metallic	15	11	(73.3)	39	6	(15.4)
37	Basic metal	20	-	(0.0)	19	1	(5.3)
38	Fabricated metal	153	58	(37.9)	245	26	(10.6)
39	Others	18	3	(16.7)	92	1	(1.1)
	Not classified	-	-	-	-	-	-
	Total	445	154	(34.6)	1,223	70	(5.7)

(1) Numbers in 1993 (Source : Statistical Yearbook, 1994)

(2) Numbers replied to Questionnaire Survey in 1994,

Figures in () indicates percentage against number of enterprises in Vietnam

Table A.14 Categories and Types of Existing Industries
in the Hanoi Area

		Central State Enterprises	Local State Enterprises	Private Enterprises	Total
31	Food, beverage, tobacco	18	8	1	27
311	Food manuf.	9	4	-	13
312	Other food	4	-	-	4
313	Beverage	4	4	1	9
314	Tobacco	1	-	-	1
32	Textile, apparel and leather	18	17	2	37
321	Textile	6	5	-	11
322	Apparel	8	5	2	15
323	Leather	-	1	-	1
324	Footwear	4	6	-	10
33	Wood and wood products	9	2	4	15
331	Wood and wood products	7	2	4	13
332	Furniture	2	-	-	2
34	Paper and paper products	20	4	0	24
341	Paper and paper products	3	1	-	4
342	Printing and publishing	17	3	-	20
35	Chemicals	17	5	0	22
351	Industrial chemicals	2	1	-	3
352	Other chemical products	13	1	-	14
353	Petroleum refineries	-	-	-	-
354	Misc. products of petroleum	-	-	-	-
355	Rubber products	2	-	-	2
356	Plastic products	-	3	-	3
36	Non-metallic mineral	11	6	0	17
361	Pottery china	4	1	-	5
362	Glass	-	-	-	-
369	Other non-metallic	7	5	-	12
37	Basic metal	0	1	0	1
371	Iron and steel	-	-	-	-
372	Non-ferrous metal	-	1	-	1
38	Fabricated metal products	58	26	3	87
381	Fabricated metal	10	7	-	17
382	Machinery	20	4	-	24
383	Electrical machinery	12	4	2	18
384	Transport equipment	11	8	1	20
385	Other equipment	5	3	-	8
39	Other manufacturing industry	3	1	-	4
Total		154	70	10	234

Source: Questionnaire Survey by JICA Study Team

Table A.15 Sales Amount by Categories and Types of Industry
in the Hanoi Area

(1993, Billion Dong)

	Central State Enterprises	Local State Enterprises	Private Enterprises	Total
31 Food, beverage, tobacco	738.2	154.7	0.0	892.9
311 Food manuf.	171.3	56.5	-	227.8
312 Other food	29.0	-	-	29.0
313 Beverage	225.1	98.2	0.0	323.3
314 Tobacco	312.8	-	-	312.8
32 Textile, apparel and leather	505.5	118.0	10.2	633.7
321 Textile	372.8	53.0	-	425.8
322 Apparel	97.8	18.8	10.2	126.8
323 Leather	-	7.0	-	7.0
324 Footwear	34.9	39.2	-	74.1
33 Wood and wood products	38.7	1.9	10.8	51.4
331 Wood and wood products	35.9	1.9	10.8	48.6
332 Furniture	2.8	-	-	2.8
34 Paper and paper products	101.6	20.2	0.0	121.8
341 Paper and paper products	28.9	-	-	28.9
342 Printing and publishing	72.7	20.2	-	92.9
35 Chemicals	518.5	18.3	0.0	536.8
351 Industrial chemicals	43.7	1.8	-	45.5
352 Other chemical products	372.7	-	-	372.7
353 Petroleum refineries	-	-	-	-
354 Misc. products of petroleum	-	-	-	-
355 Rubber products	102.1	-	-	102.1
356 Plastic products	-	16.5	-	16.5
36 Non-metallic mineral	128.1	50.9	0.0	179.0
361 Pottery china	9.7	-	-	9.7
362 Glass	-	-	-	-
369 Other non-metallic	118.4	50.9	-	169.3
37 Basic metal	0.0	2.4	0.0	2.4
371 Iron and steel	-	-	-	-
372 Non-ferrous metal	-	2.4	-	2.4
38 Fabricated metal products	528.4	315.8	101.0	945.2
381 Fabricated metal	52.4	21.9	-	74.3
382 Machinery	121.5	151.8	-	273.3
383 Electrical machinery	261.3	102.8	98.0	462.1
384 Transport equipment	54.2	35.7	3.0	92.9
385 Other equipment	39.0	3.6	-	42.6
39 Other manufacturing industry	13.7	0.0	0.0	13.7
Total	2,572.7	682.2	122.0	3,376.9

Source: Questionnaire Survey by JICA Study Team

Table A.16 Central State Enterprises
in the Hanoi Area

	Nos. of Enterprises
01 Min. of Light Industry (MLI)	25
02 Min. of Heavy Industry (MHI)	17
03 Min. of Transportations	16
04 Min. of Defence	16
05 Min. of Agriculture and Food Stuff	10
06 Min. Construction	9
07 Min. of Culture	8
08 Min. of Medicine	6
09 Min. of Trade	4
10 Min. of Post and Communication	3
11 Min. of Education and Training	2
12 Min. of Labor	1
13 Min. of Finance	1
14 State Bank of Vietnam	1
15 Other Central Organization	26
(Sub - Total)	145
06 Not Classified	9
Total	154

Source: Questionnaire Survey by JICA Study Team

Table A.17 Founded Year by Types of Industries
in the Hanoi Area

	Central State Enterprises	Local State Enterprises	Private Enterprises	Total
~ 1959	30	10	-	40
1960 ~ 1969	36	21	-	57
1970 ~ 1979	33	22	1	56
1980 ~ 1989	26	8	3	37
1990 ~	22	6	6	34
(Sub total)	147	67	10	224
Not classified	7	3	-	10
Total	154	70	10	234

Source: Questionnaire Survey by JICA Study Team

Table A.18 Factory Area by Categories of Industry
in the Hanoi Area

(1,000m²)

		Factory Area	Nos. of Enterprises	Average Area
31	Food, beverage, tobacco	497.7	25	19.9
311	Food manuf.	294.1	12	24.5
312	Other food	12.7	3	4.2
313	Beverage	180.9	9	20.1
314	Tobacco	10.0	1	10.0
32	Textile, apparel and leather	2,037.9	31	65.7
321	Textile	1,739.2	10	173.9
322	Apparel	133.0	10	13.3
323	Leather	20.0	1	20.0
324	Footwear	145.7	10	14.6
33	Wood and wood products	320.3	14	22.9
331	Wood and wood products	311.8	12	26.0
332	Furniture	8.5	2	4.3
34	Paper and paper products	168.9	24	7.0
341	Paper and paper products	50.0	4	12.5
342	Printing and publishing	118.9	20	5.9
35	Chemicals	440.9	20	22.0
351	Industrial chemicals	92.8	3	30.9
352	Other chemical products	261.6	13	20.1
353	Petroleum refineries	-	-	-
354	Misc. products of petroleum	-	-	-
355	Rubber products	71.3	2	35.7
356	Plastic products	15.2	2	7.6
36	Non-metallic mineral	808.4	20	40.4
361	Pottery china	128.4	5	25.7
362	Glass	-	-	-
369	Other non-metallic	680.0	15	45.3
37	Basic metal	\\(4.2\\)	-1	4.2
371	Iron and steel	-	-	-
372	Non-ferrous metal	4.2	1	4.2
38	Fabricated metal products	1,798.2	76	23.7
381	Fabricated metal	298.6	17	17.6
382	Machinery	594.3	18	33.0
383	Electrical machinery	292.5	14	20.9
384	Transport equipment	543.0	19	28.6
385	Other equipment	69.8	8	8.7
39	Other manufacturing industry	53.9	4	13.5
	TOTAL	6,122.0	213	28.7

Note: 215 out of 234 enterprises replied to questionnaire

Source: Questionnaire Survey by JICA Study Team

Table A.19 Employees by Categories of Industry
in the Hanoi Area

(Prs.)

		Nos. of Employees	Nos. of Enterprises	Average Nos. of Employees
31	Food, beverage, tobacco	9,573	27	355
311	Food manuf.	5,200	13	400
312	Other food	502	4	126
313	Beverage	2,451	9	272
314	Tobacco	1,420	1	1,420
32	Textile, apparel and leather	31,212	37	844
321	Textile	13,291	11	1,208
322	Apparel	10,553	15	704
323	Leather	400	1	400
324	Footwear	6,968	10	697
33	Wood and wood products	3,330	15	222
331	Wood and wood products	3,045	13	234
332	Furniture	285	2	143
34	Paper and paper products	3,585	24	149
341	Paper and paper products	847	4	212
342	Printing and publishing	2,738	20	137
35	Chemicals	7,059	22	321
351	Industrial chemicals	1,200	3	400
352	Other chemical products	3,479	14	249
353	Petroleum refineries	-	-	-
354	Misc. products of petroleum	-	-	-
355	Rubber products	1,930	2	965
356	Plastic products	450	3	150
36	Non-metallic mineral	5,239	17	308
361	Pottery china	550	5	110
362	Glass	-	-	-
369	Other non-metallic	4,689	12	391
37	Basic metal	104	1	104
371	Iron and steel	-	-	-
372	Non-ferrous metal	104	1	104
38	Fabricated metal products	20,829	87	239
381	Fabricated metal	3,489	17	205
382	Machinery	6,800	24	283
383	Electrical machinery	4,967	18	276
384	Transport equipment	4,231	20	212
385	Other equipment	1,342	8	168
39	Other manufacturing industry	1,035	4	259
	TOTAL	81,966	234	350

Source: Questionnaire Survey by JICA Study Team

Table A.20 Employees by Categories and Types of Industry
in the Hanoi Area

		Central State Enterprises	Local State Enterprises	Private Enterprises	Total
31	Food, beverage, tobacco	7,148	2,425	0	9,573
311	Food manuf.	3,805	1,395	-	5,200
312	Other food	502	-	-	502
313	Beverage	1,421	1,030	n.a	2,451
314	Tobacco	1,420	-	-	1,420
32	Textile, apparel and leather	20,369	10,401	442	31,212
321	Textile	11,075	2,216	-	13,291
322	Apparel	7,820	2,291	442	10,553
323	Leather	-	400	-	400
324	Footwear	1,474	5,494	-	6,968
33	Wood and wood products	2,172	282	876	3,330
331	Wood and wood products	1,887	282	876	3,045
332	Furniture	285	-	-	285
34	Paper and paper products	3,000	585	0	3,585
341	Paper and paper products	607	240	-	847
342	Printing and publishing	2,393	345	-	2,738
35	Chemicals	6,215	844	0	7,059
351	Industrial chemicals	1,046	154	-	1,200
352	Other chemical products	3,239	240	-	3,479
353	Petroleum refineries	-	-	-	-
354	Misc. products of petroleum	-	-	-	-
355	Rubber products	1,930	-	-	1,930
356	Plastic products	-	450	-	450
36	Non-metallic mineral	3,010	2,229	0	5,239
361	Pottery china	430	120	-	550
362	Glass	-	-	-	-
369	Other non-metallic	2,580	2,109	-	4,689
37	Basic metal	0	104	0	104
371	Iron and steel	-	-	-	-
372	Non-ferrous metal	-	104	-	104
38	Fabricated metal products	14,704	5,615	510	20,829
381	Fabricated metal	2,555	934	-	3,489
382	Machinery	5,695	1,105	-	6,800
383	Electrical machinery	3,164	1,373	430	4,967
384	Transport equipment	2,317	1,834	80	4,231
385	Other equipment	973	369	-	1,342
39	Other manufacturing industry	885	150	0	1,035
	Total	57,503	22,635	1,828	81,966

Source: Questionnaire Survey by JICA Study Team

Table A.21 Female Employees by Types of Industries
in the Hanoi Area

	Central State Enterprises	Local State Enterprises	Private Enterprises	Total
less than 10%	2	1	1	4
10 ~ 20%	14	6	2	22
20 ~ 30%	27	10	-	37
30 ~ 40%	31	12	1	44
40 ~ 50%	20	8	-	28
50 ~ 60%	19	9	-	28
60 ~ 70%	14	7	3	24
70 ~ 80%	10	10	2	22
80 ~ 90%	10	4	-	14
(Sub total)	147	67	9	223
Not classified	7	3	1	11
Total	154	70	10	234

Source: Questionnaire Survey by JICA Study Team

Table A.22 Employees' Average Age by Types of Industries
in the Hanoi Area

	Central State Enterprises	Local State Enterprises	Private Enterprises	Total
(FEMALE)				
Over 50	-	-	-	-
40 ~ 50	14	8	-	22
30 ~ 40	97	44	1	142
20 ~ 30	30	12	9	51
less than 20	-	-	-	0
(Sub total)	141	64	10	215
Not classified	13	6	0	19
Total	154	70	10	234
(MALE)				
Over 50	-	-	-	-
40 ~ 50	38	14	-	52
30 ~ 40	88	47	5	140
20 ~ 30	16	3	5	24
less than 20	-	-	-	-
(Sub total)	142	64	10	216
Not classified	12	6	0	18
Total	154	70	10	234

Source: Questionnaire Survey by JICA Study Team

Table A.23 Average Wages by Types of Industries
in the Hanoi Area

(Dong / month)	Central State Enterprises	Local State Enterprises	Private Enterprises	Total
(Semi - skilled Worker)				
Over 700,000	6	-	-	6
500,000 - 700,000	8	3	1	12
400,000 - 500,000	20	8	2	30
300,000 - 400,000	42	18	4	64
less than 300,000	56	30	2	88
(Sub total)	132	59	9	200
Not classified	22	11	1	34
Total	154	70	10	234
(Skilled Worker)				
Over 700,000	15	3	2	20
500,000 - 700,000	26	11	4	41
400,000 - 500,000	36	18	1	55
300,000 - 400,000	46	16	3	65
less than 300,000	22	18	-	40
(Sub total)	145	66	10	221
Not classified	9	4	0	13
Total	154	70	10	234
(Engineer)				
Over 700,000	12	3	6	21
500,000 - 700,000	22	7	1	30
400,000 - 500,000	26	13	-	39
300,000 - 400,000	54	26	1	81
less than 300,000	24	16	-	40
(Sub total)	138	65	8	211
Not classified	16	5	2	23
Total	154	70	10	234
(Manager)				
Over 700,000	24	8	5	37
500,000 - 700,000	20	11	1	32
400,000 - 500,000	42	14	-	56
300,000 - 400,000	35	22	2	59
less than 300,000	15	10	-	25
(Sub total)	136	65	8	209
Not classified	18	5	2	25
Total	154	70	10	234

Source: Questionnaire Survey by JICA Study Team

Table A.24 Sales Amount by Categories of Industry
in the Hanoi Area

(Billion Dong)

		1989	1990	1991	1992	1993	
							Average per Enterprise
31	Food, beverage, tobacco	96.9	186.4	422.6	645.4	892.9	33.1
311	Food manuf.	17.8	70.5	126.5	194.5	227.8	17.5
312	Other food	16.6	17.1	21.9	29.0	29.0	7.3
313	Beverage	21.9	27.2	124.2	221.2	323.3	35.9
314	Tobacco	40.6	71.6	150.0	200.7	312.8	312.8
32	Textile, apparel and leather	77.4	253.6	387.8	563.9	633.7	17.1
321	Textile	39.3	200.2	302.3	424.4	425.8	38.7
322	Apparel	27.3	34.1	59.3	87.8	126.8	8.5
323	Leather	5.0	5.0	6.0	6.5	7.0	7.0
324	Footwear	5.8	14.3	20.2	45.2	74.1	7.4
33	Wood and wood products	15.6	19.8	44.1	40.8	51.4	3.4
331	Wood and wood products	14.3	18.3	42.3	38.5	48.6	3.7
332	Furniture	1.3	1.5	1.8	2.3	2.8	1.4
34	Paper and paper products	21.0	27.8	44.3	75.0	121.8	5.1
341	Paper and paper products	9.0	10.2	9.3	18.5	28.9	7.2
342	Printing and publishing	12.0	17.6	35.0	56.5	92.9	4.6
35	Chemicals	76.0	139.5	279.0	387.2	536.8	24.4
351	Industrial chemicals	4.2	9.5	24.9	38.2	45.5	15.2
352	Other chemical products	49.9	97.2	190.1	247.3	372.7	26.6
353	Petroleum refineries	-	-	-	-	-	-
354	Misc. products of petroleum	-	-	-	-	-	-
355	Rubber products	18.1	28.0	57.9	89.5	102.1	51.1
356	Plastic products	3.8	4.8	6.1	12.2	16.5	5.5
36	Non-metallic mineral	12.1	24.8	52.7	84.8	179.0	10.5
361	Pottery china	0.8	0.9	1.3	2.3	9.7	1.9
362	Glass	-	-	-	-	-	-
369	Other non-metallic	11.3	23.9	51.4	82.5	169.3	14.1
37	Basic metal	0.3	0.2	0.9	0.9	2.4	2.4
371	Iron and steel	-	-	-	-	-	-
372	Non-ferrous metal	0.3	0.2	0.9	0.9	2.4	2.4
38	Fabricated metal products	108.5	199.4	365.9	592.8	945.2	10.9
381	Fabricated metal	14.2	17.6	36.6	57.3	74.3	4.4
382	Machinery	34.0	77.2	112.9	156.6	273.3	11.4
383	Electrical machinery	44.3	83.9	180.4	294.3	462.1	25.7
384	Transport equipment	9.7	11.5	18.6	57.9	92.9	4.6
385	Other equipment	6.3	9.2	17.4	26.7	42.6	5.3
39	Other manufacturing industries	5.5	9.5	8.8	8.8	13.7	3.4
Total		413.3	861.0	1,606.1	2,399.6	3,376.9	14.6

Source: Questionnaire Survey by JICA Study Team

Table A.25 Sales Amount per Employee
in the Hanoi Area

* Billion Dong

** Million Dong

		1993 Sales Amount *	Nos. of Employees	Average Sales per Employee **
31	Food, beverage, tobacco	892.9	9,573	93.3
311	Food manuf.	227.8	5,200	43.8
312	Other food	29.0	502	57.8
313	Beverage	323.3	2,451	131.9
314	Tobacco	312.8	1,420	220.3
32	Textile, apparel and leather	633.7	31,212	20.3
321	Textile	425.8	13,291	32.0
322	Apparel	126.8	10,553	12.0
323	Leather	7.0	400	17.5
324	Footwear	74.1	6,968	10.6
33	Wood and wood products	51.4	3,330	15.4
331	Wood and wood products	48.6	3,045	16.0
332	Furniture	2.8	285	9.8
34	Paper and paper products	121.8	3,585	34.0
341	Paper and paper products	28.9	847	34.1
342	Printing and publishing	92.9	2,738	33.9
35	Chemicals	536.8	7,059	76.0
351	Industrial chemicals	45.5	1,200	37.9
352	Other chemical products	372.7	3,479	107.1
353	Petroleum refineries	-	-	-
354	Misc. products of petroleum	-	-	-
355	Rubber products	102.1	1,930	52.9
356	Plastic products	16.5	450	36.7
36	Non-metallic mineral	179.0	5,239	34.2
361	Pottery china	9.7	550	17.6
362	Glass	-	-	-
369	Other non-metallic	169.3	4,689	36.1
37	Basic metal	2.4	104	23.1
371	Iron and steel	-	-	-
372	Non-ferrous metal	2.4	104	23.1
38	Fabricated metal products	945.2	20,829	45.4
381	Fabricated metal	74.3	3,489	21.3
382	Machinery	273.3	6,800	40.2
383	Electrical machinery	462.1	4,967	93.0
384	Transport equipment	92.9	4,231	22.0
385	Other equipment	42.6	1,342	31.7
39	Other manufacturing industry	13.7	1,035	13.2
	TOTAL	3,376.9	81,966	41.2

Source: Questionnaire Survey by JICA Study Team

Table A.26 Breakdown of Production Cost by Categories of Industry
in the Hanoi Area

(%)

	Materials	Labour	Others
31 Food, beverage, tobacco	68	11	21
311 Food manuf.	73	11	16
312 Other food	75	9	16
313 Beverage	56	12	32
314 Tobacco	84	8	8
32 Textile, apparel and leather	63	16	21
321 Textile	69	11	20
322 Apparel	57	20	23
323 Leather	60	10	30
324 Footwear	66	16	18
33 Wood and wood products	67	16	17
331 Wood and wood products	68	17	15
332 Furniture	60	13	27
34 Paper and paper products	59	16	25
341 Paper and paper products	67	15	28
342 Printing and publishing	57	17	26
35 Chemicals	69	12	19
351 Industrial chemicals	65	15	20
352 Other chemical products	71	10	19
353 Petroleum refineries	-	-	-
354 Misc. products of petroleum	-	-	-
355 Rubber products	69	14	17
356 Plastic products	69	13	18
36 Non-metallic mineral	57	16	27
361 Pottery china	59	19	22
362 Glass	-	-	-
369 Other non-metallic	56	15	29
37 Basic metal	73	10	17
371 Iron and steel	-	-	-
372 Non-ferrous metal	73	10	17
38 Fabricated metal products	63	16	21
381 Fabricated metal	65	14	21
382 Machinery	60	16	24
383 Electrical machinery	69	14	17
384 Transport equipment	65	15	20
385 Other equipment	57	21	22
39 Other manufacturing industry	57	14	29

Source: Questionnaire Survey by JICA Study Team

Table A.27 Markets of Products by Categories of Industry
in the Hanoi Area

(%) (1993)

	Domestic Sales	Exports
31 Food, beverage, tobacco	94	6
311 Food manuf.	63	37
312 Other food	57	43
313 Beverage	100	0
314 Tobacco	100	0
32 Textile, apparel and leather	61	39
321 Textile	66	34
322 Apparel	44	56
323 Leather	80	20
324 Footwear	54	44
33 Wood and wood products	30	70
331 Wood and wood products	26	74
332 Furniture	96	4
34 Paper and paper products	92	8
341 Paper and paper products	91	9
342 Printing and publishing	92	8
35 Chemicals	98	2
351 Industrial chemicals	100	0
352 Other chemical products	97	3
353 Petroleum refineries	-	-
354 Misc. products of petroleum	-	-
355 Rubber products	100	0
356 Plastic products	100	0
36 Non-metallic mineral	99	1
361 Pottery china	99	1
362 Glass	-	-
369 Other non-metallic	99	1
37 Basic metal	100	-
371 Iron and steel	-	-
372 Non-ferrous metal	100	-
38 Fabricated metal products	93	7
381 Fabricated metal	97	3
382 Machinery	96	4
383 Electrical machinery	91	9
384 Transport equipment	90	10
385 Other equipment	98	2
39 Other manufacturing industry	63	37
TOTAL	87	13

Source: Questionnaire Survey by JICA Study Team

Table A.28 Intention of Business Expansion
in the Hanoi Area

	Yes	No	Not answ.	Total
31 Food, beverage, tobacco	17	5	5	27
32 Textile, apparel and leather	23	6	8	37
33 Wood and wood products	13	1	1	15
34 Paper and paper products	19	2	3	24
35 Chemicals	14	1	7	22
36 Non-metallic mineral	13	1	3	17
37 Basic metal	-	-	1	1
38 Fabricated metal products	65	8	14	87
39 Other manufacturing industry	3	1	0	4
Total	167	25	42	234
(By Types of Industry)				
Central Gov. Enterprises	108	20	26	154
Local Gov. Enterprises	49	5	16	70
Private Enterprises	10	0	0	10
Total	167	25	42	234

Source: Questionnaire Survey by JICA Study Team