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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Tel: (+43-1) 26026-0 · www.unido.org · unido@unido.org

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Pre-Investment Studies and Development Strategy Formulation for Industrial Estate(s) in the Philippines

(TF/RAS/87/006)

Final Report

December 1989

Engineering Consulting Firms Association

(ECFA), Japan

Unico International Corporation

United Nations Industrial Development Organization

Austria

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

1. EXECUTIVE SUMMARY

1.Executive Summary

Project Background

Japanese industrialists consider the Philippines as one of the most attractive countries for investment and plant relocation from Japan. Nevertheless, insufficient industrial related infrastructure, particularly lack of qualified industrial estates, is one of the crucial bottlenecks hindering foreign investment in the Philippines. In order to promote industrial estate development projects, supporting studies such as industrial mix and identification of potential tenants were formulated.

Identification of Potential Investors

(1)Questionnaire Survey

The questionnaire survey of March 1989 received positive responses from 32 Japanese companies; out of 32, five companies showed keen interest in the proposed project. The pre-investment promotion with distribution of the pamphlets resulted in contacts from about 40 Japanese, 10 Korean, 4 Taiwanese, and 2 Philippine companies. Some ten Japanese companies visited to the proposed site.

Formulation of Industrial Mix

(1)Socio-economic Conditions in the Philippines

The Philippine economy has been recovering in a moderate pace since the second quarter of 1986. The economic growth is shifting from consumption-based to investment-based.

(2)Investment Trend of Japanese Companies

During the first eight months of this year eight investment promotion seminars were held in Japan received more than 7( ) attendants. These seminars encouraged Japanese potential investors to investigate investment climate in the Philippines; more than 20 missions visited to the Philippines. Also, the Embassy of the Philippines has received inquires on investment from about 160 Japanese firms this year.

(3)Overview of Manufacturing Sector

The leading industry in the Philippines is food industry with a large share (36.9% in 1988) of gross value added. During the first half of 1989, transport equipment, base metal, machinery, and non-metallic metal industries recorded high growth rates.

(4)Potential Industries and Proposed Industrial Estates

The desirable industrial mix consists of electricity and electronics parts, industries related to automobile and electric apparatus, machinery, metal processing, and export-oriented garment, gift, toys and housewares.

Formulation of Investment Promotion Strategies

(1)Existing Industrial Estates

This study identified 19 industrial estates in the Philippines. Industrial estates and export processing zones developed and managed by the government-sponsored agencies are lease, while those by private developers are sellout system. Out of some 3,000 ha industrial estates, 832 ha is still vacant; Relevant infrastructure is not provided in the remaining land. The industrial estates under plan covers an area of about 1,200 ha, most of which are initiated to develop in the spring of 1990.

(2)Industrial Land Demand in the Metropolitan Manila Region

The demand for industrial estates is generally good. The export-oriented firms requires good power supply, telecommunication, and transport services.

(3)Proposed Facilities in the Proposed Industrial Estate

The total development area is 154.5 ha and the area of salable industrial plots is 117.0 ha. About 80 percent of industrial plots are in the Export Processing Zone and the rest in the General Industrial Zone. Lot size is classified into four groups. The number of factories is estimated at about 80-90.

The internal roads consist of 16-meter wide main roads and 9-meter wide service roads. The total length is 7,850 meters.

The rain water in the estate is collected in the concrete-made open ditches running along the internal road and discharged into Ylang Ylang River and Nanagakaan Creek.

Water demand at the full operation is estimated at 10,000 cubic meters per day. Groundwater from 6 deep wells inside the site and 7 wells outside the site is supplied to each factory.

Estimated power demand of 60 MVA electricity is supplied from Dasmarinas sub-station. In the site, a sub-station with 115 kV/34.5kV voltage will be constructed.

The sewer water from factories collected and treated by the waste water treatment plant with capacity of 9,000 cubic meters per day in such a way to reduce BOD and suspended solids to the level of the effluent standard. Treated water will be discharged into Nangakaan Creek.

Estimated demand of telephone lines is 400. The telecommunication facilities are composed of communication system between Manila and the estate, an exchange office in the estate, and internal cabling in the estate. The estate will be directly connected to Manila with micro-wave.

As for solid waste disposal, an incineration plant of 5 ton/day capacity will be introduced. The rest of solid waste will be disposed outside of the estate at factories' responsibility.

The administration area located at the entrance of the estate includes an office, parking lots, stuff quarters, a fire fighting station, and a bonded warehouse. At the entrance of the EPZ, a custom office, a bonded warehouse, and parking lots will be constructed.

(4)Operation and Maintenance Plan

The development company is a joint venture company between the Philippines (60%) and Japan (40%). The Philippine partner provides land as equity and the Japanese partner makes cash payment. After completion of construction, a management company will operate and manage the industrial estate.

(5)Marketing Strategies

As a marketing strategy, it is important to complete the construction earlier than the other industrial estates under plan. Industrial plots will be sold by the sell-out method. the ceiling of the market price may be P.700/sq.m with consideration of prices in the other ASEAN countries.

(6)Preliminary Financial Analysis

The estimated IRR before tax is 33.8% based on net in-flow. Yearly after-tax profit to sales revenue is 10.3% at the simple average for seven years. It is judged that the Project will generate certain level of profit. However, judging from the trend of interest rate in the Philippines, increase in equity amount by shareholders is recommended.

From the price point of view, P.600/sq.m seems to be the minimum level to make the Project feasible at present.

2. PROJECT BACKGROUND

2. Project Background

The Philippine economy has been recovering from the unprecedented economic crisis between 1983 and mid-1986. The economy is currently showing a strong economic recovery from 1988. The Philippines is, however, facing several economic problems, i.e, high unemployment and under employment levels by some 12 and 38 percent, respectively, high external debt and foreign service ratio level and low investment level. Export-oriented foreign investment, especially that from Japan and Taiwan, is one solution to alleviate these problems. In view of the fact that both Japan and Taiwan are presently restructuring their industries and relocating a large number of production facilities abroad, mainly to Thailand and Malaysia in the recent years, it should be possible for the Philippines to secure a reasonable share of this investment if proper investment promotion and related actions are immediately taken.

UNIDO with the cooperation of Japanese Government established a special program to study ASEAN supporting industries in 1987. Under the ASEAN supporting industry study, Engineering Consulting Firms Association, Japan (ECFA) and UNIDO experts carried out a study of supporting industries in the Philippines in 1987 (TF/RAS/87/006). Based on the finding of the study, ECFA dispatched its own study team to Manila in October 1988 and produced a report titled "Industrial Sector Development Study: Possible Japanese Assistance" in December 1988.

The basic recommendations of the above report were:

1. improvement of industrial estates in the Metro Manila Area by Export Processing Zone Authority (EPZA) and private sector.
2. establishment of an investment promotion program by Japan International Cooperation Agency (JICA).
3. opening of Japan office at Board of Investment (BOI).
4. overall development strategy study for the Metro Manila Region by JICA.

One of the major objectives of the above recommendations was creation of employment in the Metro Manila Area where over million people are unemployed mainly by bringing foreign export-oriented investment. Sub-title of the program was called "Urban Job Creation Program: 1989-1992". The basic ideas were approved by Philippine Government in January 1989.

ECFA has sent another study mission in January 1989 and produced a report titled "Industrial Estate Development Program: Recommended Policy for Short to Medium Term (1989-1995)".

By May 1989, most ECFA-recommended projects including the private sector industrial estate development were approved and included the Multi Aid Programme.

Based on the Philippine Government's approval, ECFA contributed US$ 100,000 to UNIDO Special Trust Fund (STF). UNIDO also agreed to allocate US$ 100,000 from Industrial Development Fund (IDF) for Pre-Investment Studies and Development Strategy Formulation for Industrial Estate(s) (TF/RAS/87/006).

ECFA has carried out the Study from July to December 1989. During the study period, the following additional actions were taken in the industrial sector:

(1) investment promotion study of Cavite Export Processing Zone by JICA starting from November 1989.
(2) detail design of Cavite Export Processing Zone by OECF starting December 1989.
(3) opening of Japan office at BOI by JICA October 1989.
(4) CALABAR Region integrated development study by JICA starting December 1989.
(5) EPZA review study by IBRD expected from January 1990.
(6) infrastructure development projects in the Metro Manila Area by OECF such as Southern Expressway, telecommunication, electric power plant and Batangas Port development.

Also foreign investment to the Philippines has significantly jumped in 1989 including several large-scale export-oriented manufacturing plants such as Nippon Electric Co., Sanyo Co. and Matsushita Electric Industrial Co.. Basic findings of the industrial estate development in CALABAR region were reported to BOI and interested parties have shown keen interests in investing the project in 1990.

3. IDENTIFICATION OF POTENTIAL INVESTORS

3. Identification of Potential Investors

3.1. Questionnaire Survey

The questionnaire survey was carried out in order to identify potential Japanese investors to the Philippines, particularly to the proposed industrial estate. In March 1989, the questionnaires were sent out to 519 selected companies that have an interest in investing abroad, particularly in the ASEAN countries. Those companies are participants of the ASEAN Investment Mission sponsored by the ASEAN Center, participants of investment promotion seminars for the Philippines sponsored by major Japanese banks, potential foreign investors listed by Japan External Trade Organization, and potential investors listed by the similar questionnaire survey for the Laem Chabang Industrial Estate in Thailand. Emphasis on selecting companies was given to export-oriented manufactures, particularly small- and medium-ones. Distributed questionnaire is attached as Appendix A.

Out of 519 companies, 119 companies (22.9%) responded our questionnaire survey. According to the survey, about 52% of respondents are planning or considering investment abroad, and 26.9% of respondents have ever considered investing in the Philippines. 5 companies (4.2%) expressed keen interest in industrial estates, and 27 companies (22.7%) showed their interest in the project. The break down of industrial sector of these firms are as follows:

Table 3.1 Number of Companies Expressed their Interests in Industrial Estate Development Project by sector

Sector	No. of Companies	
Electronics	10	(31.3%)
Chemical	6	(18.8%)
Metal Processing	4	(12.5%)
Car and Auto Parts	4	(12.5%)
Textile	4	(12.5%)
Industrial Machinery	3	(9.4%)
Others	1	(3.1%)
Total	32	(100.0%)

About one third of companies answered positively belong to the electronics industry (31.3%), followed by the chemical industry (18.8%), metal processing (12.5%), car and auto parts industries (12.5%), and textile industry (12.5%).

Out of 32 companies who showed their interest in the project, 13 companies (40.6%) consider 100% direct investment and 8 companies (25%) consider joint venture investment with local companies. Those 13 companies also express their preference to be in Export Processing Zone.

Out of 32 companies expressed their interest in the project, 21 companies replied their required land for their operation. The average land requirement is 4.3 ha. However, as shown in Table 3.2, potential investors are mix of small and medium size firms and large companies; 7 companies (21.9%) require 1 ha or less and 13 companies (40.7%) require 5 to 7 ha or more than 7 ha.

Table 3.2 Land Requirement and Desirable Price

Required land area

No answer	11	34.4%
0 - 0.5 ha	5	15.6%
0.5 - 1 ha	2	6.3%
1 - 2 ha	1	3.1%
2 - 5 ha	7	21.9%
5 - 7 ha	3	9.4%
7 - ha	3	9.4%

Desirable price of land /m²

No answer	20	62.5%
0 - 500 yen	2	6.3%
501 - 1,000 yen	2	6.3%
1,001 - 1,500 yen	0	0.0%
1,501 - 3,000 yen	2	6.3%
3,001 - 4,000 yen	5	15.6%
4,001 - yen	1	3.1%

Major concerns for Japanese investors about investment in the Philippines are infrastructure, labor supply, and political stability. Power supply is the most concerned condition (83.9%), followed by telecommunication (74.2%), political stability (71.0%), port facilities (67.7%), labor supply (64.5%), trade union problem (64.5%), and industrial water supply (54.8%) as shown in Table 3.3.

Table 3.3 Major Concern for Investment in the Philippines

	out of companies expressed their interest (32)	All out of respondent companies (119)
1. Power Supply	26 (81.3%)	49 (41.2%)
2. Telecommunication	23 (71.9%)	40 (33.6%)
3. Political Stability	20 (62.5%)	45 (37.8%)
4. Labor Supply	20 (62.5%)	35 (29.4%)
5. Port Facility	19 (59.4%)	33 (27.7%)
6. Trade Union Problem	19 (59.4%)	32 (26.9%)
7. Industrial Water	16 (50.0%)	32 (26.9%)
8. Highway System	10 (31.3%)	19 (16.0%)
9. Supporting Industries	9 (28.1%)	15 (12.6%)
10. Living Condition of Staff	9 (28.1%)	17 (14.3%)
11. Airport Facility	8 (25.0%)	16 (13.4%)
12. Security	3 (9.4%)	5 (4.2%)
13. Others	2 (6.3%)	2 (1.7%)

The concerned conditions are also correspond to the response by all the respondents. Therefore, it is critical to provide stable utility supply in the industrial estate. Particularly, power supply (81.3%) is the essential factor to consider investment because many companies which expressed their interest in the project belong to the electronics industry that requires stable power supply. Telecommunication (71.9%) is also a major concern for them because good communication with Manila as well as headquarter in Japan is crucial for production. Many investors are still concerned about political stability of the Philippines. Furthermore, 3 companies expressed their concern about security of the staff (9.4%). Although the unemployment rate of Metropolitan Manila areas is very high, there has been shortage of skilled workers and those who have management capability so that Japanese investors worry about labor supply (62.5%).

3.2. Response to Distributed Pamphlets

The promotion pamphlets for the Project were distributed to about 400 Japanese companies and some 300 non-Japanese companies in Korea, Taiwan, Hong kong, the Philippines, European countries, and USA. About 40 Japanese companies responded to the pamphlets, showing their interest in investment in the Philippines. Out of 40, some ten companies are seriously considering the proposed industrial estate as plant site: Most of these companies are different from those which positively responded to the questionnaire in March. Some companies has already visited to the proposed site. The companies which requested further information are classified by industry as shown in Table 3.4. About one third of companies fall into electronics and parts industry including electric appliance. Next, auto parts makers account at four companies.

Table 3.4 Potential Investors by Industry

Industry	Number
Electronics and parts	12
Machinery	2
Chemical	3
Auto parts	4
Garment and shoes	2
Others	2
Total	25

About ten Korean, 4 Taiwanese, and 2 Philippine companies are also interested in the proposed industrial estate. One of potential Korean investors is an electric appliance maker. Both of potential Philippine companies are textile manufacturers.

4. FORMULATION OF INDUSTRIAL MIX

4. Formulation of Industrial Mix

4.1. Socio-economic Conditions in the Philippines

4.1.1 Population

The total population of the Philippines reached to 60 million during the second quarter of 1989. The annual growth rate was still relatively high at 2.35 percent during the first quarter 1989.

4.1.2. Growth of GDP

The Philippine economy has been recovering in a healthy pace since the second quarter of 1986. An economic movement toward sustaining growth was highly evident in 1988 with 6.4 percent of GDP growth rate in real terms, which was the largest since 1979; GDP at 1972 prices recorded at 101.5 billion pesos as shown in Table 4.1. In per capita term, annual growth rate increased from 2.6 percent in 1987 to 4.2 percent in 1988. The economic growth in 1987 was led mainly by consumption, while that in 1988 was achieved mainly by investment. This was attributed to continued political stability and business optimism.

During the first quarter of 1989, the economy continued to moderately grow at 5.2 percent of annual GDP growth rate which is smaller than 6.4 percent in the comparative period a year ago. This is mainly due to slowdown of production in the mining and quarrying and agricultural sectors.

4.1.3. Economic Structure

Structural change in production sectors has been occurring moderately as shown in Table 4.1. The agricultural sector contributes about 27 percent of GDP, generates more than 60 percent of total export earnings form raw and processed agricultural exports, and employs about half of the country's labor force.

The manufacturing sector increased share of GDP from 23.8 percent in 1986 to 24.9 percent in 1988, posted an annual increment of 8.9 percent from 7.7 percent in 1987.

Table 4.1. Gross National Product by Industrial Origin
(At Constant 1972 Prices in Million Pesos)

Industry	1986	%	1987	%	1988	%	1989 (Jan-Mar)	%
Agriculture, Fishery and Forestry	27110	29.7	26834	28.1	27771	27.4	7349	27.7
Agriculture & Fishery	26456	29.0	26186	27.4	27082	26.7	7229	27.3
Forestry	654	0.7	648	0.7	689	0.7	120	0.5
Industry	28396	31.1	30590	32.0	33205	32.7	8937	33.7
Mining and Quarrying	1574	1.7	1547	1.6	1615	1.6	399	1.5
Manufacturing	21717	23.8	23168	24.3	25251	24.9	6587	24.8
Construction	3382	3.7	3967	4.2	4344	4.3	1447	5.5
Electricity, Gas and Water	1723	1.9	1908	2.0	1995	2.0	504	1.9
Services	35674	39.1	38039	39.8	40558	39.9	10222	38.6
Transport, Communication and Storage	5105	5.6	5251	5.5	5487	5.4	1374	5.2
Trade	14337	15.7	15153	15.9	15832	15.6	3888	14.7
Finance and Housing	4831	5.3	5832	6.1	6200	6.1	1578	6.0
Private Services	6039	6.6	6106	6.4	6437	6.3	1614	6.1
Government Services	5362	5.9	5697	6.0	6602	6.5	1768	6.7
Gross Domestic Product	91180		95463		101534		26508	
Gross National Product	89504		94797		101186		26150	
GDP Growth Rate	1.2		4.7		6.4		5.2	

Source: National Statistical Coordination Board

4.1.4. Export and Import

With comparison of its neighboring ASEAN member countries, the Philippine export/GDP ratio is low with 0.16 (Thailand 0.12, Malaysia 0.50, and Indonesia 0.20).

The Philippines has been successful in diversifying its export profile. The share of non-traditional exports in total exports stood at 75.8 percent in 1988 as shown in Table 4.2. Expansion of export of manufactured goods contributed to increase in the share of non-traditional exports. Top five export products are semi-conductor devices, coconut oil, electronic microcircuits, copper metal, garments. Main market destinations continue to be the United States and Japan which together absorbed 55.6 percent of Philippine export in 1988.

The garment industry is the second largest foreign exchange earner by the share of 18.6 percent. It is expected that the Philippines has never exhausted its Multifiber Agreement quota in the 1980's and that export sales record an average annual growth rate of 10 percent until 1996. This optimistic assumption basically hinges on access to a non-quota market, namely the Japanese market.

The merchandise trade gap widened from US$ 1,017 million a year ago to US$ 1,085 million due to the larger increment of imports relative to exports in 1988. Aggregate exports increased by 23.7 percent to US$ 7,074 million. Notable gains were registered in the electric equipment and parts up by US$ 357 million, garments (US$ 219 million), and copper metal (US$ 133 million).

Imports were buoyed up by strong business activities particularly in the manufacturing sector. Aggregate imports surged by 21.1 percent to US$ 8,159 million in 1988; break-down of import is shown in Table 4.3. The increase rate of imports was slightly smaller than that of exports, the balance of payment decreased to US$ 370 million in 1988. The most absolute gains were observed in capital goods, raw materials and intermediate goods; these reflected renewed optimism regarding the investment potentials of the economy. Among capital goods, arrivals of electrical and non-electrical machinery, and transport equipment expanded considerably.

The continued implementation of the import liberalization program aiming at completing the tariff reform and removing import restrictions, helped to assure local producers that their import requirements would be met and improved further the competitiveness of Philippine exports in the world market as a result of the reduction in the costs of imported inputs. Under the phase I of the program, 1,229 items have been freely imported since May 1988. Additional 673 commodities under the phase II were liberalized in August 1989.

Table 4.2. Exports by Major Commodity Group, 1987-1988
(FOB Value in Million US$)

Commodity Group	1987 Value	%	1988 Value	%
I. Traditional Exports	1367	23.9	1606	22.7
Coconut Products	561	9.8	578	8.2
Sugar and Product	71	1.2	74	1.0
Forest Products	243	4.2	261	3.7
Mineral Products	224	3.9	383	5.4
Fruits and Vegetables	150	2.6	143	2.0
Abaca Fibers	12	0.2	16	0.2
Tobacco Unmanufactured	18	0.3	19	0.3
Petroleum Products	88	1.5	132	1.9
II. Non-Traditional Exports	4197	73.4	5361	75.8
Non-Traditional Manufactures	3642	63.7	4667	66.0
Electronic Eqpt. & Parts	1119	19.6	1476	20.9
Garments	1098	19.2	1317	18.6
Textile Yarns/Fabrics	68	1.2	71	1.0
Footwear	31	0.5	45	0.6
Travel Goods and Handbags	16	0.3	22	0.3
Wood Manufactures	62	1.1	79	1.1
Furnitures & Fixtures	130	2.3	184	2.6
Chemicals	245	4.3	256	3.6
Copper Metal	162	2.8	295	4.2
Non-Metallic Mineral Manufacture	22	0.4	33	0.5
Machinery & Transport Equipment	78	1.4	54	0.8
Processed Food and Beverages	126	2.2	184	2.6
Misc Manufactured Articles	199	3.5	248	3.5
Others	286	5.0	403	5.7
Non-Traditional Unmanufactures	555	9.7	694	9.8
Nickel, Iron Ore	76	1.3	86	1.2
Food	397	6.9	518	7.3
Others	82	1.4	90	1.3
III. Special Transactions	7	0.1	27	0.4
IV. Re-Exports	149	2.6	80	1.1
Total Exports	5720	100.0	7074	100.0

Source: National Statistics Office

Table 4.3 Imports by Major Commodity Group, 1987-1988
(FOB Value in Million US$)

Commodity Group	1987 Value	1987 %	1988 Value	1988 %
I.Capital Goods	1210	18.0	1735	21.3
Non-Electrical Machinery	537	8.0	708	8.7
Electrical Machinery	451	6.7	579	7.1
Transport Equipment	116	1.7	234	2.9
Aircraft, Ships & Boats	33	0.5	123	1.5
Prof., Scntfic. & Cont. Instrmnts.	73	1.1	91	1.1
II.Raw Materials & Intermediate Goods	3426	50.9	4174	51.2
Wheat	82	1.2	136	1.7
Cotton, Fibers, Inedible	290	4.3	413	5.1
Animal & Vegetable Oils & Fats	13	0.2	18	0.2
Chemicals	924	13.7	1039	12.7
Chemical Compounds	332	4.9	367	4.5
Medicinal & Pharmaceutical	104	1.5	113	1.4
Urea	59	0.9	72	0.9
Fertilizer Excl. Urea	30	0.4	35	0.4
Others	399	5.9	452	5.5
Manufactures	957	14.2	1238	15.2
Paper & Paper Products	102	1.5	111	1.4
Textile, Yarn, Fablic, etc.	279	4.1	324	4.0
Iron & Steel	340	5.0	475	5.8
Metal Products	63	0.9	85	1.0
Others	173	2.6	243	3.0
Embroideries	334	5.0	377	4.6
Mat./ Acc. for Mftr. of Elect. Eqpt	767	11.4	910	11.2
Iron Ore not Agglomerated	59	0.9	43	0.5
LLL.Mineral Fuels and Lubricants	1249	18.5	1096	13.4
Coal, Coke and Briquettes	20	0.3	45	0.6
Petroleum Crude	1062	15.8	919	11.3
Other Mineral Fuels & Lubricants	167	2.5	132	1.6
IV. Consumer Goods	547	8.1	740	9.1
Food & Live Animals for Food	368	5.5	548	6.7
Beverages & Tabaco	107	1.6	94	1.2
Miscellaneous Instruments	72	1.1	98	1.2
V.Special Transactions	305	4.5	414	5.1
Total Imports	6737	100.0	8159	100.0

Source: National Statistics Office

4.1.5. Balance of Payment

Signs of the restoration of economic growth can be seen also in improvement of US$ 516 million surplus of overall balance of payments in 1988, which was almost twice the surplus registered in 1987.

On the other hand, balance of the long-term capital became minus US$ 300 million due to decrease in net inflow since 1986. This outflow of the long-term capital is one of the economic issues in the Philippines.

As of end-March 1989, the total number of applications received under the debt-to-equity conversion program reached 420 with an aggregate value of US$ 1,898 million. 368 transactions valued at US$ 1,302 million were approved for conversion. The debt-to-equity scheme was supplemented by debt-to-asset (US$ 109 million) and debt-for-debt (US$ 380 million) arrangements as well as other new schemes which reduced the debt stock and debt service payments(US$ 433 million). Since 1988 June, the program has been practically suspended. Schedule of program restart is under study with careful watch of increase in the inflation rate.

4.1.6. Exchange Rate

The peso was slightly depreciated by 2.9 percent during the year of 1988. The official exchange value of the peso vis-a-vis the US dollar, based on the Bankers Association of the Philippines (BAP) reference rate at the end of March in 1989, was recorded at 21.33 pesos. Although the value of peso depreciated by 3.9 percent from the end of 1986, during the first quarter of 1989, the month-to-month movement of the peso was very moderate.

4.1.7. Interest Rate

Nominal interest rates were generally higher in 1988, reflecting the combined effects of the acceleration on the inflation rate, higher foreign interest rates and the increased domestic financing requirements of both the public and private sectors. The average bank lending rates across all maturities similarly increased by 2.7 percent to 16.0 percent. The average interest rate on Treasury bills for all maturities significantly rose to 15.5 percent in 1988 from 12.9 percent in 1987.

4.1.8. Inflation

The whole country's inflation rate as of July 1989 reached 10.3 percent which exceeded the single-digit (8 percent) inflation rate imposed by the International Monetary Fund in the memorandum of economic policy. Inflationary process has again

been fuelled by continuous increase in food, beverages, tobacco, and housing and repairs indices. In many provinces, increase in prices of construction materials such as plywood, GI sheets, gravel and sand, lumber, cement and plumbing materials are observed. Enforcement of new minimum wage level would raise inflation rate additionally during the rest of this year.

4.1.9. Public Finance

The National Government fiscal operations for the whole year of 1988 resulted in a budgetary deficit of 20.3 billion pesos, 21.4 percent higher than the deficit in 1987. Total revenues and expenditures during the last year were 16.1 and 13.3 billion pesos, respectively. The deficit-to-GNP ratio was 2.5 percent.

4.1.10. Employment and Wage

The total labor force was 23.5 million in March 1989, exceeding by 2.6 percent the comparable level of 22.9 million a year ago. The employed increased to 21.6 million, resulting in a higher employment rate of 91.6 percent and a lower unemployment rate of 8.4 percent, the lowest in recent years. Government infrastructure and private building construction, as well as sustained growth in manufacturing sector, continued to offer job opportunity.

The number of strikes declared increases to 51 during the first quarter of 1989, however, the corresponding number of workers involved decreased by 16.7 percent than that during the same period the previous year. The implementation of the new Labor Code (R.A. No.6715) is expected to foster industrial peace by speeding up the settling of labor disputes.

25-pesos increase in the minimum wage level became effective July 1st. According to this new regulation (R.A. No.6727), the minimum wage for non-agricultural work all over the country became 89 pesos per day. According to Rules Implementing R.A.No.6727, new business enterprises that may be established from July 1, 1989 to June 30, 1993, whose operation or investments needs initial assistance may be exempted for 2 years from the start of operation. National Wage Council is now finalizing guidelines to permit exemption of increase in 25 pesos of the minimum wage for two years. Change in the minimum wage next time would be set region by region based on living cost.

According to the survey conducted by the Tarde Union Congress of the Philippines in August 1989, a family of six in Metro Manila must spend 129.94 pesos a day.

4.1.11. Future Projection

The Philippine Government set 6.5 percent of annual GNP growth rate in real term from this year to 1992 in "Memorandum on Economic Policy" for the negotiation with the IMF in February 1989 as shown in Table 4.8. The Memorandum aims the economic development by external capital and reduction of external debts by economic development: the ratio of debt over GNP is estimated to decrease from 72.2 percent in 1988 to 52.1 percent in 1992.

In July 1988, Philippine Development Plan (1988-1992) was issued as a revision of Medium-term Philippine Development Plan (1987-1992) with reduction of target growth rate as shown in Table 4.4. Manufacturing sector is expected to grow at 7.8 percent annually. To achieve this target, expansion of industrial infrastructure should be proceeded immediately.

Table 4.4 Philippine Development Plan 1988-1992

	actual	target original	target revised
	1987	1987-92	1988-92
GNP growth rate	5.7	6.8	6.5
per capita GNP growth rate	3.2	4.4	4.1
growth rate by industry			
agriculture	0.4	5.2	3.5
manufacturing	8.0	8.7	9.1
mining	-2.4	4.4	3.2
manufacturing	7.1	7.7	7.8
construction	17.2	14.7	17.4
electricity, gas, water	10.7	8.8	8.8
services	6.4	6.9	6.4
inflation rate	3.8	8.1	7.2
investment rate	14.6	24.2	20.9
saving rate	14.6	21.2	18.3

Source: Highlight of the Updated Philippine Development Plan 1988-1992, NEDA

4.2 Investment Trend and Environment in the Philippines

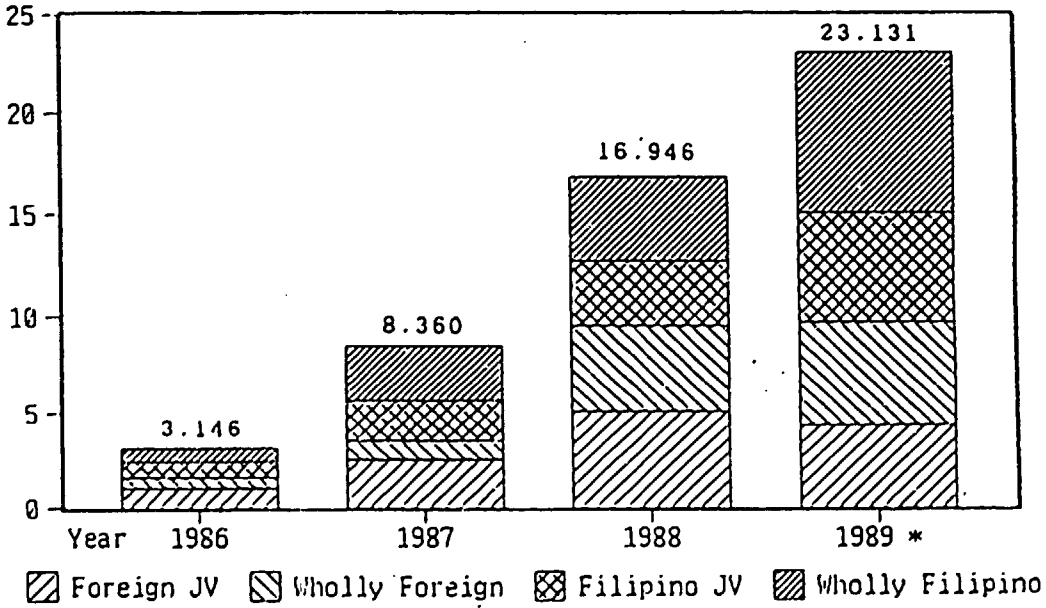
4.2.1 Overview

According to an announcement by the Board of Investment (BOI) of the Philippines, the domestic investment in the past two years doubled respectively: 8,360,160,000 pesos in 1987 and 16,944,580,000 pesos in 1988 on the basis of registered equity. This trend has continued also in the first half of this year (January to June, 1989), showing a 187% increase over the same period of last year. In value, the result in the first six months this year has already surpassed that of full last year. So long as this progress indicates, if may be mentioned that the domestic investment has completely emerged from the stagnation that had lasted from 1984 to 1986.

Figure 4.1. BOI Registered Equity Investments 1986 - 1989

Billion Peso

	1986	1987	1988	1989 *
Total Foreign	1.594	3.428	9.524	9.764
Foreign JV	1.020	2.446	5.105	4.370
Wholly Foreign	0.574	0.982	4.419	5.394
Total Filipino	1.552	4.932	7.422	13.367
Filipino JV	0.826	2.100	3.260	5.448
Wholly Filipino	0.726	2.832	4.162	7.919
Grand Total	3.146	8.360	16.946	23.131



(more than 60% of Foreign equity)

(more than 60% of Filipino equity)

* 1st half 1989 only

Source: BOI

4.2.2 Charactristic of New Investment

The recent domestic investment in the Philippines can be characterized as below.

1) Recovery of foreign investment in and after 1987

With the advent of the year 1987 and the business improved and the confidence in the Aquino Government enhanced, showing the signs of recovery of foreign investment in the Philippines. In 1987 NIEs (Newly Industrializing Economics) Played a leading role in the foreign investment in commercial and service sector; and in 1988 foreign investment enlarged to large-scale manufacturing projects. The investment from the U.S., mainly from the multinational enterprises, showed the largest amount of 3,216,200,000 pesos on the basis of registered equity, followed by Taiwan, Japan, and Hong Kong in that order. The investment from these four countries accounts for 84% of the foreign investment. In the case of the U.S.A. and Taiwan, they invested in such large projects as petrochemistry, crude rubber, semiconductor manufacturing, which may have resulted in raising the total amount of investment. In the meantime, the investment from Japan comes mainly from existing enterprises such as Matsushita Electric Industrial Co., Ltd., Yazaki Corporation, Ajinomoto Co., Inc., Kao Soap Co., Ltd., etc. The investment from Japan also includes new large investments by Asahi Glass Co., Ltd., Uniden Corporation, etc.

Table 4.5 Top 20 Foreign Countries in Investment in the Philippnes

('000 Peso)

	1988		1989	
Countries	Total Investment Cost	%	Total Investment Cost	%
U.S.A.	3,216,172	33.8	739,975	21.6
Taiwan	2,306,401	24.2	186,022	5.4
Japan	1,995,902	21.0	591,345	17.3
Hong Kong	561,096	5.9	569,633	16.6
China	350,381	3.7	169,425	4.9
England	334,786	3.6	210,374	6.1
U.S.S.R.	169,574	1.8	44,197	1.3
Bermuda	125,375	1.3	352,000	10.3
West Germany	66,441	0.7	14,443	0.4
Sweden	65,566	0.7	11,871	0.3
Singapore	50,068	0.5	18,378	0.5
India	47,314	0.5	64,918	1.9
Switzerland	42,894	0.5	19,488	0.6
Liberia	33,995	0.4	3,725	0.1
Korea	30,761	0.3	14,920	0.4
Holland	26,293	0.3	164,856	4.8
Canada	20,726	0.2	60,460	1.8
Bahamas	9,875	0.1	0	
France	9,718	0.1	46,496	1.4
Panama	8,879	0.1	8,009	0.2
Others	48,201	0.5	140,519	4.1
Total	9,523,416	100.0	3,431,054	100.0

(Source: Board of Investments)

2) Rapid increase of investment by Philippine capital

As was mentioned earlier, the domestic investment in the first half of this year made a good showing, of which, what is remarkable is the capital investment by Filipinos, the BOI statistics indicate that the investment by Philippine majority has gained a 35% increase, comparing with the corresponding period of the previous year; and also in value, the investment occupies 57% of the total. BOI says that the investment includes the Philippine capital that once fled overseas. During the present survey it was impossible to grasp the amount of the capital in flux from abroad, but it is thought certain that the funds from abroad have been invested in the form of Philippine capital, centering around construction projects and agricultural, marine products processing. The investment of Philippine capital involving the funds coming back home is playing a leading role in the domestic investment of this year.

3) Increase in the investment by export-oriented enterprises

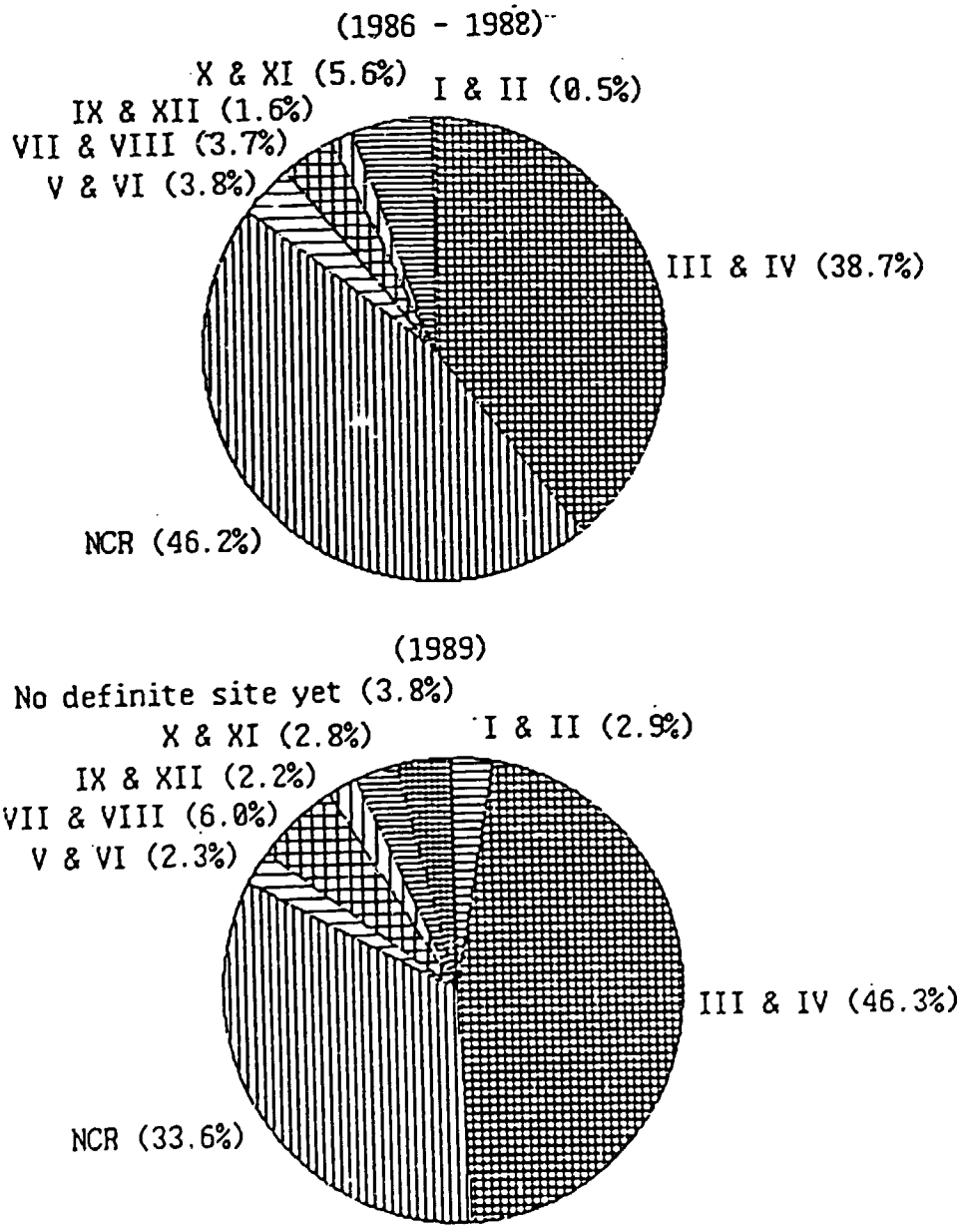
In case the investment is broken down, some 70% are the investment in the manufacturing sector, of which most of the new investments in the fields of electricity, electronics, machinery and clothing are of export-oriented investment. The investment is being made chiefly from Japan, Taiwan, Hong Kong, and South Korea. This trend of investment is expected to be boosted up further in view of the international situation with which NIEs are facing of present and of the assistance being given by the Government of the Philippines in the earning of foreign currency.

4) Trend of investment regionalization

The Government of the Philippines is encouraging the regionalization of industry, and the investment incentive

being given by the government is distinguished between the investment in the Metro Manila Area and other districts. Figure 4.2 is a comparison between the area where investment was made from 1986 to 1988 and the investment made in the first half of 1989 (January to June). Although the investment in the first six months of 1989 includes the sites where investment has not yet been decided on, the investment in the Metro Manila Region (National Capital Region: NCR) has decreased as a whole, while the investment in Region III and IV outside the NCR, namely Central Luzon and Southern Tagalog, has increased.

Figure 4.2 Total Project Cost by Region



4.2.3 Investment Environment

For several years the investment in the ASEAN nations has been very brisk. It can be said that what is playing a key role in it is the foreign capital coming from Japan and NIEs that are seeking new places of productions, rather than the investment of domestic capital. On the other hand, Thailand, Malaysia, Indonesia, and the Philippines, the principal countries receiving foreign investment, are taking positive measures to get foreign capital and are accelerating the investment in their countries.

Table 4.6 summarized the characteristic of foreign capital intake in four main ASEAN nations. As regards the incentive each country gives, they are similar in the content, and there is no great difference between the wages they pay. With reference to the level of social infrastructure such as electricity, communications and road, there clearly exists a gap between Thailand and Malaysia on one side and the Philippines and Indonesia on the other side, although nothing is mentioned about it in the table. This difference may be attributed to the unlikeness of direct foreign investment in each country.

The social unrest and labor dispute, which were taken up when investment in the Philippines is considered, have diminished undoubtedly. In connection with investment, the geographical location of the Philippines and English is spoken there are cited as being advantageous by foreign investors. With the improvement of the social infrastructure, the Philippines may become more attractive as a country for investment in the Asia-Pasific area.

The field survey conducted this time shows the following points which the Philippines must take measures immediately in connection with investment environment are as below. They are most likely what foreign investors are most concerned about.

Table 4.6 Investment Climate in Major ASEAN Countries

PHILIPPINES	MALAYSIA	THAILAND	INDONESIA
*60:40 Ownership in non-promoted area *100% Ownership (in pioneer enterprises). *Income tax holiday for 4 to 6 years. *Tax & duty free importation of capital equipment, breeding stocks & genetic materials. *Additional tax deduciton for 50% laabor expenses in fist 5 years. *Tax credit on dometic capital equipment. *Exemption from contractor's tax, whether national or local.	*30:70 Ownership (for new investments). *100% Ownership (export firms). *Investment tax allowance. *Export allowance. *Double tax deduction for export promotion.. *Industrial building allowance for hotels. *Pioneer status tax rebates. *Income tax holiday up to 10 years for those putting in an additional $25M.	*51-49% Ownership (for manufacturing for domestic use). *100% Ownership (for export firms). *50% Exemption on import duties on capital equipment. *90% Exemption on imported basic materials. *Income tax holiday for 3 to 8 years. *Exemption from withholding tax on goodwill, royalties or fees remitted abroad. *50% Reduction on import tax for 5 years after termination of normal tax holiday. *Allowance to double the deduction for electricity, water, transportation cost. *Allowance to deduct 25% of investment costs in infra structure.	*20:80 Ownership (joint veture). *95% Ownership (for export firms). *Recently broadened other fields for investors. *Foreign banks allowed to enter export trading. *allows foreign firms to enter export trading. *Procedures for same treatment for local firms was simplified. *Exemption on import duties on imported raw materials.
*English speaking country *Very strategic location within the Asia Pacific region.	*Free market economy with no foreign exchange controls.	*Buddhism country *Midway between East Asia and Europe, and enterence to Indochina	*Abundant mineral resources. *Huge domestic market *Cheap labor supply
Minimum Labor Wage all over the country Peso 89 = Yen 570	Minimum Labor Wage in the Johore area. M.$ 15 = Yen 720	Minimum Labor Wage in the Metropolitan area. Baht 78 = Yen 473	Minimum Labor Wage in the Jakarta. Rp.2,000 = Yen 153

a) Insurgency, peace and order (security)
b) Government red tape, bureaucracy, inconsistent rules
c) Poor infrastructure, especially a communication system
d) The equity limitation for foreign investors
e) Ownership of land

4.2.4 Future Trends of Investment

In predicting the future trends of investment, the survey mission referred greatly to the opinions of the Philippine BOI. As the investment target from 1986 to 1991, BOI considers 300,000 million pesos (US$14,097 million) on the basis of registered project cost (See Table 4.7). However, the amount accumulated from 1986 to 1988 was merely 44,000 million pesos, corresponding only to 14% of the target. Accordingly, BOI is expecting much of the result in the three years from 1989. The value of target shown in Figure 4.3 for the three years from 1989 is to double that of the previous year, and the value of target in 1991, the last year of the plan, is put at 133,000 million pesos. This value of target is very high for the Philippines, but it is smaller than the total investment applied in Thailand in 1987. Thailand has been enjoying the investment boom for several years, although Thailand is one of the ASEAN nations as the Philippines. Even the accumulation in the first six months of 1989 alone has already attained the annual target. If the investment climate should further be ameliorated in the Philippines, the figure cited above may be achieved. For this purpose, BOI and the Department of Trade and Industry are making efforts to improve the incentives and the system.

Figure 4.3 BOI Registered Investments Target
(in P Billion Project Cost)

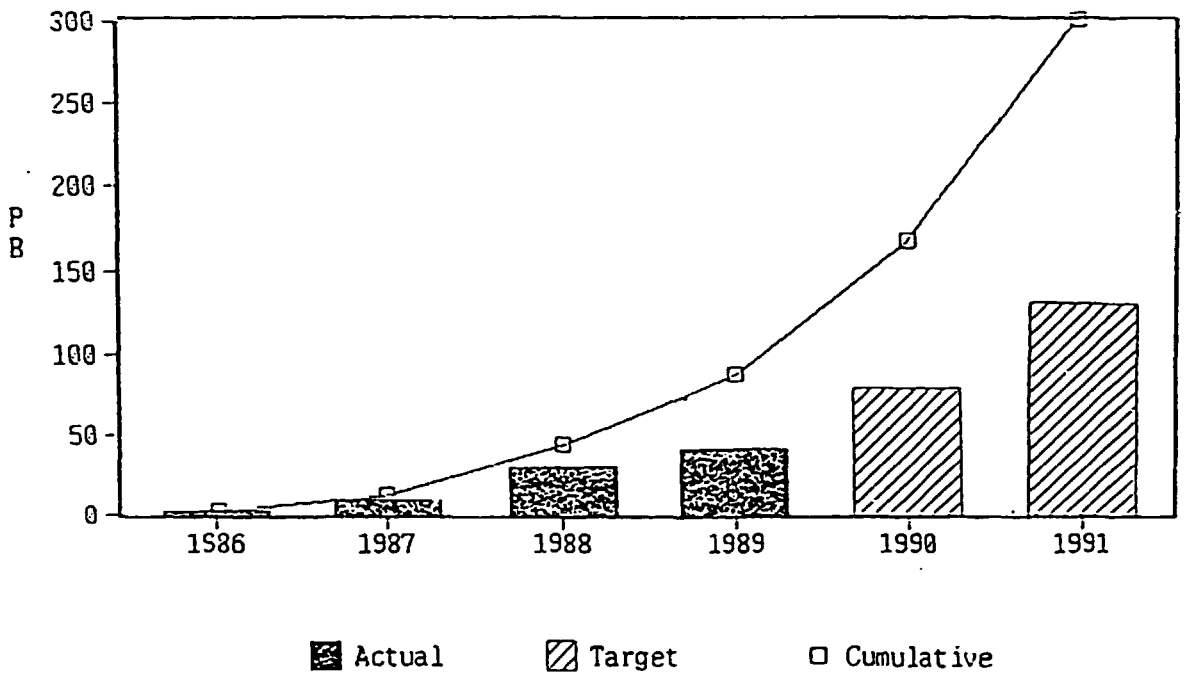


Table 4.7 BOI Registered Investments Target

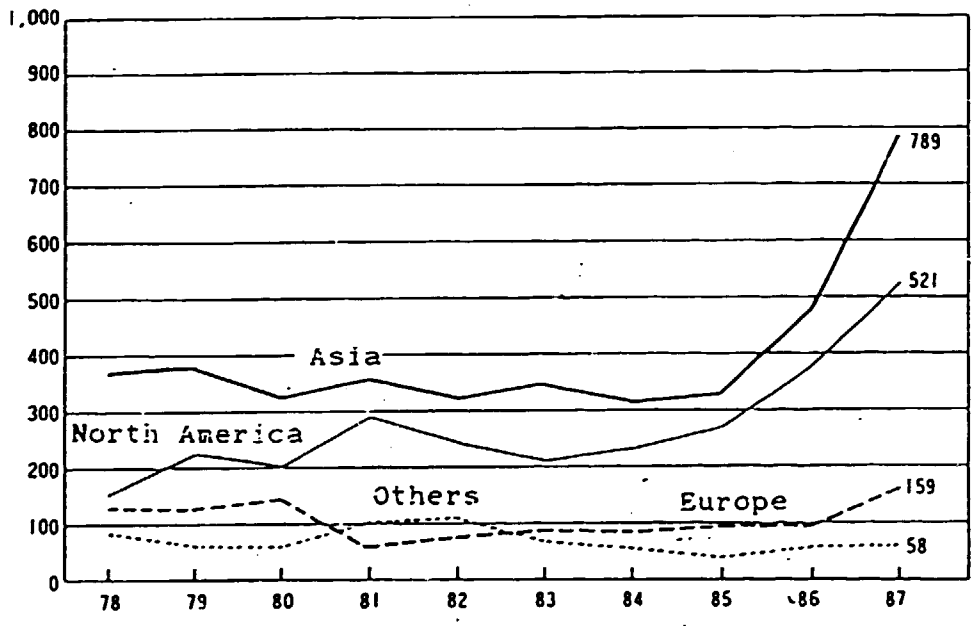
	1986	1987	1988	1989	1990	1991
Cumulative	3.2	1?	44	87	167	300
Target	0	0	0	43	80	133
Actual	3.18	9.84	30.97	*44.58	0	0
No.of Projects	501	1432	1337	*1178		

* 1st half year of 1989

4.3. Investment Trend of Japanese Companies

Japanese investment of manufacturing sector accelerates since the rapid yen appreciation in September 1985 as depicted in Figure 4.4. In terms of number of investments, Asia shared more than half in 1987. This shows relocation of plants from Japan to Asian countries. By industry, electronics recorded the largest increase rate (145.3 percent) and became to hold the largest share (19.8 percent) in 1987.

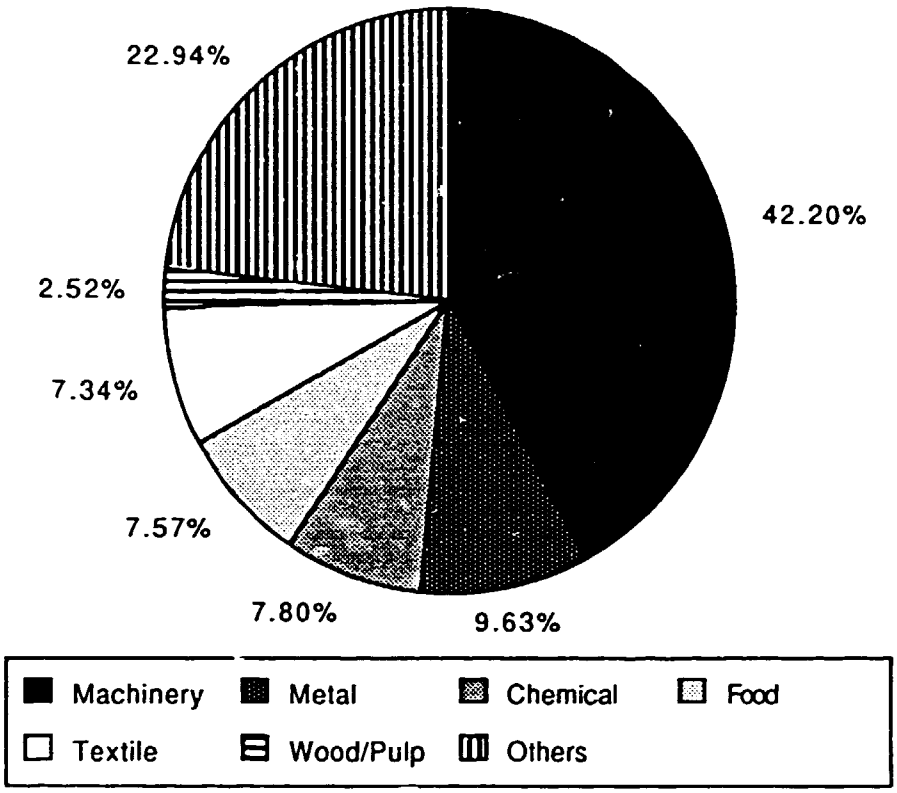
Fig. 4.4 Investment Trend of Japanese Manufactures by Region



Source: Japanese Ministry of Finance

Investment by small-and medium-firms boomed around 1970. The two oil crises in 1970 discouraged their investment. After the rapid yen appreciation, however, their investment has been again increasing. The largest target area is Asia by 44.6 percent in terms of number in 1987. By industry, manufacturing sector holds the largest share by 44.1 percent in 1987. Within manufacturing sector, some 40 percent belong to machinery industry as illustrated in Figure 4.5. Regarding target area, investment in manufacturing concentrates in ASEAN countries.

Figure 4.5. Number of Investment by Japanese Small-and Medium-Scale Firms (1987)



Eight investment promotion seminars were held not only in Tokyo and Osaka but also in several local cities in 1989. Organizers were banks and local chambers of commerce. At seminars, recent socio-economic conditions of the Philippines, investment incentives were explained and some examples of Japanese investment to the Philippines were introduced. Total attendants accounted at some 760 as shown in Table 4.8.

These seminars were publicized by local newspapers; some companies which did not attend a seminar contacted the Embassy of the Philippines after reading the newspaper article. Besides seminars, the Embassy of the Philippines made briefing investment climate to several Japanese major banks.

Some seminars were so successful that investment promotion missions composed of seminar attendants were dispatched to the Philippines. Including these, more than twenty missions were dispatched to the Philippines to investigate investment climate during the first seven months in 1989. The organizers of these missions are not only major trading companies and banks but also local banks, and chambers of commerce and industries.

Table 4.8 Number of Attendants of Investment Promotion Seminars (January-July,1989)

Place	no. of Attendants	Month
Yokohama	66	March
Shizuoka	33	March
Sendai	49	March
Osaka	92	March
Hiroshima	31	March
Nagoya	62	
Tokyo	about 380	June
Kagoshima	32	
total	745	

Source: Embassy of the Philippines

Due to improvement of investment climate and series of the seminars, the Embassy of the Philippines are receiving 30-60 inquiries a month in 1989. The Embassy has been contacted by some 160 Japanese manufacturing companies between January and August this year. Some of these companies contacted the Embassy more than once in order to receive further information for decision making. The Embassy received the most contacts from electronics and parts industry, followed by machinery, chemical, and iron & metal industries as follows:

Table 4.9 Number of Inquiries by Industry

Industry	No.
Electronics and parts	21
Machinery	12
Chemical	12
Iron and Metal	12
Car and auto parts	9
Precision machine	8
Textile and garments	7
Food	3
Others	13
Unclassified	67
Total	164

Source: The Embassy of the Philippines

The ASEAN Center is also receiving inquiries mainly from medium-and small-scale companies whose business covers manufacturing and services. Major questions to the Embassy and the Center are investment climate, incentives, labor and wage code, and industrial land.

4.4. Overview of Manufacturing Sector

4.4.1. Development of Manufacturing Sector

The manufacturing sector grew faster than the overall economy during the 1960s and 1970s. In the first half of the 1980s, however, the growth rate turned into negative. Since 1986, an industrial recovery started under the changing industrial policy and improved investment climate.

Almost all the industries suffered the economic recession during the first half of the 1980s. Sugar, textiles, wood and wood products, pulp and paper, cement, metal products including automobiles reported large idle capacities. A large decline of -14.5 percent was recorded by transport equipment, followed by wood and cork products (-7.7 percent), non-metallic mineral products (-6.3 percent), machinery excluding electrical (-6.2 percent), chemical and chemical products (-5.8 percent) during the period between 1981 and 1986. On the other hand, the relatively labor-intensive light industries oriented towards the world markets boosted their sales by almost 50 percent during the recession period.

During the first half of 1989, the manufacturing sector set the pace with a growth rate of 6.8 percent which is slightly smaller than 7.2 percent during the same period of the previous year. By subsector, a growth rate is 49.4 percent for transport equipment, 24.1 percent for base metal, 19.9 percent for machinery and 18.3 percent for non-metallic metal products. On the other hand, food industry grew only by 2.8 percent.

4.4.2. Structure of Manufacturing Sector

The leading industry in the Philippines is food industry with an absolute increase in share of gross value added from 19,9 percent in 1985 to 36.9 percent in 1988 as shown in Table 4.10. Footwear wearing apparel industry also jumped its share from 3.4 percent in 1985 to 7.8 percent in 1988. On the other hand, petroleum & coal products, chemical & chemical products, beverage, and tobacco industries significantly lost their shares.

Regarding the number of large establishments, food industry holds the largest by 23.9 percent, followed by footwear wearing apparel industry as shown in Table 4.11.

The degree of vulnerability of industries to fluctuations in growth rates is related to the type of market orientation. Export-oriented industries such as food manufactures, garments, basic metals, and electrical machinery, performed much better than domestic-market-oriented industries in the 1980s. Footwear, garments and electrical machinery have emerged as rapidly growing export-oriented industries; over 60 percent of manufactured exports are accounted for by electronics and garments.

There is a clear-cut concentration of manufacturing establishments in Metro Manila; in 1986, 54 percent of all the large establishments, 55 percent of employment and 42 percent of value added agglomerated in Metro Manila. Next to Metro Manila, Region IV takes an important role of manufacturing activities, sharing 27 percent of gross value added in 1988.

4.4.3. Relevant Policies

During the 1970s, the large increase in capital-intensive projects was promoted with subsidized capital and high protection under the government policies. In the 1980s, the tide was turned by a major thrust of the new policy reforms as follows:

1. from inward-looking to export-oriented industrialization;
2. from large-scale projects to small- and medium-scale industries;
3. from government-controlled to private sector initiatives; and
4. from urban-biased to regionally balanced industrial development.

Under the privatization program, which is scheduled for completion in 1991, 103 government-owned and controlled corporations are offered for immediate sale.

Technical assistance in support of fostering the industrialization process in the Philippines can be focussed on greater market access for exports and increased flow of investment. International cooperation is sought in strengthening existing industrial capacities directly or by means of institutional support in technology adaptation, standardization, quality control, research and development.

4.4.4. Major Issues in Manufacturing Sector

Local industries are facing several constraints and issues. The first one is limited local demand. During the recent recession, the fall in consumption has particularly affected subsectors such as consumer durables, textiles and furniture. For future projection, there are two offsetting factors to be considered. On the one hand, medium-term growth must be led by investment expenditures, with domestic consumption lagging in order to sustain an equilibrium in the balance of payments. On the other hand, because of the length of the recession the average age of consumer durables has probably increased and thus, replacement orders should be forthcoming. The latter factor can be clearly seen in automobile industry.

The second constraint is found in financial weakness. Financial distress during the recess was broadly observed across all the subsectors. The financial problems are rooted in low revenues, high real and nominal interest rates, and peso devaluation.

The third issue is slow pace of technical change. Percentage of the expenditures on research and development among GNP is fairly low by 0.2 percent in 1982, which is lower than that in Indonesia. One consequence of low inputs of technical effort is that the average level of technological development is low and that the variance among firms within a subsector is high. This problem is derived not from lack of access to technology, but the limited assimilation of technology. There are two components to this. First, technology already in place is not well used. The second is in the failure of firms to select the most appropriate technology at the time of investing in new equipment.

Mainly because of the slow change in technology, production cost in some subsectors is fairly high. Some large companies whose production cost is high manage to survive because they hold majority of the market and because fiscal incentives are biased towards large-scale firms.

Table 4.10 Gross Value Added in Manufacturing by Industry Group

(million pesos)

Industry Group	1985		1986		1987		1988		1989 Jan.-Mar	
	value added	%	value added	%	value added	%	value added	%	value added	%
Food	15,702	19.9	23,412	24.0	65,416	37.7	76,560	36.9	20,976	36.9
Beverage	8,445	10.7	8,800	9.0	6,081	3.5	7,250	3.5	2,472	4.3
Tabacco	4,866	6.2	6,767	6.9	4,871	2.8	5,930	2.9	1,556	2.7
Textile	3,209	4.1	3,730	3.8	11,871	6.8	13,148	6.3	3,206	5.6
Footwear wearing apparel	2,673	3.4	3,467	3.5	13,063	7.5	16,262	7.8	3,522	6.2
Wood and cork products	2,105	2.7	2,155	2.2	3,549	2.0	4,397	2.1	1,036	1.8
Furniture and fixtures	539	0.7	630	0.6	821	0.5	1,014	0.5	295	0.5
Paper and paper products	2,112	2.7	3,447	3.5	2,351	1.4	2,983	1.4	674	1.2
Publishing and printing	1,042	1.3	1,170	1.2	2,500	1.4	3,298	1.6	938	1.6
Leather and leather prod.	66	0.1	61	0.1	390	0.2	456	0.2	132	0.2
Rubber products	937	1.2	1,342	1.4	2,161	1.2	2,582	1.2	609	1.1
Chemical & chemical prod.	8,455	10.7	11,923	12.2	11,796	6.8	14,663	7.1	3,666	6.4
Prod. of petroleum & coal	14,619	18.5	15,494	15.9	16,605	9.6	18,637	9.0	6,019	10.6
Non-metallic mineral prod.	2,349	3.0	2,394	2.4	3,169	1.8	4,238	2.0	1,339	2.4
Basic metal	3,947	5.0	3,763	3.8	7,608	4.4	10,030	4.8	2,683	4.7
Metal	1,096	1.4	1,218	1.2	4,105	2.4	5,056	2.4	1,554	2.7
Machinery except electrical	708	0.9	765	0.8	2,792	1.6	3,359	1.6	1,139	2.0
Electrical machinery	3,698	4.7	4,584	4.7	8,181	4.7	10,712	5.2	2,789	4.9
Transport equipment	845	1.1	948	1.0	991	0.6	1,239	0.6	454	0.8
Miscellaneous	1,606	2.0	1,678	1.7	5,218	3.0	5,633	2.7	1,819	3.2
Total	79,019	100.0	97,748	100.0	173,539	100.0	207,447	100.0	56,878	100.0

Source: "Annual Survey of Establishments 1985, 1986," National Statistics Office and "National Income Accounts of the Philippines," National Statistical Coordination Board, May 1989

Table 4.11 Number of Large Manufacturing Establishments by Industrial Group

Industry Group	1985		1986	
	No.	%	No.	%
Food	1,331	24.8	1,263	23.9
Beverage	88	1.6	88	1.7
Tabacco	26	0.5	25	0.5
Textile	312	5.8	305	5.8
Footwear wearing apparel	545	10.2	550	10.4
Wood and cork products	284	5.3	270	5.1
Furnityre and fixtures	276	5.1	253	4.8
Paper and paper products	99	1.8	101	1.9
Publishing and printing	354	6.6	380	7.2
Leather and leather prod.	50	0.9	41	0.8
Rubber products	107	2.0	112	2.1
Chemical & chemical prod.	294	5.5	300	5.7
Prod. of petroleum & coal	12	0.2	12	0.2
Non-metallic mineral prod.	219	4.1	207	3.9
Basic metal	139	2.6	138	2.6
Metal	262	4.9	266	5.0
Machinery except electrical	328	6.1	316	6.0
Electrical machinery	148	2.8	159	3.0
Transport equipment	161	3.0	160	3.0
Miscellaneous	334	6.2	348	6.6
Total	5,369	100.0	5,294	100.0

Source: "Annual Survey of Establishments MANUFACTURING," National Statistics Office

4.5 Potential Industries to be Located in the Proposed Industrial Estate

In considering the potential industries to be located in the proposed industrial estate and their composition, analysis of the present conditions of leading manufacturing industries in the Philippines will first be made. The industries to be taken up here are the following 5 sub-sectors: 1) garment, 2) metal products & machinery, 3) wood products, 4) electric and electronics, and 5) food processing.

4.5.1. Garments

(1) Main Markets and Their Characteristics

1) Export market

The embroidery trade between the Philippines and the U.S. has continued since the prewar days, in which embroidery is made on the semi-manufactured lace and is sewed on ladies' underwear for re-export. As is shown in Table 4.12 , this traditional trade accounted for some 17% of the total value of export of the Philippines in 1988, ranking second in the export following electric and electronics.

The export of garments from 1984 to 1988 has gained as large growth as 23% per year on an average.

Of the garments, the "clothing embroidered on the basis of processing on commission" acccunts for over 60%, which indicates that the tradition of embroidery trade still exists. Then come "knit outerwear" and "knit underwear". The three items cited above occupy about 90% of the export value of garments.

Table 4.12 Philippine Export by Product Group
in 1986 - 1988 Calendar Year

(Unit: FOB Value in 1,000 US$, Share %)

Product Groups	1986	1987	1988
Traditional Products	1,133,335(24.0)	1,291,270(21.0)	1,374,769(19.4)
Non-Traditional Products	3,590,151(75.9)	4,418,657(77.2)	5,581,466(78.9)
Manufactures	2,996,725(63.3)	3,822,355(66.8)	4,836,767(68.4)
1) Electronics	918,465(19.4)	1,157,078(20.2)	1,436,585(20.3)
2) Garments	654,508(13.8)	989,197(17.3)	1,193,498(16,8)
a) Consigned	375,682(7.9)*	630,765(11.0)*	773,938(10.9)*
b) Unconsigned	287,825(5.9)*	385,441(6.3)*	419,560(5.9)*
3) Processed Food	142,052(3.0)	158,596(2.8)	213,210(3.0)
4) Gifts, Toys & Houseware	140,231(3.0)	187,234(3.3)	249,323(3.5)
5) Fashion Accessories & Travel Goods	129,596(2.7)	148,753(2.6)	169,835(2.4)
6) Furniture	89,353(1.9)	130,380(2.3)	183,606(2.6)
7) Footwear	48,121(1.0)	56,598(1.0)	76,993(1.1)
8) Construction Materials	34,772(0.7)	40,079(0.7)	64,586(0.9)
9) Others	893,627(17.8)	954,440(16.6)	1,249,130(17.8)
Non-Manufactures	593,426(12.5)	596,302(10.4)	744,700(10.5)
Special Transactions	6,527(0.1)	100,311(1.8)	117,955(1.7)
Grand Total	4,730,032(100.0)	5,720,238(100.0)	7,074,190(100.0)

Notes: 1) * Figures are inclusive in "Garments".

2) Each product groups share is calculated on Total Philippine Export

Sources: "Direction of Philippine Trade and Export Performance 1986.1987" BETP, DTI

"Philippine Export Performance"(Report 1 Jan-Dec, 1987-88) BETP, DTI

Table 4.13 Export Trend of Garments in 1984 - 1988 Calender Year

(Unit: Value in 1,000 US$, Share %)

Products	1984	1985	1986	1987	1988
Finished Embroidered Goods, Apparel and Clothing Imported on Consign Bases Clothing Imported	279,103	273,500	375,682	630,756	773,938(64.8)
Outergarments and Other Articles Knitted or Crocheted	59,600	65,414	93,447	143,135	167,542(14.1)
Undergarments, Knitted or Crocheted	57,410	48,055	63,772	106,033	109,263(9.2)
Outergarments, Womens', Girls', and Infants' of Textile Fabrics	53,311	65,648	53,874	53,698	70,601(5.9)
Outergarments, Mens', Boys' of Textile Fabrics	53,277	55,852	51,478	39,940	51,509(4.3)
Undergarments of Textile Fabrics Other than Knitted or Crocheted	11,563	14,520	12,546	12,268	19,344(1.6)
Articles of Apparel and Clothing Accessories of Other Textile Fabrics, Headgear of All Materials	1,936	3,162	3,709	3,366	1,301(0.1)
Garments Total	516,200	526,151	654,508	989,196	1,193,498(100.0)
Growth Rate (%)	-	1.9	24.4	51.1	20.7

Sources: "Direction of Philippine Trade and Export Performance 1986.1987" BETP, DTI

"Philippine Export Performance" (Report 1 Jan-Dec, 1987-88) BETP, DTI

By importing country, the North America including Canada accounts for about 64%, EC countries centering around Britain, West Germany and France some 25%, but the export to Japan is only 1.5%, and to the neighboring nations including Japan is merely 3% or so.

The buyers are chiefly the importers in Europe and America. They make direct transactions with makers or make continuous transactions through domestic companies or foreign companies. There are many cases, in which importers and makers in Europe and America are engaged in the processing in the EPZ (Export Processing Zone) by investing capital.

The equity composition in the four EPZs at Bataan, Mactan, Baguio, and Cavite is comparatively clear. The following shows the cases of 17 garment makers in EPZ.

Philippine equity	100%	Five companies
	Majority	Five companies
Foreign equity	100%	Five companies
	Majority	Two companies

That shows that foreign makers have increasingly shifted their production bases in the Philippines.

The scale of makers are varied, ranging from small enterprises having less than 10 employees to large enterprises with 200 to 300 employees.

Small enterprises are working in the form of a joint enterprise. They jointly receive orders, purchase materials, designing, pattern making, grading, marking, cutting, etc. (In PIE - Philippine Integrated Exporters - approximately 400 companies are participating).

These makers have small subcontractors who make embroidery using hands.

On the export market, the Philippines is competing with Taiwan, South Korea, Hong Kong, Thailand and Japan. However, the tradition of embroidery trade, the continuous transactions with importers and the effective cheap wages in the labor-intensive industry are providing competitiveness to the Philippine garments on the international market. Nevertheless, when compared with Hong Kong and Taiwan, the productivity of each worker is still lower, and needs to enhance the productivity of the Philippines through renovating the facilities.

2) Domestic market

It is natural that garments have a fairly large domestic market, but the statistics on the demand are not available.

Although there is an exception, the garments made by small companies using from 10 to 50 workers, are delivered to sellers in Metro Manila, in the some region or neighboring regions by makers themselves or through domestic companies, and are sold to consumers. These garments makers have secured the domestic market, matching their production capacity, and the competition with imported goods and with the garments made by large enterprises is not so severe. They procure more than 90% of the materials, such as cloth, thread and accessories, in Metro Manila. These entrepreneurs are mainly concerned about the expansion of domestic market and enlargement of their production equipment, and do not, attach importance to the cultivation of overseas market or improvement in the quality of their products.

(2) Characteristic Seen from the Supply of Materials

Most of the materials of garments, which are intended for the export market, are imported from Hong Kong, Taiwan, South

Korea, and Japan. The export garments makers must supply the products that can satisfy the buyers' specifications on the cloth, design and quality. But the cloth supplied by domestic textile makers is uneven in dyeing, and there is no thinly made, which is essential for the underwear, and moreover, the price is higher than the imported cloth. The import of cloth and accessories is permitted on condition that the bonded warehouse should be used.

On the other hand, the materials of garments, which is intended for local market, are mostly supplied by domestic textile makers. The domestic cloth poses a problem in that the dyeing is uneven and the price is high.

As the garments depend most of their quality on the cloth, it is natural that the improvement in dyeing should be strongly required. Both dyestuff and finishing agent are imported at present. There are no domestic products. Although dyeing facilities are superannuated, some makers are indirectly exporting the cloth dyed in the Philippines. Therefore, it is technically possible to dye the cloth. Also, PTRI (Philippine Textile Research Institute) has confidence in making guidance in this field.

The reason why the dyeing of garments, which are to be used locally, is bad is that an inappropriate dyestuff is used to lower the price, the dyestuff is diluted, and the finishing agent is not used. Such 'omission' has resulted in dyeing badly. It is necessary to set die quality standard for the dyeing and finished products.

The reason of a high price is caused by that textile makers do not supply directly, and wholesalers, who stand between the makers and buyers, take a margin, and the price becomes 80% higher than the cloth coming from Hong Kong, even if the quality is on the same level. Regarding this, wholesalers say that garment makers are unable to put a large order and the time of delivery is short. These require a warehouse, which makes them to add the expenses to the price.

The garment industry has been creating an opportunity for the domestic accessory industry which is not being fully grasped.

In each sector of the garment industry, there are constants such as:

a) Thread b) Zips c) Labels d) Interlinings e) Buttons

Of thses elements, only thread, zips, labels and some elements of packaging are covered adequately.

Owing to the sophistication of the accessory market in such competitive countries as Hongkong, Taiwan and South Korea, the Philippine garment exporters tend to purchase accessories while purchasing their basic raw materials, so that color matching and delivery dates can be combined. To a large extent, the requirements of the domestic market are attended to through the parallel market: "smuggling".

The following table lists BOI registered garment accessory manufacturers and their capacities (1986).

	Registered Capacity (per annum)
Zippers	
YKK Zipper Phils. - nylon zippers	14,720,000 pieces
- brass zippers	10,000,000 pieces
FUJI Zipper	2,569,000 meters
Garters	
Conrad Mark Mfg. Corp.	36,000,000 meters
Pacific Rayon Mfg. Inc.	17,047,239 yards
Spanlace	154,000 rolls
United Asia Weaving and Trimming Mfg. Co.	75,758 rolls
Labels	
Manufacturer's Associates	45,435,000 pieces
Junand Labels Ind.	24,000,000 pieces
Twin Towers Labels	24,000,000 pieces
United Asia Weaving and Trimming Mfg. Co.	30,000 rolls

Buttons

ONDA Buttons

- shell buttons	38,400,000 pieces
- casein blands and casein buttons	230.4 metric tons

Sewing Thread

Manila Bay Spinning Mills, Inc.	3,015,013 kgs.
Allied Thread Co., Inc.	985 metric tons

Interlinings

Non-Woven Fabrics Phils., Inc.	8,161,000 meters

(3) Synthetic Fiber Industry

1) Maker and production capacity

As of the end of March 1987, the Texfiber Corporation has a capacity of producing 7,300 tons of filament fiber and the Philippines Synthetic Fiber Corporation puts out 17,900 tons of filament fiber and 11,000 tons of staple yarn per year. There exist these two firms (There were two firms earlier putting out respective fiber, but they have suspended operation at present.).

When their production capacity is compared with that of a firm in the synthetic fiber producing countries, (See Table 4.14) the Philippine maker surpasses somewhat Indonesia and Thailand in the production of nylon filaments fiber, but the Philippine produciton capacity corresponds to one-third of Taiwan and one-seventh of South Korea. As regards polyester filament fiber, the Philippine maker exceeds Indonesia and Thailand, but corresponds to 40% of Taiwan and 70% of South Korea. With regard to polyester staple yarn, it is less than one-third of Indonesia and Thailand and less than one-fifth of Taiwan and South Korea (Indonesia and Thailand are now planning to set up new factories and/or expand the facilities for both filament fiber and staple yarn.

Table 4. 14 Production Capacity of Synthetic Fiber in the Neighboring Countries of the Philippines

	Number of makers	Total production capacity	Average production capacity per firm
Nylon filament fiber			
South Korea	3	155,500 tons/year	51,800 tons/year
Taiwan	8	197,100 tons/year	24,600 tons/year
Indonesia	2	12,300 tons/year	6,200 tons/year
Thailand	3	18,200 tons/year	6,100 tons/year
Polyester filament fiber			
South Korea	11	284,800 tons/year	25,900 tons/year
Taiwan	13	618,400 tons/year	47,600 tons/year
Indonesia	5	70,900 tons/year	14,200 tons/year
Thailand	4	35,100 tons/year	8,800 tons/year
Polyester staple yarn			
South Korea	5	267,100 tons/year	53,400 tons/year
Taiwan	9	572,400 tons/year	63,600 tons/year
Indonesia	4	136,900 tons/year	34,200 tons/year
Thailand	2	75,500 tons/year	37,800 tons/year

2) Production cost of synthetic fiber

The production cost of synthic fiber, one of the equipment industries is influenced by the equipment capacity following the material cost. The produciton cost being kept secret at the makers, it is difficult to grasp it. At the Asia Fiber Trade Conference held in Singapore in November 1987 under the sponsorship of the Japan Chemical Fiber Association, Mr. Dee, president of AFTEX spinning company, who represent the Philippines, reported (The minutes of the Conference) the "Philippines pays more than

2 dollars/kg for the production of polyester fiber and the imported goods costs 1.5 to 2 dollars/kg".

When the quantity and amount of polyester filament in 1988 are shown by country referring to the Hong Kong Import Statistics so as to know the international competitiveness of the Philippine polyester fiber, the average unit price of all the exporting countries is 2.1 dollar/kg, while the Philippine average unit price is 2.5 dollars, which indicates that the Philippine unit price is high by about 20%. (It may be due to this higher price that the Philippines market share is only 0.2%.).

3) The policy of the Government of the Philippines

At the Asia Fiber Trade Conference mentioned above, President Dee says "The Government of the Philippines has a fiber expansion program, but the execution of the program requires 576 million dollars, which makes it difficult to implement the program quickly, and the government does not encourage the domestic production of synthetic fiber shortly, because the import duty of polyester will be lowered from 30% of 1987 to 20% in April 1988.".

4) Capital required for the construction of a synthetic fiber plant

The economical scale of a synthetic fiber plant to be established newly or to be expanded is reportedly 33,000 tons year of nylon filament fiber and both polyester filament fiber and staple yarn is 42,900 tons/year respectively. The capital required for the construction of those plants is some 200 million dollars respectively in Japan.

In case the Philippines, which has no synthetic fiber processing facilities, is assumed to construct that scale of

a plant having three to five times as large capacity as at present, the synthetic fiber thus put out is compelled to compete with the products from Taiwan and South Korea in the Third World markets, it may be impossible for the Philippine synthetic fiber to compete favorably because for the depreciation in those two countries is already under way.

The policy of the Government of the Philippines, encourage the domestic productin of synthetic fiber early, may be quite reasonable.

(4) Investment Problem

In making investment, it differs in the condition between the garment industry and the synthetic fiber industry, because the garment industry has relatively a small scale, depending largely on human technique, while it may be said that the synthetic fiber industry is a capital-intensive industry. Further, the latter needs electric power and water resources.

The projected industrial estate may not be suitable for such industries that consume electricity and water in large quantities. On the contrary, the garment industry is thought to be an industry that can be recommended strongly to use the industrial estate when the labor power abundant in the Philippines, the Filipinos' strong eye sight, and their skillfulness in the use of fingers and the low production cost in the Philippines are taken into consideration.

Nevertheless, in making investment, it may be necessary to consider the introduction of the facilities having high productivity.

4.5.2 Metal Products and Machinery Industry

(1) Market and Their Characteristic

The Philippine metal processing industry's market is still composed mainly of the domestic market except some enterprises that export only a small portion of their products. The delay in the development of the manufacturing industry gives much weight to the replacement market.

Main domestic market consists of construction, sugar refining, mining, cement, shipbuilding, agricultural machinery, home electric appliances, and automobile industry, of which, sugar refining, mining and cement are stable having a long history and tradition, but they are not expected to make large growth.

On the other hand, the development of automobile (including motorcycle) and home electric appliances can be expected with the improvement of income level.

The number of automobiles manufactured and sold in the Philippines increased owing to the Progressive Car Manufacturing Program (PCMP) which was carried out in 1972. About 70,000 cars were manufactured in 1978, reaching the peak. But after that, it gradually decreased, and from 1984 it showed a rapid decline, and in 1986, only 3,737 cars were manufactured, reaching its bottom (Table 4.15). Nevertheless, the manufacturing picked up in 1987, with two companies, PAMCOR (Mitsubishi) and PNI (Nissan) could produce and sell the following number of cars.

1987: 6,378 cars
1988: 12,651 cars (of which, PNI shows the sales up to September 1988)

From March 1989 Toyota Motor Corporation resumed its production together with the above two leading companies. The passenger cars are being manufactured only by the above three

Table 4.15 Vehicle Sales - 1973 to 1987

Year	Car	AUV 1/	LCV 2/	Trucks	Total
1973	16,737	6,562	5,105	3,867	32,271
1974	21,844	11,546	5,263	5,494	44,147
1975	26,592	11,976	4,188	6,256	49,012
1976	30,839	12,356	5,267	4,263	52,725
1977	31,539	18,003	4,809	5,006	59,357
1978	34,626	20,851	8,600	5,884	69,961
1979	34,973	20,685	6,932	5,893	68,483
1980	29,980	14,021	9,721	5,008	58,730
1981	28,697	9,976	9,773	5,219	53,665
1982	28,995	12,730	10,407	4,123	56,255
1983	27,967	9,056	9,742	3,485	50,520
1984	6,481	2,472	2,007	1,155	12,115
1985	4,769	375	373	90	5,707
1986	3,640	54	22	21	3,737
1987	5,543	341	210	162	6,256

Note : 1/ AUV: Asian Utility Vehicle
2/ LCV: Light Commercial Vehicle
Source: Philippine Auto Motive Federation, Inc.

companies, but there are many companies engaging in the production of trucks, buses, Light Commercial Vehicle (LCT) and AUV. With the stability and improvement of the Philippine economy, the demand for cars and production will grow rapidly.

The problem is the rate of home production. PCMP set 55% as the target of the minimum local content, but it was reduced to 40% in 1983, and then was lowered to 32.26% in the new guideline. This is due to the fact that the local metal processing industry cannot meet the demand because of their equipment capacity and manufacturing technology.

For instance, the local content ratio of PNI (Nissan) is 32%, but they put out locally only small press processed goods which can easily be done, and large press parts such as doors are being imported.

Like PNI, PAMCOR (Mitsubishi) is making efforts to put out things locally, and at the plant visited they were making forging parts (gear blank) casting parts (brake drum, brake desk, etc.), press parts (seat adjustor, pedals, etc.) for are sake of both the companies.

Regarding the motorcycle, three Japanese companies, Honda, Kawasaki, and Suzuki are operating, but the production scale is small, even Honda is putting out only about 10,000 a year. The following shows the change in the number of cars produced by Honda. The production reached its bottom in 1985 and 1986, but seems to be recovering after that.

Year	1983	1984	1985	1986	1987	1988	1999
No.of Car	13,055	3,986	1,586	1,910	3,902	4,090	10,000 (estimated)

Approximately 24,000 cars are being manufactured in the entire Philippines per year. This, however, is far below the number of cars being sold in Thailand, where they sell more

than 400,000 cars a year. There is plenty of room for growth in the Philippines.

Although it is an unusual case, there is an automobile transmission assembly, as the future user of metal processed products. The Asian Transmission Corporation, which was set up to earn foreign currency necessary for the import of PAMCR's (Mitsubishi) component parts. The Corporation has a capacity of putting out 143,000 units/year of transmission. However, 93% is imported, and 7%, which is to be used locally, is all for PAMCOR. What their local content ratio is 35%, which is mainly consist of in-house additional value and the local parts being bought is still small in quantity, for instance, forging gear blank, and fastener. The precision of the machine tool possessed by subcontractors being bad, so that the machine processing is all done within the company without placing an order outside.

Metal processed goods are used mainly for such home electric appliances as washing machine, refrigerator, air conditioner, electric and electronic machines. In the Philippines there are such local makers as Philippine Appliance Corporation (Philacer), Conception Industries, Inc., Standard Appliances Corporation, 3D. The items they manufacture are limited. Japanese firms, that are running business in the Philippines, are Matsushita (Precision Electronics Corp.), Sharp (Sharp Phils Corp.), and Sanyo (Sanyo Phils Inc.).

PEC (Matsushita) analyzes the home electric appliances market in the Philippines as below.

The Philippines has a population of 57 million, the number of households is 10,300,000. According to income, the social stratum has been classified into five as follows:

Class A:	>15,000 pesos/month		
B:	8,000 - 14,999 pesos/month	┐	30%
C:	3,000 - 7,999 pesos/month	┘	
D:	800 - 2,999 pesos/month	┐	70%
E:	<799 pesos/month	┘	

At present 47% of the households are electrified, but 50% of the entire households are considered customers. Matsushita intends to manufacture commodities for C and D classes because they compose the majority. The electric appliances market is expected to expand with a rise in their income. People have recently come to have a strong desire to purchase electric appliances.

Local home electric appliances makers purchase local press parts cost products, electric plating. Japanese makers in the Philippines are very careful to use local products because of quality, but place an order for some of the local metal plate, electric plating, etc.

Of the metal processing industry in the Philippines, casting has the longest history and tradition. The ratio of use of the anti-abrasion cast steel, which are adopted in the mines, cement industry and construction industry as an article of consumption, is much higher than in other industrialized countries. The manufacture of such anti-abrasion cost steel requires the high-level facilities and technology, and most of them are being made at the captive foundry of mining companies (such as Benguet, Atlas, etc.) and at large joint venture companies (such as AG & P, AMECO Foundry Inc.). The facilities and technology of there firms are almost equal to the international level. Accordingly, even the jobbing foundry gives priority to the product quality in order to keep the linkage with the customers.

However, most of the jobbing foundries find it difficult to deal with the customers who give priority to the price.

ANI, the largest forging company in the Philippines exports 80% of its products. The company was originally established to supply forged products to the automobile industry in the Philippines in accordance with PCMP, adopting mainly the job order ACME Tool company also uses mainly the job order. These two firms have the facilities and technology surpassing the normal level, and are boosting up their linkage with local automobile manufacturers and transmission makers.

As regards the press processing, automobile maker (PNI - Nissan), and home electric appliances maker (Precision Electronics - Matsushita) have their own in-house press shops, but the majority are medium and small jobbing press factories. Automobile makers, home electric appliances makers and motorcycle makers are purchasing the press parts from local subcontract enterprises.

Some enterprises have their in-house electric plating shops, but most of them being medium and small enterprises, they are connected with customers through the job order from automobile makers, autoparts makers, home electric appliances makers.

As to heat treatment, there are no makers specializing in getting the job order, as was mentioned earlier, the firms, who need heat treatment, have their own in-house heat treatment shops

Quality is usually required for the parts of the original equipment, but what is preferred on the replacement market (for example, auto parts) is the low price rather than the quality.

(2) Problem Viewed from the Supply of Raw Materials

Reliability of domestic raw materials is generally low, and the materials, which are required to have high quality, are imported from abroad. It is also difficult to obtain good and suitable materials whenever necessary. This is applicable to Metro Manila, and the situation is worse in the province.

1) Problem

a) Materials for steel making

There is no steelworks in the Philippines that operate the pig iron and steel making continuously. There are makers who are engaged in steel making and rolling, using the electric furnace, elongated iron makers, welded steel pipe makers, surface treated steel plate makers, etc. Hence, the main material will be scrap steel, but only small quantity of scrap steel is generated locally, and a greater portion most be imported from overseas. However, the source of supply sometimes poses a problem. For instance, a certain rolling mill maker says that the local billet was after made from the scrap steel, which was generated during the Vietnam war, by casting continuously in the steel making electric furnace. And when the deformed a high tensiled strength reformed bar is made by rolling the billet, it presents a problem on its bending property. Because of this, the billet, which was made a continuous casting from iron are to pig iron and steel making, is being imported form South Africa and Brazil.

Both thick and thin plates are being made exclusively at NSC, but scrap is all imported. It may be due to the problem of rolling technique on a rolling mill, a certain user (press processing enterprise) complains that NSC's thin plate is not uniform in the thickness,

grain and unsuitableness for deep draw. High grade steel material (steel plate for automobiles, carbon steel for structure, alloy steel, tool steel, etc.) which has little demand in the Philippines, is imported from industrialized countries. It may be due to the insufficient quantity in stock or the distribution system does not well function, users complain that they find it difficult to obtain the materials.

As to ferroalloy, ferrosilicon and ferrochrome are being manufactured locally, although the quantities are small. However, ferronickel and ferromanganese are being imported from abroad.

(3) Problem in the Investment

Metal products and machinery may become the final products as they are or may be used as parts and materials to produce the final products. In the Philippines the plural number of automobile, motorcycle, and home electric applianess makers have already started operation, mainly for the domestic market. However, the number and quality of parts and material makers, that back up the said industries, are short. Much of the primary materials are still being imported, but the investment in the metal products and machinery industry sector at EPZ with the governments investment incentives, may be very promising.

Not only the export market but also the domestic market will hereafter require high-quality products, and it needs to install new production facilities. It may be possible to establish a plant in the projected industrial estate except the heat treatment factories that use much electric power and some of the metal products that generate large quantities of dust and combustion gas. As to the water pollution, it needs to impose duty on the plants to treat the waste water at the primary stage.

4.5.3 Wood Product

Wood product, which is made of wood, is a wide range of industry. It envolves plywood, veneer, building materials which are used for making doors and walls, wood furniture, toys in the miscellaneous goods, wood carving etc. More than 2,400 companies are engaged in their productions.

Since July 1, 1989 the export of wood, except semi-products such as plywood and veneer, has been prohibited and consequently, wood product has increased its importance.

(1) Export Market

1) Wood Product

Table 4.16 shows the change in the export value of plywood and veneer from 1984 to 1988. As the table indicates, the export of plywood and veneer is going to reach the limit. This may due to the fact that the Government would to try to put value-added products so that the wood resources, which has a limit, can be utilized effectively, and that industrial circles are now making efforts to put out the products having a high added value.

The largest import country of Philippine Wood Products in the U.S., the market share of which is about 38%, followed by Hong Kong (about 28%), Britain (about 17%) and Japan (about 5%).

Industrial circles have the target of putting and high-added value products like this: They intend to attain 10% of the volume of all wood products in 1988 - 1989 and gradually raise the volume of high-added value products so as to achieve 60% in 1996 - 1997.

Table 4. 16 Export Trend of Plywood and Veneer in 1984 - 1988 Calender Year

(Unit: FOB Value in 1,000 US$)

Year	Export Value	Growth Rate (%)
1984	70,290	-
1985	62,541	▲11.0
1986	65,916	5.4
1987	82,138	24.6
1988	99,332	20.9
Average Growth Rate	-	9.0

Sources: "Direction of Philippine Trade and Export Performance 1986.1987" BETP, DTI
"Philippine Export Performance" (Report 1 JAN - DEC 1987 - 1988) BETP, DTI

Table 4.17 Export Trend of Furniture
in 1984 - 1988 Calender Year

(Unit: FOB Value in 1,000 US$, Share %)

Products	1984	1985	1986	1987	1988	
Rattan Furniture	60,233	59,181	62,537	94,912	135,207	(73.6)
Wood Furniture	5,780	5,801	6,579	10,600	17,541	(9.6)
Parts of Furniture	4,433	3,733	3,575	4,847	6,127	(3.3)
Bamboo Furniture	677	627	859	881	1,334	(0.7)
Furnishing	225	170	142	236	718	(0.4)
Metal Furniture	175	78	59	167	395	(0.2)
Plastic Furniture	0	0	2	2	0	(-)
Furniture of Other Metarials	16,775	14,128	15,601	18,735	22,295	(12.2)
Furniture Total	88,298	83,718	89,354	130,380	183,606	(100.0)
Growth Rate (%)	5.7	▲5.2	6.7	45.9	40.8	

Sources: "Direction of Philippine Trade and Export Performance 1986.1987" BETP, DTI
"Philippine Export Performance" (Report 1 JAN - DEC 1987 - 1988)" BETP, DTI

2) Furniture

As Table 1.13 indicates, the ratio of furniture occupies in the export value of the Phlippines is only about 2%. As is shows in Table 1.13 , some 70% of the export is rattan furniture. When the destination is classified by region, North America including Canada accounts for some 67%, EC about 16%, and the neighboring countries including Japan is about 8%. Both Department of Trade & Industry (DTI) and industrial ciecles consider the export of furniture as one of the strategic commodities. They predict that is the furniture industry is fostered well, its export will attain the level of 300 - 500 million dollars in 1996.

As an example of "high-added value", the Chamber of Furniture Industries of the Philippines (CFIP) has cited the following figures.

- The average export price of sawmillers : 0.75 US$/BF 1/
- The average export price of furniture (Chairs finished by applying sand paper): 3.50 US$/BF
- The average export price of furniture : 7.00 US$/BF (Chairs finished by applying vanish/lacquer)

The above shows that as much as 4.7 to 10 times added value can be attained.

Note: 1/ BF = Volume of 1 inch x 12 inches x 12 inches
= 2,250cc = 0.00225m^3

Makers are paying such attention to the quality that they consult with buyers in Europe and U.S. on the specifications of rattan furniture and get technical guidance from Japanese makers. This is particularly remarkable among the makers in the Sebu area. However, as to other furnitures than that, it is reported that the number of makers, who pay much attention to the quality, is only 5 to 6 firms. CFIP, the association of furniture makers in the

Philippines, is trying to enlighten industrial circles through bulletins and study meetings. In May 1989 they send a business mission to Sweden, a leading furniture making nation and to other European country to grasp the trends overseas.

Also, pioneer makers consider that the merit of Philippine furniture are wooden tables, chairs and bookshelves, which were curved in relief, through labor-intensive work. They export that such furnitures will become the most promising export product after the rattan furniture. For this purpose, CFIP is now studying the setting up of a training center of relief technique called "curving".

(2) Domestic Market

The Government of the Philippines has a plan to increase the rate of supply of all wooden products to the domestic market from the present 45% (export 55%) to 55% (export 45%) during the 10 years up to the year 1998. Thus, the rate of supply to the domestic market will come to surpass that of export.

Wood industrial circles have so far treated the local market lightly, but as the export of wood was prohibited, except such semi-products as plywood and venner on July 1, 1989, they have changed their strategy, diversifying such products as construction materials furniture, etc., which are put on sale on the local market.

Furniture is typical daily necessaries, which belongs to the local industry, The furnitures, that are made by medium and small makers having 10 to 100 makers, which are located in and around Regions III, IV and VII, are delivered directly by makers or through local trading firms to stores and showrooms in Metro Manila, in the same Region or in the adjacent Region, and are sold to consumers. Some of imported furnitures are also displayed in stores, but competition between domestic product seldom occurs because foreign made are more

than three times higher in price than local products and differ in quality and appearance.

Furniture makers are concerned about the expansion of domestic market, trying to lower their prices and to reduce their production cost, and are not interest in the improvement of quality.

(3) Characteristic viewed from the Supply of Raw Materials

The export of oak, lauan and mahogany, which are main materials of furniture, is prohibited to export as a timber from the producing centers like Mindanao, in order to encourage the export of processed goods; which match up the national policy, and will secure the supply of the wood.

In contrast, the rattan resources, the main material of rattan furniture are being exhausted; especially a shortage of the thick material, which is used to make the frame and the outside of furniture, is giving a serious problem to makers. They are now trying to survive by importing rattan from neighboring countries such as Malaysia (Sabah) and Vietnam as well as from a distant country like Myanmar.

(4) Problem in the Investment

Wood to be used in the Philippines mainly comes from Mindanao Island where there are many furniture makers. Wood products require a vacant place where the wood products can be seasoned in the open air.

The projected industrial estate may be unsuitable for the wood product industry because the estate is far from the supplying centers of necessary wood, and to keep a wide space will worsen the profitability. Therefore, the industrial estate located in Luzon is considered unsuitable for investment.

4.5.4 Electric and Electronics Products

(1) A General Market Condition

The electric/electronics industry in the Philippines was started by American enterprises that made a home refrigerators, air conditioners, and the like, followed by Japanese enterprises engaging in the production of such electronic apparatus like radio and TV sets. The production is centered on the home apparatuses, which substitute the imported on the domestic market. Except the offshore production of semi-conductors, the products that can compete favorably on the export market are small in number. The production of industrial electronic machinery is still in the initial stage, and the fastering of the parts industry has not yet started fully. The recent demand in the Philippines is as follows: 130,000 units of black and white TV sets and 90,000 units of color TV sets.

Regarding the domestic market, the Philippines is also faced with the structural problem same as Thailand. In other words, the electrification in the provinces is going very slowly and the disparity of wealth is wide, and people in the low-income bracket are not able to buy durable consumer goods. And the rate of popularization of home apparatuses is still on a low level, and some 60% of demand is concentrated to Metro Manila, showing an uneven spread of the apparatuses.

With regard to the export market, it attained the peak in 1983, recording US$ 1,330 million, which however, dropped as low as to US$ 920 million in 1986, and in 1987 it began recovering, and a total from January to October registered a 22,2% increase over the same period of the previous year. But more than 90% of the export occupied by electronics parts like semi-conductors.

Table 4.18 Sales Amount of Consumer Electric & Electronics Products in Philippines

(Unit: set)

	1983	1984	1985	1986	1987[1/]
Black & White TV Set	228,812	117,017	114,209	118,451	130,000
Color TV Set	315,041	165,886	42,513	63,070	90,000
Refrigerator	200,000	98,000	95,315	108,111	170,000
Electric Fan	475,046	280,015	230,562	259,455	300,000
Electric Heater	217,574	157,369	125,162	139,334	160,000
Gas Range	44,903	22,044	22,117	19,422	24,000
Electric Rice Cooker	52,540	32,688	23,004	23,775	28,000
Electric Iron	45,730	19,542	20,972	17,094	24,000

Note : 1/ provisional figure in 1987.
Source: Consumer Electronic Products Manufacturers Association

Table 4.19 Japanese Electronic Company in Philippines

Japanese Investor	Name of Company	Established	Capital	Main Products
AKAI	Akai Philippines Inc.	1976	10	tape recorder, stereo
SANYO	Sanyo (Philippines) Inc.	1971	24	TV set, stereo refrigerator, electric fan, others
SHARP	Sharp (Philippines) Corp.	1982	17.5	TV set, tape recorder
SHINDENGEN	Labtech Manufacturing Industry Inc.	1979	7.5	semiconductor
MATSUSHITA	Precision Electronics Corp.	1967	68	TV set, stereo, refrigerator, electric fan, others
MITSUMI	Mitsumi Philippines Inc.	1980	63	condensor

Assembly makers, whose effort has so far been directed to the domestic market, are now considering the export because it has become necessary for them to raise foreign money themselves due to the regulations on the foreign currency allocations.

(2) Characteristic viewed from the Supply of Raw materials and Parts

Most of the raw materials and parts to be used for electricity and electronics must able be imported. Especially, regarding the important and precision parts, it is unable to obtain them from the local parts makers. Mitsumi Electric Company, a Japanese firm, has a plan to expand their production in Bataan EPZ, but it may take time before the Philippine parts industry has come to have international competitiveness. Until that time, it may need to depend upon the import. It may also be necessary in the future as well to import the following raw materials of semi-conductors, such as silicone die, wafer, metal container, aluminum and metal wires, and expoxy resins.

(3) Problem in the Investment

Although the raw materials and parts must be imported, it may be worth studying investment because of relatively low wages of unskillful workers in the Philippines. The production of TV, radio and degital watch, which require a low level of technique and labor-intensive work, will be field where the Philippines can gain competitiveness, as NIEs are expected to go to the field requiring high technique. The parts industry is a field where investment can be recommended because the industry aims not only the local market but also Asian market.

4.5.5 Food Processing Industry

(1) Market

Food Processing industry occupies an important place in due manufacturing industries in the Philippines, accounting for about one-third of all manufacturing enterprises. The following shows a general market situation by raw material.

1) Fruit and Vegetable Processing

The number of principal enterprises engaging in the canning, bottling, drying, freezing, salting and vinegaring of fruits and vegetables was 42 in 1984. The Federations of Philippine Food Industries estimates that of the 42 companies, 6 companies are large enterprises, whose annual sales amount to more the 100 million pesos. These six firms account for 70% of the domestic production and 80% of the export.

The medium-sized firms numbering 29, that occupy some 70% of all firms (whose annual sales are 50 - 99 million pesos) account for 20% of the domestic production and 20% of the export. Seven firms, whose annual sales amount 1 - 49 million pesos, occupy only 5% of the domestic production.

Processing enterprises other than the pineapple processing enterprises who can obtain the raw material through the year have seasonal fluctuation is operation depending upon the availability of raw materials, which makes them impossible to run the processing facilities throughout the year and to utilize the workers constantly.

By geographical location, 35 companies out of the existing 42 companies are situated around Metro Manila, which is a large consuming center and the export port. In the case of fruits, they must be carried from producing

centers lying far away, which raises the transport cost and lower the quality.

2) Beef and Pork Processing

A number of principal processing companies are 19. A total of their processing capacities is 59,400 tons, of which 4 companies engaged in the meat processing in an integrated way using their own slaughter house. The remaining 15 companies have comparatively small-scale canning facilities. Their average rate of operation was only 36% in 1983.

Of 19 companies, 17 are located in the Great Manila area, and the cows and pigs to be slaughtered must be carried over the long distance from the producing centers.

The enterprises, that exist in the producing center of cows and pigs, have about 20% advantage in the cost compared with the enterprises which are located in the Manila area.

a) Transport cost
b) Difference in wages (Some are about one-second of Manila)
c) Fuel cost (Alternative fuel can be obtained including local wooden materials)

3) Chicken Processing

There are seven companies engaged in the chicken processing in an integrated manner. All of them are located in the Metro Manila area. The rate of operation in 1983 was as low as 36%.

Unlike the beef and pork processing, the chicken processing was started from the end of the 1960s to the beginning of the 1970s, introducing the technique from abroad. As most of the processing enterprises have experience in the beef and pork processing, they are on a

high level concerning the plant layout, facilities, quality control and sanitation.

The meat consumption per capita in the Philippines increased from 11.4kg in 1974 - 1976 to 14.4kg in 1982 - 1983. This is attributable to a rapid increase of the chicken consumption. As the price is low, it is excepted that the consumption will be expanded in the future as well.

Eighty-one percent of the meat including beef, pork and chicken are sold raw, and the quantity to be processed is only 19%. 40% of the processed meat are bottled, but the packing cost is relatively high, the use of ethylene film seems to be exceeding the use of bottles.

Processing capacity of chicken processing enterprises

Name of Enterprises	Annual Processing Capacity (Million)
1. San Miguel	44
2. General Milling	22
3. Republic Flow Mills	13
4. Robin	26
5. Vitarich	22
6. Golden Country (including FTI)	11
7. Purefoods	16
Total	154

Note: Operating time per day: 20 hours. Annual operation: 275 days.

4) Processing of Dairy Products

Nine dairy products processing enterprises are putting out various kinds of daily products including reduced milk

from the imported milk powder. The majority of processing enterprises are located in the Great Manila area, which is a consuming center and lied near the import port of raw material. The rate of operation until October 1983 was relatively high with 60 - 70% but declined to 30 - 40% owing to the reduction in the supply of raw material and the decrease in consumption which were caused by the economic crisis in 1984.

5) Marine Products Processing

The number of enterprises engaging in the frozen marine products processing is 47, of which 11 companies are processing tuna, 16 companies sardine and 20 companies lobster. Those engaged in the canning process are all medium and small firms. The canned tuna is all exported, while canned sardine is all consumed locally. The export of canned tuna accounts for some 40% of the total export value.

As fish catch decreases from November to February, and the operating rate of the fish processing facilities becomes lower.

a) The number of tuna fishing vessels, that are furnished with freezing capability will be increased.

b) Fish is stored in a refrigerating warehouse in order to be processed in the off-season from November to February.

c) The processing facilities will be used for the processing of fruits and fruit cocktail during the off-season.

d) The fish caught in the outside territorial waters of Micronesia will not be considered as the imported fish.

According to the robster export association, the firms engaged in exporting frozen marine products number about

50, of which 20 firms have their refrigerating facilities, and the remaining 30 firms have no refrigerating facilities, depending on other firms. Of the marine products refrigerating firms, 5 are large firms, and the rest 15 firms are medium and small enterprises. The five large refrigerating firms are exporting almost all the frozen marine products they put out, occupying about 80% share in the export of frozen marine products. Other medium and small refrigerating firms are exporting part of the frozen products they produced and refrigerate the products of petty marine products exporters on commission the dry processing of marine products is being done by petty enterprises.

(2) Problems in the Food Processing Industry

As was mentioned when description on the 4 processing fields was deals with, the seasonal fluctuation of the raw material supply brings about unstable rate of operation, and as the processing enterprises are located concentrating of Manila and its vicinity, which presents a problem of a high transport cost of raw materials from their producing centers. Besides, the following problems are pointed out.

1) When the low acid foods like canned fish and meat are heat treated, the sterilization is not fully checked. This is seen especially, in the canning factories dealing with the products to be put on the local market.

2) Also, the domestic material for a can making comes into problem. The tinplate sheet to be used as material is uneven in its thickness and quality, the necessary electric material is not available, and coating is not done in uniform. The the solder, which is used as a sealing material of cans contains much lead is sometimes talked about on the export market.

Philippine canning companies used a different can according to the destination of a canned product.

a) For the export of the canned tuna and pineapple, they are the can imported from the U.S., Japan or from Taiwan.

b) For other export canned products, they use the can made locally from the imported tinplate sheet.

c) For the canned products to be put on the local maker, they use the can made from the local tinplate sheet.

3) The building and facilities of medium and small factories are defective, sanitary conditions in some of them is not kept appropriately.

(3) Problem in the Investment

Around the proposed industrial estate exist fruit producing centers, for instance, peanuts of Aurora; guyabano, banana, and pineapple of Cavite; citrus, rambutan and banana of Oriental Mindor; cashew nuts of Palawan; and mango of Rizal, although these 3 producing centers are situated at some distance from the estimate.

What presents a problem, however, is the difficulty of stable supply of a fixed quantity.

In addition to this problem, the proposed industrial estate has no plan to set up the joint food processing system or storage warehouse. In case a large quantity of water is used, this will also pose a problem concerning the water supply. For these reasons, the proposed industrial estate is unsuitable as a location of canning and frozen food processing. It may rather be possible to utilize the estate for food processing such as snack candies.

4.5.6 Plastic Molding Industry

(1) Plastic Manufacturing Industry

There is no regular resin industry in the Philippines, and of so called 4 resins (polyethylene, polysthylene, polypropylene Polyvinyl chloride) PS and PVC and polymerized into the products by importing monomer. The makers and their production capacity are as follows.

Product	Maker	Location	Production Capacity (t/y)
PVC	Mabukay Vinyl Corp.	Iligan	28,000
	Philippine Vinyl Corp.	Rosaris	20,000
Total			48,000
PS	Philippines Polystylene Prod.	Rosario	10,000
	Polyethlene Mfg.	Manila	10,000
	Pand L	Manila	12,000
Total			32,000

The material monomer is being imported as below.

	1987	1986
VCM	17,427	9,942
SM	14,795	11,475

These figures show that the rate of operation of the plants is very low. Strickly speaking, it may be said that there is no plastic making industry in the Philippines.

There are small-scale industries dealing with phenol resin and urethane resin.

According to the import statistics, plastics are being imported as below.

Unit: Ton

	1987	1987
PE	120,506	92,911
PP	78,497	59,438
PS	18,257	13,507
	(14,795)	(11,479)
PVC	39,156	28,299
	(17,427)	(9,942)
Total	256,416	194,155

( ) shows the quantity of monomer.

The following shows a comparison of the import volume with other countries.

	Per capita GDP ($)	Consumption of Plastic	Per capita Plastic Consumption Kg
Japan	11,300	5.5	47
China	380	2.6	2.5
ASEAN 1/	665	1.2	4
NIEs 2/	3,100	3.7	53

Notes : 1/ Thailand, Indonesia, Malaysia, Philippines
2/ South Korea, Taiwan, Hong Kong, Singapore

Source: Ecc, N 29 May, 1989

From the population of the Philippines being 57 million and the above import volume of plastic, the consumption of plastic per capita will be:

1986 - 3,4kg
1987 - 4.5kg

The Philippines is planning to set up the petrochemical industry as below.

Date of completion:	1992	
Capacity: Ethylene	230,000	tons/year
Propylene	100,000	tons/year
LL/L.D.P.E.	63,000	tons/year
H.D.P.E.	57,000	tons/year
P.P.	100,000	tons/year

There are no PVC and PS plans at present, but the plans will come to before when surplus ethylene is put out.

As the petrochemical industry must import the raw material naphtha, the funds must be raised, and the profitability must be taken into account, it is quite doubtful if the proposed plant can be completed in 1992.

The demand prospects of the 4 resins are shown in the following table.

Unit: 1,000 tons/year

	1990	(87-90) Growth	1995	(90-95) Growth	2,000	(95-100) Growth
LL/L.D.P.E.	75	6.5%	101	7.0%	141	8.0%
H.D.P.E.	46	7.0%	63	7.5%	88	8.0%
PS	17	8.0%	27	8.0%	38	8.0%
PVC	39	7.0%	53	7.0%	72	7.0%

The petrochemical industry in such neighboring countries as Thailand and Indonesia is in due stage of constructions. Therefore, it is necessary for the Philippines to make a decision as soon as possible.

Because when the plastic molding industry, which will be mentioned below, is established and if the price of the raw material resin should be higher than that in the neighboring nations, the plastic molding industry in the Philippines would be unable to continue its operation, and the investment made there may be wasted.

(2) Plastic Molding Industry

The plastic molding industry in the Philippines are making chiefly daily miscellaneous goods, parts of home electric appliances, pipes and the like.

The daily miscellaneous goods made from plastic, which are displayed in a large department store, show that South

Korean-made is largest in number, followed by Taiwan, Japan, U.S., the Philippines. In terms of ratio, South Korea is 5,Taiwan 3, Japan and U.S. is 1, as a total, and the Philippinesl. The Philippine products, however, are bad in quality and uneven in the thickness and color, and the lids are not well fixed. The Japanese and U.S.-made have a large capacity, while those of South Korea and Taiwan are of smaller capacity. It may be due to a low price that the Philippine products are being put on sale increasingly in department stores.

The parts of home electric appliances (TV, radio cassettes, etc.) are made to order from foreign enterprises stationing in the Philippines. The plants are in good order and the quality of products is good. Some of these enterprises are exporting parts to other joint venture companies that place an order with them.

Detergent and shampoo makers, who was plastic containers, complain that the plastic molding industry in the Philippines

a) do not observe the date of delivery,
b) the quality is bad, and
c) the price is high.

And some of the users of plastic containers are inclined to mold plastics in their plants. Philppinas Kao says that they can make the containers about half the price. As a reason, they cite (1) bad yield, and (2) difficulty of obtaining the raw material resin, Philippnas Kao is using 1,000,000 tons of containers a month, of which one-third is their own products and they buy the remaining two-thirds. They have a plan to switch all the containers to their make.

(3) Problem in the Investment

The plastic molding industry is being run mostly on a small scale in the Philippines as in Japan. They are

a) short of funds,
b) import duty of the molding machine is high,
c) it is unable to obtain resin steadily, and
d) the metal molding industry has not yet been developed.

And the products have no competitiveness except the parts to be used in home electric appliances. Hence, the Philippine products are liable to lose ground in the competition with NIEs'products.

The molding technique does no longer require a highly advanced technique (for example, the bottle molding can be done in about two weeks and the machines can be operated after two-week training. This is the case with Philippinas Kao.) Regarding a) to d) above, it may be necessary for due government to take some measures, and in the case of c), resin is being imported, for which some counter measures must be taken as quickly as possible.

In case plants are located in EPZ and import the raw material without tax and the products are exported, it will be advantageous when aboundant labor power is taken into account. Also, the demand in assembly makers of automobile and home electric appliances is on the increase. Hence, there may be enough room for further investment.

4.6 Proposed Industrial Mix

(1) Geographical Features of the Industrial Estate

The projected industrial estate is located some 35km south of Metro Manila and about 50-minute ride. The location has the following features.

1) Access: South Express way via Carmona or Coastal Road Via Zapiote and the main access roads to Manila.

2) Water : Industrial water of 85m^3 can be supplied per hectare.

3) Electricity: Electricity of 400kw can be supplied per hectare, which exceeds the standard (about 250kw) of the ordinary industrial estate.

4) Environmetal Control: The water quality criteria of River Ylang Ylang, which runs adjacent to the industrial estate is Class B.

5) Labor Power: A total population of the Province of Cavite in 1987 is 1,084,842, of which the labor population (15 to 64 years of age) is 618,381. The labor power outside Metro Manila can also be used.

6) Topography : As this industrial estate is located in a hilly area. There is some undulations.

7) Others: Although the estate is near Metro Manila, it belongs to Region IV, the investment incentive area.

There being many industrial estates around, it is possible to make a linkage with other makers.

Besides Manila Port, the estate is situated near Batangas Port, which has been developed as an international port.

(2) Region Industrial Policy

According to the Trade and Industry Development Medium-Term Plan (1989 - 1992), which announced by the Department of Trade and Industry (DTI), the following industries have been taken up as the important industries to be fastered in Region IV including Cavite Province.

1) Garments Industry

The production, especially of the export-oriented garments, is encouraged. As a measure to assist the industry, The intra-provincial and inter-regional subcontracting program has been boistered.

2) Food Processing Industry

This is aimed as making processed foods, making use of agricultural and marine products in the region. For example vegetable processing at Laguna, Marine products processing at Cavite and Batangas. The construction of cold storages will be made with the purpose of extending assistance to the food processing industry.

3) Gifts, Toys and Housewares

Marble craft, stonecraft, stuffed toy, paper-based products Christmas decos, etc. To foster the industry, there must a plan to construct a training center and crafts villages.

4) There are also such promising items as wood furniture in Aurora, rattan furniture in Palawan, artwork in Rezal, and metalworking, footwear, etc.

5) As far as Cavite Province is concerned, the following can be cited as the industries to be encouraged.

a) Manufacture of electronic components and apparatus, computer and other data processing.

b) Manufacture of professional, scientific measuring and controlling equipment.

c) Manufacture of fabricated metal products, machinery and equipment.

d) Rubber and plastic products.

e) Manufacture of Wearables.

For the purpose of fostering the industry in Region IV, DTI has put aside the following amount of money covering 1988 to 1992, which totals P.117.01B., the breakdown of which is as below.

Year	Value of Investment
1989	P. 13.82 B
1990	P. 25.22 B
1991	P. 34.85 B
1992	P. 43.32 B

(3) Industrial Mix in the Industrial Estate

The desirable way of mixing the industries that will be allowed to locate in the industrial estate may be the following, when the conditions cited earlier are taking into account:

1) Electronic products such as semiconductor devices and components, and also electrical machinery.

2) With the purpose of utilizing the geographical advantage of the proposed site, that is close to Metro Manila and the South Expressway where are concentrated of existing factories such as automobile, electric, and food processing.

a) Their related component parts and accessories industry.
b) Machinery and metal equipment manufacture.
c) Packaging materials industry.

3) Export-oriented garment manufacture.

4) Export-oriented gifts, toys, houseware.

It is desirable to have them compose the core in the site. However, if air and/or noise pollution is feared to occur from the above mentioned supporting industry such as machinery and metal equipment, it is not always desirable to place in the mixing of 1) and 2) in the same place. Of course it depend on the type of industry, for instance in the mixing of heat treatment or metal pressing factory and the precision or electronics factory is undesirable. It mixing the industries, this must be taken into consideration.

5. FORMULATION OF INVESTMENT PROMOTION STRATEGIES

5. Formulation of Investment Promotion Strategies

5.1. Existing Industrial Estates

(1) Definition

The Housing and Land Use Regulatory Board of the Philippines stipulated the design standards and guidelined on the industrial estate. It is defined that the industrial estate, which is to be sold, should have an area of more than 5 hectares and be furnished with utilities such as roads, water supply, power supply, drainage, sewerage, etc. Incidentally, a site having an area of 1 to 5 hectares, provided with the utilities equivalent to those of the Industrial Estate is called 'Industrial Subdivision'(IS) and is distinguished from I.E. Starting from 1989, BOI has given investment priority to the development of industrial estates with an area of over 50 hectares fixing as the standard.

In the Philippines there are also four Export Processing Zones (EPZ), which are managed and controlled by the Export Processing Zone Authority (EPZA), which was founded in 1972 by Presidential Decree No. 66. Besides there are three Special Processing Zones which specific enterprises use for capital intensive projects. With regard to the facilities and scale, these zones are similar to, or surpass, the level of other IE, although developers differ.

The industrial estates to be taken up in this report are concerned with IE and EPZ.

(2) Major Developer

Table 5.1 shows the industrial estates in the Philippines, which became clear during the present field surveys. These states are all in operation presently. In addition, more than five industrial estates, which were learned from newspapers and from other sources of information. Roughly speaking, there are two kinds of the industrial estate in the Philippines: one is the industrial estates developed and

Table 5.1 Industrial Estates in the Philippines

As of July 1989

Name	Implementing Agency	Location				Total Area	Industrial Area	For Sales (as of July)		Expansion (Period)	Water	Electrical Power (Supplies by)
		From Makati	City	Province	Region			Available	Price (P/m²)			
1. Baguio City E. P. Z.	EPZA	4.5 (hr) by car	Baguio	Benguet	I	66 (ha)	42 (ha)	21 (ha)	4.70 for rental per month	— (ha)	1M Gallon tank x 1	10,000KVA x 2 69KV/13.8KV (NPC)
2. Bataan E. P. Z.	EPZA	3.0	Mariveles	Bataan	III	1,209	345	240	3.00 for rental per month	—	2,48 Gallon Capacity dam	10,000KVA x 8 69KV/13.8KV (NPC)
3. Sapang-Palay I. E.	NHA	1.0	Sapang-Palay	Bulacan	III	19.5	16.7	7.5	200 for sale	—	deepwell	no sub-station (MERALCO)
4. Meycauayan I. S.	NHA	1.0	Meycauayan	Bulacan	III	24	15	9	600 for sale	—		(MERALCO)
5. Luisita I. P.	TDC	2.5	San Miguel	Tarlac	III	120	96	96	250 for sale	—		(MERALCO)
6. F. T. I. Agro-Commercial	FTI	0.25	Taguig	Metro Manila	NCR	120	51	0	80 for rental per year	—	150,000 gallon tank x 1 700,000 gallon reservoirs x 2	34.5KV/13.8KV (MERALCO)
7. YFP Industrial Area	P. I. A.	0.25	Taguig	Metro Manila	NCR	50	46	6	3.50 for rental per month	—	deepwell (300ft)	50KV/34.5KV (MERALCO)
8. Dagat-Dagatan I. E.	NHA	0.75	Navotas	Metro Manila	NCR	30	25	0	1,000 for sale	—	deepwell	no sub-station (MERALCO)
9. Bagong-Silang I. E.	NHA	1.50	Bagong Silang	Novaliches	NCR	6.4	6.0	6.0	300 for sale	120?	deepwell	no sub-station (MERALCO)
10. Dasmarinas I. S.	NHA	1.00	Bagong Bayan	Cavite	IV	12.8	12.8	4.5	200 for sale	—	deepwell 60,000 gallon tank x 18	no sub-station (MERALCO)
11. Canlubang I. E.	LEDC	0.75	Canlubang	Laguna	IV	400	340	10.5	820 for sale	200 (ha) 1990.8～	deepwell 60-150ft	34.5/20KV (MERALCO)

Name	Implementing Agency	Location				Total Area	Industrial Area	For Sales (as of July)		Expansion	Water	Electrical Power (Supplies by)
		From Makati	City	Province	Region			Available	Price (P/m²)	(Period)		
12. Carvite-Carmona I. E.	TLRC	0. 50	Gen. M. Alvarez	Carvite	IV	53	45	0	250 for sale	— —	50. 000 gallon tank x 1 deepwell x 2	34. 5KV
13. Carmona I. E.	NHA	0. 75	Gen. M. Alvarez	Cavite	IV	9. 7	9. 7	8. 7	90 for sale	7. 2	deepwell	no sub-station (MERALCO)
14. Cavite EPZ	EPZA	1. 0	Rosario	Cavite	IV	275 (ha)	75 (ha)	0 (ha)	3. 60 for rental per month	70 1990. 3～	100. 000 gallon tank x 2 1M gallon reservoir x 1	34. 5KV (MERALCO)
15. New Cavite I. C.	SLIC	1. 0	Gen. Trias	Cavite	IV	44	39	13	210 for sale	—	20. 000 gallon tank x 1	(MERALCO)
16. First Cityland Heary I. C.	CDC	1. 0	Dasmarinas	Cavite	IV	24	24	0	—	—	75. 000 gallon tank x 1	(MERALCO)
17. Mactan EPZ	EPZA	1. 10 by plane	Lapulapu	Cebu	VII	119	57	9	4. 20 for rental per month	62 1990. 1～	30. 000 gallon tank x 1 1M gallon reservoir x 1	10. 000KVA x 2 69KV/13. 8KV (NPC)
18. Phividec I. E.	PIA	1. 70 by plane	Tagaloan	Misamis Oriental	X	3. 000	1. 580	400	5. 18/yr. for rental	1000 1990～	several sources	Hydro electric in M. Oriental
19. Macabalan I. E.		1. 50 by plane	Cagayan de Oro	Misamis Oriental	X	13	11	0. 5	4. 7 for rental	—		(MERALCO)
under planning												
Canlubang : MITSUBISHI		0. 75	Canlubang	Laguna	IV	344	152			1990～		
Canlubang : C. ITO		0. 75	Canlubang	Laguna	IV	200	150			1990～		
Dasmarinas : Marubeni		1. 00	Dasmarinas	Cavite	IV	238	150			1990～		
Science Park I. E. : SPPI		0. 75	Cabuyao	Laguna	IV	143				1989～		
Engineering I. E. : AG & P		1. 50	Bauan	Batangas	IV	160				1989～		

EPZA: Export Processing Zones Authority
FTI : Food Terminal Inc.
PIA : Phividec Industrial Estate
LEDC: Laguna Estate Development Corp.
CDC : Cityland Development Corp.
SLIC: State Land Investment Corp.
TLRC: Technology and Livelihood Resource Center
TDC : Tarlac Development Corp.
NHA : National Housing Authority

managed by the Government-sponsored agency including EPZA and the other by private developers. What differs most between the two is that the public bodies lease the land, while the private organizations frequently adopt a sellout system. The companies being run by foreigners or the companies, more than 41% of their capital is owned by foreigners, are constitutionally prohibited from acquiring land. Only Filipino citizens or corporations, at least 60% of their capital is owned by Filipinos, may own land, develop natural resources or operate public utilities. Hence, the industrial estates so far developed officially and privately have all been done by Philippine capital.

1) Export Processing Zone Authority (EPZA)

The largest organization, that develops and manages the industrial estates, is the Export Processing Zone Authority mentioned earlier. Since it was set up in 1972, the Authority has developed four fully operational zones and has designated three industrial sites as the special export processing zones. The four EPZs have not necessarily been fully utilized, but what is remarkable in the use of zones during the past year is an increase of enterprises from Japan, Taiwan, and Hong Kong. Some of the zones are almost fully occupied, and an expansion plan is under way.

2) National Housing Authority (NHA)

This is a public organization, which was established for the purpose of supplying houses to low-income earners. NHA's primary object is the supply of houses, but is also developing commercial and industrial facilities concerned. In this way, NHA is engaged in the regional development.

Six industrial estates are being developed at present all of which exist in Luzon. The area of one developed estate is relatively small, and no consideration is given to the

facilities intended for the export-oriented enterprises NHA's principal object of developing industrial estates is to give job opportunities and income generating activities to the people in the low-income bracket. No restriction, therefore, is imposed on the enterprises that come to settle in the estates.

3) Phividec Industrial Authority (PIA)

The public organization, that can be cited thirdly having the purpose of developing industrial estates, is the Phividec Industrial Authority (PIA). PIA was founded in August 1974 by Presidential Decree No.538 as a subsidiary of the Philippine Veterans Investment Development Corporation (PHIVIDEC) to carry out the government policy of establishing well-planned industrial areas with appropriate infrastructure so as to encourage, promote, and sustain the economic and social growth of the country. The Authority has so far developed and operated two industrial area. The area having about 3,000 hectares, which was first developed, is located in Marin palities of Tagoloan and Villanueva in the Province of Misamis Oriental, The area developed secondly having a 50-hectare land is located in Taguig, Metro Manila.

4) Food Terminal Inc.

FTI formally commenced its operation in March 1974. It has expanded its business from whole sale of commodities, storage business and food processing to retail sales, transport service and real estate business. FTI has developed a 120-hectare industrial estate along the South Express way, leasing it to 58 companies. FTI is the only industrial estate in Metro Manila, where investors can set up then projects enjoying tax exemption and can import capital equipment free of tax under the 'Industrial Location Policy of the Board of Investments'. Because of being located in Metro Manila, FTI is not only engaged in

food processing but also in running a factory manufacturing electronics, electric appliances, and the like.

Meanwhile, the Government of the Philippines is considering the privatization of FTI.

5) Luguna Estate Development Corporation (LEDC)

LEDC is a 100% private company, and is one of the most powerful real estate developers in the Philippines. LEDC has developed a 340-hectare fully integrated industrial estate in Canlubang and also plans to develop another 200-hectare estate in the adjacent land. In the estate already completed, 53 companies are operating their businesses, and 60% of them are joint venture companies with foreign investors. The Canlubang Industrial Estate is thought to be the most fully equipped estate among the industrial estates which were developed and operated by the privated sector.

(3) Supply of Industrial Estates

As of the end of July 1989, a total area of the land allocated for industrial estates in the Philippines reaches approximately 3,000 hectares including EPZ (See Table 5-2).

Of the above, an area of 832 hectares is still vacant without residents. In selling industrial estates in the Philippines, developers do not make land preparation and sell them after providing only such infrastructure as roads, sewerage etc. The infrastructure is provided only when required, and most of the 832 hectares remaining unsold have not yet been furnished with infrastructure. This merely means that land has been secured.

The industrial estates under plan, which were made public, covers an area of about 1,200 hectares, for most of the spring of 1990. When the industrial estates, which are being

planned, are seen by region. Phividec IE in Region X has the largest area. However, Region IV centering around Cavite, Luguna Province, is expected to have more industrial estates. In case the industrial estates under plan are included, Region IV will come to have as many as 12 industrial estates in and after 1990. Table 5.2 shows the situation as of the end of July this year. As of the date, most of the industrial estates in Region IV and NCR area have already been sold out with only less than 10% remaining as the vacant area. Also Region VII has comparatively small vacant lots thanks to a high popularity of Mactan EPZ this year (There are some plots of land, which were sold out, but no plants have yet been constructed. Therefore, even if the land is sold, it does not mean that plants are under operation there.).

Table 5.2 Industrial Estates by Region

(As of July 1989)

Region	No. of IE (incl. EPZ)	Industrial Area (ha)	Available (ha)	Expansion (incl. planned) (ha)	Total Supply
I	1	42	21	0	21
III	4	472.7	352.5	0	352.5
NCR	4	128	12	120	132
IV	7 + (5)	543.5	36.7	1,032.2	1,068.9
VII	1	57	9	62	71
X	2	1,591	400.5	1,000	1,400.5
		2,836.2	831.7	2,214.2	3,045.9

Note : For location of regions, refer to Figure 5.1

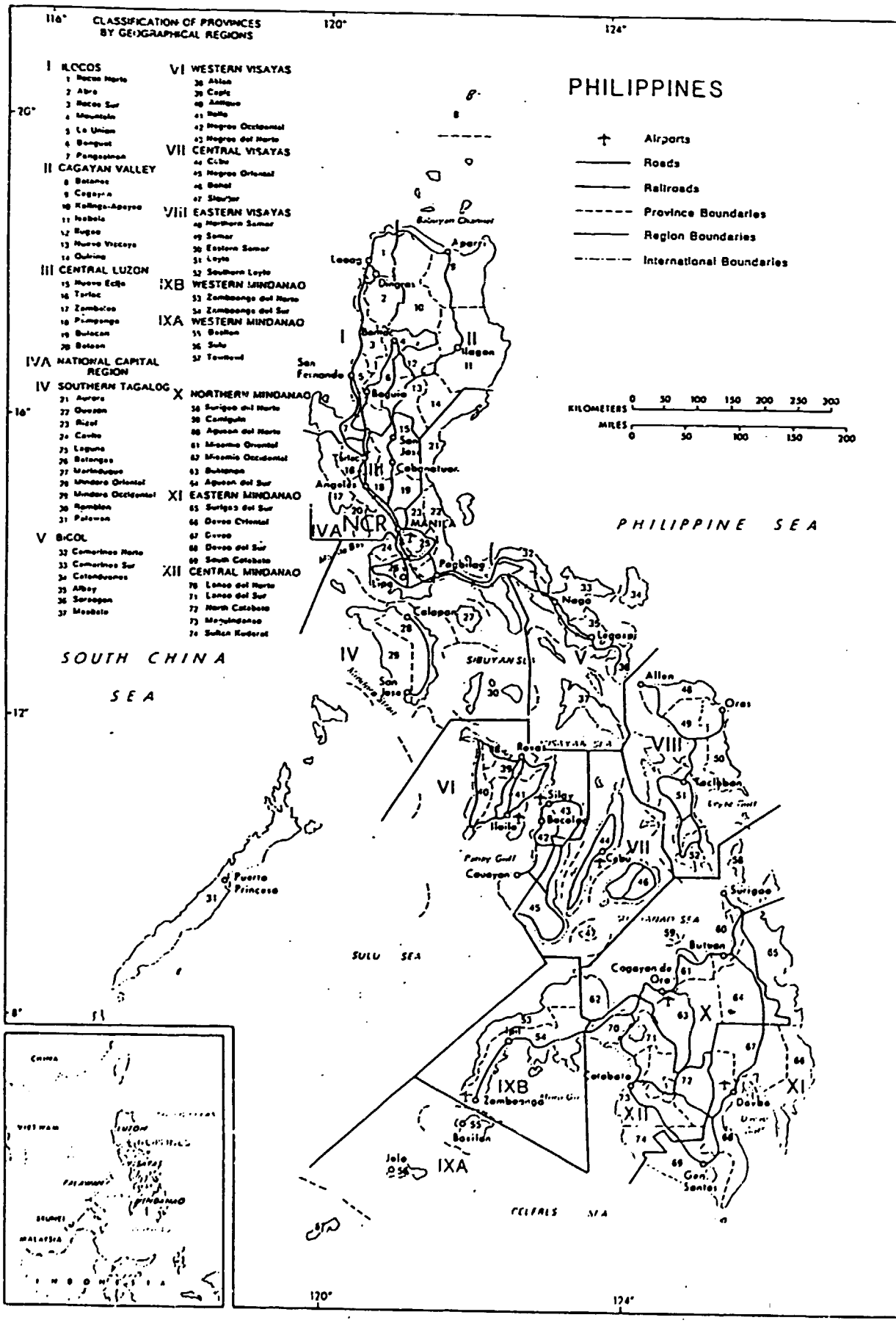
5.2 Industrial Land Demand in the Metropolitan Manila Region

When we look upon a motive of tenant companies in the existing industrial estate and a feature of industrial estate with high popularity in foreign investors since 1987, following matters are pointed out.

(1) There has been increasing number of the export-oriented and foreign enterprises.

(2) In the industrial estates with high popularity among foreign investors, a fact of less labour dispute and to be equipped minimum number of direct telephone lines.

Figure 5.1 Boundary of Regions



(3) A size of the owned estate by each tenant companies, neither in EPZ nor the line of business there are big differences. Average land size by manufacturing company in Cavite Province is about 4 ha. and in the Canlubang IE where is most popular for foreign investor in recent, average land size owned by a tenant company is about 5 ha.

(4) An industrial estate located at the outskirts of Metro Manila (NCR) shows high tenant ratio despite of high sales price as compared with other IE.

The demand for industrial estates has rapidly expanded this year. Even in EPZ alone, the number of approvals from January to June this year has increased as many as three-folds and 3.56 times in terms of the investment cost over that of the corresponding period of last year.

This trend is also applicable to the industrial estates developed by the private sector. The Canlubang Industrial Estate, which represents the private industrial estates, has raised its selling price this year two times as much as that of last year, but is in good demand, with only 10 hectares remaining unsold.

The demand for industrial estates is generally good, but the estates, that are not well furnished with transport and communications services and power supply are still vacant without residents. There being an increasing number of the export-oriented enterprises the industrial estates, which are convenient for the export and import businesses, are in large demand.

BOI has a plan to regionalize industry and has partially cut down the incentives for the investment in the Metro Manila area. Consequently, it is expected that new investments will concentrate in such regions that are conveniently located near Manila and easily make contact with foreign countries.

5.3. Proposed Facilities in the Proposed Industrial Estate

5.3.1. General Layout

The general layout is drawn out in consideration of the following condition;

1) The industrial plot has two (2) parts in general; one is EPZ (Export Processing Zone) and another is GIZ (General Industrial Zone). The total area of industrial lot in EPZ is about 80% of the whole industrial lot. It is desirable to locate the GIZ in the north side land facing to Dasmarinas-Trece Martires road to avoid entry of outsiders into EPZ as much as possible.

2) Requirement of industrial lot size is presumed as below, classifying the unit lot size into 4 types.

Lot size	Ratio (in area)
1) 0.3 to 1.0 ha	about 30%
2) 1.1 to 2.0 ha	20%
3) 2.1 to 5.0 ha	25%
4) 5.1 to 10.0 ha	25%

The numbers of factory entered into the estate are estimated to be 80 to 100 based on the above assumption.

3) The industrial estate is required to be established only inside the NDC's own land in Dasmarinas. Out of 32 blocks of land, 19 blocks shown in Table 5.1 are utilized for the project this time, since the remaining blocks are considered to be unsuitable for development in view of their steep land surface.

Note: a) The cadastral map referred this time is not a map precisely scaled so that there is a possibility that some part of project boundary is not exactly conform to the ownership boundary. Final confirmation is necessary in the detailed design stage.

Table 5.3 LIST OF NDC's LAND FOR DEVELOPMENT

No.	LAND NO.	Area (m^2)
1.	5947-B-1	16,161
2.	5947-B-3	103,427
3.	5947-B-4	25,331
4.	3863-D	95,087
5.	3863-B	75,996
6.	8363-A	80,792
7.	3862	333,204
8.	3862-B	333,201
9.	6327	114,132
10.	6327	114,130
11.	6906-A	17,827
12.	5949-R	53,017
13.	5949-Q	54,050
14.	6890	57,677
15.	6891	54,068
16.	5949-P	52,931
17.	6901-B	27,727
18.	6892	58,444
19.	6893-B	50,000
	Total	1,717,202 m^2

b) Even in the land which is clearly identified to be NDC's own, steeply sloped land along the rivers is excluded from the development area. These land will be utilized as green belt or spoil bank.

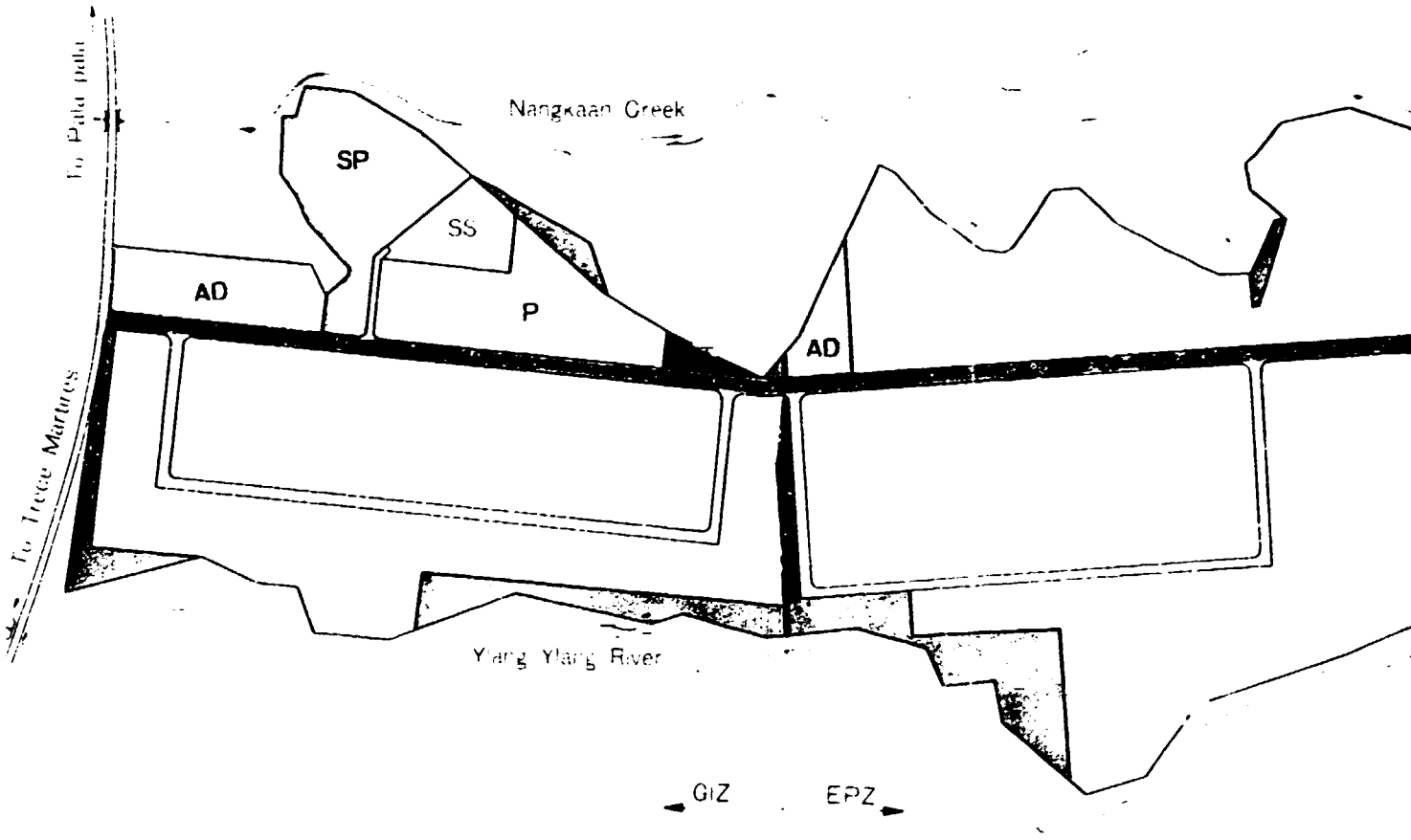
4) Common facilities established in the project area are administration area, customs in EPZ, sewerage system with treatment plant, water supply facilities, power distribution line with sub-station, communication facilities with exchange office, green belt and the park. No residential area is considered in the project area.

Fig.5.2 shows general layout of the estate, and the land use in the area is classified as follows:

a)	Industrial plot	117 ha (75%)
b)	Common utilities	
i)	Road including side drain	14.3 ha
ii)	Administration area	2.3 ha
iii)	Customs area	0.9 ha
iv)	Sewerage plant	4.0 ha
v)	Water supply tank	1.0 ha
vi)	Park and green area	13.8 ha
vii)	Sub-station and telecommunication office	1.3 ha
	Sub-total	37.5 ha (25%)
	Total	154.5 ha (100%)

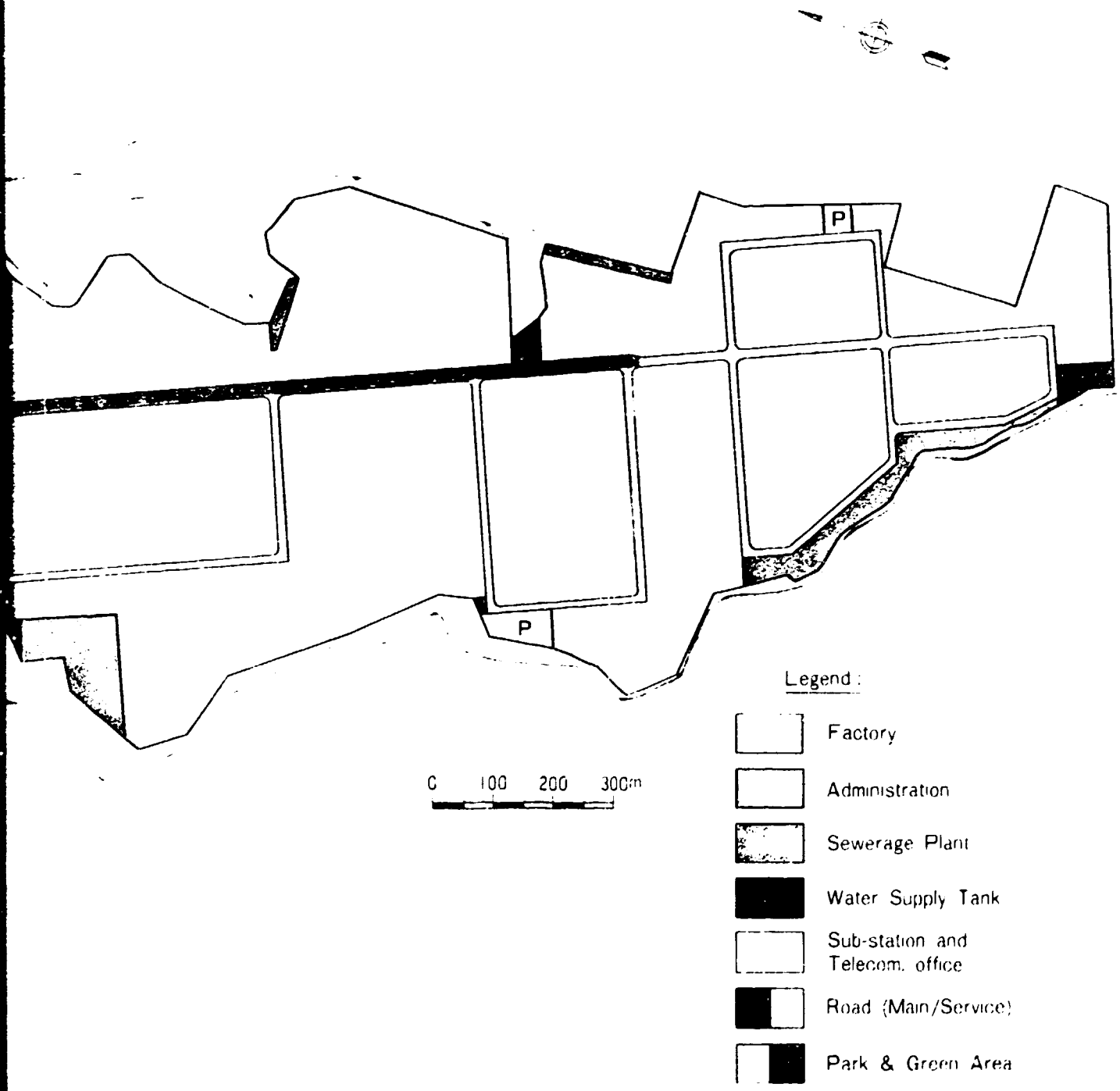
A sample of lotting plan of the industrial plot, for which the assumed lot size requirement (above item 2) is incorporated, is illustrated in Fig. 5.3.

Fig. 5 2 GENERAL LAYOUT OF DASMARIÑAS IN



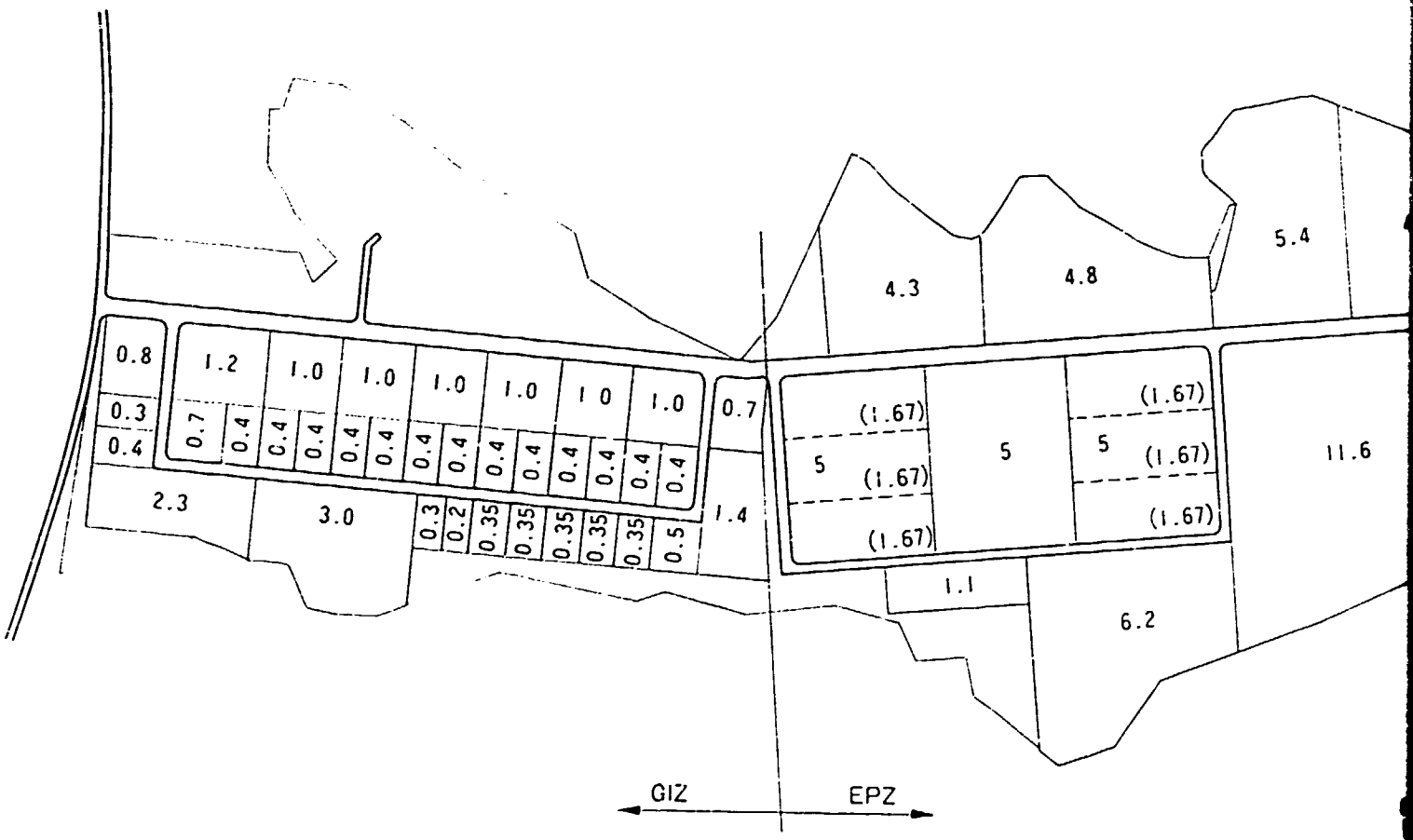
SECTION 1

AYOUT OF DASMARIÑAS INDUSTRIAL ESTATE



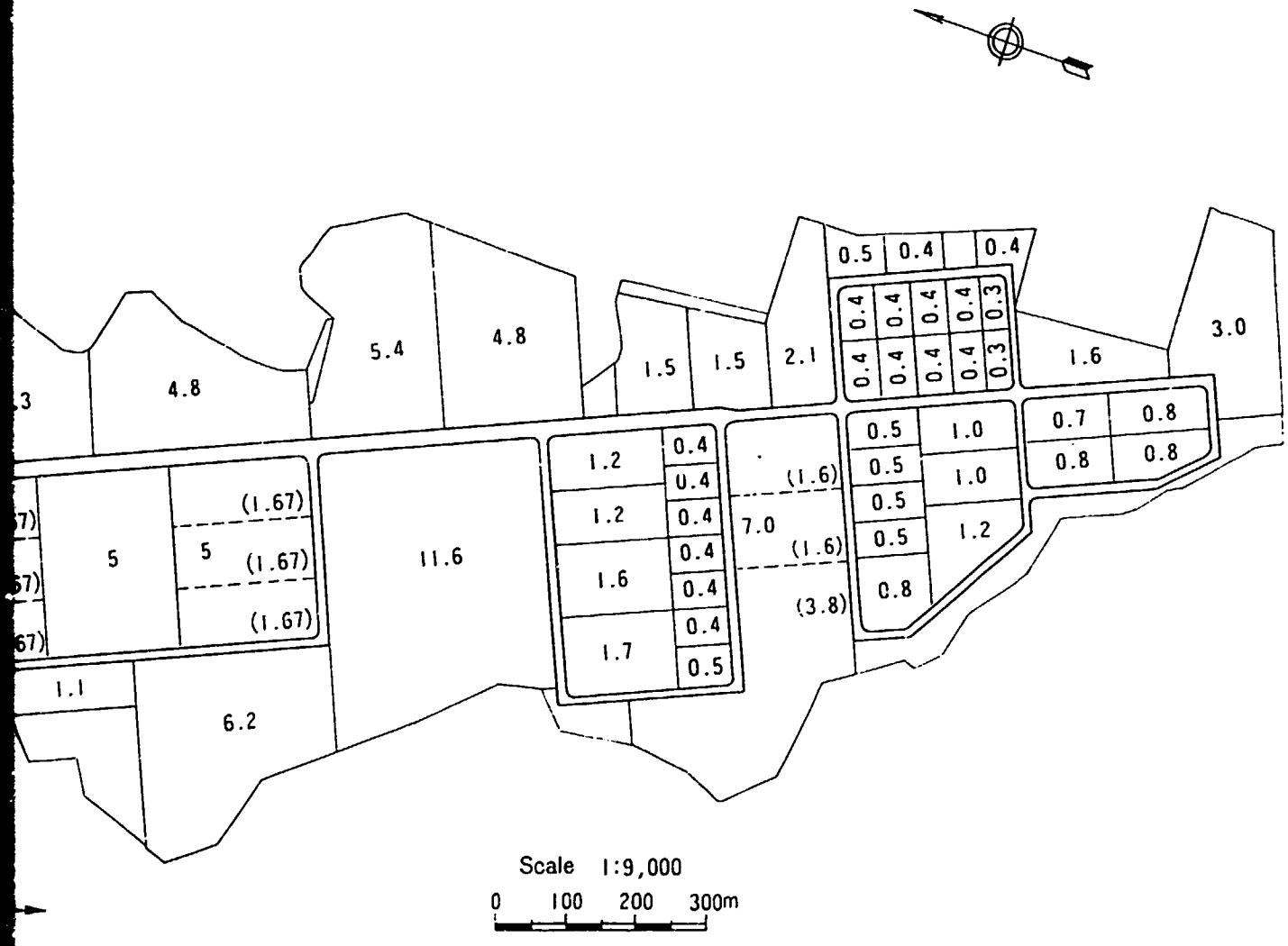
SECTION 2

Fig. 5.3 SAMPLE LOTTING PLAN OF INDUST



SECTION 1

LE LOTTING PLAN OF INDUSTRIAL PLOT



Note : Figures on the map show land area in hectare.

SECTION 2

5.3.2. Land Prepararation

The following two (2) kinds of land preparation plan are studied.

1) Case-I (Complete levelling)

Diving the project area into 20 blocks and keeping difference of the formation levels between neighboring blocks within 5 m, the land levelling work with maximum gradation of 1% is carried out in every blocks.

The earth work volume is estimated as follows:

Excavation : 1,700,000 m^3

Embankment : 1,400,000 m^3

2) Case-II (Rough grading only)

In this case only decapitating hill-tops and filling valley bottoms in the project area are carried out, therefore, the present undulations remain as it is in the most of the area.(Refer to Fig. 5.4) This methods is generally adopted in Philippine, however, the substantial grading and levelling works by each factory owner is necessary to be carried out inside his land according to his requirement.

The earth work volume is estimated as follows:

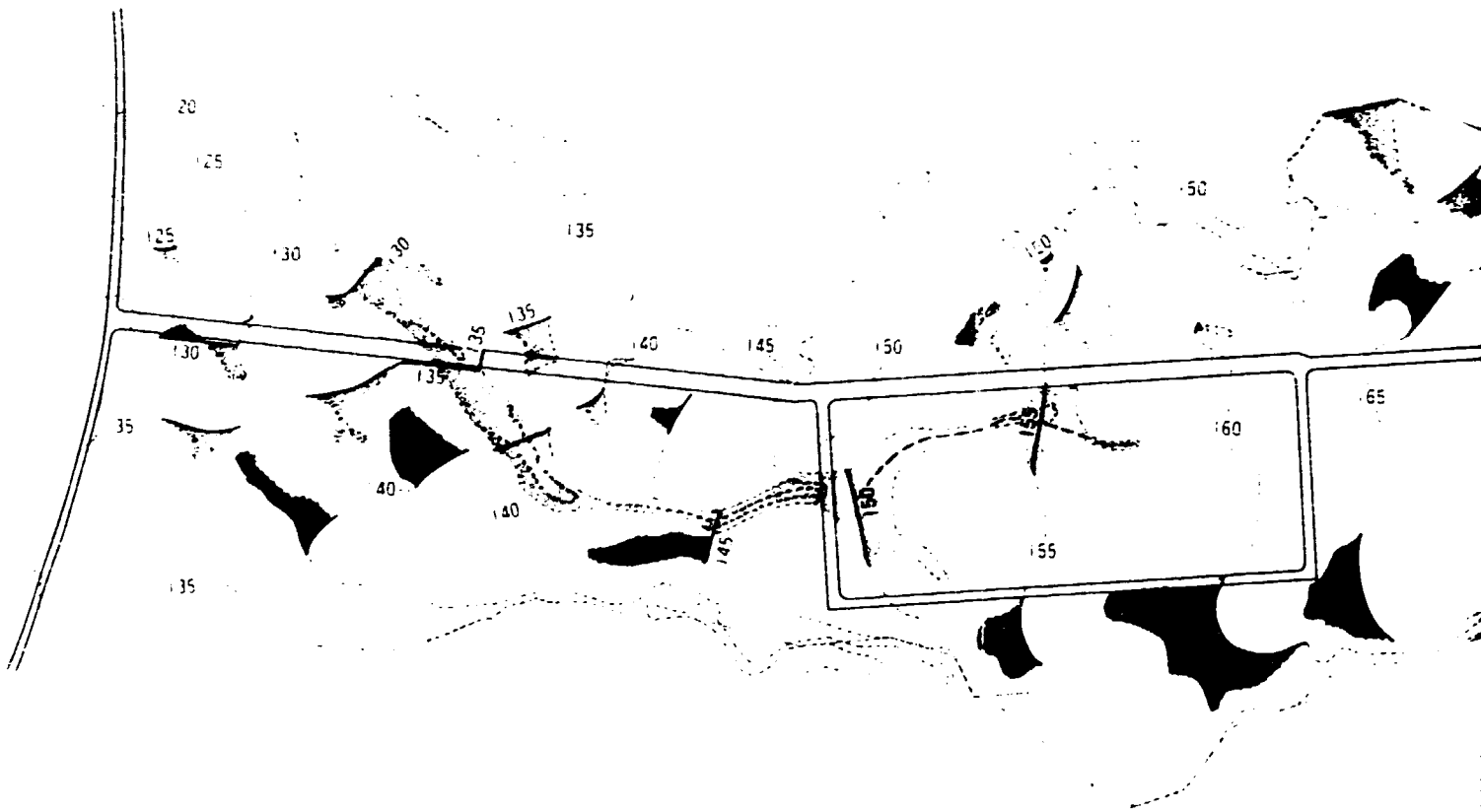
Excavation : 600,000 m^3

Embankment : 500,000 m^3

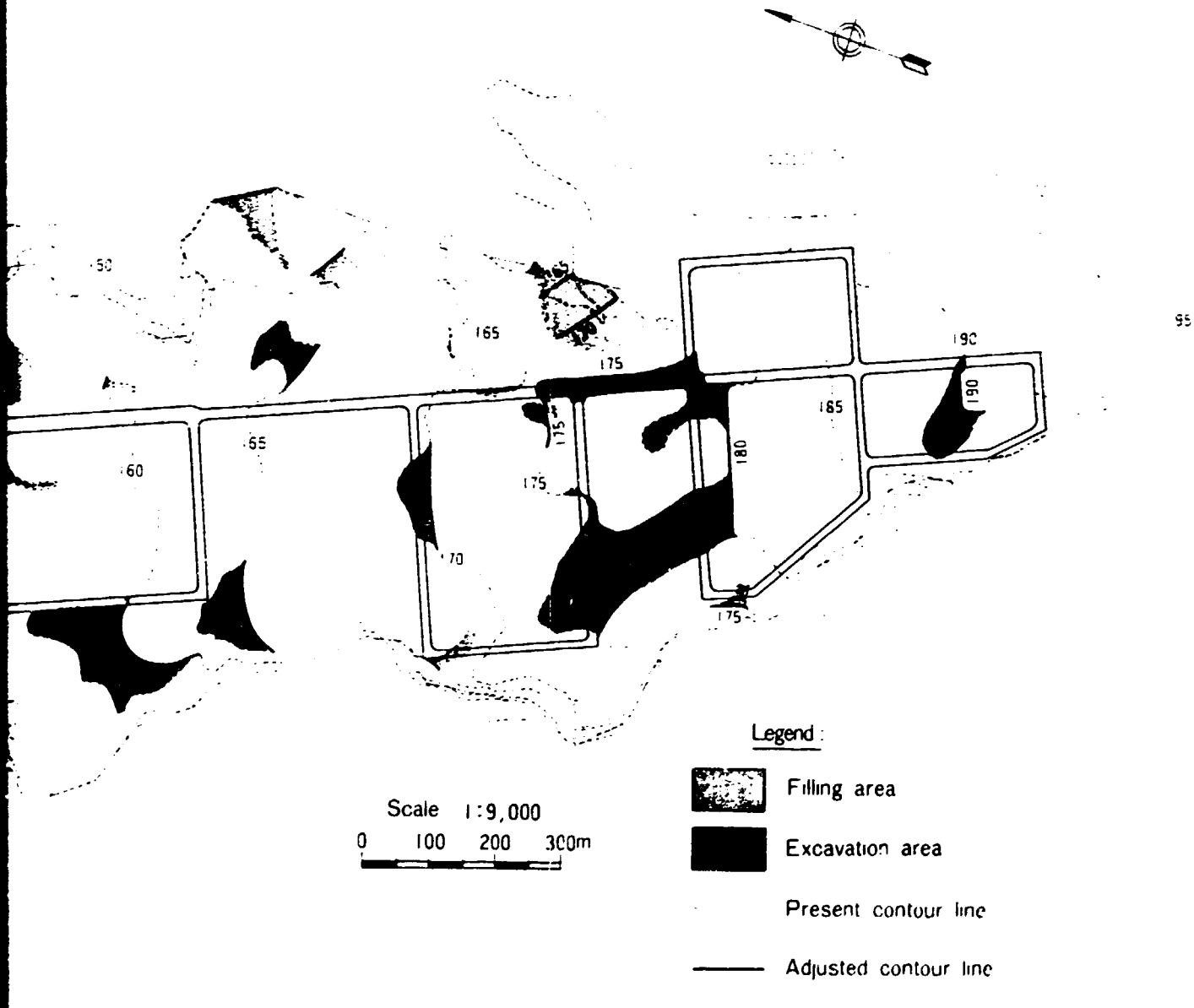
Note : In the above work quantity, excavation volume is about 20% larger than embankment volume because of possible shrinkage of embanked materials after compaction and contain of unsuitable material for the embankment is considered.

The above Case-II is finally selected in this study and the expense for the substantial grading work mentioned above is necessary to be borne by each factory.

Fig.5.4 LAND FILLING AND EXCAVATIO



LING AND EXCAVATION PLAN



SECTION 2

To drain out ground water seepage in the filled valley which might be occured, perforated concrete pipes of 30 cm dia. are planned to be laid in the valley bottom.

5.3.3. Internal Road

The internal roads consist of main road and service road which typical cross sections are shown in Fig.5.5. The road network is so designed to make smooth traffic flow and easy access to every lot in the estate.

The major specifications of the road are as follows;

		Main road	Service road
1)	Nos. of lane	4 lanes	2 lanes
2)	Lane width	3.5 m	3.5 m
3)	Pavement width incl. shoulder	16 m	9 m
4)	Overall width incl. drainage	24 m	16 m
5)	Pavement	Asphalt concrete	Asphalt concrete
6)	Max. grade	4%	4%
7)	Total length	2,150 m	5,700 m

5.3.4. Drainage System

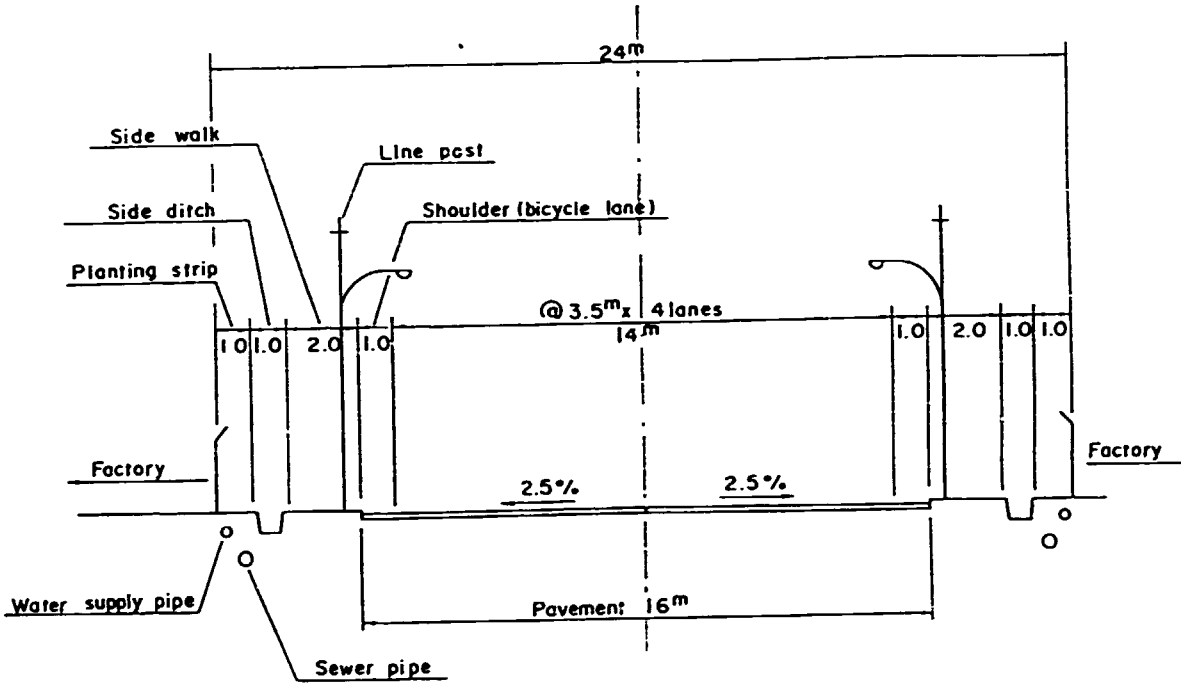
The rain water in the estate is once collected in the concrete made open ditches running along the roads and discharged to the Ylang Ylang river and the Nangakan creek. The discharge outlet will be placed at three (3) or four (4) points each for the both river.

The each factory shall make his own arrangement so as to drain the rain water in his land to the ditches provided by the developer.

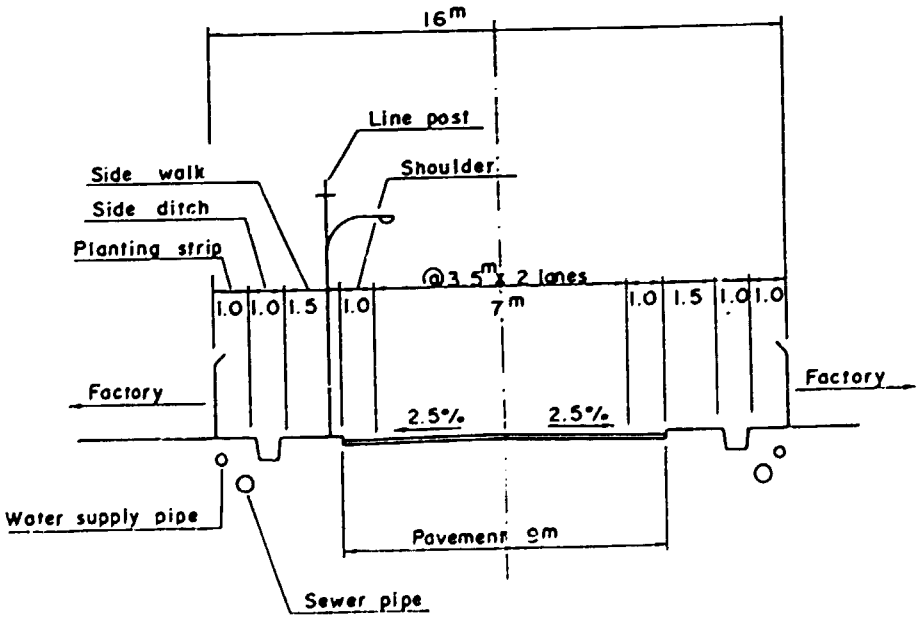
The total length of the ditch having average section of 0.5 m wide x 0.5 m high is estimated at about 15,000 m approximately.

Fig. 5. 5 TYPICAL CROSS SECTION OF ROADS

A. Main Road



B. Service Road



(Scale 1 : 200)

5.3.5. Water Supply System

Water demand for the whole estate is estimated at about 10,000 m^3/day (85 m^3/ha) at the full development stage in consideration of type of industries assumed to be relocated to the estate.

Possibility of abundant water supply to the estate is hardly expected, therefore, operation of water consuming industries such as food, textile mill and chemicals is considered to be not suitable in any case.

The required nos. of production well is estimated at 13 nos. with the following calculation;

$$N = W \times f \div 24\ hr \div 3{,}600\ sec \div Q$$
$$= 10{,}000 \times 1.1 \div 24 \div 3{,}600 \div 0.01 = 12.7 \fallingdotseq 13\ nos$$

where;

W (water demand)	:	10,000 m^3/day
f (leakage factor)	:	0.1
Q (Safe yield of well)	:	0.01 m^3/sec (10 lit/sec)

Judging from pumping test conducted this time, it is unavoidable to put some wells outside of the project area. The realistic well arrangement is tentatively assumed as below;

1) Out of 13 nos. of the deep well, seven (7) nos. will be constructed in the project area, allocating them to the east and west estate boundaries facing to the Ylang Ylang river and Nangkaan creek with minimum distance of 600 m to avoid well interference.
2) Remaining six (6) wells will be necessary to be arranged outside

of the estate. It will be practicable to request Dasmarinas Water District to construct these wells and make daily water supply to the estate, considering possible difficulty of land acquisition for the wells and pipeline by the developer. According to LWUA, the water charge will be 5 to 7 Peso/m^3 in this case.

The main future of the production well is outlined as below;

a) Borehole : 400 mm dia.

b) Casing : 250 mm dia.

c) Depth : 200 m (Blind 140 m, Wire-wrapped screen 60 m)

d) Submersible motor pump

- Capacity : 1.0 m^3/min
- Total head : 100 m (Pump installation depth 55 - 60 m)
- Motor output : 30 kW

It is recommended to continue the pumping test during even the construction stage with newly constructed wells to observe long-term attitude of ground water to determine the final well arrangement.

The water lifted up from the wells is delivered to the ground water tanks constructed in three (3) places in the estate, then pumped up to elevated steel tanks which assure minimum static water pressure of 15 kg/cm^2 in every water taps. Each ground water tank, which main role is to catch up with the peak water demand, has 1,800 m^3 capacity equivalent to about 12 hours average water consumption. The water is distributed to the consumers, after chlorination treatment, through steel pipeline of 250 mm and 150 mm dia. which are laid along the main and service roads respectively.

Since the supplied water is not purified by the plant, the consumer should make such treatment according to their requirement, if necessary.(Refer to Table 4.4 for water quality of the test well.)

It is required to obtain water right from LWUA for utilization of ground water and river water before development of the water recources.

5.3.6. Power Supply System

The total power demand of the estate is estimated to be 60 MVA (45 MW) at the full development stage, assuming unit area demand is about 400 kW/ha.

The following facilities is necessary to be constructed for power supply to the estate from the existing power network.

1) Transmission line
   a) Voltage : 115 kV
   b) Section : From Dasmarinas sub-station to new sub-station in the estate
   c) Capacity : 100 MVA (incl. 40 MVA reserve for possible future expansion)
2) Sub-station
   a) Voltage : 115 kV/34.5kV
   b) Capacity : 60 MVA (Final requirement)
   c) Location : As shown in Fig.5.1

3) Distribution line
   a) Voltage : 34.5 kV
   b) Capacity : 20,000 kVA
   c) Length : 11 km (along main and service roads)

There are two ways to get the supply of power; i.e. from MERALCO or from NPC, as compared below.

	MERALCO	NPC
1) Facilities provided, operated and maintained by MERALCO	- 115 kv T/L - Sub-station	- 115 kV T/L

	/NPC	- 34.5 kV D/L	
2)	Initial construction cost	To be lent by developer (with 10% interest)	- do - (without interest)
3)	Point of power delivery	1ry side of step-down Tr. of the factory own in principle	1ry side of Tr. in Sub-station
4)	Power tariff	1.4-1.6 Peso/kWh	0.9-1.0 Peso/kWh

Note: i) Power tariff mentioned above is not quoted value for the estate by MERALCO/NPC but only the value generally prevailing.

ii) In case of direct supply from NPC, special waver from MERALCO is required to be obtained beforehand, since the estate locates inside the MERALCO franchised area.

Since the point of power delivery by NPC is at the primary side of the transformer in the estate own new substation, the following activities is required to be undertaken by the developer or management firm of the estate.

1) Construction of sub-station and 34.5 kV D/L.
2) Operation and maintenance of sub-station and 34. kV D/L.
3) Collection of power charge from each factory and transfer it to NPC.

Viewed from possible developer's burden mentioned above and initial investment cost increase, it will be advantageous to get power supply from MERALCO.

Beside the power supply system, the following facilities are required to be arranged by the developer itself.

1) Street lighting (to be fixed on distribution line pole)
2) Diesel power generator for emergency, 500 kW class (for emergent power supply to common utilities only)

5.3.7. Sewerage System

The total sewerage volume from factories is estimated at about 9,000 m^3/day with the following calculation.

$$Q_s = Q_w \times (1 - f_1 + f_2)$$
$$= 10{,}000\ m^3/day \times (1 - 0.2 + 0.1) = 9{,}000\ m^3/day$$

where,

Q_s : Sewerage volume (m^3/day)
Q_w : Water supply volume (10,000 m^3/day)
f_1 : Water loss in factory (0.2)
f_2 : Infiltration rate of ground water to sewer pipe (0.1)

The sewer water from the factory is drained by the factory into receiving pits, which are provided at an average interval of about 100 m in the sewer pipeline of 250 mm to 450 mm diameter mainly laid along the internal road network. The collected sewer is delivered to the sewerage plant by gravity flow which locates in the lowest land of north-east edge of the estate, then discharged into the Nangkaan creek after treatment.

The sewerage plant having the treatment capacity of 9,000 m^3/day should be designed so as to treat the sewer upto the level required by the water quality standards enforced in Philippines for drain water control and river preservation. The upper limits of biochemical oxygen demand (BOD) and suspended solid (SS) are restrained by the above standard as below;

(unit: mg/liter)

Restraint for	BOD	SS	Remarks
1) Drain water	30	50	Protected waters, Category II; Class ~~A~~, B ~~and~~ SB)
2) River	5	60	

It is necessary to make a rule to restrain the quality of sewerage water from the factory to the certain level for the following purposes.

1) To avoid the overload of the plant
2) To avoid the disadvantage of the factory which sewer is relatively clean, but who shall share the same sewerage charge (operating cost of the plant) as others on the basis of only sewer volume.

If ~~every~~ factories treat their sewer upto national standard level by their individual treatment plant, provision of common sewerage plant becomes unnecessary theoretically. In this study, however, the common plant is planned to be introduced for the extra safety even under such condition, especially in view of poor water quality and quantity of the Ylang-Ylang river at present with which strict control of the treated sewer discharge is forced to be managed.

5.3.8. Telecommunication System

Requirement of telephone line in the estate is estimated at 400 nos., assuming that number of factory at full development stage and average line demand per factory are 100 and 4 respectively.

The telecommunication system to be introduced in the estate should have the following functions;

1) Direct call to Manila and overseas
2) Use of facsimile
3) Data communication

The existing facilities of PLDT in Dasmarinas is not sufficient in both its capacity and function for the estate use even after accomplishment of its expansion program, therefore, the new facilities is required to be additionally provided for the estate by PLDT.

The facility will be composed of three parts, i.e. 1) communication system between Manila and the estate, 2) exchange office in the estate, and 3) internal cabling in the estate along distribution power line. As for communication system between Manila and the estate, the following three (3) alternatives can be proposed.

1) Direct connection to Manila (PLDT, San Poloc) with micro-wave
2) Connection to the nearest PLDT toll station with micro-wave
3) Connection to Manila through Dasmarinas exchange office with cable

In this study, above item 1) is adopted, however, further discussion is required to be made specifically with PLDT to determine the most appropriate system for the estate.

Cabling work inside each factory including installation of PABX is to be carried out by each factory at his own expense.

5.3.9. Solid Waste Disposal

It is roughly estimated that volume of solid waste will be about 12,000 t/year (100 t/ha-year) at full development stage of the estate.

The following two (2) options is considered for disposal method of the solid waste:

1) Case-I

   Each factory disposes the waste at the outside of the estate at his own responsibility and expense.

2) Case-II

All the waste are collected and disposed inside the estate area with landfilling method at actual cost basis borne by each factory. Construction cost for the necessary facilities for about 15 year's operation, which include coffer dam, impermeable sheet and treatment plant for seepage water, is estimated at 120 mil Peso approximately.

It is finally determined to adopt the above Case-I in this study, although Case-II seems to be ideal because of non-availability of public disposal area nearby the estate.

For disposal of community light waste, package type incineration plant of 5 ton/day capacity is planned to be introduced.

5.3.10. Administration Facilities

Since the estate is divided into EPZ and GIZ, the administration facility is planned to be placed in the both area.

The administration area (2.3 ha) located at the entrance of the estate has common administrative functions with the following facilities;

1)	Administration office	: 1,000 m^2 (floor area)
2)	Parking lot	: 5,000 m^2
3)	Stuff quarters	: 1,000 m^2 (200 m^2 x 5)
4)	Fire fighting station with a fire engine	: 100 m^2
5)	Bonded warehouse for GIZ	: 1,600 m^2

The administration area (0.9 ha) located at the entrance of the EPZ mainly has customs functions with the following facilities:

1)	Custom office	: 500 m^2
2)	Bonded warehouse	: 800 m^2
3)	Parking lot	: 1,000 m^2

The commercial facilities such as shopping arcade, canteen, bank, insurance company and medical clinic will be located in the room of the administration area or industrial area. The construction of such facility by the developer is not considered in this study.

5.3.11. Common Bonded Manufacturing Warehouse (CBMW)

Two Common Bonded Manufacturing Warehouse (CBMW) shall be established and operated in the proposed industrial estates. A CBMW is bonded manufacturing warehouse to avail of tax and duty exemptions on the importation of raw materials to be used in the manufacture of finished products for export. A space in a CBMW shall be lent for accredited exporters in the estates.

Some 100m2 office space shall be provided for the Customs personnel to be assigned at the bonded warehouse.

All finished products for export shall first be examined and identified before packing for subsequent exportation. The Customs examiner or the authorized Customs officer shall examine the goods and identify the articles being packed and make proper notations on the corresponding Import Entry/Entries of the raw materials involved.

5.4. Operation and Maintenance Plan

It is highly recommended that industrial estate will be developed by a joint venture because of the following reasons:

1) foreign developer has better connection to potential foreign manufacturers to locate in the industrial estate.

2) foreign developer sufficiently knows preference of potential foreign manufacturers.

3) development by foreign developer could be considered that the Philippines has regained competitiveness with respect to investment environment.

4) participation of local developer is needed to purchase construction site and keep a good connection to local manufacturers.

Although Japanese investment falls behind that of Taiwanese in 1988 statistical record, Japanese may play the major role of industrial investment, and thus, participation of Japanese company will be essential for successful implementation of the proposed industrial estate. For the marketing viewpoint, Philippine-Japan joint venture is preferable.

(1) Developer

The Development Company is a joint venture company between the Philippines and Japan, with the Philippines investing 60% and Japan 40% according to the Philippine regulation.

To render qualified services to the locators, the joint venture company organizes effective administration and management system.

Following services shall be included.

1) Repair and maintenance of the facilities in the estate.
2) Security services in the estate.

3) Operation and management of Bonded Manufacturing Warehouse (BMW)
4) Escort services between the Port of Manila or Manila International Airport and the Dasmarinas I.E.
5) Operation of water supply system.
6) Fire fighting services.
7) Public relations activities.
8) Collection of service charge.
9) Operation and management of the office.

Other services, that can be supposed to be given to the resident enterprises, are various business assistances. For instance, such businesses as the necessary assistance of obtaining governmental approvals, search and introduction of materials and parts supplies, etc. It may need to further study as to how the services should be rendered. The customs brokerage, trucking and freight forwarding services should be done by private service companies which are permitted to be established in the industrial estate.

The services as stated above will be rendered by the staff in the joint venture company, who have deep experience and knowledge pertaining to industrial operation.

(2) Electricity / Communications Facilities

The land formation work and construction of the electricity / communications facilities, which are scheduled to be installed in the industrial estate, shall be started almost same time, at the Development Company's own expense. However, the facilities of electricity and communications will eventually come to be owned by the Manila Electric Company (MERALCO) and the Philippines Long-Distance Telephone (PLDT), redeeming the required capital by issuing preferred shares by MERALCO and PLDT. In other words, the construction and management of the electric facilities and communication facilities is done by MERALCO and PLDT, respectively, while

the construction cost of the facilities is temporarily paid by the Development Company on behalf of MERALCO and PLDT because of make up for both company's lack of funds and speed up the project schedule.

(3) Incentives for Developer

This project falls within the 1989 Investment Priorities Plan, and can enjoy the incentives such as the tax holiday for a certain period of time.

The fiscal incentives, which are supposed to be given to this project are as below.

1) Income tax holiday four (4) years from commercial operation.
2) Tax and duty exemption on imported capital equipment.
3) Tax credit on domestic capital equipment.
4) Exemption from contractor's tax, whether national or local.

5.5. Marketing Strategy

It is planned to sell 117.0 hectares in the site.

For the new development or expansion of industrial estates in Philippines, about 2,000 hectares are set aside as was already mentioned (See 5.1). Most of the plan are expected to be materialized about the spring of 1990. Owing to the delay of administrative procedures, the conversion of the use of land to other purposes or shortage of funds, the implementation of the plan is sort of lagging behind as a whole.

In the meanwhile, the investment trend in the manufacturing it is foreseen that the supply of industrial estates (especially around Manila) from the latter part of 1989 to 1991 will become tight. Consequently, as a marketing strategy, it is important to complete the construction of the industrial estate earlier than those under plan so that the estate can be supplied to investors opportunity.

It is predicted that the following will be the main types of business, namely, export-oriented types of enterprises such as electronics/electricity, automobile and parts, machinery, and various light industries. They are chiefly the enterprises in Japan and NIEs that have the intention of shifting their production bases, and the investment of local capital will also take part therein.

The selling prices of main existing estates differ greatly according to their locations as are shown in Table 5.1 .

EPZA is based on a lease contract, and the lease charge is raised every five years. Of the four EPZs, which are being operated at present, the lease cahrge of Cavite EPZ in the same province is 3.6 pesos/m2/month, but the lease cahrge is expected to be raised to 5.25 pesos/m2/month in January 1990.

The selling price in the same Cavite Province was 200 pesos/m2 on an average. However, Cavite-Carmora I.E. one of

the estates in the province was already sold out at 250 pesos/m2 and the selling place is rising unprecedentely. And the other implementing companies are now inclined to raise their prices. Hence, the figure of 200 - 250 pesos/m2 is already out of date, and may not reflect the present situation.

In considering the selling price, it ought to take into account the prices in the neighboring Asian Countries, particularly of Thailand and Malaysia. The following table shows a comparison of selling prices of the industrial estates in the Philippines and those two neighborring nations, that are enjoying popularity at present (as of July 1989).

Thailand	Bangpakong I.E.	Bt. 750/m2 = ¥ 4,275/m2
Malaysia	Selangor F.T.Z.	M$ 86/m2 = ¥ 4,300/m2
Philippines	Canlubang I.E.	P. 820/m2 = ¥ 5,084/m2

This means that if the price is set at P. 820/m2, it will become relatively higher than those in Thailand and Malaysia. The content of investment incentives in the Philippines are in the same level of those in these two countries. Therefore, the fixing of a selling price higher than those in these two nations, should be avoided. When the current exchange rate is also considered, P. 700/m2 may be the ceiling of the market price.

5.6. Preliminary Financial Analysis

General

This chapter presents the financial evaluation of the proposed Industrial Estate Project.
Outline of this project is summarized below:

(1) Land Area (ha)

- Total area developed	154.5 ha
- Area available for sale	117.0 ha

(2) Construction Period 14 months

(3) Commensement of Sales April, 1990

5.6.1.Condition of Financial Analysis

(1) Marketing Plan

1) The expected potential customers are these categories:

one third, Japanese
one third, Taiwan and other foreign investors.
and remaining one third, Philippines

2) Marketing schedule

The marketing schedule for the proposed industrial estate is 30% in 1990, 30% in 1991, 30% in 1992 and 10% in 1993.

3) Sales price

The sales price is assumed at Peso 600 per sq.m in 1990 and subject to 10% p.a. escalation.

4) Payment terms for the sales price shall be that 50% in the year when buyers purchase the land (as downpayment), and the remaining 50% in the next year.

(2) Revenue

1) Land Sales

Main revenue of the company consist of land sales in the total of 117 hectare. The sales price is assumed at 700P/m^2 in 1990.

2) Registration Fee

Upon registration with the Development Company, the investor pays a registration fee of P.500 per 1,000m^2.

3) Administration Service Charge

All the buyers and tenants shall pay service charge annually from the next year after purchasing the land. The service charge is assumed at Peso 80/m^2/yr in 1991 subject to 5% p.a. escalation.

4) Handling Fee of Common Bonded Manufacturing Warehouse (CBMW)

Handling fee is 2.5% of invoice value of customer. It is assumed that export value from the estate for 1991 shall be at $50 million and a half of freight shall be handled at the CBMW in the estate.

5) Water Service Charge

Water demand for the whole estate shall be about 10,000m^3/day at the full development stage, while water consumption shall be gradually increase in accordance with estate development. Water service charge is depend on the size of pipe, however, here is assumed at P.8/m^3 as average.

6) Escort Service Charge

Escort service between the Port of Manila or International Airport and the proposed site shall be done by the company's guards. Service charge is assumed at P.200 per one trip.

7) Redemption of Preferred Shares (Non-operating Income)

The ten percent (10%) cumulative Preferred Shares of MERALCO and PLDT shall be redeemable at par value five (5) years from and after issue.

5.6.2. Cost Estimate for Project

The estimated operation and maintenance cost for this project are as follows.

		(Peso '000)
(1)	Land Acquisition Cost	231,750
(2)	Construction Cost	
2.1	Land formation work	56,610
2.2	Road work	58,610
2.3	Water supply system	53,296
2.4	Power supply system and lighting	
	a) Developer's works	17,700
	b) Third party's works	(76,700)
2.5	Sewerage system	101,150
2.6	Telecommunication system (Third party's works)	(36,635)
2.7	Solid waste disposal work	7,500
2.8	Administration facilities	56,848
2.9	Engineering Service	28,100
2.10	Contingency	52,757
	Sub-Total	432,571
		(545,906)

(3) Pre-operating Expenses

3.1	Company registeration expenses	1,400
3.2	Feasibility study expenses	2,104
3.3	Sales promotion expenses	4,000
3.4	Training Expenses for Employee	5,600
	Sub-Total	13,104

1) Company registration expenses

All corporations doing business in the Philippines are required to register with the Securities and Exchange Commission (SEC). The filing fee is 1/10 of 1% of the authorized capital. On the assumption that the authorized capital of the company will be million Peso, the filing fee will be thousand Peso. And here is made an appropriation for the preparation expenses of equivalent in amount.

2) Stamp tax on original issue of certificates of stock

There shall be collected a documentary stamp tax of one peso and seventy centavos on each two hundred pesos of the par value of such certificates.

3) Feasibility study expenses

To hire the consultants for doing a feasibility study on this project.

4) Sales promotion expenses

Sales promotion for the project shall be done mainly in Philippines and Japan as soon as the company registered.

5) Training expenses for employee

Training expenses for employee is calculated on the assumptions that about one month value of direct labour cost.

(4) Interest During Construction

The interest during construction period is to be calculated using the following formula:

Interest Rate = 24.0% per annum

Period of Borrowing = Half of the 24 months construction period

I.D.C. = Long-term Debt x 0.24%/12 x 14/2
= L/L Debt x 14%

(5) Initial Working Capital

Initial working capital is calculated on the assumptions that 4 months value of direct labour cost and this amount also cover the utility cost of the company at the initial stage.

(6) Wages and Salaries (in 1990) (Peso '000)

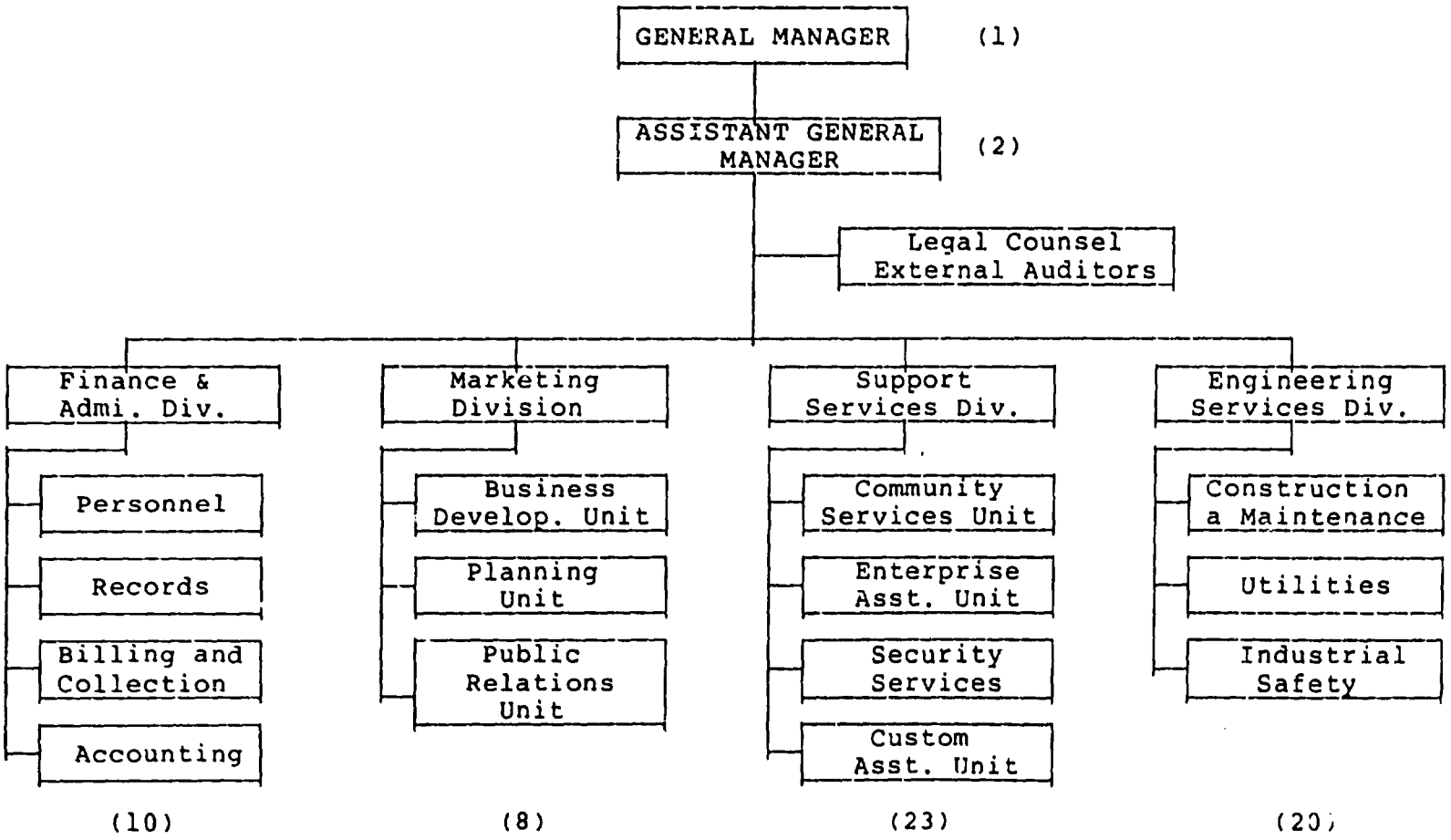
Class	Annual Rate	No. of Persons	Amount
General Manager	700	1	700
Asst. General M.	350	2	700
Managers	195	4	780
Chiefs	120	12	1,440
Engineers	105	5	525
Assistants Officer	80	18	1,440
Secretaries/ Drivers	55	5	275
Security/ Fireman	55	17	935
Total		64	6,795

(Subject to 8% p.a. escalation)

The Company's organizational structure consists of four (4) divisions, namely: 1) Engineering Services Division; 2) Marketing Division; 3) Support Services Division; and 4) Finance and Administration Division (See Figure 5.6). Number of staffs are as follows.

Positions	No. of Persons
General Manager	1
Asst. General Manager	2
Sub-total	3
Marketing Division	
Division Manager	1
Unit Chief	3
Assistant Officer	4
Sub-total	8
Support Services Division	
Division Manager	1
Unit Chief	4
Assistant Officer	4
Security Staffs	14
Sub-total	23
Finance & Administration Division	
Division Manager	1
Unit Chief	2
Assistant Accountant	2
Secretary	3
Driver	2
Sub-total	10

Figure 5.6 ORGANIZATIONAL CHART OF MANAGEMENT COMPANY



Engineering Services Division

Division Manager	1
Unit Chief	3
Assistant Officer	1
Engineer / Architect	5
Assistant Engineer	7
Fireman	3
Sub-total	20
Grand Total	64

(7) Repair and Maintenance

- Initial year of commercial operation: 2% of*
- 2nd year of commercial operation : 3% of*
- 3nd year of commercial operation : 4% of*
- 4nd year of commercial operation : 5% of*

* the costs for road; drainage; water supply system; street lighting, sewerage, solid waste disposal, Administration facilities including engineering.

(8) Insurance Premium

0.5% of the value of utilities facilities, building and other facilities including engineering, remaining after depreciation or amortization.

(9) Property Tax

There shall be collected a property tax of two pesos on each five tnousand of the assessed value of remaining estate.

(10) Value Added Tax

10% of the revenue gained every year.

(11) Corporate Income Tax

At least, 4 years income tax holiday from commercial operation is supposed to be given to this project.

(12) Depreciation and Amortization

Straight line depreciation or amortization with 10% residual value is applied to the following facilities or expenses:

Hens	Depreciation/ Amortization Period
- Road; sewerage and solid waste disposal facilities	25
- Water supply facilities, Power supply facilities (part of developer's work)	25
- Building	25
- Engineering	5
- Pre-operating expenses, interest during construction	5

All expenses on third party's works are excepted from depreciation items.

(13) Assumptions for the Financial Projection

Assumptions taken for the financial projection, other than those stated above, are summarized below:

1) Financial plan

a) Equity capital (50%)	(Peso '000)
- Local investors	247,106 (60%)
- Foreign investors	164,736 (40%)
Sub-Total	411,842(100%)
b) Long-term Debt. (50%)	411,842
Total Financing (100%)	823,684

(14) Financial Sources

50% of the total project cost will be financed from local financial market as the long term loan. Because the Central Bank of the Philippines (CBP) strictly control a loan from overseas countries, especially it seems to be difficult to borrow a term loan in foreign currency for private company. In this connection, CBP's condition to borrow a foreign loan is as follow:

1) Benefit from the project should be contribute not only for the company also the state.

2) The term must be better than the Paris Club terms (inclusive of five years grace period).

3) Interest rate should not be higher than 1.37% over the U.S. prime rate.

4) Maximum commitment fee is allowed 0.5% based on the balance of the loan.

5) Front-end fee should not be more than 17%.

In case of using a term loan from local finance sources, the conditions are as follow:

From Local Commercial Bank

1) Conditions of Loan and Equity Participation.

a) Single borrowing limit (maximum loan amount is 15% of bank's equity).

b) interest rate based on commercial lending rates, now within 22 - 27% range.

c) interest rate is floating lending.

d) repayment period, within 5 years after approval including a 1 year grace period (maximum).

e) repayment can be either quarterly or semi annual.

f) guarantee is requested.

Because of the regulation of single borrowing limit by one commercial bank, this project should be arranged co-financing or syndication financing.

From Asian Development Bank

1) Conditions of Loan and Equity Participation

a) maximum 25% of project cost.
b) at least 5 mil US$; namely at least, 20 mil US$ of project cost.
c) any foreign currency can be selected.
d) loan is applied for foreign portion.
e) interest rate is close to the market rate; the rate can be either fixed or variable.
f) in case of fixed rate, the interest rate of US$ would be 10.75%, that of yen would be 7.5%.
g) repayment period; 10 - 12 years after approval including a grace period. The grace period is negotiable.
h) guarantee is requested.

2) Procedure

a) no commitment from a government is required.
b) ADB sends a short letter to the Central Government to check no objection.
c) it takes 4 - 5 months to get final approval.

5.6.3. Financial Analysis

(1) Internal Rate of Returns

The financial statements of this industrial estate projected for a 15-year economic life are attached as Appendix B. An analysis of the internal rate of returns (IRR) and other financial indicators is also attached.

The estimated IRR is 29.23% on before tax net in-flow.

Yearly after tax profit to sales revenue is 19.5% at the simple average for 15 years.

In view of the above mentioned figures, it is judged that this project will have level of profitability. However, the trend of interest rate in Philippines needs continuously the greatest care. More increased equity amount by shareholder is recommendable.

5.6.4. Sensitivity Analysis

In case of IRR analysis affected by changes in the sales price is made as follows.

The sales price is assumed at Peso 500 per sq.m in 1990 and at Peso 700 per sq.m in 1990 respectively subject to 10% p.a. escalation.

Sensitivity Analysis

Case	Sales Price	IRR Before Tax	IRR After Tax
I	P500/m^2	24.23%	21.42%
II (Master)	P600/m^2	29.23%	26.46%
III	P700/m^2	35.32%	32.67%

5.6.5. Economic and Social Benefits

(1) Employment Geveration

The estate will help to generate employment. Assuming that worker/land ratio is 100 persons per hector (gross), some 12,000 jobs will be created by the Project. And also construction workers may average 700 to 900 during the construction period. A very high percentage of workers will be trained to higher skills and earning the power than they have had in the past.

(2) Acceleration of Industrial Investment

The estate can be expected to accelerate factory investment, particularly by foreign fims which are export-oriented or supporting industry for the existing industries. Prepared industrial sites and services ready for factory construction can significantly reduce the time interval between project conception and start up of operations.

(3) Spillover Effect

Operation of factories in an industrial estate needs supporting economic activities such as supply of material, distribution of products, supply of food for workers. Also, wages of workers in the estate will create new consumption. In this manner, the Project will bring spillover to create additional 14,400 jobs (1.2 times of the employment generation in the proposed estate).

APPENDICES

APPENDIX A

QUESTIONNAIRE TO POTENTIAL INVESTORS

Questionnaire

1. Have you ever considered investment abroad?

   1. already have a plan
   2. considering now
   3. would like to consider in future
   4. not considering

2. Have you ever considered the Philippines as a possible place for investment?

   1. Yes
   2. No, but other country
   3. Not at all

3. What type of investment do you consider in case of the Philippines?

   1. 100% direct investment
   2. Joint venture with local company
   3. Co-investment with other Japanese companies
   4. Joint venture with other foreign companies
   5. Not decided yet

4. Which do you prefer investing in Export Processing Zone or General Industrial Estate?

   1. Export Processing Zone
   2. General Industrial Estate
   3. Either place

5. Are you interested in the Dasmarinas Industrial Estate Development Project?

   1. Very much interested
   2. Interested
   3. Not interested
   4. Not at all

6. When do you consider investment in the Dasmarinas IE?

   1. Within 1 year
   2. Between 2 and 3 years
   3. Between 4 and 5 years
   4. After 5 years

7. If you expand business in the Dasmarinas IE, how much land would be required and how much cost would be desirable?

   1. Required land ha
   2. Cost of land price /m

8. What kind of factors do you consider in making decision for investment in the Dasmarinas IE? (multiple choices)

1. Electricity supply
2. Telecommunication facilities
3. Quality and quantity of industrial water supply
4. Highway and road facilities
5. Port facilities
6. Airport facilities
7. Availability of labor
8. Trade Union problems
9. Existence of local supporting industries
10. Living condition
11. Political stability
12. Others

APPENDIX B

PROJECTED FINANCIAL STATEMENTS

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***

SALES PLAN

CASE 1 - SALE OUT : 100/0 - (PESO, 1000)

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
TOTAL AREA FOR SALES (M2)	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.
SALES RATIO	0.300	0.300	0.300	0.100	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL SOLD LAND(M2)	351000.	351000.	351000.	117000.	0.	0.	0.	0.	0.	0.
REGISTARATION FEE(PESO/M2)	0.0005	0.0005	0.0006	0.0007	0.0007	0.0008	0.0009	0.0010	0.0011	0.0012
SALES REVENUE	176.	193.	212.	78.	0.	0.	0.	0.	0.	0.
TOTAL AREA FOR SERVICE (M2)	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.
SERVICE RATIO	0.150	0.300	0.300	0.200	0.050	0.0	0.0	0.0	0.0	0.0
TOTAL SERVICE LAND (M2)	175500.	351000.	351000.	234000.	58500.	0.	0.	0.	0.	0.
UNIT PRICE(PESO/M2)	0.5000	0.5500	0.6050	0.6655	0.7320	0.8053	0.8858	0.9744	1.0718	1.1790
SALES REVENUE	87750.	193050.	212355.	155727.	42825.	0.	0.	0.	0.	0.
TOTAL AREA FOR SALES (M2)	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.
SALES RATIO	0.0	0.300	0.600	0.900	1.000	1.000	1.000	1.000	1.000	1.000
TOTAL SOLD LAND (M2)	0.	351000.	702000.	1053000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.
SERVICE CHARGE (PESO/M2)	0.0	0.0800	0.0840	0.0882	0.0926	0.0972	0.1021	0.1072	0.1126	0.1182
SALES REVENUE	0.	28080.	58968.	92874.	108354.	113771.	119460.	125433.	131704.	138289.
TOTAL INVOICE VALUE (PESO)	600000.	600000.	600000.	600000.	600000.	600000.	600000.	600000.	600000.	600000.
SERVICE RATIO	0.0	1.000	1.100	1.210	1.331	1.464	1.611	1.772	1.949	2.144
HANDLING VOLUME	0.	600000.	660000.	725999.	798599.	878459.	966304.	1062934.	1169227.	1286150.
CBMW SERVICE FEE	0.0	0.0250	0.0250	0.0250	0.0250	0.0250	0.0250	0.0250	0.0250	0.0250
SALES REVENUE	0.	15000.	16500.	18150.	19965.	21961.	24158.	26573.	29231.	32154.
TOTAL WATER SUPPLY (M3/YR)	3000000.	3000000.	3000000.	3000000.	3000000.	3000000.	3000000.	3000000.	3000000.	3000000.
SALES RATIO	0.0	0.500	0.600	0.750	0.850	0.850	0.850	0.850	0.850	0.850
TOTAL SUPPLIED WATER	0.	1500000.	1800000.	2250000.	2550000.	2550000.	2550000.	2550000.	2550000.	2550000.
SERVICE CHARGE(PESO/M3)	0.0	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080
SALES REVENUE	0.	12000.	14400.	18000.	20400.	20400.	20400.	20400.	20400.	20400.
TOTAL ESCORT (/M)	2400.	2400.	2400.	2400.	2400.	2400.	2400.	2400.	2400.	2400.
SERVICE RATIO	0.0	0.300	0.400	0.500	0.700	0.800	0.800	0.800	0.800	0.800
ESCORT ROUND	0.	720.	960.	1200.	1680.	1920.	1920.	1920.	1920.	1920.
SERVICE CHARGE	0.0	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000
SALES REVENUE	0.	144.	192.	240.	336.	384.	384.	384.	384.	384.
TOTAL SALES REVENUE	87925.	248467.	302627.	285069.	191879.	156517.	164101.	172790.	181719.	191227.
NON-OPERATING INCOME	0.	0.	24934.	24934.	24934.	24934.	24934.	0.	0.	0.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT. PHILIPPINE ***

SALES PLAN

CASE 1 - SALE OUT : 100/0 - (PESO, 1000)

YEAR	2000	2001	2002	2003	2004
TOTAL AREA FOR SALES (M2)	1170000.	1170000.	1170000.	1170000.	1170000.
SALES RATIO	0.0	0.0	0.0	0.0	0.0
TOTAL SOLD LAND(M2)	0.	0.	0.	0.	0.
REGISTARATION FEE(PESO/M2)	0.0013	0.0014	0.0016	0.0017	0.0019
SALES REVENUE	0.	0.	0.	0.	0.
TOTAL AREA FOR SERVICE (M2)	1170000.	1170000.	1170000.	1170000.	1170000.
SERVICE RATIO	0.0	0.0	0.0	0.0	0.0
TOTAL SERVICE LAND (M2)	0.	0.	0.	0.	0.
UNIT PRICE(PESO/M2)	1.2969	1.4266	1.5692	1.7261	1.8987
SALES REVENUE	0.	0.	0.	0.	0.
TOTAL AREA FOR SALES (M2)	1170000.	1170000.	1170000.	1170000.	1170000.
SALES RATIO	1.000	1.000	1.000	1.000	1.000
TOTAL SOLD LAND (M2)	1170000.	1170000.	1170000.	1170000.	1170000.
SERVICE CHARGE (PESO/M2)	0.1241	0.1303	0.1368	0.1437	0.1509
SALES REVENUE	145204.	152464.	160087.	168091.	176496.
TOTAL INVOICE VALUE (PESO)	600000.	600000.	600000.	600000.	600000.
SERVICE RATIO	2.358	2.594	2.853	3.138	3.452
HANDLING VOLUME	1414765.	1556241.	1711865.	1883051.	2071357.
CBMW SERVICE FEE	0.0250	0.0250	0.0250	0.0250	0.0250
SALES REVENUE	35369.	38906.	42797.	47076.	51784.
TOTAL WATER SUPPLY (M3/YR)	3000000.	3000000.	3000000.	3000000.	3000000.
SALES RATIO	0.850	0.850	0.850	0.850	0.850
TOTAL SUPPLIED WATER	2550000.	2550000.	2550000.	2550000.	2550000.
SERVICE CHARGE(PESO/M3)	0.0080	0.0080	0.0080	0.0080	0.0080
SALES REVENUE	20400.	20400.	20400.	20400.	20400.
TOTAL ESCORT (/M)	2400.	2400.	2400.	2400.	2400.
SERVICE RATIO	0.800	0.800	0.800	0.800	0.800
ESCORT ROUND	1920.	1920.	1920.	1920.	1920.
SERVICE CHARGE	0.2000	0.2000	0.2000	0.2000	0.2000
SALES REVENUE	384.	384.	384.	384.	384.
TOTAL SALES REVENUE	201357.	212154.	223668.	235952.	249064.
NON-OPERATING INCOME	0.	0.	0.	0.	0.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***

COST STATEMENTS

CASE 1 - SALE OUT : 100/0 - (PESO, 1000)

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
TOTAL SOLD LAND(M2)	351000.	351000.	351000.	117000.	0.	0.	0.	0.	0.	0.
SALARY & WAGES	6795.	7339.	7926.	8560.	9245.	9984.	10783.	11645.	12577.	13583.
ADMINISTRATION	11551.	12476.	13474.	14552.	15716.	16973.	18331.	19797.	21381.	23091.
SALARY & WAGES INC. ADMI.	18346.	19814.	21399.	23111.	24960.	26957.	29114.	31443.	33958.	36675.
REPAIR & MAINTENANCE	0.	9863.	14794.	19726.	24657.	25890.	27185.	28544.	29971.	31470.
INSURANCE	0.	3629.	3676.	3523.	3370.	3217.	3154.	3091.	3027.	2964.
PROPERTY TAX	0.	433.	368.	285.	183.	154.	154.	154.	154.	154.
VALUE ADDED TAX	8793.	24847.	30263.	28507.	19188.	15652.	16440.	17279.	18172.	19123.
DIRECT OPERATING COST	8793.	38972.	49102.	52041.	47399.	44913.	46933.	49068.	51325.	53711.
DIRECT COST	27139.	58786.	70501.	75153.	72359.	71870.	76046.	80510.	85283.	90385.
DEPRECIABLE ASSETS (ROAD,ETC)	0.	8059.	8059.	8059.	8059.	8059.	8059.	8059.	8059.	8059.
DEPRECIABLE ASSETS (UTILITIES)	0.	2556.	2556.	2556.	2556.	2556.	2556.	2556.	2556.	2556.
DEPRECIABLE ASSETS (BUILDINGS)	0.	2047.	2047.	2047.	2047.	2047.	2047.	2047.	2047.	2047.
DEPRECIABLE ASSETS (ENGINEERING)	0.	5058.	5058.	5058.	5058.	5058.	0.	0.	0.	0.
DEPRECIABLE ASSETS (PRE-OPE)	0.	2359.	2359.	2359.	2359.	2359.	0.	0.	0.	0.
DEPRECIABLE ASSETS (I.D.C.)	0.	10530.	10530.	10530.	10530.	10530.	0.	0.	0.	0.
DEPRECIATION AND AMORTIZATION	0.	30608.	30608.	30608.	30608.	30608.	12662.	12662.	12662.	12662.
INCL. DEPRT. & AMORT.	27139.	89395.	101109.	105761.	102967.	102479.	88708.	93172.	97944.	103047.
OPERATING EXPENSES	27139.	89395.	101109.	105761.	102967.	102479.	88708.	93172.	97944.	103047.
INTEREST ON LONG TERM DEBT	0.	0.	98842.	79074.	59305.	39537.	19768.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL COST	27139.	89395.	199951.	184835.	162273.	142015.	108477.	93172.	97944.	103047.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***

COST STATEMENTS

CASE 1 - SALE OUT : 100/0 - (PESO, 1000)

YEAR	2000	2001	2002	2003	2004
TOTAL SOLD LAND(M2)	0.	0.	0.	0.	0.
SALARY & WAGES	14670.	15843.	17111.	18480.	19958.
ADMINISTRATION	24939.	26934.	29089.	31416.	33929.
SALARY & WAGES INC. ADMI.	39609.	42777.	46199.	49895.	53887.
REPAIR & MAINTENANCE	33043.	34695.	36430.	38252.	40164.
INSURANCE	2901.	2837.	2774.	2711.	2648.
PROPERTY TAX	154.	154.	154.	154.	154.
VALUE ADDED TAX	20136.	21215.	22367.	23595.	24906.
DIRECT OPERATING COST	56234.	58902.	61725.	64712.	67872.
DIRECT COST	95842.	101680.	107925.	114607.	121759.
DEPRECIABLE ASSETS (ROAD,ETC)	8059.	8059.	8059.	8059.	8059.
DEPRECIABLE ASSETS (UTILITIES)	2556.	2556.	2556.	2556.	2556.
DEPRECIABLE ASSETS (BUILDINGS)	2047.	2047.	2047.	2047.	2047.
DEPRECIABLE ASSETS (ENGINEERING)	0.	0.	0.	0.	0.
DEPRECIABLE ASSETS (PRE-OPE)	0.	0.	0.	0.	0.
DEPRECIABLE ASSETS (I.D.C.)	0.	0.	0.	0.	0.
DEPRECIATION AND AMORTIZATION	12662.	12662.	12662.	12662.	12662.
COST INCL. DEPRT. & AMORT.	108504.	114341.	120586.	127269.	134421.
OPERATING EXPENSES	108504.	114341.	120586.	127269.	134421.
INTEREST ON LONG TERM DEBT	0.	0.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0.	0.
TOTAL COST	108504.	114341.	120586.	127269.	134421.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE *** PAGE 1

INCOME STATEMENTS (FOR ENDING MARCH 31)

CASE 1 - SALE OUT : 100/0 - (PESO, 1000)

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
OPERATING INCOME	87925.	248467.	302627.	285069.	191879.	156517.	164401.	172790.	181719.	191227.
TOTAL SALES REVENUE	87925.	248467.	302627.	285069.	191879.	156517.	164401.	172790.	181719.	191227.
COST OF SALES	27139.	89395.	101109.	105761.	102967.	102479.	88708.	93172.	97944.	103047.
SALARY & WAGES INC. ADMI.	18346.	19814.	21399.	23111.	24960.	26957.	29114.	31443.	33958.	36675.
DIRECT OPERATING COST	8793.	38972.	49102.	52041.	47399.	44913.	46933.	49068.	51325.	53711.
DEPRECIATION AND AMORTIZATION	0.	30608.	30608.	30608.	30608.	30608.	12662.	12662.	12662.	12662.
GROSS PROFIT ON SALES	60786.	159072.	201518.	179308.	88912.	54038.	75693.	79618.	83775.	88180.
OPERATING PROFIT	60786.	159072.	201518.	179308.	88912.	54038.	75693.	79618.	83775.	88180.
NON-OPERATING INCOME	0.	0.	24934.	24934.	24934.	24934.	24934.	0.	0.	0.
NON-OPERATING EXPENSES	0.	0.	98842.	79074.	59305.	39537.	19768.	0.	0.	0.
INTEREST ON LONG TERM DEBT	0.	0.	98842.	79074.	59305.	39537.	19768.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NET PROFIT OR (LOSS) BEFORE TAX	60786.	159072.	127610.	125168.	54541.	39435.	80858.	79618.	83775.	88180.
INCOME TAX	0.	0.	0.	0.	19089.	13802.	28300.	27866.	29321.	30863.
NET PROFIT OR (LOSS) AFTER TAX	60786.	159072.	127610.	125168.	35451.	25633.	52558.	51752.	54453.	57317.
DIVIDENDS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RETAINED EARNINGS	60786.	159072.	127610.	125168.	35451.	25633.	52558.	51752.	54453.	57317.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***

INCOME STATEMENTS (FOR ENDING MARCH 31)

CASE 1 - SALE OUT : 100/0 - (PESO, 1000)

YEAR	2000	2001	2002	2003	2004
OPERATING INCOME	201357.	212154.	223668.	235952.	249064.
TOTAL SALES REVENUE	201357.	212154.	223668.	235952.	249064.
COST OF SALES	108504.	114341.	120586.	127269.	134421.
SALARY & WAGES INC. ADMI.	39609.	42777.	46199.	49895.	53887.
DIRECT OPERATING COST	56234.	58902.	61725.	64712.	67872.
DEPRECIATION AND AMORTIZATION	12662.	12662.	12662.	12662.	12662.
GROSS PROFIT ON SALES	92853.	97813.	103081.	108683.	114643.
OPERATING PROFIT	92853.	97813.	103081.	108683.	114643.
NON-OPERATING INCOME	0.	0.	0.	0.	0.
NON-OPERATING EXPENSES	0.	0.	0.	0.	0.
INTEREST ON LONG TERM DEBT	0.	0.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0.	0.
NET PROFIT OR (LOSS) BEFORE TAX	92853.	97813.	103081.	108683.	114643.
INCOME TAX	32498.	34234.	36078.	38039.	40125.
NET PROFIT OR (LOSS) AFTER TAX	60354.	63578.	67003.	70644.	74518.
DIVIDENDS	0.	0.	0.	0.	0.
RETAINED EARNINGS	60354.	63578.	67003.	70644.	74518.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE *** PAGE 1

FUNDS FLOW STATEMENTS (FOR ENDING MARCH 31)

CASE 1 - SALE OUT : 100/0 - (PESO, 1000)

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
SOURCE OF FUNDS	719733.	354417.	257060.	234850.	125365.	95778.	84988.	64413.	67115.	69979.
CASH GENERATED FROM OPERATION	60786.	189681.	257060.	234850.	125365.	95778.	84988.	64413.	67115.	69979.
PROFIT AFT. TAX. BFR INT.	60786.	159072.	226451.	204242.	94757.	65169.	72326.	51752.	54453.	57317.
DEPRECIATION AND AMORTIZATION	0.	30608.	30608.	30608.	30608.	30608.	12662.	12662.	12662.	12662.
FINANCIAL RESOURCES	658946.	164737.	0.	0.	0.	0.	0.	0.	0.	0.
SHARE CAPITAL	411842.	0.	0.	0.	0.	0.	0.	0.	0.	0.
LONG TERM DEBT	247105.	164737.	0.	0.	0.	0.	0.	0.	0.	0.
SHORT TERM DEBT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
USES OF FUNDS	538803.	257700.	181210.	161442.	141673.	121905.	102137.	0.	0.	0.
FIXED CAPITAL EXPENDITURE	538803.	257700.	0.	0.	0.	0.	0.	0.	0.	0.
NON-DEPRECIABLE ASSETS	231750.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DEPRECIABLE FIXED ASSETS	297266.	208987.	0.	0.	0.	0.	0.	0.	0.	0.
INTEREST DURING CONSTRUCTION	9787.	48713.	0.	0.	0.	0.	0.	0.	0.	0.
CHANGE IN WORKING CAPITAL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DEBT SERVICES	0.	0.	181210.	161442.	141673.	121905.	102137.	0.	0.	0.
REPAYMENT OF LONG TERM DEBT	0.	0.	82368.	82368.	82368.	82368.	82368.	0.	0.	0.
REPAYMENT OF SHORT TERM DEBT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
INTEREST ON LONG TERM DEBT	0.	0.	98842.	79074.	59305.	39537.	19768.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DIVIDENDS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CASH INCREASE OR (DECREASE)	180930.	96717.	75850.	73409.	-16308.	-26127.	-17149.	64413.	67115.	69979.
BEGINNING CASH BALANCE	0.	180930.	277647.	353497.	426905.	410597.	384470.	367321.	431734.	498849.
ENDING CASH BALANCE	180930.	277647.	353497.	426905.	410597.	384470.	367321.	431734.	498849.	568828.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***
FUNDS FLOW STATEMENTS (FOR ENDING MARCH 31)

CASE 1 - SALE OUT : 100/0 - (PESO, 1000)

YEAR	2000	2001	2002	2003	2004
SOURCE OF FUNDS	73016.	76240.	79665.	83305.	87180.
CASH GENERATED FROM OPERATION	73016.	76240.	79665.	83305.	87180.
PROFIT AFT. TAX. BFR INT.	60354.	63578.	67003.	70644.	74518.
DEPRECIATION AND AMORTIZATION	12662.	12662.	12662.	12662.	12662.
FINANCIAL RESOURCES	0.	0.	0.	0.	0.
SHARE CAPITAL	0.	0.	0.	0.	0.
LONG TERM DEBT	0.	0.	0.	0.	0.
SHORT TERM DEBT	0.	0.	0.	0.	0.
USES OF FUNDS	0.	0.	0.	0.	0.
FIXED CAPITAL EXPENDITURE	0.	0.	0.	0.	0.
NON-DEPRECIABLE ASSETS	0.	0.	0.	0.	0.
DEPRECIABLE FIXED ASSETS	0.	0.	0.	0.	0.
INTEREST DURING CONSTRUCTION	0.	0.	0.	0.	0.
CHANGE IN WORKING CAPITAL	0.	0.	0.	0.	0.
DEBT SERVICES	0.	0.	0.	0.	0.
REPAYMENT OF LONG TERM DEBT	0.	0.	0.	0.	0.
REPAYMENT OF SHORT TERM DEBT	0.	0.	0.	0.	0.
INTEREST ON LONG TERM DEBT	0.	0.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0.	0.
DIVIDENDS	0.	0.	0.	0.	0.
CASH INCREASE OR (DECREASE)	73016.	76240.	79665.	83305.	87180.
BEGINNING CASH BALANCE	568828.	641844.	718084.	797749.	881054.
ENDING CASH BALANCE	641844.	718084.	797749.	881054.	968234.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE *** PAGE 1

BALANCE SHEET (FOR ENDING MARCH 31)

CASE 1 - SALE OUT : 100/0 - (PESO, 1000)

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
ASSETS	719733.	1043542.	1088783.	1131583.	1084666.	1027930.	998120.	1049872.	1104325.	1161642.
CURRENT ASSETS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ACCOUNT RECEIVABLE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
INVENTORIES	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ACC. EXCESS CASH	180930.	277647.	353497.	426905.	410597.	384470.	367321.	431734.	498848.	568828.
NET FIXED ASSETS	538803.	765895.	735286.	704678.	674069.	643461.	630799.	618137.	605476.	592814.
INVESTMENT	538803.	796503.	796503.	796503.	796503.	796503.	796503.	796503.	796503.	796503.
NON-DEPR. ASSETS	231750.	231750.	231750.	231750.	231750.	231750.	231750.	231750.	231750.	231750.
DEPRECIABLE ASSETS	297266.	506253.	506253.	506253.	506253.	506253.	506253.	506253.	506253.	506253.
INTEREST DRG CONSTR.	9787.	58500.	58500.	58500.	58500.	58500.	58500.	58500.	58500.	58500.
LESS: ACC. DEPRECIATION	0.	30608.	61217.	91825.	122434.	153042.	165704.	178366.	191027.	203689.
LIABILITIES	247105.	411842.	329473.	247105.	164737.	82369.	0.	0.	0.	0.
CURRENT LIABILITIES	0.	82368.	82368.	82368.	82368.	82368.	0.	0.	0.	0.
ACCOUNT PAYABLE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CURRENT PORTION OF L/T DEBT	0.	82368.	82368.	82368.	82368.	82368.	0.	0.	0.	0.
SHORT TERM DEBT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FIXED LIABILITIES	247105.	329473.	247105.	164737.	82369.	0.	0.	0.	0.	0.
LONG TERM DEBT BALANCE	247105.	329473.	247105.	164737.	82369.	0.	0.	0.	0.	0.
OTHER FIXED LIABILITIES	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STOCK HOLDERS EQUITY	472628.	631700.	759310.	884478.	919929.	945562.	998120.	1049871.	1104325.	1161642.
SHARE CAPITAL	411842.	411842.	411842.	411842.	411842.	411842.	411842.	411842.	411842.	411842.
ACC. RETAINED EARNINGS	60786.	219859.	347468.	472636.	508088.	533720.	586278.	638030.	692483.	749801.
LIABILITIES & S/H EQUITY	719733.	1043542.	1088783.	1131583.	1084666.	1027930.	998120.	1049872.	1104325.	1161642.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***
BALANCE SHEET (FOR ENDING MARCH 31)
CASE 1 - SALE OUT : 100/0 - (PESO, 1000)

YEAR	2000	2001	2002	2003	2004
ASSETS	1221997.	1285575.	1352578.	1423221.	1497739.
CURRENT ASSETS	0.	0.	0.	0.	0.
ACCOUNT RECEIVABLE	0.	0.	0.	0.	0.
INVENTORIES	0.	0.	0.	0.	0.
ACC. EXCESS CASH	641844.	718084.	797749.	881054.	968234.
NET FIXED ASSETS	580152.	567491.	554829.	542167.	529506.
INVESTMENT	796503.	796503.	796503.	796503.	796503.
NON-DEPR. ASSETS	231750.	231750.	231750.	231750.	231750.
DEPRECIABLE ASSETS	506253.	506253.	506253.	506253.	506253.
INTEREST DRG CONSTR.	58500.	58500.	58500.	58500.	58500.
LESS: ACC. DEPRECIATION	216351.	229012.	241674.	254338.	266997.
LIABILITIES	0.	0.	0.	0.	0.
CURRENT LIABILITIES	0.	0.	0.	0.	0.
ACCOUNT PAYABLE	0.	0.	0.	0.	0.
CURRENT PORTION OF L/T DEBT	0.	0.	0.	0.	0.
SHORT TERM DEBT	0.	0.	0.	0.	0.
FIXED LIABILITIES	0.	0.	0.	0.	0.
LONG TERM DEBT BALANCE	0.	0.	0.	0.	0.
OTHER FIXED LIABILITIES	0.	0.	0.	0.	0.
STOCK HOLDERS EQUITY	1221996.	1285575.	1352577.	1423221.	1497739.
SHARE CAPITAL	411842.	411842.	411842.	411842.	411842.
ACC. RETAINED EARNINGS	810155.	873733.	940736.	1011380.	1085897.
LIABILITIES & S/H EQUITY	1221997.	1285575.	1352578.	1423221.	1497739.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT. PHILIPPINE ***
LONG TERM DEBT
CASE 1 - SALE OUT : 100/0 - (PESO. 1000)

AMOUNT OF DEBT 411842.

INTEREST RATE 24.000 PER CENT/YEAR

REPAYMENT 5 YEAR-EQUAL-INSTALLMENT-REPAYMENT (ANNUAL REPAYMENT)

YEAR	SER.NO	PRINCIPAL	INTEREST	DEBT SERVICE	BALANCE AFT. PAYMENT
1990	1	0.	0.	0.	247105.
1991	2	0.	0.	0.	411841.
1992	3	82368.	98842.	181210.	329473.
1993	4	82368.	79074.	161442.	247105.
1994	5	82368.	59305.	141673.	164737.
1995	6	82368.	39537.	121905.	82368.
1996	7	82368.	19768.	102137.	0.
1997	8	0.	0.	0.	0.
1998	9	0.	0.	0.	0.
1999	10	0.	0.	0.	0.
2000	11	0.	0.	0.	0.
2001	12	0.	0.	0.	0.
2002	13	0.	0.	0.	0.
2003	14	0.	0.	0.	0.
2004	15	0.	0.	0.	0.
TOTAL		411841.	296526.	708367.	0.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***
PROFITABILITY AND FINANCIAL INDICATORS
CASE 1 - SALE OUT : 100/0 - (PESO, 1000)

YEAR	(1) AFT TAX PROFIT -TO- SALES REV (PCT)	(2) AFT TAX PROFIT -TO- S/H EQUITY (PCT)	(3) BFR TAX PROFIT -TO- INVESTMENT (PCT)	(4) AFT TAX PROFIT -TO- S/CAPITAL (PCT)	(5) CURRENT RATIO	(6) QUICK RATIO	(7) DEBT SERVICE RATIO	(8) L/T DEBT -TO- S/H EQUITY	(9)* PROFIT B.E.P. CAPACITY UTILIZE (PCT)	(10)* CASH B.E.P. SALES PRICE (PRICE)	(11)* CASH B.E.P. CAPACITY UTILIZE (PCT)
1990	69.1	12.9	11.3	14.8	********	********	********	34 / 66	3.8	77.3	3.8
1991	64.0	25.2	20.0	38.6	0.0	0.0	********	34 / 66	9.1	167.5	5.1
1992	39.0	16.8	16.0	31.0	0.0	0.0	1.42	25 / 75	18.9	717.1	22.6
1993	40.4	14.2	15.7	30.4	0.0	0.0	1.45	16 / 84	6.1	2022.2	7.4
1994	16.4	3.9	6.8	8.6	0.0	0.0	0.88	8 / 92	********	********	0.0
1995	14.1	2.7	5.0	6.2	0.0	0.0	0.79	0 / 100	********	********	0.0
1996	27.8	5.3	10.2	12.8	********	********	0.83	0 / 100	********	********	0.0
1997	30.0	4.9	10.0	12.6	********	********	********	0 / 100	********	********	0.0
1998	30.0	4.9	10.5	13.2	********	********	********	0 / 100	********	********	0.0
1999	30.0	4.9	11.1	13.9	********	********	********	0 / 100	********	********	0.0
2000	30.0	4.9	11.7	14.7	********	********	********	0 / 100	********	********	0.0
2001	30.0	4.9	12.3	15.4	********	********	********	0 / 100	********	********	0.0
2002	30.0	5.0	12.9	16.3	********	********	********	0 / 100	********	********	0.0
2003	29.9	5.0	13.6	17.2	********	********	********	0 / 100	********	********	0.0
2004	29.9	5.0	14.4	18.1	********	********	********	0 / 100	********	********	0.0
AVERAGE1	34.0	8.0	12.1	17.6	********	********	********	8 / 92	********	********	2.6
AVERAGE2	33.6	6.9	12.1	17.6	0.0	0.0	2.33	6 / 94			

(AVERAGE1) : SUM OF ANNUAL FIGURES OF PERCENTAGE AND RATIO IS DIVIDED BY NO. OF YEARS(SIMPLE AVERAGE)
(AVERAGE2) : AVERAGE FIGURES ARE CALCULATED BY ACTUAL VALUES ACCUMULATED OVER THE PROJECT LIFE(WEIGHTED AVERAGE)
* NOTE FOR (9)(10)(11)
WHEN THERE ARE TWO OR MORE PRODUCTS, AND DURING THE YEARS WHEN ALL OF PRODUCTS ARE NOT PRODUCED AT THE SAME RATE OF CAPACITY UTILIZATION, ABOVE BREAK-EVEN-POINTS CANNOT GIVE CORRECT FIGURES.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***
FINANCIAL RATE OF RETURN (IN CURRENT PRICE)
CASE 1 - SALE OUT : 100/0 - (PESO, 1000)

YEAR	FIXED CAPITAL EXPEND.	CHANGE IN WORKING CAPITAL	(1) GROSS CAPITAL EXPENDTR	OPERATING PROFIT	DEPRECIATN	(2) GROSS CASH IN-FLOW	(3) INCOME TAX	(4) BFR-TAX NET IN-FLOW (2)-(1)	(5) AFT-TAX NET IN-FLOW (4)-(3)
1990	529016.	0.	529016.	60786.	0.	60786.	0.	-468230.	-468230.
1991	208987.	0.	208987.	189072.	30608.	189681.	0.	-19306.	-19306.
1992	0.	0.	0.	201518.	30608.	232126.	0.	232126.	232126.
1993	0.	0.	0.	179308.	30608.	209917.	0.	209917.	209917.
1994	0.	0.	0.	88912.	30608.	119520.	19089.	119520.	100431.
1995	0.	0.	0.	54038.	30608.	84646.	13802.	84646.	70844.
1996	0.	0.	0.	75693.	12662.	88355.	28300.	88355.	60054.
1997	0.	0.	0.	79618.	12662.	92280.	27866.	92280.	64413.
1998	0.	0.	0.	83775.	12662.	96436.	29321.	96436.	67115.
1999	0.	0.	0.	88180.	12662.	100842.	30863.	100842.	69979.
2000	0.	0.	0.	92853.	12662.	105514.	32498.	105514.	73016.
2001	0.	0.	0.	97813.	12662.	110474.	34234.	110474.	76240.
2002	0.	0.	0.	103081.	12662.	115743.	36078.	115743.	79665.
2003	0.	0.	0.	108683.	12662.	121344.	38039.	121344.	83305.
2004	-529506.	0.	-529506.	114643.	12662.	127305.	40125.	656810.	616685.
	208497.	0.	208497.	1587968.	266997.	1854965.	330217.	1646471.	1316254.

INTERNAL RATE OF RETURN

ON (4) BFR-TAX NET IN-FLOW (2)-(1) 24.23 PER CENT

ON (5) AFT-TAX NET IN-FLOW (4)-(3) 21.42 PER CENT

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE *** PAGE 1

SALES PLAN

CASE II (Master Case) - SALE OUT : 100/0 - (PESO, 1000)

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
TOTAL AREA FOR SALES (M2)	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.
SALES RATIO	0.300	0.300	0.300	0.100	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL SOLD LAND(M2)	351000.	351000.	351000.	117000.	0.	0.	0.	0.	0.	0.
REGISTARATION FEE(PESO/M2)	0.0005	0.0005	0.0006	0.0007	0.0007	0.0008	0.0009	0.0010	0.0011	0.0012
SALES REVENUE	176.	193.	212.	78.	0.	0.	0.	0.	0.	0.
TOTAL AREA FOR SERVICE (M2)	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.
SERVICE RATIO	0.150	0.300	0.300	0.200	0.050	0.0	0.0	0.0	0.0	0.0
TOTAL SERVICE LAND (M2)	175500.	351000.	351000.	234000.	58500.	0.	0.	0.	0.	0.
UNIT PRICE(PESO/M2)	0.6000	0.6600	0.7260	0.7986	0.8785	0.9663	1.0629	1.1692	1.2862	1.4148
SALES REVENUE	105300.	231660.	254826.	186872.	51390.	0.	0.	0.	0.	0.
TOTAL AREA FOR SALES (M2)	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.
SALES RATIO	0.0	0.300	0.600	0.900	1.000	1.000	1.000	1.000	1.000	1.000
TOTAL SOLD LAND (M2)	0.	351000.	702000.	1053000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.
SERVICE CHARGE (PESO/M2)	0.0	0.0800	0.0840	0.0882	0.0926	0.0972	0.1021	0.1072	0.1126	0.1182
SALES REVENUE	0.	28080.	58968.	92874.	108354.	113771.	119460.	125433.	131704.	138289.
TOTAL INVOICE VALUE (PESO)	600000.	600000.	600000.	600000.	600000.	600000.	600000.	600000.	600000.	600000.
SERVICE RATIO	0.0	1.000	1.100	1.210	1.331	1.464	1.611	1.772	1.949	2.144
HANDLING VOLUME	0.	600000.	660000.	725999.	798599.	878459.	966304.	1062934.	1169227.	1286150.
CBMW SERVICE FEE	0.0	0.0250	0.0250	0.0250	0.0250	0.0250	0.0250	0.0250	0.0250	0.0250
SALES REVENUE	0.	15000.	16500.	18150.	19965.	21961.	24158.	26573.	29231.	32154.
TOTAL WATER SUPPLY (M3/YR)	3000000.	3000000.	3000000.	3000000.	3000000.	3000000.	3000000.	3000000.	3000000.	3000000.
SALES RATIO	0.0	0.500	0.600	0.750	0.850	0.850	0.850	0.850	0.850	0.850
TOTAL SUPPLIED WATER	0.	1500000.	1800000.	2250000.	2550000.	2550000.	2550000.	2550000.	2550000.	2550000.
SERVICE CHARGE(PESO/M3)	0.0	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080
SALES REVENUE	0.	12000.	14400.	18000.	20400.	20400.	20400.	20400.	20400.	20400.
TOTAL ESCORT (/M)	2400.	2400.	2400.	2400.	2400.	2400.	2400.	2400.	2400.	2400.
SERVICE RATIO	0.0	0.300	0.400	0.500	0.700	0.800	0.800	0.800	0.800	0.800
ESCORT ROUND	0.	720.	960.	1200.	1680.	1920.	1920.	1920.	1920.	1920.
SERVICE CHARGE	0.0	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000
SALES REVENUE	0.	144.	192.	240.	336.	384.	384.	384.	384.	384.
TOTAL SALES REVENUE	105475.	287077.	345098.	316215.	200444.	156517.	164401.	172790.	181719.	191227.
NON-OPERATING INCOME	0.	0.	24934.	24934.	24934.	24934.	24934.	0.	0.	0.

SALES PLAN

CASE II (Master Case) - SALE OUT : 100/0 - (PESO, 1000)

YEAR	2000	2001	2002	2003	2004
TOTAL AREA FOR SALES (M2)	1170000.	1170000.	1170000.	1170000.	1170000.
SALES RATIO	0.0	0.0	0.0	0.0	0.0
TOTAL SOLD LAND(M2)	0.	0.	0.	0.	0.
REGISTARATION FEE(PESO/M2)	0.0013	0.0014	0.0016	0.0017	0.0019
SALES REVENUE	0.	0.	0.	0.	0.
TOTAL AREA FOR SERVICE (M2)	1170000.	1170000.	1170000.	1170000.	1170000.
SERVICE RATIO	0.0	0.0	0.0	0.0	0.0
TOTAL SERVICE LAND (M2)	0.	0.	0.	0.	0.
UNIT PRICE(PESO/M2)	1.5562	1.7119	1.8831	2.0714	2.2785
SALES REVENUE	0.	0.	0.	0.	0.
TOTAL AREA FOR SALES (M2)	1170000.	1170000.	1170000.	1170000.	1170000.
SALES RATIO	1.000	1.000	1.000	1.000	1.000
TOTAL SOLD LAND (M2)	1170000.	1170000.	1170000.	1170000.	1170000.
SERVICE CHARGE (PESO/M2)	0.1241	0.1303	0.1368	0.1437	0.1509
SALES REVENUE	145204.	152464.	160087.	168091.	176496.
TOTAL INVOICE VALUE (PESO)	600000.	600000.	600000.	600000.	600000.
SERVICE RATIO	2.358	2.594	2.853	3.138	3.452
HANDLING VOLUME	1414765.	1556241.	1711865.	1883051.	2071357.
CBMW SERVICE FEE	0.0250	0.0250	0.0250	0.0250	0.0250
SALES REVENUE	35369.	38906.	42797.	47076.	51784.
TOTAL WATER SUPPLY (M3/YR)	3000000.	3000000.	3000000.	3000000.	3000000.
SALES RATIO	0.850	0.850	0.850	0.850	0.850
TOTAL SUPPLIED WATER	2550000.	2550000.	2550000.	2550000.	2550000.
SERVICE CHARGE(PESO/M3)	0.0080	0.0080	0.0080	0.0080	0.0080
SALES REVENUE	20400.	20400.	20400.	20400.	20400.
TOTAL ESCORT (/M)	2400.	2400.	2400.	2400.	2400.
SERVICE RATIO	0.800	0.800	0.800	0.800	0.800
ESCORT ROUND	1920.	1920.	1920.	1920.	1920.
SERVICE CHARGE	0.2000	0.2000	0.2000	0.2000	0.2000
SALES REVENUE	384.	384.	384.	384.	384.
TOTAL SALES REVENUE	201357.	212154.	223668.	235952.	249064.
NON-OPERATING INCOME	0.	0.	0.	0.	0.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***

COST STATEMENTS

CASE II (Master Case) - SALE OUT : 100/0 - (PESO, 1000)

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
TOTAL SOLD LAND(M2)	351000.	351000.	351000.	117000.	0.	0.	0.	0.	0.	0.
SALARY & WAGES	6795.	7339.	7926.	8560.	9245.	9984.	10783.	11645.	12577.	13583.
ADMINISTRATION	11551.	12476.	13474.	14552.	15716.	16973.	18331.	19797.	21381.	23091.
SALARY & WAGES INC. ADMI.	18346.	19814.	21399.	23111.	24960.	26957.	29114.	31443.	33958.	36675.
REPAIR & MAINTENANCE	0.	9863.	14794.	19726.	24657.	25890.	27185.	28544.	29971.	31470.
INSURANCE	0.	3829.	3676.	3523.	3370.	3217.	3154.	3091.	3027.	2964.
PROPERTY TAX	0.	433.	368.	285.	183.	154.	154.	154.	154.	154.
VALUE ADDED TAX	10548.	28708.	34510.	31621.	20044.	15652.	16440.	17279.	18172.	19123.
DIRECT OPERATING COST	10548.	42833.	53349.	55156.	48255.	44913.	46933.	49068.	51325.	53711.
DIRECT COST	28894.	62647.	74748.	78267.	73215.	71870.	76046.	80510.	85283.	90385.
DEPRECIABLE ASSETS (ROAD,ETC)	0.	8059.	8059.	8059.	8059.	8059.	8059.	8059.	8059.	8059.
DEPRECIABLE ASSETS (UTILITIES)	0.	2556.	2556.	2556.	2556.	2556.	2556.	2556.	2556.	2556.
DEPRECIABLE ASSETS (BUILDINGS)	0.	2047.	2047.	2047.	2047.	2047.	2047.	2047.	2047.	2047.
DEPRECIABLE ASSETS (ENGINEERING)	0.	5058.	5058.	5058.	5058.	5058.	0.	0.	0.	0.
DEPRECIABLE ASSETS (PRE-OPE)	0.	2359.	2359.	2359.	2359.	2359.	0.	0.	0.	0.
DEPRECIABLE ASSETS (I.D.C.)	0.	10530.	10530.	10530.	10530.	10530.	0.	0.	0.	0.
DEPRECIATION AND AMORTIZATION	0.	30608.	30608.	30608.	30608.	30608.	12662.	12662.	12662.	12662.
COST INCL. DEPRT. & AMORT.	28894.	93256.	105356.	108876.	103824.	102479.	88708.	93172.	97944.	103047.
OPERATING EXPENSES	28894.	93256.	105356.	108876.	103824.	102479.	88708.	93172.	97944.	103047.
INTEREST ON LONG TERM DEBT	0.	0.	98842.	79074.	59305.	39537.	19768.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL COST	28894.	93256.	204198.	187949.	163129.	142015.	108477.	93172.	97944.	103047.

YEAR	2000	2001	2002	2003	2004
TOTAL SOLD LAND(M2)	0.	0.	0.	0.	0.
SALARY & WAGES	14670.	15843.	17111.	18480.	19958.
ADMINISTRATION	24939.	26934.	29089.	31416.	33929.
SALARY & WAGES INC. ADMI.	39609.	42777.	46199.	49895.	53887.
REPAIR & MAINTENANCE	33043.	34695.	36430.	38252.	40164.
INSURANCE	2901.	2837.	2774.	2711.	2648.
PROPERTY TAX	154.	154.	154.	154.	154.
VALUE ADDED TAX	20136.	21215.	22367.	23595.	24906.
DIRECT OPERATING COST	56234.	58902.	61725.	64712.	67872.
DIRECT COST	95842.	101680.	107925.	114607.	121759.
DEPRECIABLE ASSETS (ROAD.ETC)	8059.	8059.	8059.	8059.	8059.
DEPRECIABLE ASSETS (UTILITIES)	2556.	2556.	2556.	2556.	2556.
DEPRECIABLE ASSETS (BUILDINGS)	2047.	2047.	2047.	2047.	2047.
DEPRECIABLE ASSETS (ENGINEERING)	0.	0.	0.	0.	0.
DEPRECIABLE ASSETS (PRE-OPE)	0.	0.	0.	0.	0.
DEPRECIABLE ASSETS (I.D.C.)	0.	0.	0.	0.	0.
DEPRECIATION AND AMORTIZATION	12662.	12662.	12662.	12662.	12662.
COST INCL. DEPRT. & AMORT.	108504.	114341.	120586.	127269.	134421.
OPERATING EXPENSES	108504.	114341.	120586.	127269.	134421.
INTEREST ON LONG TERM DEBT	0.	0.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0.	0.
TOTAL COST	108504.	114341.	120586.	127269.	134421.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***

INCOME STATEMENTS (FOR ENDING MARCH 31)

CASE 11 (Master Case) - SALE OUT : 100/0 - (PESO, 1000)

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
OPERATING INCOME	105475.	287077.	345098.	316215.	200444.	156517.	164401.	172790.	181719.	191227.
TOTAL SALES REVENUE	105475.	287077.	345098.	316215.	200444.	156517.	164401.	172790.	181719.	191227.
COST OF SALES	28894.	93256.	105356.	108876.	103824.	102479.	88708.	93172.	97944.	103047.
SALARY & WAGES INC. ADMI.	18346.	19814.	21399.	23111.	24960.	26957.	29114.	31443.	33958.	36675.
DIRECT OPERATING COST	10548.	42833.	53349.	55156.	48255.	44913.	46933.	49068.	51325.	53711.
DEPRECIATION AND AMORTIZATION	0.	30608.	30608.	30608.	30608.	30608.	12662.	12662.	12662.	12662.
GROSS PROFIT ON SALES	76581.	193821.	239742.	207339.	96621.	54038.	75693.	79618.	83775.	88180.
OPERATING PROFIT	76581.	193821.	239742.	207339.	96621.	54038.	75693.	79618.	83775.	88180.
NON-OPERATING INCOME	0.	0.	24934.	24934.	24934.	24934.	24934.	0.	0.	0.
NON-OPERATING EXPENSES	0.	0.	98842.	79074.	59305.	39537.	19768.	0.	0.	0.
INTEREST ON LONG TERM DEBT	0.	0.	98842.	79074.	59305.	39537.	19768.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0	0.	0.	0.	0.	0.	0.
NET PROFIT OR (LOSS) BEFORE TAX	76581.	193821.	165833.	153199.	62249.	38435.	80858.	79618.	83775.	88180.
INCOME TAX	0.	0.	0.	0.	21787.	13802.	28300.	27866.	29321.	30863.
NET PROFIT OR (LOSS) AFTER TAX	76581.	193821.	165833.	153199.	40462.	25633.	52558.	51752.	54453.	57317.
DIVIDENDS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RETAINED EARNINGS	76581.	193821.	165833.	153199.	40462.	25633.	52558.	51752.	54453.	57317.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***
INCOME STATEMENTS (FOR ENDING MARCH 31)
CASE 11 (Master Case) - SALE OUT : 100/0 - (PESO, 1000)

YEAR	2000	2001	2002	2003	2004
OPERATING INCOME	201357.	212154.	223668.	235952.	249064.
TOTAL SALES REVENUE	201357.	212154.	223668.	235952.	249064.
COST OF SALES	108504.	114341.	120586.	127269.	134421.
SALARY & WAGES INC. ADMI.	39609.	42777.	46199.	49895.	53887.
DIRECT OPERATING COST	56234.	58902.	61725.	64712.	67872.
DEPRECIATION AND AMORTIZATION	12662.	12662.	12662.	12662.	12662.
GROSS PROFIT ON SALES	92853.	97813.	103081.	108683.	114643.
OPERATING PROFIT	92853.	97813.	103081.	108683.	114643.
NON-OPERATING INCOME	0.	0.	0.	0.	0.
NON-OPERATING EXPENSES	0.	0.	0.	0.	0.
INTEREST ON LONG TERM DEBT	0.	0.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0.	0.
NET PROFIT OR (LOSS) BEFORE TAX	92853.	97813.	103081.	108683.	114643.
INCOME TAX	32498.	34234.	36078.	38039.	40125.
NET PROFIT OR (LOSS) AFTER TAX	60354.	63578.	67003.	70644.	74518.
DIVIDENDS	0.	0.	0.	0.	0.
RETAINED EARNINGS	60354.	63578.	67003.	70644.	74518.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***
FUNDS FLOW STATEMENTS (FOR ENDING MARCH 31)

CASE II (Master Case) - SALE OUT : 100/0 - (PESO, 1000)

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
SOURCE OF FUNDS	735528.	389166.	295284.	262881.	130375.	95778.	84988.	64413.	67115.	69979.
CASH GENERATED FROM OPERATION	76581.	224430.	295284.	262881.	130375.	95778.	84988.	64413.	67115.	69979.
PROFIT AFT. TAX. BFR INT.	76581.	193821.	264675.	232273.	99767.	65169.	72326.	51752.	54453.	57317.
DEPRECIATION AND AMORTIZATION	0.	30608.	30608.	30608.	30608.	30608.	12662.	12662.	12662.	12662.
FINANCIAL RESOURCES	658946.	164737.	0.	0.	0.	0.	0.	0.	0.	0.
SHARE CAPITAL	411842.	0.	0.	0.	0.	0.	0.	0.	0.	0.
LONG TERM DEBT	247105.	164737.	0.	0.	0.	0.	0.	0.	0.	0.
SHORT TERM DEBT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
USES OF FUNDS	538803.	257700.	181210.	161442.	141673.	121905.	102137.	0.	0.	0.
FIXED CAPITAL EXPENDITURE	538803.	257700.	0.	0.	0.	0.	0.	0.	0.	0.
NON-DEPRECIABLE ASSETS	231750.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DEPRECIABLE FIXED ASSETS	297266.	208987.	0.	0.	0.	0.	0.	0.	0.	0.
INTEREST DURING CONSTRUCTION	9787.	48713.	0.	0.	0.	0.	0.	0.	0.	0.
CHANGE IN WORKING CAPITAL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DEBT SERVICES	0.	0.	181210.	161442.	141673.	121905.	102137.	0.	0.	0.
REPAYMENT OF LONG TERM DEBT	0.	0.	82368.	82368.	82368.	82368.	82368.	0.	0.	0.
REPAYMENT OF SHORT TERM DEBT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
INTEREST ON LONG TERM DEBT	0.	0.	98842.	79074.	59305.	39537.	19768.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DIVIDENDS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CASH INCREASE OR (DECREASE)	196725.	131466.	114074.	101439.	-11298.	-26127.	-17149.	64413.	67115.	69979.
BEGINNING CASH BALANCE	0.	196725.	328191.	442265.	543704.	532406.	506279.	489130.	553543.	620659.
ENDING CASH BALANCE	196725.	328191.	442265.	543704.	532406.	506279.	489130.	553543.	620659.	690637.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***
FUNDS FLOW STATEMENTS (FOR ENDING MARCH 31)
CASE II (Master Case) - SALE OUT : 100/0 - (PESO, 1000)

YEAR	2000	2001	2002	2003	2004
SOURCE OF FUNDS	73016.	76240.	79665.	83305.	87180.
CASH GENERATED FROM OPERATION	73016.	76240.	79665.	83305.	87180.
PROFIT AFT. TAX. BFR INT.	60354.	63578.	67003.	70644.	74518.
DEPRECIATION AND AMORTIZATION	12662.	12662.	12662.	12662.	12662.
FINANCIAL RESOURCES	0.	0.	0.	0.	0.
SHARE CAPITAL	0.	0.	0.	0.	0.
LONG TERM DEBT	0.	0.	0.	0.	0.
SHORT TERM DEBT	0.	0.	0.	0.	0.
USES OF FUNDS	0.	0.	0.	0.	0.
FIXED CAPITAL EXPENDITURE	0.	0.	0.	0.	0.
NON-DEPRECIABLE ASSETS	0.	0.	0.	0.	0.
DEPRECIABLE FIXED ASSETS	0.	0.	0.	0.	0.
INTEREST DURING CONSTRUCTION	0.	0.	0.	0.	0.
CHANGE IN WORKING CAPITAL	0.	0.	0.	0.	0.
DEBT SERVICES	0.	0.	0.	0.	0.
REPAYMENT OF LONG TERM DEBT	0.	0.	0.	0.	0.
REPAYMENT OF SHORT TERM DEBT	0.	0.	0.	0.	0.
INTEREST ON LONG TERM DEBT	0.	0.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0.	0.
DIVIDENDS	0.	0.	0.	0.	0.
CASH INCREASE OR (DECREASE)	73016.	76240.	79665.	83305.	87180.
BEGINNING CASH BALANCE	690637.	763653.	839893.	919558.	1002863.
ENDING CASH BALANCE	763653.	839893.	919558.	1002863.	1090043.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE *** PAGE 1

BALANCE SHEET (FOR ENDING MARCH 31)

CASE II (Master Case) - SALE OUT : 100/0 - (PESO, 1000)

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
ASSETS	735528.	1094086.	1177551.	1248382.	1206475.	1149740.	1119929.	1171681.	1226134.	1283452.
CURRENT ASSETS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ACCOUNT RECEIVABLE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
INVENTORIES	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ACC. EXCESS CASH	196725.	328191.	442265.	543704.	532406.	506279.	489130.	553543.	620659.	690637.
NET FIXED ASSETS	538803.	765895.	735286.	704678.	674069.	643461.	630799.	618137.	605476.	592814.
INVESTMENT	538803.	796503.	796503.	796503.	796503.	796503.	796503.	796503.	796503.	796503.
NON-DEPR. ASSETS	231750.	231750.	231750.	231750.	231750.	231750.	231750.	231750.	231750.	231750.
DEPRECIABLE ASSETS	297266.	506253.	506253.	506253.	506253.	506253.	506253.	506253.	506253.	506253.
INTEREST DRG CONSTN.	9787.	58500.	58500.	58500.	58500.	58500.	58500.	58500.	58500.	58500.
LESS ACC. DEPRECIATION	0.	30608.	61217.	91825.	122434.	153042.	165704.	178366.	191027.	203689.
LIABILITIES	247105.	411842.	329473.	247105.	164737.	82369.	0.	0.	0.	0.
CURRENT LIABILITIES	0.	82368.	82368.	82368.	82368.	82368.	0.	0.	0.	0.
ACCOUNT PAYABLE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CURRENT PORTION OF L/T DEBT	0.	82368.	82368.	82368.	82368.	82368.	0.	0.	0.	0.
SHORT TERM DEBT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FIXED LIABILITIES	247105.	329473.	247105.	164737.	82369.	0.	0.	0.	0.	0.
LONG TERM DEBT BALANCE	247105.	329473.	247105.	164737.	82369.	0.	0.	0.	0.	0.
OTHER FIXED LIABILITIES	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STOCK HOLDERS EQUITY	488423.	682244.	848078.	1001277.	1041739.	1067371.	1119929.	1171681.	1226134.	1283451.
SHARE CAPITAL	411842.	411842.	411842.	411842.	411842.	411842.	411842.	411842.	411842.	411842.
ACC. RETAINED EARNINGS	76581.	270403.	436236.	589435.	629897.	655530.	708088.	759839.	814293.	871610.
LIABILITIES & S/H EQUITY	735528.	1094086.	1177551.	1248382.	1206475.	1149740.	1119929.	1171681.	1226134.	1283452.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***

CASE 11 (Master Case) BALANCE SHEET (FOR ENDING MARCH 31)
- SALE OUT : 100/0 - (PESO, 1000)

YEAR	2000	2001	2002	2003	2004
ASSETS	1343806.	1407384.	1474387.	1545031.	1619548.
CURRENT ASSETS	0.	0.	0.	0.	0.
ACCOUNT RECEIVABLE	0.	0.	0.	0.	0.
INVENTORIES	0.	0.	0.	0.	0.
ACC. EXCESS CASH	763653.	839893.	919558.	1002863.	1090043.
NET FIXED ASSETS	580152.	567491.	554829.	542167.	529506.
INVESTMENT	796503.	796503.	796503.	796503.	796503.
NON-DEPR. ASSETS	231750.	231750.	231750.	231750.	231750.
DEPRECIABLE ASSETS	506253.	506253.	506253.	506253.	506253.
INTEREST DRG CONSTR.	58500.	58500.	58500.	58500.	58500.
LESS: ACC. DEPRECIATION	216351.	229012.	241674.	254336.	266997.
LIABILITIES	0.	0.	0.	0.	0.
CURRENT LIABILITIES	0.	0.	0.	0.	0.
ACCOUNT PAYABLE	0.	0.	0.	0.	0.
CURRENT PORTION OF L/T DEBT	0.	0.	0.	0.	0.
SHORT TERM DEBT	0.	0.	0.	0.	0.
FIXED LIABILITIES	0.	0.	0.	0.	0.
LONG TERM DEBT BALANCE	0.	0.	0.	0.	0.
OTHER FIXED LIABILITIES	0.	0.	0.	0.	0.
STOCK HOLDERS EQUITY	1343806.	1407384.	1474387.	1545030.	1619548.
SHARE CAPITAL	411842.	411842.	411842.	411842.	411842.
ACC. RETAINED EARNINGS	931964.	995542.	1062545.	1133189.	1207707.
LIABILITIES & S/H EQUITY	1343806.	1407384.	1474387.	1545031.	1619548.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***
LONG TERM DEBT
CASE 11 (Master Case) - SALE OUT : 100/0 - (PESO, 1000)

AMOUNT OF DEBT 411842.

INTEREST RATE 24.000 PER CENT/YEAR

REPAYMENT 5 YEAR-EQUAL-INSTALLMENT-REPAYMENT (ANNUAL REPAYMENT)

YEAR	SER.NO	PRINCIPAL	INTEREST	DEBT SERVICE	BALANCE AFT. PAYMENT
1990	1	0.	0.	0.	247105.
1991	2	0.	0.	0.	411841.
1992	3	82368.	98842.	181210.	329473.
1993	4	82368.	79074.	161442.	247105.
1994	5	82368.	59305.	141673.	164737.
1995	6	82368.	39537.	121905.	82368.
1996	7	82368.	19768.	102137.	0.
1997	8	0.	0.	0.	0.
1998	9	0.	0.	0.	0.
1999	10	0.	0.	0.	0.
2000	11	0.	0.	0.	0.
2001	12	0.	0.	0.	0.
2002	13	0.	0.	0.	0.
2003	14	0.	0.	0.	0.
2004	15	0.	0.	0.	0.
TOTAL		411841.	296526.	708367.	0.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***
PROFITABILITY AND FINANCIAL INDICATORS
- SALE OUT : 100/0 - (PESO, 1000)

CASE II (Master Case)

YEAR	(1) AFT TAX PROFIT -TO- SALES REV (PCT)	(2) AFT TAX PROFIT -TO- S/H EQUITY (PCT)	(3) BFR TAX PROFIT -TO- INVESTMENT (PCT)	(4) AFT TAX PROFIT -TO- S/CAPITAL (PCT)	(5) CURRENT RATIO	(6) QUICK RATIO	(7) DEBT SERVICE RATIO	(8) L/T DEBT -TO- S/H EQUITY	(9)* PROFIT B.E.P. CAPACITY UTILIZE (PCT)	(10)* CASH B.E.P. SALES PRICE (PRICE)	(11)* CASH B.E.P. CAPACITY UTILIZE (PCT)
1990	72.6	15.7	14.2	18.6	********	********	********	34 / 66	3.6	82.3	3.6
1991	67.5	28.4	24.3	47.1	0.0	0.0	********	33 / 67	8.2	178.5	4.8
1992	44.8	19.6	20.8	40.3	0.0	0.0	1.63	23 / 77	16.9	729.2	20.2
1993	44.9	15.3	19.2	37.2	0.0	0.0	1.63	14 / 86	5.6	2048.8	6.8
1994	18.0	3.9	7.8	9.8	0.0	0.0	0.92	7 / 93	********	********	0.0
1995	14.1	2.4	5.0	6.2	0.0	0.0	0.78	0 / 100	********	********	0.0
1996	27.8	4.7	10.2	12.8	********	********	0.83	0 / 100	********	********	0.0
1997	30.0	4.4	10.0	12.6	********	********	********	0 / 100	********	********	0.0
1998	30.0	4.4	10.5	13.2	********	********	********	0 / 100	********	********	0.0
1999	30.0	4.5	11.1	13.9	********	********	********	0 / 100	********	********	0.0
2000	30.0	4.5	11.7	14.7	********	********	********	0 / 100	********	********	0.0
2001	30.0	4.5	12.3	15.4	********	********	********	0 / 100	********	********	0.0
2002	30.0	4.5	12.9	16.3	********	********	********	0 / 100	********	********	0.0
2003	29.9	4.6	13.6	17.2	********	********	********	0 / 100	********	********	0.0
2004	29.9	4.6	14.4	18.1	********	********	********	0 / 100	********	********	0.0
AVERAGE1	35.3	8.4	13.2	19.5	********	********	********	7 / 93	********	********	2.4
AVERAGE2	35.9	7.0	13.2	19.5	0.0	0.0	2.50	6 / 94			

(AVERAGE1) : SUM OF ANNUAL FIGURES OF PERCENTAGE AND RATIO IS DIVIDED BY NO. OF YEARS(SIMPLE AVERAGE)
(AVERAGE2) : AVERAGE FIGURES ARE CALCULATED BY ACTUAL VALUES ACCUMULATED OVER THE PROJECT LIFE(WEIGHTED AVERAGE)
* NOTE FOR (9)(10)(11)
WHEN THERE ARE TWO OR MORE PRODUCTS, AND DURING THE YEARS WHEN ALL OF PRODUCTS ARE NOT PRODUCED AT THE SAME RATE OF CAPACITY UTILIZATION, ABOVE BREAK-EVEN-POINTS CANNOT GIVE CORRECT FIGURES.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***

CASE II (Master Case) FINANCIAL RATE OF RETURN (IN CURRENT PRICE)

- SALE OUT : 100/0 - (PESO, 1000)

YEAR	FIXED CAPITAL EXPEND.	CHANGE IN WORKING CAPITAL	(1) GROSS CAPITAL EXPENDTR	OPERATING PROFIT	DEPRECIATN	(2) GROSS CASH IN-FLOW	(3) INCOME TAX	(4) BFR-TAX NET IN-FLOW (2)-(1)	(5) AFT-TAX NET IN-FLOW (4)-(3)
1990	529016.	0.	529016.	76581.	0.	76581.	0.	-452435.	-452435.
1991	208987.	0.	208987.	193821.	30608.	224430.	0.	15443.	15443.
1992	0.	0.	0.	239742.	30608.	270350.	0.	270350.	270350.
1993	0.	0.	0.	207339.	30608.	237947.	0.	237947.	237947.
1994	0.	0.	0.	96621.	30608.	127229.	21787.	127229.	105442.
1995	0.	0.	0.	54038.	30608.	84646.	13802.	84646.	70844.
1996	0.	0.	0.	75693.	12662.	88355.	28300.	88355.	60054.
1997	0.	0.	0.	79618.	12662.	92280.	27866.	92280.	64413.
1998	0.	0.	0.	83775.	12662.	96436.	29321.	96436.	67115.
1999	0.	0.	0.	88180.	12662.	100842.	30863.	100842.	69979.
2000	0.	0.	0.	92853.	12662.	105514.	32498.	105514.	73016.
2001	0.	0.	0.	97813.	12662.	110474.	34234.	110474.	76240.
2002	0.	0.	0.	103081.	12662.	115743.	36078.	115743.	79665.
2003	0.	0.	0.	108683.	12662.	121344.	38039.	121344.	83305.
2004	-529506.	0.	-529506.	114643.	12662.	127305.	40125.	656810.	616685.
	208497.	0.	208497.	1712476.	266997.	1979472.	332915.	1770979.	1438063.

INTERNAL RATE OF RETURN

ON (4) BFR-TAX NET IN-FLOW (2)-(1) 29.23 PER CENT

ON (5) AFT-TAX NET IN-FLOW (4)-(3) 26.46 PER CENT

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***

SALES PLAN

CASE (1) - SALE OUT : 100/0 - (PESO, 1000)

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
TOTAL AREA FOR SALES (M2)	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.
SALES RATIO	0.300	0.300	0.300	0.100	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL SOLD LAND(M2)	351000.	351000.	351000.	117000.	0.	0.	0.	0.	0.	0.
REGISTARATION FEE(PESO/M2)	0.0005	0.0005	0.0006	0.0007	0.0007	0.0008	0.0009	0.0010	0.0011	0.0012
SALES REVENUE	176.	193.	212.	78.	0.	0.	0.	0.	0.	0.
TOTAL AREA FOR SERVICE (M2)	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.
SERVICE RATIO	0.150	0.300	0.300	0.200	0.050	0.0	0.0	0.0	0.0	0.0
TOTAL SERVICE LAND (M2)	175500.	351000.	351000.	234000.	58500.	0.	0.	0.	0.	0.
UNIT PRICE(PESO/M2)	0.7000	0.7700	0.8470	0.9317	1.0249	1.1274	1.2401	1.3641	1.5005	1.6506
SALES REVENUE	122850.	270270.	297297.	218018.	59955.	0.	0.	0.	0.	0.
TOTAL AREA FOR SALES (M2)	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.
SALES RATIO	0.0	0.300	0.600	0.900	1.000	1.000	1.000	1.000	1.000	1.000
TOTAL SOLD LAND (M2)	0.	351000.	702000.	1053000.	1170000.	1170000.	1170000.	1170000.	1170000.	1170000.
SERVICE CHARGE (PESO/M2)	0.0	0.0800	0.0840	0.0882	0.0926	0.0972	0.1021	0.1072	0.1126	0.1182
SALES REVENUE	0.	28080.	58968.	92874.	108354.	113771.	119460.	125433.	131704.	138289.
TOTAL INVOICE VALUE (PESO)	600000.	600000.	600000.	600000.	600000.	600000.	600000.	600000.	600000.	600000.
SERVICE RATIO	0.0	1.000	1.100	1.210	1.331	1.464	1.611	1.772	1.949	2.144
HANDLING VOLUME	0.	600000.	660000.	725999.	798599.	878459.	966304.	1062934.	1169227.	1286150.
CBMW SERVICE FEE	0.0	0.0250	0.0250	0.0250	0.0250	0.0250	0.0250	0.0250	0.0250	0.0250
SALES REVENUE	0.	15000.	16500.	18150.	19965.	21961.	24158.	26573.	29231.	32154.
TOTAL WATER SUPPLY (M3/YR)	3000000.	3000000.	3000000.	3000000.	3000000.	3000000.	3000000.	3000000.	3000000.	3000000.
SALES RATIO	0.0	0.500	0.600	0.750	0.850	0.850	0.850	0.850	0.850	0.850
TOTAL SUPPLIED WATER	0.	1500000.	1800000.	2250000.	2550000.	2550000.	2550000.	2550000.	2550000.	2550000.
SERVICE CHARGE(PESO/M3)	0.0	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080
SALES REVENUE	0.	12000.	14400.	18000.	20400.	20400.	20400.	20400.	20400.	20400.
TOTAL ESCORT (/M)	2400.	2400.	2400.	2400.	2400.	2400.	2400.	2400.	2400.	2400.
SERVICE RATIO	0.0	0.300	0.400	0.500	0.700	0.800	0.800	0.800	0.800	0.800
ESCORT ROUND	0.	720.	960.	1200.	1680.	1920.	1920.	1920.	1920.	1920.
SERVICE CHARGE	0.0	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000
SALES REVENUE	0.	144.	192.	240.	336.	384.	384.	384.	384.	384.
TOTAL SALES REVENUE	123025.	325687.	387569.	347360.	209009.	156517.	164401.	172790.	181719.	191227.
NON-OPERATING INCOME	0.	0.	24934.	24934.	24934.	24934.	24934.	0.	0.	0.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT. PHILIPPINE ***

SALES PLAN

CASE III - SALE OUT : 100/0 - (PESO. 1000)

YEAR	2000	2001	2002	2003	2004
TOTAL AREA FOR SALES (M2)	1170000.	1170000.	1170000.	1170000.	1170000.
SALES RATIO	0.0	0.0	0.0	0.0	0.0
TOTAL SOLD LAND(M2)	0.	0.	0.	0.	0.
REGISTARATION FEE(PESO/M2)	0.0013	0.0014	0.0016	0.0017	0.0019
SALES REVENUE	0.	0.	0.	0.	0.
TOTAL AREA FOR SERVICE (M2)	1170000.	1170000.	1170000.	1170000.	1170000.
SERVICE RATIO	0.0	0.0	0.0	0.0	0.0
TOTAL SERVICE LAND (M2)	0.	0.	0.	0.	0.
UNIT PRICE(PESO/M2)	1.8156	1.9972	2.1969	2.4166	2.6582
SALES REVENUE	0.	0.	0.	0.	0.
TOTAL AREA FOR SALES (M2)	1170000.	1170000.	1170000.	1170000.	1170000.
SALES RATIO	1.000	1.000	1.000	1.000	1.000
TOTAL SOLD LAND (M2)	1170000.	1170000.	1170000.	1170000.	1170000.
SERVICE CHARGE (PESO/M2)	0.1241	0.1303	0.1368	0.1437	0.1509
SALES REVENUE	145204.	152464.	160087.	168091.	176496.
TOTAL INVOICE VALUE (PESO)	600000.	600000.	600000.	600000.	600000.
SERVICE RATIO	2.358	2.594	2.853	3.138	3.452
HANDLING VOLUME	1414765.	1556241.	1711865.	1883051.	2071357.
CBMW SERVICE FEE	0.0250	0.0250	0.0250	0.0250	0.0250
SALES REVENUE	35369.	38906.	42797.	47076.	51784.
TOTAL WATER SUPPLY (M3/YR)	3000000.	3000000.	3000000.	3000000.	3000000.
SALES RATIO	0.850	0.850	0.850	0.850	0.850
TOTAL SUPPLIED WATER	2550000.	2550000.	2550000.	2550000.	2550000.
SERVICE CHARGE(PESO/M3)	0.0080	0.0080	0.0080	0.0080	0.0080
SALES REVENUE	20400.	20400.	20400.	20400.	20400.
TOTAL ESCORT (/M)	2400.	2400.	2400.	2400.	2400.
SERVICE RATIO	0.800	0.800	0.800	0.800	0.800
ESCORT ROUND	1920.	1920.	1920.	1920.	1920.
SERVICE CHARGE	0.2000	0.2000	0.2000	0.2000	0.2000
SALES REVENUE	384.	384.	384.	384.	384.
TOTAL SALES REVENUE	201357.	212154.	223668.	235952.	249064.
NON-OPERATING INCOME	0.	0.	0.	0.	0.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***

COST STATEMENTS

CASE III - SALE OUT : 100/0 - (PESO, 1000)

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
TOTAL SOLD LAND(M2)	351000.	351000.	351000.	117000.	0.	0.	0.	0.	0.	0.
SALARY & WAGES	6795.	7339.	7926.	8560.	9245.	9984.	10783.	11645.	12577.	13583.
ADMINISTRATION	11551.	12476.	13474.	14552.	15716.	16973.	18331.	19797.	21381.	23091.
SALARY & WAGES INC. ADMI.	18346.	19814.	21399.	23111.	24960.	26957.	29114.	31443.	33958.	36675.
REPAIR & MAINTENANCE	0.	9863.	14794.	19726.	24657.	25690.	27185.	28544.	29971.	31470.
INSURANCE	0.	3829.	3676.	3523.	3370.	3217.	3154.	3091.	3027.	2964.
PROPERTY TAX	0.	433.	368.	285.	183.	154.	154.	154.	154.	154.
VALUE ADDED TAX	12303.	32569.	38757.	34736.	20901.	15652.	18440.	17279.	18172.	19123.
DIRECT OPERATING COST	12303.	46694.	57596.	58270.	49112.	44913.	48933.	49068.	51325.	53711.
DIRECT COST	30649.	66508.	78995.	81382.	74072.	71870.	78046.	80510.	85283.	90385.
DEPRECIABLE ASSETS (ROAD.ETC)	0.	8059.	8059.	8059.	8059.	8059.	8059.	8059.	8059.	8059.
DEPRECIABLE ASSETS (UTILITIES)	0.	2556.	2556.	2556.	2556.	2556.	2556.	2556.	2556.	2556.
DEPRECIABLE ASSETS (BUILDINGS)	0.	2047.	2047.	2047.	2047.	2047.	2047.	2047.	2047.	2047.
DEPRECIABLE ASSETS (ENGINEERING)	0.	5058.	5058.	5058.	5058.	5058.	0.	0.	0.	0.
DEPRECIABLE ASSETS (PRE-OPE)	0.	2359.	2359.	2359.	2359.	2359.	0.	0.	0.	0.
DEPRECIABLE ASSETS (I.D.C.)	0.	10530.	10530.	10530.	10530.	10530.	0.	0.	0.	0.
DEPRECIATION AND AMORTIZATION	0.	30608.	30608.	30608.	30608.	30608.	12662.	12662.	12662.	12662.
COST INCL. DEPRT. & AMORT.	30649.	97117.	109604.	111990.	104680.	102479.	88708.	93172.	97944.	103047.
OPERATING EXPENSES	30649.	97117.	109604.	111990.	104680.	102479.	88708.	93172.	97944.	103047.
INTEREST ON LONG TERM DEBT	0.	0.	98842.	79074.	59305.	39537.	19768.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL COST	30649.	97117.	208446.	191064.	163986.	142015.	108477.	93172.	97944.	103047.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***

COST STATEMENTS

CASE III - SALE OUT : 100/0 - (PESO, 1000)

YEAR	2000	2001	2002	2003	2004
TOTAL SOLD LAND(M2)	0.	0.	0.	0.	0.
SALARY & WAGES	14670.	15843.	17111.	18480.	19956.
ADMINISTRATION	24939.	26934.	29089.	31416.	33929.
SALARY & WAGES INC. ADMI.	39609.	42777.	46199.	49895.	53887.
REPAIR & MAINTENANCE	33043.	34695.	36430.	38252.	40164.
INSURANCE	2901.	2837.	2774.	2711.	2648.
PROPERTY TAX	154.	154.	154.	154.	154.
VALUE ADDED TAX	20136.	21215.	22367.	23595.	24906.
DIRECT OPERATING COST	56234.	58902.	61725.	64712.	67872.
DIRECT COST	95842.	101680.	107925.	114607.	121759.
DEPRECIABLE ASSETS (ROAD,ETC)	8059.	8059.	8059.	8059.	8059.
DEPRECIABLE ASSETS (UTILITIES)	2556.	2556.	2556.	2556.	2556.
DEPRECIABLE ASSETS (BUILDINGS)	2047.	2047.	2047.	2047.	2047.
DEPRECIABLE ASSETS (ENGINEERING)	0.	0.	0.	0.	0.
DEPRECIABLE ASSETS (PRE-OPE)	0.	0.	0.	0.	0.
DEPRECIABLE ASSETS (I.D.C.)	0.	0.	0.	0.	0.
DEPRECIATION AND AMORTIZATION	12662.	12662.	12662.	12662.	12662.
COST INCL. DEPRT. & AMORT.	108504.	114341.	120586.	127269.	134421.
OPERATING EXPENSES	108504.	114341.	120586.	127269.	134421.
INTEREST ON LONG TERM DEBT	0.	0.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0.	0.
TOTAL COST	108504.	114341.	120586.	127269.	134421.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE *** PAGE 1

INCOME STATEMENTS (FOR ENDING MARCH 31)

CASE 111 - SALE OUT : 100/0 - (PESO, 1000)

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
OPERATING INCOME	123025.	325687.	387569.	347360.	209009.	156517.	164401.	172790.	181719.	191227.
TOTAL SALES REVENUE	123025.	325687.	387569.	347360.	209009.	156517.	164401.	172790.	181719.	191227.
COST OF SALES	30649.	97117.	109604.	111990.	104680.	102479.	88708.	93172.	97944.	103047.
SALARY & WAGES INC. ADMI.	18346.	19814.	21399.	23111.	24960.	26957.	29114.	31443.	33958.	36675.
DIRECT OPERATING COST	12303.	46694.	57596.	58270.	49112.	44913.	46933.	49068.	51325.	53711.
DEPRECIATION AND AMORTIZATION	0.	30608.	30608.	30608.	30608.	30608.	12662.	12662.	12662.	12662.
GROSS PROFIT ON SALES	92376.	228570.	277965.	235370.	104329.	54038.	75693.	79618.	83775.	88180.
OPERATING PROFIT	92376.	228570.	277965.	235370.	104329.	54038.	75693.	79618.	83775.	88180.
NON-OPERATING INCOME	0.	0.	24934.	24934.	24934.	24934.	24934.	0.	0.	0.
NON-OPERATING EXPENSES	0.	0.	98842.	79074.	59305.	39537.	19768.	0.	0.	0.
INTEREST ON LONG TERM DEBT	0.	0.	98842.	79074.	59305.	39537.	19768.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NET PROFIT OR (LOSS) BEFORE TAX	92376.	228570.	204057.	181230.	69958.	39435.	80858.	79618.	83775.	88180.
INCOME TAX	0.	0.	0.	0.	24485.	13802.	28300.	27866.	29321.	30863.
NET PROFIT OR (LOSS) AFTER TAX	92376.	228570.	204057.	181230.	45472.	25633.	52558.	51752.	54453.	57317.
DIVIDENDS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RETAINED EARNINGS	92376.	228570.	204057.	181230.	45472.	25633.	52558.	51752.	54453.	57317.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***
INCOME STATEMENTS (FOR ENDING MARCH 31)
CASE III - SALE OUT : 100/0 - (PESO, 1000)

YEAR	2000	2001	2002	2003	2004
OPERATING INCOME	201357.	212154.	223668.	235952.	249064.
TOTAL SALES REVENUE	201357.	212154.	223668.	235952.	249064.
COST OF SALES	108504.	114341.	120586.	127269.	134421.
SALARY & WAGES INC. ADMI.	39609.	42777.	46199.	49895.	53887.
DIRECT OPERATING COST	56234.	58902.	61725.	64712.	67872.
DEPRECIATION AND AMORTIZATION	12662.	12662.	12662.	12662.	12662.
GROSS PROFIT ON SALES	92853.	97813.	103081.	108683.	114643.
OPERATING PROFIT	92853.	97813.	103081.	108683.	114643.
NON-OPERATING INCOME	0.	0.	0.	0.	0.
NON-OPERATING EXPENSES	0.	0.	0.	0.	0.
INTEREST ON LONG TERM DEBT	0.	0.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0.	0.
NET PROFIT OR (LOSS) BEFORE TAX	92853.	97813.	103081.	108683.	114643.
INCOME TAX	32498.	34234.	36078.	38039.	40125.
NET PROFIT OR (LOSS) AFTER TAX	60354.	63578.	67003.	70644.	74518.
DIVIDENDS	0.	0.	0.	0.	0.
RETAINED EARNINGS	60354.	63578.	67003.	70644.	74518.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***
FUNDS FLOW STATEMENTS (FOR ENDING MARCH 31)
CASE III - SALE OUT : 100/0 - (PESO, 1000)

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
SOURCE OF FUNDS	751323.	423915.	335508.	290912.	135386.	95778.	84988.	64413.	67115.	69979.
CASH GENERATED FROM OPERATION	92376.	259179.	333508.	290912.	135386.	95778.	84988.	64413.	67115.	69979.
PROFIT AFT. TAX. BFR INT.	92376.	228570.	302899.	260304.	104778.	65169.	72326.	51752.	54453.	57317.
DEPRECIATION AND AMORTIZATION	0.	30608.	30608.	30608.	30608.	30609.	12662.	12662.	12662.	12662.
FINANCIAL RESOURCES	658946.	164737.	0.	0.	0.	0.	0.	0.	0.	0.
SHARE CAPITAL	411842.	0.	0.	0.	0.	0.	0.	0.	0.	0.
LONG TERM DEBT	247105.	164737.	0.	0.	0.	0.	0.	0.	0.	0.
SHORT TERM DEBT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
USES OF FUNDS	538803.	257700.	181210.	161442.	141673.	121805.	102137.	0.	0.	0.
FIXED CAPITAL EXPENDITURE	538803.	257700.	0.	0.	0.	0.	0.	0.	0.	0.
NON-DEPRECIABLE ASSETS	231750.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DEPRECIABLE FIXED ASSETS	297266.	208987.	0.	0.	0.	0.	0.	0.	0.	0.
INT. DURING CONSTRUCTION	9787.	48713.	0.	0.	0.	0.	0.	0.	0.	0.
CHANGE IN WORKING CAPITAL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DEBT SERVICES	0.	0.	181210.	161442.	141673.	121805.	102137.	0.	0.	0.
REPAYMENT OF LONG TEPM DEBT	0.	0.	82368.	82368.	82368.	82368.	82368.	0.	0.	0.
REPAYMENT OF SHORT TERM DEBT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
INTEREST ON LONG TERM DEBT	0.	0.	98842.	79074.	59305.	39537.	19768.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
DIVIDENDS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CASH INCREASE OR (DECREASE)	212520.	166215.	152297.	129470.	-6287.	-26127.	-17149.	64413.	67115.	69979.
BEGINNING CASH BALANCE	0.	212520.	378735.	531032.	660503.	654215.	628088.	610939.	675353.	742468.
ENDING CASH BALANCE	212520.	378735.	531032.	660503.	654215.	628088.	610939.	675353.	742468.	812447.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***
FUNDS FLOW STATEMENTS (FOR ENDING MARCH 31)
CASE 111 - SALE OUT : 100/0 - (PESO, 1000)

YEAR	2000	2001	2002	2003	2004
SOURCE OF FUNDS	73016.	76240.	79665.	83305.	87180.
CASH GENERATED FROM OPERATION	73016.	76240.	79665.	83305.	87180.
PROFIT AFT. TAX. BFR INT.	60354.	63578.	67003.	70644.	74518.
DEPRECIATION AND AMORTIZATION	12662.	12662.	12662.	12662.	12662.
FINANCIAL RESOURCES	0.	0.	0.	0.	0.
SHARE CAPITAL	0.	0.	0.	0.	0.
LONG TERM DEBT	0.	0.	0.	0.	0.
SHORT TERM DEBT	0.	0.	0.	0.	0.
USES OF FUNDS	0.	0.	0.	0.	0.
FIXED CAPITAL EXPENDITURE	0.	0.	0.	0.	0.
NON-DEPRECIABLE ASSETS	0.	0.	0.	0.	0.
DEPRECIABLE FIXED ASSETS	0.	0.	0.	0.	0.
INTEREST DURING CONSTRUCTION	0.	0.	0.	0.	0.
CHANGE IN WORKING CAPITAL	0.	0.	0.	0.	0.
DEBT SERVICES	0.	0.	0.	0.	0.
REPAYMENT OF LONG TERM DEBT	0.	0.	0.	0.	0.
REPAYMENT OF SHORT TERM DEBT	0.	0.	0.	0.	0.
INTEREST ON LONG TERM DEBT	0.	0.	0.	0.	0.
INTEREST ON SHORT TERM DEBT	0.	0.	0.	0.	0.
DIVIDENDS	0.	0.	0.	0.	0.
CASH INCREASE OR (DECREASE)	73016.	76240.	79665.	83305.	87180.
BEGINNING CASH BALANCE	812447.	885463.	961702.	1041367.	1124672.
ENDING CASH BALANCE	885463.	961702.	1041367.	1124672.	1211852.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***

BALANCE SHEET (FOR ENDING MARCH 31)

CASE III - SALE OUT : 100/0 - (PESO, 1000)

YEAR	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
ASSETS	751323.	1144630.	1266319.	1365180.	1328284.	1271549.	1241738.	1293490.	1347944.	1405261.
CURRENT ASSETS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ACCOUNT RECEIVABLE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
INVENTORIES	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ACC. EXCESS CASH	212520.	378735.	531032.	660503.	654215.	628088.	610939.	675353.	742468.	812447.
NET FIXED ASSETS	538803.	765895.	735286.	704678.	674069.	643461.	630799.	618137.	605476.	592814.
INVESTMENT	538803.	796503.	796503.	796503.	796503.	796503.	796503.	796503.	796503.	796503.
NON-DEPR. ASSETS	231750.	231750.	231750.	231750.	231750.	231750.	231750.	231750.	231750.	231750.
DEPRECIABLE ASSETS	297266.	506253.	506253.	506253.	506253.	506253.	506253.	506253.	506253.	506253.
INTEREST DRG CONSTR.	9787.	58500.	58500.	58500.	58500.	58500.	58500.	58500.	58500.	58500.
LESS: ACC. DEPRECIATION	0.	30608.	61217.	91825.	122434.	153042.	165704.	178366.	191027.	203689.
LIABILITIES	247105.	411842.	329473.	247105.	164737.	82369.	0.	0.	0.	0.
CURRENT LIABILITIES	0.	82368.	82368.	82368.	82368.	82368.	0.	0.	0.	0.
ACCOUNT PAYABLE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CURRENT PORTION OF L/T DEBT	0.	82368.	82368.	82368.	82368.	82368.	0.	0.	0.	0.
SHORT TERM DEBT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FIXED LIABILITIES	247105.	329473.	247105.	164737.	82369.	0.	0.	0.	0.	0.
LONG TERM DEBT BALANCE	247105.	329473.	247105.	164737.	82369.	0.	0.	0.	0.	0.
OTHER FIXED LIABILITIES	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
STOCK HOLDERS EQUITY	504218.	732788.	936845.	1118075.	1163548.	1189180.	1241738.	1293490.	1347943.	1405260.
SHARE CAPITAL	411842.	411842.	411842.	411842.	411842.	411842.	411842.	411842.	411842.	411842.
ACC. RETAINED EARNINGS	92376.	320947.	525004.	706234.	751706.	777339.	829897.	881648.	936102.	993419.
LIABILITIES & S/H EQUITY	751323.	1144630.	1266319.	1365180.	1328284.	1271549.	1241738.	1293490.	1347944.	1405261.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***
BALANCE SHEET (FOR ENDING MARCH 31)
CASE 111 - SALE OUT : 100/0 - (PESO, 1000)

YEAR	2000	2001	2002	2003	2004
ASSETS	1465615.	1529193.	1596196.	1666840.	1741358.
CURRENT ASSETS	0.	0.	0.	0.	0.
ACCOUNT RECEIVABLE	0.	0.	0.	0.	0.
INVENTORIES	0.	0.	0.	0.	0.
ACC. EXCESS CASH	885463.	961702.	1041367.	1124672.	1211852.
NET FIXED ASSETS	580152.	567491.	554829.	542167.	529506.
INVESTMENT	796503.	796503.	796503.	796503.	796503.
NON-DEPR. ASSETS	231750.	231750.	231750.	231750.	231750.
DEPRECIABLE ASSETS	506253.	506253.	506253.	506253.	506253.
INTEREST DRG CONSTR.	58500.	58500.	58500.	58500.	58500.
LESS: ACC. DEPRECIATION	216351.	229012.	241674.	254336.	266997.
LIABILITIES	0.	0.	0.	0.	0.
CURRENT LIABILITIES	0.	0.	0.	0.	0.
ACCOUNT PAYABLE	0.	0.	0.	0.	0.
CURRENT PORTION OF L/T DEBT	0.	0.	0.	0.	0.
SHORT TERM DEBT	0.	0.	0.	0.	0.
FIXED LIABILITIES	0.	0.	0.	0.	0.
LONG TERM DEBT BALANCE	0.	0.	0.	0.	0.
OTHER FIXED LIABILITIES	0.	0.	0.	0.	0.
STOCK HOLDERS EQUITY	1465615.	1529193.	1596196.	1666840.	1741357.
SHARE CAPITAL	411842.	411842.	411842.	411842.	411842.
ACC. RETAINED EARNINGS	1053773.	1117351.	1184354.	1254998.	1329516.
LIABILITIES & S/H EQUITY	1465615.	1529193.	1596196.	1666840.	1741358.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***
LONG TERM DEBT
CASE III - SALE OUT : 100/0 - (PESO, 1000)

AMOUNT OF DEBT 411842.

INTEREST RATE 24.000 PER CENT/YEAR

REPAYMENT 5 YEAR-EQUAL-INSTALLMENT-REPAYMENT (ANNUAL REPAYMENT)

YEAR	SER.NO	PRINCIPAL	INTEREST	DEBT SERVICE	BALANCE AFT. PAYMENT
1990	1	0.	0.	0.	247105.
1991	2	0.	0.	0.	411841.
1992	3	82368.	98842.	181210.	329473.
1993	4	82368.	79074.	161442.	247105.
1994	5	82368.	59305.	141673.	164737.
1995	6	82368.	39537.	121905.	82368.
1996	7	82368.	19768.	102137.	0.
1997	8	0.	0.	0.	0.
1998	9	0.	0.	0.	0.
1999	10	0.	0.	0.	0.
2000	11	0.	0.	0.	0.
2001	12	0.	0.	0.	0.
2002	13	0.	0.	0.	0.
2003	14	0.	0.	0.	0.
2004	15	0.	0.	0.	0.
TOTAL		411841.	296526.	708367.	0.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***
PROFITABILITY AND FINANCIAL INDICATORS
CASE III - SALE OUT : 100/0 - (PESO, 1000)

YEAR	(1) AFT TAX PROFIT -TO- SALES REV (PCT)	(2) AFT TAX PROFIT -TO- S/H EQUITY (PCT)	(3) BFR TAX PROFIT -TO- INVESTMENT (PCT)	(4) AFT TAX PROFIT -TO- S/CAPITAL (PCT)	(5) CURRENT RATIO	(6) QUICK RATIO	(7) DEBT SERVICE RATIO	(8) L/T DEBT -TO- S/H EQUITY	(9)* PROFIT B.E.P. CAPACITY UTILIZE (PCT)	(10)* CASH B.E.P. SALES PRICE (PRICE)	(11)* CASH B.E.P. CAPACITY UTILIZE (PCT)
1990	75.1	18.3	17.1	22.4	********	********	********	33 / 67	3.5	87.3	3.5
1991	70.2	31.2	28.7	55.5	0.0	0.0	********	31 / 69	7.6	189.5	4.6
1992	49.5	21.8	25.6	49.5	0.0	0.0	1.84	21 / 79	15.3	741.3	18.3
1993	48.7	16.2	22.8	44.0	0.0	0.0	1.80	13 / 87	5.2	2075.4	6.3
1994	19.4	3.9	8.8	11.0	0.0	0.0	0.96	7 / 93	********	********	0.0
1995	14.1	2.2	5.0	6.2	0.0	0.0	0.79	0 / 100	********	********	0.0
1996	27.8	4.2	10.2	12.8	********	********	0.83	0 / 100	********	********	0.0
1997	30.0	4.0	10.0	12.6	********	********	********	0 / 100	********	********	0.0
1998	30.0	4.0	10.5	13.2	********	********	********	0 / 100	********	********	0.0
1999	30.0	4.1	11.1	13.9	********	********	********	0 / 100	********	********	0.0
2000	30.0	4.1	11.7	14.7	********	********	********	0 / 100	********	********	0.0
2001	30.0	4.2	12.3	15.4	********	********	********	0 / 100	********	********	0.0
2002	30.0	4.2	12.9	16.3	********	********	********	0 / 100	********	********	0.0
2003	29.9	4.2	13.6	17.2	********	********	********	0 / 100	********	********	0.0
2004	29.9	4.3	14.4	18.1	********	********	********	0 / 100	********	********	0.0
AVERAGE1	36.3	8.7	14.3	21.5	********	********	********	7 / 93	********	********	2.2
AVERAGE2	37.9	7.0	14.2	21.5	0.0	0.0	2.67	5 / 95			

(AVERAGE1) : SUM OF ANNUAL FIGURES OF PERCENTAGE AND RATIO IS DIVIDED BY NO. OF YEARS(SIMPLE AVERAGE)
(AVERAGE2) : AVERAGE FIGURES ARE CALCULATED BY ACTUAL VALUES ACCUMULATED OVER THE PROJECT LIFE(WEIGHTED AVERAGE)
* NOTE FOR (9)(10)(11)
WHEN THERE ARE TWO OR MORE PRODUCTS, AND DURING THE YEARS WHEN ALL OF PRODUCTS ARE NOT PRODUCED AT THE SAME RATE OF CAPACITY UTILIZATION, ABOVE BREAK-EVEN-POINTS CANNOT GIVE CORRECT FIGURES.

*** DASMARINAS INDUSTRIAL ESTATE PROJECT, PHILIPPINE ***

FINANCIAL RATE OF RETURN (IN CURRENT PRICE)

CASE III - SALE OUT : 100/0 - (PESO, 1000)

YEAR	FIXED CAPITAL EXPEND.	CHANGE IN WORKING CAPITAL	(1) GROSS CAPITAL EXPENDTR	OPERATING PROFIT	DEPRECIATN	(2) GROSS CASH IN-FLOW	(3) INCOME TAX	(4) BFR-TAX NET IN-FLOW (2)-(1)	(5) AFT-TAX NET IN-FLOW (4)-(3)
1990	529016.	0.	529016.	92376.	0.	92376.	0.	-436640.	-436640.
1991	208987.	0.	208987.	228570.	30608.	259179.	0.	50192.	50192.
1992	0.	0.	0.	277965.	30608.	308574.	0.	308574.	308574.
1993	0.	0.	0.	235370.	30608.	265978.	0.	265978.	265978.
1994	0.	0.	0.	104329.	30608.	134937.	24485.	134937.	110452.
1995	0.	0.	0.	54038.	30608.	84646.	13802.	84646.	70844.
1996	0.	0.	0.	75693.	12662.	88355.	28300.	88355.	60054.
1997	0.	0.	0.	79618.	12662.	92280.	27866.	92280.	64413.
1998	0.	0.	0.	83775.	12662.	96436.	29321.	96436.	67115.
1999	0.	0.	0.	88180.	12662.	100842.	30863.	100842.	69979.
2000	0.	0.	0.	92853.	12662.	105514.	32498.	105514.	73016.
2001	0.	0.	0.	97813.	12662.	110474.	34234.	110474.	76240.
2002	0.	0.	0.	103081.	12662.	115743.	36078.	115743.	79665.
2003	0.	0.	0.	108683.	12662.	121344.	38039.	121344.	83305.
2004	-529506.	0.	-529506.	114643.	12662.	127305.	40125.	656810.	616685.
	208497.	0.	208497.	1836981.	266997.	2103978.	335613.	1895485.	1559872.

INTERNAL RATE OF RETURN

ON (4) BFR-TAX NET IN-FLOW (2)-(1) 35.32 PER CENT

ON (5) AFT-TAX NET IN-FLOW (4)-(3) 32.67 PER CENT