

## 4. TAX AND TARIFF SYSTEMS

### 4.1 OUTLINE OF DOMESTIC TAX SYSTEMS

Taxes levied in Indonesia are the Income Tax, Stamp Duty, Land and Buildings Tax, Value Added Tax, Sales Tax on Luxury Goods and Import Duties. Here, the first five kinds of tax are referred to as domestic taxes.

#### 4.1.1 Income Tax

##### (1) Income Tax Rates

In Indonesia, the same rates of income tax are applied to resident individuals and corporations, according to the amount of taxable income. Tax rates are as follows:

Table 3-4-1 Income Tax Rates In Indonesia

	Taxable Income (Rp)	Rate	Tax (Rp)
On first	25,000,000	10%	2,500,000
On next	25,000,000	15%	3,750,000
Over	50,000,000	30%	-

Source : *Pocket Tax Book 1995*, Kantor Akuntan Publik Drs Hadi Sutanto & Rekan

##### (2) Personal Income tax

In case an individual person is: a) domiciled in Indonesia, b) is present in Indonesia for more than 183 days within any 12 month period or c) is present in Indonesia within a fiscal year with intention to reside in Indonesia, that person is regarded as a tax resident and becomes subject to the monthly withholding of tax from salaries. Tax is also withheld from pensions and severance payments at the rate of 15%. In the case of a non-resident, he is subject to a withholding tax of 20% on Indonesian source income.

##### (3) Corporate Income Tax

If a company is established or domiciled in Indonesia, it is regarded as a "Tax Resident." A permanent establishment(PE) must have the same tax obligations as a tax resident. All "tax resident" companies, businesses and PEs are required to pay tax in monthly installments. In addition, interest, royalties, rental, dividends, insurance premiums paid to offshore insurance companies, capital gains on the sale of property in Indonesia and service fees shall be subject to withholding tax.

Corporate profits shall be computed on the basis of normal accounting principles and losses may be carried forward for a maximum of five years but the principle of deemed profit margins shall be applied to foreign shipping and airline companies, foreign oil and gas drilling service companies and certain Ministry of Trade Representative Offices.

#### (4) Incentives on Income Tax

Income tax on gains of stocks listed in Indonesia is limited to 0.1% of transaction value and tax on interest from Indonesian banks is fixed at a final 15%. A 5% income tax on the sales value of land & buildings is applied to individuals. For depreciation of assets with a beneficial life of more than one year, either a straight-line or declining-balance basis can be applied, (however, only a straight-line basis is applicable to buildings). On the contrary, in the case of imports, tax residents are required to prepay their own income tax by making payment at the rate of 2.5% on the CIF value of import goods (or at 7.5% if they have no import license).

In August, 1996, the Government decided to revive the Tax Holiday scheme, applicable for those companies in export-oriented industries which have to be newly set up and which produce industrial raw materials, or those in high-tech or agro-related industries. Corporate tax will be exempted for 10 years ( 12 years, in case of investment in the eastern parts of Indonesia ), once a company is recognized as a Tax Holiday company. This policy was adopted to improve the international competitiveness of Indonesian industries in view of the implementation of AFTA from 2003. The Government is now undertaking the screening of candidate industries. According to a newspaper report in August, 1996, more than 40 industrial sectors have been chosen as the objects of the Tax Holiday

scheme.

In late August, 1996, the Government also decided to provide the opportunity for corporate tax reduction by admitting the compression of corporate profit through re-appraisal of corporate assets.

#### **4.1.2 Stamp Duty**

Stamp duty is payable at either Rp 1,000 or Rp 500 according to types of documents. Letters of agreement, Notary deeds, Deeds prepared by Pembuat Akta Tanah, etc., are subject to a stamp duty of Rp 1000. Other documents such as the receipt of moneys, the recording or deposit of money in the bank, the notification of a bank balance, acknowledgment of debt wholly or partly paid or compensated, the form of valuable documents such as notes receivable, notes payable, promissory notes, cheques, etc., are either free of tax or subject to duty of Rp 500 or Rp 1000 according to the amount shown on the documents.

#### **4.1.3 Land & Buildings Tax**

The effective rate of the land & buildings tax is 0.1% of the value of property and property valued at less than Rp. 8 million is non-taxable.

#### **4.1.4 Value Added Tax**

##### **(1) History and Present Status of Value Added Tax (VAT)**

Until VAT was introduced in 1985, a Sales Tax had been levied at each process of manufacturing from raw materials to finished goods or at each step of distribution in the case of imported goods. It had the nature of cumulative and double taxation. Since 1985, the number of taxable corporations and taxable services has been increased and in 1994 intangible services also became subject to VAT.

VAT is levied at 10% on imported or domestically manufactured goods and on most

services at the retail level. In other words, it is levied when a taxpayer delivers taxable goods or taxable services, or imports taxable goods as routine work in Indonesia.

## (2) VAT Refund

The VAT amount payable is normally the balance between output VAT and input VAT and overpaid VAT can be refunded or credited against that of future periods. Refund of VAT usually requires about two months in the case of exports or delivery to VAT collectors and 12 months for other cases. The application for refunds can be filed based on monthly returns for exports and delivery to VAT collectors, and in December for others. The maximum VAT overpayment refund in each tax period is 7% of sales to tax collectors or of the export value of the tax period, in case of sales to VAT collectors or exports. If the overpayment to be refunded is larger than the maximum refund amount above, the balance can be carried forward and compensated in the following tax period.

## (3) Exemption, Reduction and Deferral of VAT

VAT on imports of machinery for manufacturing may be deferred and on import of equipment in specified industries such as hotels, transport, etc., VAT payment may be postponed for 1-5 years.

For those small-scale enterprises with annual turnover of less than Rp 240 million for taxable goods or less than Rp 120 million for taxable services, it is possible to acquire "Non-Taxable Enterprise" status upon application to the authorities.

When a domestic subcontractor delivers goods for further processing to the factories located in a Bonded Area or EPTE (Export Oriented Production Entrepots) factories, the goods to be delivered between Bonded Areas or a Bonded Area and an EPTE factory or EPTE factories, or the goods being imported by factories located in a Bonded Area or by EPTE factories, or the goods for processing on commission or manufacturing machinery for repair being delivered from a Bonded Area or EPTE factory to outside factories, VAT may be exempted or deferred.

Also, VAT on imported goods to be used in manufacturing of export goods may be exempted or drawn back.

#### **4.1.5 Sales Tax on Luxury Goods (Luxury Tax)**

Sales tax is levied at 10%, 20%, 25% and 35% on imported or domestically produced luxury goods as stipulated in the Decree of the Minister of Finance and is collected at the importer or manufacturer level, not at the end-consumer level.

Items taxable at 10% are dairy products, juices, beverages, cosmetics, refrigerators, TV, luxury houses, etc. Those at 20% are 2 wheel motor vehicles imported with engines of 250cc or less in size, 4 wheel motor vehicles which are sedans or station wagons with engine capacity of 1600cc or less, jeeps which are 60% made in Indonesia, 4 wheel motor vehicles in the form of van/minibus/pickup, air conditioners, washing machines, optical products, etc. Imported or locally made 4 wheel motor vehicles in the form of combi, minibus, van or pick-ups using diesel oil as fuel are taxable at 25%. Among items taxable at 35% are 2 wheel motor vehicles with engine capacity of 250cc or over, imported buses, 4 wheel motor vehicles in the form of sedan/station wagon/jeep except those in the 20% category, imported household goods, alcoholic beverages, and aircraft/ships and vessels except those for government or public use.

By the Decree of June, 1996, 4 wheel motor vehicles with engines of 1600cc or less, which are sedans and more than 60% made in Indonesia, and 4 wheel motor vehicles which are for commercial use and more than 60% made in Indonesia became exempted from the Luxury Tax.

## 4.2 TARIFF SYSTEMS

### 4.2.1 Outline of General Tariff Systems

Although there had been no law to serve as a basis for tariff in Indonesia and the tariff had been treated by Presidential or Ministry Decree in the past, the first customs law was formulated in December, 1995 and became effective in April, 1996.

#### (1) Rates of Import Duties

Before the implementation of new the customs law, import duties had been levied in four categories as follows:

Table 3-4-2 Rate of Import Duties

Group	Goods	Rate
Most essential items	Rice, flour, cotton, certain iron and steel products, certain chemicals and industrial machinery, equipment and raw materials	0-10%
Essential items	Some raw materials and spare parts for industry	10-40%
Less essential items	Some locally produced goods which are subject to import protection	50-70%
Luxury items	Some consumer goods and some goods produced locally	up to 200%

In the new customs law, a rate of 0-40% shall be levied as the tariff on the taxable price of the commodities, except certain agricultural products, commodities included in the exclusion list of GATT, and the imported goods to which import duties shall be levied according to international agreement.

#### (2) Taxation Standard

Indonesian tariffs had been basically on an ad valorem basis and the taxation standard was the CIF value. For the calculation of import duties, the higher CIF value between the invoice value and the value shown on LPS, an evaluation value by SGS, had been used. In the new customs law, it is clearly described that the taxation standard is the

transaction price and the invoice price is used as a basis.

### **(3) Import-related Taxes Other Than Import Duties**

Upon import of goods, it may be necessary to pay an Import Surcharge, VAT(10%), Luxury Tax, or Withholding Tax as a prepayment of Corporate Income Tax, as the case may be.

### **(4) Exemption and Reduction of Import Duties**

To encourage foreign investment, an exemption or reduction in import duties on the import of certain capital assets is granted for foreign companies or joint ventures. To receive import duty exemption or reduction, a master list application has to be completed and submitted to BKMP prior to the import.

Exemption or reduction of import duty is as follows:

Main equipment:	100% exemption
Auxiliary equipment:	50% exemption
Spare Parts:	100% exemption for spare parts for main equipment but not exceeding 5% of main equipment value
Raw Materials:	100% exemption for materials not available locally but only for 2 years operation where the import duty is 5% or less; 50% exemption where the import duty is above 5%
Consumables:	100% exemption for consumables not available locally, used in the first year where related to main equipment

For those companies located in a Bonded Area or EPTE companies, imports of capital assets and raw materials are exempt from import duties.

Import duties on the import of raw materials used for the production of export goods may also be exempt or drawn back but there are some complaints among the manufacturers of export goods saying that the time it takes for refunds to be processed tends to

be too long.

#### 4.2.2 ASEAN and CEPT (Common Effective Preferential Tariff)

##### (1) Outline of CEPT

The adoption of CEPT was agreed by six ASEAN nations and started in January 1994, aiming to promote AFTA (ASEAN Free Trade Area). Under the CEPT scheme, the division of work by ASEAN countries is being pursued and foreign investment into ASEAN nations is promoted by reducing the high tariffs on certain goods for mutual trade among ASEAN nations. At the beginning, it was targeted to reduce all tariffs down to 0-5% within 15 years but recently the target has been changed to within 10 years, that is by 2003.

##### (2) Indonesian Policies Toward CEPT

In Indonesia, the items for tariff reduction and new tariff rates have been proposed by the Ministry of Industry and Trade to the Ministry of Finance every year and the Minister of Finance would issue a Decree about the tariff reduction after examining and approving the proposal of MOIT. It is now under examination in the Ministry of Industry and Trade to disclose at one time an overall tariff reduction table on all items by 2003 and it is expected to be approved by the end of this year.

According to the Decree of the Minister of Finance issued in May 1995, the tariff reduction program in compliance with the CEPT schedule is as follows:

Table 3-4-3 Tariff Reduction Program under CEPT Schedule

	1995	1998	2000	2003
Normal Track	Over 20%	0-20%		0-10%
	20% or below		0-5%	
Fast Track	Over 20%		0-5%	
	20% or below	0-5%		



Four wheel motor vehicles are included in the temporary exclusion list at the moment but it is supposed that they will not to be moved to the inclusion list even after 2003, as in the case in other ASEAN member countries.

The target import duties at 2003 described in the Decree which the Minister of Finance issued in May, 1995, were as follows ;

- i. 4 wheel motor vehicles equivalent to those already domestically produced
  - Sedans/Station Wagons: Max. 40%
  - Commercial Vehicles: Max. 50% (20% duty plus 30% surcharge)
- ii. 4 wheel motor vehicles not yet domestically produced
  - Sedans/Station Wagons: Max. 90% (40% duty plus 50% surcharge)
  - Commercial Vehicles: Max. 30%
- iii. Components for 4 wheelers: Max. 25%
- iv. 2 wheel motor vehicles
  - Below 250cc: Max. 20%
  - Above 250cc: Max. 100% (50% duty plus 50% surcharge)
  - Components: Max. 10%

Nevertheless, in the reshuffling of the tariff reduction program of June, 1996, the classification of 'Already domestically produced' and 'Not yet domestically produced' was erased and the import surcharge was decided to be merged into the tariff. As a result, the target import duties for motor vehicles at 2003 have been modified as follows ;

4 wheel motor vehicles ( Sedans and wagons):	90%(25% for CKD)
4 wheel commercial vehicles:	50%(15% for CKD)
2 wheel less than 250cc:	20%
over 250cc:	100%
CKD:	10%

In addition, the tariff reduction schedule for Most Favored Nations (MFN) until 2003 has been decided as follows in the reshuffling of June, 1996 ;

Table 3-4-4 Tariff Reduction Schedule for Most Favored Nations

Year	May 1995	1996	1997	1998	1999	2000	2001	2002	2003
Tax	5%	5%	5%	5%	5%	5% or less	None	None	None
Reduction Schedule	10%	10%	5%	5%	5%	5% or less	None	None	None
	15%	15%	10%	10%	5%	5% or less	None	None	None
	20%	15%	15%	10%	10%	10%	10%	10%	10% or less
	25%	20%	20%	15%	15%	10%	10%	10%	10% or less
	30%	25%	25%	20%	20%	15%	15%	10%	10% or less

Note: Figures in column of "May, 1995" are tariff rates which had already been reduced, in PAKMEI 1995, by 5-10% down from the previous rates used before May, 1995.

### (3) Problems of AFTA and CEPT

The basic policy in the present agreement of CEPT has been rather reciprocal so that the items in which certain member nations are strong could be excluded from the inclusion list. Since this basic policy is now going to be changed in the direction of unilateral agreement, a difficult question may arise as to what extent the member nations can compromise regarding tariff reductions in the industrial field where each nation is putting emphasis on development and promotion.

For example, in the automobile industry, while Malaysia has already succeeded in making a national car and Indonesia has announced their ambitious plan for making a national car, Thailand has been attracting the investments of major car manufacturers of Japan and the USA and is expected to produce more than one million cars a year in 1998, and therefore it is predicted to become the third biggest car exporting country in Asia after Japan and South Korea. The Philippines has expressed their interest in promoting foreign investment in their car manufacturing industry, as well. It is difficult to foresee how the interests of these member countries could be adjusted. If there is a considerable difference in each country's production of cars in the future, that would cast serious doubt on the success of the BBC scheme, as well.

Regarding the above problem, the hint of the future possible conflict among member countries was seen in the economic conference of ASEAN held in Jakarta in September,

1996. Member countries had a hard discussion about the time limit for tariff reduction on rice and other agricultural products which became included in the AFTA tariff reduction program from this year.

Even if tariff rates can be successfully reduced in the CEPT scheme, it is said to be doubtful for the concept of AFTA to really work out if any country tries to control trade itself by governmental policies. Vietnam has agreed to join ASEAN by consenting to the reduction of import duties but if Vietnam keeps controlling imports itself by their own policies as they do now, it would be impossible to realize the full advantages of AFTA in the future.

#### **4.2.3 Present Situation and Problems of Taxation Policies**

##### **(1) Domestic Taxation**

As to Corporate Income Tax, progressive taxation is applied only in Indonesia among the five major ASEAN nations but there is no disadvantage compared with other nations since the highest rate remains 30%, which is almost equal to other nations. VAT is higher than the 3% of Singapore but remains at the same level as in the four other major countries.

A Sales Tax on Luxury Goods is applicable at 10% to refrigerators, TVs and vending machines, and at 20% to stereo sets, VTRs and tape recorders. Electronics and electric industries claim that, as the domestic demands for such electric or electronic goods have been curbed by the high luxury tax and therefore economies of scale could not be attained in the production lines, they have difficulties in improving their competitiveness over foreign suppliers. They say it would be difficult for Indonesia to attract foreign investment in electric and electronics parts industries and also to bring them up unless the production of these items is increased considerably by eliminating the Luxury Tax.

Regarding 4 wheel motor vehicles, the Luxury Tax would become controversial in relation to the National Car project. Although passenger cars with engines of 1600cc or

less and more than 60% made in Indonesia and commercial cars more than 60% made in Indonesia will be exempted from the Luxury Tax after 1996, it will still be levied on other cars. Rates of Luxury Tax to be levied on 4 wheel motor vehicles after 1996 would be as follows:

Table 3-4-5 Luxury Tax on Four Wheel Motor Vehicles

Rates of Luxury Tax	Applicable type of motor vehicles
20%	Commercial vehicles, except jeeps, 60% or less made domestically
25%	Commercial vehicles with diesel engines
35%	Passenger vehicles with engines of over 1600cc or 60% or less made domestically and jeeps 60% or less made domestically

Regarding the present model for the National Car, a considerable grace period has been given before the National Car model would achieve the requirement for local contents. During the grace period, the Luxury Tax would be exempted for the same model of car to be manufactured in another country and imported as CBU to Indonesia. On the other hand, the best selling car manufactured domestically is said to sell around 100,000 units a year and its local content remains about 45%. If the luxury tax exemption is approved solely for cars made in foreign countries, in other words, which are still only a candidate model for National Car in reality, it would take away fair opportunities of competition by existing domestically made cars. It may force the domestic car manufacturers to fail in achieving the local content requirement and bringing up the domestic automotive parts and components manufacturers.

## (2) Taxation on Import

Since the import procedures were deregulated broadly by Presidential Decree No.4 in April 1985, such deregulation policies as the reduction of import duties and abolishment of import surcharges have been implemented, aiming to improve and strengthen export competitiveness. The average rate of import duty of Indonesia is now down to less than 8% as the import duties have been repeatedly reduced since May 1986. However,

import duties still amount to more than 8% of the total tax income of the Government.

The reduction of import duties or import liberalization on related equipment and machinery, parts and raw materials was executed for the selected target industries to strengthen their export competitiveness. Such policies, in the past, had been applied to electronics parts, computer parts, machine tools, textiles, iron and steel, electric products, car manufacturing materials, automobile parts, used machinery, used tools, used equipment, and others. In May 1995, the import duties on 6,000 items were reduced to prepare for AFTA and in January 1996, the import duties on 428 items of industrial machinery and raw materials were also reduced by 5-20 points, in order to improve the export competitiveness of industrial and agricultural processed products.

Although, as shown above, the Government has been paying serious attention to the reduction of import duties, there are still some problems left.

- The clarification, unification and simplification of import-related taxation

One of them is import surcharges. Though import surcharges are on the way to be unified with import duties, there are still 112 items subject to import surcharges. The problem is that it is not clear on what basis, to what items and how much surcharges will be levied.

- From consignment customs clearance to own customs clearance, computerization of information management

Regarding the classification and evaluation of imported goods, which is the basis of taxation, discrepancies often occur in interpretation between SGS (PT Surveyor Indonesia) and customs. It had been a heavy load for importers to face claims for additional import duties much later on or to have 2 - 3 year old import documents re-examined. However, by the Decree of the Minister of Finance issued on May 28, 1996, it has been declared that the Government would terminate the consignment contract for preshipment inspection with PT Surveyor Indonesia, as of April 1, 1997.

By having realized own customs clearance, the complexity of customs clearance procedures would be improved and the problems of overlapping work would be solved. As a next step, the computerization of information management on customs clearance operations shall be introduced for achieving smooth and quicker customs clearance and preparing the information on trade and duties.

- Unification of taxation section and refund section; simplification, prompter processing and computerization of office management

Although the import duties levied on the raw materials or spare parts used for manufacturing of export goods can be refunded after the finished goods are exported, it takes a long time (sometimes as long as a year) for the refunds actually to take place. Since the interest rates in Indonesia are very high, this situation greatly reduces the advantage of the draw back system.

- Integration of policies and laws as a means of execution of policies

According to the electric and electronics industries, the rates of import duties for manufacturing materials and semi-products are 5-30%, whereas those for parts are only 0-5%. This is now a big obstacle for developing the domestic electric and electronics parts industries.

## **5. INVESTMENT PROMOTION POLICIES**

### **5.1. HISTORICAL TRANSITION OF FOREIGN INVESTMENT PROMOTION POLICIES**

From an historical perspective, the Sukarno administration emphasized a policy of economic autonomy, and while the "Foreign Capital Investment Law" was enacted in 1958, the government was rather passive toward attracting foreign investment. It wasn't until 1965, when the Soeharto administration came into power, that Indonesia began to actively utilize foreign investment to rebuild the country's economy. Under the Soeharto administration, economic policy was transformed from that of a controlled economy to that of a market economy, and in order to stimulate both foreign and domestic private investment, the "Foreign Capital Investment Law" was enacted in 1967, followed by the "Domestic Capital Investment Law" in 1968. Following the enactment of these two laws, the government then established its first 5-year economic plan, and embarked on a process of long-term economic development.

Under the Foreign Capital Investment Law of 1967, incentives such as exemptions from corporate taxes and taxes on stock dividends were given to just about anyone who met certain investment criteria, including investment on islands other than Java, the investment of at least US\$2.5 million within two years of the initial investment, and so on. However, in response to pressure on traditional local industries and Pribumi (native Indonesian) capital caused by the influx of foreign investment, along with strong criticism of the foreign enterprises which were becoming partners with Chinese-owned companies, the government revised the foreign and domestic investment laws twice, in 1970 and again in 1974.

The purpose of these revisions was to make businesses and industries "more Indonesian" by protecting and fostering Pribumi capital, and they reduced the status of foreign capital to that of a supplementary role in Indonesia's economic development. Foreign investment eligible for incentives became limited to certain industry sectors, and the sale of up to 51% of stock to Pribumi investors, establishment of joint ventures with Pribumi companies, and other conditions were put in place. The hiring of foreign specialists was also restricted.

While these restrictions led to a slow-down in foreign investment activity in Indonesia in the 1970s, the sharp appreciation in oil prices during the oil crisis of 1973 produced a dramatic increase in foreign currency income for Indonesia, an oil exporter, and this compensated for the lack of capital caused by the decline in foreign investment.

While the next oil crisis in 1979 and the resulting rise in oil prices benefited the Indonesian economy temporarily, the high oil prices produced a worldwide recession after 1981, and the Indonesian economy, which depends heavily on oil exports, received a major blow when the oil market turned sluggish. In an attempt to reduce the country's dependence on oil and bring about more stable economic growth, in 1982 the government began to reform the country's economic structure through deregulation. It introduced export-oriented industrialization policies, and began once again to actively solicit the introduction of foreign capital.

Under tax reforms implemented in January 1984, a number of investment incentives were adopted, including the reduction of corporate tax rates, the acceleration of depreciation, and so on. On the other hand, some investment incentives were abolished, including the six-year tax holiday, the investment income tax exclusion, and the capital whitening system (interest on time deposits, etc., not subject to taxation, regardless of the source of the deposits). Consequently, an increasing number of foreign enterprises put off making investments.

In September of 1984 the government expanded the range of applicability of the accelerated depreciation rate (25%), and re-instated the capital whitening system. In September of 1985, export financing policies were revised, and low-interest export loans, which had been limited to domestic enterprises, were allowed for foreign-affiliated enterprises as well. Regulations covering the operating areas of foreign banks were also eased, and this opened the way for foreign enterprises in outlying regions to obtain export loans via foreign banks. 'Made-in-Indonesia' policies also became more flexible, and, in the area of labor policy, procedures for obtaining permission to hire foreign workers were simplified. In fact, the \$400 per worker education and training surcharge, which had been assessed for each foreign worker employed for over a certain period of time, was abolished in April of 1985. Policies promoting capital domestication also began to be revised in the automobile and heavy machinery sectors. In the list of investment priority industries released in July of 1985, 475



sectors were opened to foreign investment, and, except for some public sectors, all industry sectors were opened to foreign investment with regard to 100% export enterprises.

After the Plaza Accord of September 1985, the value of the Japanese Yen shot up rapidly versus the US dollar, and Japanese corporations, as a countermeasure against the strong Yen, began to move their manufacturing operations from Japan to other Asian countries. At that time, the majority of this export-oriented investment went to countries such as Malaysia or Thailand, which were ahead of Indonesia in terms of infrastructure improvement and deregulation regarding foreign investment, and investment by Japanese companies in Indonesia didn't really begin in earnest until two years later, in 1987. With its December 1987 policy package, the government of Indonesia implemented the following measures designed to ease restrictions on foreign capital investment.

- establishment of joint-venture trading firms intended for export
- liberalization of employment of foreign workers
- extension of the time limit (10 years→15 years) for transferring majority control of PMA companies (companies established under the Foreign Investment Law) to Indonesian companies
- easing of ownership restrictions on export-oriented PMA companies, etc.

Under deregulation implemented in May of 1989, the list of industry sectors in which foreign investment was permitted was replaced by an investment negative list, which instead showed only those sectors closed to investment. At the same time, the number of sectors either completely closed or subject to restrictions on foreign capital investment was reduced from 273 to just 75. Furthermore, in an effort to promote investment by smaller enterprises, the minimum amount of foreign capital investment was reduced, albeit with certain restrictions, from \$1 million to \$250,000. Then, in June of 1991, the number of sectors included on the investment negative list was reduced to just 60, and the conditions on \$250,000 minimum investments were further relaxed.

The government began announcing foreign investment deregulation measures with increased frequency as the 1990s began and the EPTE (Export Processing Entrepots) system, which was implemented in June of 1993, was particularly effective in attracting foreign exporters.

EPTE enterprises and factories, along with enterprises located in EPZ (Export Processing Zones), are provided with the following incentives.

- exemption from import tariffs, import surcharges, income tax, value-added tax, sales tax on luxury goods, and other taxes in conjunction with the import of raw materials, parts, or capital goods used in the production process
- 25% of the exported amount allowed to be sold within Indonesia simply by completing the normal import procedures and paying normal tariff charges
- up to 5% of the raw materials used in the production process allowed to be sold as scrap or waste material within Indonesia

In June of 1994, even more foreign investment restrictions were abolished. Restrictions on foreign ownership ratios, capital transfer obligations, and minimum investment requirements were all abolished in principle, effectively liberalizing foreign capital investment in Indonesia for the first time in 20 years. The following are the major elements of this policy.

- PMA companies are allowed to establish 100% foreign-owned enterprises, but a portion of the stock must be transferred to an Indonesian individual or company within 15 years after the business is established
- the minimum amount of the foreign capital investment may be determined based on the economic possibility of realization of the business activities
- PMA companies wishing to enter public works sectors such as harbors, electric power, communications, etc., must form a joint venture with an Indonesian partner holding at least 5% of the stock

At this point, Indonesia's foreign investment policies had become the most liberal of all ASEAN countries except Singapore. Then in May of 1995, additional incentives, including reduction of or exemption from import tariffs, were adopted for export-oriented companies. The major elements of these incentives, which were very important to companies because they led to increased domestic sales and to lower production costs via larger production scale, are summarized below.

- EPTE companies are allowed to sell the equivalent of 25% of their export amount in the domestic market, and sales from an EPTE company to another EPTE/EPZ company are included in the export amount

- regular import tariffs are assessed on imports of raw materials used in products manufactured by EPTE companies for sale in the domestic market, but tariffs on components and raw materials used in household appliance products are reduced to just 30% of the normal tariff rates for such products
- PMA companies which, in order to increase production capacity, re-invest an amount equivalent to at least 30% of the amount initially invested in machinery and other capital equipment are exempt from import tariffs and surcharges on the machinery and equipment imported for such purpose, and tariffs and import surcharges on imported raw materials for two years worth of the production increase are waived for up to four years

Further, with regard to promoting exports of industrial goods, in recent years there has been a growing awareness of the importance of nurturing supporting domestic enterprises and attracting supporting foreign enterprises. As a result, promotion measures have been implemented toward this end as well. The following are some of the major measures that were announced by May 1995.

- EPTE/EPZ companies are allowed to assign certain production processes to non-EPTE/EPZ subcontractors, but the period of such subcontracting may be no more than 60 days. Assembly, quality inspection, sorting, and packaging processes may not be subcontracted
- EPTE/EPZ companies which assign certain production processes to non-EPTE/EPZ subcontractors are allowed to loan the equipment and/or plant facilities necessary for such processes to the subcontractors for a period of up to two years
- when EPTE/EPZ companies transfer goods necessary for the processing of their products to non-EPTE/EPZ subcontractors, they are exempt from the value-added taxes and sales tax on luxury goods normally assessed on such transactions

The June 1994 abolition of the \$1 million and \$250,000 minimum investment requirements was an extremely large investment incentive for smaller foreign companies in supporting industries, and since then a growing number of small and medium-sized Japanese companies have been investing in Indonesia.

In January 1996, transportation of materials and equipment by domestic corporations to the EPTE/EPZ corporations was liberalized, and exports by 100% foreign-owned companies were approved. Then in June, the following liberalization measures were implemented.

- Exemption of import duties on materials and semi-finished products for the manufacture of electronic parts.
- Approval for foreign manufacturers to import supplementary parts from their overseas affiliates and to wholesale market their own products at the wholesale level domestically. (Establishment of a joint venture for wholesale marketing is no longer necessary.)
- Simplification of procedures for tenancy at an industrial compound.
- Release of bonded areas and bonded warehouses to management by private resources.

In July 1996, an exemption from corporate income tax for special industries (tax holiday) was reinstated after thirteen years. Under this measure, corporate income tax is exempted for ten to thirteen years, provided that projects are completed within five years after obtaining approval to make the investment. The government has still not indicated what special industries shall apply, but it is suspected that corporations in export-oriented industries and corporations established anywhere except Java and Bali will be targeted.

## 5.2 FOREIGN INVESTMENT ACTIVITY

Since the enactment of the Foreign Investment Law of 1967, there have been three major booms in investment flowing into Indonesia from overseas. In terms of investments authorized by the BKPM (Investment Coordination Board), excluding the financial and oil and gas sectors, the first boom lasted from 1967 through 1974. During this period, there was a marked increase in investment oriented toward Indonesia's domestic market, including the automobile, electric machinery, and textiles industries. However, beginning in 1974 policies turned more toward a 'made-in-Indonesia' philosophy, and restrictions on foreign investment became tighter. As a result, foreign investment in Indonesia turned sluggish for a period of about ten years. The second boom started in 1987, when the government once again began to entice foreign investment actively, and lasted until around 1990. The sharp appreciation in the value of the Yen, along with appreciation in the currencies of South Korea, Hong Kong, Taiwan, and other Asian NIES, which began in 1985, accelerated foreign investment in the ASEAN countries. In 1990, the peak year of this boom, total foreign investment of \$9.5 billion (447 cases) was authorized. During this period, foreign investment by Japanese companies was mostly export-oriented investment in countries such as Malaysia and Thailand. In the early 1990s, however, Japanese investment in mainland China increased dramatically, and, as the investment climate in Indonesia improved, Japanese companies began to take another look at investing in Indonesia.

The third investment boom, from 1994 to 1995, was more widespread than ever before, as both domestic market-oriented investment and export-oriented investment increased dramatically. With regard to domestic market-oriented investment, automobile manufacturers, anticipating a growing local market, began to make enthusiastic investment plans. As for export-oriented investment, there was a sharp increase in investment in the electrical and electronic industries. In addition, spurred by growing investment by finished goods producers, there was a gradual increase in investment in the casting, plastic molding, press processing, and other supporting sectors as well.

In 1994, total authorized investment doubled from the year before to \$23.7 billion (449 cases), and the figure jumped another 68% in 1995 to \$39.9 billion (799 cases). At \$63.6

billion, the sum total of new investment authorized during these two years alone nearly equaled the \$67.6 billion in total investment authorized during the previous 26 years (1967 - 1993) combined (adjusted for approval invalidations, withdrawal, etc.).

The following are some of the factors which contributed to this sharp increase in foreign investment in Indonesia.

- a series of foreign investment deregulation measures, particularly the effective abolition of foreign ownership restrictions, capital transfer obligations, and minimum investment requirements
- implementation of the EPTE system and other incentives for export-oriented investment
- the most abundant labor force and lowest wage costs among ASEAN countries
- expansion of industrial parks and other infrastructure improvements
- an expanding domestic market due to growing purchasing power

Looking at the amount of investment approved in 1994 by country of origin, we find that Hong Kong ranked number one with \$6,042 million, 15.7 times more than the previous year. However, \$3,500 million of this amount was for a single oil refinery project. The U.K. ranked second with total investment of \$2,957 million, 9.8 times more than the previous year. Here again, a \$1,100 million oil refinery project along with \$1,000 million in pulp expansion investment were major contributors. Ranking third was Taiwan with \$2,848 million, 21.7 times more than the previous year, and in this case there were a large number of relatively small-scale investment projects. Although Japan fell from second place to sixth, with \$1,563 million in investment, this amount corresponded to an 86.9% increase compared to the prior year. As seen in these results, it appears that investment from NIES nations returned to Indonesia after declining sharply the previous year.

Broken down by industry, the manufacturing sector accounted for 79% of total investment, with the chemical industry grabbing the single largest share at 33%. While the machinery and metals industry accounted for a mere 6% of the total investment amount, it accounted for the largest number of investment cases, with 20% of the total. There were 287 export-oriented investment projects, accounting for 64% of the total number of cases. These were

concentrated primarily in three sectors, with the machinery and metals industry attracting 77 cases, the chemical industry 49, and the textiles industry 37 cases.

In 1995, the U.K. had the largest share of the total investment authorized in Indonesia, with a 110% increase over the previous year to \$6,322 million (34 cases). This amount was primarily due to a few very large projects, including a \$1,980 million petrochemical plant project and a \$1,750 million oil refinery project. Japan returned to the number two position with total investment of \$3,792 million (135 cases), a 140% increase over the previous year. The only major investment was \$1,196 million for a pulp manufacturing plant, with most of the other cases relatively small investments. Ranking third was Australia, whose investment total was 69.7 times more than in 1994. Oil refinery projects of \$1,558 million and \$1,800 million contributed. In 1995, investments from Asian NIES countries declined, while large-scale oil-related projects from western nations increased.

By industry sector, investment in manufacturing concerns accounted for 67% of the total, and, as was the case in 1994, the chemical sector accounted for the single largest share at 49%. Investment in the machinery and metals industry also increased. While this sector accounted for just 6% of the total investment amount, it had the largest number of investment cases, with 19% of the total. The majority of investment in this sector is by supporting companies, and most of the cases are relatively small-scale investments. The most prominent increase in 1995 was seen in investment in the transportation sector, where the total investment amount jumped by 37 times to \$5,540 million. Large increases were also seen in investment in the electric power, gas, sewer and water, and housing and real estate sectors. In addition, at 468 cases, export-oriented investments accounted for 59% of the total, and nearly half of these were concentrated in just two industry sectors- the machinery and metals sector with 120 cases, and the chemical sector with 97 cases.

In the first half of 1996, the value of approved direct foreign investments fell 0.4% from the year-earlier period, remaining roughly the same at US\$ 20,923 million, but the number of investments increased 38.5% over the same period, reaching 576 cases, the highest number on record. By country, Japan ranked first, with its investments, primarily in manufacturing, increasing 4.2 times to US\$ 5,013 million. This figure exceeded the previous highest mone-

tary value, which was US\$ 3,792 million in 1995. Investments by England dropped 30.8% in the same period, but in value terms, the figure reached US\$ 2,410 million, the second largest sum. There were two large-scale investments: a power generation plant in central Java (US\$ 1,660 million) and a petrochemical plant in eastern Java (US\$ 495 million).

Investments from Asian countries increased 3.7 times from the year-earlier period. Singapore invested US\$ 1,616 million, primarily in hotels and other sectors of the service industry. Thailand made a large investment (US\$ 1,600 million) in a pulp plant in eastern Kalimantan. Hong Kong invested US\$ 1,033 million in hotels, apartments, etc., in the city of Jakarta, and Korea invested US\$ 449 million in manufacturing.

The value of Japan's investment in manufacturing stood at US\$ 4,424 million, almost 90% of its total investments in Indonesia. In the breakdown by industry, US\$ 1,724 million went to chemicals, US\$ 1,207 million to paper and pulp, and US\$ 1,110 million to machinery and metals; these three industries account for 92% of Japan's total investment in Indonesia for manufacturing. Among the large-scale investments were an oil refining plant on Lombok Island (US\$ 1,250 million) and a pulp making plant in southern Sumatra (US\$ 1,196 million). Even in the field of automobiles, where it was feared that investments would be curtailed under the national automobile program, Toyota obtained permission to invest (US\$ 357 million) for plant expansion.

The forecast value of exports as a percentage of total investments stands at 32%. Of this amount, the largest portion, 49% goes into manufacturing; in the field of machinery and metals, in particular, the figure reaches 74%. Of the fields with high forecast values of exports, chemicals claims the largest at US\$ 2,600 million, followed by machinery and metals at US\$ 1,200 million. The export forecast value of domestic investments in the field of machinery and metals is only US\$ 182 million. Exports in this field will depend heavily on foreign investments in the future.

The total value of approved foreign investments from 1967 to the end of June 1996 has reached US\$ 162,622 million. In the breakdown by country or region, Japan ranks first at US\$ 31,846.9 million, or 20% of the total, followed by England, at US\$ 27,444.8 million,



and Hong Kong in third place at US\$ 18,239.1 million. By industry type, the petrochemical industry, primarily oil refining, took up US\$ 47715.5 million, or 29% of the total, followed by paper and pulp at 14% and machinery and metals at 8%.

Table 3-5-1 Authorized Foreign Investment in Indonesia (by Industry Sector)

(Unit: US\$ Million)

	1994		1995		1967-95 Total	
	Cases	Amount	Cases	Amount	Cases	Amount
Agriculture	15	690.4	26	1,153.1	108	3,324.4
Forestry	0	0.0	0	0.0	27	510.3
Fisheries	6	39.5	8	221.2	68	568.0
Mining	0	0.0	0	0.0	119	5,070.3
Manufacturing	293	18,738.9	454	26,891.9	2,504	97,606.5
Foods	32	1,234.8	38	1,331.8	197	4,645.7
Textiles	38	396.4	52	471.1	468	5,900.7
Woodworking	17	68.1	33	262.9	172	1,170.7
Pulp & paper	13	5,120.1	16	2,540.5	73	19,543.8
Pharmaceuticals	0	0.7	3	36.7	41	320.5
Chemicals	64	7,742.5	113	19,367.7	539	43,594.3
Non-metal minerals	11	631.9	20	289.3	97	4,048.5
Basic metals	16	2,081.6	16	291.7	86	7,024.2
Machinery, metal	91	1,423.1	153	2,258.0	736	10,932.1
Other	11	39.6	10	42.2	95	426.1
Electricity, gas, sewer & water	5	2,397.3	6	3,549.3	15	8,652.8
Construction	15	76.5	43	205.8	186	1,038.4
Trading	34	86.7	58	30.5	201	1,234.3
Hotels, restaurants	12	343.6	31	998.8	163	8,866.4
Transportation	10	145.1	47	5,539.5	98	7,183.8
Housing, real estate	19	795.1	22	1,062.2	84	3,598.2
Office space	4	232.7	3	129.8	39	2,400.0
Other services	36	178.7	103	122.5	327	1,471.2
<b>Total</b>	<b>449</b>	<b>23,724.3</b>	<b>799</b>	<b>39,914.7</b>	<b>3,939</b>	<b>141,524.8</b>

Source: BKPM

Table 3-5-2 Authorized Foreign Investment in Indonesia (by Country/Region)

(Unit: US\$ Million)

	1994		1995		1967-95 Total	
	Cases	Amount	Cases	Amount	Cases	Amount
Japan	75	1,562.5	135	3,792.0	788	19,802.9
Hong Kong	36	6,041.7	40	1,763.3	330	13,392.5
S. Korea	35	1,849.1	52	674.7	376	6,369.1
Taiwan	48	2,847.6	89	567.4	398	7,852.7
Singapore	97	1,664.4	124	1,468.5	466	13,185.5
Malaysia	25	421.8	48	877.0	103	1,514.7
Thailand	7	11.7	4	34.5	26	145.3
China	5	91.0	5	17.4	28	174.8
India	2	1.9	9	5.6	23	245.2
Australia	16	53.3	38	3,712.4	192	5,423.4
U.S.	18	977.0	37	2,770.6	211	7,233.7
U.K.	15	2,957.1	34	6,322.1	178	12,204.7
Netherlands	13	165.7	20	360.1	135	3,154.7
France	1	37.1	10	498.3	49	966.2
Germany	7	113.1	19	1,344.6	85	3,475.6
Switzerland	10	70.8	5	44.9	50	688.2
Others	15	135.0	41	440.6	206	4,258.7
Multinational J.V.	24	5,083.5	89	15,220.5	296	41,611.7
Total	449	23,724.3	799	39,914.7	3,939	144,524.8

Source: BKPM

Table 3-5-3 Approved Foreign Investment by Industry in the First Half of 1996

(Units: Million US\$, %)

Industry		Investment Value	Forecast Export Value	Export/ Investment Percentage
Primary industries	Food crops	139.0	63.9	46.0
	Plantations	693.3	321.9	46.4
	Dairy farming	15.3	1.5	9.8
	Fisheries	43.5	12.2	28.0
	Forestry	135.5	0.0	0.0
	Mining	1,286.8	535.8	41.6
Secondary industries	Food processing	418.7	261.4	62.4
	Textiles, clothing	270.5	366.6	135.5
	Wood products	70.7	155.4	219.8
	Paper & pulp	2,847.4	709.4	24.9
	Pharmaceuticals	29.5	27.0	91.5
	Chemicals	5,256.8	2,593.7	49.3
	Non-metallic minerals	542.0	106.1	19.6
	Basic metals	33.5	22.6	67.5
	Machinery & metals	1,666.2	1,226.6	73.6
	Other	18.0	36.2	201.1
Tertiary industries	Electricity, gas, water works	3,738.5	0.0	0.0
	Building construction	197.0	0.2	0.1
	Commerce	28.0	247.5	883.9
	Hotels, restaurants	605.4	0.0	0.0
	Transportation	682.4	2.2	0.3
	Housing, real estate	1,621.5	0.0	0.0
	Offices	238.9	0.0	0.0
	Other services	344.7	10.2	3.0
Total		20,923.1	6,700.4	32.0

Source: BKPM

## **5.3. OVERVIEW OF FOREIGN INVESTMENT POLICIES**

### **5.3.1 Status of Foreign Investors**

Under the Foreign Capital Investment Law, foreign investors may form joint-stock corporations (PT). These companies are called PMA enterprises, and their status differs with that of domestic investments (PMDN). Foreign companies which are already conducting commercial production in Indonesia are allowed to establish a separate company. However, if any new foreign shareholders other than the existing shareholders of the parent company are included among the shareholders of the new company, the status of the new company will be that of a PMA enterprise. On the other hand, if the parent company is the only shareholder, or if the shareholders other than the parent company are Indonesian individuals or corporations, then the status of the new company will be that of a PMDN enterprise.

### **5.3.2 Investment Size**

Regulations stipulating the minimum investment amount for PMA enterprises were abolished, allowing the investment amount to be determined according to economic conformity with the specific business activity.

### **5.3.3 Term of Authorization for Foreign Enterprises**

In principle, 30 years from the start of commercial operation. This term may be extended by another 30 years if the business is expanding. Furthermore, if the company in question provides increased employment, export promotion, or otherwise benefits the national economy, then the company may apply for an additional 30-year extension.

### **5.3.4 Ownership Ratio**

Foreign enterprises may choose to be 100% foreign owned or form a joint venture with an Indonesian enterprise. In the case of joint venture companies, the Indonesian partner must own at least 5% of the company's stock. In the case of 100% foreign owned companies, a

portion of the company's stock must be transferred, either directly or via securities markets, to the ownership of Indonesian individuals or corporations within 15 years after the start of operations. In 1994, infrastructure and other public works-related sectors were opened up to foreign capital investment. In such cases, however, the ratio of Indonesian stock ownership must be at least 5%.

### **5.3.5 Tax Incentives**

#### **i. General Incentives**

- Exemption from tariffs on the importation of capital equipment
- Exemption from tariffs on the importation of capital equipment components valued at up to 5% of the price of the main equipment
- 50% tariff reduction on the importation of supplementary equipment
- Concerning the importation of raw materials and components for up to two years of production capacity, full tariff exemption for items with tariff rates of 5% or less, and 50% tariff reduction for items with tariff rates of 5% or more
- Exemption from or rebate of tariffs on the importation of raw materials intended for export
- PMA companies which, in order to increase production capacity, re-invest an amount equivalent to at least 30% of the amount initially invested in machinery and other capital equipment are exempt from import tariffs and surcharges on the machinery and equipment imported for such purpose, and tariffs and import surcharges on imported raw materials for two years worth of the production increase are waived for up to four years

#### **ii. Incentives for Companies in Export Processing Entrepots (EPTE) and Export Processing Zones (EPZ)**

- EPTE/EPZ companies are exempt from tariffs, import surcharges, and value-added taxes on imports of raw materials
- Exemption from or suspension of value-added taxes when goods are sent from non-EPTE/EPZ companies to EPTE/EPZ companies for the purpose of processing, when

goods are shipped between EPZ companies, between EPTE companies, or between an EPZ company and an EPTE company, and when goods and/or capital equipment are shipped from EPTE/EPZ companies for the purpose of subcontracted processing or repair

- EPTE/EPZ companies are allowed to assign certain production processes to non-EPTE/EPZ subcontractors, but the period of such subcontracting may be no more than 60 days. Assembly, quality inspection, sorting, and packaging processes may not be subcontracted
- EPTE/EPZ companies which assign certain production processes to non-EPTE/EPZ subcontractors are allowed to loan the equipment and/or plant facilities necessary for such processes to the subcontractors for a period of up to two years
- When EPTE/EPZ companies ship goods necessary for the processing of their products to non-EPTE/EPZ companies, they are exempt from the value-added taxes and sales tax on luxury goods normally assessed on such transactions
- EPTE companies are allowed to sell the equivalent of 25% of their export amount in the domestic market, and sales from an EPTE company to another EPTE/EPZ company are included in the export amount
- Regular import tariffs are assessed on imports of raw materials used in products manufactured by EPTE companies for sale in the domestic market, but tariffs on components and raw materials used in household appliance products are reduced to just 30% of the normal tariff rates for such products

iii. Through revisions to the income tax code, effective January 1, 1995 the maximum corporate tax rate was reduced from 35% to 30%. Tax rates are now set at three levels- 10%, 15%, and 30%- according to the amount of taxable income. In addition, a 25% straight-line depreciation method is now applicable for general capital equipment.

### **5.3.6 Land, Building Sites**

Land ownership rights are granted to Indonesians only. Foreign enterprises are granted building permits and property use rights valid for terms of 25-30 years, and these may be

extended if necessary.

### **5.3.7 Employment of Foreign Nationals**

Although the employment of foreign nationals is generally restricted for certain occupations, companies which export 65% or more of their product are not subject to regulations covering the employment of foreign nationals, and therefore such companies are allowed to hire foreign nationals freely.

### **5.3.8 Business Activities**

Through joint ventures with Indonesian enterprises, foreign capital companies may establish sales offices and agencies, conduct wholesaling of their own products, and sell capital goods, components, and materials used in manufacturing directly to other companies. However, they are not permitted to engage in retail sales.

### **5.3.9 Local Financing**

Foreign capital companies are not permitted to borrow funds from state-affiliated banks (a total of 7 commercial, development, and savings banks). Although there are still some restrictions on the business activities of foreign banks, financial liberalization measures enacted in 1988 made it possible for them to conduct local business operations as long as they meet certain conditions, including the formation of joint ventures with local banks.

### **5.3.10 Overseas Wire Transfers**

Foreign exchange transactions are, in general, unrestricted, and there are no foreign exchange control-related restrictions on the overseas transfer of dividends, profits, etc.

### **5.3.11 Industry Sectors Restricted to Foreign Investment (as of May 1995)**

- i. Foreign investment is not permitted in national defense industries (weapons, munitions,

explosives, combat equipment).

- ii. 9 public works sectors (harbors, electric power generation/transmission, communications, sea transport, air transportation, potable water, nuclear power generation, railroad) are open to foreign capital investment, but the foreign ownership ratio is limited to a maximum of 95%.
- iii. Industry sectors closed to foreign capital investment:
  - Taxi/bus transportation
  - Local shipping
  - Retail trade and the like
  - retail trade
  - Domestic trade support services
  - Private television and radio broadcasting services
  - Operation of cinema
- iv. Industry sectors conditionally closed to foreign investment (investment allowed if conditions noted in parentheses are met):
  - Powdered milk, condensed milk (if integrated with dairy cattle raising)
  - Sawmill (if located in east Timor or Irian Jaya Provinces)
  - Plywood (raw) (if located in east Timor or Irian Jaya Provinces)
  - Printing of valuable paper, such as postage stamps and other negotiable securities (if jointly with the state-run company PERUBI)
  - Manufacture of ethyl alcohol (if high-grade product)
  - Explosive materials and the like (if jointly with state owned enterprise, PT. DAHANA or PT. MULTI NITROTAMA KIMIA)
  - Aircraft equipment and components (if in cooperation with PT. IPTN)
  - Liquor, alcoholic beverages (if manufactured in EPZ or EPTE)
  - Fireworks (if manufactured in EPZ or EPTE)
- v. Sectors closed to both domestic and foreign investment
  - Contractors of forest logging



- Casinos, gambling halls
- Utilization and cultivation of sponges
- Finished / Semi-finished mangrove wood processing
- Plantation and processing marijuana and the like
- Veneer manufacturing
- Manufacture of penta chlorophenol, DDT, dieldrin, etc.
- Pulp industries using sulfite process
- Alkaline chlorides industries using mercury process
- Manufacture of chlorofluoro carbon (CFC/Freon)
- Manufacture of Cyclamate and Saccharine

## 6. EXPORT PROMOTION POLICIES

### 6.1. TRANSITION OF EXPORT PROMOTION POLICIES

Export promotion measures were first implemented during the period of the first 5-year economic plan REPELITA I (1969-73). In March of 1970 the Basic Law Concerning Free Trade Zones was promulgated. In April of 1970, export policies were simplified through the abolition of the multiple exchange rate system etc., and in April of 1971 the National Agency For Export Development (NAFED, BPEN, Badan Pengembangan Ekspor Nasional) was established.

In the latter 1970s, import promotion measures began to be implemented in earnest. For instance, in April of 1976 the following comprehensive measures to promote exports of non-oil and gas products were resolved.

- exemption/reduction of export duties, and abolition of export stamp taxes
- abolition of taxes and other public charges imposed on exports by local government entities
- reduction of interest rates on export loans
- establishment of export processing zones
- establishment of trade centers in New York and London for the purpose of promoting exports of Indonesian products
- establishment of quality standards for specific export products

In November of 1978, the government, in order to restructure the country's international balance of payments, scrapped the linkage of the Rupiah to the US dollar in favor of a managed float system. This resulted in a 33.4% reduction in the value of the Rupiah versus the dollar (IMF method), and, in conjunction with this devaluation, the following tariff reductions and other trade policy changes were implemented.

- import duties on 1,000 items were reduced by 50%
- import duties and import sales taxes were reduced for items necessary for the production of export products

- adoption of SE system (export certificate system), a type of drawback system under which a rebate amount is determined for a specific product export amount, and an export certificate is issued beforehand. This system contributed to increased exports of textiles and textile products, but was abolished in November 1986 due to complaints from the U.S.

In 1981, the effects of a worldwide recession spread to Indonesia, leading to a decline in exports, not just of petroleum products, but of other products as well. The result was a continued deterioration in the country's international balance of payments. In order to combat this situation, in January of 1982 the government reformed its export financing policies, and implemented an export promotion policy which featured a counter purchase system. Then, at the end of 1982, import restrictions were strengthened. Further, in March of 1983, the Rupiah was devalued by another 27% versus the dollar (IMF method). In January of the same year, PANTJATAP, a standing committee on export promotion, was also established.

During the period of REPELITA IV (1984-88), the government clarified a policy of attracting export-oriented foreign capital investment and fostering export industries. In May of 1985, import procedures were radically reformed, and customs operations were privatized in an attempt to improve speed. In May of 1986, the government announced the following import liberalization measures regarding imported goods used in the production of export products.

- as a measure to ease the obligation of using domestically produced raw materials and intermediate goods in the production of export products, companies exporting 85% or more of their product were allowed to use imported raw materials and intermediate goods for production. Companies exporting less than 85% of their product were allowed to use imported goods if the prices of domestically produced goods were found to be higher than those of the imported goods
- Import duty rebates  
import duties and import surcharges imposed on imported goods used in the production of export products are rebated
- Exemption from duties

companies importing raw materials for the purpose of manufacturing export products are exempt from import duties and import surcharges

- Bonded zones

bonded zones are established in the Jakarta region, and the construction of bonded warehouses and bonded factories is permitted in such zones. There are no industry restrictions regarding investment within bonded zones.

On September 12, 1986, in an effort to increase export competitiveness, the Rupiah was again devalued by 31% (IMF method). Along with this, in October the following export promotion measures were implemented with regard to non-oil and gas products. Combined, these measures brought about a dramatic transformation in Indonesia's export structure. By 1987 the value of non-oil and gas exports had become nearly equal with the value of oil and gas exports, and since then the relative share of non-oil and gas exports has been growing steadily.

- Reduction in import duties

duties on 59 items (electronic components and other basic industrial goods which are not easily produced domestically) with tariff rates of 5-30% are reduced to zero. Duties on 94 items (computer components, machine tools, etc.) with tariff rates of 10-40% are reduced to 5%

- Abolition of restrictions on distribution of imported goods

abolition, in principle, of import distribution control measures (monopoly, sole agent system, quota systems) intended to protect domestic products

- Expansion of export financing programs

in order to promote exports, PMA companies (companies established according to the foreign investment law) are eligible for the same export loans of up to 85% of necessary operating capital as PMDN companies (companies established according to the domestic investment law)

In January of 1987, in an effort to ease rising import prices resulting from the previous year's devaluation of the Rupiah and increase export competitiveness in the textile, steel, electrical

equipment, and automobile sectors, the following import restrictions were liberalized for 300 product items.

- import restrictions were replaced by import duties for 103 products (92 textile products, 11 steel products)
- liberalization of products traded by designated import trading firms (142 products: 135 textile products, 7 steel products)
- reduced import duties on 55 products
- exemption from import duties on materials used in the manufacturing of automobile parts

Then, in December of 1987, imports of 111 products, including 51 steel products, were liberalized, and the number of monopolistic import companies under the centralized purchasing system was reduced from 278 to 70.

In October and November of 1988, the government implemented the following wide-ranging deregulation measures in the financial and manufacturing sectors. The impact of financial system deregulation was particularly large, and led to a dramatic increase in new joint ventures between foreign and domestic banks.

- easing of licensing requirements for foreign banks
- elimination of monopolistic importing of plastics, steel, etc.
- deregulation of the distribution sector, and liberalization of entrance of foreign-affiliated joint venture companies into wholesale operations
- liberalization of foreign capital entrance into the domestic vessel sector

In May of 1990, the following wide-ranging deregulation measures, including the reduction of tariff rates on even more industrial goods, were implemented. These measures primarily targeted assembly industries that the government was trying to promote, and included parts and materials used in the electric, electronic, and precision equipment industries in particular.

- easing of import restrictions (1,013 items completely excluded from import restrictions, and regulations eased for an additional 371 items)
- sharp reductions in the tariff rates of 2,363 industrial items. As a result, the number of high-tariff (over 45%) products was reduced from 1,608 to just 162
- reform of import surcharge structure (53 items exempted, 64 items reduced, 4 items increased)

In June of 1991, import duties and surcharges were revised. In addition, trade restrictions on designated materials (some steel materials, edible fats and oils, etc.) were lifted, and imports of these products were liberalized. In July of 1992, import restrictions on textile products, steel products, used machinery, etc., were abolished, and in June of 1993, imports of finished automobiles, which had been prohibited since 1974, were allowed, and the reduction of duties on automobile parts was implemented in accordance with the ratio of domestic production of finished automobiles. Additionally, it was also at this time that the EPTE system (see previous chapter) was implemented as a means of attracting export-oriented companies.

As evidenced by AFTA (ASEAN Free Trade Area), GATT, and so on, since 1994 the trend toward regional and international trade liberalization has accelerated, and the Indonesian government has actively accommodated this trend. Following the December 1993 GATT Uruguay Round agreements, in June of 1994 the government moved to implement further deregulation measures, including the reduction of tariffs on 739 different products, and the elimination of import surcharges on 108 products. Further, at the conference of ASEAN economic cabinet ministers held in Thailand in September of the same year, the rolling forward of CEPT (Common Effect Preferential Tariffs) through the year 2003 was agreed upon, and schedules of each country's tariff reductions through the year 2003 were made public. The following October, the government of Indonesia announced its participation in the auto parts mutual supplementation scheme (BBC scheme) implemented among the ASEAN countries.

In November of 1994 the Indonesian government hosted an informal summit of APEC leaders (Asia Pacific Economic Cooperation Conference). Under the leadership of President

Soeharto, the Bogor declaration was adopted. It states that industrialized nations will liberalize intra-APEC trade by the year 2010, and developing nations will do so by the year 2020. Following the APEC conference, President Soeharto worked to materialize the Bogor declaration by urging the suppression of protectionism in Indonesia and promoting free trade. On May 23, 1995, the government announced comprehensive deregulation measures, including the following tariff reduction schedule for 6,030 products, a number equivalent to two-thirds of all products subject to import duties.

- regarding products for which the combined total of import duties and import surcharges is 20% or less, the combined total is to be reduced to 5% or less by the year 2000
- products for which the total exceeds 20% are to be reduced to 20% or less by 1998, and then further reduced to 10% or less by 2003
- regarding automobile imports, import duties on sedans are to be reduced to 40%, and import surcharges to 50%, by the year 2003

Furthermore, on the same date the following import deregulation measures were implemented as first year measures in accordance with these policies.

- the combined total of import duties and surcharges is reduced by 5% for products in which the total is 10-35%, by 10% for products in which the total is 40% or higher, and left unchanged for products in which the total is 0-5%
- of the 108 products subject to import surcharges, such surcharges are eliminated for 45 products and reduced for 50 products
- duties on passenger cars are reduced from 175% to 125%, and duties on commercial vehicles are reduced by 10-25%
- the number of import-restricted products is reduced from 270 to 189

On January 26, 1996, tariffs were lowered on 428 items, including capital goods and raw materials, in an effort to promote exports. Among other measures was a reduction in the number of import-restricted items from 142 to 119 items, and on June 4, the following easing of restrictions was announced.

- Tariffs were reduced on 1,497 items, including 385 capital goods items
- Abolition of import surcharges (but 80 of the items are subjected to tariffs)
- Simplification of procedures for export declaration and for certification of origin
- Total abolition of inspection before shipping export goods

As indicated above, the Indonesian Government has not implemented direct export promotion policies. Rather its basic export promotion policy has been to attract export-oriented foreign capital and to promote the export of non-petroleum and gas products through indirect measures for cultivating export industries, primarily easing of import restrictions. This policy has proven to be successful thus far.



## **6.2. OVERVIEW OF EXPORT PROMOTION POLICIES**

Although they include some direct export promotion measures, such as the activities of NAFED (National Agency For Export Development), Indonesia's current export promotion policies are fundamentally indirect measures aimed at promoting exports by nurturing industries which produce industrial goods other than oil and gas products, particularly automobiles, electronics, electrical equipment, and so on. Accordingly, the country's principal export promotion policies involve the liberalization of trade and investment in order to aid in the development of related industries. These policies include investment promotion, incentives for foreign capital enterprises, and reduced tariff rates for raw materials, intermediate goods, and parts necessary for production, as well as the easing of import trade restrictions. The following is a brief overview of the policies and measures implemented to date.

### **6.2.1 NAFED (National Agency For Export Development, BPEN) Activities**

Established in 1971 as an external organ of Indonesia's Department of Trade. Known as NIFED (National Institute for Export Development) for its first four years of existence, the name was changed to NAFED (National Agency for Export Development) in 1974, when it was completely integrated into the Department of Trade as part of government-wide organizational reforms. The agency's primary activities involve promoting exports of Indonesia's non-oil and gas products, including agricultural products.

When it was first established, the agency's organization included only the industrial arts center. In 1972, however, the agricultural products center and the industrial products center were added, and in 1987 the trade information and market analysis center (CENTIMA) was established. As a result, the agency is currently composed of five bureaus, the four noted above along with a general affairs bureau. Overseas, the agency currently operates 13 Trade Promotion Centers (ITPC) located in major cities around the world (New York, London, Hamburg, Sydney, Osaka, Jeddah, Dubai, Los Angeles, Dallas, Budapest, Mexico), and these centers gather and disseminate information from overseas.

The following are some of the agency's main activities for FY 1994/95.

- a total of 672 trade inquiries from 82 different countries
- a library collection which includes nearly 8,000 trade-related books and documents.  
3,800 users annually
- publication of WARTA EKSPOR (EXPORT NEWS)
- establishment of a Buyer Reception Desk (BRD) in 1987. 4,900 users in 1994
- cooperation with overseas export promotion organizations: multilateral institutions (UNCTAD, GATT, ESCAP), Japan (JETRO, JICA), Germany (GTZ, AMK), Australia (AAECP), Denmark (DIPO), Norway (NORIMPOD)
- participation in international trade fairs ~ participation by over 600 Indonesian companies in 40 trade fairs in 22 countries
- dispatch of trade missions ~ to South Africa, Kenya, Australia, etc.
- hosted domestic trade fair ~ RESOURCE INDONESIA '94 (held October 25-30, 1994; 4,500 overseas buyers; total contracted transactions of \$160 million)
- hosted export forums ~ held during RESOURCE INDONESIA '94; themes: The Global & Regional Economic Outlook and Indonesia's Export Prospect; The Role of ISO 9000 in Increasing Competitiveness; etc.
- Indonesia Export Training Center (IETC)  
provides training related to export marketing, business English/Japanese, quality inspection of export products, business management, export promotion of non-oil and gas products, etc.
- award programs for enterprises which contribute to exports (PRIMANIYARTA, SUCCESSFUL EXPORT)  
1994 award recipients ~ 16 companies at the national level, 43 companies at the local and regional level

### 6.2.2 Foreign Exchange Policy (Currency Devaluation)

- November 1978 - adoption of managed float system; Rupiah devalued by 33.6% versus the dollar (IMF method)
- March 1983 - Rupiah devalued by 27% versus the dollar (IMF method)
- September 1986 - Rupiah devalued by 31% versus the dollar (IMF method)

- approximately 3.5% real rate of devaluation for 1992
- approximately 2.3% real rate of devaluation for 1993
- approximately 4.3% real rate of devaluation for 1994

### **6.2.3 Easing of Import/Export Trade Licensing Requirements**

Beginning January 1, 1988, the registration system for general export licenses (APE, APES) and limited export licenses (APIT) was abolished in principle in order to promote exports. However, export of export control products and export quota products (coffee, etc.) is still limited to registered export contractors.

Under deregulation measures adopted in October 1986, the import distribution control system intended to protect domestic products was effectively abolished. In December of 1987 the import contractor system was abolished for 106 products, and in November of 1988, 318 products were opened up to general traders. In December of 1987, the number of products which could be imported only by authorized agents was reduced from 278 to just 70. Another ten items were liberalized in June 1996.

### **6.2.4 Reduction of Products Subject to Import Limitations**

In June of 1993, deregulation reduced the number of products subject to import restrictions from 464 items to 324 items. Included were imports of finished automobiles, which had been refused entry for the previous 20 years. In May of 1995, the number of products subject to import limitations was reduced from 270 items to 189 items. As of January 1996, there are 119 items.

### **6.2.5 Reduction of Import Duties and Import Surcharges**

While import duties were reduced and import surcharge schedules revised a number of times during the 1980s also, the following is a list of the reductions implemented since 1990.

- In May 1990, tariff rates on 2,363 industrial products were reduced sharply, and import surcharges were reduced or eliminated for 117 products

- In June 1991, import duties were reduced for 562 products, and import surcharges were reduced or eliminated for 502 products
- In June 1993, import duties were reduced for 221 products, and import surcharges were reduced for 76 products
- In October 1993, import duties were reduced for 198 products, and import surcharges were reduced or eliminated for 119 products
- In June 1994, import duties were reduced for 739 products, and import surcharges were eliminated for 121 products
- In May 1995, the following import deregulation measures were adopted regarding 6,030 product categories.
  - \* 5% tariff reduction for products in which the combined rate of import duties and import surcharges totals 10-35%, and 10% reduction for products in which the combined rate is 40% or higher
  - \* of 108 products subject to import surcharges, elimination of such surcharges for 45 products, and reduction for 50 products
  - \* reduction of import duties on automobiles from 175% to 125%, and 10-25% reduction of duties on commercial vehicles
- In June 1996, tariffs were reduced on 1,497 items; import surcharges were completely abolished, and inspections before shipping export goods were eliminated.

#### **6.2.6 Drawback System**

Import duties and surcharges assessed on imported products which are used in the production of products for export may be rebated.

#### **6.2.7 Attracting Export-oriented Foreign Enterprises**

Under a package of policies adopted in December of 1987, the Indonesian government announced measures to attract large-scale foreign investment, and began to aggressively lure export-oriented foreign capital investment into Indonesia. Among these measures, the EPTE (Export Processing Entrepots) system, which was adopted in June of 1993, has been improved every year since, and has been very effective in attracting foreign investment.

The EPZ (Export Processing Zone) system, which was expanded in 1986, has also played an important role in luring foreign investment.

The following incentives are provided to EPTE companies/factories and companies located within EPZs.

- exemption from import tariffs, import surcharges, income tax, value-added tax, sales tax on luxury goods, and other taxes in conjunction with the import of raw materials, parts, or capital goods used in the production process
- 25% of the exported amount is allowed to be sold within Indonesia simply by completing the normal import procedures and paying normal tariff charges
- exemption from SGS (Societe Generale de Surveillance) inspection at the loading port which is normally required for goods imported into Indonesia

In addition, the following deregulation measures were adopted in an effort to foster supporting industries.

- EPTE/EPZ companies are allowed to assign certain production processes to non-EPTE/EPZ subcontractors for a period of up to 60 days
- EPTE/EPZ companies which assign certain production processes to non-EPTE/EPZ subcontractors are allowed to loan the equipment and/or plant facilities necessary for such processes to the subcontractors for a period of up to two years

Furthermore, under June 1994 revisions to the Foreign Investment Law, foreign ownership restrictions, capital transfer obligations, and minimum investment requirements were effectively abolished. This made Indonesia's foreign investment policies the most liberal of all ASEAN countries except Singapore. In particular, the abolition of the minimum investment requirement is an extremely positive incentive for smaller foreign companies without tremendous amounts of available capital when considering whether or not to invest in Indonesia.

### 6.3 EXPORT ACTIVITY

For Indonesia, an exporter of primary products such as petroleum and natural gas, export trends have a tremendous impact on the economy. Since the country basically relies on imports for the capital goods necessary for economic development, import volume increases as development accelerates, and this leads to a shrinking of the nation's trade surplus. Coupled with growing external debt repayments and a structural services trade deficit stemming from a constant deficit in shipping trade etc., the shrinking trade surplus leads to a deterioration in the country's current account balance, and this inevitably results in import restrictions, restrictions on economic development, postponement of infrastructure development projects, and so on.

Transition away from an oil and gas-dependent economy means boosting exports of industrial goods. Since 1970, the government of Indonesia has been aggressively working to increase exports of non-oil and gas products, particularly industrial goods. As a result, exports of non-oil and gas products, which accounted for a mere 18% share of total exports of \$25.2 billion in 1981, had eclipsed exports of oil and gas products by 1987, accounting for a 50.1% share of Indonesia's total exports of \$17.1 billion that year. In addition, the share of non-oil and gas exports accounted for by exports of industrial goods increased from 59% in 1981 to 78% in 1987. Exports of non-oil and gas products have continued to grow since then as well, and in 1994 accounted for a 76% share of the nation's total export value of \$40.1 billion. Furthermore, that same year the share of industrial goods exports climbed to 85% of non-oil and gas exports.

Among exports of industrial goods, plywood, apparel, and fabrics account for particularly large shares. In 1994, exports of plywood totaled \$3.7 billion, a 14.5% share of total industrial goods exports, apparel exports totaled \$3.2 billion, a 12.6% share, and fabrics \$2.6 billion, a 10% share. After these three areas come exports of electrical and electronics equipment, which is rapidly developing into a promising export industry. Exports of electrical and electronics equipment (office equipment, communications equipment, electrical equipment) jumped from just \$400 million in 1991 to \$2,368 million in 1994. These results

can largely be attributed to the government's aggressive efforts and policies to attract export-oriented foreign capital investment.

In 1994, the number-one destination of Indonesian exports was Japan. Exports to Japan totaled \$10.9 billion, a 27% share of Indonesia's total exports. Second was the United States with \$5.8 billion, a 15% share. Third was Singapore with \$4.1 billion, a 10% share. Together, these three countries accounted for over 50% of Indonesia's total exports. Exports to Japan and Singapore received a particular boost thanks to exports by companies from those two countries which had established operations in Indonesia. Exports to Japan of VCRs and other AV equipment, batteries, insulated cable, and other products showed an especially sharp increase. Additionally, exports to Malaysia, Thailand, and other ASEAN countries are also increasing, and Malaysian companies in Indonesia have recently begun to export their products. ASEAN countries have made export-led economic growth the cornerstone of their economic policies, and with the announcement of the AFTA tariff reduction schedule, the liberalization of regional trade is progressing rapidly. Trade involving industrial goods within ASEAN is expected to become increasingly active in the coming years.

In order to increase exports of industrial goods, raw materials, parts, production equipment, and other capital goods necessary to manufacture those industrial goods must be imported. In 1994, imports of raw materials and capital goods accounted for 72% and 23%, respectively, of Indonesia's total imports of \$32.0 billion. Of the \$23.1 billion in raw materials imports, industrial-use intermediate goods accounted for a 50% share (\$11.6 billion), capital goods components 14% (\$3.3 billion) and transportation equipment components 13% (\$3.0 billion). As for imports of capital goods, machinery (excluding transportation equipment) accounted for an 89% share of the \$7.4 billion in total capital goods imports.

Exports in 1995 continued a favorable trend, increasing 13.4% from the previous year to reach US\$ 45,418 million. By country, exports to Japan ranked first, rising 12.4% to US\$ 12,288 million, and the United States was second, with an 8.5% increase to US\$ 6,322 million. By region, exports to the European Union gained 16.1% to US\$ 6,760 million; those to the Asian NIEs climbed 13.9% to US\$ 6,323 million, while to the ASEAN countries, exports increased 6.4% to US\$ 6,007 million. The margin of increase to the ASEAN nations con-

tracted because of a slump in exports of jewelry and communications equipment to Singapore, which dropped 9.2% from the previous year to US\$ 3, 767 million. Shipments to other countries showed substantial growth: Thailand (up 75.2% from the previous year, US\$ 703 million); Philippines (up 61.7%, US\$ 590 million), Malaysia (up 33.6%,US\$ 987 million).

In the breakdown by product, petroleum and gas exports increased 8.0% from the previous year, to reach US\$ 10, 465 million, while shipments of non-petroleum and gas products climbed 15.1% to US\$ 34,954 million. Petroleum and gas exports increased from the previous year for the first time in five years due to stabilization of international prices. In exports of non-petroleum and gas products, there was a 7.0% gain for textiles and textile products, which recovered to US\$ 6,203 million. Plywood dropped for the second year in a row, falling 6.9% to US\$ 3,462 million. Electrical and electronic equipment, primarily to Europe and America, expanded steadily, rising 16.7% to US\$ 2,778 million.

Using the trade specialization coefficient (coefficient obtained by subtracting the import value of the product in question from the export value, and dividing this result by the total of export and import values; if the coefficient ranges from 0.0 to 100.0, the product is considered an export product), it is possible to compare the relationship between export value and import value for two product categories: communications equipment, including television, radio, VTR and other items already classed in the export industry, and automobile products, scheduled to foster the export industry in the future.

As indicated in Table 3-6-3, the trade specialization coefficient of communications equipment/devices in 1990 was -64.7. For automobiles it was -94.6. For both of these items, the import value greatly surpassed the export value, but already at this time, the trade specialization coefficient of radio among communications equipment/devices reached 87.9, putting radios in the category of export industry. The coefficient for communications equipment/devices went from -51.0 in 1992 to 31.9 in 1994 as exports steadily increased and exceeded imports. Already in 1992, television (86.5) and VTR/tape recorder (77.6) became export industries, but the import value of communications equipment and parts was high, with the trade specialization coefficient at -68.8. In 1994, the coefficients for television, radio, VTR, etc., reached 90.0 or higher, while for communications equipment and parts it was



still -29.9, but exports continue to exceed imports every year in this category.

For automobiles, the trade specialization coefficient was -70.3 in 1992, and -76.3 in 1994. From 1990, exports have been increasing but the coefficient has remained level. In this category, the coefficient for motorcycles went from -75.7 in 1990 to -24.8 in 1994, indicating that exports have been growing more than imports and that motorcycles are becoming an export industry. In the automobile industry as of 1994, assembly production for the domestic market has been extensive while imports of automotive parts have been increasing sharply. Imports of finished vehicles are curtailed by high tariffs and parts imports account for 66% of the total value (US\$ 2,300 million) of automobile imports.

Table 3-6-1 Indonesian Exports by Sector

(Unit : US\$ Million)

	1990	1991	1992	1993	1994
Non-oil and gas	14,604.1	18,247.2	28,296.2	27,077.1	30,359.7
agricultural sector	2,083.2	2,281.9	2,212.0	2,644.2	2,818.4
industrial sector	11,878.5	15,067.5	19,613.1	22,944.0	25,702.1
mining sector	636.0	889.0	1,453.0	1,463.9	1,800.4
others	6.4	8.8	18.1	25.0	38.6
Oil and gas	11,071.1	10,894.8	10,670.7	9,745.9	9,693.7
crude oil	6,219.9	5,695.6	5,397.8	4,778.4	5,071.6
petroleum products	1,183.9	1,018.7	1,221.1	914.7	933.0
natural gas	3,667.3	4,180.5	4,051.8	4,052.8	3,689.1
Total exports	25,675.2	29,142.0	33,966.9	36,823.0	40,053.4

Source: *Indikator Ekonomi*, BPS, December, 1995

Table 3-6-2 Indonesian Imports by Category

(Unit : US\$ Million)

	1990	1991	1992	1993	1994
Consumer goods	876.9	958.4	1,212.8	1,146.1	1,430.2
Raw materials/ Intermediate goods	14,893.1	17,233.8	18,700.0	20,034.8	23,133.6
Capital goods	6,067.0	7,676.6	7,366.8	7,146.9	7,419.7
Total imports	21,837.0	25,868.8	27,279.6	28,327.8	31,983.5

Source: *Indikator Ekonomi*, BPS, December, 1995

Table 3-6-3 Exports/Imports of Designated Products\*

(Unit : US\$ Million)

SITC No.	Product	1992		1993		1994	
		exports	imports	exports	imports	exports	imports
71	Power generating machinery	17.8	1,678.2	28.8	1,616.8	49.4	1,752.0
73	Metal working machinery	2.2	505.4	5.4	369.2	2.4	440.0
74	Industrial machinery, parts	49.2	2,317.0	112.1	2,169.3	144.2	2,214.1
75	Office equipment, parts	139.6	181.3	156.7	200.7	299.9	176.5
751	Office equipment	13.3	40.0	20.6	40.6	67.5	39.4
752	Computers, peripherals	140.2	101.1	89.0	115.9	96.2	94.2
759	Parts for office equipment	22.1	40.2	47.1	44.2	136.2	42.9
76	Communication equipment, parts	598.7	874.4	963.6	999.1	1,472.5	759.5
761	Televisions	115.6	8.4	114.2	5.1	183.2	6.8
762	Radios	156.9	14.5	238.7	4.7	268.9	5.8
763	VCRs, tape recorders	76.8	9.7	353.2	9.7	620.4	5.7
764	Communications devices, parts	249.3	841.9	257.5	979.5	400.0	741.2
77	Electrical machinery, parts	335.9	1,514.1	418.3	1,737.1	596.0	1,766.8
775	Household electrical appliances	5.2	34.4	15.8	26.2	16.9	33.3
776	Cathodes, semiconductors, etc.	61.0	189.9	49.0	300.5	107.3	327.9
778	Others (incl. electrical devices)	182.0	343.4	225.9	347.3	317.8	373.7
78	Road vehicles	181.5	1,040.0	334.2	1,324.1	314.2	2,335.2
781	Passenger cars	7.5	170.2	17.5	190.9	16.6	86.3
782	Commercial vehicles	2.1	144.2	5.0	127.9	1.2	238.6
784	Automobile parts	22.4	479.8	24.9	702.0	34.4	1,532.5
785	Motorcycles	110.1	208.1	252.3	270.3	243.2	403.5

Note: \* Products subject to JICA survey (automobiles, electrical equipment, machinery parts, etc.)

Source: BPS trade statistics for each year

Table 3-6-4 Trend in Trade Specialization Coefficient \*<sup>2</sup> of Specific Products\*<sup>1</sup>

SITC No.	Product	1990	1992	1994
71	Power generating machinery	-96.5	-97.9	-94.5
73	Metal working machinery	-97.1	-99.1	-98.9
74	Industrial machinery, parts	-97.1	-95.8	-87.8
75	Office equipment, parts	-99.4	-13.0	25.9
751	Office equipment	-99.6	-50.1	26.3
752	Computers, peripherals	-99.6	1.5	1.1
759	Parts for office equipment	-98.2	-29.1	52.1
76	Communication equipment, parts	-64.7	-18.7	31.9
761	Televisions	-42.6	86.5	92.8
762	Radios	87.9	83.1	95.8
763	VCRs, tape recorders	-63.3	77.6	98.2
764	Communications devices, parts	-77.2	-54.3	-29.9
77	Electrical machinery, parts	-78.9	-63.7	-49.6
775	Household electrical appliances	-93.0	-73.7	-32.3
776	Cathodes, semiconductors, etc.	-78.9	-51.4	-50.7
778	Others (incl. electrical devices)	-53.9	-30.7	-8.1
78	Road vehicles	-94.6	-70.3	-76.3
781	Passenger cars	-96.2	-91.6	-67.7
782	Commercial vehicles	-99.4	-97.1	-99.0
784	Automobile parts	-98.1	-91.1	-95.6
785	Motorcycles	-75.7	-30.8	-24.8

Note: \*<sup>1</sup> Same as Table 3-6-3

\*<sup>2</sup> Trade specialization coefficient is calculated as follows:

$$(\text{export value} - \text{import value}) / (\text{export value} + \text{import value}) \times 100$$

Source: BPS trade statistics for each year

## **7. HUMAN RESOURCE DEVELOPMENT POLICIES**

### **7.1 LABOR FORCE IN INDONESIA**

According to the 1990 Census, the population in Indonesia was 179,381 thousand persons. The population growth has recently declined due to the drop in the fertility rate. Although the average population growth rate decreased from 2.32% per year during the 1970s to 1.98% per year during the 1980s, the population of Indonesia is still relatively large among ASEAN countries, and is estimated to reach 195,283 thousand in 1995.

The labor force in Indonesia has been expanding more rapidly than the population. During the 1980s, it grew by 2.8% per year on average. However, it is predicted that the growth of labor force will decelerate. The features of the labor force in Indonesia are: more young workers and relatively high participation of female workers.

There were 2,186,000 people unemployed in 1992 and the unemployment rate was 2.71%. Unemployment is a serious problem in urban areas with the unemployment rate being 5.78% compared to 1.52% in the rural areas. The unemployment rate among those with higher education is relatively high in the urban area. Unemployment has become a more serious problem than might be observed merely from unemployment rates, which are measured based on the number of jobseekers. The ratio of underemployed workers who are working less than 35 hours a week is estimated at 42.1% in 1990.

Although the education level of the labor force in Indonesia is relatively low compared with other major Asian countries, it has been improving at a rapid pace. The ratio those workers with incomplete primary schooling among the total labor force dropped from 67% in 1980 to 46% in 1990.

The number of workers in 1993 was 79,2001 thousand, of which 8,784 thousand or 11.1% were engaged in the manufacturing sector. The breakdown of the labor force in the manufacturing sector by type of industry and size of enterprise is as shown in Table 3-7-2.

Table 3-7-1 Percentage of Secondary School Age Children Enrolled in School  
in Selected Asian Nations

Country/Area	Enrollment Ratio (%)
South Korea	86
Hong Kong	73
Philippines	73
Singapore	69
Malaysia	59
Indonesia	47
China	44
Thailand	29

Source: Fairclough, 1993

Table 3-7-2 Labor Force in the Manufacturing Sector by Type of Industry  
and Size of Enterprises

(Unit: Persons)

		Large & Medium Enterprises	Small Enterprises*	Household Industries*	Total
Food, Beverages, and Tobacco (31)	1991	643,021	309,603	1,483,593	2,436,217
	1993	737,026	253,612	1,519,619	2,510,257
Textile, Clothing and Leather (32)	1991	907,161	174,734	431,497	1,513,392
	1993	1,065,881	230,520	469,995	1,766,396
Wood and Wood Products (33)	1991	445,209	216,185	1,460,646	2,122,040
	1993	498,959	189,740	1,403,865	2,092,564
Paper and Paper Products, Printing and Publishing (34)	1991	102,429	11,415	12,224	126,068
	1993	118,457	9,147	16,532	144,136
Chemicals, Petroleum, Coal, Rubber and Plastic Products (35)	1991	377,775	11,647	2,542	391,964
	1993	473,540	13,484	25,622	512,646
Non-metallic Mineral Products (36)	1991	129,919	171,789	300,353	602,061
	1993	140,964	197,148	320,387	658,499
Basic Metals (37)	1991	37,520	-	-	37,520
	1993	38,651	-	-	38,651
Fabricated Metal Products, Machinery and Equipment (38)	1991	305,179	63,128	62,327	430,634
	1993	360,453	37,853	82,141	480,447
Others (39)	1991	45,754	20,005	33,144	98,903
	1993	63,708	20,534	50,145	134,387
Total	1991	2,993,967	978,506	3,786,326	7,758,799
	1993	3,497,639	952,038	3,888,306	8,337,983

Note: \* The figures of 1993 do not include Jambi, Bengkulu, Timor Timur, Kalimantan Tengah, Kalimantan Timur, Maluku, Irian Jaya.

Source: *Statistik Indonesia 1994*, Biro Pusat Statistik, 1995

The breakdown of labor force in the manufacturing sector by type of academic background is as shown in Table 3-7-3. The ratio of university graduates is low because most of them go to the public sector.

Table 3-7-3 Labor Force in the Manufacturing Sector by Academic Background

Education Level		Number of Workers* (Persons)	Breakdown
No Education		806,027	9.2%
Some Primary School		1,707,187	19.4%
Primary School		3,380,727	38.5%
SMTP	General	1,201,376	13.7%
	Vocational	138,080	1.6%
SMTA	General	852,640	9.7%
	Vocational	549,023	6.3%
Diploma I/II		18,773	0.2%
Academy/Diploma III		58,402	0.7%
Universities		72,060	0.8%
Total		8,784,295	100.0%

Note: \* Workers ten years old or older.

Source: *Statistik Indonesia 1994*, Biro Pusat Statistik, 1995

The vocational training currently conducted in Indonesia can be roughly divided into the following:

- Vocational high schools under the Ministry of Education and Culture
- Vocational Training Centres (Balai Latihan Kerja (BLK), Kursus Latihan Kerja (KLK)) under the Ministry of Manpower
- Academies and training centers under the Ministry of Industry and Trade
- State owned polytechnics (Diploma program for medium level technicians)
- In-house training by private companies

The Indonesia government is making efforts to improve the quality of manpower through formal education and vocational training, especially emphasizing the expansion of vocational training. The government is expanding training facilities, curriculum, instructors, and the linkage with the industry.

## 7.2 EDUCATION SYSTEM

The education system in Indonesia consists of the following 4 stages:

Elementary School (SD)	7 ~12 years old
Junior High School (SMTP)	13~15years old
Senior High School (SMTA)	16~18 years old
Academy/University	19~24 years old

There are 2 courses, general course and vocational course at both junior and senior high schools. As for higher education, academies are 2 - 3 year education courses, and universities, 4 - 5 years. There are Islamic schools under the Ministry of Religion besides schools mentioned above under the Ministry of Education and Culture.

The targets of enrollment in Repelita VI are as shown in Table 3-7-4. The focus of education programs in Repelita VI is the Nine-Year Universal Basic Education Program.

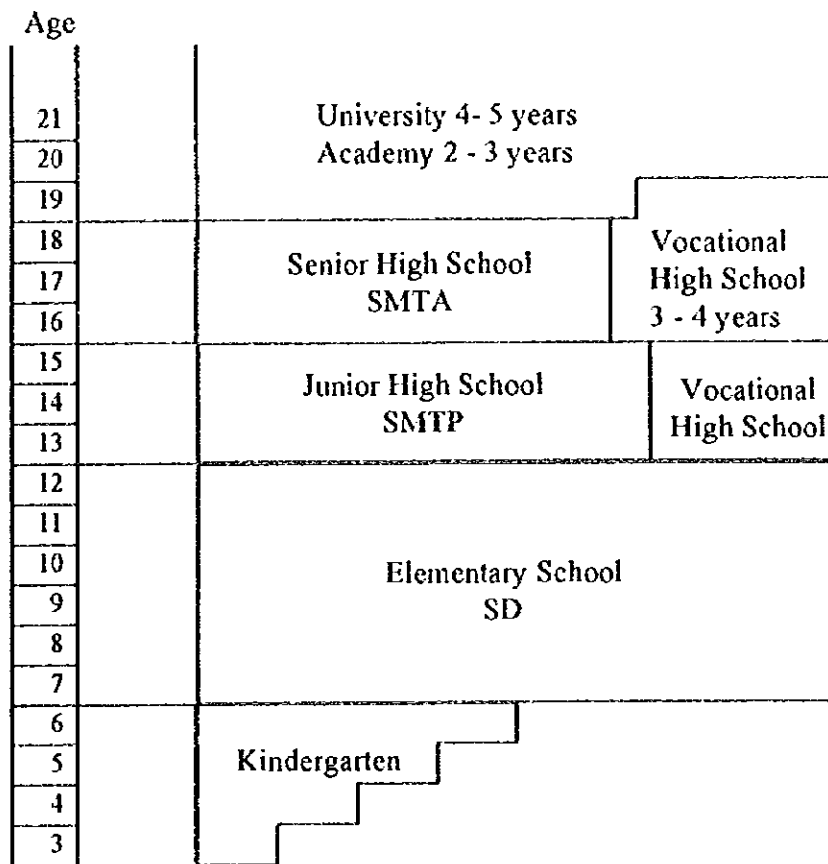
Table 3-7-4 Enrollment Targets in Repelita VI

	End of Repelita V	1994/95	1998/99
Elementary School (7-12 years old)	93.5%	93.7%	94.0%
Junior High School (13-15 years old)	39.9%	41.2%	48.6%
Senior High School (16-18 years old)	24.7%	25.0%	30.4%
Higher Education (19-24 year old)	10.5%	10.9%	12.8%

Source: *Repelita V - A Summary*, BAPPENAS



Fig. 3-7-1 Education System in Indonesia



### 7.3 VOCATIONAL TRAINING WITHIN THE MINISTRY OF MANPOWER

There are 156 Vocational Training Centres under the Ministry of Manpower in 27 provinces.

The breakdown of them are as follows:

Balai Latihan Kerja Type A(Large size):	34
Balai Latihan Kerja Type B (Medium size):	16
Kursus Latihan Kerja (Small size):	106

Training programs of Vocational Training Centres consist of: i) Mobile Training Programmes; ii) Standard Training Programmes; iii) Instructor Training Programmes; and iv) Tailor Made Training Programmes. Mobile Training Programmes are conducted by Mobile Training Units (MTU) for vocational training at remote areas.

Qualifications for entrance to Vocational Training Centres are: age of 18 years old or older, and completion of primary schooling. The standard training period is 4 months. In September, 1995, the three-year disciple training system with training at a company's work place was started.

Major fields of training conducted by Vocational Training Centres are as follows:

Table 3-7-5 Major Fields of Training Conducted by Vocational Training Centres under the Ministry of Manpower

Major Fields	Sub-trades
Mechanical Engineering	Gas welding, arc welding, machining, plumbing, sheet metal, pipe fitting, foundry
Electric & Electronic	Dwelling installation, power installation, air conditioning & refrigeration, radio, B/W & color television, amplifier
Automotive Engineering	Diesel engine, petrol engine, motor cycle, auto body repair, speed boat
Construction	Furniture, carpentry & joinery, bricklaying & masonry, designing & technical drawing, steel reinforcement, building construction
Commercial	Typing, book keeping, office administration, secretarial, computer, hospitality
Agricultural	Farming, fishery, agricultural mechanization, animal husbandry
Miscellaneous	Dress making/tailoring/embroidery, hair dressing, beauticians, wood and/or metal carving, handicrafts

Source: *Training at Vocational Training Centres*, the Ministry of Manpower

The numbers of workers trained by 153 vocational training centres under the Ministry of Manpower are shown in Table 3-7-6. Since fiscal year 1985/86, the number of workers trained dropped drastically due to the curtailed budgets. In the 1990s, the number has tended to rise and exceeded 100,000 persons in the year 1992/93.

Table 3-7-6 Number of Workers Trained by Vocational Training Centres under the Ministry of Manpower

Area	(Unit: Persons)									
	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Mechanics	13,507	11,230	5,432	2,268	3,493	3,531	2,248	9,424	-	-
Electronics	16,503	11,703	5,922	3,196	4,509	5,237	3,448	10,552	-	-
Automotive	15,884	13,835	7,354	3,234	4,107	4,840	3,758	10,927	-	-
Building	14,225	9,494	4,721	2,998	3,344	4,148	3,592	8,663	-	-
Business/Admin.	5,227	6,966	4,133	1,297	3,186	3,275	1,431	4,211	-	-
Miscellaneous	28,606	25,864	11,324	6,741	6,223	9,277	6,921	15,087	-	-
Agriculture	19,512	14,053	4,925	3,294	5,343	5,411	15,597	14,770	-	-
Total	113,464	93,145	43,811	23,028	30,205	35,719	36,014	73,634	80,951	105,881

Source: *Manpower and Employment Situation in Indonesia 1994*, the Ministry of Manpower, 1995

The following problems are pointed out for Vocational Training Centres under the Ministry

of Manpower:

- i. Facilities are obsolete.
- ii. The skill level of instructors is not sufficiently high.
- iii. The budgets are not sufficient.

As a result, their training courses are mainly short-term basic training.

## **7.4 VOCATIONAL TRAINING WITHIN THE MINISTRY OF INDUSTRY AND TRADE**

### **7.4.1 Organization of Vocational Training within the Ministry of Industry and Trade**

The vocational training within the Ministry of Industry and Trade is divided in to three levels of education: Vocational High Schools, Academies, and Colleges. The numbers of each type of schools are as follows:

Vocational High Schools:	9
Academies:	6
Colleges:	2

Vocational high schools consist of 6 technical high schools (Sekolah Menengah Teknologi Industri, SMTI) in Yogyakarta, Ujung Pandang, Pontianak, Padang, Tanjung Karang, and Banda Aceh, and 3 chemical analysis high schools in (Sekolah Menengah Analisis Kimia) in Bogor, Ujung Pandang, and Padang. Table 3-7-7 shows the academies and colleges. All of the above are accredited by the Ministry of Education and Culture. Based on the data of the year 1993/94, there were 4,840 students of Diploma I to IV (colleges and academies) and 3,883 students of first year to fourth year of vocational high schools.

Table 3-7-7 Colleges and Academies under the Ministry of Industry and Trade

Name	Level	Location	Establishment
College of Textile Industry (Sekolah Tinggi Teknologi Tekstil, STTT)	Diploma IV	Bandung	1954
College of Industrial Management (Sekolah Tinggi Manajemen Industri, STMI)	Diploma IV	Jakarta	1968
Academy of Business Administration (Akademi Pimpinan Perusahaan, APP)	Diploma III	Jakarta	1961
Academy of Leather Technology (Akademi Teknologi Kulit, ATK)	Diploma III	Yogyakarta	1958
Academy of Analytical Chemistry (Akademi Kimia Analisis, AKA)	Diploma III	Bogor	1959
Academy of Industrial Technology (Akademi Teknologi Industri, ATI)	Diploma III	Ujung Pandang	1967
Academy of Industrial Technology (Akademi Teknologi Industri, ATI)	Diploma III	Padang	1974
Academy of Chemical Engineering (Pendidikan Teknologi Kimia Industri, PTKI)	Diploma III	Medan	1983

Source: *Buku Panduan Pendidikan dan Latihan Industri* and data from MOIT

#### 7.4.2 Vocational Training within the Ministry of Industry and Trade

The vocational training conducted by the Ministry of Industry and Trade consists of regular management courses and non-regular management courses. Regular management courses are regularly held focusing for the development of employees of state owned companies. They include: Supervisory Management Course, Middle Management Course, General Management Course, Advanced Management Course, etc. Non-regular training courses are conducted based on the needs of the industry. They include: Training Officer Course, Training of Trainers, Achievement Motivation Training, Achievement Motivation Training for Trainers, Entrepreneurship Courses, etc. From 1990 to 1994, a total of 2,297 persons for regular training and 930 persons for non regular training were trained.

#### 7.4.3 Organization of PUSBINLAT

The Centre for Industry Vocational Training Development (Pusat Pembinaan Pelatihan Ket-

crampilan dan Kejuruan, PUSBINLAT), under the Ministry of Industry and Trade, develops and conducts industrial training and education. The function of PUSBINLAT is as follows:

- To prepare teaching and training programs.
- To develop teaching administration and training administration affairs.
- To implement teaching and training coordination with the functional institution.

PUSBINLAT consists of three departments, i.e., Department of Vocational Training, Department of Industrial Skills, and Administration Department. The Department of Vocational Training is responsible for the administration of vocational high schools, colleges, and academies. It is also responsible for program preparation, curriculum, syllabus, development programs of teachers/lecturers, and teaching coordination with functional institutions. The Department of Industrial Skills is responsible for managing industrial training as well as industrial seminars. The administration department deals with general administration and personnel affairs within PUSBINLAT.

## **7.5 PROBLEMS CONCERNING HUMAN RESOURCES DEVELOPMENT**

As for the problems of the current human resource development in Indonesia, the followings are pointed out:

- i. The geographical structure of the country makes spreading the effects of education and training more costly and less effective.
- ii. There is still no coordination among the ministries and related institutions for technical vocational training. Standard models of industrial training need to be established and developed to fulfill the demands of the labor market.
- iii. Education and training in high-level skills and new technologies are not sufficiently carried out.
- iv. The responsibility for technical vocational education in Indonesia is apparently only in the hands of the government. The promotion of technical training by the private sector is required.



## **8. DEVELOPMENT OF INFRASTRUCTURE**

### **8.1 PRESENT SITUATION OF INDUSTRIAL PARKS**

#### **8.1.1 Scale of Development**

At the end of December in 1995, Indonesia had 57 industrial parks (about 18,000 ha in total area) in operation and 9 industrial parks (about 2,600 ha) under construction (Refer to Table 3-8-1). In the future, the total number of industrial parks is expected to reach 167 (about 51,000 ha in total area), including those that are now under application for approval and under planning. Thus, the total number of industrial parks will be 1.7 times as great as that at present. Considering the fact that there were only 8 industrial parks (2,896 ha in total area) in 1989, it can be said that Indonesia is now accelerating the construction of infrastructure, keeping pace with its rapid industrialization.

There are also 15 export processing zones (EPZ), independent from or attached to industrial parks.

#### **8.1.2 Development Enterprises**

Almost all the industrial parks have been developed by private companies, not by the Government. Of these industrial parks, about 20% are developed and being planned by foreign companies. 13 industrial parks are developed and being developed by Japanese affiliates. Some of these industrial parks were offered only with standard buildings constructed and grounds prepared. The land prices are US\$50-80/m<sup>2</sup> in the suburbs of Jakarta.

#### **8.1.3 Regional Features**

130 industrial park development projects, about 80% of the total, are concentrated in the island of Java. In these projects, 84 industrial parks are expected to be created in the suburbs and west of Jakarta. (Refer to Table 8-1-1).

Thus, many projects are concentrated in Jakarta and surrounding areas. From the view-

point of regional development, however, much attention is directed to the state of Riau. This state has a larger scale of industrial park development projects than the others, because the island of Batam belongs to this state. The projects in this state account for about 10% of the total number of projects and 20% of the total projected area in the country. This means that relatively large industrial parks are being developed and planned in this state. (Refer to Table 8-1-1).

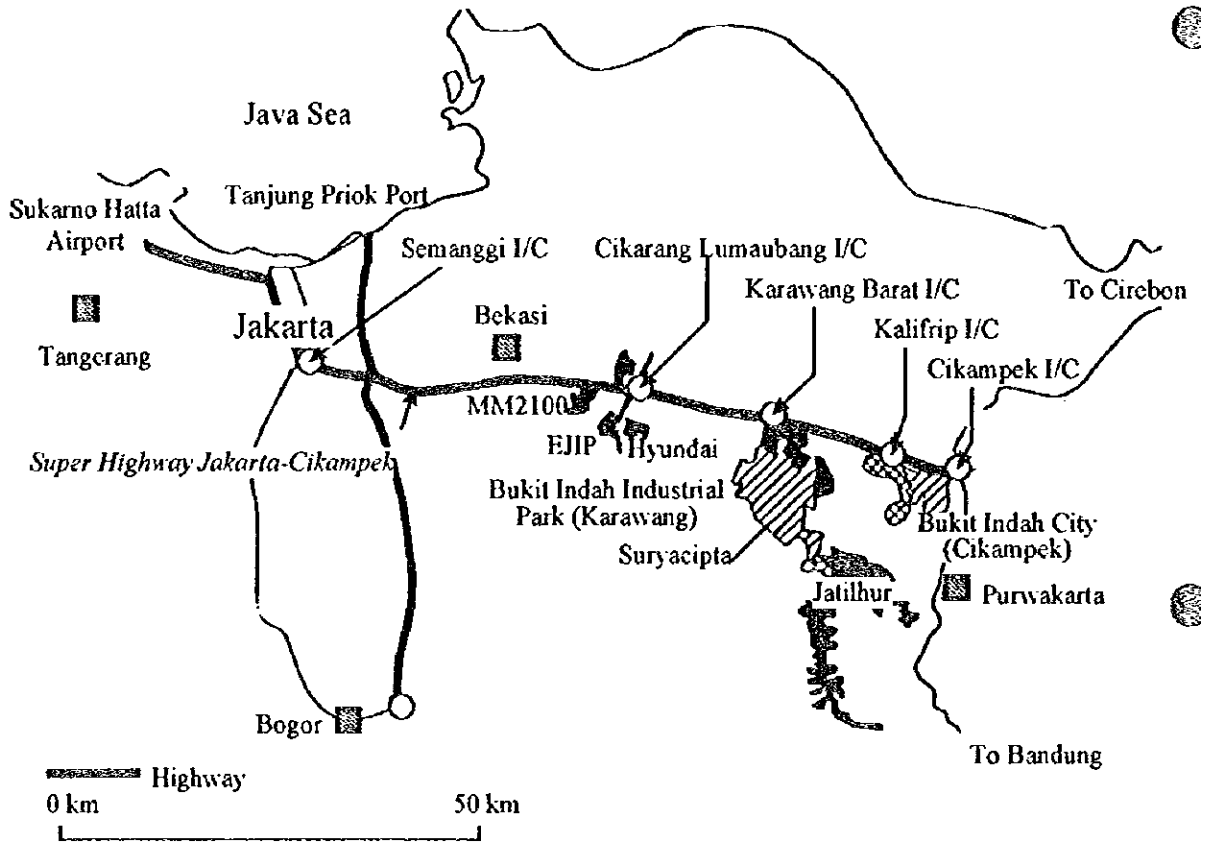
Table 3-8-1 Development Project of Industrial Estates

Province	Total		In Operation	Under Construction	Applied for Development Permit	Under Planning	Developing Agency			Export Processing Zone
	Number	Area (ha)					Government	Domestic Private	Foreign-affiliated	
I DKI Jakarta	6 (4%)	3,195 (6%)	5	1	0	0	2	1	2	1
II West Java	84 (50%)	23,252 (46%)	21	6	45	12	1	57	13	6
1) Tangerang	17	3,370	1	3	9	4	0	13	1	0
2) Serang	18	4,088	2	0	15	1	1	17	0	1
3) Bekasi	16	5,157	9	3	4	3	0	9	5	2
4) Karawang	18	7,919	6	0	9	0	0	8	5	2
5) Purwang	6	1,000	0	0	6	0	0	6	0	0
6) Bogor	4	556	3	0	0	1	0	0	2	1
7) Bandung	2	600	0	0	0	2	0	2	0	0
8) Sumedang & Cirebon	3	562	0	0	2	1	0	2	0	0
III Central Java	12 (7%)	2,477 (5%)	7	1	4	0	1	11	0	1
IV East Java	28 (17%)	6,175 (12%)	8	0	11	9	1	19	1	3
V Riau	15 (9%)	9,212 (18%)	8	0	3	4	0	7	5	1
VI Others	22 (13%)	6,672 (13%)	8	1	5	8	3	11	1	3
Medan	7	1,565	1	1	2	3	1	4	0	1
South Sumatra	1	1,442	0	0	0	1	0	0	0	0
Others	14	3,665	7	0	3	4	2	7	1	2
Total	167(100%)	50,983(100%)	57	9	68	33	8	106	22	15

Note: Data is as of Dec.1995

Source : Center for R&D of Resources, Industrial Zone & Environment, MOIT

Fig 3-8-1 Industrial Estates at Bekasi, Karawang, and Cikampek



Source: *Indonesia*, JETRO, Mar, 1996

Table 3-8-2 Outline of Main Industrial Estates

Name of Industrial Estate	MM2100 Industrial Town	East Jakarta Industrial Park	Cikarang Industrial Estate	Karawang International Industrial City
Developing Agency	P. T. Megalopolis Manunggal Industrial Development	P. T. East Jakarta Industrial Park	P. T. Kawasan Industri Jababeka	P. T. Maligi Permata Industrial Estate
Foreign-Equity	Japanese 45% Domestic 55%	Japanese 60% Domestic 40%	Japanese 60% Domestic	Japanese 50% Domestic 50%
Place	Cibitung, Bkasi Prefecture of State of West Java	Lemahabang, Bkasi Prefecture of State of West Java	Cikarang, Bkasi Prefecture of State of West Java	Karawang Prefecture of State of West Java
Planned Area	505 ha	320 ha	1,240 ha	1,200 ha
Developed Area	345 ha	320 ha	790 ha	150 ha
No. of Industries (Contract Base)	82	60	90	24
No. of Japanese Industries (Contract Base)	55	51	16	17
EPZ	Yes	No	No	Yes (applying)
Land Price	US\$ 85/m <sup>2</sup>	US\$ 75 - 80 /m <sup>2</sup>	US\$ 80 /m <sup>2</sup>	US\$ 60 - 66 /m <sup>2</sup>

Source : Materials of BKPM

Table 3-8-2 Outline of Main Industrial Estates (Continued)

Name of Industrial Estate	Suryacipta City of Industry	Bukit Indah Industrial Park	Tanjung Emas Export Processing Zone	Pasuruan Industrial Estate Rembang
Developing Agency	P. T. Suryacipta Suwadaya	P. T. Indotaisei Indah Development (IID)	P. T. Lamicitra Nusantara	P. T. Surabaya Industrial Estate Rungkut (Perseru)
Foreign-Equity	Domestic 100%	Japanese 49% Domestic 51%	Domestic 100%	Domestic 100%
Place	Karawang Prefecture of State of West Java	Cikampek, Karawang Prefecture of State of West Java	Sumarang City of State of Central Java	Pasuruan Prefecture of State of East Java
Planned Area	1,000 ha	700 ha	101 ha	474 ha
Developed Area	200 ha	300 ha	24 ha	150 ha
No. of Industries (Contract Base)	3	5	12	32
No. of Japanese Industries (Contract Base)	0	5	2	3
EPZ	No	Yes	Yes	Yes
Land Price	US\$ 50 - 55 /m <sup>2</sup>	US\$ 50 /m <sup>2</sup> , EPZ US\$ 55 /m <sup>2</sup>	Rental	US\$ 30 /m <sup>2</sup> EPZ US\$ 36 /m <sup>2</sup>

Source : Materials of BKPM

Table 3-8-2 Outline of Main Industrial Estates (Continued)

Name of Industrial Estate	Batamindo Industrial Park	Bintan Industrial Estate	Kabil Industrial Estate
Developing Agency	Singapore BIC Indonesia BIC	Singapore BIEM Indonesia BIIE, BIES	P. T. Kbil Indonusa Estate
Foreign-Equity	Singapore 45%, Domestic 55%	Singapore 45%, Domestic 55%	Holland 25%, Domestic 75%
Place	Mukakuning , Batam Island of State of Riau	Bintan Island of State of Riau	Batam Island of State of Riau
Planned Area	289 ha	4,000 ha	180 ha
Developed Area	174 ha	55 ha	100 ha
No. of Industries (Contract Base)	77	15	12
No. of Japanese Industries (Contract Base)	32	1	0
EPZ	Yes	Yes	Yes
Land Price	US\$ 114 /m2	US\$ 57 /m2	US\$ 42 /m2

Source : Materials of BKPM

## 8.2 PRESENT SITUATION OF DEVELOPMENT IN BATAM ISLAND

The island of Batam is located in the sea 20 km southeast of Singapore and has an area of 415 square kilometers (two thirds the size of Singapore). A general development project of industrial parks, residential districts and resorts is now being carried forward under the direction of the Batam Island Development Authority (BIDA) in the island of Batam, together with the neighboring southern islands, Rempang (165 square kilometers) and Galang (80 square kilometers). (Refer to Fig. 8-2-1).

### 8.2.1 History of Development

In 1971, A General Development Plan of Batam Island was decided under Presidential Order No. 74-1971. In 1972, the master plan of development was drawn up by Nissho-Iwai (Japan), Bechtel Corporation (U.S.A.) and Pertamina (national petroleum company of Indonesia). At the same time, the construction of an industrial park was started in the present Batu Ampar district. In 1974, some districts were appointed as bonded zones. In the period of 1976 to 1978, several construction projects were started by the Government on a large scale. In 1978, a Batam Island Development Authority (BIDA) was established and Dr. Habibie was appointed as the Director General. In the same year, the whole island was designated by Presidential Order No. 41-1978 as a bonded zone, and various development projects of industrial parks, residential districts and resorts started to be implemented.

### 8.2.2 Progress in the Development Plan of Batam Island

Year	1978	1983	1993	1994
Population (1,000 persons)	31.8	43.0	146.2	162.5
Tourist (1,000 persons)	-	9.7	680.4	871.6
Electric Power (MW)	5	18	200	200
Investment (million US\$)				
Government	116.0	253.0	742.7	859.1
Private	81.4	248.9	3,781.8	4,169.2



### 8.2.3 Industrial Parks in Batam Island

The Guide issued by the Batam Island Development Authority (BIDA) lists 8 (or 9) industrial parks constructed in the island of Batam as follows: (Refer to Fig. 3-8-3.)

- 1) PT Kabil Indonusa Estate  
(PT Citra Agramasiniti Nusantara)
- 2) PT Suar International Development  
(Kuang Hwa Industrial Park)
- 3) i. PT Aman Sejati Propertindo  
ii. PT Kara Primanusa
- 4) PT Batamindo Investment Corp.  
(Batam Industrial Park)
- 5) PT Seafront Industrial City  
(PT Karyatama)
- 6) PT Spinindo Mitradaya Batam
- 7) PT Trisatya Usaha
- 8) PT Putri Selaka Kencana

However, these industrial parks include those constructed before 1978. One of the typical examples is Batu Ampar industrial park, which was the first constructed for heavy industry. On the other hand, no industrial park site has been prepared in the islands of Rempang and Galang which were included in the General Development Plan together with the island of Batam. It is expected that the implementation of development projects in the islands of Rempang and Galang will have to wait until a project of constructing 6 bridges between the two islands and the island of Batam is completed.

As of June 1995, the number of investments applied for in the 8 industrial parks as listed above amounted to 213, of which about 50% have been approved and carried out. The related factories have already started operation there.

#### 8.2.4 Outline of BATAMINDO Industrial Park

Of the industrial parks listed above, the largest and the one with the most remarkable features is BATAMINDO industrial park which was jointly developed by Salim Group in Indonesia, and the Singaporean Government's Technology Corporation and Juron Environmental Engineering Company in Singapore. This industrial park was constructed to attract electrical and electronic industries (non-polluting light industries). Making the best use of Singaporean companies' experiences in constructing industrial parks, BATAMINDO industrial park is equipped with a complete infrastructure and provides 3 types of industrial facilities; Type A (one-storied industrial buildings for large businesses), Type B (two-storied buildings for small- and medium-sized businesses - the first floors available for industrial facilities and the second floors for offices), and Type C (three-storied industrial buildings for small-sized businesses).

At present, BATAMINDO industrial park, which is now under Phase III extension work, has a total developed area of 500 square meters, and about 65 companies (of which 30 are Japanese affiliates) have already started operation there.

A majority of the Japanese affiliates in the electrical and electronic industry are located in this industrial park, where Japanese food restaurants are found in the management office building.

Fig.3-8-2 Batam and Bintan Islands

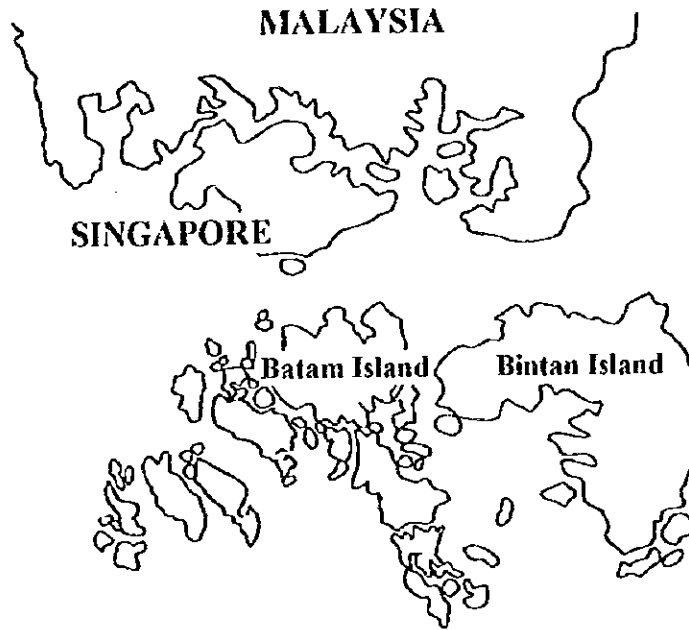
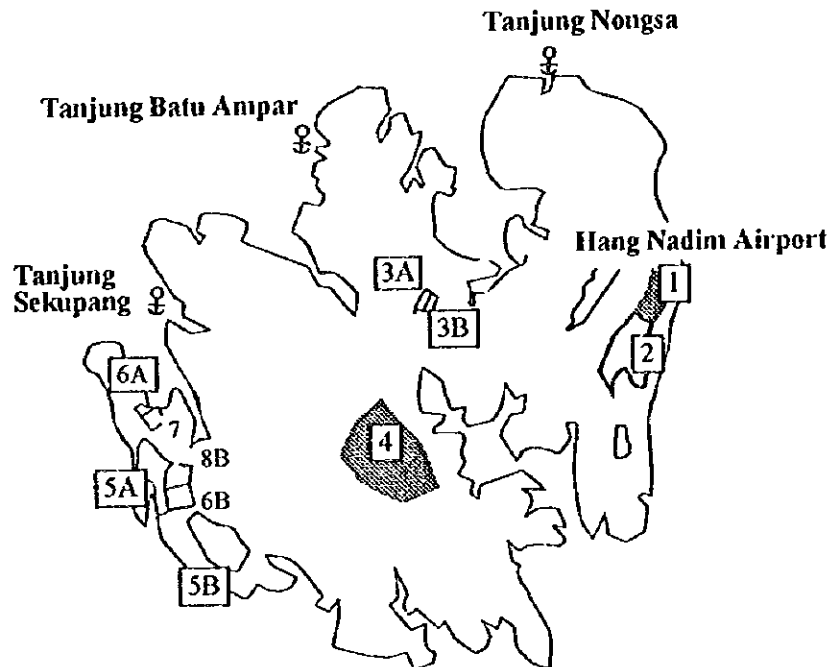


Fig 3-8-3 Industrial Estates in Batam Island



- |   |   |
|---|---|
| 1. PT Kabil Indonusa Estate<br>(PT Citra Agramasiniti Nusantara)    | 4. PT Batamindo Investment Corp.<br>(Batam Industrial Park) |
| 2. PT Suar International Development<br>(Kuang Hwa Industrial Park) | 5. PT Seafont Industrial City<br>(PT Karyatama)             |
| 3. i. PT Aman Sejati Propertindo                                    | 6. PT Spinindo Mitradaya Batam                              |
| ii. PT Kara Primanusa   | 7. PT Trisatya Usaha  |
|   | 8. PT Putri Selaka Kencana                                  |

## 8.3 PRESENT SITUATION OF INFRASTRUCTURE

### 8.3.1 Transportation

#### (1) Roads

Express highways and national/state roads link cities to one another in the islands of Java, Sumatra, Sulawesi and Bali. However, Sulawesi, Kalimantan and Irian Jaya are still underdeveloped.

The Primary Long-Term Development Plan resulted in increasing the total length of roads in Indonesia; national highways to 17,800 km, state roads to 32,250 km, prefectural roads to 168,602 km and municipal roads to 25,518 km. The total length of roads include 10,420 km of trunk roads, 39,630 km of branches and 194,120 km of local roads. In the total length of roads, the rate of pavement has reached 85%, as high as in Malaysia and higher than the other ASEAN countries.

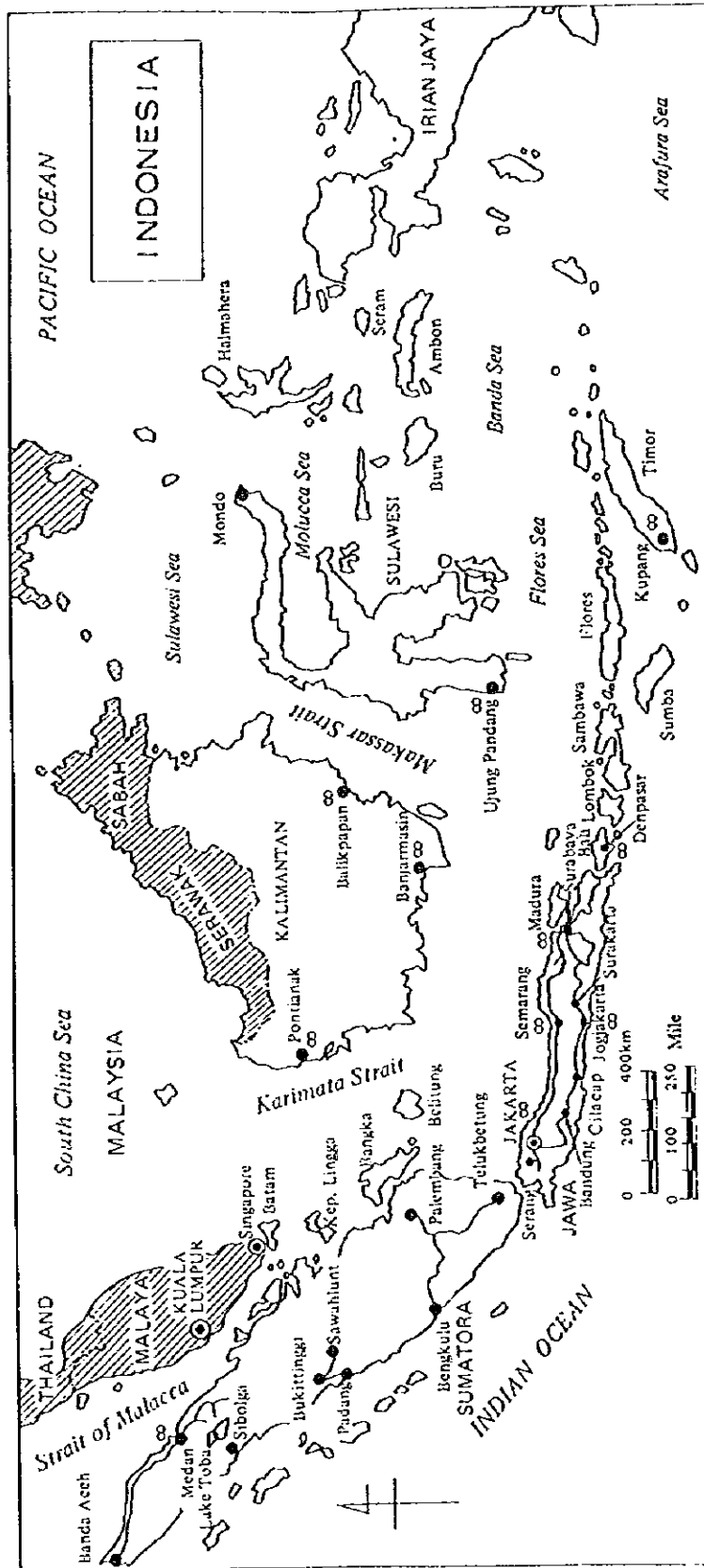
In 1991, 32.85% of the total road length was in good state with 22.1% damaged and 16.1% much damaged. The rate of damaged roads was higher in that year than in 1986 when it was 19.2%.

In development projects, priority has been given to industrial zones and rapidly developing areas. In the future, development projects are expected to focus on Irian Jaya, West Indonesia, Central and East Kalimantan, Jakarta and Aceh. In the Jakarta area, toll roads have been constructed by local and overseas companies. By January 1994, 17 toll roads were opened and an express highway was completed between Chawang and Tanjung Priokby.

In recent years, Indonesia has seen rapidly developing motorization, reportedly because a middle class was brought forth by the economic development in the country, especially in the metropolitan areas (the average income per capita is estimated at US\$3,000 in Jakarta, while it is US\$700 in the whole country.) There is tremendous traffic congestion in Ja-

karta, where one can hardly pick up a taxi in the morning or evening rush hours. The traffic situation in Jakarta is worse than in the capitals of other developing countries. Thus, it is an urgent necessity to develop the network of roads to handle the ever increasing the traffic.

Fig. 3-8-4 The Whole Country of Indonesia



- · - · - · Border Line
- Railway
- Main Airport
- ◎ Capital
- Main City

Source: The Japan Research Institute, Ltd.

## (2) Railroads

In Indonesia, all the railroad lines were operated by PJKA (the national railroad company), which aimed to provide improved services, establish a sound management system, and operate safer and lower cost means of transport. In October 1990, the national railroad company was transformed into Perunka (public railroad corporation), because it faced a variety of problems difficult to solve such as chronic deficits (the most serious problem), outworn cars and facilities, excessive employment and the depressed morale of employees. In the railroad sector, however, the challenges are still to provide transport services without delay and to increase the transport capacity.

All the railroad lines in operation were constructed in an age when the country was under Dutch rule. They are found only in Java, Madura and Sumatra. A greater part of the rolling stock is obsolete. All the railroad systems are single-track except for some sections in the island of Java. In 1993, the total length of railroads reached 5,051 km in the islands of Java and Sumatra.

The annual number of passengers carried increased from 5,554 in 1989 to 7,297 in 1992, up 31.4%. The annual tonnage of freight was 1,388 tons in 1992.

Urban railroad lines has been built in the Jakarta and Surabaya areas, though there are few lines in the other cities. Double-track railroad lines are now in place from Jakarta to Bogor, Tangerang and Bekasi (JABOTABEK) over a total length of 96 km. In the railroad network, the rolling stock comprised 922 passenger cars, 8,906 freight cars and 364 locomotives in 1993.

In the central part of Jakarta where economic development has caused the traffic to rapidly increase, a subway system is planned to solve the serious problem of traffic congestion.

Table 3-8-3 Railway Transport Statistics

	1989	1990	1991	1992	1993 <sup>(*)</sup>
Java - Madura					
Cargo (1,000 ton)	5,276	4,961	4,900	4,848	3,928
Passenger (1,000 persons)	53,285	55,821	60,365	70,909	70,615
Sumatera					
Cargo (1,000 ton)	6,301	7,572	8,826	9,035	6,646
Passenger (1,000 persons)	2,259	2,213	2,127	2,057	1,724

Note: \* Till September

Source: *Indikator Ekonomi*, Biro Pusat Statistik, July, 1994.

### (3) Marine Transport and Harbors

Due to the geographical features of this archipelagic country, Indonesia has been challenged for many years to reform its marine transport system, increase its capacity and improve its efficiency. The Government has enforced a protective policy for the domestic shipping industry for more than 10 years. In November 1988, it integrated the licences for coastal and overseas shipping services in the deregulation policy package, and granted approval for foreign companies to enter coastal shipping services through their joint ventures. In 1992, the Shipping Act was amended to introduce several regulations including raising the standards of corporate establishment.

In 1992, Indonesia had 349 harbors, of which 127 ports were equipped with facilities accepting ocean liners. At the end of the 5th 5-Year Development Plan, the number of registered Indonesian flag vessels reached 1,463, including 13 passenger ships and 27 ocean liners, with 3,974 vessels owned by private residents for their personal transport means.

The 4 largest ports are Tanjung Priok, the largest, in Jakarta, Belawan in Medan, Tanjung Perak in Surabaya, and Ujung Pandang in Sulawesi. At the 4 largest ports, the annual shipping tonnage of ocean liners increased by 34.8% and 37.7% for loading and unloading, respectively, in the period from 1990 to 1993, while that of home-waters liners was up 17.1% and 19.3%.



Containerization is little advanced, and the shipping sector in East Indonesia remains substantially underdeveloped. The 6th 5-Year Development Plan focuses on several goals such as the development and improvement of 7 containerized harbors, the construction of 158 new wharves, and the building of coastal freight vessels having a transport capacity of 167 million tons.

Table 3-8-4 Sea Transport Statistics at Four Main Ports

(Unit: 1,000 ton)

Unit		1990	1991	1992	1993	1994 <sup>(*)</sup>
Inland Transport	Loading	8,527	8,486	9,368	9,988	3,719
	Unloading	24,214	26,098	27,308	28,893	11,759
Overseas Transport	Loading	9,204	9,469	11,628	12,411	5,295
	Unloading	13,022	14,982	17,436	17,931	8,814

Note1: \*: 1992~1994 (Tentative)

Note2: Data of Tanjung Perak Port till February

Note3: Data Ujung Pandang Port till May

Others till June

Four Main Ports: Belawan, Tanjung Priok, Tanjung Perak, Ujung Pandang

Source: *Indikator Ekonomi*, Biro Pusat Statistik; July, 1994

#### (4) Air Transport

For Indonesia, which has a vast territory comprising many islands, small and large, aircraft are efficient transport means which can transport people and goods easily in a short time. In 1994, Indonesia had 26 airline companies, of which 6 companies provided passenger transport services, which the rest provided charter flight and freight services.

Garuda Indonesia Airlines, the national airline company, operates local and international airlines and transports 60% of all the tourists visiting Indonesia. In recent years, it has made efforts to extending its own international network.

Local airline companies include Merpati Airlines partly owned by Garuda Indonesia routes, and Bouraq Airlines and Mandala Airlines which are private businesses. Sempati Airlines which was placed under private management in 1989 runs international routes to nearby destinations as well as local services. In recent years, much attention has been attracted by the high growth of these airline companies.

Recent air transport statistics indicate that the international airline services in Indonesia showed a remarkably high growth in the number of services, the number of passengers carried and the tonnage of freight in the period from 1990 to 1993.

Jakarta Soekarno Hatta International Airport, which is the airline hub of Indonesia, was constructed in 1985, and a new air terminal was completed in March 1992. In 1993, this airport operated 170 thousand flights both departure and arrival, and accepted about 11.45 million passengers. Indonesia has 72 airports, of which 6 are equipped with departure and arrival facilities for large jet planes. The Government plans to transform the 23 existing airports into international ones, including Ujung Pandang, Medan, Biak and Solok. If this plan is realized, Indonesia will rank, in the number of airports, 2nd in the world, following the U.S.A..

Indonesia has aimed to rapidly raise its own level of science and technology. In November 1994, it succeeded in the trial manufacture of the first middle-distance passenger plane developed with its own technologies. Under the 6th 5-Year Development Plan, it is expected to ensure an air transport capacity of 12.20 million passengers on local lines and 9.60 million passengers on international lines, construct 12 hub airports and 13 local airports and open flight services to Sumatra, Kalimantan, Sulawesi, Moluccas, Nusa Tenggara and Irian Jaya.

Table 3-8-5 Air Transport Statistics

Domestic Flights		1990	1991	1992	1993	1994*
Flights	Departure	267,709	279,731	287,842	274,585	70,528
	Arrival	267,109	279,150	288,042	273,946	74,713
Passenger (1,000 persons)	Departure	8,345	8,534	9,119	9,405	2,514
	Arrival	8,230	8,585	9,198	9,363	2,509
Cargo(ton)	Loading	90,933	111,329	108,614	109,078	28,362
	Unloading	84,650	98,511	97,627	96,485	25,545
International Flights		1990	1991	1992	1993	1994*
Flight	Departure	19,929	21,115	26,832	32,905	8,203
	Arrival	20,036	20,729	26,401	32,279	8,155
Passenger (1,000 persons)	Departure	2,179	2,211	2,838	3,536	921
	Arrival	2,183	2,315	3,092	3,436	950
Cargo(ton)	Loading	70,076	71,424	107,139	112,235	35,102
	Unloading	38,909	35,490	42,487	51,549	12,879

Note : \* till March

Source : *Indikator Ekonomi*, Biro Pusat Statistik; July, 1994.

### 8.3.2 Communications

#### (1) Mail

In Indonesia, mail services are carried out by the Mail & Transfer Corporation (Perum Pos & Giro). In 1992, there were 341 post offices, 3,150 auxiliary post offices and 1,719 other mail facilities in operation. However, the mail service network cannot fully meet the people's needs in Indonesia, which has a vast territory and a large population.

The goals that the Government set under the 6th 5-Year Development Plan are to improve the quality and efficiency of mail services, to provide diversified services, and to mechanize mail operations. At the end of the Plan, it is anticipated that mail facilities will be installed in all the sub-districts of the Capital and 40% of all the villages.

The annual amount of domestic mail handled reached about 451.71 million pieces in 1992, up about 10% over the previous year, and decreased to about 444.30 million in 1993. The annual amount of overseas mail was about 28.78 million pieces in 1993, less than in 1992.

## (2) Telephone

Domestic telecommunication services are controlled by TELECOM, a private company which was transformed from Perumtel, public telecommunication corporation, in September 1991. International telecommunication services are controlled by INDOSAT. The total capacity of switchboards grew to 2,305,877 lines in the 4th year of the 5th 5-Year Development Plan. The number of public telephones installed was increased under the Plan, and reached 34,836 for coin type and 6,215 for card type in 1992. However, card type telephones are seldom found in the streets even in Jakarta and other large cities, where they are installed in large department stores.

In 1993, the rate of installed telephone lines in Indonesia was 1.24 lines per 100 residents one of the lowest among ASEAN countries. In this country, you must wait generally for several years to have a new telephone installed. So, the telephone network in Indonesia has much room for further development. The goals of the 6th 5-Year Development Plan are to improve the quality of telephone services, to install additional switchboards for 5 million lines, to increase the rate of installed telephone lines to about 4 lines per 100 residents, and to raise the rate of successful local and toll calls up to 65% and 45%, respectively. To install new facilities, however, the telephone sector faces several problems such as the shortage of governmental funds, difficulties in using and maintaining the facilities, etc., and efforts are being made to introduce foreign and private funds to install new telephone lines.

## (3) Other communication modes

Among all the developing countries, Indonesia is the pioneer that launched the first telecommunication satellite. Since the telecommunication satellite "Palapa" was launched in July 1976, the total number of satellites shot up to 7 in 1992.

In April 1993, SATELINDO, a private company, was separated from TELECOM to manage the telecommunication satellite business and develop it on a large scale.

INDOSAT, the national telecommunication company, plans to open the first CATV (cable television) services through its affiliate SINDOSAT in Jakarta and its suburbs during 1995. The developing economy of Indonesia has increased the purchases of consumer electronics and raised the literacy rate of the population. Therefore, the mass media sector will have new business opportunities such as the publication of new newspapers and magazines and the installation of new TV channels.

### 8.3.3 Electric power

In Indonesia, the national power company PLN has a near monopoly on the supply of electric power. It is now implementing its programs for increasing power output and for local electrification. In 1993, PLN increased the total capacity of power generation facilities to 21,598 MW, installed new transmission systems of 19,986 km in total, and extended the medium- and low-voltage distribution networks to 8,315 km and 162,447 km, respectively, in total length. Its annual power output amounted to 120 GW in that year. Under the 6th 5-Year Development Plan, the Government aims to attain the goals of 60% for the average rate of electrification in the whole country and 79% for the rate of electrification in the rural areas.

Indonesia has various energy sources such as oil, coal, hydraulic energy, geothermal and solar heat. The supply of power by oil-fueled power plants is decreasing, while the supply by coal-fueled power plants is growing as an alternative source of energy. In January 1993, 2 new coal-fueled power plants started operation in Gresik, East Java, and in Muara Karang, North Jakarta. However, the success of these power plants will depend upon the expansion of transport capacity and the development of infrastructure, because coal resources are located in distant areas.

In Indonesia where the introduction of the private sector's vitality into public projects is encouraged, the Paiton coal-fueled power plant is now under construction as the first private project. In addition, the division and privatization of PLN is planned as part of its ongoing restructuring program. The deregulation action taken in June 1994 approved foreign affili-

ates to enter power generation activities. As a result, domestic and foreign companies have shown interest in this business.

On the other hand, Indonesia has also devoted attention to the development of nuclear energy, and surveys are now ongoing in the central part of Java state for the purpose of constructing a nuclear power plant there.

## 8.4 ENVIRONMENTAL PROBLEMS

### 8.4.1 Present Situations

In the process of rapid industrialization, Indonesia is facing a variety of environmental problems. The country also suffers from the typical environmental problems caused by industries, namely significant pollution of the atmosphere, considerable contamination of surface and underground water, and waste disposal.

#### (1) Water Contamination

In highly industrialized and urbanized cities such as Jakarta and Surabaya and around industrial facilities, the BOD and COD concentrations in rivers and streams are much higher than the environmental standards of WHO and Japan. Of all the factories in Jakarta, 79% to 89% did not attain the standard COD value of waste water discharges, 60% to 85% did not meet the BOD standard value, and 40% did not satisfy the standards of heavy metal releases (according to investigations made in 1990).

The harbor of Jakarta is also significantly contaminated with heavy metals, and it is reported that high concentrations of mercury (Hg) were detected in the samples of sea water and fish taken there during the surveys made by Jakarta City's Urban Environmental Center and public works contractors. Water contamination in Jakarta is mainly caused not only by industrial waste water, but also by household waste water.

In 1992, the Institute of Developing Economies (Japan) and the Central Bureau of Statistics (BPS) in Indonesia jointly conducted the "Investigations on Enterprises' Recognitions and Actions Taken against Environmental Pollution Problems." In these investigations, 34 of the 95 target companies which were officially announced as the contaminators of the 3 rivers in Jakarta answered that 32 companies are taking certain waste water treatment measures (Refer to Table 3-8-6).

Concerning the installation of waste water treatment facilities, none of the local enter-

prises answered that they had such facilities in 1970, while only some foreign affiliates reported that they had them. However, almost all the target companies, whether local or foreign affiliates, answered that at the time of investigation, they had already installed at least what was called waste water treatment facilities (though the situation of companies giving no answer was unknown).

Table 3-8-6 Installation of Waste Water Treatment Plants

	Total		Local Companies		Foreign Companies	
	Total No.	Installed No.	Total No.	Installed No.	Total No.	Installed No.
1974	21	4	10	0	11	4
1975	29	8	15	0	14	8
1984	32	11	18	1	14	10
1988	33	16	18	4	15	12
1992	34	32	18	16	16	16

Note: Data are based on the results of [Survey of Company's Understanding and Counter Measures Against Environmental Pollution Problems], Institute of Developing Economies, Japan and Indonesian Central Statistic Bureau.

Source: *Development and Environment*, Institute of Developing Economies, Japan.

## (2) Atmospheric Pollution

The most serious problem of atmospheric pollution that confronts Indonesia is the high concentration of air-borne dust. The environmental standard value of air-borne dust is set at  $90 \mu\text{g}/\text{m}^3$  on annual average in Indonesia. However, 5 to 7 times higher values than the environmental standard have been recorded in Jakarta, Bandung (West Java), Medan (North Sumatra) and Palembang (South Sumatra). The main sources of air-borne dust are exhaust gases released from motor vehicles and industrial facilities as well as incinerated wastes. The emission of airborne dust has been increasing year by year. In addition, it is pointed out that high emissions of sulfur dioxide are recorded in some areas where cement or/and chemical plants are installed.



### (3) Waste

In large cities such as Jakarta, the disposal of waste as well as underdeveloped sewerage systems are considered as critical problems of the communities. In Indonesia, the physical infrastructure for the collection, transportation and landfill remains underdeveloped, and waste treatment and disposal systems have not yet been established for several reasons such as the shortage of human resources.

The investigations made by the Institute of Developing Economies (Japan) on industrial wastes reported that only 7 of 34 target companies had taken measures against detrimental wastes and that only one foreign affiliate had returned its waste from Indonesia to its home country.

#### 8.4.2 Environmental Administration

Indonesia became aware of environmental problems for the first time in 1972, when the National Environment Committee was established, taking the opportunity of the United Nations Conference on Human Environment held in Stockholm. The "General Guidelines on Environment" were published in 1973, and the "State Ministry for Development and the Environment" was established in 1978 as the supreme organ responsible for administering environmental affairs. The "Environment Management Ordinance," which sets forth the most fundamental provisions on environmental affairs, was established in 1982. Under this basic law, the State Ministry for Development and the Environment was reorganized into the "State Ministry of Population Affairs and the Environment (KLH)." The Regulations on Environmental Impact Assessments were promulgated in 1986, and the program "PROKASIH" for ensuring the purification of rivers and streams was launched in 1989. In 1990, the "Environmental Management Agency" (BAPEDAL) was set up as the executive office responsible for carrying out the administration of environmental affairs, and has since developed a variety of environmental administration initiatives, and especially has made environmental impact assessments and exercised administrative control over the fields which were related to the problems of water contamination and atmospheric pollution.

The BAPEDAL was set up, as the office attached directly to the President, to strengthen the functions that the KLH (State Ministry of Population Affairs and the Environment) must perform. The BAPEDAL is also responsible for entering contaminator factories and making inspections, making agreements with them and applying penalties to them, if necessary.

### 8.4.3 Environmental Standards

#### (1) Water Quality Standards

The Indonesian Government has enforced the waste water standards as follows:

- i. "The Republic of Indonesia's Rules on Water Quality Pollution Regulations", No. 20, 1990.
- ii. The "Minister of KLH's Decisions on the Waste Water Rules Applicable to Industrial Facilities in Operation" were made and have been in effect under the State Minister of Population Affairs and the Environment's (KLH's) order (KEP-03/MENKLH/II/1991) issued in 1991. The Minister's Decisions include the maximum acceptable standard values of waste water discharges from the individual industries of caustic soda, metallic plating, leathers, pulp & paper, rubbers, sugar, tapioca, textile, urea compound fertilizers, ethanol, monosodium gultamate, and plywood.

#### (2) Atmospheric Standards

The standards regarding the pollution of atmospheric air are constituted by 2 sets of standards; National Environmental Standards of Atmospheric Air, and Table of Standard Emissions from Fixed and Mobile Sources. The 2 sets of standards are provided for in the "Circular Notice of the State Ministry of Population Affairs and the Environment's Decrees on Setting Environmental Standards under the Ministry's Ordinance" (KEP-02/MENKLH/1988). In principle, state governors are empowered to enforce the regulations on the pollution of atmospheric air.

#### 8.4.4 Environmental Assessments (ANDAL)

Article 16 in the Environment Management Ordinance of 1982 provides for the necessity of making environmental impact assessments.

The environmental impact assessment covers the number of persons potentially affected, potentially affected geographical areas, the duration of environmental impact, the intensity of impact, the effects of accumulated impacts, and so on.

The concrete description of the environmental impact assessment is specified in the "PP29 (Government Regulations No.29 of 1986)." The guidelines on target activities, procedures and methods, documents to submit, the procedure of review, etc., related to the environmental impact assessment took effect on June 5, 1987.

The entrepreneur concerned must prepare the required documents to be reviewed: (i) The entrepreneur concerned has submit to the competent authorities the "Environmental Information Presentation (PIL)" on his or her activities which have potential impact on the environment; (ii) Based upon the review of the PIL, the competent authorities determine whether or not it is necessary to conduct an "environmental impact study (ANDAL)" related to each of the activities; (iii) If the authorities judge it necessary to conduct an environmental impact study (ANDAL), the PIL will be reflected on the "TOR" required to conduct the study (ANDAL); (iv) If the authorities judge it not necessary, the entrepreneur concerned will be requested to prepare an "Environmental Management Plan (RKL)" and an "Environmental Monitoring Plan (RPL)."

The "Environmental Assessment Committees," which are responsible for making reviews on these procedures, are installed within the Central Government and state governments. These committees are also responsible for preparing the technical guidelines necessary to make environmental assessments, making reviews of documents submitted to them, and issuing orders to execute decisions made on the necessity of making environmental assessments.

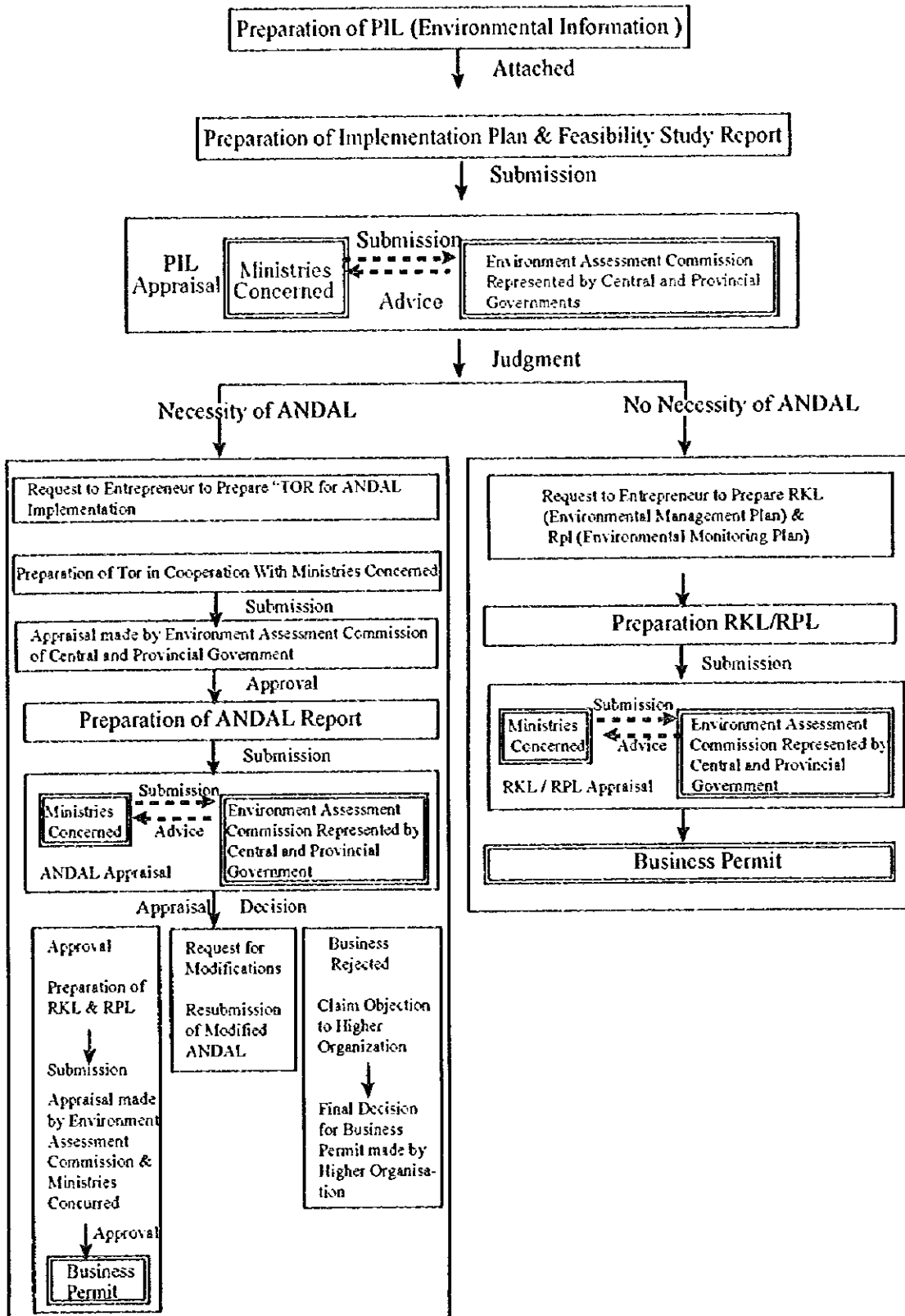
#### **8.4.5 Necessity of Environmental Protection**

The environmental problems that Indonesia is facing are a matter of great significance to the health and living security of the people. Indonesia is now required to ensure a harmonization between its environmental protection and economic development policies, as symbolized by the idea of "sustainable development".

Therefore, the Indonesian Government has positioned a set of environmental problems as one of its priorities in the national environmental policy, and emphasized that it had to take a leading role in making efforts to solve these problems. Such a positive attitude shown by the Government is proved by the fact that the environmental legislation process has been rapidly advanced in recent years.

The Indonesian Government is playing a leading role in making efforts to solve environmental problems because the potential damage caused by environmental problems is estimated to be critical and difficult to remedy, it is imperative to take preventive measures against foreseeable environmental damage, and it is necessary to take national policy actions to solve environmental problems.

Fig 3-8-5 Environment Assessment Chart in Indonesia



Source: *Environmental Profile of Indonesia*, Overseas Economic Cooperation Fund, Japan, 1992

## 8.5 CHALLENGES TO THE ESTABLISHMENT OF INFRASTRUCTURE

From the information provided by field surveys and the results of interviews with corporate management, several important problems to solve can be pointed out to establish the infrastructure in Indonesia, as described below.

### i. Living environment

Some industrial parks such as EJIP (East Java Industrial Park) are provided with adjacent living facilities containing hotels, supermarkets and houses. However, none of the residential facilities fully equipped with security means are found around many other industrial parks. Therefore, most of the Japanese residents live in the City of Jakarta.

For reasons such as traffic congestion, it takes 1 to 2 hours to reach work from home or vice versa depending on the workers. Industrial parks are generally located along express highways, on which there are so many traffic accidents that it is very dangerous for commuters to drive their cars to and from their workplaces in such industrial parks.

It is necessary to provide living environments around industrial parks so that foreigners can live in a comfortable way.

### ii. Flood damages

Sometimes, newspapers and other media have reported that some factories located in the suburbs of Jakarta were so damaged by floods in the rainy season that they were obliged to temporarily shut down.

Topographically, Jakarta is located in a flat land as low as 1 to 3m in above sea level, within an alluvial plain with 13 rivers, large and small. At high or full tide, therefore, Jakarta is placed in a geographical situation where it is difficult for sewerage systems to rely on natural drainage.

Flood control has long been considered a problem of great importance, and artificial drainage systems have been constructed in Jakarta with yen credits granted by the Japanese Government, though some areas are still often damaged by floods.

### iii. Harbor facilities and surcharges

The port of Tanjung Priok is equipped with 10 gantry cranes and handles the highest tonnage of cargos in Indonesia. However, it is not yet equipped with harbor facilities sufficient to respond to the increasing tonnage of cargos handled. It has been pointed out that it takes so much time to load or unload cargos there that production plans of industries are often affected.

In addition, newspapers and other media report that many surcharges, formal and informal, such as charges for using cranes to unload cargos and containers from vessels, premiums for power consumption, parking charges, charges for carrying cargos in and from the port, etc., have been imposed on users of Tanjung Perak port (Surabaya). Consequently, this has caused them to raise their voice that all these factors affected the competitiveness of domestic manufacturers.

### iv. Implementation of ANDAL

In Indonesia, one problem is that the ANDAL (environmental assessment) system is established, but has not yet been implemented. About 75 companies participated in the Environmental Seminar that the Institute of Developing Economies (Japan) organized in September 1992. It was reported that only 5 of the 75 participants had carried out the ANDAL. (Refer to the "Environmental Legislation and Administration System in Indonesia," Chapter 6, P.211.)

According to newspaper, one industrial company reported that Rp. 50 million were spent just to prepare an environmental assessment (ANDAL) statement.

v. Special industrial park for the electronic components industry

Although its proposal is being prepared, the Association of Electronic and Electrical Home Appliances Industries of Indonesia (GEI) is of the opinion that it is necessary to provide a special industrial park (LIKE: Lingkungan Industri Komponen Elektronika) in order to attract foreign electronics makers to Indonesia.

To do so, it is planned that a system similar to the EPTE will be applied to such a special industrial park for the electronic components industry, though no restrictions on domestic sales will be imposed upon foreign makers in the industrial park.

In addition, a suitable site will be offered at less expensively priced land with siting conditions close to those for the downstream industry. More integrated services will be provided to companies entering the special area.

At present, candidate sites including Pulwakarta are under examination.

vi. Relationships between this survey and the development project of Batam Island

The development project of Batam Island has been proposed for many years. However, it is only since 1991-92 that economic activities such as industrial investments have really been activated there. In the whole island of Batam, the infrastructure is remarkably underdeveloped with some exceptions including BATAMINDO industrial park.

Hotels, ready-built villas and resort facilities are jerry-built, and extremely poor for a tourist resort famous for its scenic beauty. If economic activities expand steadily in the future, the island of Batam has the potential of becoming an integrated developed area with industries, housing and resorts, which come close to the basic plan and can make the best use of facilities and infrastructure now under construction. If economic activities stagnate for any reason, the island will probably end up being devastated as a whole.

In the island of Batam, investments are now made by foreign companies which transfer



their labor-intensive production bases there from Singapore where labor costs are prohibitive, and it is expected that this tendency will continue for a while. However, a greater part of the labor force in the island of Batam is constituted by workers coming from the island of Java, and it will probably be difficult to meet the needs for labor in Batam if industrial development is more advanced in other areas of Indonesia.

Some supporting industries such as plastic injection molding and mechanical press are developing on the island of Batam. However, it cannot be anticipated that a closer relationship will be established between the assembling and supporting industries in Batam and the supporting industries fostered in other areas of Indonesia. One of the reasons is that assemblers in Batam consider that it is not advantageous to procure materials, equipment and parts from other areas of Indonesia, because they can freely obtain them overseas (Batam is geographically nearer to Singapore and Malaysia). Another reason is that there is little advantage for parts suppliers in Batam to sell their products in other areas of Indonesia.

Therefore, it seems to be more reasonable that development projects for supporting industries in the island of Batam are positioned as those drawn up for an isolated market in Indonesia.

