

2.3 Rubber-based Products Industry

2.3.1 Items Covered

The survey covers the rubber-based products industry. It therefore covers both latex based products made from latex and products made from solid rubber. Included in the former category of latex products are those made for surgical use, household use, gloves for industrial use, and mats and related products. The latter category of solid rubber products includes tyres and related products, general rubber products, industrial rubber products, rubber shoes and related products.

2.3.2 Outline of World Demand

1) World production and consumption of natural rubber

According to the International Rubber Institute, world production of natural rubber increased from 3.85 million tons in 1981 to 5.3 million tons in 1991 at an average annual rate of 3.3%. The three main producing countries in the world are Indonesia (1.34 million tons), Thailand (1.34 million tons), and Malaysia (1.25 million tons). They are followed in order by India, China, The Philippines and Nigeria, with Sri Lanka being the eighth largest producer.

Production of synthetic rubber increased at an average annual rate of 0.6% for the 10 years from 1981 through to 1991 when production stood at 9.08 million tons. Thus, the increase in production of natural rubber outstrips that for synthetic rubber.

World consumption of rubber increased from 12.26 million tons in 1981 to 14.31 million tons by 1991, an average annual rate of increase of 1.5%. The percentage of total rubber consumption comprised by natural rubber increased from 31.7% in 1981 to 35.8% in 1991.

A look at the main consumer nations for natural rubber show that the USA is the largest at 750,000 tons, followed by Japan, 690,000 tons, and China 600,000 tons. The combined 1990 total for the EC was 870,000 tons. Although there was little increase in consumption by the U.S. and the EC during the 1980s, China's consumption doubled and Japan's rose by a considerable 50%.

2) Trade in Rubber-based Products

An outline is provided below of rubber-based product exports and imports for the various OECD countries which accounted for approximately 50% of world rubber consumption in 1990 (See Table 15).

(1) Rubber Compounds, Thread, etc:

OECD imports totalled \$3.25 billion. The main OECD exporters are Germany, which was the largest exporter at \$610 million, followed in order by the U.S. at \$450 million, Italy at \$390 million, and France at \$300 million. As for Asian exporters, Malaysia was by far and away the largest exporter at \$63.97 million, followed by Taiwan at \$18.85 million, and Thailand at \$10.29 million. Although exports from Sri Lanka totalled just \$890,000, they had increased some 5.7-fold from its 1986 level of \$150,000.

(2) Tyres/Tubes:

OECD imports of these products stood at \$13.01 billion, with France being the largest exporter at \$2.01 billion, followed by Japan at \$1.74 billion, Germany at \$1.66 billion, and Great Britain at \$960 million. Among developing countries Republic of Korea ranked as the ninth largest exporter in the world at \$580 million. Of other Asian countries Taiwan was the largest exporter at \$260 million with ASEAN members Thailand and Indonesia exporting \$60 million and \$30.9 million respectively. Exports from Sri Lanka increased from \$5.09 million in 1986 to \$19.42 million in 1990.

(3) Rubber-based Products for Hygienic/Pharmaceutical Use, Conveyors, Belts, Hard Rubber Products, etc:

The OECD imported \$4.1 billion of these products. The largest exporter was Germany which exported \$790 million worth of these products, followed by the USA at \$490 million, France at \$390 million, and Japan at \$380 million. Outside the OECD, Taiwan was the ninth largest exporter in the world at \$130 million. As for other Asian countries, the main suppliers were Republic of Korea, which exported \$59 million, Thailand, \$40.74 million, and Malaysia, \$32.83 million. Sri Lanka exported \$8,480,000 of these products, which represented a 2.7-fold rise over its exports of \$3,170,000 for 1986.

It is evident from the above that OECD countries import the bulk of their rubber-based products from other OECD countries. Even so, with Taiwan and Republic of Korea as the largest exporters, exports from the Asian region are increasing. The value of Sri Lanka's exports is on a par with that of Indonesia and India, and have been expanding rapidly since 1985 (See Table 16-17).

3) Imports to Japan

Rubber-based product imports to Japan are increasing sharply, but demands related to quality, delivery and a stable supply have meant that a larger part of these imports are being exported from industrialised countries such as European nations. Nonetheless, the level of imports from Asian NIEs and ASEAN is increasing as Japan now imports belts from Singapore, Republic of Korea and Taiwan, gloves from Malaysia, mats from Malaysia, Taiwan, and Thailand, and rubber footwear from Republic of Korea and Taiwan. A major factor behind this rise in imports from Asia is the relocation of Japanese businesses in Asian countries owing to the appreciation of the Japanese yen and the Japanese labour shortage. (See Figure 7, Table 18)

A look at the kinds of products imported by Japan shows that its main imports are footwear, gloves, and other rubber-based products. The share of total rubber imports comprised by tyres has also increased since the Japanese yen began to appreciate. Although industrial rubber products market in Japan was self sufficient type market, imports of these products have shown an increase since the appreciation of the yen.

Japan imports an extremely small amount from Sri Lanka. In 1991 its imports from Sri Lanka of solid tyres and tyre flaps were worth ¥6.26 million, representing 6.7% of total imports of these products, its imports of gloves (excluding those made for surgical use) were worth ¥8.56 million, or 0.7% of glove imports and its imports of other articles of vulcanised rubber were worth ¥22.45 million with 0.4% share. Japan imported no other rubber-based products from Sri Lanka (See Table 19).

4) Imports to the USA

During the 1980s, production in the USA of rubber-based products for industrial use and latex products increased at a rate of roughly 8% per year in terms of monetary value. During this period imports increased by more than 30%. The share of the US market comprised by imports increased 3-fold between 1982, when it stood at 6%, and the end of the 1980s when it stood at 18%. The increase in imports of latex products,

mainly surgical gloves, was particularly high as it increased at an annual rate of more than 50%.

This increase in imports was led by ASEAN, from where exports of latex products increased by 72% annually, and exports of rubber-based products for industrial use increased by 57% each year. Notable increase in exports from this region to the U.S. were seen in Thailand's exports of industrial rubber-based products, mainly absorbers, and latex products from Malaysia such as surgical gloves.

Competition for its main imports is such that in the case of industrial rubber-based products, imports from ASEAN of absorbers and fenders are high owing to relative ease of production and the importance attached to price competitiveness. As for imports of hoses and pipes, for which a high level of quality is required, Japan is the leading exporter to the USA. In the case of latex products, ASEAN countries have been putting pressure on the NIEs. Though Taiwan holds a large share of imports of condoms and surgical gloves, there has been a marked increase in imports from Thailand and Malaysia of non-surgical gloves, products, market of which can be easily entered.

With the exception of Japan, NIEs, Thailand and Malaysia, exports to the USA from Asian countries are still small. Sri Lanka exports tyre retreads, mats and rubber clothing and accessories to the USA.

5) Asian Competitors

(1) Malaysia

Malaysia has been successful in developing its rubber-based product manufacturing industry and in exporting rubber-based products because of its comprehensive research and development and industrial development policies, and because of the active role it has played in bringing in foreign investment.

Malaysia's exports of rubber-based products increased in value from M\$110 million in 1985 to M\$1.73 billion in 1991 when they represented 64.5% of the value of natural rubber exports. Malaysia's rubber-based product exports are mainly latex products such as gloves. During the 1970s there was considerable investment in latex products from around the world, including well-known companies. Since the latter half of the 1980s there has been active investment by local companies as well as that by foreign interests, with the result that production capacity has risen sharply in a relatively short period of time.

The Malaysian Rubber Research and Development Board (MRRDB) has overall responsibility for the development and promotion of the rubber industry from the natural rubber through to the product stage. The MRRDB encompasses 4 government organisations (total work force of 2,000) which carry out government policy. These are the Rubber Research Institute of Malaysia (PRIM), the Malaysia Rubber Bureau (MRB), the Tun Abdul Razak Laboratory (TARL), and the Malaysia Rubber Producers' Research Association (MRPRA).

PRIM carries out research and development and guarantees quality for rubber raw materials through to rubber products. Its research centre has equipment and machinery like that of a large manufacturer, and it provides considerable assistance to private companies. TRAL has a research laboratory in London and supplements PRIM's activities.

MRPRA provides assistance with overseas marketing, technical aid and training to private companies.

The MRB has offices in Great Britain, the USA, India, Republic of Korea, Japan, and Taiwan, and collects information relating to overseas markets and technology.

(2) Thailand

Thailand has rapidly emerged as a producer of natural rubber. In 1991 its production of natural rubber surpassed that of Malaysia. However, its rubber-based product industry is far less developed than Malaysia's, and as a result raw rubber comprises 90% of its rubber exports.

Its exports of rubber-based products have expanded sharply since the latter half of the 1980s. These exports are comprised mainly of tyres/tubes and gloves, with products for industrial use still accounting for a small percentage of exports. In the case of rubber gloves, up until 1986 there existed just 2 manufacturers in Thailand, both of which were foreign-owned. However, the investment boom which has been taking place since 1987 saw the granting of licenses to 150 companies by 1989 and brought about a 15-fold increase in planned production capacity between 1986 and 1989. Though there has been some increase in exports of hoses and tubes by local manufacturers, the level of technology in this area is considered to be quite low.

The promotion of the rubber industry is the responsibility of the Ministry of Agriculture's Rubber Research Institute which covers both raw materials and products. The Rubber Research Centre, a subsidiary organisation of the Rubber Research Institute, carries out research and development.

(3) Indonesia

Indonesia's rubber-based products industry, which is blessed with natural rubber and a cheap and abundant work force, is an industry which is in the low level processing stage. As such, 90% of natural rubber is exported in raw material form. Because of the large size of the domestic market the rubber-based product industry is for the most part a domestic market oriented industry. There has, however, been an increase in exports since 1987. A large part of its exports consist of tyre/tubes, but it also exports hoses, belts, pipes, thread and gloves. Also, there has been a sharp increase in rubber footwear exports as a result of the setting up in Indonesia of many Asian NIEs companies.

Responsibility for developing the rubber industry is held by different government ministries. The Ministry of Agriculture is in charge of raw materials, the Ministry of Industry looks after manufacturing industries, and distribution and exports come under the jurisdiction of the Ministry of Trade. Each of these ministries has its own research and development and testing and inspection organisations. These organisations are not equipped with adequate machinery and equipment, and there is also a lack of coordination with one another. Standards for rubber products have been set independently by each of the ministries concerned, but steps are now being taken to integrate them.

The Indonesian rubber-based products industry faces a number of problems in each area. There is the inconsistency in the quality of latex in the raw material sector, the manufacturing sector has yet to introduce up-dated quality control and production management, insufficient marketing hinders exports, and there is a lack of government cooperation in the area of promotion policies.

2.3.3. Sri Lanka's Rubber-based Products Industry

1) Natural Rubber Industry

Sri Lanka ranks 8th in the world as a producer of natural rubber. Production of natural rubber peaked in 1980 when 159,000 tons were produced. Production subsequently ranged between 120,000~130,000 tons during the 1980s, and in 1991 stood at 103,000 tons. This is equal to almost one-tenth of that of Malaysia, Thailand and Indonesia.

Production may be divided into two types: estates and small holders. Though estates used to be government owned they were privatised in June 1992. Small holders, which produce latex, would appear to have problems with quality.

As for the types of products, ribbed smoked sheets (RSS) comprise the largest single type at roughly 50% of all production of natural rubber. Pale crepe accounts for roughly 30%, and technically specified rubber (TSR) for roughly 10%. The rest is made up of scrap crepe, sole crepe, and latex.

Exports have decreased gradually since they peaked at 132,000 tons in 1981. In 1991, 76,000 tons, or 73.4% of total production, were exported. The main types of exports were RSS, pale crepe and TSR. The main countries of destination for these products were: China, the USA, and Germany for RSS; the USA, Germany, Japan and Pakistan for pale crepe; and Germany and Bulgaria for TSR.

The reputation of Sri Lankan natural rubber is such that a large volume of pale crepe is imported because of its high quality owing to its high degree of transparency. However, the hardness of RSS rubber is not suited to Japanese processing machinery, and as a result only smaller quantities of this are exported to Japan.

2) Rubber-based Products Industry

(1) History of the Rubber-based Products Industry

The Sri Lankan rubber-based products industry first started in 1936 with the commencement of the tyre retreading. The tyre retreading continued to develop into the period of the Second World War as Sri Lanka supplied tyres to the allies. With the assistance of the Soviet Union the state-run Sri Lanka Tyre Corporation went into production in 1967. The corporation introduced technology it obtained from

the Goodrich Company, and continued to produce pneumatic tyres which competed with imported products. The corporation has been privatised and is now known as the Kelani Tyre Ltd.

After the liberalisation of the economy in 1977 the rubber-based products industry diversified its products and also increased its output. Exports started to expand in the early 1980s.

In an effort to develop the rubber-based products industry the Rubber Service Laboratory (RSL) was established in 1948 and in 1956 it was integrated in the form of the Rubber Technology Section into the Ceylon Institute of Scientific and Industrial Research (CISIR). In 1978 the Rubber Product Development and Service Centre was established by the Industrial Development Board (IDB) to provide assistance to small and medium-sized manufacturing companies.

(2) Outline of the Rubber-based Products Industry

Industrial statistics relating to the rubber-based products industry as not considered to be very reliable given that the figure for the number of employees for 1986 (6,804) is about half of that of the EDB's estimate of 13,489. For this reason, an outline of the industry has been obtained from the wider-reaching 1983 Census of Industry and this has been supplemented by 1990 Annual Survey of Industries (See Table 20).

For the purpose of the industrial census the rubber-based products industry was divided into three parts: 355- rubber products; 3551- tyre tubes; and 3559- other rubber products.

Number of Companies and Employees

There are 9,691 companies engaged in the rubber product industry (355). These companies make up 9.6% of the 100,340 companies which comprise all the country's manufacturing industries. The industry employs 47,926 workers, and this represents 8.2% of the total work force of the manufacturing industries. The average number of employees per company stands at 4.9 workers, which is lower than the average of 5.8 workers for all manufacturing industries. The rubber product industry is part of the chemical industry (35), and accounts for 92.8% of all companies and 75.8% of employees within the industry. Because it includes the

large petrochemical companies, the average number of employees per company for the chemical industry as a whole is a high 6.0 employees.

Company Size

There are 9,053 companies, or 93.4% of the total, which are cottage industries with 1~4 persons engaged. This is higher than the average of 85.8% for all manufacturing industries, and shows the high number of small companies engaged in the industry.

There are 638 companies producing rubber products which have more than 5 persons engaged, and these represent 4.8% of all companies with more than five persons engaged in manufacturing industries. Of these 638 companies there are only 14 which produce tyre/tubes. The other 624 companies produce other rubber products. These larger companies employ a combined work force of 32,378 employees, which is equivalent to 8.1% of the total work force of all manufacturing industries. The average number of engaged persons is 50.7 for rubber product industry companies (355), 184.3 for tyres/tube companies (3551), and 47.8 for companies producing other rubber products (3559). The average company work force for these companies is larger than the average for the manufacturing industries as a whole, with companies belonging to the tyre/tube production industry employing a high number of employees.

Value Addition

The value addition for the rubber product industry is 6.8% of that for all manufacturing industries. This is equal to 121,471 rupees of value addition per company, or 24,562 rupees of value addition per individual person engaged. These figures are considerably lower than those for all manufacturing industries which stand at 171,583 rupees per company and 29,342 rupees per individual person engaged. Given that the rubber product industry accounts for 9.6% of all companies and 8.2% of all employees engaged in manufacturing industries, its share of value addition of 6.8% shows that rubber product manufacturers in Sri Lanka are small compared to other types of manufacturers. It may be noted, however, that with an input-output ratio of 0.37, the rubber product industry compares favourably with other manufacturing industries' ratio of 0.64.

Capital Intensity

A look at the percentage of the value of fixed assets comprised by machinery and equipment shows that for the rubber products industry it stands at 70.6%, which is higher than the percentage of 60.8% for manufacturing industries as a whole. Thus, it is more capital intensive than other industries. Even for companies with 5 or more persons engaged the same percentage stands at 74.7% which is higher than the manufacturing industries average of 62.4%. A breakdown for these larger companies shows that the percentage of fixed assets comprised by machinery and equipment for companies which produce tyre tubes is 67.2% and is 76.3% for those which produce other rubber products.

According to the EDB, as of 1992 there are an estimated 250 companies engaged in the rubber-based products industry. In 1986 the IDB put the total number of companies at 187. This number was broken down into 60 companies that were classified as cottage industries (employed 4 or fewer workers and had fixed assets worth less than 250,000 rupees), 50 small companies (5~20 employees, 250,000~2,500,000 rupees), 25 medium companies (20~50 employees, 2,500,000~7,500,000 rupees), and 50 large companies (more than 50 employees and fixed assets in excess of 7.5 million rupees). A look at the survey questionnaire shows that the industry is shaped like a pyramid with an overwhelming number of companies being either cottage industries or small or medium-scale businesses.

Production

There are no official statistics for the production of rubber-based products. According to the Rubber Controller the consumption of natural rubber stood at 23,559 tons for 1988, which was comprised of 18,140 tons of solid rubber and 5,410 tons of latex. The domestic consumption of total natural rubber production increased from 2.4% in 1970 to 11.2% in 1980. This had increased to 20.8% by 1990. In terms of volume, consumption increased from 3,779 tons in 1970, to 14,926 tons in 1980 to 23,559 tons in 1988. However, compared to consumption volumes for other Asian countries for 1991 (Thailand- 103,000 tons, Malaysia- 215,000 tons, India- 370,000 tons and Republic of Korea- 264,000 tons), Sri Lanka's rubber-based products industry is still small.

Although production figures are not available for each different product, according to the EDB tyre tubes comprise 30.8% of natural rubber consumption, gloves 20.7%, industrial rubber products and general rubber product 17.5%, tyre retreading 12.3%, footwear 11.2%, rubber apparel and clothing 3.2%, and others 4.3%. It is possible to classify products under five different categories: tyres/tubes, latex products, general rubber products, industrial rubber products, and footwear.

Exports

According to the EDB, the value of rubber-based product exports increased from 18.4 million rupees in 1980 to 1,446.3 million rupees by 1990. A breakdown according to category shows that tyre/tubes comprised the largest group of exports at 588.2 million rupees, followed by rubber clothing and textile items at 326.2 million rupees, rubber footwear at 270.7 million rupees, and mats and other products at 249 million rupees. Approximately 58% of all exports were destined for western Europe. The EDB estimates that about 20 of the 250 or so manufactures engaged in exports. In 1991 its value increased to 1,677.0 million rupees or 26.95 million SDR (See Table 21).

(3) Outline of the Industry and Problem Areas as Shown by the Findings of the Questionnaire Survey

An outline of the rubber-based product companies and areas in which they are experiencing problems, which have been obtained from the findings of the questionnaire surveys of 50 companies carried out between April and June 1992, are shown below.

Outline of Companies Covered by the Survey

Date Established

Twenty-one of the companies were established before 1979 and 15 were established prior to 1977 when the economy was liberalised. Twenty-eight companies have been established since 1980.

Number of Employees

The number of employees ranged from a minimum of 5 employees to a maximum of 450. The average was 78.3. Following the IDB's definition of small

and medium-sized companies as those which employed 49 or fewer employees, more than half of those surveyed, 26, fell into this category. There were only 7 companies which employed a work force of more than a 100.

Ownership

With only 6 companies having received investment from foreign companies, the majority of those covered in the survey are domestically owned. These foreign companies included 2 Dutch companies, 2 Hong Kong companies, 2 German companies, and 1 Danish company. Of these 6 companies, 5 are large companies that engage more than 100 employees. Thus, it may be concluded that large companies are owned by foreign interests and small and medium-sized companies are owned by local interests.

Production Items

Five of the 50 companies produce tyres and related items, 16 make rubber-based products for industrial use (hoses, tubes, belts and automobile components), 18 produce rubber-based products for general use (rubber bands, gloves, mats, etc), 6 produce footwear and footwear parts, and 5 make other items (compounds, rubber sheet, etc).

Production Equipment

In the case of 28 companies their main production equipment was new, 7 used second-hand equipment, and there were 15 which used a combination of new and used equipment. However, in the case of this later group there was a higher proportion of second-hand equipment. A look at the country of manufacture shows that only 3 companies used equipment that was manufactured in Sri Lanka, 15 companies used a combination of imported and domestically-manufactured equipment, and 30 companies used only imported equipment. Thus, the majority of manufacturers relied upon imports. As for the country of manufacture, 20 companies had equipment made in Great Britain, 19 had Indian equipment, 10 had equipment made in Taiwan, and 7 had equipment made in Japan.

Raw Materials, Sub Materials

While natural rubber was supplied domestically, a large part of sub materials was imported. Many of those that responded saying that their sub materials were

supplied by domestic sources said that they bought imported items on the domestic market.

Employee Training (multiple responses)

48 companies carried out in house training. There were 6 companies which received assistance from the government. Only 3 companies used outside-company facilities to provide training.

Quality inspection

17 companies had inspection divisions and 32 replied that they had no such division. While there were 37 companies which carry out inspection during the manufacturing stages, 11 companies did not do this. This indicates that some are lagging behind in the area of quality control.

Exports

22 companies are engaged in exports. Of the 28 companies which were not engaged in exporting there were 15 that were interested in exporting. 11 of the exporting companies had an export ratio of more than 90%, and there were 9 which exported their entire output. Ten, or nearly half of the exporting companies, began exporting after 1988 when structural adjustment program was first implemented. There were only 3 companies which had been exporting prior to 1977. Eight companies were recording an increase in exports, 9 companies had the same level of exports as before and only 3 companies experienced a decline in exports. As for the method of exporting, 16 companies exported directly while 6 companies exported through an agent.

Export Marketing

There were 4 companies which discovered importers through the EDB's inquiry service, 6 through the use of exhibitions, and 4 by taking part in trade missions (multiple responses). Thus, there were 14 companies which received some form of assistance from the government. There were 5 companies which had received either enquiries or visits from importers. As for obtaining information on other countries (multiple responses), 12 had received information from the EDB, and 22 had received information from buyers, etc. As for opening up overseas markets, 12 had done so by making direct enquiries through importers, 8 had taken

part in exhibitions, 4 had participated in a trade mission, and 7 companies had used the EDB's inquiry service. Thus, there were 19 companies which had used services available to the public.

Government Export Incentives

Most of the incentives used are related to the tax system. These include the Import Duty Rebates (used by 12 companies), Duty Concessions on Machinery Imports (11 companies), Income Tax Concessions (10 companies), Financial Assistance in the form of Medium-long-term Credits (14 companies), and Short-term Preshipment Credit Scheme (11 companies). The majority of companies which used such incentives found them useful. As for the types of difficulties they faced with regard to incentives, there were 8 companies which said that they had difficulty obtaining adequate information, 6 said that the application procedure took up time, and 5 replied that they had trouble gaining access to the incentives.

Joint Ventures and Technical Tie-ups

There were 40 companies which said that they were interested in forming joint ventures with foreign companies and there were 36 which expressed interest in technical tie-ups. In the case of both joint ventures and technical tie-ups the most common expectation which the companies had of the foreign company related to technology. At the present time there are 6 companies which have formed a technical tie-up with a foreign company.

Problem Areas (multiple responses)

The most common problem related to raw materials cited by the companies was that of price (40 companies), followed by problems related to quality (23 companies). The same was also true for sub materials with 36 companies responding that price was the biggest problem. The most common problem facing companies in the area of production is that of machinery and equipment (cited by 21 companies), followed by 7 companies which said that they had technology-related problems.

Expectations of the Government

The most commonly cited expectation of the government were those relating to technical guidance (18 companies), followed by information services (18), employee training (17) and the dispatch of trade missions (17).

3) Rubber Industry Promotion Policies and Promotion Organisations

(1) Government Organisations

With regard to promotion policies relating to the rubber industry, the Ministry of Plantation Industries is responsible for natural rubber, the Ministry of Industries, Science and Technology (MIST) is in charge of rubber-based product industries, the EDB is responsible for export promotion, and the IDB is in charge of providing assistance to small and medium-sized rubber-based product companies. Research and development and education and training are carried out by the Rubber Research Institute (RRI), the CISIR, and the IDB Rubber Products Development and Service Centre. The Sri Lanka Standards Institution (SLSI) is in charge of setting standards and promoting standardisation. The activities of these government organisations are organised systematically from the upstream down through the downstream sectors. However, unlike in the case of Malaysia where there is the Malaysian Rubber Research and Development Board there is no organisation in Sri Lanka which sees to a comprehensive promotion policy which covers all areas from raw materials through to products.

There are no incentive measures aimed exclusively at the rubber-based products industry. Instead, general incentives relating to investment and export promotion are also applied to the rubber-based products industry. The questionnaire survey of the rubber-based products industry showed that incentives such as tariff rebates and machinery import tariff exemptions were widely used and were valued by producers. There are, on the other hand, calls on the government to provide advice in relation to technology.

(2) Outline of Organisations which Promote the Rubber-based Products Industry

There are 3 government organisations which are involved in the promotion of rubber-based products. These are the CISIR, the IDB Rubber Products Development and Service Centre, and the Sri Lanka Standards Institution.

Ceylon Institute of Scientific & Industrial Research (CISIR)

The institute is a research organisation affiliated to MIST which was established in 1955 for the purpose of promoting scientific and industrial technology. It employs 12 research officers in its rubber and plastics section who carry out experiments and inspections, research and guidance in relation to rubber products. Although it has the capacity to carry out research and development analysis, it has insufficient testing and inspection equipment and is particularly lacking in large testing and inspection equipment for rubber products.

Rubber Products Development and Service Centre (RPDSC)

The centre was established in 1982 with the assistance of the World Bank. It provides a technical service and an information service related to raw rubber, latex and the rubber-based products industry to small and medium-sized companies. It is part of the Ministry of Tourism and Rural Industrial Development and employs a staff of 40. For experiments requiring analysis it must rely on the CISIR as it does not have any product analysis equipment such as an infrared spectrometer. It is experiencing difficulty in keeping up with advances rubber-based product technology, and would like to send its employees overseas for training.

Sri Lanka Standards Institution (SLSI)

The SLSI was established in 1964 for the purpose of setting standards and for promoting standardisation. As part of the Ministry of Industries Science and Technology it sets standards, tests products, inspects exports, and carries out import inspection. Though some standards relating to rubber products have been put in place, more still needs to be done in this area.

There is the Sri Lanka Association of Manufacturers and Exporters of Rubber Products (SLAMERP) to which 20 companies belong.

4) Problems Areas in the Rubber-based Products Industry

The problem areas affecting the Sri Lankan rubber-based products industry which have been indicated in reports put out by the CISIR and the EDB (Remark) are set out below.

- (a) Raw Materials
 - Quality and availability of centrifuged latex in sufficient volumes
 - Inferior quality of domestically-manufactured sub materials and lack of standard on sub materials
- (b) Production
 - Low productivity as a result of price increases and increased energy costs, and the high production costs of raw materials and sub materials
 - Insufficient production capacity for exports
 - Out-dated production equipment
 - Low level of processing technology
- (c) Quality Control
 - Insufficient inspection and testing equipments and inadequate quality control
 - Insufficient standards for rubber products
- (d) Research & Development, Training
 - Owing to budgetary constraints and limited machinery and equipment the activities of the government research and development organisations are not sufficient
- (e) Infrastructure
 - Limited capability and low standard of domestically produced metal molds and metal processing technology, and the subsequent reliance upon imports
 - Unstable supply of electricity
- (f) Marketing
 - Lack of marketing know how
 - Lack of staff who are familiar with export marketing
- (g) Management
 - Lack of management skills
 - Lack of staff who are familiar with modern management control, marketing, QC, and R & D
 - Difficulties faced by small and medium-sized companies in obtaining finance

As can be seen from the above there are a wide variety of problems facing the industry. However, problems relating to quality control, marketing and management are not unique to the rubber-based products industry, but are common to most other

industries in Sri Lanka. In order to resolve these sorts of problems considerable government assistance is required in addition to the independent efforts of private businesses.

According to a Japanese technical expert who has provided technical assistance to the Sri Lankan rubber-based products industry, the following problems are found throughout the industry: (1) there is a lack of plant management such as keeping the manufacturing site orderly, the most rudimentary of plant management; (2) manufacturing equipment is old; (3) safety in the work environment is inappropriate; and (4) there is inadequate testing of products. The disorderly state of raw material storehouses and chemical blending rooms has a definite influence on the quality of end products. Also, there are more than a few managers who refuse to let others take a tour through their plants and who seem to lack interest in improving technology. In ASEAN countries there are almost no examples to be found of managers refusing to allow technical experts from public organisations to look through their plants. It is desirable that managers understand that it is necessary to take a look at actual sites in order to be able to give appropriate advice.

As for the current and future problems relating to pollution and hygiene, adequate disposal of waste gas and waste water was not carried out at plants that were visited, and no measures were taken for workers such as providing anti-dust masks and overalls. Although the government organisations that are involved in the promotion of the rubber industry are actively involved in research and development from the raw material stage through to the product stage, as well as exports, providing guidance to small and medium-sized companies, and are involved in standardisation and systematisation, all these organisations have inadequate facilities.

(Remark) CISIR, Rubber Based Industrial Sector in Sri Lanka 1988
pp.110-118
EDB, National Export Development Plan 1990-94 pp.330-338

2.3.4. Recommendations for Promotion Measures and Programmes

1) Basic Perspective

(1) SWOT Analysis

The components required in order to understand the situation in which the Sri Lankan rubber-based products industry is placed have been incorporated in the SWOT analysis diagram provided below. SWOT refers to Strength, Weakness, Opportunity, and Threat. The reasons for each of these items are explained in detail in 2.1.4, 2.2.4, 2.3.2 and 2.3.3, and are therefore not repeated here.

(Strength)	(Weakness)
<ul style="list-style-type: none">• Advantageous labour cost and workforce• Supply of raw materials (natural rubber)• Competitive export and investment incentives	<ul style="list-style-type: none">• Insufficient support system (standards, inspection and testing, R & D)• Import requirements for chemical agents and sub-materials• Insufficient production control, management and marketing skills
(Opportunity)	(Threat)
<ul style="list-style-type: none">• Preferential treatment under GSP• Increasing demand for natural rubber products	<ul style="list-style-type: none">• International competition from ASEAN producers

(2) Need for an Integrated Assistance Policy

A characteristic of the rubber-based products industry is from raw materials through to products it is a vertically integrated industry. If there is a problem with the quality of raw materials there will be problems with the manufacture of end products which face international competitiveness in the area of quality. Export promotion for the rubber-based products industry requires an integrated government assistance policy such as that used successfully by Malaysia which incorporated all

aspects such as the upstream through to the downstream sectors, marketing, and standard setting.

(3) Selection of Companies for Export Promotion

Of the 250 companies that are engaged in the Sri Lankan rubber-based products industry there are roughly 20 companies which are currently engaged in exports and a further 15 or so which have export potential. Most of the companies that are involved in exports are large companies that are either foreign owned or those which have introduced technology from overseas. Most of the companies which have the potential to engage in exports are small or medium in size, and therefore while they have the desire to export, improvements are required in the areas of marketing and production technology. The role of the government is not to directly help private companies but to provide assistance to the efforts of private companies. Given that there are constraints in the amount of resources which may be used to promote rubber industry exports, it is recommended that assistance be given in the area of marketing to the 15 companies with export potential which have been selected for promotion and also to the 20 companies engaged in exports.

(4) Focus on Production Sites and Phased Implementation of Promotion Policies

The potential export companies face problems related to the manufacturing stage such as plant management, production technology, and quality control. They therefore require guidance at their manufacturing sites. It is recommended that as a first stage improvements be made at the manufacturing stage while assistance is also given to product development and to the marketing side of things, such as with exhibitions and participation in trade missions.

(5) Strengthening of a Common Assistance Policy

Many of the problems encountered by the rubber-based products industry are also to be found in other industries. It is recommended that certain steps be taken urgently in order to strengthen Sri Lanka's industrial base and to expand its exports. These steps are: establishment of an infrastructure, promotion of standards and standardisation, the fostering of personnel who possess marketing know-how, simplification of the way in which small and medium-sized companies procure funds, and the fostering of entrepreneurs.

2) Consideration of Potential Export Items

(1) Latex Products

By increasing the supply of good quality latex from small holders it will be possible to manufacture (a) latex-coated (slip-free) work gloves and (b) thicker gloves for disposal use. If there is a stable supply of good quality latex it will be possible to manufacture (c) latex products for medical use. However, the establishment of a research systems and the installation of sophisticated inspection and testing equipment and equipment are required in order to achieve this. By putting in place (d) cobalt 60 radiation facilities it should be possible to develop radiated latex products.

(2) Products Made from Solid Rubber

By making slight improvements to existing equipment and technology levels it is possible to manufacture more products. (a) as automobile tyre tubes are not competitive in terms of quality and price with those made by the leading manufacturers which have the upper hand on the world market there will be some difficulty in exporting these products. Rather, there is greater potential in the area of tyre tubes for motorbikes. (b) It is desirable to make finished products such as solid tyres just as the manufacture of castors is more desirable than metal processing. (c) Research and development is required for tyre retreading in the area of blending rubber compounds and synthetic rubber, blending without scorching, and adhesives. There is also potential for exports of (d) rubber thread, (e) floor mats, (f) rollers for hulling rice, (g) construction-use monocycles tyres and (h) eraser rubber.

(3) While in the shorter term markets for these products may include Sri Lanka's neighbours, the Middle East and Europe, it is recommended the research be carried out and efforts be made to break into the Japanese market.

3) Issues and Measures

As the analysis of the present situation contained in the previous section has shown the Sri Lankan rubber-based products industry faces many problems in developing as an export industry. There are two types of steps that need to be taken: those that pertain solely to the rubber industry; and those which face other industries as

well. There are also two other types of problems: those related to the demand side; and those related to the supply side. It is possible to deal with these problems in the following manner under the headings of demand- and supply-related problems and unique and shared problems.

	Supply problems	Demand problems
Problems unique to rubber industry	<ul style="list-style-type: none"> • Inferior quality of latex produced by small holders • Inferior quality of locally produced sub-materials and lack of standards • Incomplete blending planning, blending technology • Promotion of an integrated promotion policy for up-stream through downstream sectors 	<ul style="list-style-type: none"> • Intensification of competition from ASEAN
Problems shared by industries overall	<ul style="list-style-type: none"> • Inadequate plant management • Inadequate test equipment lagging behind in QC • Low level of metal molds & metal processing technology • Unstable electricity supply • Inadequate standards • Slowness in equipping of testing and research organisations • Difficulties faced by small & medium-sized firms in procuring funds • Inadequate environmental conservation, safety & 	<ul style="list-style-type: none"> • Lack of marketing skills • Lack of personnel who have experience and know-how in export marketing • Export inspection system not yet established

hygiene measures

It is recommended that by classifying the problems faced by the rubber-based products industry into the following 3 categories: (1) issues related to production technology; (2) issues related to marketing; and (3) issues related to public assistance services, the following steps be taken.

(1) Production Technology

(1) Improving the Quality of Raw Materials and Sub-materials

Field latex which is produced in large plantations is for the most part used for rubber that is Visually Graded Rubber (RSS, crepe, etc), and most of the centrifuged latex which is produced at state latex centrifuging plants is supplied to foreign-owned companies. In contrast to this, field latex supplied by small holders is produced mainly for small and medium-sized companies, and is of inferior quality. For instance, it has a high level of volatile fatty acid which makes it unsuitable for the manufacture of thin products. It is recommended that technical guidance by way of RRI be strengthened for such small holdings.

Due to the poor quality of locally-manufactured sub-materials there is a heavy reliance on imported goods. It is also necessary for the SLSI to put in place quality standards for sub-materials.

(2) Guidance in Plant Management

Out-dated equipment and poor plant layout were found to be common. A high level of investment is required in order to improve this. Therefore, given existing equipment the issues which must first be addressed as a means of introducing appropriate plant management are the putting in order of production sites and the demarcation of passageways, marking devices, and putting up signs for manufacturing and management. It is recommended that the EDB, with assistance from the IDB and CISIR, provide instruction on these points at production sites and also take up these topics for seminars.

(3) Promotion of Quality Control

Quality control and standardisation at each manufacturing stage are necessary in the manufacture of good quality products. This involves consistency in the quality of raw materials, appropriate blending planning and blending technology

management, process management such as the standardisation of operations at the time of molding, and the inspection of products prior to shipment. It is necessary to hold seminars and to provide instruction at production sites with regard to the methods of quality control, necessary experiments, inspection machinery and equipment and correct inspection methods. Because it is difficult for small and medium-sized companies to introduce testing and inspection machinery and equipment into their own plants it is recommended that the government's promotion organisations put in place the required machinery and equipment and train staff so that they may be able to provide instruction.

(2) Marketing

(1) Implementation of Export Marketing

As well as providing instruction at production sites the EDB needs to develop products suitable for export for companies with potential as exporters and also for companies which are already engaged in exports, provide information on overseas markets and information related to technology, and to carry out market surveys on target markets. As a programme to follow up on guidance in plant management, it is recommended that monitoring survey be carried out on the market suitability of goods produced by companies receiving guidance, that there be participation in exhibitions held overseas, trade missions sent overseas, and that market surveys of other countries be carried out by staff belonging to manufacturers and promotion organisations.

(2) Fostering of Personnel Capable of Export Marketing

Private companies and the government sector need to have staff who can speak English as well as languages of the main export markets, who are familiar with export-import systems and business practices, who have a knowledge of the situation in markets, and who have experience in methods of marketing. The main role would be carried out by the EDB, which would foster personnel through systematic training in subjects, expertise and knowledge necessary for export promotion centred on export marketing.

(3) Services for Providing Official Assistance

(1) Strengthening of Research and Development Organisations and Inspecting and Testing Organisations

The promotion of the rubber-based products industry requires an integrated promotion policy which covers all areas from raw materials through to products. It is recommended that there be reciprocal links and cooperation between the EDB and the RRI which makes improvements to raw materials, the CISIR which carries out product research and development and which is in charge of testing and inspection, the IDB which provides assistance to small and medium-sized companies, and the RPDSC which needs to improve its facilities as well as train staff.

(2) Setting Standards, Promoting Standardisation, and the Establishment of an Export Inspection System

It is recommended that steps be taken to put standards in place for rubber-based products and that the SLSI strengthen its testing and inspection capacity. With the bulk of the work to be carried out by the SLSI a certification system for plants which manufacture rubber-based products and an export inspection system need to be established. It is recommended that the assistance of similar organisations in advanced countries be sought as a means of effecting the smooth establishment of standards, a plant certification system, and an export inspection system.

(3) Establishment of Infrastructure

It is recommended that basic infrastructure, such as transportation, communications, and electricity be put in place. Of particular importance is a stable supply of electricity. Given that the manufacture of metal molds and metal processing technology are fundamentally vital for not only rubber-based products but for the development of other industries as well, support from the government and the introduction of foreign investment are required in this area.

(4) Conservation of the Environment and Safety and Hygiene Policies

Although it is not currently involved in resolving problems in this area, it is recommended that the government take the lead in preventing industrial pollution caused through the pollution of the atmosphere and a worsening in the quality of

water. The government also needs to take a lead in regard to measures aimed at ensuring the safety and hygiene of employees.

Among the issues mentioned above the following are also issues facing other industries: the promotion of quality control, fostering personnel capable of export marketing, setting of standards, promotion of standardisation, establishment of an export inspection system, establishment of an infrastructure, conservation of the environment, and measures for employee safety and hygiene. In addition to the major role of the EDB and the MIST in their implementation, other government organisations will need to play a substantial role. The scale and cost of such programmes are also major considerations. At any rate, they are indispensable when it comes to the continuous development of industry and the steady expansion of exports, and much is expected of the government as it takes the initiative to solve current problems without delay.

4) Main Promotion Programme

Comprehensive policies which integrate all areas from raw materials through to products which cover research and development, standards, marketing, and also the establishment of an infrastructure are required in order for the rubber-based products industry to develop as an export industry.

Given that there is resources limitation, a short-term programme outlining initial recommendations has been devised. A medium to long-term programme containing policies required for strengthening the industrial structure and base, and for facilitating continuous growth has also been devised. Items (1) through (4) contained in the medium to long-term programme are items which may also be adopted for the purpose of fostering other industries.

(1) Short-term Programmes

(a) Guidance in Factory Control

It is recommended that guidance in factory control be provided to companies, mainly those with export potential, under the direction of the EDB and in cooperation with the IDB based on the assumption of present levels of equipment. This would be centred on production sites, but would also entail seminars. Guidance would be provided continuously to specific companies and improvements would be monitored. All kinds of advice would be given

depending on the level of the company concerned. Such advice would include rudimentary measures such as keeping plant tidy and orderly through to product development, testing, measures for implementing inspection, and introducing the latest in manufacturing technology. Guidance is to be upgraded gradually and number of plants to be guided will be expanded year after year.

(b) Guidance to Managers

Under the direction of the IDB and in cooperation with the EDB it is recommended that guidance in areas such as business administration, manufacturing technology, and quality control be given to the managers of small and medium-sized company which have the potential to export. In addition to holding seminars, guidance on site and holding discussions with managers should play an important role. It is recommended that managers, as well as those in charge of policies, undergo short-term training overseas. Improvements will be monitored so that results of guidance and overseas training will be applied to management in site.

(c) Guidance in Development of Suitable Export Products

Under the direction of the EDB it is recommended that guidance in the manufacture of rubber-based products suited for overseas markets be given to companies which have potential as exporters. The marketability of items already being made should also be tested overseas. The findings of these tests need to be passed on to the manufacturing companies with a view to making improvements where necessary. The EDB would also provide information on overseas markets and information on overseas technology. Adapted and improved products will be displayed at Export Promotion Windows and exhibitions and seller/buyer meetings to exploit new markets.

(d) Implementation of Overseas Market Surveys

After selecting specific markets and items it is recommended that the EDB be largely responsible for the implementation of market surveys in other countries which cover rubber-based items produced in Sri Lanka. Market survey is to be conducted by reliable research company located in target markets. The survey findings need to be prepared in such a way that they

may be utilised by the manufacturing companies, by holding workshop and printing reports.

(e) Implementation of Export Promotion Activities

As a step which follows on from plant management and the development of items suitable for export, it is recommended that the EDB be continuously involved in the display of goods in overseas exhibitions, participation in trade missions, and the holding of business talks.

(f) Short-term Overseas Training of Staff in Promotion Organisations

It is necessary that staff in charge of rubber-based products in promotion organisations which provide guidance and assistance to private companies have an up-to-date exposure to the situation in foreign markets and of trends in technology. This would be achieved by having staff undergo short-term training in major importing nations and in competing countries.=

(2) Medium to Long-term Programmes

(a) Establishment of Standards, Strengthening of Testing and Inspection Organisations, Establishment of an Export Inspection System

Under the direction of the SLSI it is recommended that standards relating to rubber-based products be completed, machinery and equipment used in testing and inspecting rubber-based products be improved, and that an export inspection system be established. The smooth establishment of such systems would be aided by reference to the relevant experiences of advanced countries in this area.

(b) Guidance and Assistance to Small Holders

It is recommended that advice in relation to technology be given to small holders under the direction of the RRI for the purpose of improving the quality of field latex supplied by such small holders. Financial assistance is also required so that they may purchase rollers for use in the manufacture of quality slab sheets.

(c) Fostering of Manpower for Export Marketing

It is recommended that under the direction of the EDB training be provided to mainly small and medium-sized companies, as well as to larger companies, as a means of increasing the number of personnel who are able to engage in export marketing. The training would range from short-term training covering 1~2 weeks to long-term training which would take about one year. The training would cover a wide variety of aspects which meet the needs of private companies such as marketing, trade practices, trends in overseas markets, and foreign language training.

(d) Improvement of Infrastructure and Environmental Protection

It is recommended that the relevant government organisations and agencies work together in order to establish a basic infrastructure that would include transportation, communications and electricity, strengthen the mold and metal processing industries, and also for the purpose of preventing industrial pollution.

(e) Strengthening and Augmentation of Common Service Facility for R&D and Training

It is recommended that public research institutes and common service facilities be augmented in capacity and capability in order to support the sustainable growth in production and export of rubber based products industry. R&D on important subjects from raw material production technology, pollution prevention technology to QC, and its application to private sector should be promoted. Common services such as testing, technical guidance, training of employee to small and medium industry is to be strengthened.

Action Programmes for Promotion of Rubber-based Product Industry

Programme	Implementing organisation	Action/Activity		
		Follow-up	Short-term (1 to 3 years)	Medium and long-term (4 years or more)
1. Short-term programmes				
[1] Guidance in factory control • Guidance on factory floors (factory control, quality control, testing and inspection, etc.) • Seminars	EDB IDB	• Selection of companies and preparation of guidance plans • Selection of experts • Preparations for seminars	• Invitation of short-term foreign experts (continued for at least three years)	
[2] Guidance to managers • Seminars • Guidance in companies • Overseas training	IDB EDB	• Deliberations with related domestic and foreign organisations • Deliberations with companies (selection of experts etc.) • Preparations for seminars • Selection of companies for training • Preparation of plan for training	• Invitation of short-term foreign experts • Overseas training	
[3] Guidance in development of suitable export products • Testing of marketability of products • Guidance in improvement of products (guidance at factories) • Provision of overseas market information and technical information	EDB	• Deliberations with related domestic and foreign organisations • Deliberations with companies (selection of experts, determination of companies, preparations for tests)	• Invitation of short-term foreign experts (continued for at least three years)	
[4] Implementation of overseas market surveys	EDB	• Deliberations with related domestic and foreign organisations (selection of markets, products, etc.)	• Overseas market surveys • Hosting of meeting for survey report	
[5] Implementation of export promotion activities • Participation in overseas exhibitions • Dispatch of missions • Hosting of business meetings	EDB	• Deliberations with related domestic and foreign organisations (selection of participating companies, determination of schedule, PR, etc.)	• Dispatch of missions	
[6] Short-term overseas training (exposure visits) of staff in promotion organisations • Surveys of overseas market trends and technical trends	EDB	• Deliberations with related domestic and foreign organisations (selection of trainees, determination of training content and schedule)	• Short-term overseas training • Hosting of meeting for reports	
2. Medium- and long-term programmes				
[1] Establishment of standards, strengthening of testing and inspection organisations, establishment of export inspection system	SLSI	• Requests for cooperation	• Invitation of foreign experts • Development surveys	• Provision of equipments • Overseas training
[2] Guidance and assistance to small holders	RRI		• Implemented by World Bank • Development surveys	
[3] Fostering of manpower for export marketing	EDB	• Formulation of basic concepts	[a] Construction of industrial estates [b] Invitation of foreign experts • Strengthening of ties and coordination among RRI, IDB, CISIR, MIST, and EDB	• Invitation of foreign experts
[4] [a] Improvement of infrastructure [b] Environmental protection	MIST etc. CISIR	[b] Requests for cooperation		[a] Improvement of roads, ports, communications, etc. [b] Provision of equipment, [c] Overseas training
[5] Strengthening and augmentation of common service facility for R&D and training	EDB MIST	• Raising issues at Rubber Advisory Committee of EDB		• Development surveys

2.4 Trends in Trade of Three Other Industry Products

2.4.1 Ceramic Products

1) Ceramic products industry of Sri Lanka

Sri Lanka engages in the domestic production of the raw materials for ceramics (ballclay, kaolin, feldspar, etc.) and has relative superiority in labour. Making use of these factors and with the help of investment from Japanese and Republic of Korean companies, the ceramic product industry is establishing itself as one of the country's labour-intensive export industries. The principal items produced and exported are tiles, tableware, and ornamental articles.

Exports of ceramic products reached 1.17 billion rupees in 1991 (about \$27 million). This represented two-fold growth compared with the figures for 1989, but still represented only slightly over a 1% share of the total value of exports (see Table 5). The export destinations differ somewhat depending on the product line, but in general Sri Lanka is exporting to the West, Japan, Oceania, and other industrialised regions and has begun exporting to the Asian NIEs as well.

2) World trade

Imports of OECD

The global trade in ceramic products was affected by the general business recession in the early 1980s and stagnated somewhat, but in the late 1980s expanded due to the business recovery. The total value of imports of the OECD countries, which account for the majority of the imports of ceramics in the world, came to \$3.5 billion in tiles (including paving materials, same below), over \$2.6 billion in tableware (including kitchenware, same below), and just under \$1.4 billion in ornamental articles (including statuettes, ornaments, etc., same below).

The main importers of tiles are Germany, France, the U.S., and the U.K. The main importers of tableware are the U.S., Germany, Italy, France, and Japan, while the main importers of ornamental articles are the U.S., Germany, the U.K., France, and Japan. In each case, the Western nations and Japan prove to be the major importers.

A look at exports to the OECD countries shows that the majority is from neighbouring member countries, but exports from the Asian NIEs (Republic of Korea

and Taiwan), China, and ASEAN (Thailand, Malaysia, Indonesia, and the Philippines) are increasing in the fields of tableware and ornamental articles (see Table 23). In tableware, Chinese, Taiwanese, and Republic of Korean products came to hold a 16% share of the value of OECD imports in 1990, mostly in the low price market. The share of ASEAN products was just under 4% and Sri Lankan products 0.3%.

Among ceramics, in the field of ornamental articles, which are particularly labour intensive, the share of Asian products has been growing. Taiwanese products accounted for 20% of the value of OECD imports in 1990, making that country the biggest country of origin of imports, while Chinese products accounted for 9% and ASEAN products, mostly Thailand's and Malaysian products, accounted for just over 5%. The share of Sri Lankan products was 0.9%.

A look at future demand in the OECD countries shows that, generally speaking, demand for tableware and ornamental articles is expected to increase at about the level of growth of the population and income. Medium and higher class products and low priced products will exist in parallel, but in the case of tableware the former market will grow and more diverse assortment of products will be sought, while in the latter case the orientation toward better qualities will grow stronger. There is a slight global surplus in tile production facilities and tile demand will be governed by economic growth, in particular, construction activities. In the case of the Japanese market, tile demand is expected to increase in the area of external tiles, principally for buildings. Outside of the OECD countries, in view of the expected continued economic growth of Asia, an increase in demand is anticipated for ceramic products in that region.

3) Imports of Japan

Domestic Japanese demand for ceramic products grew starting in the late 1980s due to the domestic demand driven economic growth. Imports grew particularly fast in particular from 1987. Imports of tableware and ornamental articles respectively grew 1.9 fold and 1.7 fold in the period from 1988 to 1990 (see Table 24).

Characteristics of the market include a large share of British products in the field of tableware and Italian products in the field of ornamental articles. The share of high grade products made in Europe is large. In the field of medium and lower grade products, there was growth in Asian products. In particular, in the case of ornamental articles, the share of Republic of Korean, Chinese, and Taiwanese products rose to 23% in 1990. Imports of ASEAN products rose as well (see Table 24).

The share of Sri Lankan products in Japan's import market is still extremely small (0.2% for both tableware and ornamental articles in 1990). It is not considered easy to enter the tableware market, which is strongly oriented to higher grade products, or the tile market, where domestic products have the advantage, but there should be ample opportunity to enter the Japanese market for ornamental articles, which are very labour intensive. The opinions of industry experts is that when exporting to the fiercely competitive Japanese market, it is necessary to work to earn the trust of the buyers by satisfying the following requirements in addition to having the ability to supply products meeting the needs of the Japanese market:

- Offering competitive prices
- Engaging in sufficient quality control
- Delivering products on time as promised

2.4.2 Processed Foods

1) Processed food industry of Sri Lanka

Sri Lanka, known from olden days as an exporter of tea, produces diverse types of tropical produce and subtropical produce. Most of this produce is consumed as food or is converted for food use. Numerous products are exported at present as food.

Taking note of the export potential of food of Sri Lanka, the EDB direct its attention to large numbers of types of food as eligible for coverage under the export promotion programme and has been searching for ways to increase exports of these products. A list of the agricultural and marine produce currently being exported would include large numbers of products, led first of all by the biggest export item, tea. The main products exported include, in agricultural produce, tea, coconuts, fruit, vegetables, spices, coffee, cocoa, essential oils, cashew nuts, medicinal herbs, herbal teas, and mushrooms. In addition to agricultural produce, there is considered to be potential for future export products in such marine produce as yellowfin, bigeye tuna, skipjack, marlin, swordfish, and shark, caught mostly by coastal fishing.

Farm products accounted for 31% of the total 84.4 billion rupees (about \$2 billion, US\$1=41.58 Rp) in exports of Sri Lanka in 1991. Among the agricultural products, the three traditional products of black tea, rubber, and coconuts accounted for 87% of the exports of agricultural produce and were worth 22.2 billion rupees in export value. Exports of other agricultural products totalled 4.26 billion rupees,

corresponding to 13% of the exports of agricultural products, in 1991. The export of food, which includes processed foods, is shown in Table 5.

2) Trends in global trade in food products

The global trade in food products turns about four axes - the world's number one net importer, Japan, the world's largest exporter and larger importer, the U.S., the main EC countries, which account for large shares of both exports and imports, and Australia, which specialises in exports.

From this viewpoint, we will take a simple look at the features and changes in the trade structures of four key countries: the U.S., France, Germany, and Australia.

[1] U.S.

The U.S. is the world's largest exporter of food products and at the same time the world's largest importer. Its two largest export markets are the EC and Japan.

In the late 1980s, the export structure began to change and a trend arose of a shift of exports from low unit price bulk items to higher added value products such as meat, fruits, vegetables, and fish and shellfish.

Further, the structure of imports of food products changed. At the end of the 1980s, there was a major increase in products competing with domestic products and a decline in noncompeting products. As a result, competing products came to account for three-fourths of imports and began to have an effect on the domestic agricultural, forestry, and fishery industries.

[2] France

France is the biggest producer and exporter of food products in the EC. Its rate of self-sufficiency in food exceeds 100%. Food products constitute a major export industry, accounting for 16.6% of total exports. France's trade surplus of food products in 1991 totalled 25.9 billion francs.

A look at the export destinations shows that the other countries in the EC account for 70% of the exports, followed by the U.S.

[3] Germany

Germany is the world's largest import of food products (about \$41.3 billion in 1991), but it exports to the tune of over half of its imports as well (Japan is the world's largest net importer in terms of the net imports obtained by subtracting exports from imports).

Processed foods account for 80% of its exports. The main items are meat and processed meat, followed by milk products, cereals, vegetables and fruits, tobacco, and unrefined sugar.

The main imports are meat (over 50% being pork and processed pork), vegetables and fruit, milk products, coffee, and black tea.

[4] Australia

Australia is the one of the world's leading producers of agricultural products. Twenty-eight percent of its total exports consist of agricultural products.

The main exports are meat (beef 70%), cereals (wheat 80%), fish and shellfish, sugar, milk products, and vegetables and fruit.

Its main export destination is Japan. About 25% of Australia's exports of agricultural products go to Japan. A look by country and product shows that the leading destinations are Japan, the U.S. (meat and fish and shellfish), the EC (meat, vegetables, fruit), Asia, including China (cereals and cereal products, dairy products, eggs), and the Middle East (cereals and cereal products).

A look at the trends in global population and food consumption shows that there is a remarkable imbalance in food consumption between the industrialised countries and the developing countries. The industrialised countries, which account for only 16% of the world's population, consume 24% of the world's cereals and 43% of its meat, while the developing countries, though accounting for 53% of the world's population, consume 35% of the cereals and 23% of the meat. In particular, Africa holds 10% of the world's population, but consumes only 4% and 3% of its cereals and meat, respectively. Further, while the per capita consumptions of cereals and meat in Asia in 1980s have been increasing compared with the 1960s, the per capita consumptions in Africa have been falling as a general

trend. There is a growing imbalance, therefore, by region even among the developing countries.

An analysis of examples of imports of processed food by the OECD is given in Table 25.

3) Japanese imports of processed foods

[1] Summary of imports

Japan's imports of agricultural products continue to increase, primarily in the area of meat, vegetables, and other secondary foods and of beverages and other preference type foods. Japan is now the world's largest net importer of agricultural products.

Japan imported \$35.1 billion worth of food products in 1991, the second highest level in the world after Germany. In the same year, however, it exported only \$1.6 billion worth of food, resulting in a surplus of imports of \$33.5 billion and making Japan the world's largest net importer. It should be noted that Japan's rate of food self-sufficiency is the lowest among the industrialised countries, being only 47%.

A look at countries of origin by region shows that the U.S. accounts for about 30% of Japan's imports, though the share has been falling little by little. On the other hand, imports from Taiwan, China, Australia, Canada, Thailand, and South Korea have been moving fairly the same. In 1991, however, imports from China and Thailand soared. Three-fourths of Japan's imports of food products are accounted for by these seven Pacific Rim countries.

A look at the structure of imported food products by region shows that North America and Oceania account for large shares of the cereal and meat, Asia for vegetables, fish, and shellfish, and the EC for processed foods.

[2] Growing imports of processed foods

A look at the changes in the structure of imports of food products shows that up to the early 1980s, food materials such as cereals, oil seed, and other bulk items accounted for 40% of imports, but reflecting the changes in the Japanese production system, imports of vegetables, fruit, meat, fish, and shellfish soared throughout the 1980s and came to account for a higher share than food materials. Further, starting

in the mid-1980s, there was a steady increase in processed foods. In addition, there has been an increasing number of cases of imports in the form of finally processed goods for direct consumption as opposed to imports for domestic reprocessing. The main products here are meat products, cheese, and wine.

On the other hand, reflecting the mind of consumers orienting toward higher grade items in the consumption of food products this year, a trend has arisen of increased imports of high priced foods such as live fish and increased imports of higher class food products. This has been aided by the commercialisation of technology for freezing and refrigerating fish and shellfish and vegetables, thanks to innovations in transportation technology, or transporting them fresh, maintaining their freshness, by air freight. In 1991, there was a surge in air transport of shrimp, prawn, and lobster, tuna, fish roe, red sea bream, conger, amberjack, yellowjack, and other live fish and fish products.

It is also noted that the increase in imports of foods for the preference of consumers through overseas development imports. Japan has been shifting its investment in developmental imports from the old centres of South Korea and Taiwan to Thailand, Indonesia, the Philippines, China, and other countries since 1988.

This increase in imports of food products means that imported food products are now essential in the Japanese diet. Therefore, due to these changes in the structure of imports of food products, effort is sought in ensuring stable imports, not only of the cereals and other staple foods, but also in particular the food products used as secondary foods.

Sri Lankan exports of food products to Japan, with the exception of tea, of which Sri Lanka is the biggest supplier to Japan, have still not gone beyond the area of sample exports. Full-scale development of the market remains a task for the future.

To succeed in exports to Japan, one must tailor one's products to meet exactly with the characteristics of the Japanese market, a market where competition is fierce and the consumer is extremely picky, and be able to supply products meeting the fundamental requirements of quality, price, and delivery.

In the opinion of buyers, leading food importers prefer lots of considerable size with each transaction. On top of this, it is necessary that a supplier be able to

ensure continued delivery of similar lots meeting all the above fundamental requirements.

Table 26 shows the imports of processed food of Japan from major exporting countries based on OECD statistics.

An explanation will be given below of the trends in imports of processed food of interest to Sri Lanka (see Table 27).

Tea: Imported black tea comes in two types: tea imported in retail containers of less than 3 kg which can be used directly for sale to consumers and tea imported in the form of black tea materials or blended tea consisting of blends of the same which is processed domestically and then sold in retail containers. The former is traded directly packaged (in retail containers), while the latter is traded in other forms (bulk).

Japan imported \$22.16 million or about 1000 tons of black tea in retail containers in 1991 and \$39.48 million or 12,000 tons of other forms of tea. The biggest country of origin was Sri Lanka, which accounted for 19% of tea in retail containers and 35% of the other forms of tea.

Demand for black tea in Japan had been sluggish in the past due to the increase in demand for coffee and the competition with various other beverages and had moved around 7000 tons a year, but recently there have been signs of a recovery in demand. Demand reached 14,083 tons in 1990 and 13,316 tons in 1991.

Canned pineapples: In 1991, Japan imported 66,000 tons of canned pineapple worth \$64.73 million. The main countries of origin were Thailand, the Philippines, and Malaysia. These three countries account for 90% of Japan's imports of canned pineapple. In 1992, there were fears of an effect from the drought in the main producer, Thailand. It is expected that in the future the worldwide supply and demand relationship will become tighter. Inventories are high, however, so imports are expected to be about the same as in the previous year.

Edible nuts: Japan's 1991 imports of edible nuts totaled 74,900 tons and were valued at \$259 million. The leading products were almonds, which are imported primarily from the U.S., and chestnuts, which are imported mainly from China. Together these two items accounted for about 60 percent of all edible nut imports. These were followed by pistachio nuts from Iran and cashew nuts from India.

1991 imports of cashew nuts amounted to about 5,000 tons and were valued at \$30 million.

No import duty is levied on cashew nuts, and they are used as snacks when drinking, in Chinese cooking, and in pickles.

Japan's consumption of edible nuts is low in comparison with the other industrialised nations, making it the greatest potential market for producer nations. As a result, sales efforts by producers in the U.S. and elsewhere are intensifying.

Canned vegetables: Most of the canned vegetables imported into Japan come in large-volume containers for commercial use. However, some of the canned sweet corn and asparagus is also for household use.

1991 imports of canned vegetables amounted to \$205.57 million. The main items were asparagus, at \$12.21 million, bamboo sprouts, at \$110.94 million, french mushrooms, at \$13.81 million, and sweet corn, at \$43.84 million.

China, Thailand, and Taiwan were the leading suppliers of bamboo sprouts, while most French mushrooms originated in China, Taiwan, and Indonesia.

2.4.3 Coconut-based Product Industry

1) Coconut and its fibre industry of Sri Lanka

The coconut industry is an important element in the Sri Lankan economy, producing about 5 percent of the GDP (1985) and 3 percent of total exports (1991). Coconut products are classified into kernel products, fibre, fibre products, shells, and other products. Kernel products such as coconut oil and desiccated coconuts account for 67 percent of exports of coconut-based products (1991). Exports of coconut products must compete with substitute materials (other edible oils for coconut oil and synthetic fibres for coconut fibre), and as a result world demand is gradually declining.

The present study is concerned with coconut fibre, which includes the small scrubbing brushes called *tawashi* in Japan. Japan accounts for a large share of Sri Lanka's fibre exports, and Sri Lankan products dominate Japanese fibre imports. Further, the EDB has expressed interest in this area.

The raw material for *tawashi* is bristle fibre. Export statistics divide bristle fibre into four small categories. Exports of the four categories combined grew from 253 million rupees in 1988 to 309 million rupees in 1989 and 324 million rupees in 1990. In 1991, however, the figure plunged to 98 million rupees (see Table 28). Behind this drop were a 14 percent smaller harvest due to unfavorable climate condition and a shift in production from fibre to finished *tawashi*.

Although it is impossible to determine the value of *tawashi* exports from export statistics, 1991 exports of brooms and brushes, which include *tawashi*, grew 20 percent to 283 million rupees. Japan was the leading destination in 1991, accounting for 25 percent of all bristle fibre exports by Sri Lanka and 51 percent of all broom and brush exports (See Table 29).

The EDB has indicated the following problem areas for coconut fibre: 1) competition with substitutes; 2) dust content; 3) lack of market information; and 4) supply fluctuations due to climatic irregularities.

2) Japan's imports

Japan's imports of coconut fibre totaled 517 million yen (up 31 percent on the year) in 1989, 368 million yen in 1990, and 317 million yen in 1991 (see Table 30). The leading suppliers to the Japanese market are Sri Lanka, the Philippines, Thailand, and Indonesia. Sri Lanka dominates the field with shares of 97 percent for raw coconut fibre and 67 percent for non-raw coconut fibre.

There are no statistics on coconut fibre products by themselves, so here a look is taken at the trends in imports of brooms and brushes made of vegetable materials (see Table 31). Imports of brooms and brushes made of vegetable materials increased in value from 508 million yen in 1988 to 949 million yen in 1991. The biggest supplier was China, at 56% (1991). Sri Lanka ranked as the fifth largest supplier, increasing its shipments 49% in 1991, compared with the previous year, to 24 million yen. Imports of other brooms, brushes, mops, and squeegees rose from the 2,153 million yen of 1988 to 2,679 million yen in 1991. The biggest supplier, accounting for 31% (1991), was Taiwan, but Sri Lanka has held second placed position as an exporting country since 1988 and in 1991 shipped 517 million yen worth of goods, giving it a 20% share.

No survey has been made of the Japanese market for coconut fibre or *tawashi* and there is extreme shortage of data as a result. According to the main importers, coconut

fibre is used for brushes and bed cushions. There is considered to be a high future potential for coconut fibre due to its being nonpolluting when disposed of and due to the increase in consumer selection of natural materials. Sri Lanka's coconut fibre is evaluated as being of the highest quality in the Japanese market and production control is considered good. The processing of coconut fibre in Japan is considered "dirty, demanding, and dangerous" work and therefore the number of processors is declining. In the future, it is expected that coconut fibre will be processed more in Sri Lanka (export substitution).

3. EXPORT PROMOTION POLICIES, SYSTEMS AND ORGANISATIONS

3.1 Scope of Study

A country's export promotion policies include a broad range of matters from policies on foreign exchange rates and improvement of infrastructure to financial and fiscal incentives and promotional activities. This survey, however, focuses its analysis on the policies and organisations of the Export Development Board (EDB), the implementing organisation for export promotion policies providing direct support to export industries. Allusion will be made to export promotion policies in the broader sense of the term, such as exchange rate policies, where necessary.

3.2 Current State and Background of Export Promotion Policies, Systems and Organisations

1) Export Promotion Policies

Sri Lanka pressed forward with a programme of industrialisation for the purpose of import substitution starting from 1956 when the Sri Lanka Freedom Party (SLFP) took office up to the economic deregulation of 1977. During this period, the policies adopted for export promotion were by nature for correcting some of the economic problems caused by the import substitution policy and included the Bonus Voucher System (BVS) of 1967, the Foreign Exchange Entitlement Certificate (FEEC) establishing a preferential exchange rate for exports of nontraditional products introduced in 1968. During the 1972-1976 five-year plan, priority was given to exporters of manufactured products in the allocation of foreign exchange for raw material imports. The BVS system gave export companies import quotas corresponding to 20 percent of the f.o.b. value of their exports.

Export promotion policies have become the key part of economic development efforts since the 1977 economic liberalisation. Behind this liberalisation of the economy were (1) the dead end reached in the programme of import substitution industrialisation, (2) the growing shortage of foreign exchange, (3) the poor capacity utilisation in the industrial sector caused by the restrictive import controls, (4) below the expectation performance of public sector, (5) the faltering growth of foreign investment, and other factors causing economic stagnation and slow industrialisation.

In the new economic development strategy announced in November 1977, the government stressed (1) a changeover from government intervention to a price mechanism in the distribution of resources, (2) encouragement of exports of nontraditional products, and (3) promotion of export-oriented foreign investment. In 1979, the EDB was set up as the implementing organisation for export promotion and the GCEC, FIAC, and LIAC were established as organisations for encouraging foreign and local investment. Efforts were also made to deal with problems arising from the import substitution programme. Since November 1977, the government has changed over from quantitative restrictions of imports to control based on import duties, has reduced the number of products under import licence scheme, has streamlined the tariff structure, and has depreciated the exchange rate.

In 1983, the first National Export Development Plan was formulated covering the years up to 1987. Under this plan, the following promotional measures were called for: (1) free trade in inputs used in export processing, (2) adoption of a realistic exchange rate, (3) provision of finance to facilitate procurement of working capital, and (4) correction of the anti-export bias. A second plan (1990 to 1994) was launched in 1990, which called for achievement of an annual 13.7 percent rate of increase in exports of nontraditional products. In addition to the four measures of the first programme, the government announced a step-by-step elimination of the export tax on traditional products. Also taken up were the streamlining of cumbersome procedures, practices and documentation at various points of import of inputs and export of finished products such as the Ports, Airport, Customs Exchange Control, Import and Export Control as well as at the point of grant of incentives, the facilitation of use of air cargo services, and a reevaluation of the absence of clear cut land grant/lease policy of state land for the production of export crops other than tea, rubber and coconuts. Decades of Exports Plan (1993-2002) is now being formulated.

2) Current Export Promotion Policies

As mentioned earlier, export promotion policies in the broad sense of the term include foreign exchange rate policies, construction of roads, ports, and other infrastructure, deregulation of imports, and the promotion of export-oriented foreign investment, but in this section a study will be made of the direct support given to the export industries as these "export promotion policies".

Export promotion policies can be divided into four categories: (1) fiscal incentives, (2) financial incentives, (3) partial trade deregulation, and (4) export-related services. If the export promotion policies of Sri Lanka are compared with those of Japan, South Korea, Thailand, and Malaysia based on this classification, then it becomes clear that almost all the policy means used in those countries are being implemented in Sri Lanka as well. There is no great difference in Sri Lanka compared with other countries.

Comparison of Export Promotion Policies

	Sri Lanka	Japan	R. of Korea	Thailand	Malaysia
1. Fiscal (tax) incentives					
(1) Exemption of corporate taxes	o			o	o
(2) Deductions of export income		o	o	o	o
(3) Accelerated depreciation	o	o	o	o	o
(4) Export subsidies			o		
2. Financial incentives					
(1) Refinancing system of central bank		o	o	o	o
(2) Other export financing	o	o			
3. Partial trade deregulation					
(1) Duty rebate, etc.	o		o	o	o
(2) Export processing zones	o		o	o	o
4. Others					
(1) Export promotion organisations	o	o	o	o	o
(2) Export insurance	o	o			o
(3) Encouragement of export associations	o	o			
(4) Export inspection system		o	o		o
(5) Human resource development organisations		o			
(6) Discounting of electrical power rates			o	o	
(7) Encouragement of trading companies	o		o	o	

Remark: Japan's export promotion policies were mostly implemented in the 1950's and 1960's.

Looking at the export promotion of Sri Lanka in more detail, the fiscal and financial measures taken are considered very well targeted and generous, including subsidies for 50 percent of the expenses for market development and equity participation in export-oriented projects. In other areas of promotion, however, such as export inspections and human resource development, there is still room for improvement.

3) Export Promotion Organisations

The implementing authority for Sri Lanka's export promotion programme is the Export Development Board (EDB). The EDB was established as a statutory body under the Ministry of Trade and Shipping in 1979 with the aim of promotion of exports of goods and services and has a staff of about 280 in the following 10 departments:

- (i) Policy and Planning
- (ii) Product Management
- (iii) Marketing
- (iv) Projects
- (v) Services
- (vi) Human Resource Division
- (vii) Finance
- (viii) World Trade Centre
- (ix) Trade Information Service
- (x) Board Secretariat

Its activities vary from the formulation of export development plans to the handling of inquiries, hosting of exhibitions, dispatch of missions, promotion of product development and adaptation, surveys, and information services, but the EDB is special in financial incentives and equity participation. It is therefore engaged in a broader range of activities than the export promotion organisations of other countries.

The EDB has offices in the Ramada Hotel complex in the centre of Colombo and has permanent exhibition facilities, the World Trade Centre, in the centre of business.

The EDB is organised as shown in Figure 9. The Export Development Council of Ministers (EDCM) is the highest policy-making authority in export promotion and is chaired by the President of the Republic of Sri Lanka and attended by the ministers of the Ministries in charge of Trade and Commerce, Industries, Science and Technology Agricultural Research and Development, Plantation Industries, Handloom and Textile

Industries, Fisheries, Finance, Policy Planning, Foreign Affairs and Rural Industries. The Board of Directors is comprised of 16 members - the chairman and the secretaries of the above nine ministries and six experts appointed by the Minister of Trade and Commerce and a member representing BOI.

In addition to fiscal and financial incentives, the EDB offers the following services:

- (1) Collection and provision of information and trade consultations
- (2) Handling of inquiries, organisation of buyers/sellers contact
- (3) Dispatch and reception of missions
- (4) Arrangement of exhibitions and participation in overseas exhibitions and trade fairs
- (5) Overseas PR of Sri Lankan products
- (6) Preparation of brochures and other publications
- (7) Studies (marketing studies, feasibility studies)
- (8) Product development
- (9) Exporter training
- (10) Presidential awards to companies contributing to exports
- (11) Establishment of Export Production Villages (EPV)

Comparison of Export Promotion Organisations in Asia

Name	Sri Lanka Export Development Board (EDB)	Korea Trade Promotion Corporation (KOTRA)	Department of Export Promotion (DEP) Thailand	Malaysian Export Trade Centre (MEXPO)
Year of establish- ment	1979	1962	1952	1980
Law under which established	Sri Lanka Export Development Act No. 40 of 1979	Korea Trade Promotion Corporation Act (No. 1059, 1962)		
Ministry in charge	Ministry of Trade and Commerce	Ministry of Trade and Industry	Ministry of Commerce	Ministry of Trade and Industry
Organisational network Domestic Overseas	Headquarters	Headquarters (1), branches (10) 76 locations	Headquarters (1), branches (3) 13 locations (also 34 offices of commercial secretaries in embassies)	Headquarters (1) 30 locations (Locations where trade commissioners are dispatched)
Number of staff Domestic Overseas	281 -	499 193	275 26	39 -
Summary of activities	(1) Provision of fiscal incentives (2) Provision of financial incentives (3) Equity participation (4) Promotion of exports of policy products (5) Handling of inquiries (6) Exhibitions and missions (7) Information services (8) Awards to companies contributing to exports (9) Publications (10) Standing exhibition facilities	(1) Export and import promotion (2) Industrial cooperation (3) Overseas market studies (4) Trade related information services (5) Exhibitions (6) Publications (7) Management of de facto subsidiary Korea Trading Intl. Inc.	(1) Collection and provision of trade information (2) Arrangement of domestic and foreign exhibitions (3) Organisation, dispatch, and reception of trade promotion missions (4) Sponsoring of seminars (5) Establishment of permanent exhibition facilities and provision of information on domestic products (6) Handling of inquiries and operation of library (7) Publications	(1) Handling of inquiries (2) Provision of trade-related information (3) Registration of export companies and maintenance of lists of overseas importers (4) Operation of permanent exhibition facilities (5) Advisory services (6) Arrangement of business appointments (7) Exhibitions and dispatch of missions
Size of budget	(1) Rs. 603 million (approximately US\$14 million) (2) Rs. 82 million (equity participation) (fiscal 1992)	36.3 billion won (fiscal 1988) (approximately US\$46.28 million)	154 million bahts (fiscal 1989) (approximately US\$5.92 million)	M\$1 million (fiscal 1988) (approximately US\$390,000)

3.3 State of Utilisation and Evaluation of Export Promotion Measures

1) State of Utilisation

Questionnaires were sent to 100 garment and apparel makers, 59 gems and jewellery makers, and 50 rubber-based product makers, for a total of 209 companies in all. Of these, 92, or 92 percent, of the garment and apparel makers, 30, or 51 percent, of the gems and jewellery makers, and 22, or 44 percent, of the rubber-based product makers were exporting.

A look at the state of utilisation of export promotion measures by industry shows that use is extremely high in the garment and apparel makers. This is because most of the garment and apparel makers are export-oriented and rely on imports for almost 100 percent of their raw materials and manufacturing facilities, so take advantage of the Import Duty Rebates in most cases. On the other hand, the gems and jewellery and the rubber-based product manufacturers utilise domestic resources. Further, the rubber industry has not grown enough as an export industry and the often used pattern of business in gems and jewellery products is for a foreign buyer to visit Sri Lanka, make purchases at a jewellery store, and take his purchases back with him personally. These are believed to be the reasons for the lesser use of export promotion measures compared with garment and apparel makers.

A look by industry shows that 74 to 78 of the garment and apparel makers use the Duty Concessions, except for the BOI duty concessions, and that there is also a high rate of use of the tax incentives, lead by 79 companies using the Income Tax Concessions. Among the financial assistance schemes, 63 of the 100 companies, the highest rate of utilisation, use Short-Term Pre-Shipment Credit Scheme, but the rate of utilisation of the Concessionary Financing Scheme of the EDB is low. As to other promotional measures, the Pre-Shipment Credit Guarantees and the EDISS are used by a relatively large number of firms, 35, but the subsidies and support services of the EDB are little used.

Thirty of the gems and jewellery companies use the Income Tax Concessions and 29 the BTT concessions, a high rate of close to 100 percent usage in terms of the number of export companies. Next, 19 companies use the EDB's Market Development Support and 11 the Product Development Support - a relatively high state of use of the EDB services. The number of companies using other promotional measures, with the exception of the EDISS, is low.

The rate of use of promotional measures in the rubber-based product makers is lower overall than in the garment and apparel makers, but like with the garment and apparel makers, the import duty, tax, and financial incentives are made considerable use of. The most use is made of the Import Duty Rebates, 12 companies, the Duty Concessions, 11 companies, the Income Tax Concessions, 10 companies, the Short-Term Pre-Shipment Credit Scheme, 11 companies, and the medium and long term credit scheme, 14 companies (See Table 32).

A look at the industries all together by the promotional measures shows that the tax incentives are made the most use of. In particular, the Income Tax Concessions are used by 119 companies and is the promotional measure used by the most number of companies among all the measures. The BTT concessions are used by 104 companies. Next, the Import Duty Rebates, except for the BOI duty concessions, are used to a high degree, about 90 companies each, mostly among the garment and apparel makers. In the financial assistance schemes, the Short-Term Pre-Shipment (Packing) Credit Scheme is used by 81 companies and the Medium and Long Term Credit Scheme is used by 68 companies. In this way, the import duty, tax, and financial incentives are used to a high extent, while other promotional measures are used to a considerably lower extent. Among them, the Pre-Shipment Credit Guarantees and the EDISS are used by relatively large numbers of companies, about 50 each. The EDB's support services are not used much, except among gem companies, but among them the information service is made frequent use of.

Looking at the state of use of promotional measures according to the size of companies, taking as examples the Import Duty Rebate and Income Tax Concessions, which are made frequent use of, small and medium sized companies use them less than large companies. For example, in the case of garment and apparel makers, where the overall extent of use is high, defining companies with less than 100 employees are small and medium sized and those with 101 or more employees are large sized, the Income Tax Concessions are used by 88.3 percent of the large companies, but only about half that, 47.8 percent, of the small and medium sized companies. With gems and jewellery, in the same way, the rate of use of Income Tax Concessions by large companies is 78.6 percent and that by small and medium sized companies is about half that, 40.9 percent. The difference is even more marked in rubber-based products, with 36.4 percent of the large companies using the concessions, but only 7.1 percent of the small and medium sized ones. The same is true of the Income Duty Rebates, with the percentages being 31.8 percent versus 7.1 percent.

State of Utilisation of Import Duty Rebate

	Garments and apparel			Gems and jewellery			Rubber-based products		
	No. of Companies	Rate of		No. of Companies	Rate of		No. of Companies	Rate of	
	companies using	measures utilisation	companies using	measures utilisation	companies using	measures utilisation			
Small and medium sized companies	23	8	34.8%	44	2	4.5%	28	2	7.1%
Large companies	77	66	85.7%	14	5	35.7%	22	7	31.8%

Remark: Small and medium sized companies are defined as those with up to 49 employees in the case of gems and jewellery and rubber-based products and up to 100 employees in the case of garment and apparel makers.

Source: Questionnaire survey

State of Utilisation of Income Tax Concessions

	Garments and apparel			Gems and jewellery			Rubber-based products		
	No. of Companies	Rate of		No. of Companies	Rate of		No. of Companies	Rate of	
	companies using	measures utilisation	companies using	measures utilisation	companies using	measures utilisation			
Small and medium sized companies	23	11	47.8	44	18	40.9%	28	2	7.1%
Large companies	77	68	88.3%	14	11	78.6%	22	8	36.4%

Remark: Same as above.

Source: Same as above.

2) Evaluation and Problems

About 100 percent of the companies using the promotional measures evaluate them as being useful. The interview study also showed that the promotional measures were highly evaluated. With most of the promotional measures, the number of companies evaluating them as useful exceeds the number of companies actually using them, so it would appear that the usefulness of the promotional measures is widely recognised. It is only natural that many companies would evaluate promotional measures which are made much use of as being useful, but the EDB support services and subsidies and its equity participation are also evaluated as being useful by more than the number of companies actually using them.

Problems in Export Promotion Measures

The biggest problem mentioned with respect to the export promotion measures was the time taken for the procedures. Next mentioned were the complexity of the procedures and the lack of information. These may be considered to be the reasons for the low rate of use among small and medium sized companies and require improvement.

Problems in Export Promotion Measures

	Garments and apparel	Gems and jewellery	Rubber-based products	Total
1. Lack of information	30	8	8	46
2. Difficulty of access	20	5	5	30
3. Insufficient promotional measures	25	6	4	35
4. Complicated procedures	40	10	3	53
5. Time-consuming procedures	47	14	6	67
6. Changes in policies	18	6	3	27

Source: Questionnaire survey.

3) Support expected to Government

The action requested most from the government are information services, followed by training of employees, hosting of exhibitions, technical guidance, and

organisation of missions. These actions were each requested by over 60 companies. A look by industry shows that the actions requested most by the garment and apparel makers were information services, training of employees, and hosting of exhibitions, in that order, those requested most by the gems and jewellery makers were hosting of exhibitions, information services, and dispatch of missions, and those requested most by rubber-based product makers were technical guidance, information services, training of employees, and dispatch of missions.

Requests to Government

	Garments and apparel	Gems and jewellery	Rubber-based products	Total
1. Technical guidance	26	16	19	61
2. Guidance in quality control	9	6	14	29
3. Training of employees	39	17	17	73
4. Information services	40	19	18	77
5. Inquiry services	15	14	9	38
6. Exhibitions	34	20	14	68
7. Dispatch of missions	27	17	17	61
8. Others	32	8	8	48

Source: Questionnaire survey.

3.4 Existing Problems of Export Industries

It was observed that most of the problems identified by the field surveys of the Garment and Apparel industry, the Gems and Jewellery industry and the Rubber-based Products industry are common to all export-oriented industries in Sri Lanka. These problems are briefly organised as follows:

Production elements

- <1> Unstable supply of materials and auxiliary materials (prices, quality, delivery times, etc.)
- <2> Securing personnel (skilled workers, production managers, etc.)
- <3> Outdated production facilities

- <4> Inadequate maintenance and management of facilities
- <5> A Low level of production technology
- <6> High cost of capital (interest rates, etc.)

Production management

- <1> Insufficient management of factories and processes
- <2> Inadequate quality control
- <3> Insufficient testing and inspection
- <4> Unreliable infrastructure (electrical power and communications in particular)

(2) Marketing/export-related problems

Export markets

- <1> Intense global competition
- <2> MFA quotas

Marketing

- <1> Insufficient marketing concepts
- <2> Shortage of information about targeted markets
- <3> Inadequate sales promotion activities
- <4> Lack of manpower

Corporate assistance

- <1> Limited resources (personnel, funds, equipments etc.) of government agencies and insufficient coordination among agencies
- <2> Insufficient information service
- <3> Slow, complicated procedures
- <4> Insufficient industrial standards
- <5> Insufficient supply of competitive rate financing

Business environment

- <1> Deficiencies in infrastructure (electrical power, communications and transport, in particular)
- <2> Lag in energy conservation and environmental protection measures

- <3> Lack of manpower (managerial skills, marketing, technology development, quality control, etc.)

These problems are analysed in detail in Chapter 2 of this report, Promotion of Export-Oriented Industries.

3.5 Recommendations for Improvement

1) Basic perspective

[1] Strengthening of International Competitiveness by Improvements in Management and Production

Exports can be sustained by strengthening the international competitiveness of the industries in addition to promotional measures and other promotion. The rapid growth of Japan's export industries after World War II was achieved by its export promotion policies and simultaneously by its modernisation of technology, modernisation of facilities, modernisation of conditions of competition, and modernisation of management, pushed forward by a concerted effort in the public and private sectors, all of which resulted in strengthening the international competitiveness of Japan's industries. To start and increase exports, it is essential not only to be competitive in price, but also to strengthen nonprice competitiveness, such as quality, delivery, packaging, design, and responding to consumer requests. When promoting exports, it is necessary to use promotional measures to allocate resources in a manner advantageous to export industries and to rationalise and reinforce management and production.

[2] Elimination of Legacies of Import Substitution Policies

When a policy of import substitution is maintained for a long period of time, disadvantages arise due to the protection of domestic industries and these inhibit exports. The legacies of an import substitution policy are generally said to be the following: (1) an attitude of "rent seeking" ignoring management and production efficiency, improvement, and sales effort and seeking protection and special privileges ("rent seeking wrong skills, wrong attitude"), (2) aging production facilities and low levels of technical expertise, resulting in production of high priced, low quality products ("wrong

production base"), (3) controls on business activities and trade and complicated time-consuming procedures ("responsiveness slowed by regulation"), and (4) lack of export knowhow and experience due to dependence on sales in domestic market ("lack of export knowhow"). In Sri Lanka, since the 1977 economic deregulation, the import substitution policy has been reoriented. In particular, regulations have been eased under the policy of structural adjustment followed since 1988. Some of the above legacies of the previous policy still remain, however, and are hindering exports. It is necessary to sweep them away.

[3] Establishment of Exchange Rates Enabling Competitiveness to Be Maintained

Since the G5 agreement of September 1985, the currencies of the Asian NIE's and the ASEAN countries have followed the U.S. dollar and been devalued with respect to the yen and mark. This adjustment of the exchange rates has remarkably strengthened the price competitiveness of industrial products of the NIEs and ASEAN and have helped to vastly increase exports. The real exchange rate (RER) of Sri Lanka has been appreciated with respect to the main world currencies in the period from 1979/1980 to 1985/1986. Maintaining realistic exchange rates is important for promoting exports.

2) Issues

[1] Establishment of Reliable Infrastructure and Support System

Establishment and expansion of a stable supply of electric power, ports, roads, and other transport facilities, and telephones and other telecommunication facilities are essential for exports and for attracting export-oriented foreign investment. This infrastructure should be built up in preparation for growth in future demand. It is also urgent to establish and strengthen the system of support for export promotion, such as export inspections, standards, and training of manpower for handling the export work. It is desirable that concessionary institutional finance for expansion and modernisation of production facilities for export be expanded.

[2] Implementation of Strategic Export Promotion Programme

To make effective use of limited resources (budget and manpower), exports promotion programmes should be formulated and implemented on a strategic basis.

Specifically, a survey should be made, feasibilities determined for products, targets set for markets, companies for promotion selected (promotion of "champion" companies), and promotion continued on a sustained basis (three or more years). The products, markets, and companies should first be determined, and then promotion should be given in a comprehensive form from production to marketing.

[3] Emphasis on Guidance on Production Floor

To strengthen competitiveness, management and production efficiency and improvement of quality are necessary. Promising firms should be selected and a stress given to direct guidance to those companies on the production floor (production supply oriented approach). Guidance should be given on a sustained basis to the same companies, the state of improvement monitored, and step-by-step guidance provided.

[4] Strengthening of EDB

The EDB is no different from similar export promotion organisations in Asia in terms of scale and number of staff, but it may be said to be engaged in a greater range of activities as it also deals with financial incentives. Private companies in Sri Lanka evaluate the usefulness of these promotional measures very highly. Rather than increase promotional measures, it is necessary to improve access and procedures and strengthen and improve current services such as the collection and dissemination of information, guidance on production technology, and training of personnel for the trade business.

3) Programmes for improvement

The following programmes are recommended for promoting the exports of Sri Lankan products and improving the export promotion organisation and institutions. Note that the action programmes are summarised in separate tables.

(1) Short-term programmes

The programmes which should be implemented immediately are put together as the short-term programme. Several among these have already started to be implemented as action programmes, but to increase their effectiveness they must be

continued for at least three years and the state of implementation and effects of the programmes must be monitored.

1) Programme of comprehensive export promotion, targeting mainly the Japanese and other key markets, covering garments and apparels, rubber-based products, and gems and jewellery, lasting over three years, and focusing on particular companies for promotion. EDB is responsible for implementation.

[1] Formulation of package of programmes for promotion of promising companies

- Survey of industries and companies (pinpointing of issues)
- Selection of companies for promotion
- Diagnosis of companies and preparation of guidance plans

[2] Guidance in matters of production (factory control, production technology, testing and inspection, pollution prevention, etc.)

- Guidance to companies covered on production floors
- Hosting of seminars
- Guidance in development of suitable export products

[3] Guidance in matters of management (management modernisation, quality control, etc.)

- Hosting of seminars
- Overseas training (exposure visits)
- Promotion of industrial associations

[4] Strengthening of marketing

- Collection and dissemination of overseas market information
- Improvement of products for Japanese market and other target markets (monitoring, product adaptation)
- Hosting of seminars on Japanese market and other target markets
- Dispatch of missions (for exhibitions, business meetings, market surveys)
- Reception of missions and hosting of buyers/sellers meetings

2) Programme of comprehensive export promotion, covering industries other than the above three, and focusing on particular companies for promotion. EDB is responsible for implementation.

[1] Survey for selection of industries and companies to be guided

[2] Formulation of comprehensive, sustained programmes

[3] Implementation of overseas marketing survey

[4] Collection and dissemination of overseas market information

3) Programme for strengthening functions and activities of EDB

Active use will be made of the experiences (organisation, measures, etc.) of the promotion organisations of other countries which have successfully promoted exports for strengthening the EDB.

[1] Strengthening of assistance to export companies

- Strengthening of trade consultations, procedural improvements, and exports from regional districts
- Strengthening of information services (library, publications, PR, CTIS)
- Improvement of exhibition techniques (World Trade Centre, EXPO, etc.)

[2] Enhancement of abilities of EDB staff

- Strengthening of knowledge and understanding of overseas markets and products by staff in charge of product management

4) Strengthening of PR and promotion of Sri Lankan products overseas

The image of Sri Lanka is poor in reality compared with the country's resources and potential. PR and promotion will be performed for primarily export products and covering investment and tourism as well so that the image of Sri Lanka can be improved.

- Augmentation of Export Promotion Window (EPW)
- Implementation of in-store promotions
- Improvement of image of Sri Lanka

(2) Medium- and long-term programmes

After exports have commenced and a certain time has elapsed, the experience of the ASEAN countries shows that the inferior quality and servicing of products, insufficient new product development capabilities, the shortage of engineers and manpower for marketing, the insufficient supply of infrastructure, and other problems become bottlenecks hampering sustained growth. It is difficult to solve any of these problems over the short term. The government should take the initiative and deal with these problems over the medium and long term in methodical fashion. Based on the experiences of ASEAN and the problems pointed to by private companies and related government ministries in Sri Lanka, the following measures are recommended to be taken over the medium and long term. The current survey, however, is limited in scope to the export institutions and organisations. It will be necessary to run a separate survey before implementing the following programmes.

1. Establishment of standards, promotion of standardisation, and strengthening of TQM in companies

The SLSI will take the lead and set up industrial standards of an international level, strengthening testing and inspection capabilities, and promote standardisation and TQM (total quality management) at the company level.

2. Fostering of manpower for export marketing

To launch and sustain exports, manpower well versed in marketing, foreign languages, overseas market trends, the trade business procedure and practice, etc. is essential. Small and medium businesses lack such manpower. Even large companies engaging in exports may find themselves confronted with shortages of staff due to their growing export business. The EDB will take the lead and train manpower able to handle export work.

3. Strengthening and augmentation of central common service facility for R&D, testing and inspection, and training

Research and development into raw materials, products, manufacturing technologies, packaging, etc., various types of testing and inspection, the testing of engineers, and the vocational training of workers lay the foundation for development of

an export industry. MIST will take the lead and work to strengthen and augment existing public facilities, primarily for the key export industries, and to strengthen coordination between them.

4. Fostering of managers and improvement of productivity

Modernisation of business management is a task which cannot be avoided if the Sri Lankan companies are to become more internationalised with the growth of the export business. The training of managers and supervisors well versed in modern business management is an urgent task for the efficient running of public-run companies to be privatised. The NIBM will take the lead and promote training of managers and supervisors and implement a campaign for the improvement of productivity.

5. Invitation of experts on private and long term basis

Experts in the fields of production technology, business management, marketing, and the like will be dispatched for one- to two-year periods to provide on-site guidance to promising export companies.

6. Augmentation of financial system for expansion and modernisation of facilities

Private companies in Sri Lanka, in particular small and medium businesses, complain about a lack of funds for export efforts. Many firms, even including the large companies, suffer from antiquated production facilities and small capacities and lack testing and inspection equipment. The EDB should take the lead and promote short-term financing, such as procurement of raw materials, and the increase of the supply of medium and long term funds required for expansion of facilities and modernisation.

7. Study of SAARC Trade, Investment, and Tourism Promotion Centre Concept

Establishment in target countries of permanent facilities with standing exhibition space for the purpose of promotion of exports, investment, and tourism would be extremely effective. This is evident from the tremendous role played by the ASEAN Centre in Japan in promoting ASEAN exports to Japan, investment in ASEAN, and tourism in ASEAN. If it would be difficult for Sri Lanka to set up such permanent facilities on its own, consideration could be given to SAARC setting up such a promotion centre (Refer to Chapter 4).

8. Improvement of infrastructure

The sustained development of export industries requires the establishment of infrastructure such as roads, communications, water supplies, electric power, and ports. In the medium and long term, infrastructure should be established centred in the industrial centres, but for the time being industrial estates with industrial infrastructure should be built.

9. Promotion of supporting industries

Promotion of the supporting industries is necessary for strengthening the foundations of export industries and fostering small businesses. However, development plans should be formulated with due consideration given to the size of industry in Sri Lanka and with care that there are no cost penalties arising due to import substitution.

Action Programmes for Promotion of Exports (1/3)

Programme	Implementing organisation	Action/Activity		
		Follow-up	Short-term (1 to 3 years)	Medium and long-term (4 years or more)
I. Short-term programmes				
<p>1. Comprehensive and sustained programme covering garments and apparel, gems and jewellery, and rubber-based products</p> <p>[1] Formulation of package of EDB programmes for promotion of promising companies</p> <ul style="list-style-type: none"> • Surveys of industries and companies (pinpointing of issues) • Selection of companies for promotion • Diagnosis of companies and preparation of guidance plans <p>[2] Guidance in matters of production (factory control, production technology, testing and inspection, pollution prevention, etc.)</p> <ul style="list-style-type: none"> • Guidance to companies covered on production floors • Hosting of seminars • Guidance in development of suitable export products <p>[3] Guidance in matters of management (management modernisation, quality control, etc.)</p> <ul style="list-style-type: none"> • Hosting of seminars • Overseas training (exposure visits) • Promotion of industry associations <p>[4] Strengthening of marketing</p> <ul style="list-style-type: none"> • Collection and dissemination of overseas market information • Improvement of products for Japanese and target markets (monitoring, product adaptation) • Hosting of seminars on Japanese and target markets • Dispatch of missions (exhibitions, business meetings, market surveys) • Reception of missions and hosting of buyers/sellers meetings 	<p>EDB (IDB)</p> <p>EDB Industry associations</p> <p>EDB Overseas Sri Lankan embassies</p>	<ul style="list-style-type: none"> • Deliberations with related domestic and foreign organisations • Deliberations with industries and companies (selection of experts and decision on survey plans) <ul style="list-style-type: none"> • Deliberations with related domestic and foreign organisations • Deliberations with companies (preparations for guidance, determination of schedule) • Preparations for hosting of seminars <ul style="list-style-type: none"> • Deliberations with related domestic and foreign organisations • Deliberations with companies and industry associations (selection of companies trained, seminar contents, etc.) • Preparations for seminars <ul style="list-style-type: none"> • Deliberations with related domestic and foreign organisations • Deliberations with companies (determination of products covered, themes of guidance, and schedule, selection of companies participating in missions etc., preparations for catalogs and DM) • Preparations for seminars <ul style="list-style-type: none"> • Deliberations with related domestic and foreign organisations • Deliberations with industries and companies (determination of products and companies, preparation of survey plans, determination of experts, etc.) 	<ul style="list-style-type: none"> • Invitation of short-term foreign experts (continued for at least three years) <ul style="list-style-type: none"> • Invitation of short-term foreign experts (continued for at least three years) (corporate guidance and seminars) • Dispatch of entrepreneurs overseas <ul style="list-style-type: none"> • Invitation of short-term foreign experts (continued for at least three years) • Dispatch of entrepreneurs overseas <ul style="list-style-type: none"> • Invitation of short-term foreign experts (continued for at least three years) (corporate guidance and seminars) • Dispatch of missions • Participation in overseas exhibitions • Hosting of business meetings (EXPO and individual) <ul style="list-style-type: none"> • Invitation of short-term foreign experts (corporate guidance and seminars) • Overseas market research • Overseas training 	<ul style="list-style-type: none"> • Invitation of foreign experts on private basis <ul style="list-style-type: none"> • Invitation of foreign experts on private basis
<p>2. Programmes for promotion of exports of other industries</p> <p>[1] Surveys for selection of industries and companies to be guided</p> <p>[2] Formulation of comprehensive, sustained programmes</p> <p>[3] Implementation of overseas market surveys</p> <p>[4] Collection and dissemination of overseas market information</p>	EDB			

Action Programmes for Promotion of Exports (2/3)

Programme	Implementing organisation	Action/Activity		
		Follow-up	Short-term (1 to 3 years)	Medium and long-term (4 years or more)
<p>3. Strengthening of functions and activities of EDB</p> <p>[1] Strengthening of assistance to export companies</p> <ul style="list-style-type: none"> • Strengthening of trade consultations, procedural improvements, and exports from regional districts 	EDB	<ul style="list-style-type: none"> • Deliberations with related domestic and foreign organisations (determination of plans for strengthening and schedules, selection of experts, provision of materials and data, determination of overseas trainees) • Preparations for EDB workshops and in-house training 	<ul style="list-style-type: none"> • Invitation of short-term foreign experts (surveys, workshops, in-house training) • Overseas training of EDB staff 	<ul style="list-style-type: none"> • Invitation of foreign experts on long term basis • Provision of information and data to local offices
<ul style="list-style-type: none"> • Strengthening of information services (library, publications, PR, CTIS) 	EDB Overseas Sri Lankan embassies	<ul style="list-style-type: none"> • Deliberations with related domestic and foreign organisations (determination of plans for strengthening and schedules, selection of experts, provision of materials and data, determination of overseas trainees) • Collection and strengthening of overseas market information 	<ul style="list-style-type: none"> • Invitation of short-term foreign experts (surveys, workshops, in-house training) • Overseas training of EDB staff 	
<ul style="list-style-type: none"> • Improvement of exhibition techniques (World Trade Centre, EXPO, etc.) 	EDB	<ul style="list-style-type: none"> • Deliberations with related domestic and foreign organisations (determination of plans and schedules, selection of experts) • Preparations for workshops and in-house training 	<ul style="list-style-type: none"> • Invitation of short-term foreign experts (surveys, workshops, in-house training) • Overseas training of EDB staff 	
[2] Enhancement of abilities of EDB staff	EDB	<ul style="list-style-type: none"> • Deliberations with related domestic and foreign organisations (selection of products and persons covered, determination of training themes and schedules) 	<ul style="list-style-type: none"> • Overseas training of EDB staff 	
<p>4. Strengthening of PR and promotion of Sri Lankan products overseas</p> <ul style="list-style-type: none"> • Augmentation of Export Promotion Window (EPW) • Implementation of in-store promotion • Improvement of image of Sri Lanka 	EDB Overseas Sri Lankan embassies	<ul style="list-style-type: none"> • Deliberations with related domestic and foreign organisations (preparation of long-term, comprehensive PR and promotion plans, selection of EPW exhibited products by experts, etc.) 	<ul style="list-style-type: none"> • Use of PR companies • Invitation of journalists to Sri Lanka • Preparation of promotional materials 	<ul style="list-style-type: none"> • Establishment of SAARC Trade, Investment, and Tourism Promotion Centre

Action Programmes for Promotion of Exports (3/3)

Programme	Implementing organisation	Action/Activity		
		Follow-up	Short-term (1 to 3 years)	Medium and long-term (4 years or more)
II. Medium- and long-term programmes				
1. Establishment of standards, promotion of standardisation, and strengthening of TQM in companies	SLSI	• Requests for cooperation	• Invitation of foreign experts • Development surveys	• Provision of equipment • Overseas training
2. Fostering of manpower for export marketing	EDB	• Formulation of basic concepts	• Development surveys	
3. Strengthening and augmentation of central common service facility for R&D, testing and inspection, and training	MIST	• Deliberations with related domestic and foreign organisations (formulation of current problems, needs, priorities, and basic concepts)	• Development surveys	
4. Fostering of managers and improvement of productivity	NIBM	• Requests for cooperation	• Invitation of foreign experts • Development surveys	• Provision of equipment • Overseas training
5. Invitation of experts on private and long-term basis	EDB	• PR on current programmes	• Matching of interested companies and experts	• Invitation of foreign experts
6. Augmentation of financial system for expansion and modernization of facilities	EDB	• Surveys of current systems	• Survey of needs	
7. Study on SAARC Trade, Investment, and Tourism Promotion Centre Concept	MIST BOI EDB Overseas Sri Lankan embassies	• Survey of ASEAN Centre	• Deliberations in SAARC	• Recommendations of basic concepts
8. Improvement of infrastructure	MIST etc.		• Construction of industrial estates	• Augmentation of roads, communications, ports, etc.
9. Fostering of supporting industries	IDB MIST EDB	• Recommendations of development survey	• Development surveys and formulation of promotion measures	

4. INVESTMENT PROMOTION POLICIES, SYSTEMS AND ORGANISATIONS

4.1 Scope of Study

This survey had as its object contributing to the promotion of foreign investment, encouraged by Sri Lanka as part of the current "A Strategy for Industrialisation", by throwing light on private foreign investment in Sri Lanka and considering promotion of investment.

The theme covered in this section is direct investment by private foreign capital.

4.2 Current State and Background of Investment Promotion Policies, Systems, and Organisations

1) History of Industrialisation Policy

The industrialisation policy followed by Sri Lanka from its independence in 1948 to 1977 was for protection of domestic industries based on an import substitution policy. A restrictive policy was adopted toward foreign investment and free entry of foreign capital into Sri Lanka was not allowed.

The import substitution policy announced in 1956 was the first official industrial policy hammered out by the Sri Lankan government. Under this policy, government companies controlled basic industries such as ferrous metals, chemicals, cement, fertilisers, and other heavy and chemical industries, while vegetable oil, leather, ceramics, textiles, and other consumer good industries were left to the private sector. In 1956, further, a policy of nationalisation of foreign capital run plantations, transportation, insurance companies, banks, etc. was adopted. Based on this, oil companies were nationalised in the 1960's and plantations in the 1970's.

Further, in 1971, riding the global wave of nationalism, a law for promotion of nationalisation was enacted and Sri Lanka began nationalising all industries, including industries comprised mostly of small and medium sized companies. This nationalisation policy not only caused a decline in the desire of the private sector to invest, but also triggered a flight of capital overseas and sapped vitality from industry. The reason why Sri Lankan industry remains far behind those of the ASEAN nations even today may be found in this excessive past nationalisation policy.

This industrialisation policy was changed in 1977 as the Socialist Sri Lanka Freedom Party (SLFP) administration left office and the Jayawardene administration (United National Party) took over. The Jayawardene administration was oriented toward economic development under an open market economic system, opened the door to foreign investment in Sri Lanka, and worked to establish international competitiveness in businesses. In 1979, it set up Sri Lanka's first export processing zone in Katunayake in the suburbs of Colombo and then set up an export processing zone in Biyagama as well.

In the 10 year period from 1977, the Asian NIEs and ASEAN experienced remarkable industrialisation and economic development, but Sri Lanka was visited with domestic conflicts among its nationalities and found itself at the end of the 1980's with its open door policy having had insufficient effect.

The new Premadasa administration which was born in 1989 pushed forward further with the open, free economic policies inherited from the preceding administration. At the end of 1989, it adopted "A Strategy for Industrialisation" where it called for positive foreign investment. Further, the Premadasa administration secured assistance from the World Bank, the UNDP, etc. in privatisation of government companies.

2) Objectives of Current Development Policies and Industrial and Foreign Investment Policies

The "Strategy for Industrialisation in Sri Lanka" adopted at the end of 1981 set four targets so as to enable the country to achieve industrialisation through promotion of exports and reach the level of a newly industrialised country in the near future: (1) promotion of export-oriented industries, (2) expansion of employment, (3) diversification of export products, and (4) correction of the distribution of income. Nine goals were set for the industrialisation strategy for this:

- (1) Stabilisation at the macroeconomic level
- (2) Promotion of investment and exports
- (3) Promotion of savings
- (4) Encouragement of foreign investment to achieve an inflow of capital and the transfer of technology and opening of overseas markets
- (5) Promotion of privatisation
- (6) Promotion of export-oriented industries

- (7) Strengthening of industrial structure through stronger relations between large companies and small and medium sized companies
- (8) Human resource development
- (9) Elimination of various government restrictions

In this way, Sri Lanka's industrial strategy emphasises promotion of export industries through introduction of foreign direct investment and has as its aim deregulation of the economy through privatisation of government companies and relaxation of restrictions so as to make maximum use of the country's greatest resource, its labour force, and stimulate the economy.

The current industrialisation policy of Sri Lanka is based on nurturing export-oriented industries through direct investment by foreign corporations. This may be considered a realistic change made in reflection of the failure of the past closed system of socialist economic development and in view of the remarkable success in industrialisation in the Asian NIEs and ASEAN.

3) Main Foreign Investment Policies

Foreign capital continues to move briskly in Asia. In the late 1980's, there was a massive inflow of investment there from Japan and the Asian NIEs. The investment tended strongly to concentrate in Vietnam and the rest of Indochina and in South China. Recently, further, in addition to Bangladesh, Sri Lanka, and Pakistan, India has announced deregulation and easing of restrictions, and thus South Asia is rising as a new investment market.

Under these circumstances, Sri Lanka is required to construct an investment environment superior to that of competing countries in order to promote foreign investment. Toward this end, it is taking various steps in terms of both facilities and systems. In terms of facilities, it has set up large-scale export processing zones in two locations, Katunayake and Biyagama, in the suburbs of Colombo and has already succeeded in attracting large numbers of foreign companies there. In addition, it opened a third export processing zone in Koggala in the south in 1991. At the end of 1992, nine foreign factories are reportedly in operation there.

In terms of systems, it has eased restrictions on foreign capital and set up a system for authorisation of foreign investment. It is proceeding with a series of policies granting attractive incentives for investment. The investment authorisation system and incentives will be viewed below.

Fields where investment is authorised: investment is approved upon notification to the BOI for all industries except five small scale retailing and other industries, where foreign investment is not allowed, and banking and another 10 industries, wherein authorisation of a government organisation other than the BOI is required.

Fields which are encouraged and promoted companies: All companies which are located in areas under the jurisdiction of the BOI and meet any one of the following criteria can obtain status as an "area enterprise" and enjoy special advantageous incentives:

- Businesses exporting more than 90 percent of their products, which receive capital and operating funds from overseas and which have a total investment of over US\$250,000
- Infrastructure building businesses helping industrialisation or the tourist industry
- Flagship companies, large-scale businesses with initial investments of over US\$50 million

Companies meeting one of the above criteria which are located outside of the area of jurisdiction of the BOI receive the same incentives as "licensed enterprises".

Conditions for residence in export processing zones: (1) exporting over 90 percent of products (80 percent in Koggala), (2) receiving capital and operating funds from overseas, and (3) having total investment of over US\$250,000.

Restrictions on equity ratio: Except for fields where entry of foreign capital is restricted, in principle up to 100 percent equity is automatically approved. When the foreign equity ratio exceeds 40 percent in one of 14 industries such as "manufacturing industries of export quota products subject to international agreements", however, approval of the BOI is necessary.

4) Investment Promotion Organisations

(1) Board of Investment of Sri Lanka (BOI)

The Greater Colombo Economic Commission (GCEC) was set up in 1978 based on the Greater Colombo Economic Commission Law (No. 4 of 1978) and is

charged with the monitoring and promotion of foreign investment. The range of jurisdiction of the GCEC was initially limited to the Colombo area, but an amendment of the law in 1980 broadened its jurisdiction to areas outside of the Colombo area. Further, in 1990, it merged with the Foreign Investment Advisory Commission (FIAC), which previously was in charge of foreign investment outside the jurisdiction of the GCEC, and therefore serves as a "one-stop centre", i.e., the only government organisation dealing with foreign investment. The name of the GCEC gave the impression that the organisation was an official body having jurisdiction solely over the Colombo region and therefore the name was changed to the Board of Investment (BOI) in November 1992.

The BOI has created export processing zones in two locations, Katunayake and Biyagama, in the suburbs of Colombo and has succeeded in attracting large numbers of foreign companies there. It has also set up a third export processing zone in Koggala in the south. In particular, it is worthwhile to note that the Katunayake and Biyagama export processing zones have been considerably successful in attracting foreign investment.

The BOI engages in a wide range of activities from PR aimed at potential investors to granting of various privileges to existing investing companies. In the export processing zones, the BOI has the same role as a manpower bank. It will act as an intermediary for finding workers for investing companies and has established a "Joint Consultative Councils" in the export processing zones. The council serves to coordinate matters relating to labour affairs.

The BOI has five divisions and provides assistance and services to foreign investors. The names of the divisions and the work they engage in are as follows:

Promotion

- Answering various questions in advance surveys
- Provision of various specialised technical materials
- Serving as a channel for other government organisations and private companies when necessary

Appraisal

- Negotiations with foreign companies and making adjustments to shorten the examination period as much as possible

Investor Services

- After approval, assistance to foreign companies to enable projects to proceed smoothly
- Assistance in procedures for importing raw materials and machinery and equipment
- Assistance in setting up communication facilities

Engineering Services

- Assistance in selection of industrial sites and in procedures for water supplies, garbage disposal services, electric power, etc.
- Assistance in obtaining approval of factory plans
- Necessary assistance in obtaining construction materials

Employment and Industrial Relations

- Assistance in finding workers
- Advice in maintaining good labour-management relations

Recently, the BOI has been engaged in numerous efforts both in Sri Lanka and overseas to promote foreign investment, such as forums and seminars. In 1992, it held a Gam Udawa Investment Forum in Sri Lanka (July), dispatched investment missions to the Republic of Korea (July) and Japan (August), and held investment seminars. It is planning similar activities in Singapore as well.

The BOI is stressing the promotion of investment from Japanese firms. With the idea of appealing to potential Japanese investors, it has prepared a video explaining the investment environment in Sri Lanka in the Japanese language and, in addition, has prepared a small number of Japanese language publications. In general, only insufficient information on Sri Lanka is available in Japan, so in the future it would be desirable for the BOI to prepare even more Japanese language materials.

To attract Japanese companies, presentations of the BOI together with the strengthening of promotion activities in Japan must be considered again in the future, even if the Sri Lankan embassy takes responsibility for them. In the case of the ASEAN countries, the jointly run ASEAN Centre was established in Tokyo with support from the Japanese government and engages in active public relations campaigns. Further, Thailand and Malaysia have set up offices of the Thailand Board of Investment and Malaysian Industrial Development Authority in Tokyo and

engage in Japanese language PR and information services aimed at Japanese companies with the objective of promoting investment. South west Asia does not have any organisation serving South Asia as a whole and corresponding to the ASEAN Centre. Further, none of those countries, excluding India, has set up an independent office in Japan. Improvements in this area should be considered in the future.

Presentation of Asian Investment Promotion Organisations in Japan

	(Sri Lanka)	(Malaysia)	(Thailand)
Name	Board of Investment of Sri Lanka: BOI	Malaysian Industrial Development Authority: MIDA	Board of Investment: BOI
Law on establishment	Greater Colombo Economic Commission Law No.4 of 1978	Industrial Coordination Act 1975	Investment Promotion Act, B.E.2520 (1977) Alien Business Law (1972) Working of Alien Act (1978)
Ministry having jurisdiction	President's Office	Ministry of International Trade and Industry	
Japanese office	None	MIDA Tokyo Office	BOI Tokyo Office
Services to Japanese companies	Provision of materials on investment environment including the Japanese version of investment Promotion video	Provision of materials on investment environment, followup assistance after establishment, and coordination of filed surveys	Provision of general and project-oriented information on investment in Thailand, arrangement of missions and seminars

(2) Industrialisation Commission

Government organisations in charge of promoting investment outside of the BOI include the Ministry of Industries, Science and Technology (MIST) and others in charge of formulation and coordination of industrialisation policies and PR of the same and the Industrial Development Board (IDB) in charge of small and medium sized business policies. The Industrialisation Commission on the other hand establishes policies regarding industrialisation and coordinates policies among related ministries. Financial organisations for financing the industrialisation include the National Development Bank, the Development Finance Corporation, commercial banks, merchant banks, unit trusts, and mutual funds.

The Industrialisation Commission was launched in 1991 under the Industrial Promotion Law with the aim of smoothing the inflow of foreign capital. It is the highest policy-making organisation for the promotion of industrialisation and is comprised of Secretaries of the Ministry of Finance, the Ministry of Industries, Science and Technology, the Ministry of Policy Planning and Implementation, and another three ministries, the chairman of the BOI, the president of the Central Bank, the chairman of the EDB, and five representatives of private business. Important policy matters relating to investment such as the adoption of the "Foreign Investors' Guide" announced in September 1991 are deliberated on at this commission.

4.3 Current State of Foreign Investment

1) Trends in Foreign Investment

A look at the trends in foreign investment in Sri Lanka since the 1970's by the investment projects approved by the BOI shows that the peak years were 1978 in terms of the number of approvals, 53, and 1980 in terms of the value of the investments approved (scheduled foreign investment), Rs. 2.699 million. For the FIAC projects, the past peaks in terms of the projects starting operations were 1980 and 1981, when 51 and 50 projects in operation were recorded. The peak year for scheduled foreign investment in FIAC projects was 1983, with Rs. 5.437 million. This reflects the rising tide of foreign investment in Sri Lanka caused just after 1977, when the government shifted from a controlled economy to deregulation.

After that, the deterioration in political and social stability caused by the outbreak of civil conflicts in the 1980's resulted in a rapid fall in foreign investment in Sri Lanka. In the first half of the 1980's, only several dozen projects were approved a year. The value of the investments fell to the low level of Rs. 100 million or so in 1983, 1985, and 1986. This slump in foreign investment finally ended in the late 1980's.

2) Recent Investment Trends

Since late 1990, when the minority conflicts were localised and public order consequently restored, signs finally began appearing of a recovery in foreign investment in Sri Lanka. There were 40 investments worth Rs. 2,234 million approved by the BOI in 1990. Foreign investment moved further toward recovery in 1991 counting 79 projects approval, 7,896 million \$. This was probably a result of the

favorable impression created among overseas investors by the series of measures taken since 1989 to ease regulations and to promote investment in addition to the restriction of the civil conflicts to the northern and eastern states and the restoration of public order in the other regions.

During January-June 1992, the number of projects approved by the BOI jumped to 101. These were valued at Rs. 6,334 million.

From 1978 through June 1992 the BOI approved a total of 527 foreign investment projects valued at Rs. 29,450 million. Contracts with the BOI have been completed for 308 of the projects as of June 1992, with foreign investment worth Rs. 19,044. This accounts for 58 percent of the number of projects and 64 percent of the total approved investment.

179 projects had already entered into commercial production by mid-1992. Of these, 77 are located in the Katumayake EPZ, 33 in the Biyagama EPZ, and 7 in the Koggala EPZ. The remaining 62 are located in areas outside the export processing zones. In terms of nationality, 32 of the projects are from South Korea, 26 from Hong Kong, 17 from Japan, 11 from the U.K., 10 from Switzerland, 10 from the Netherlands, 9 from Germany, and 8 from the U.S. Thus it can be seen that Republic of Korea, Hong Kong, and Japan are the driving force behind foreign investment in Sri Lanka (see Table 34).

When broken down by industrial sector, the highest concentration of foreign investment was found in the garments and apparel sector. Of the 179 projects mentioned above, 54, or 30 percent, are engaged in the manufacture of garments and apparel. This was followed by gems and jewellery, with 14 projects, electronics and electrical products with 12, non-ferrous metals with 10, rubber products with 9, metalworking with 9, textiles with 9, and PVC products with 9 (see Table 35). In the three fields of garments and apparel, gems and jewellery, and rubber products, firms from the Republic of Korea and Hong Kong, typically in garments and apparel, accounted for a large portion of firms from the Asian NIEs and Japan (see Table 36).

3) Investment by Japanese Companies in Sri Lanka

Japanese investment in Sri Lanka has totaled some three to four projects a year up to now. According to statistics of the Japanese Ministry of Finance (see Table 37), which show investments notified to it, there were a cumulative total of 126 investments approved from fiscal 1951 to 1991, worth some US\$102 million. Sri Lanka is the

largest investment destination in South Asia after India and Pakistan. Still, judging from the change to a policy of economic deregulation in 1977 by Sri Lanka and the positive measures taken to promote foreign investment and also trends in Japanese foreign investment since the 1985 Plaza Accord, the amount of investment in Sri Lanka cannot be said to have been that great.

In this way, investment by Japanese companies in Sri Lanka has been slower than in other countries such as the ASEAN countries. This was probably due in large part to the apprehensions among Japanese business over political and social instability in Sri Lanka. On the other hand, many Japanese companies are unfamiliar with the investment environment in Sri Lanka. In addition, Sri Lanka has not engaged in sufficient publicity in Japan to promote investment.

A look at the cumulative total of foreign investment in Sri Lanka for the period from 1978 to September 1990 by country shows that among the GCEC approved investments, Hong Kong companies were the most numerous at 47, followed by Republic of Korean companies at 44, old West German companies at 35, Japanese firms at 29, U.S. companies at 27, British companies at 26, and Indian firms at 22. In terms of the old FIAC approved investments (cumulative total from 1977 to October 1990), British firms were the most numerous at 114, followed by Hong Kong companies at 97, Singaporean firms at 89, old West German companies at 89, Japanese firms at 75, U.S. firms at 72, and Indian firms at 44.

4.4 Overseas Direct Investment by Japan and Asian NIEs

1) Direct Investment by Japan in Asia

Let us examine the trends in Japan's foreign investment by statistics of the Japanese Ministry of Finance (Table 37), which show the number and value of investments notified to the Ministry.

By region, investment has concentrated most in North America. Over 44 percent of all investment has been made in North America, with the U.S. accounting for 42.2 percent of investments. Next after North America comes Europe at 19.5 percent, followed by Asia at 15.2 percent.

Within Asia, the largest amount of investment has gone to Indonesia, with 2021 investments worth US\$12,733 million being made there. Following Indonesia, the

biggest destinations for investment have been Hong Kong, Singapore, Thailand, Republic of Korea, Malaysia, and China. Sri Lanka comes after this and is ranked 14th in Asia. It counts 126 investments worth US\$102 million.

Japan's overseas investment soared in the late 1980's, but in these past two to three years investment has been slow due to the slump in Japanese economy, the completion of large-scale projects, and other factors. Still, it is projected that Asia will become the centre of Japanese investment. While the surge in investment to Asia, primarily ASEAN, in the late 1980's has cooled down somewhat in the past two to three years, in the long term, investment in Asia should continue to grow. At the same time, Japanese based subsidiary companies in South East Asian countries are exporting more to Japan and neighbouring Asian countries (Table 38).

2) Direct Investment by Asian NIEs in ASEAN

Direct investment by the Asian NIEs in Asia has been increasing, so we will look at this by the foreign investment made in three ASEAN nations (Table 39-41).

Thailand: According to statistics on approvals announced by the Thai Board of Investment (BOI), there were 390 foreign investments approved in 1991, down 37 percent from the previous year, worth 127,279 million bahts, down 65 percent. In addition to the political stability, there are problems with infrastructure, such as the road situation in Bangkok, now close to the saturation state, and a shortage of skilled workers, middle management, and other higher grade labour. In addition to these domestic factors, the main investors, companies from Japan, Taiwan, etc., are experiencing difficulties in raising funds due to the business recession. These internal and external factors have resulted in a drop in investment.

Even should this trend continue for a few years, from the medium and long term perspective, investment by Japan, the Asian NIEs, and ASEAN in Thailand will not rapidly die out. Once the investment environment is improved by construction of infrastructure in Thailand and the recessions in the investing nations end, foreign investment in Thailand is expected to turn for the better.

Malaysia: According to statistics of approvals of foreign investment in Malaysia announced by the Malaysian Industrial Development Authority (MIDA), approvals fell about 10 percent in 1991 from the previous year to M\$15.9 billion. In the top 10 investing countries, Taiwan was at the lead, followed by Japan at second place, and

then seven Asian countries. The seven Asian countries accounted for about 73 percent of the investments on a value basis.

Indonesia: The Indonesian Investment Coordinating Board (BKPM) has announced cumulative totals of foreign investment since 1967. Let us look at the cumulative number of investments approved up to 1991.

Japan stands at the top in terms of foreign investment in Indonesia, accounting for 472 projects, or 21 percent of the total, worth about US\$11.4 billion, or 23 percent of the value. Among the top 10 investing countries, Japan stands at number one followed by Hong Kong, Taiwan, Republic of Korea, and Singapore, so there are five Asian investors. These five investors account for 60 percent of all projects approved, worth 47 percent of the value.

As is clear from the trends in investment by Asian countries in these three ASEAN nations, investment from Japan and the Asian NIEs accounts for the majority of the investment in the three ASEAN nations. Further, Singapore is included among the top 10 investors in Malaysia and Indonesia. Investment within the ASEAN region itself is therefore also growing.

Due to the restrictions on investment which have recently appeared in the ASEAN countries that is, the bottleneck in infrastructure and the shortages of engineers, middle management, and other higher grade labour, signs are appearing of investment in production of labour-intensive goods shifting from Thailand and Malaysia to Vietnam, China, and South Asia. Sri Lanka is said to gradually draw attention as an investment site from not only Japan and the NIEs, but also Singapore, Malaysia, etc.

4.5 Investment Demand of Sri Lankan Companies and Japanese Companies

1) Expectations of Sri Lankan Companies on Foreign Investment

The questionnaire survey run on three industrial subsectors (garments and apparel, gems and jewellery, and rubber products) showed that a large number of companies in the fields of garments and apparel and rubber products desired joint ventures and technical tieups with foreign companies. In the field of gems and jewellery, there were fewer companies expressing an interest in joint ventures and

tieups compared with the above two fields, but about half of the companies still responded they desired ventures or tieups.

As the foreign companies with which tieups were desired, the overwhelmingly large number of respondents indicated Japanese companies both for joint ventures and technical tieups, showing a high degree of interest in Japanese firms. As to what was expected from the foreign companies, the answers were diverse, including capital, technology, marketing, improvement of quality, and product development, but particularly strong expectations were expressed on technology and capital in all three fields, followed by marketing.

A Summary of the questionnaire survey is shown in Table 42.

2) Evaluation of Sri Lankan Investment Environment by Japanese Companies

A questionnaire survey on investment demand was run on Japanese companies (179 valid responses) and questioned the companies on the merits of Sri Lanka as an investment site. Responses were received on this from 125 of the 179 respondents. The merit mentioned most often was labour costs, in 47 percent of the cases. Next came the securing of a base for export production, 20 percent, and procurement of raw materials and labour, at 9 percent each (Table 43).

The problems mentioned with regard to Sri Lanka as an investment site were a shortage of infrastructure, 44 percent, an insufficient development of related industries, 43 percent, the political and social situation, 36 percent, shortages of engineers and skilled workers, 32 percent, and difficulties in obtaining raw materials, 29 percent.

Further, 146 of the 179 companies, or 82 percent, indicated that they did not know of the investment incentives offered by Sri Lanka. Only 27, or 15 percent, answered that they knew of them.

The reasons given for the lack of interest in investment in Sri Lanka were a shortage of sufficient information on the investment environment in Sri Lanka, mentioned by 35 percent of the respondents, the political and social situation in Sri Lanka, 30 percent, and no interest in overseas investment at all, 12 percent, or 22 companies.

3) Current State of Japanese Companies Investing in Sri Lanka and Evaluation of Investment Environment by Same

Questionnaires were sent to 34 Japanese companies with investments in Sri Lanka. These 34 companies included 26 in the manufacturing sector and eight in the nonmanufacturing sector. The result of the questionnaire survey is summarised below, based on 16 responding manufacturing companies (in details, Table 44).

(1) Motivation Behind Investment

The motivation behind investment in Sri Lanka mentioned most often (multiple responses allowed) was "securing labour". Eight out of the 16 responding Japanese affiliated companies said they had want to obtain labour.

Next came "supply of products to third countries", mentioned by six companies. It is clear that the biggest group of Japanese investments is in the labour intensive industries. Japanese manufacturers have shifted their export production bases to Sri Lanka, where labour costs are low and sufficient labour can be obtained, to deal with the problem of the shortage of workers in Japan.

Five companies indicated they invested to "expand sales channels in the local market". This indicates that there was some investment aimed at import substitution in Sri Lanka.

(2) Reasons for Selection of Sri Lanka

The most frequent response was "labour force/labour costs", by 11 companies. Next came "export processing zones", mentioned by seven firms, and "incentives for foreign investment", by six. Four companies indicated that they had "previous business relations with Sri Lanka".

(3) State of Operations in Sri Lanka

The companies were asked if their operations in Sri Lanka were "smooth" (making a profit), "in the red" (losing money), or "balanced" (not making money, but not losing it either). Eleven of the 16 responding companies answered their operations were "smooth", i.e., over 60 percent of the companies were operating well. Four companies answered their operations were "in the red" and none that they were "balanced".

In response to a question as to from what year the companies answering their operations were "smooth" start to make a profit, four responded the first year and three from the second year. In other words, many companies found their operations running smoothly right from the start.

(4) Comparison of Quality and Cost of Sri Lankan Products

The companies were asked how Sri Lankan products compared in quality with comparable items made in Japan and how much cheaper the costs of production were in Sri Lanka, if at all.

One out of the 16 responding companies answered that products made in Sri Lanka were better in quality than comparable products made in Japan, 12 that the products were the same in quality, and one that the quality of Sri Lankan products was inferior.

Next, the companies were asked if the manufacturing costs were lower, the same, or higher than those of comparable products made in Japan and to what extent they were the same. Ten of the 16 responding companies answered costs were lower, two that they were the same, and only one that they were higher.

(5) Problems in Management

The companies were asked what kind of problems they encountered in management. The most frequent response was "political instability", in eight cases, followed by "infrastructure", in seven.

(6) Evaluation of Employees

Seven companies indicated that they were satisfied with their workers, while three indicated that they were satisfied with middle management. None of the companies indicated they were dissatisfied with their workers, but five indicated they were dissatisfied with middle management. Eight companies responded their workers were only fair, while seven indicated the same for middle management.

(7) Employment and Training of Employees

The BOI offers a service whereby it provides companies with the necessary number of workers in the same way as an employment agency. Companies

residing in export processing zones can therefore secure workers directly from the BOI. Seven of the 16 responding companies indicated that they had obtained their workers through the BOI, while nine indicated that they had used other methods. These methods were newspaper advertisements (six companies), introductions from local governments (one company), introductions from a local diet member (one company), and notices in the factory (one company).

The type of worker training used by the most companies was training in Japan, in the case of 11 companies, and on-the-job training in the case of five.

(8) Evaluation of Investment Environment

Two companies indicated that they were satisfied with the basic foreign investment policies of Sri Lanka, two that they were dissatisfied, and 12 that the policies were only fair.

Some comments regarding the foreign investment policies were as follows: "The ministries are not under a single control, so there is a tendency for a lot of talk, but no one taking any responsibility. Some central control over policies should be instituted", "We invested in the beginning with the assumption that import substitution type companies would be protected. Despite this, there were subsequently changes in policy, so that import substitution type companies are no longer protected".

Regarding the infrastructure, there were few companies indicating they were satisfied with the electrical power system. The overwhelming majority conversely indicated they were dissatisfied with it. Infrastructure dissatisfied with included the power system (nine companies dissatisfied), telecommunications (nine companies), railroads (seven companies), road conditions (12 companies), waste disposal (disposal of industrial waste products) (10 companies), etc.

(9) Evaluation of Investment Incentives

Four companies indicated that they were generally satisfied with the existing incentives for foreign investment, while five indicated that while the system was in place, there were problems in its operation and another four that there was room for improvement in the incentives.