

**THE STUDY ON SELECTED  
INDUSTRIAL PRODUCT  
DEVELOPMENT IN MALAYSIA**

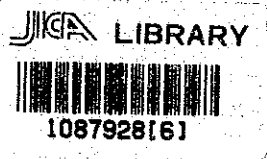
**TOTAL REVIEW OF  
THE THREE YEARS' STUDIES**

**NOVEMBER 1990**

**JAPAN INTERNATIONAL COOPERATION AGENCY**

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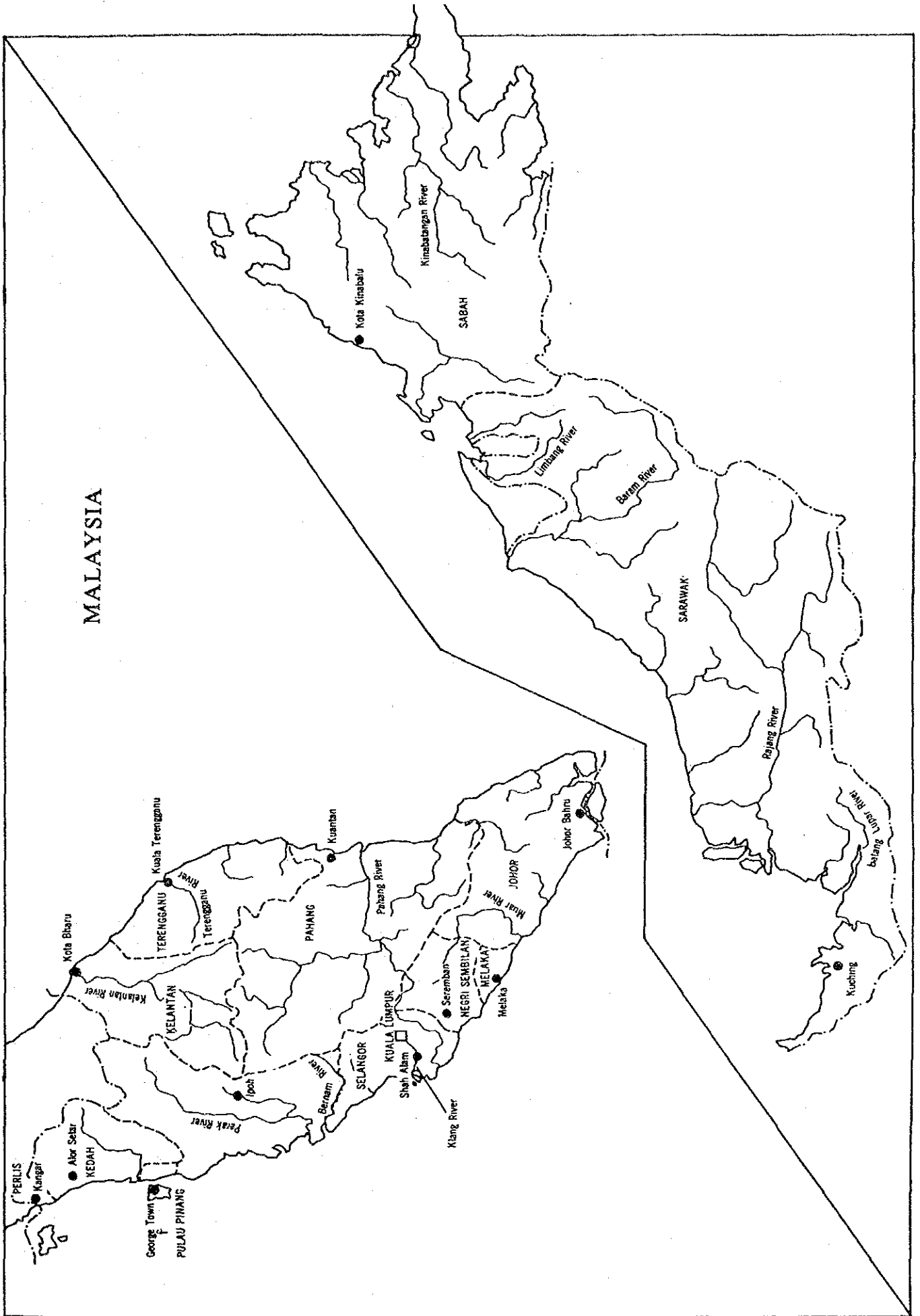
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# MALAYSIA





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## **I. Introduction**

## **I. Introduction**

This is a compilation of the recommendation programmes which have been formulated based on three years' studies and constitutes one part of the Final Report of the Third Year Study on Selected Industrial Product Development in Malaysia.

This study is based on the Scope of Work for the Study on Selected Industrial Product Development in Malaysia agreed upon by the government of Malaysia and the Japan International Cooperation Agency on August 1, 1987. The First Year Study began at the end of January 1988 and the Third Year Study ended in November 1990.

This Report was completed as a collective edition of the priority projects formulated from the review and compilation of the recommendation programmes, in the Third Year Final Report.

### **I-1. Background and Objective of the Study**

The Asian countries are striving to build up local industries so as to strengthen their economic structures and to push forward with aggressive programmes for the invitation of foreign investment in order to rapidly build up export-oriented industries contributing to the acquisition of foreign currency instead of promoting import-substitution type industries.

Malaysia is currently pushing forward with the promotion of 12 sectors, primarily export-oriented industries of the type using existing resources, in line with the "Industrial Master Plan (IMP) 1986-1995," which was officially announced in January 1986. The Malaysian Export Trade Centre (MEXPO) selected certain key products for export promotion. The IMP is envisaged as the pillar of the economic plan and aims at an annual 8.9% increase in exports of manufactured goods from 1986 to 1995.

Since the G5 conference of the financial heads of five advanced nations in September 1985, the yen has been appreciating in value and the U.S. dollar has been depreciating. The currencies of the Asian NIES are also under pressure for reevaluation upward against the U.S. dollar. This has led to a rapid change in the international environment for exports. In particular, in the highly labour-intensive manufacturing fields, Japanese and NIES' companies have been increasingly investing in the ASEAN region in export-oriented industries. Under the Fifth Malaysia Plan, which began in 1986, Malaysia has been striving to enlarge the role of the private sector, achieve greater efficiency in the management of its economy, and promote industrial development. In line with this, it has relaxed its restrictions on foreign investment for export-oriented manufacturing industries and has come out aggressively to promote foreign investment.

The present Study on Selected Industrial Product Development in Malaysia aims at comprehensive cooperation for the development of strategic export industries. The objective of this study is to survey and analyse the state of selected industries in Malaysia and to formulate a comprehensive programme for industrial development with the aim of promoting exports. Further, it seeks to organize information on Japanese firms wishing to make investments or establish joint ventures in these industries so as to promote joint ventures and technological tie-ups between Japan and Malaysia.

## **I-2. Implementation of the Study**

In April 1986, the Malaysian government submitted a request to the Japanese government for a "Technical Cooperation Project on Industrial Sector Development." Receiving this, the Japan International Cooperation Agency (JICA) sent a contact mission in September 1986 to deliberate with the Economic Planning Unit, Prime Minister's Department (EPU), the Ministry of Trade and Industry and the Malaysian Industrial Development Authority (MIDA) and reached agreement with them on the basic objectives and content of the technical cooperation in industrial sector development between Japan and Malaysia. Based on this, the JICA sent a short-term expert to MIDA from February to August 1987 to select the target industries, resulting in the selection of the later mentioned industries. JICA then sent the Preliminary Survey Team in August 1987 and signed the Scope of Work including the selected industries with the Malaysian side.

The First Year Study started at the end of January 1988 and the report was completed in September of the same year. The Second Year Study began in the middle of October 1988 and the report was completed in July 1989. The Third Year Study started in the middle of October 1989 and ended in November 1990. The personnel involved from both the Japanese and Malaysian sides are shown in Annex 2 and 3.

## **I-3. Industries to be Surveyed**

The industries surveyed during the three years of study were as shown on the next page.

The industries surveyed were selected based on the list proposed from the Malaysian side.

### Subsectors and Products Surveyed for Three Years

	Subsector	Product
1st year	Engineering	(a) Moulds and dies
		(b) Automotive metal parts
	Non-Metallic Products	(c) Chinaware (tableware and decorative ware)
		(d) Glassware (except sheet glass)
2nd year	Electronics	(a) Office electronic equipment
		(i) Word processors
		(ii) Photocopying machines
		(iii) Facsimile machines
		(iv) Telex machines
	Rubber	(b) Cathode ray tubes
		(c) Ceramic packages/substrates
		(d) Rubber footwear
3rd year	Engineering	(a) Castings
	Electronics	(b) Computers and computer peripherals
		(i) Microcomputer
		(ii) Monitors/video display unit
		(iii) Printer
		(iv) Keyboard

As mentioned earlier, the Malaysian government has selected the following 12 industries for priority development in its Industrial Master Plan 1986-1995.

- (1) Resource-based Industries
  - [1] Rubber Processing Industry
  - [2] Palm Oil Products Industry
  - [3] Food Processing Industry
  - [4] Wood-based Industries
  - [5] Chemicals and Petrochemical Industries
  - [6] Nonferrous Metal Products Industry
  - [7] Non-Metallic Mineral Products Industry
- (2) Non-resource-based Industries
  - [1] Electronics and Electrical Industry
  - [2] Transport Equipment Industry
  - [3] Machinery and Engineering Products Industry
  - [4] Ferrous Metal (Iron and Steel) Industry

## **[5] Textiles/Apparel Industry**

Further, the Malaysian Export Trade Centre (MEXPO) has designated the following as important items for export:

Foodstuffs (including cocoa, seasonings, fruits, and seafood), feed, beverages, tobacco, cement, precious stones, ceramics, glass, furniture, wood products, rattan products, chemical products, fertilizers, pharmaceuticals, oils and fats, textiles, apparel, weaving thread, weaving cloth, carpets, handicrafts, jewelry, electronic and electric products and parts, musical instruments, machinery, metal products, sports goods, toys, cut flowers, rubber products, plastic products, footwear, leather goods, stationery, and auto accessories.

The Malaysian government proposed industries and items to be covered under this study by taking into consideration the priority industries identified under the IMP and the key items for export promotion identified by MEXPO as well as the recent trends in direct investment by Japanese firms and firms from NIES and other areas. A final decision on which industries and items would be surveyed was made through negotiations between the Malaysian and Japanese sides based on the subsectors and products proposed by the Malaysian government.

### **I-4. Scope of Study**

The details of the items of the survey under this study were decided as follows, based on the Scope of Work agreed on August 1, 1987:

- (1) To overview the present situation of the selected industrial products:
  - a) Production items and their production, trade and manufacturers; and
  - b) investment, technological partnership, finance, taxation, introduction of foreign capital, etc.
- (2) To study the existing status of manufacturing establishments in Malaysia for the selected industrial products. These studies are to cover the following areas:
  - a) Manufacturing processes and specifications
  - b) Technical level (quality control, etc.)
  - c) Product development (designs, etc.)
  - d) Business administration (business management, fund-raising, etc.)
  - e) Sales strategies (market research, marketing, etc.)
  - f) Relation with periphery industries (raw materials, equipment, etc.)

- (3) To study the export markets of the selected industrial products:
- a) Supply and demand and import situations in major importing countries;  
and
  - b) marketability of the selected industrial products in major importing countries
- (4) To recommend policies and measures for development, technical upgrading and export promotion for the selected industrial products. The areas to be covered are as follows:
- a) Systems and policies
  - b) Technical improvement
  - c) Product improvement
  - d) Sales strategies
  - e) Business administration
  - f) Manpower development
  - g) Improvement of infrastructure relating to the selected products
- (5) To undertake cost-analysis studies for the selected industrial products which are to include cost-comparison studies for the production of similar products in Japan.
- (6) To undertake a study and survey to ascertain and identify Japanese enterprises for the selected industrial products which are keen to undertake direct investment and/or technical collaboration in Malaysia. The study/survey is to cover the following:
- a) survey on enterprises intending direct investment and technical collaboration
  - b) List of enterprises

Separately from the study on selected industries, in the Third Year Study the programmes proposed for each product in each of the three years were reviewed and compiled. The background and basic concepts for review and compilation are explained in a later section.

## **II. Comprehensive Promotion Programmes Proposed for Each Selected Industry**



## **II. Comprehensive Promotion Programmes Proposed for Each Selected Industry**

### **II-1. Comprehensive Promotion Programmes for the Mould and Die Industry**

#### **(1) Basic Strategy**

In the mould and die industry of Malaysia, a portion of the foreign-owned industry is equipped with high technology. However, the industry comprises mostly small scale local enterprises.

The mould and die industry in Malaysia produces widely for the electrical, electronics and automobile industries. The industry is expected to grow in the future at a yearly rate of 30%.

The problems the mould and die industry of Malaysia faces are as follows:

- 1) Lack of skilled workers and designers  
Every company lacks skilled workers and designers, a situation for which urgent solution measures are needed. To raise technical standards, it is necessary to develop skilled workers and designers.
- 2) Lack of modern management control systems  
There are many enterprises which do not have modern management control systems. An improvement in the management systems of firms is needed.
- 3) Insufficient cooperation with international enterprises  
Cooperation with international enterprises is a very effective method for improving technical standards. For producing precision moulds and dies in particular, for which demand is increasing, cooperation with foreign enterprises is a shortcut.

In light of the above circumstances, following are the basic strategies of a comprehensive programme to build up the mould and die industry in the future.

<b>Basic Strategies for Promotion of the Mould and Die Industry</b>
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- |   |
|---|
| <ol style="list-style-type: none"><li>1. In order to improve technical standards and to train high-level special technicians for the mould and die industry, the MIDEDEC (Metal Industry Development Centre) would have to be expanded.</li></ol> |
|---|

2. To train middle-level technicians in local areas, with the cooperation of the government and the private sector, early establishment of the Penang Tooling Centre would be expected.
3. Additional education is a standard technique to improve production and business administration skills.
4. There should be more promotion to attract investment from overseas enterprises.

## **(2) Proposed Comprehensive Promotion Programmes**

Based on the problems related to the promotion of the mould and die industry in Malaysia, the following promotion programmes were proposed for promotion of the industry. The process of the identification of the comprehensive promotion programmes is shown in Fig. II. 1-1.

### **Programme 1. Expansion of MIDEC (Metal Industry Development Centre)**

- To expand MIDEC activities such as technical seminars and to make better use of its facilities.
- To install advanced CNC machines for technology transfer.
- To invite foreign experts having advanced technology.
- To train technical instructors overseas.
- To collect and supply technical information.

### **Programme 2. Support for the Establishment of Skill Development Centre**

- To invite consultants for planning and designing.
- To train technical instructors overseas.
- To introduce necessary machinery and equipment.
- Practical technical training by foreign experts.
- To collect and supply technical information.

### **Programme 3. Expansion of Polytechnic and ITI Activities**

- To prepare a curriculum specifically for moulds and dies.
- To prepare technical manuals.

- To expand the machinery for education and training.
- To provide practical instruction in design, production and set-up of moulds and dies by foreign experts.
- To train technical instructors overseas.
- To collect technical information.

#### **Programme 4. Intensification of Training Scheme for Managers**

- To provide training seminars for managers.
- To expand management consulting services.
- To prepare technical manuals.
- To train managers overseas.
- To collect and supply management and technical information.

#### **Programme 5. Introduction of a Model Factory System for Moulds and Dies (Expansion of SIRIM activities)**

- To invite consultants for making plans.
- To provide technical training by foreign experts.
- To train technician overseas.
- To apply financial and tax incentives.

#### **Programme 6. Introduction of Financial and Tax Incentives to Modernize Machinery and Equipment**

- To introduce a low interest financing scheme for modernization of equipment.
- To expand incentives for overseas training.

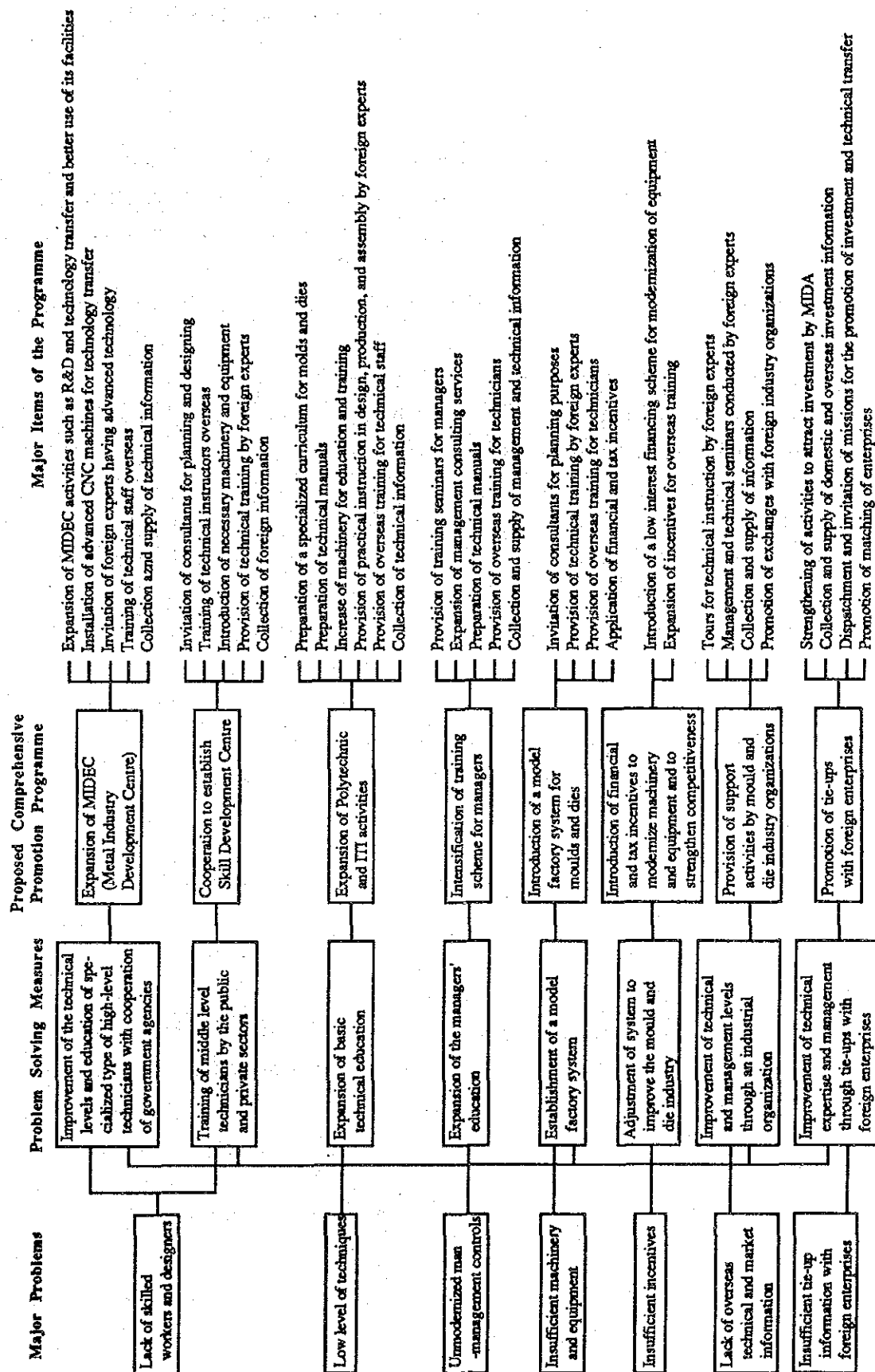
#### **Programme 7. Provision of Support Activities by Mould and Die Industry Organizations**

- To have tours of technical instruction by foreign experts.
- To hold management and technical seminars by foreign experts.
- To collect and supply information.
- To promote exchanges with foreign industry organizations.

#### **Programme 8. Promotion of Tie-ups with Foreign Enterprises**

- **Strengthening of activities to attract investment by MIDA.**
- **To collect and supply domestic and overseas investment information.**
- **To dispatch and invite missions for the promotion of investment and technical transfers.**
- **To promote matching of enterprises.**

Fig. II. 1-1 Process of Formulation of Comprehensive Programmes for Development of Mould and Die Industry



## **II-2. Comprehensive Promotion Programmes for the Automotive Metal Parts Industry**

### **(1) Basic Strategy**

At the core of Malaysia's automobile industry is PROTON, which produces the national car. Major part of its aim is to promote related industries. Considering the fact that the country's population is 16.5 million, its purchasing power is not very large, and a recent decrease in auto production has affected the automotive parts very badly.

Following are the problems of the automotive metal parts industry in Malaysia:

- 1) A gap between production and manufacturing technology.  
Both enterprises having foreign tie-ups and those without them have low technical levels. A plan to cope with this situation is necessary.
- 2) Noncompetitive prices.  
Considering present technical standards, production levels and control prices are not competitive. It is necessary to take measures to promote domestic production.
- 3) Low production volumes.  
Expansion of exports is needed in order to assure volume production of automobiles in Malaysia.

Noting the above background and problems, the basic strategies for a comprehensive programme to promote automotive metal parts industry in Malaysia are as follows.

#### **Basic Strategies for Promotion of the Automotive Metal Parts Industry**

1. To promote domestic production of components for automotive metal parts, it is necessary to master production and manufacturing technology. Establishment of a technical development unit for domestic automotive parts within the SIRIM is to be carried out in order to make up for lacking technical abilities, to establish a continuing system of research, and to extend the results to the private sectors.
2. Expand technical education and education of managers.
3. Increase activities to attract investment from foreign enterprises in order to promote effectively domestic production.
4. Support export promotion.

## **(2) Proposed Comprehensive Promotion Programmes**

Based on the problems related to the promotion of the automotive metal parts industry in Malaysia, the following promotion programmes were proposed for promotion of the industry. The process of the identification of the comprehensive promotion programmes is shown in Fig. II. 2-1.

### **Programme 1. Establishment of a Technical Development Unit for Automotive Parts in SIRIM**

- Establishment of a technical development unit for automotive parts in SIRIM to supply information concerning metals. Research materials will be introduced and field surveys will be carried out by experts when necessary.
- Research on manufacturing techniques for parts and provision of services to manufacturers.
- To supply technical information to private enterprises.
- To provide overseas training for Malaysian instructors.

### **Programme 2. Expansion of the Programme to Educate Technicians and Workers in such organization as ITI or to Educate Managers at NPC**

- Provision of technical guidance for parts manufacturers including subcontracted enterprises.
- To organize seminars at NPC for managers. (Subjects will include quality control, automation, improvements in productivity, cost accounting, multiple equipment operation and safety measures.)
- To prepare a curriculum to strengthen actual training such as of soldering and metal manufacturing at vocational training facilities.
- To provide training for technicians dispatched to joint and technical tie-up enterprises.

### **Programme 3. Promotion of Technical Tie-ups and Attraction of Investment**

- Dispatch of missions to promote investment.
- To strengthen investment promotion activities by MIDA.
- To invite investment missions from abroad.

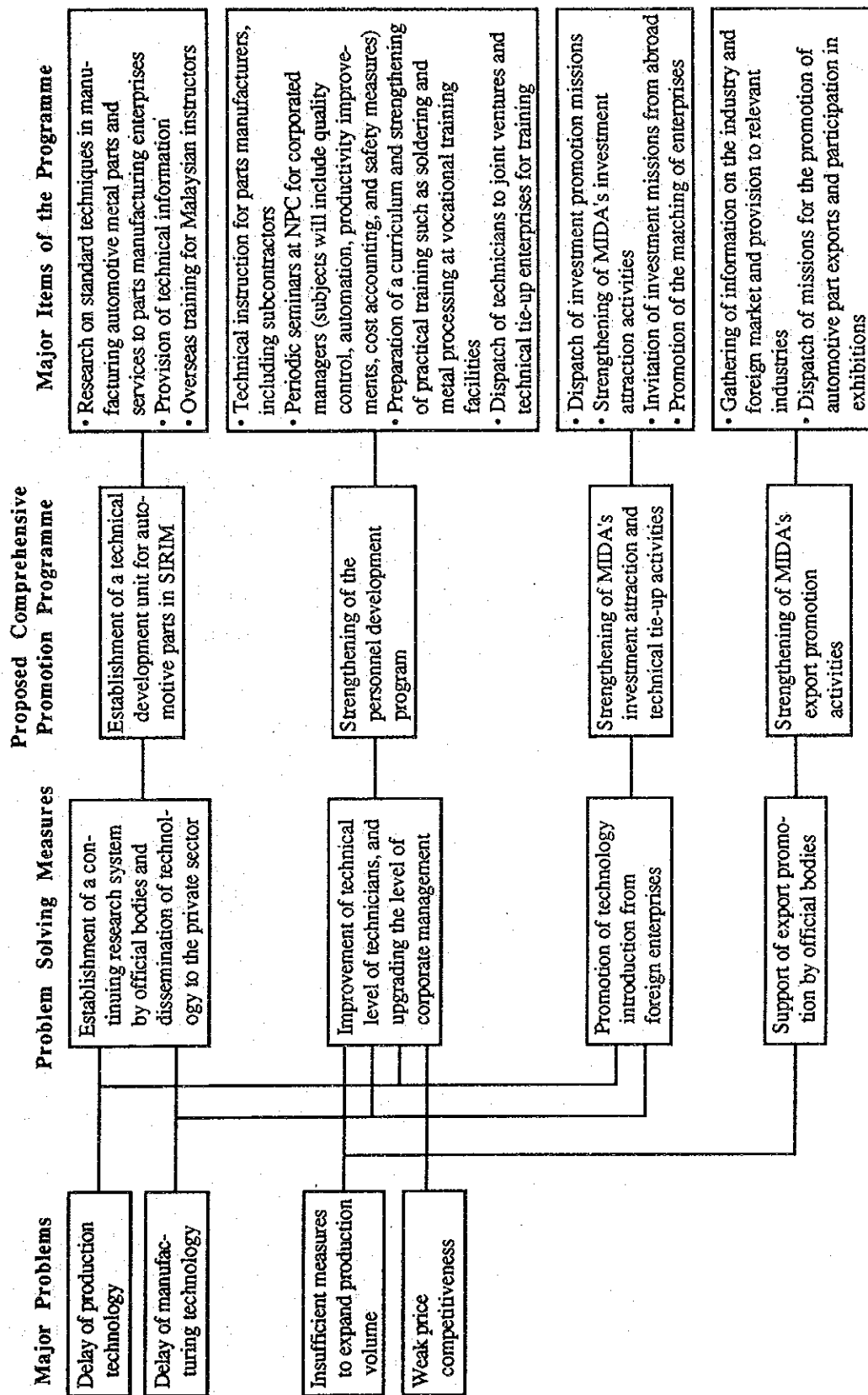
- To promote matching of enterprises.

**Programme 4. Strengthening of the Promotional Activities for Export of Automotive Parts by MEXPO**

- To collect informations on the industry and foreign markets, and to supply informations to the proper industries.
- To dispatch automotive part export promotion missions and to hold exhibitions (support for enterprises with no tie-ups overseas).



Fig. II.2-1 Process of Formulation of Comprehensive Programmes for Development of Automotive Metal Parts Industry



### **II-3. Comprehensive Promotion Programmes for the Chinaware Industry**

#### **(1) Basic Strategy**

Except for a small number of foreign-affiliated firms having high production technology, most Malaysian chinaware manufacturers are family-management type small-scale firms. These manufacturers are classified into several groups creating separate enclaves, which makes balanced growth of the ceramic industry difficult. The technical level of the majority of local manufacturers is less developed when compared with neighboring countries such as China and Thailand.

Although Malaysia abounds in the major raw materials for chinaware production, they are not fully utilized to produce high value-added products.

Small domestic market size is another major problem for Malaysian chinaware manufacturers. To expand sales into overseas markets, most local manufacturers have no experience in exports or else they do not have enough capability to produce or design sufficiently competitive products for overseas markets.

Under the above mentioned circumstances, the basic strategies of the comprehensive programme for the development of the chinaware industry in Malaysia could be summarized as follows.

#### **Basic Strategies for Promotion of the Chinaware Industry**

1. Establish the Ceramic Technology Centre which was already proposed by SIRIM at the earliest stage in order to upgrade the production technology levels of general chinaware manufacturers.
2. Expand the geological surveys of ceramic raw materials.
3. Improve the overseas marketing capabilities of local chinaware manufacturers through overseas market information services and support for design development.
4. Promote the invitation of foreign investors.

#### **(2) Proposed Comprehensive Promotion Programmes**

Based on the problems related to the promotion of the chinaware industry in Malaysia, the following promotion programmes were proposed for promotion of the industry. The process of the identification of the comprehensive promotion programmes is shown in Fig. II. 3-1.

#### **Programme 1. Promotion of SIRIM Ceramic Technology Centre**

- The Ceramic Technology Centre which has already been proposed by SIRIM should be established as soon as possible. Before its establishment, the necessary R & D activities should be promoted by the Ceramic Department of SIRIM. Following are the major activities expected from the proposed Centre.
- R & D activities in the mixing of raw materials, and in forming and burning and other techniques, particularly those related to the production of high-quality tableware and artware, as well as extension of results to local manufacturers.
- Development of new types of designs which could be acceptable in export markets.

#### **Programme 2. Intensification of Geological Surveys of Ceramic Raw Materials**

- A nationwide geological survey would be needed in order to identify stable and high quality mineral raw material deposits.

#### **Programme 3. Implementation of Human Resources Development Programmes**

- To provide technical training for ceramic engineers and workers which are generally conducted jointly by the MARA Institute of Technology and SIRIM.
- To provide practical training on factory sites in the areas of both production technology and design development.
- To hold seminars and training programmes for Malaysian managers in the area of business management which are usually conducted by NPC.

#### **Programme 4. Feasibility Study for the Establishment of a Ceramic Industrial Estate**

- After finding a good mineral raw material deposit, a feasibility study on the establishment of a ceramic industrial estate having a joint R & D institution and an organization to supply all the necessary raw materials to all manufacturers located in the estate should be conducted.

#### **Programme 5. Intensive Promotion Activities for Foreign Investment and Technical Tie-ups**

- To dispatch investment promotion mission teams to potential investors' areas.

- To expand investment promotion activities by MIDA.
- To invite investment mission teams to Malaysia.
- To strengthen matching services for capital and technical tie-ups between local and foreign firms.

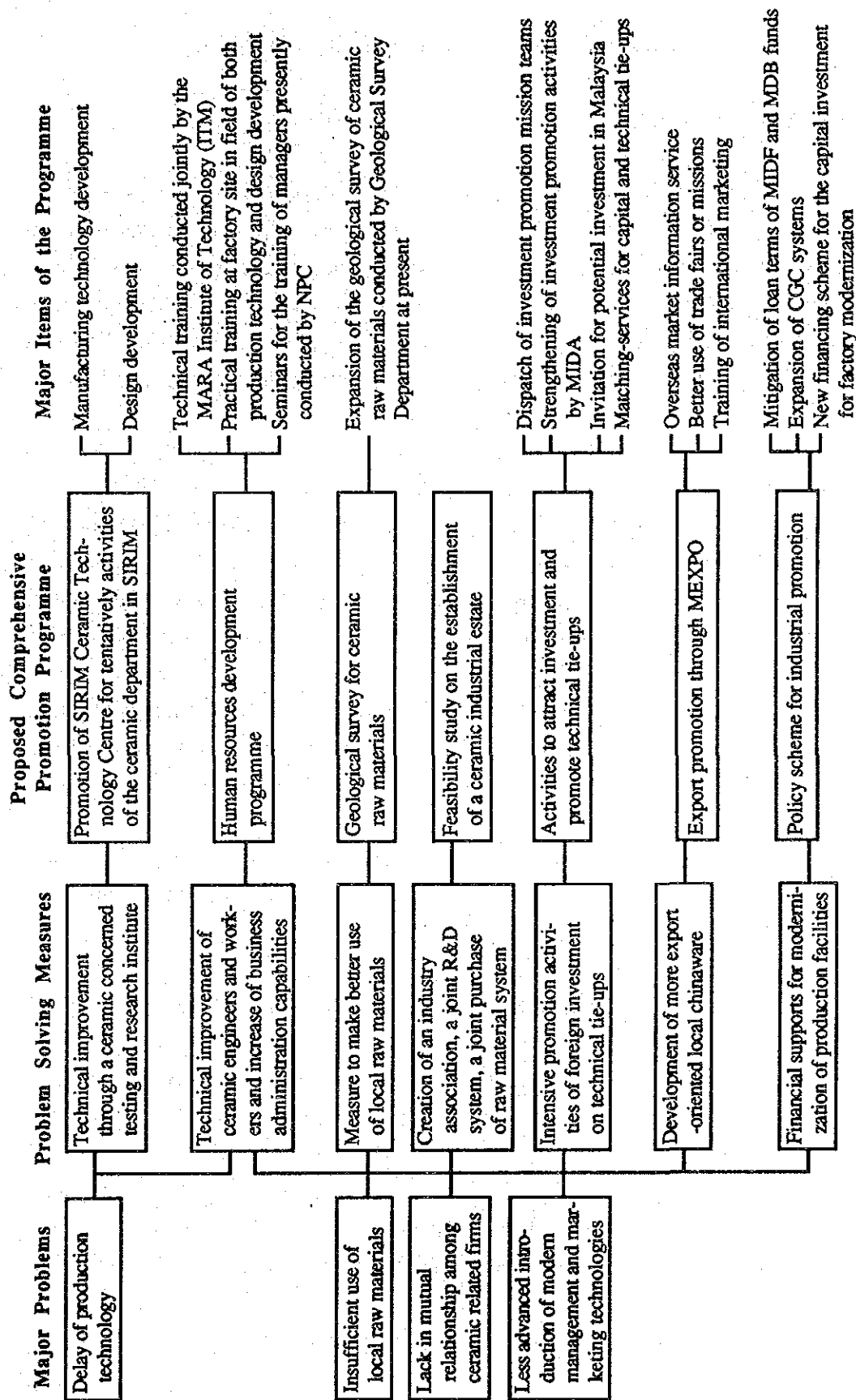
**Programme 6. Chinaware Export Promotion through MEXPO**

- To collect and supply to local manufacturers overseas market information on chinaware.
- To participate actively in trade fairs overseas, and to dispatch trade mission teams to potential markets.
- To have training programmes and seminars which target international marketing know-how for chinaware.

**Programme 7. Establishment of a Policy Schemes for the Development of the Chinaware Industry Particularly in Regard to Financing**

- To mitigate lending terms of MIDF or MDB loans.
- To expand the CGC scheme.
- To establish new financing schemes for capital investment directed for factory modernization.

Fig. II.3-1 Process of Formulation of Comprehensive Programmes for Development of Chinaware Industry



## **II-4. Comprehensive Promotion Programmes for the Glassware Industry**

### **(1) Basic Strategy**

There are only 3 manufacturers that produce glass products from mineral raw materials (except for sheet glass) in Malaysia at present. All of these firms have relatively strong relationships with leading foreign glassware manufacturers, and have modernized mass-production facilities. Due to stagnant market demand for glass bottles, their total production capacity far exceeds the present domestic market demand, and all of these firms are faced with the urgent necessity of strengthening their managerial bases by product diversification, export promotion or productivity.

Domestic market demand for glass tableware is nearly as large as that for glass containers, and significant portion of this domestic demand is expected to be filled by a new glass tableware factory to be established by an Indonesian investor. As for other glass products such as electric lights, pharmaceutical or chemical containers or measurement cylinders, only finishing work is conducted in Malaysia. Their present production volumes in Malaysia are considered to be insufficient to start production from mineral raw materials.

For the future development of the glassware industry in Malaysia, export promotion would be an essential element, for which cooperation with foreign manufacturers having high production capabilities and established overseas sales networks would become a major factor.

From the above present status of the glassware industry in Malaysia, the basic strategies for the comprehensive industrial development programme would be summarized as follows.

#### **Basic Strategies for Promotion of the Glassware Industry**

1. Establish an R & D glass production technology center (a glass laboratory in the proposed SIRIM Ceramic Technology Centre), which would support the product diversification and productivity development of existing firms.
2. Improve export capability of glassware manufacturers through governmental support for overseas market information collection, for improved container transport facilities and for the establishment of an inspection system on exported glass products.
3. Investigate the possibility of giving more favorable financial support for factory modernization or expansion.

- |  |
|--|
| <p>4. Promote the invitation of foreign investors having established overseas networks and product brand images.</p> |
|--|

## **(2) Proposed Comprehensive Promotion Programmes**

Based on the problems related to the promotion of the glassware industry in Malaysia, the following promotion programmes were proposed for promotion of the industry. The process of the identification of the comprehensive promotion programmes is shown in Fig. II. 4-1.

### **Programme 1. Promotion of a Ceramic Technology Centre (Glass Laboratory)**

- The establishment of a Glass Laboratory in the Ceramic Centre, which has already been proposed by SIRIM, should be promoted. Before its establishment, the Ceramic Department of SIRIM should engage in R & D activities to promote the development of the glassware industry, including R & D to improve technological levels. The following are the major activities expected from the proposed Centre.
- To carry out R & D activities on various production technologies.
- To engage in design development.

### **Programme 2. Implementation of Human Resources Development Programmes**

- Practical training at a factory site of each firm for production technology development and design development will be especially effective to increase the skills of technicians and workers.

### **Programme 3. Promotion Activities for Foreign Investment and Technical Tie-ups**

- To dispatch investment mission teams.
- To expand investment promotion activities by MIDA.
- To provide intermediary services between domestic and foreign enterprises.

### **Programme 4. Glassware Export Promotion through MEXPO**

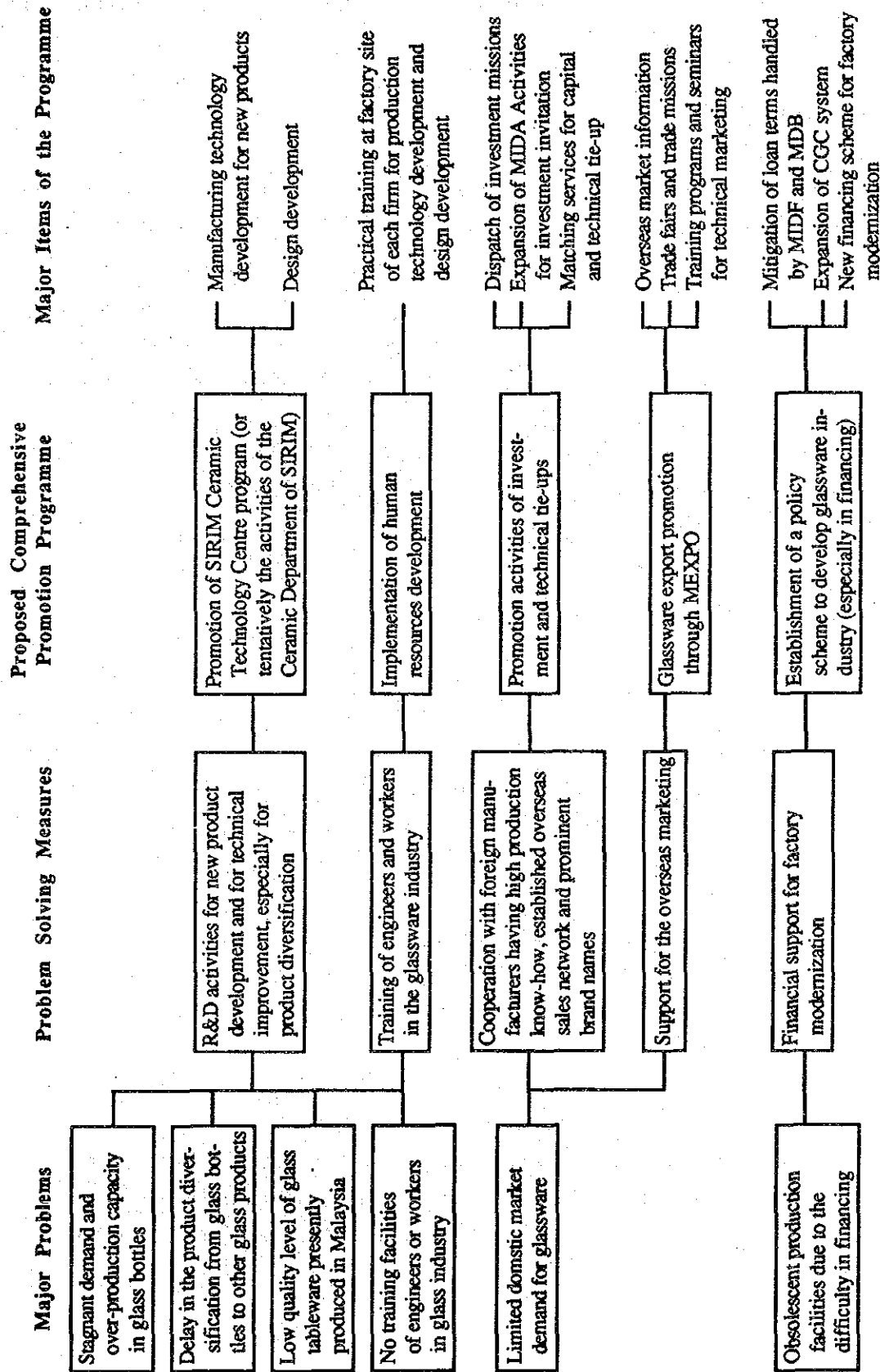
- To collect information on overseas markets and to provide it to the industry.
- To participate in trade fairs and to dispatch trade missions.
- To hold training programmes and seminars on overseas marketing activities.

**Programme 5. Establishment of a Policy Scheme for the Development of the Glassware Industry Particularly in Regard to Financing**

- To mitigate loan terms on MIDF and Malaysia Development Bank funds.
- To expand activities of the Credit Guarantee Cooperation (CGC).
- To establish new financing schemes to promote capital investments for plant modernization.



Fig. II.4-1 Process of Formulation of Comprehensive Programmes for Development of Glassware Industry



## **II-5. Comprehensive Promotion Programmes for the Office Electronic Equipment Industry**

### **(1) Basic Strategy**

As a result of the evaluation of the present status of the electronics industry in Malaysia and the international market, it was concluded that priority should be given to the promotion of foreign investment. Also, the result of the feasibility analysis of starting the production of office electronic equipment operation showed that there is a possibility of the start of domestic production. Accordingly, for the first stage of industry development, investment promotion will be the main part of urgent measures to be taken for the promotion of the office electronic industry.

According to the results of the survey, basic strategies to be taken in Malaysia for the promotion of the office electronic industry are proposed as follows.

#### **Basic Strategies for Promotion of the Office Electronic Equipment Industry**

1. Investment promotional activities toward foreign office electronic equipment manufacturers should be placed at the core of strategies for the promotion of industry in Malaysia. By inviting foreign manufacturers, such problems as the existing technological gap with overseas countries and the difficulty in the access to the world market would be solved and the foundation for the future development of the office electronic equipment industry would be established.
2. Direct investment promotional activities should firstly be intensified. Besides keeping office electronic equipment subject to pioneer status, the reinforcement of investment promotional activities by MIDA and other governmental organisations should be carried out.
3. Measures to increase the attractiveness of Malaysia's investment climate toward foreign office electronic equipment manufacturers should be conducted. For the establishment of the foundation of the office electronic equipment industry, such measures as the promotion of the parts and components industries and the development of human resources should be carried out intensively.

## **(2) Proposed Comprehensive Promotion Programmes**

Based on the problems related to the promotion of the office electronic industry in Malaysia, the following promotion programmes were proposed for promotion of the industry. The process of the identification of the comprehensive promotion programmes is shown in Fig. II. 5-1.

### **Programme 1. Intensification of Investment Invitation Activities**

- Preparation of data and materials for investment promotion activities
- To invite foreign investment missions
- Dispatch of Investment Promotion Missions Abroad

As well as the promotion of investment by office electronic equipment manufacturers, for parts and components which cannot be produced by existing local parts and components manufacturers, it is necessary to promote investment and technical tie-ups by foreign parts and components manufacturers.

### **Programme 2. Strengthening of Policy-making Section for the Promotion of the Parts and Components Industries**

- The following functions would be expanded at a policy-making section of the government.
  - It would formulate a vision for the development of the parts and components industries related to the electronics industry. It would also be necessary to give priority to the promotional measures taken for the development of the parts and components industries, according to the development needs required for the development of the office electronic equipment industry, and the overall development of the electronics industry.
  - To coordinate the contents of promotional policies for the development of the parts and components industries including financial supports, subsidies, supports to R&D activities, and personnel development, and to coordinate the activities of policy execution organizations.
- Promotion of the establishment of industry associations by type of parts and components and encouragement of their activities for the development of the industry.

**Programme 3. Financial Support for the Introduction of Modern Production Equipment  
by Parts and Components Manufacturers**

- Low interest loans through the introduction of a financial support system for plan modernisation
- Expanded use of the CGC system
- Tax incentives such as a special depreciation system and tax deductions
- Exemption of import tax for imports of up-to-date machines

**Programme 4. Strengthening of Quality Control Activities**

- To hold seminars and provide advice about quality control in order to cultivate the sense of quality among managers and workers in the parts industry.
- To dispatch managers of parts and components manufacturers to overseas training tours to see production lines in Japanese plants
- To expand training programmes of company managers by the NPC (National Productivity Centre) and to encourage the activities for the improvement of productivity.

**Programme 5. Development of Engineers and Technicians and Intensification of R&D  
Activities in the Field of Electronics**

- Tax exemption subject to dispatch of workers for training to a parent company by foreign manufacturers in Malaysia
- To expand engineer training curriculums at universities
- Increased availability of scholarships for overseas study at universities and R&D organizations
- To establish a financial support system for employee training which would give priority to the training of technician-class employees.
- Promotion of the establishment of manpower training centres by foreign firms or by foreign firms jointly with the government for the purpose of practical training in production technology and educating engineers on electronics technologies
- Expansion of research institutes related to electronic parts and components technologies, and provision of support to R&D activities of domestic parts and components manufacturers in cooperation with major assemblers which are major users of parts and components.

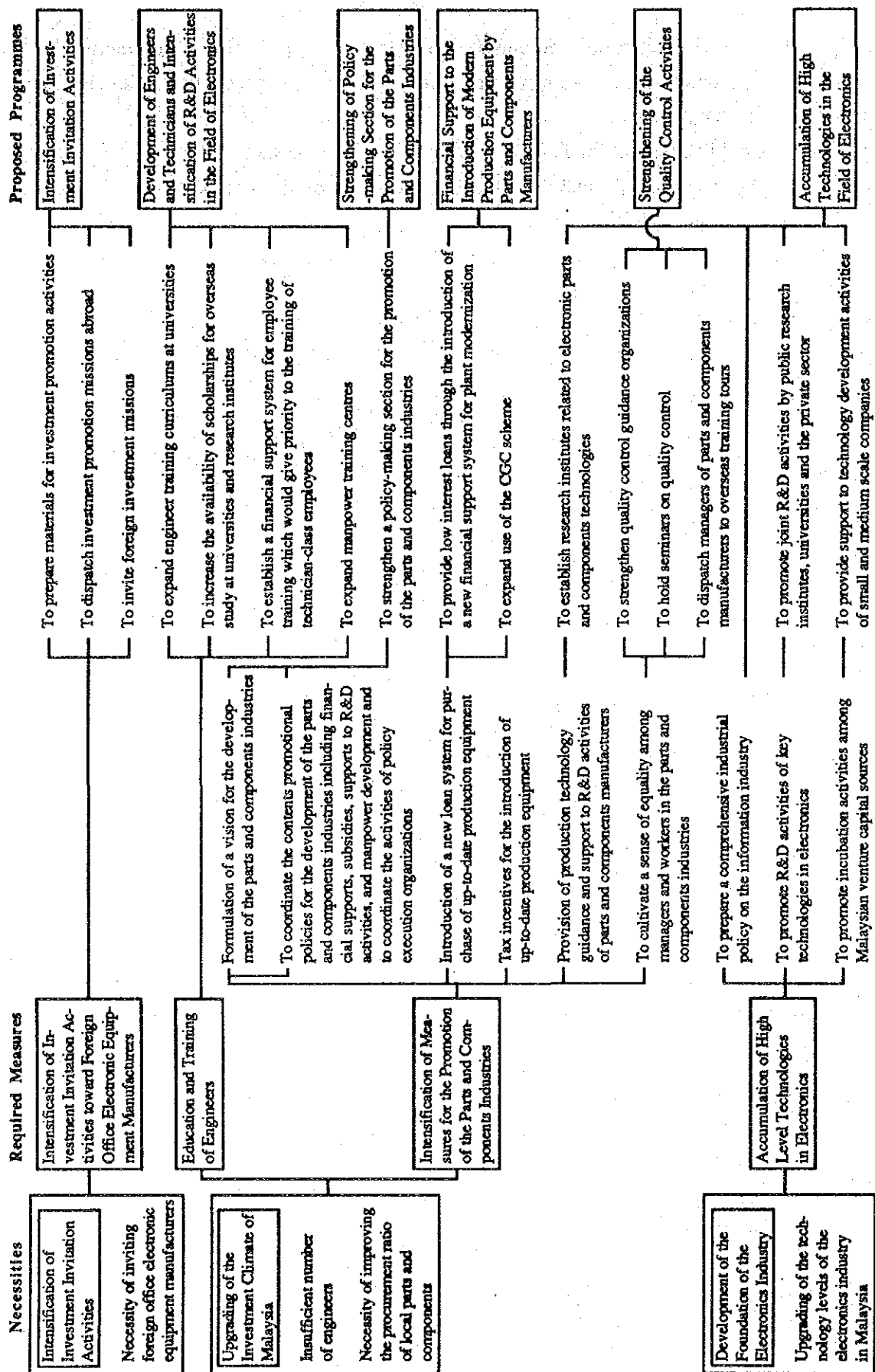
**Programme 6. Accumulation of High Level Technologies in the Field of Electronics**

- Promotion of joint R&D activities between public research institutes, the telecommunication firm, universities, and the private sector on key technologies

of office electronic equipment and electronics parts and components. (For example, by the introduction of systems such as a key technology development subsidy system.)

- Establishment of incubation activities among Malaysian venture capital sources. For example, provision of subsidies for technology development to small and medium scale companies.

Fig. II. 5-1 Process of Formulation of Comprehensive Programmes for Development of Office Electronic Equipment Indust



## **II-6. Comprehensive Promotion Programmes for the CRT Industry**

### **(1) Basic Strategy**

The domestic production of colour CRTs, which are the most important components for TV set assembly, is highly desirable in the Malaysian market, due to the rapid increase of domestic colour TV set production. Further, from the political viewpoint, the start of local production of colour CRTs, which occupy approximately 35% of the total material costs of colour TV set assembly, has become one of the top priority issues. The domestic production of CRTs is expected to contribute largely both to the increase of domestic value added ratio of TV set production and to the diversification and stabilisation of the electronics industry in Malaysia.

For the start of domestic production of colour CRTs, however, a very large amount of initial investment is required and it would take a long time to recover this investment cost. Further, a very high level of technology has to be transferred from overseas manufacturers in a short period for the start of local production.

From the above, basic strategies for the promotion of the CRT industry in Malaysia are proposed as follows.

#### **Basic Strategy for the Promotion of the CRT Industry**

1. Firstly, the investment invitation activities directed for the T.V. set assemblers having plants in Malaysia and other international CRT manufacturers should be strengthened.
2. In order to make the investment promotion activity effective, the bottleneck areas of CRT production should be eliminated, the creation of a sufficient number of engineers and skilled manpower should be achieved through the expansion of educational and training facilities and such infrastructure as waste water discharge systems or sludge disposal systems should be developed.
3. The key issue for the investment decision is the financial viability of local CRT manufacturing. Because the improvement of profitability should be achieved by the investors' own efforts, the invitation of investors having enough technical capability and CRT production experience is essential. Politically, it could be supported by such indirect measures as the development of local parts suppliers or the supply of stable funds.

## **(2) Proposed Comprehensive Promotion Programmes**

Based on the examination of the various kinds of measures to be taken in order to achieve the goal of the development scenario of the CRT industry in Malaysia, the following development programmes were proposed for promotion of the industry. The process of the identification of the comprehensive promotion programmes is shown in Fig. II. 6-1.

### **Programme 1. Intensification of Investment Invitation Activities**

- Compilation of investment information
- Dispatch of invitation mission teams
- Establishment of better accommodation facilities for the study mission teams from overseas manufacturers
- Promotion of the invitation of overseas parts manufacturers
- Promotion of capital and technical tie-ups

### **Programme 2. Strengthening of Policy-making Section for the Promotion of Parts and Components Industries**

- Establishment of a long-term strategy for the development of domestic parts suppliers for the colour CRT industry
- Implementation of such promotion measures as financial support, R&D support or personal training schemes for parts suppliers and coordination of all of the activities of organizations related to the development of electronics parts suppliers
- To compile a list of local parts supply companies and to establish an information supply system related to local procurement of parts

### **Programme 3. Development of Engineers and Technicians and Intensification of R&D Activities in the Field of Electronics**

- Expansion of engineering and electro-mechanics education in universities
- Establishment or expansion of training centres related to the electronics industry which could train (1) engineers and technicians, (2) foremen, (3) skilled workers, (4) general workers and (5) managers



- Establishment or expansion of supporting systems for overseas training of employees through taxes or subsidies
- Promotion of joint R&D activities between universities and private companies

#### **Programme 4. Strengthening of Quality Control Activities**

- Support for the establishment of quality control systems in each factory
- Support for the R & D activities of local parts suppliers

#### **Programme 5. Alleviation of the Problem of Industrial Wastes**

- To improve the infrastructure related to industrial waste water discharge or to sludge disposal in collaboration with developers of industrial sites
- To set national and regional criteria for industrial waste

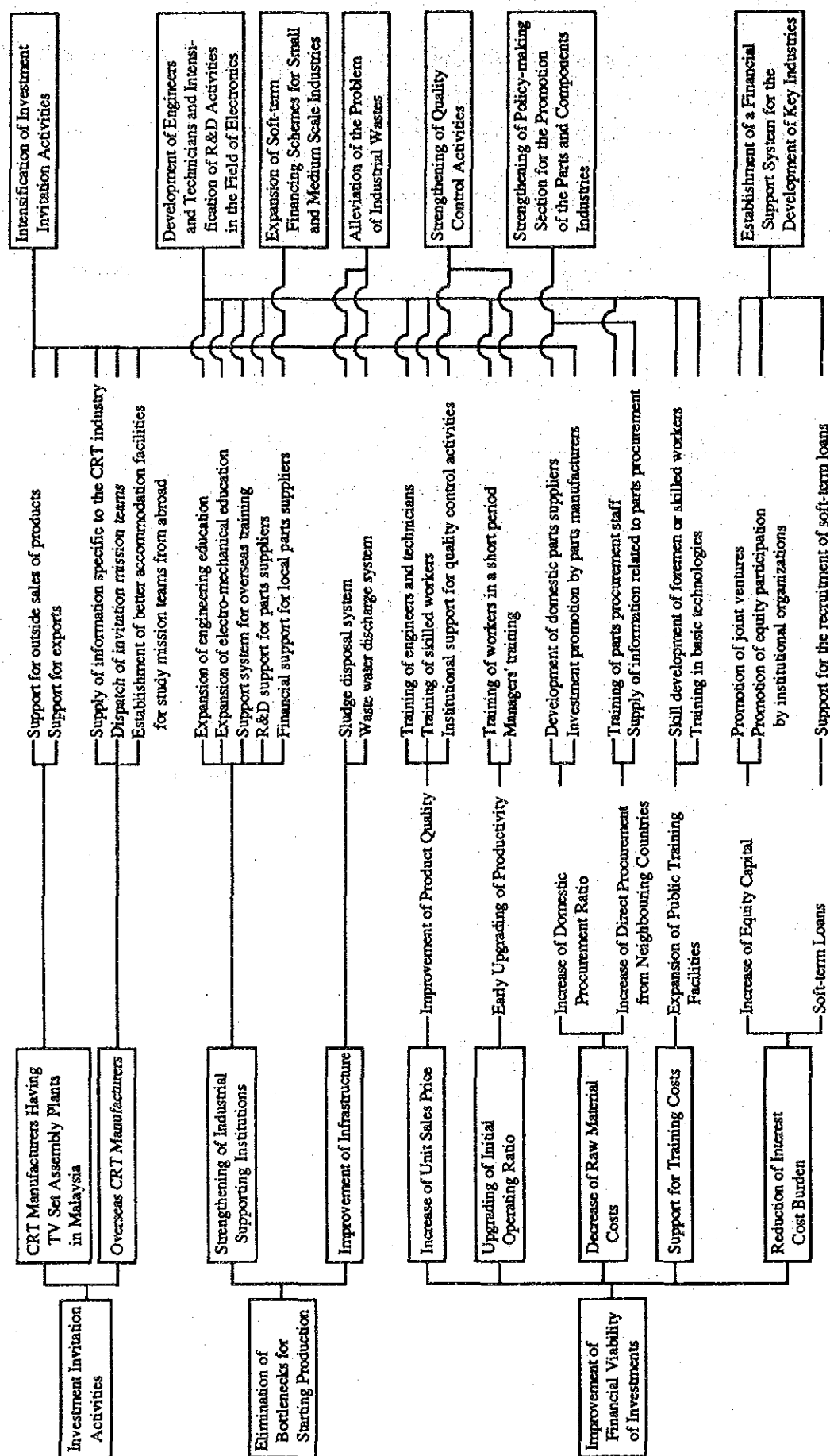
#### **Programme 6. Expansion of Soft-term Financing Scheme for Small and Medium Scale Industries**

- To establish or expand the institutional financing scheme which would supply soft-term financing to subcontracting small and medium scale industries
- To expand the credit guarantee scheme with the aim of assisting small and medium scale industries which have inadequate collateral to have ready access to bank credit

#### **Programme 7. Establishment of a Financial Support System for the Development of Key Industries**

- To establish a new financing scheme to supply long-term credit for the development of key industries

Fig. II. 6-1 Process of Formulation of Comprehensive Programmes for Development of CRT Industry



## **II-7. Comprehensive Promotion Programmes for the Ceramic IC Packages/Substrates Industry**

### **(1) Basic Strategy**

Malaysia is a big market of ceramic IC packages following only Japan and the U.S. The semiconductor industry is a central industry in Malaysia which occupies 78.5% of total sales value of the Malaysian electronics and electrical industry. Because the existence of nearby suppliers of important product parts such as ceramic IC packages would lead to the strengthening of their product competitiveness through cost reduction and quicker service, etc., domestic production of ceramic IC packages is strongly desired by the semiconductor manufacturers in Malaysia. The local supply of ceramic IC packages would also contribute to the further expansion of the semiconductor industry in Malaysia. Because the development of both the semiconductor industry and the parts suppliers for the semiconductor industry is one of the targets in the governmental industrial development programme, fostering parts suppliers such as ceramic IC package manufacturers would be most expected.

Meanwhile, the ceramic IC package industry is said to be a peculiar industry because a fairly high level of production know-how and technology are required for production and at present only a few manufacturers control the world market.

Thus, the basic strategies to be taken in Malaysia for promotion of the industry are proposed as follows.

#### **Basic Strategy for Promotion of Ceramic IC Packages/Substrates**

1. For the start of domestic production, it is necessary to invite the investment of foreign companies who already have the know-how and technology. In order to realise such investment, investment invitation activities and improvement of the investment environment would have to be conducted.
2. As to the investment environment, improvement of worker quality is significantly necessary since the production of ceramic IC packages/substrates requires skilled workers and engineers. For expansion of the market, continuous development of the semiconductor industry is necessary. Worker quality would be improved through public institutional activities to increase the supply of skilled workers and engineers. As to investment environment, the solution of such problems as the disposal of industry waste and the constant supply of electricity should be executed.

3. After the start of production, a long period of training of employees would be required. Support for that training should be provided. Encouragement of domestic product use as a support for product sales activities would be made. Other support systems for product quality improvement or activation of new product development would be arranged.

## **(2) Proposed Comprehensive Promotion Programmes**

Based on the examination of the effective measures for the promotion of the ceramic IC package/substrate industry in Malaysia, the following comprehensive promotion programmes for the industry were proposed. The process of the identification of promotion programmes is summarised and shown in Fig. II. 7-1.

### **Programme 1. Intensification of Investment Invitation Activities**

- Dispatching of investment invitation missions.
- Provision of information related to investment invitation.

### **Programme 2. Development of Engineers and Technicians and Intensification of R&D Activities in the Field of Electronics**

- Expansion of university education in chemistry and electronics.
- Expansion of circuit designing courses in universities and other public organizations.
- Expansion of courses of general knowledge and technology related to electronics as well as quality control in vocational training centres. Start of night courses would also be recommended.
- Establishment of electronics related technology centres to train skilled workers to obtain highly demanded special technology.
- Dispatching overseas of engineers, and expansion of overseas study systems.
- Widening the present incentive qualifications for employee training.
- Strengthening of joint R&D activities between public academic institutions and private companies.

### **Programme 3. Establishment of a Fund to Support the Training and R&D Activities of Industries**

- To reduce the burden for private companies through providing subsidies for employee training. And to pool the fund which is freely used by vocational training centres and technology centres, etc., for their contribution to the improvement of worker quality.
- New products development and product quality improvement activities would also be supported by the fund.

### **Programme 4. Strengthening of Policy-making Section for the Promotion of Parts and Components Industries**

- In order to promote the development of the domestic products parts industry, institutional incentives such as ITA and export incentives would be reviewed and newly proposed. For Example, sales of product parts to industries in FTZ and LMW should be considered as export activities to which ITA or export incentives could be applied.
- By reviewing the actual status of the parts industry in Malaysia and identifying parts items to be domestically produced in the future, targets and policies for parts industry development are to be established.
- To encourage the use of domestic product parts through campaigns and expansion of related incentives.
- To provide useful information on parts procurement in Malaysia to both users and suppliers.

### **Programme 5. Alleviation of the Problem of Industrial Wastes**

- To solve the problem of industrial waste such as sludge by an adequate disposal method.
- To review the existing criteria and the standardise adequate criteria. Registration and administration of waste disposal firms to provide useful information for the users would be conducted.
- To construct industrial estates for high-technology industry which are fully equipped with disposal systems for industrial waste.

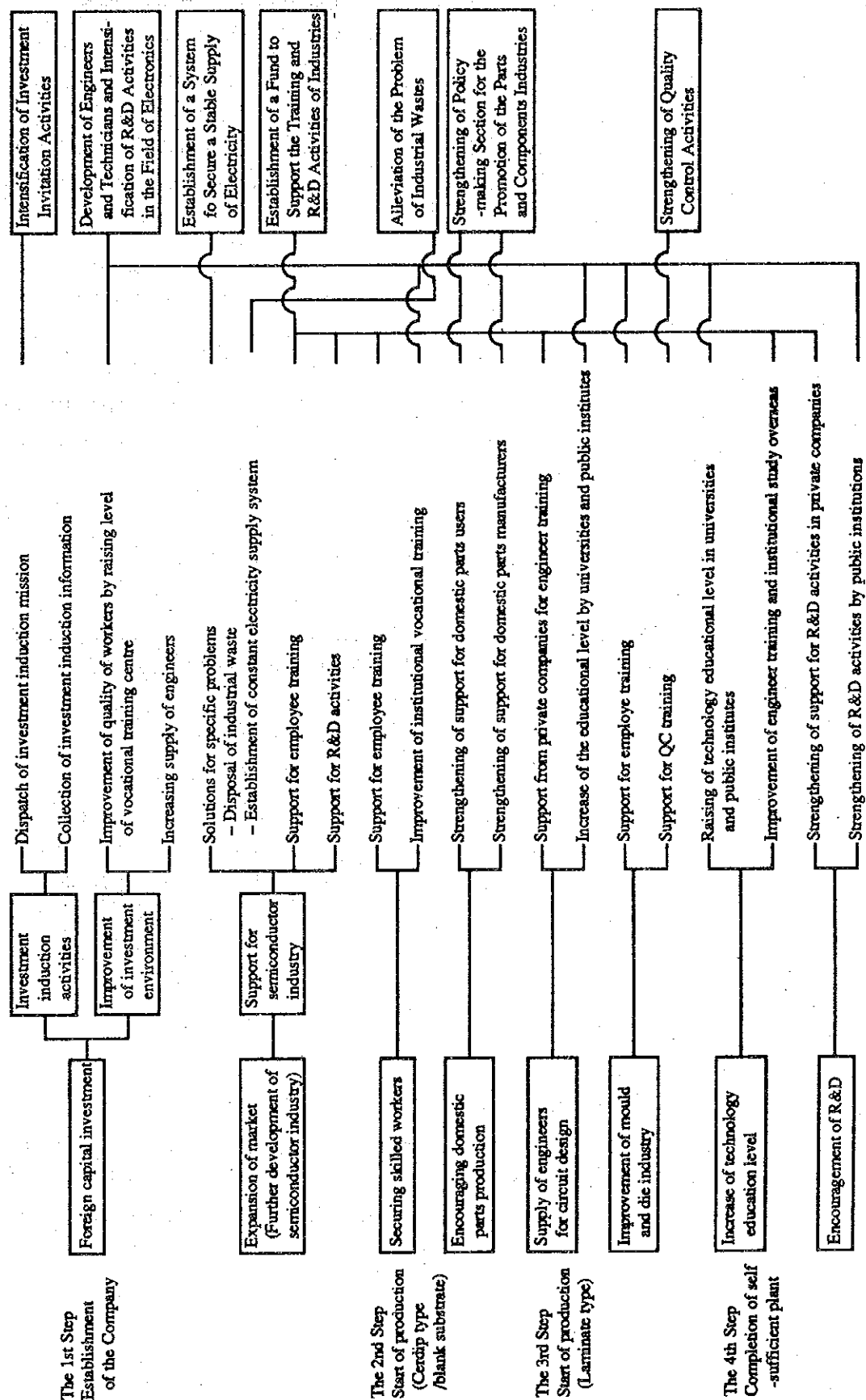
#### **Programme 6. Establishment of a System to Secure a Stable Supply of Electricity**

- Review of prohibitive regulations as to capacity of in-house power plants.
- Improvement of infrastructure in regions where semiconductor manufacturers are concentrated.

#### **Programme 7. Strengthening of Quality Control Activities**

- QC seminars and workshop sessions at each factory site are to be held with the aim of increasing the quality consciousness at each level of the production line from managers to operators.
- Expand the nation-wide activities for productivity improvement led by NPC.

Fig. II. 7-1 Process of Formulation of Comprehensive Programmes for Development of Ceramic IC Packages/Substrates



## **II-8. Comprehensive Promotion Programmes for the Rubber Footwear Industry**

### **(1) Basic Strategy**

The Malaysian rubber footwear industry is designated as one of the priority industries because the industry is a resource-based industry that utilises natural rubber (NR) - an important primary product of Malaysia. And the industry is given various incentives and is expected to develop further.

But, as the Malaysian purchasing power is limited with small population, the future direction is that the production is to be expanded targetting at export markets. In the overseas markets, Korean and Taiwanese products are still competitive and Chinese, Thai and Indonesian products are getting power. Accordingly, the public and private joint efforts to make the Malaysian products more competitive must be continued by both the industry and the Government.

In light of the above, following are the basic strategies of a comprehensive promotion programme to foster the rubber footwear industry in the future.

#### **Basic Strategy for the Promotion of the Rubber Footwear Industry**

1. Adoption of any possible measures to reduce production costs and improve product quality to increase competitiveness in the world market.
2. Promotion of product standardisation and development of high-value added products to raise the reputation of Malaysian products in overseas markets.
3. Strengthening of overseas marketing activities and promotion of tie-ups with foreign manufacturers producing internationally well-known brand-name products.

### **(2) Proposed Comprehensive Promotion Programmes**

Based on the problems related to the promotion of the rubber footwear industry in Malaysia, the following comprehensive promotion programmes for the industry were proposed. The process of the identification of the programmes is shown in Fig. II. 8-1.



#### **Programme 1. Company Diagnoses and Guidance by Experts**

- Company analyses and guidance by experts at each factory site.
- Management and technical seminars by experts.
- Preparation of operation and management manuals, etc.

#### **Programme 2. Strengthening of Quality Control Activities**

- QC activities seminars by experts.
- QC activities workshop sessions at each factory by experts.
- Collection and supply of QC manuals, etc.

#### **Programme 3. Promotion of Rubber Footwear Product Standardization**

- Stipulation of additional SIRIM standards.
- Installation of testing equipments in RRIM.
- Provision of training and education to RRIM testing staff.

#### **Programme 4. Expansion of R&D and Technology Extension Activities in RRIM or SIRIM**

- Provision of training and education of the RRIM and SIRIM staff in charge of R&D of rubber footwear.
- Expansion of the R&D activities in RRIM and SIRIM, and the promotion of technical transfer.
- Collection of overseas technical information.

#### **Programme 5. Expansion of Soft-term Financing Schemes**

- Low interest financial scheme for the rationalization and modernization of the facilities of its small and medium scale industry.
- Flexible application and simple procedure of financial scheme.
- Expansion of credit guarantee schemes.

#### **Programme 6. Expansion of MEXPO Activities**

- The funds and staff of MEXPO be increased and its activities be strengthened in those areas as to collect such information as overseas market trends, new products, new technology and other related information, disseminate them to the private sector, to send the trade missions to overseas markets and to attend to rubber footwear trade fairs.

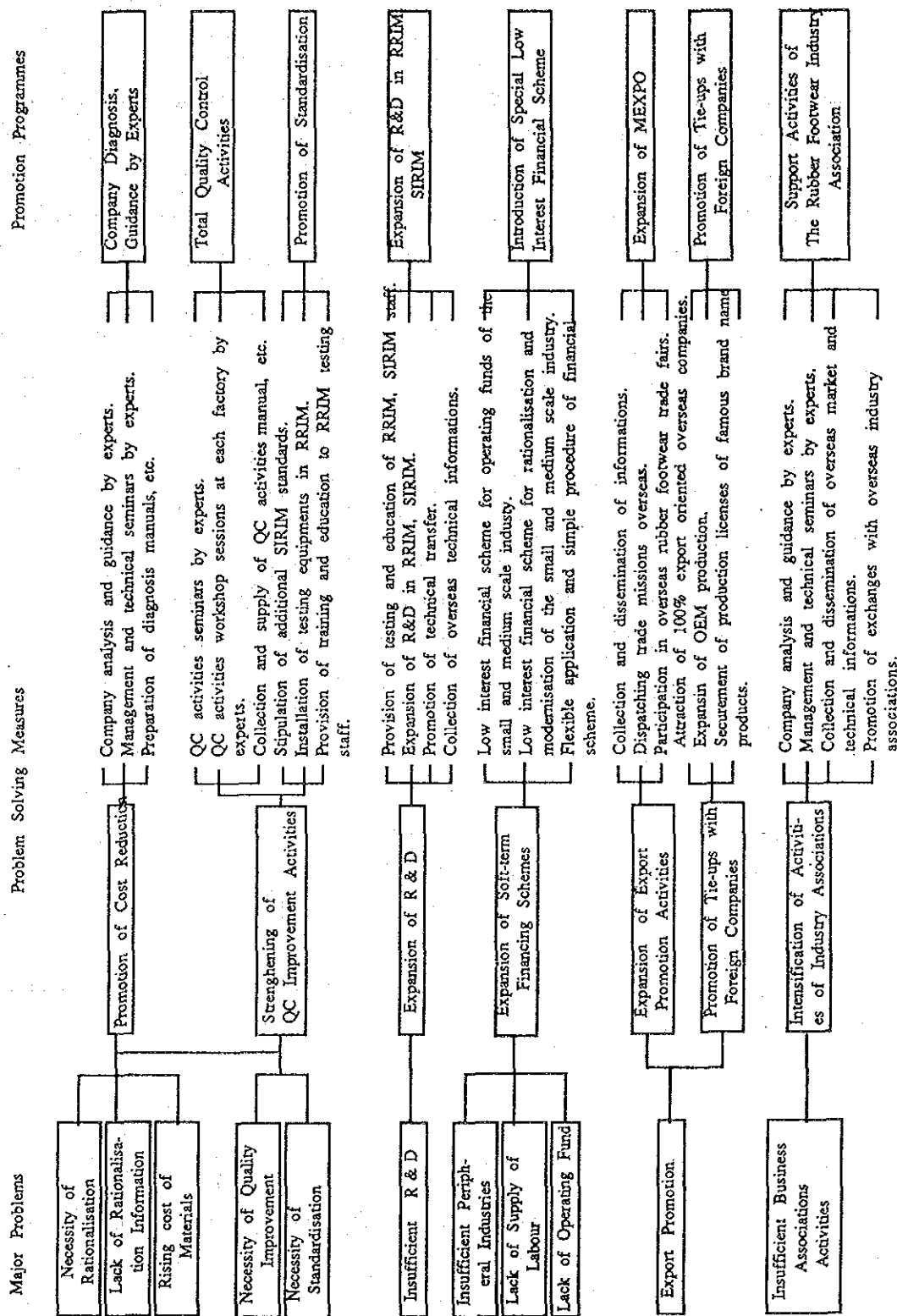
#### **Programme 7. Promotion of Tie-ups between Local and Overseas Companies**

- Attraction of 100% export oriented overseas companies.
- Expansion of OEM production.
- Securement of production licenses of famous brand products.

#### **Programme 8. Intensification of the Activities of the Rubber Footwear Industry Association**

- Under the sponsorship and initiative of the industry association, the following activities should be implemented:
  - Company analyses and guidances by experts.
  - Management and technical seminars by experts.
  - Collection and dissemination of overseas market and technical informations.
  - Promotion of information exchanges with overseas industry associations.

Fig. II. 8-1 Process of Formulation of Comprehensive Programmes for Development of Rubber Footwear Industry



## **II-9. Comprehensive Promotion Programmes for the Casting Industry**

### **(1) Basic Strategy**

The Malaysian casting industry has long developed in response to demand from the traditional Malaysian industries of tin, rubber, palm oil, and timber, but its role as a supporting industry for modern demand sectors has lagged behind that of its counterparts in neighboring countries.

In order for Malaysia to proceed down the path of modernization laid out for it by the IMP, development of a modernized and internationally competitive casting industry is critical.

The basic strategies for the development of the Malaysian casting industry based on the above ideas are given below.

#### **Basic Strategy for the Development of the Casting Industry**

1. Virtually all of the factories in the Malaysian casting industry are small businesses, and the problems facing both individual factories and the industry as a whole are numerous. Industrial promotion policies emphasizing enlargement of the production infrastructure are to be proposed.
2. Modernization of existing casting factories is to be promoted. Important elements will be (1) modernization of such production activities as plant sites, plant buildings, and equipment and facilities, (2) introduction of modern production technologies through the training of managers and engineers, and (3) modernization of company management themselves.
3. In those fields in which Malaysia has little accumulated technology, capital and technology should be actively introduced from abroad.

### **(2) Proposed Comprehensive Promotion Programmes**

Various programmes corresponding to the above-described measures for the development of the Malaysian casting industry were studied. In the end, the proposal

was brought together in the following eight programmes. The process for identification of the programmes is shown in Table II.9-1.

**Programme 1. Expansion of Training and Education Programmes for Managers**

- Following activities by NPC, Industry Association
  - holding seminars
  - traveling guidance
  - consulting services
- Oversea training of managers
- Collection and dissemination of information on modernized production management and management technique.

**Programme 2. Development of Engineers and Technicians**

- Training seminars  
Seminars will be held for plant managers and engineers.
- Assistance for overseas training  
In order to facilitate overseas training for plant managers and engineers, assistance will be provided in the form of advance training, etc.
- Collection and distribution of plant management and technological information.  
Information on the latest plant management methods and technologies will be collected from abroad and distributed to Malaysian companies.

**Programme 3. Greater Guidance in Quality Control**

- QC activities seminars by SIRIM, NPC and the industry Association.
- QC activities workshop session at each factory by experts.
- Strengthening of the national standards system and promotion of company standardization by SIRIM.

**Programme 4. Greater Activities by Foundry and Engineering Industries Associations**

- Collection of information, both domestic and foreign, concerning casting technology, production, and materials, and distribution of this information to member corporations.
- Sponsoring of quality control and technical seminars to improve the technological level of the industry as a whole.
- Operation by Association of the common supporting facilities to be provided in the foundry and engineering industrial parks.

- Promotion of cooperation between member corporations in the fields of raw material procurement, share production, and the joint receipt of orders.

**Programme 5. Promotion of the Construction Plan for Foundry and Engineering Industrial Parks**

- Modernization of the plants, equipment, and facilities at existing casting factories.
- Strengthening of Common Facility Centre activities in the parks in order to maximize benefits.

**Programme 6. Expansion of Financing Scheme for the Development of Small and Medium Scale Enterprises**

- Enlargement of the CGC loan guarantee scheme in order to facilitate access to public financial institutions by small businesses having difficulty in obtaining credit.
- Establishment of new credit systems to support fund-raising for modernization of production facilities by small manufacturers.

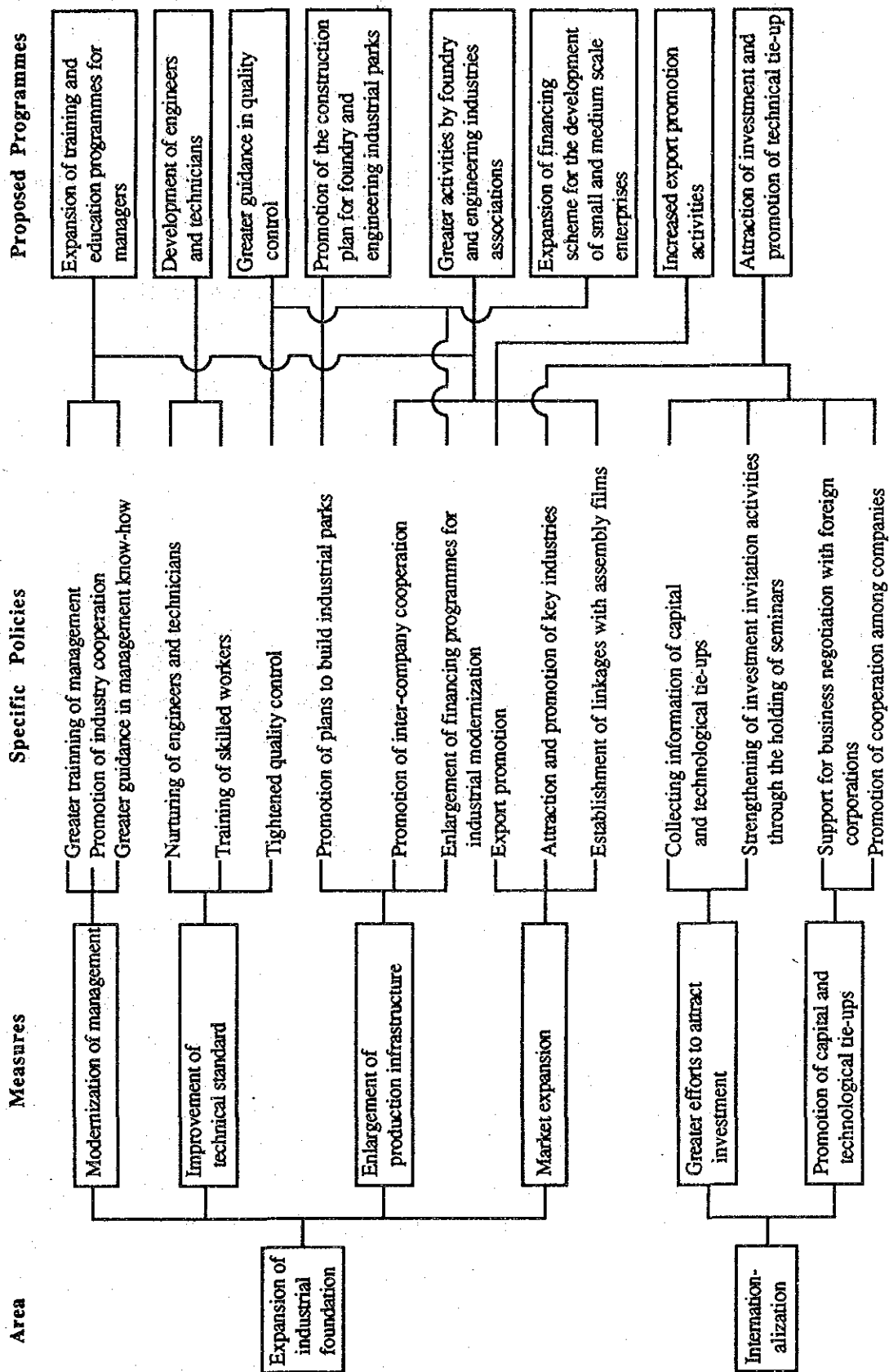
**Programme 7. Attraction of Investment and Promotion of Technical Tie-up**

- The collection and distribution of information on the Malaysian investment environment and industry for foreign firms considering investing in Malaysia.
- The dispatch of overseas investment attraction missions concentrating on firms in the casting industry.
- The strengthening of so-called "matching services" to realize capital and technology tie-ups with foreign corporations.

**Programme 8. Increased Export Promotion Activities**

- Collection of foreign markets and trade inquiry information and distribution to concerned local companies.
- Distribution to concerned local companies of information on foreign corporations desiring tie-ups with Malaysian casting companies.
- Sponsoring of trade fairs in Malaysia and abroad and promotion of casting exports.

Fig. II. 9-1 Process of Formulation of Comprehensive Programmes for Development of Casting Industry



## **II-10. Comprehensive Promotion Programmes for the Computers & Computer Peripherals Industry**

### **(1) Basic Strategy**

Based on the analysis and evaluation of the computers & computer peripherals industry in Malaysia and the international environment surrounding them, and in view of the feasibility of and potential for their quick development, it has been concluded that the promotion of foreign investment is the most important element for the development of the industry. Measures to promote foreign investment are expected to have a beneficial impact on the existing industry as well as related industries.

The basic strategies for the development of the industries can be summarized as follows.

#### **Basic Strategy for the Development of the Computers & Computer Peripherals Industry**

1. In light of the current situation of the computers & computer peripherals market and technology therein, the invitation of foreign investment is crucial if Malaysia's computers & computer peripherals industry are to be developed at a rapid pace. Thus the first priority of a development policy should be measures to promote foreign investment.
2. Specifically, measures should be considered to (1) strengthen activities to promote foreign investment and (2) improve the production environment. In view of the broader possibilities for investment in Malaysia and the far-reaching impact it would have on industry as a whole, a wide range of manufacturers, including related parts manufacturers, should be covered by measures for the promotion of foreign investment.
3. In terms of the improvement of the production environment, targets should include (1) development of human resources and (2) a higher ratio of local sourcing of components. In the area of human resource development, it is necessary to improve training of supervisors, skilled workers and engineers, particularly in design. For the development of the components industry, efforts must be made to improve technology, marketing and quality control.



- |  |
|--|
| <p>4. It is necessary to create a more encouraging environment for R&amp;D to reverse the current trend toward insufficient R&amp;D activities at the level of domestic private firms, to accumulate original technologies and to develop human resources through the strengthening of R&amp;D activities by government organizations.</p> |
|--|

## **(2) Proposed Comprehensive Promotion Programmes**

Based on the outcome of the study and what is assumed to be the most realistic scenario for development, a series of measures to realise the development of the computers & computer peripherals industry in Malaysia are proposed. Summaries of the measures are presented below in the outline of each programme.

The proposed execution measures and implementation schedules of these programmes are summarized and shown in Table II. 10-1.

### **Programme 1. Intensification of the Investment Promotion Organization's Activities**

- Dispatch of investment promotion missions to overseas computers & computer peripherals manufacturers, holding of seminars and invitation of missions comprising potential investors
- Preparation and supply of specific information regarding the industry and related areas
- Collection of industrial information and implementation of surveys to discover promising potential investors
- Matching of domestic firms which are interested in entering the industry with foreign firms which are interested in technical tie-up agreements or OEM contracts
- Identification of the present status and needs of industries and planning for more effective industry support, human resource development, and so forth through the establishment of an industry association concerning electronics.

### **Programme 2. Strengthening of Measures for the Development of Small and Medium Scale Manufacturing Enterprises**

- Establishment of a policy making committee in relation to the development of supporting industries
- Strengthening of support for development and improvement of products/production processes

- Strengthening of support for higher quality
- Strengthening of support for market expansion

### **Programme 3. Intensification of Export Promotion Activities**

- Intensification of business through preparation of a directory of Malaysia's supporting manufacturers  
Or, integration of the directory and MTT's subcontracting schemes. In this case, the directory will be prepared and updated every year using a database prepared under the subcontracting scheme
- Financial support for participation in overseas electronics shows or other exhibitions, or, supply of exhibition booths free of charge
- Invitation of overseas purchasing missions and sponsorship of exhibitions
- Re-energizing of inquiry services handled by MEXPO

### **Programme 4. Promotion of QC Activities**

- Preparation and supply of QC manuals by NPC and industrial associations
- Increasing of the number of QC seminars and QC classes by NPC
- Training of management staff overseas through NPC, which functions as a liaison
- Guidance through visits to factories in small & medium-scale industries

### **Programme 5. Strengthening of Training of Skilled Workers**

- Expansion of vocational training schools
- Establishment of government-industry technical training institutions
  - i) Expansion of manufacturers' in-house training programmes and reception of employees from other manufacturers. The government would offer incentives for this type of training center. The programme would be worked out based on similar programmes which have already been undertaken by several manufacturers in Singapore
  - ii) The government would supply land, buildings and operating funds while companies would be responsible for the supply of equipment and experts. The specific operations would be examined by a committee including representatives of the both the government and private sector
- Opening of short-term training centers for employees by NPC and CIAST

- Establishment of seminars and consulting services for managers of medium and small-scale firms
- Review of incentives for in-house training programmes

**Programme 6. Training of Electronics-related Engineers and Intensification of R&D Activities**

- Expansion of electronics curricula at universities
- Strengthening of MIMOS activities
- Widespread computer-related education
- Realization of the transfer of Technology Park and expansion of incentives for firms to locate in the park
- Review of current R&D incentives
- Expansion of scholarship scheme for study at foreign universities or institutes

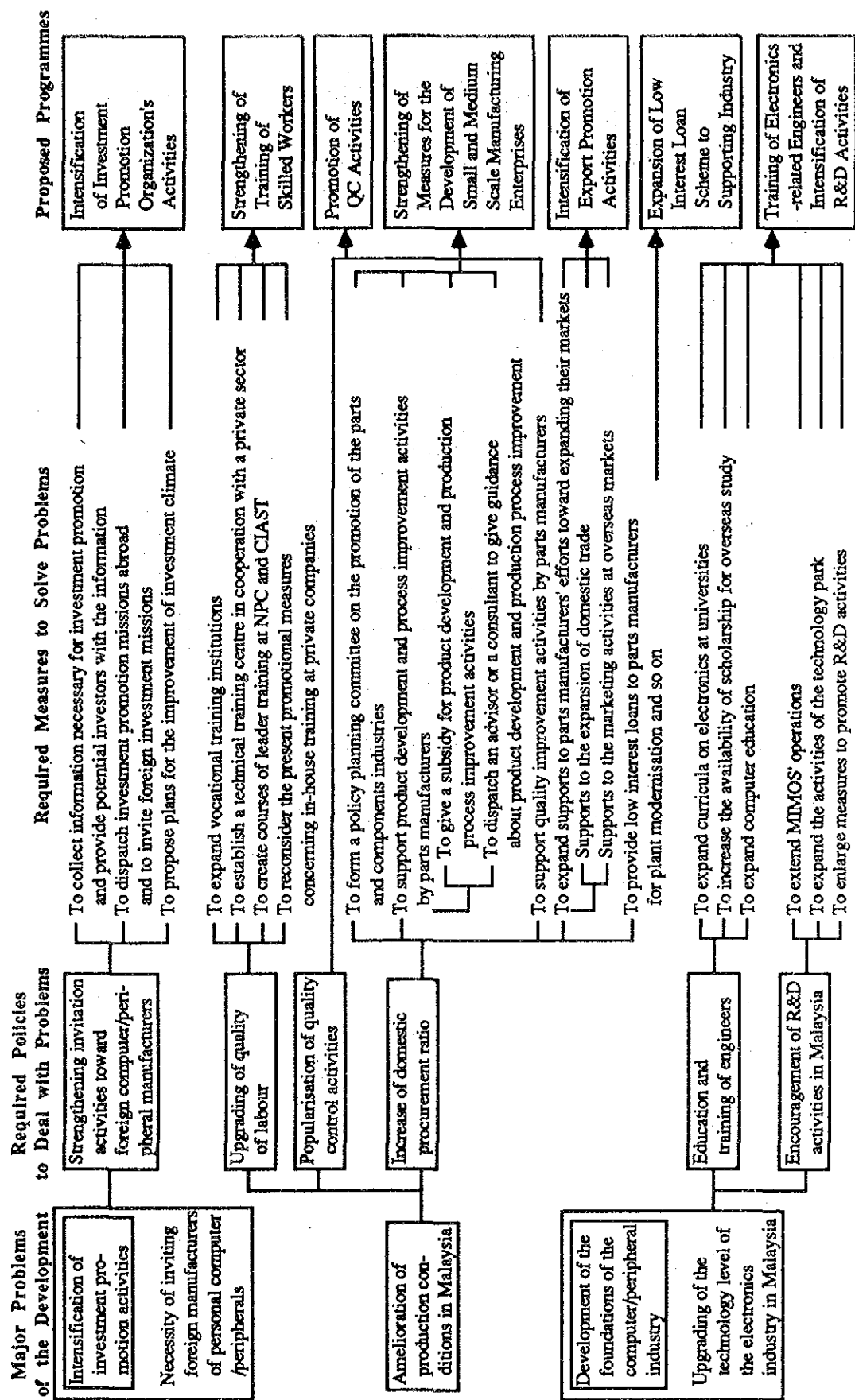
**Programme 7. Expansion of Low Interest Rate Loan Scheme to Promote Supporting Industries**

The following two cases may be considered as methods of use of the existing schemes for low interest rate loans:

- 1) Projects in supporting industries where local capital is involved should be covered by the AJDF loans without setting any limits as to size of capital.
- 2) The long-term low interest rate industrial loans such as the New Investment Fund (NIF) offered in the past and of excellent reputation should be resumed for small and medium sized companies.

Further, consideration is given to the establishment of a new fund for promotion of supporting industries.

Fig. II. 10-1 Process of Formulation of Comprehensive Programmes for Development of Computers and Computer Peripherals Industry



### **III. Compilation of the Three Years' Comprehensive Programmes**

### **III-1. Basic Concepts for Compilation**

### III. Compilation of the Three Years' Comprehensive Programmes

#### III-1. Basic Concepts for Compilation

##### (1) Introduction

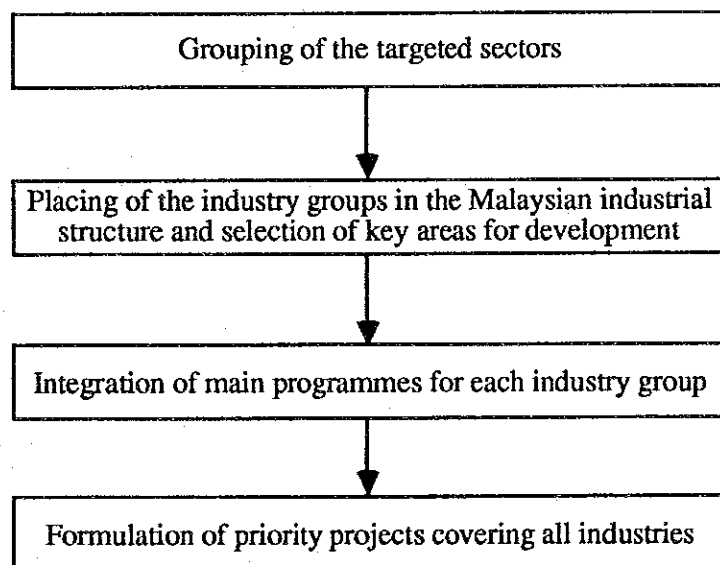
In the present survey, comprehensive programmes have been formulated for each of the targeted industries from the standpoint of industry development and export promotion. It is desirable that these comprehensive programmes be implemented in a comprehensive and concentrated manner.

In actuality, however, (1) limitations on funding and personnel make it impossible to implement all of the proposed programmes simultaneously. Furthermore, since (2) many of the proposed programmes are common for several industries and (3) it would be realistic to group proposals together as a single project, it was decided to integrate the numerous proposed programmes.

The results of these efforts are summarized in Fig. III.1-1.

##### (2) Integration procedure

Key projects were selected from among the proposed comprehensive programmes based on the following procedure.



### **(3) Grouping of targeted sectors**

Ten industry sectors were covered by the three-year study. These were classified into three groups: (1) electronics-related industries; (2) supporting industries; and (3) resource-based industries. These groups constitute the backbone of Malaysian industry. The various industry sectors in each group face numerous common problems, and their strategies for development naturally share similarities.

#### **(1) Electronics-related industries**

1. Office electronic equipment
2. Cathode ray tube
3. Ceramic IC packages/substrates
4. Computers and computer peripherals

#### **(2) Supporting industries**

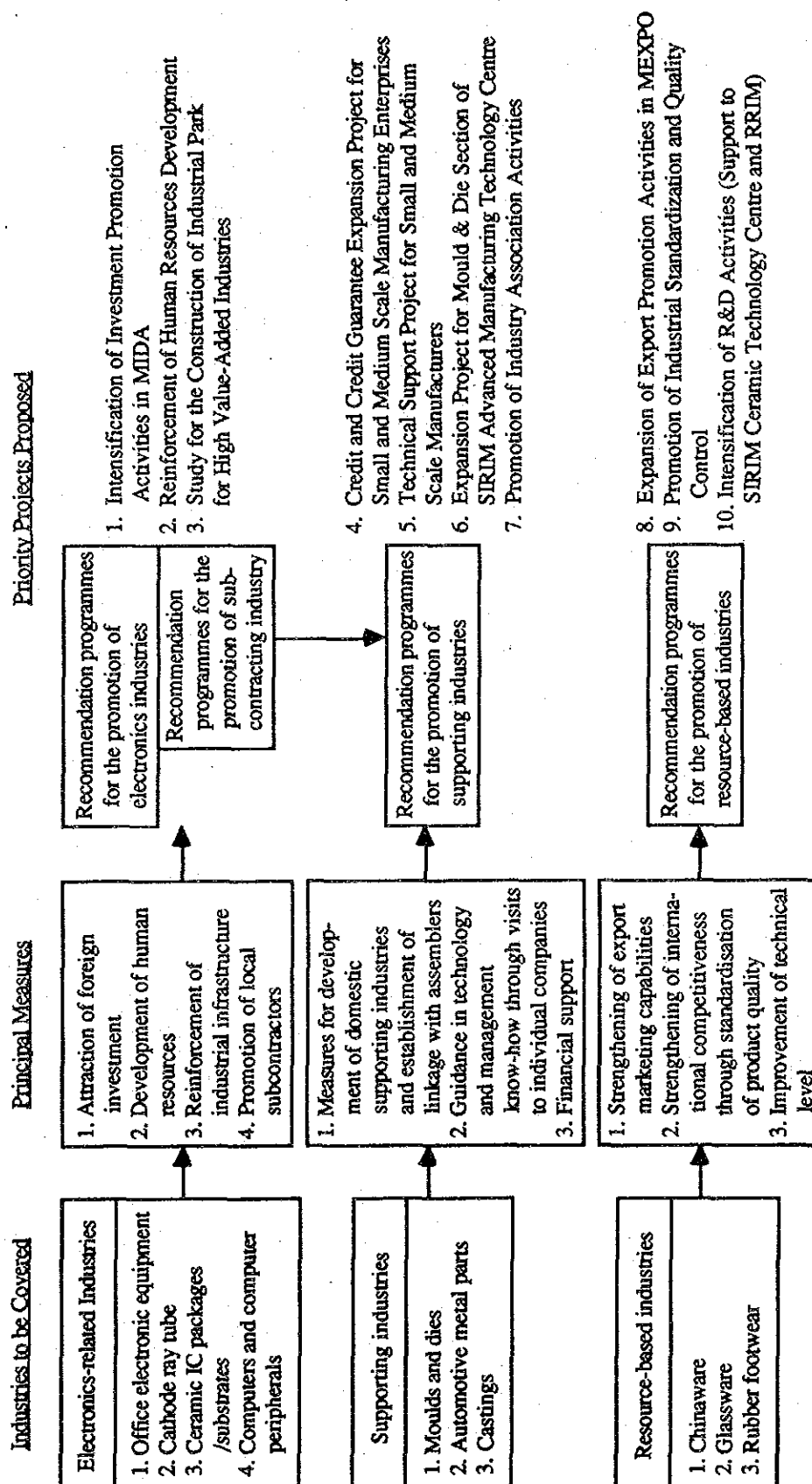
1. Moulds and dies
2. Automotive metal parts
3. Castings

#### **(3) Resource-based industries**

1. Chinaware
2. Glassware
3. Rubber footwear



Fig. III. 1-1 Basic Concepts for Compiling Three Years' Comprehensive Programmes



**III-2. Placement of the Industry Groups  
in the Malaysian Industrial Structure  
and Selection of Key Areas for Development**

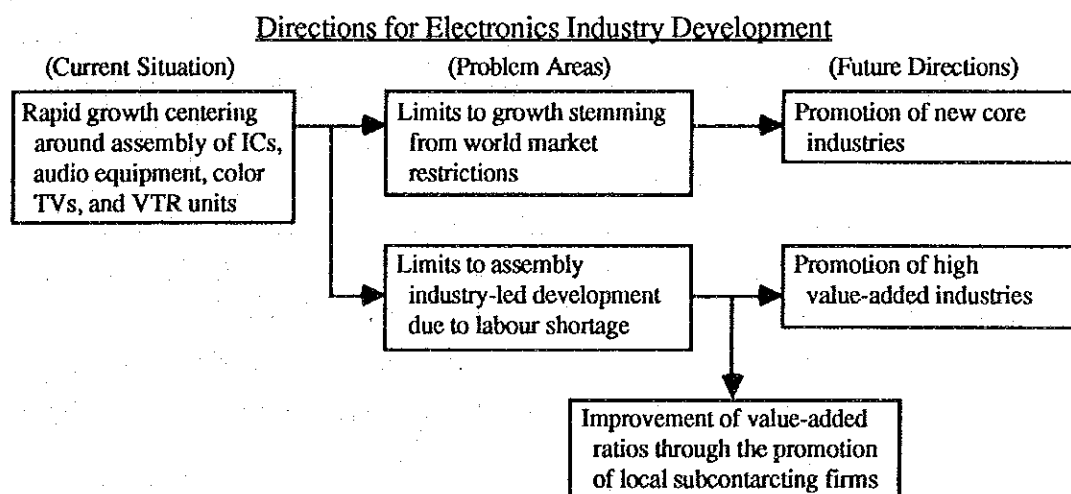
### III-2. Placement of the Industry Groups in the Malaysian Industrial Structure and Selection of Key Areas for Development

#### (1) Electronics industry

The electronics industry has provided the driving force behind Malaysia's industrialization. In the process, it has established itself as the country's largest and most dynamic manufacturing sector. Factory shipments by the Malaysian electronics industry totaled M\$18 billion in 1989, equivalent to approximately 30% of all Malaysian shipments by value. Electronics products were also responsible for fully 55.2% of total manufactured exports by value for the same year.

In the past, IC assembly provided the driving force behind electronics industry growth. IC were followed by audio equipment and color TVs and, in recent years, VTR units. This pattern for growth, however, faces two problems in the coming years: (1) Malaysia has already established itself as a worldwide base for production and exports in the existing electronic products, and sizeable further growth cannot be expected; and (2) a labour shortage threatens further industrialization centering around the labour-intensive assembly industries.

In order to overcome these problems, new growth industries must first be developed. Candidates for this category of new core industries include computers and computer peripherals, and office electronic equipment sectors covered by the present survey. Another effective measure would be to increase the domestic value-added ratios in existing core industries. This would involve promotion of the CRT and ceramic IC package/substrate industries. Also needed is an increase in parts suppliers through the promotion of local supporting industries.



In order to achieve the development of the electronics industry in the above-noted directions, the following types of measures are needed:

1) Attraction of foreign-affiliate companies

Promotion of the new industries that will be responsible for future growth in the Malaysian electronics industry will require the attraction of foreign affiliates rich in manufacturing know-how and having access to worldwide marketing networks.

2) Development of human resources for the electronics industry

The Malaysian electronics industry is currently faced with a serious shortage of engineers, technicians, and skilled workers. The training of such personnel is urgently required for the future development of this industry.

3) Reinforcement of industrial infrastructure

A high-value-added electronics industry will require advanced infrastructure such as the installation of industrial waste treatment facilities or the stable supply of electric power and industrial water.

4) Promotion of local subcontractors

The promotion of small and medium scale local parts manufacturers will be indispensable to any effort to improve the international competitiveness of the Malaysian electronics industry. This in turn will require: (1) increased guidance in quality control for small and medium scale local manufacturers; (2) financial support for modernization of production facilities at these firms; and (3) increased technical support for the improvement of management and production know-how.

(2) Supporting industries

In the process of industrialization, which has been led by the electronics industry, the inability of the small and medium scale local subcontracting industry to supply export-oriented assemblers with the parts they need has become a major problem.

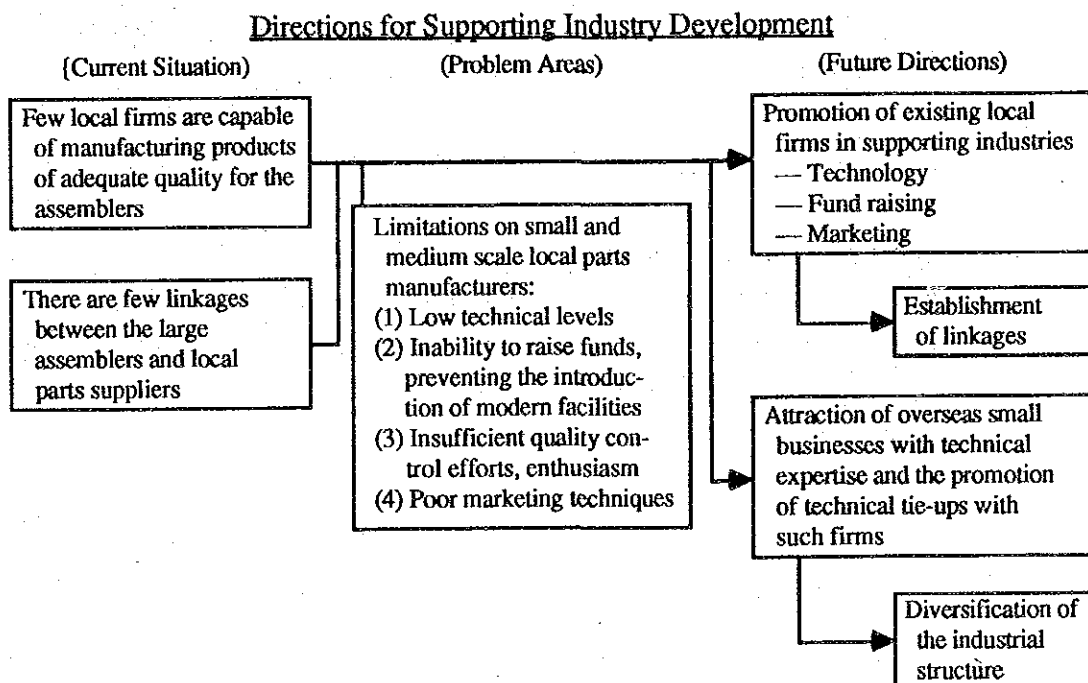
In the mould and die industry, for example, the industry itself has a relatively short history in Malaysia, and very few firms have the technical expertise needed to satisfy the demands of the large scale assemblers. Furthermore, they suffer from a shortage in the absolute number of skilled workers. Another factor inhibiting improvements in technical expertise is the fact that there are few Malaysian manufacturers specializing in moulds and dies, with most engaged in metal press machining, machinery assembly, or some other form of metal machining as well.

There are numerous firms specializing in castings, but their heavy dependence on traditional industries such as tin, rubber, palm oil, and lumber makes it difficult for them

in terms of technology to satisfy the requirement level for casting products ordered from the rapidly developing modern industries.

Development in the automotive metal parts industry has also lagged behind due to the limited total production volume of automobiles in Malaysia and the large variety of models. Only a few firms have the technical expertise required to produce prototypes according to automaker specifications or the financial resources to introduce new production facilities.

In future efforts to promote industrialization in Malaysia, the development of supporting industries, the small and medium scale local manufacturers in particular, would become an essential factor, along with the development of new core industries such as those of the electronics industry.



In summary, the following measures will be needed in order to allow the supporting industries in Malaysia to carry out their expected roles.

1) Technical support for small and medium scale local manufacturers

Technical support will be provided through government organizations in the areas of production technology, management, and marketing with the objective of developing linkages between the large scale assemblers and small and medium scale local parts manufacturers. Visits to these firms by experts would be preferable to intensive training at specific technical training facilities.

- 2) Financial support for the promotion of small and medium scale manufacturers  
Financial assistance programmes for the modernization of production facilities and the development of new business by small and medium scale manufacturers are to be strengthened.
- 3) Greater role for R&D assistance organizations  
The role of government bodies providing assistance in R&D efforts is to be increased to help small and medium scale manufacturers develop new products capable of satisfying the needs of the large scale assemblers in new fields.
- 4) Attraction and promotion of technical tie-ups with foreign-affiliate companies possessing advanced technologies  
The attraction of foreign companies and the promotion of technical tie-ups with these firms is needed to begin local production of products which are in high demand by the large scale assemblers but which cannot be produced by local companies due to a lack of technology and experience.

Furthermore, the following policies are to be implemented.

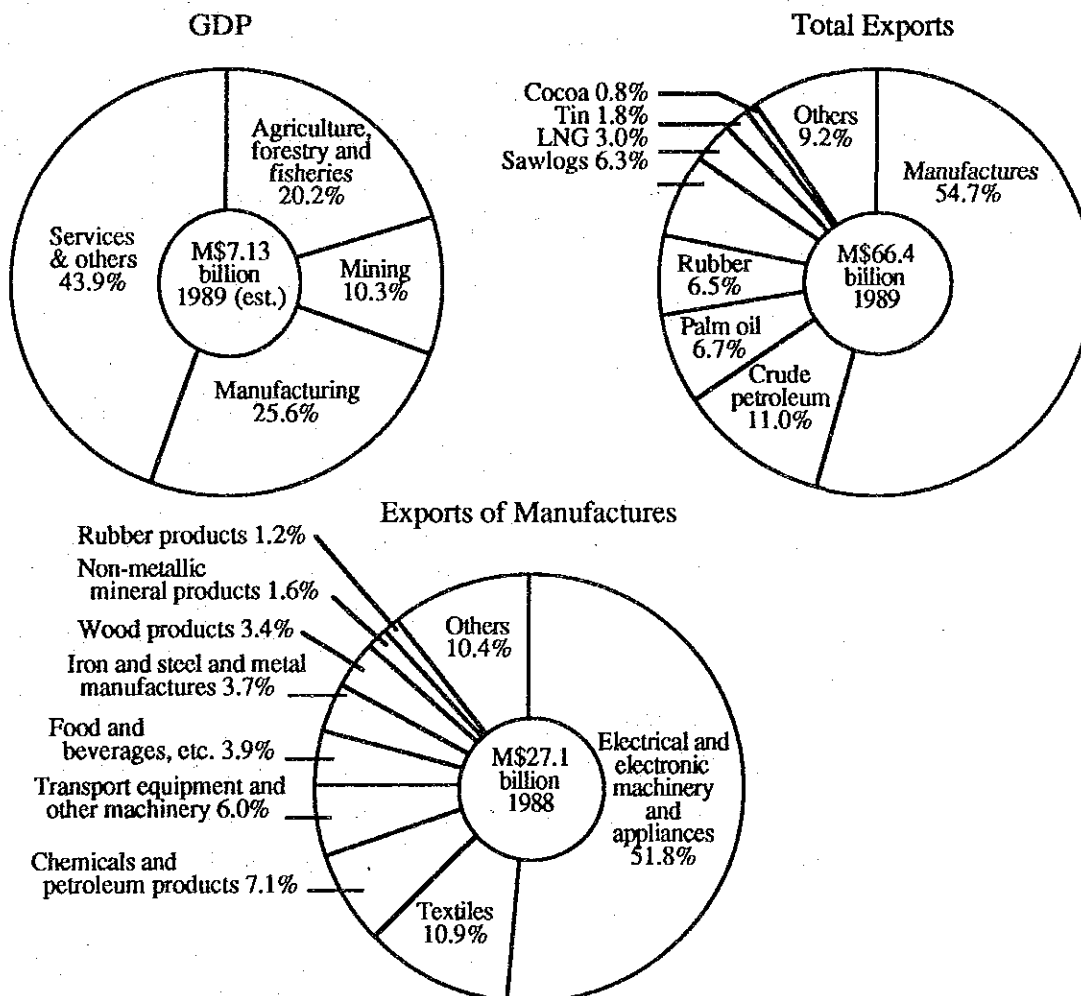
- 5) Development of skilled workers  
Since the training of personnel in the moulds and dies and casting sectors requires a great deal of time, advanced training both before and after employment must be increased.
- 6) Increased awareness of quality control  
As a result of the extremely high quality standards of parts orders from the large scale firms assembling products for export, awareness of the necessity for quality control must be increased among workers at small and medium scale companies.
- 7) Vitalization of industry association activities  
The vitalization of industry association activities is one effective means of improving technical standards and increasing management effectiveness throughout the industry. This is especially true for the casting industry, where greater industry cooperation will be needed for the transfer of operations to the foundry and engineering industrial estates.
- 8) Greater export promotion efforts  
For products in fields where there is only limited domestic demand, overseas markets must be developed in order to increase the size of production lots and thereby improve production efficiency.

### (3) Resource-based industries

Malaysia is a nation of abundant natural resources. In 1989, the primary industries of agriculture, forestry, livestock, fisheries, and mining accounted for 30.5% of the GDP (the *Economic Report 1989/90*). In addition, crude oil, palm oil, rubber, lumber, LNG, tin, and cocoa were responsible for 36.1% of all exports.

Electrical and electronic equipment were responsible for an overwhelmingly large share of industrial product exports in 1988, with exports of processed foods, wood products, rubber products, and non-metallic mineral products together amounting to less than 20% of total exports. This suggests that Malaysia has not been successful in exporting its natural resources with much added value.

#### Placement of Primary Products in the Malaysian Economy



Source: "Economic Report 1989/90" and "1990 Malaysia National Budget"

Chinaware, glass products, and rubber footwear sectors targeted by the present survey are not among leading resource-based industries in this country, and it is therefore difficult to propose a development scenario for the entire industry from the results of this survey alone. The following is a rough summary of the present situation in these three industries along with problem areas.

Firstly, very few companies have succeeded in effectively utilizing local resources for exports. Virtually all successful exporters have technical tie-ups with foreign affiliates or foreign capital, and many of them in fact depend more on imported raw materials than on domestic resources.

Secondly, virtually all of the products manufactured by local companies using locally-produced raw materials are intended for the limited domestic market, and with the exception of the glassware manufacturers, most of these firms have very small operations. Only a few have the resources necessary to gather information on foreign markets and carry out sales promotion campaigns on their own.

Thirdly, most of the products produced by local firms and intended for the Malaysian market are not of sufficient quality to be exported as-is. Thus, improved quality control and the development of more sophisticated product design are needed.

The following proposals are suggested as key policies for the promotion of resource-based industries in the future.

1) Increased R&D activities

R&D assistance activities at government organizations should be strengthened in order to more effectively utilize Malaysian resources and develop products which are competitive on the international market.

2) Support for export promotion

Since there are limits to the export marketing any one firm is capable of, marketing activities at government organizations should be boosted. It is also suggested that export promotion activities for the industry as a whole be strengthened via the efforts of industry associations.

3) Higher quality for exports

Product quality standards should be developed in order to improve the international competitiveness of Malaysian products from a long-term perspective.



### **III-3. Integration of Major Proposed Programmes for Each Industry Group**



### **III-3. Integration of Major Proposed Programmes for Each Industry Group**

#### **(1) Electronics industry**

Fig. III.3-1 shows the results of integrating the various separate programmes proposed for the four electronics-related industries -- office electronic equipment, CRTs, and ceramic IC packages, computers and computer peripherals -- in correspondence with principal policy measures for the industry as a whole.

The following three proposals are thought to be directly effective for the promotion of these industries.

1) Greater investment attraction activities by relevant organizations (MIDA)

The attraction of foreign-affiliate corporations possessing advanced manufacturing know-how and having access to worldwide marketing networks is to be promoted for the new electronics sectors which will form the basis for future industrial growth in Malaysia.

2) Development of human resources for the electronics industry

Engineers and technicians are to be trained to ensure a supply of skilled workers for the future development of the industry.

3) Reinforcement of the industrial infrastructure

The following elements of the industrial infrastructure should be provided to accept high-value-added electronics industry sectors.

- Industrial waste treatment facilities
- Reliable electric power supply
- Financing for the promotion of key industries
- R&D facilities

Furthermore, the following programmes have been proposed as a means of promoting the development of the local subcontractors which will supply parts and components to the electronics industry.

4) Greater guidance in quality control

Quality control at small and medium scale local manufacturers is to be improved and the local content ratio for the electronics industry increased.

5) Greater financial support for small and medium scale manufacturers

Financial assistance to small and medium scale local manufacturers for the modernization of production facilities and diversification of products is to be increased, and linkages between these firms and the electronics industry strengthened.

- 6) Strengthening of policy-making section for the promotion of parts industries  
Policies for the promotion of small and medium scale local parts manufacturers should be integrated and linkages between the large scale assemblers and small and medium scale local manufacturers strengthened.

## (2) Supporting industries

Fig. III.3-2 shows the results of integrating the various programmes proposed for the three main supporting industries -- moulds and dies, automotive metal parts and castings -- in correspondence with principal policy measures for the industry as a whole.

The integrated programmes are as follows.

- 1) Visits to small and medium scale manufacturers for technical support  
Experts are to visit small and medium scale local manufacturers for instruction in the areas of production technology, corporate management, and marketing in order that these firms may carry out their role as a supporting industry.
- 2) Increased financial support for small and medium scale manufacturers  
Financial assistance to local firms for the modernization of production facilities and diversification of products is to be increased, and linkages between these firms and the large scale assemblers strengthened.
- 3) Technology upgrading in the mould and die industry  
The activities of the Mould and Die Section at SIRIM are to be strengthened and the technical standards of this industry, which has a particularly large impact on the manufacturing sector as a whole, improved.
- 4) Attraction of investment and promotion of technical tie-ups  
The attraction of foreign-capital companies and technical tie-ups with these firms are to be promoted in sectors where existing local firms lack the necessary technology and experience.
- 5) Greater activities by industry associations  
Activities at industry associations are to be increased with the following objectives.
  - Improvement of production technology and quality control standards throughout the industry
  - Modernization of management through the education of managers
  - Promotion of industry cooperation in the operation of the foundry and engineering industrial estates
- 6) Development of human resources in metal processing industries  
Managers, engineers, and skilled workers are to be trained in metal processing-related fields.

7) Increased export promotion activities

In order to overcome the restrictions of the limited domestic market and increase production efficiency, export promotion activities are to be revitalized throughout the supporting industries.

(3) Resource-based industries

Fig. III.3-3 shows the results of integrating the various programmes proposed for three resource-based industries -- chinaware, glassware, and rubber footwear. The seven integrated programmes are listed below.

1) Greater R&D support for resource-based industries

The role of government R&D organizations is to be increased in order to support private sector R&D, thereby allowing companies to make the most effective use of Malaysian natural resources and produce competitive products. A plan for establishment of a SIRIM Ceramic Technology Centre is to be promoted for the chinaware and glassware industries. For the rubber footwear industry, inspection and testing facilities for rubber footwear in RRIM are to be enlarged.

2) Greater export promotion activities

In order to help those small and medium scale local businesses who produce products with export potential but are unable to succeed in exports because of a lack of overseas marketing expertise, the activities of export promotion organizations such as MEXPO are to be strengthened.

3) Promotion of industrial standardization and quality control

In order to improve the international competitiveness of Malaysian export products and especially those items, such as chinaware and rubber footwear, which are manufactured by small and medium scale businesses, a series of industrial standardization and quality control systems is to be established. This will include the unification of Malaysian product standards, the promotion of company standardization, and the sponsoring of nationwide quality control campaigns.

4) Technical support for small and medium scale companies

Experts are to be dispatched to local manufacturers to instruct managers in corporate management and offer on site guidance in the areas of production technology and quality control.

5) Financial support for small and medium scale companies

Local manufacturers hoping to increase product exports are to be provided with financial assistance for the modernization of production facilities and the expansion of export operations.

6) Greater activities by industry associations

Activities at industry associations are to be strengthened with the following objectives.

- Improvement of production technology and quality control standards throughout the industry
- Modernization of management through the education of managers
- Promotion of industry cooperation in the operation of the ceramic industry park currently under construction in Perak

7) Attraction of investment and promotion of technical tie-ups

Foreign-affiliate corporations boasting well-known brands or having access to worldwide marketing networks are to be attracted in industries utilizing Malaysia's natural resources. Technical tie-ups with local firms are to be promoted.

Fig. III. 3-1 Integration of Programmes Proposed for the Electronics-related Industries

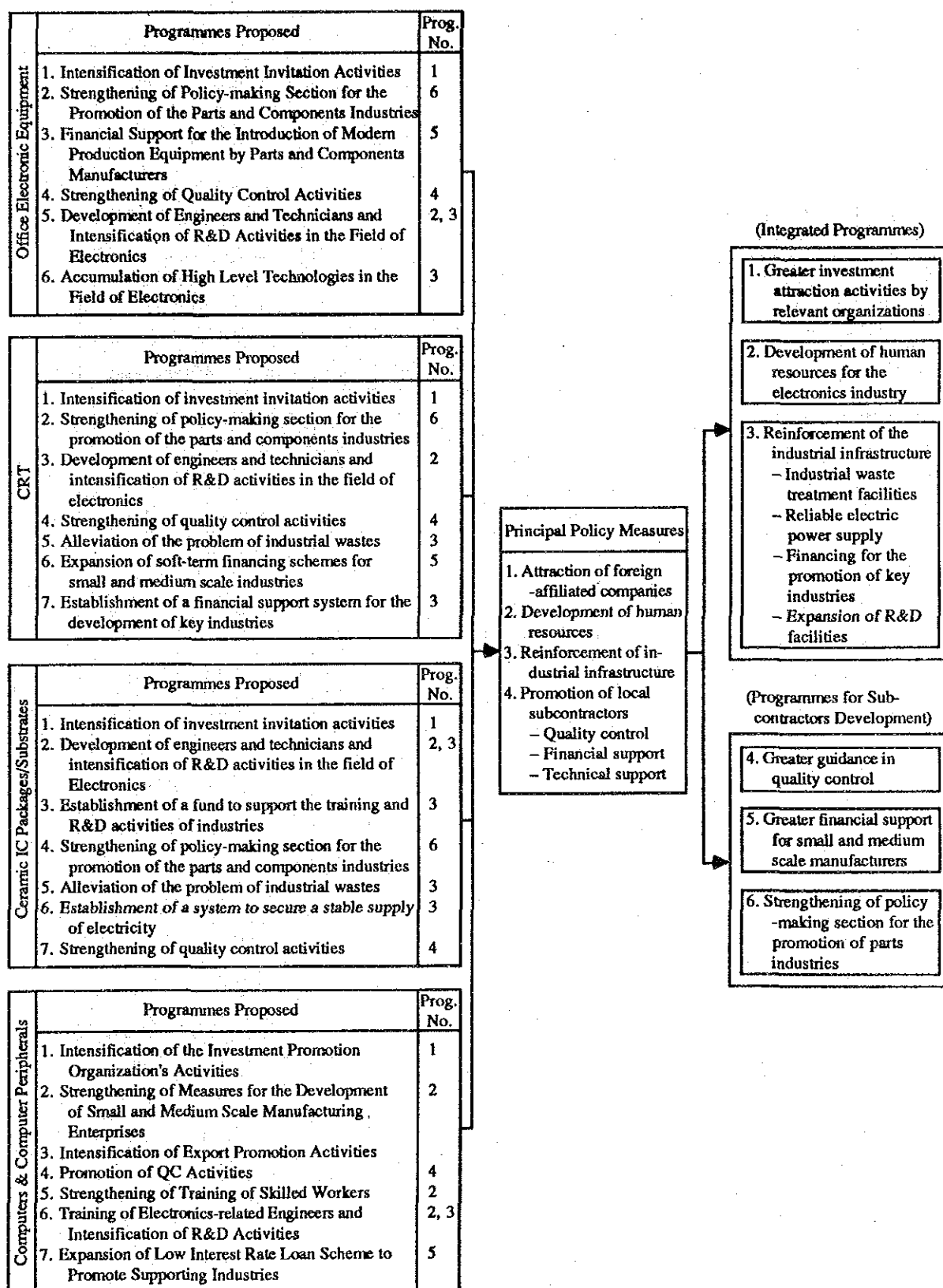


Fig. III. 3-2 Integration of Programmes Proposed for the Supporting Industries

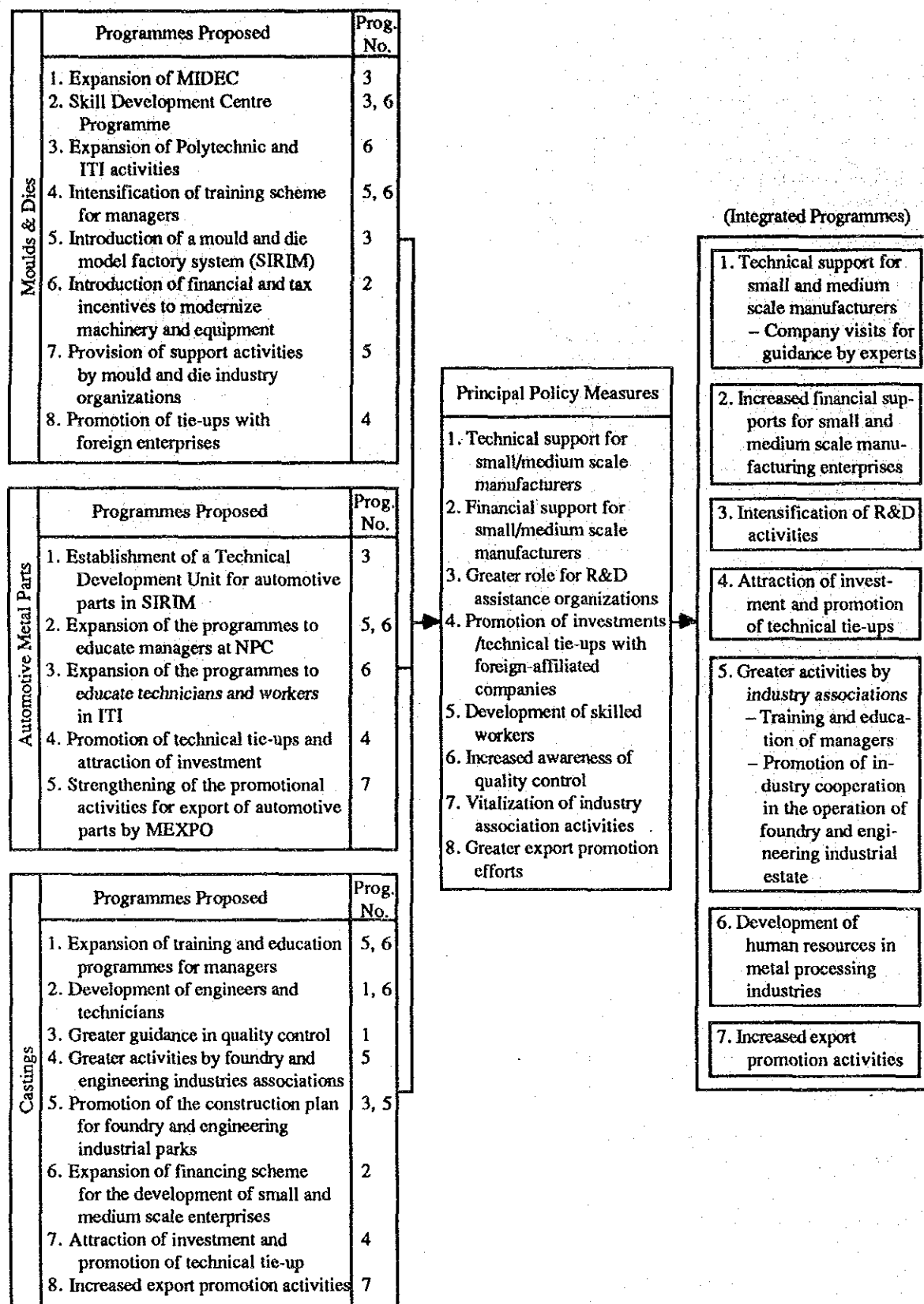
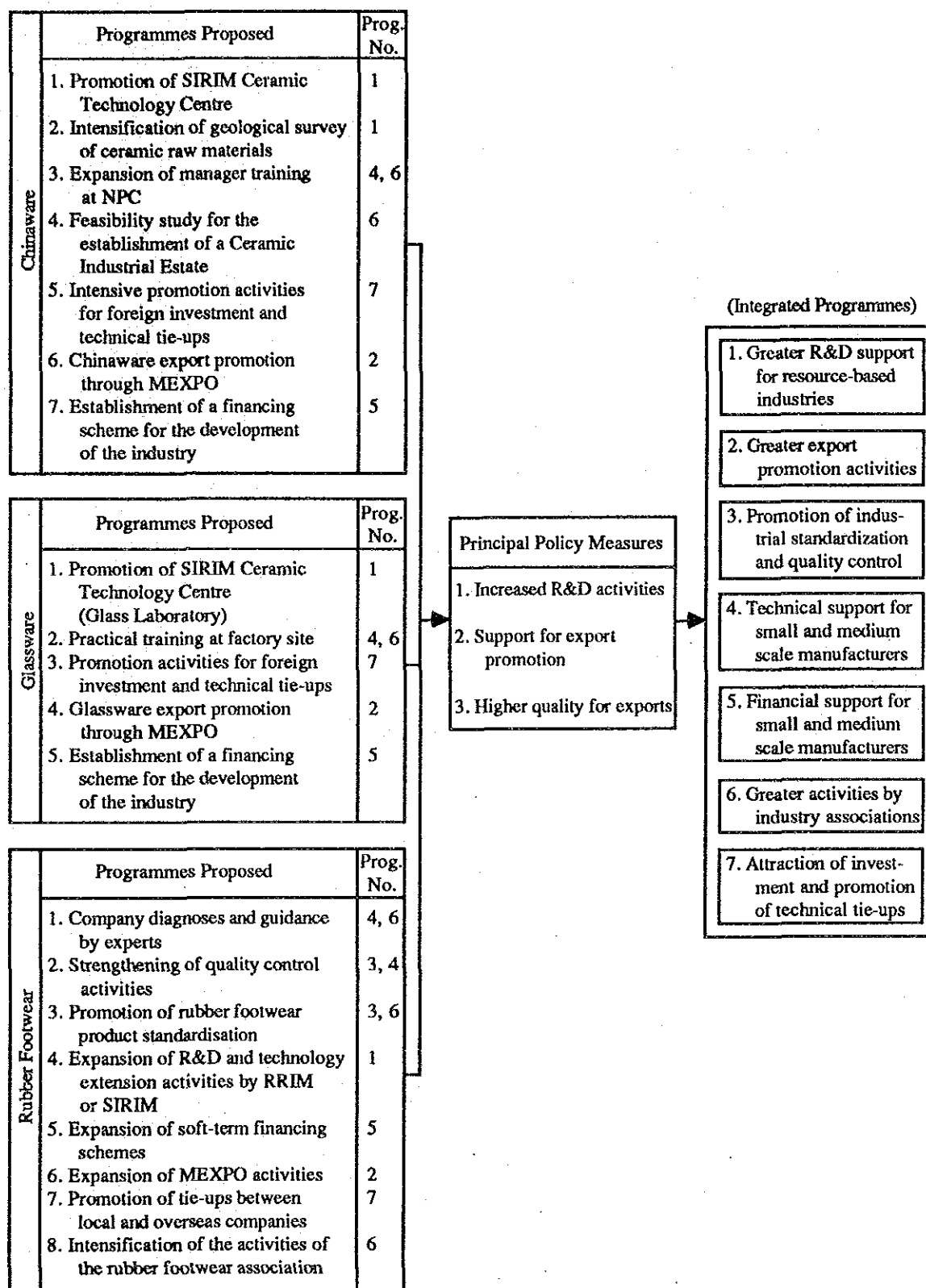




Fig. III. 3-3 Integration of Programmes Proposed for the Resource-based Industries



### **III-4. Formulation of Priority Projects**

### **III.4. Formulation of Priority Projects**

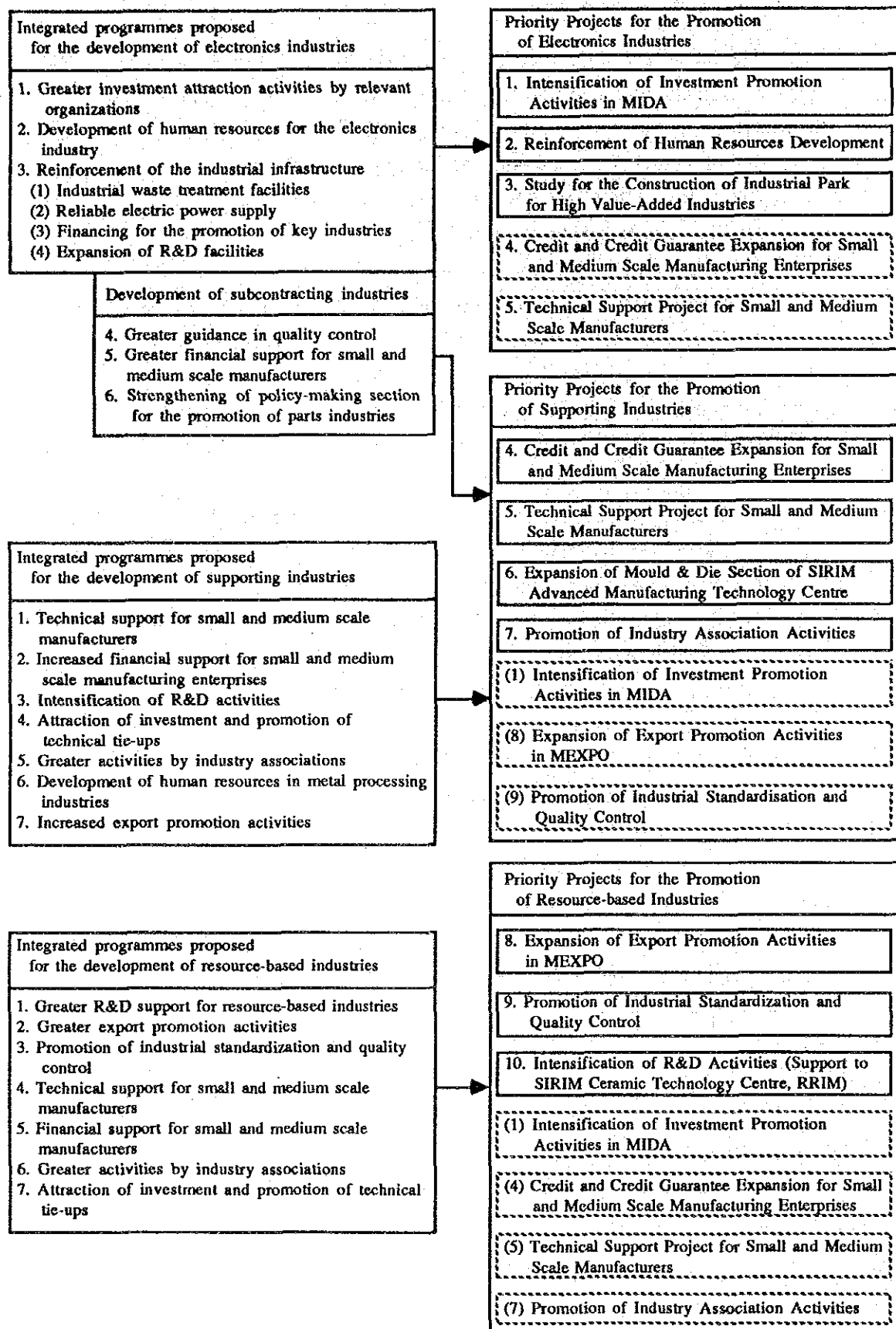
The integrated programmes described above were further integrated to facilitate their management, and final priority projects were proposed. The formulation process is illustrated in Fig. III.4-1. Details regarding the individual priority projects are given in the following section III-5. Contents of Priority Projects Proposed.

The following is a list of the ten priority projects.

- (1) Intensification of Investment Promotion Activities in MIDA
- (2) Programme for Reinforcement of Human Resources Development
- (3) Study for the Construction of Industrial Park for High Value-added Industries
- (4) Credit and Credit Guarantee Expansion Project for Small and Medium Scale Manufacturing Enterprises
- (5) Technical Support Project for Small and Medium Scale Manufacturers
- (6) Expansion Project for Mould and Die Section of SIRIM Advanced Manufacturing Technology Centre
- (7) Project for Promotion of Industry Association Activities
- (8) Expansion of Export Promotion Activities in MEXPO
- (9) Promotion of Industrial Standardization and Quality Control
- (10) Intensification of R&D Activities (Support to SIRIM Ceramic Technology Centre, and RRIM)

Of the above projects, (1) - (3) are based mainly on proposals for the electronics industry; (4) - (7) on proposals for supporting industries; and (8) - (10) on proposals for resource-based industries. Individual projects, however, are not necessarily limited to a specific industry group or sector but are comprehensive plans designed to meet the needs of all ten industries targeted in the current survey as well as other related industries. Project (5), involving technical support project for small and medium scale manufacturers, incorporates not only expert visits to individual companies for guidance in production technology, quality control technology, management know-how, and marketing techniques but also the proposal of government policies for promotion of small and medium scale enterprises.

**Fig. III. 4-1 Process of Formulation of Priority Projects**



### **III-5. Contents of Priority Projects Proposed**

**III-5-1. Intensification of Investment Promotion  
Activities in the Malaysian Industrial  
Development Authority (MIDA)**

### **III-5. Contents of Priority Projects Proposed**

#### **III-5-1. Intensification of Investment Promotion Activities in the Malaysian Industrial Development Authority (MIDA)**

##### **1. Background of Project Proposal**

In this development study, 10 industries were covered. Among these, there are many industries requiring attraction of overseas companies as a first step of industrial growth, such as office electronic equipment, computers and its peripherals, CRTs, and ceramic IC packages.

In Malaysia, MIDA plays the central role in investment promotion activities. Its activities are very highly evaluated by Malaysian government agencies and private companies which have invested in Malaysia. Despite the activities of MIDA, which is highly evaluated as one of the most efficient organizations in this area in Malaysia, this study group has proposed an intensification programmes of the investment activities. The reason for this is the much greater importance of strategic investment promotion activities in the promotion of the future industrialization of Malaysia.

On the other hand, MIDA too fully recognizes the importance of drafting comprehensive investment promotion policies and has already drafted and executed several programmes. The programmes proposed now are not different programmes from these existing ones, but are based on the same and intends to further augment and strengthen them.

##### **2. Summary of MIDA Activities**

###### **(1) General Summary**

- |                   |   |
|-------------------|---|
| [1] Name:         | Malaysian Industrial Development Authority<br>(MIDA)  |
| [2] Established:  | 1967 launched as Federal Industrial Development<br>Authority (FIDA)   |
| [3] Related Acts: | FIDA (Incorporation) Act, 1965<br>FIDA (Incorporation) (Amendment) Act, 1972<br>(* the main amendments were for additional<br>functions of the Authority and the establishment of<br>Special Advisory Committee along with the same)<br>FIDA (Change of Name and Amendment) Act, 1979<br>(* the main amendments were for confirmation of<br>the change of name from FIDA to MIDA) |

- [4] Organization: Independent government organization under jurisdiction of Ministry of Trade and Industry (MTI)
- Headquarters: Kuala Lumpur, nine division structure
- Domestic branches: 13 offices (MIDA opened its branch office in Selangor, Penang, Malacca, Negeri Sembilan and Perlis states in July 1990, and so as a result MIDA has got branch offices in all the 13 states in Malaysia.)
- Overseas offices: 14 investment centres (London, Zurich, Cologne, Paris, New York, Los Angeles, Chicago, Sidney, Seoul, Tokyo, Singapore, Hong Kong, Taipei, Stockholm)
- [5] Staff: 437 (as of July 1, 1989, including overseas local employees. Note that the capacity is 454 members so there is a chronic state of shortage of staff)
- [6] Budget: M\$22,855,000 (fiscal 1988)

The current organization chart of MIDA is as shown in Fig. III.5-1.

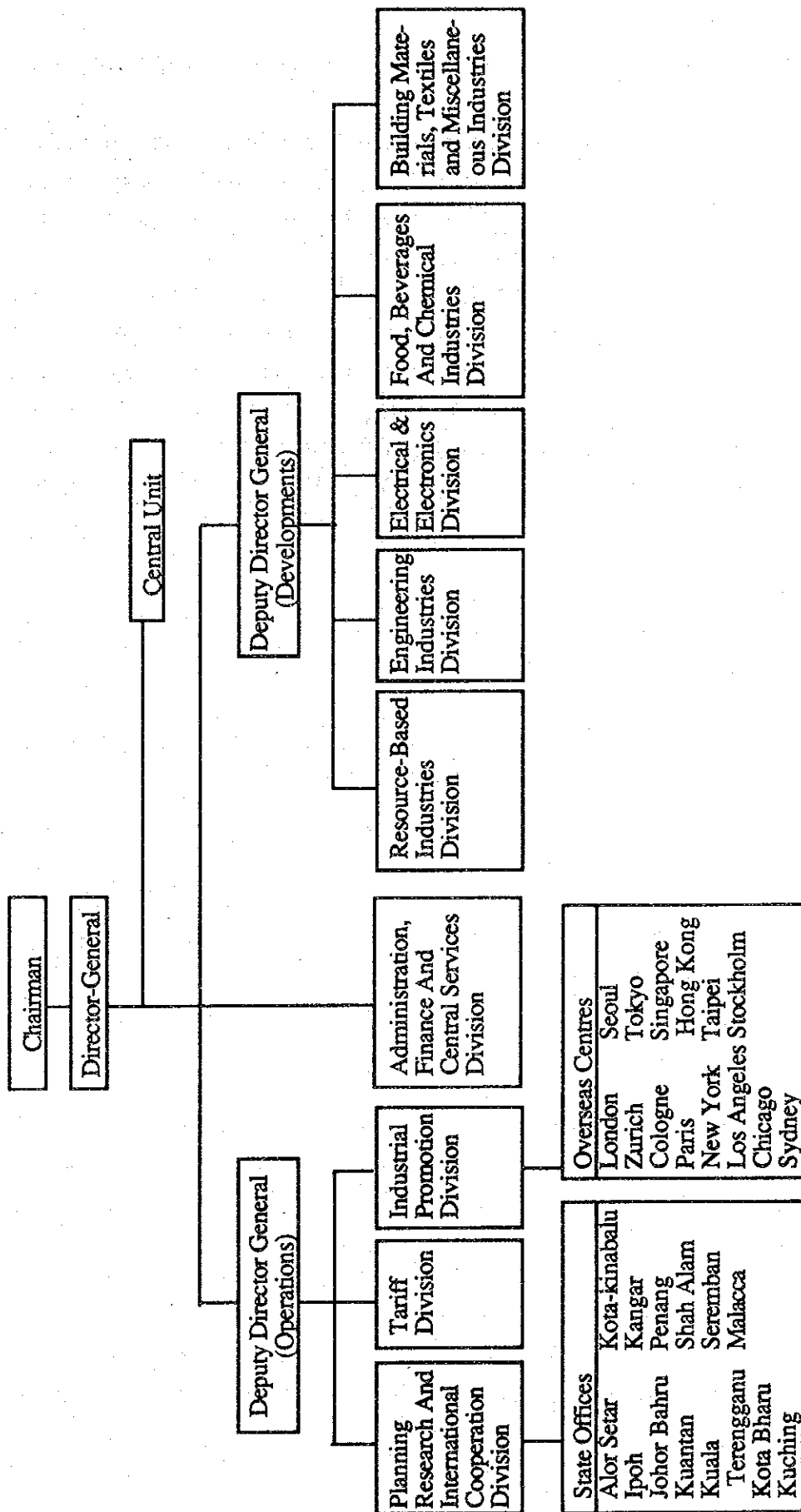
## (2) MIDA Functions

MIDA is given the job of promotion and coordination of industrial development in Malaysia. In the current FIDA Act (that is, the MIDA Act), the stipulated functions are as follows:

- [1] To undertake economic feasibility studies of industrial possibilities
- [2] To undertake industrial promotion work (whether in Malaysia or abroad)
- [3] To facilitate exchange of information and coordination among institutions engaged in or connected with industrial development
- [4] To recommend policy on industrial site development and, where it deems fit, to undertake the development of such sites
- [5] To evaluate applications for pioneer status
- [6] To advise the Federal Government on measures for the protection and promotion of industries including the imposition and alteration of , and exemption from, customs and other duties, and import and export licensing (\*functions added by amendments of 1972 Act)
- [7] To report annually to the Minister on the progress and problems of industrialization in Malaysia and to make recommendations on the manner in which such problems may be dealt with
- [8] To undertake other related duties



Fig. III. 5-1 Organization Chart of MIDA



Further, while not clearly stated in the FIDA Act, there are the following actual functions:

- [1] To evaluate granting of incentives under 1986 Investment Promotion Act
- [2] To evaluate granting of incentives to applications for manufacturing licenses under 1975 Industrial Coordination Act and 1984 Petroleum Development Act
- [3] To evaluate applications for posts for foreign nationals etc.

Further, in October 1988, the Coordination Centre for Investment (COI) was established. This was for strengthening the functions of MIDA as a one-stop agency for investors. At the present time, most of the matters requiring approval at the Federal Government level relating to the establishment of manufacturing projects, comprehensive agricultural projects, and hotel and tourism projects (that is, the establishment and operation of companies for investment in factories etc.) can be handled all at once through MIDA.

(3) Current MIDA Investment Promotion Strategy

MIDA itself already has a strategy for promotion of investment in its activities. The strategy for promotion of investment must be comprehensive - MIDA recognizes.

1) Basic Policy

MIDA divides its current investment promotion activities into the following two categories:

- [1] Publicity activities aimed at domestic and foreign investors for establishing an image of Malaysia as a profit-making base
- [2] Investment promotion activities aimed at potential domestic and foreign investors application for obtaining direct contacts so as to get investors to embark on surveys of Malaysia as a production base

That is, these activities are aimed at improving the image of Malaysia and getting potential investors to visit Malaysia.

In addition to this, at the present time, MIDA is of the belief that it is important to provide the information necessary and suitable for persuading potential investors. Note that recently, MIDA has been exerting more effort than ever in luring foreign companies.

2) Summary of Strategies

Table III.5-1 gives a summary of the investment promotion strategies of MIDA based on the materials prepared in January 1988. Recently (as of the time of the present study), these strategies have basically been adopted.

Note that MIDA is stressing projects related to the [1] resource-based industries, [2] high-technology industries, including the precision industries, and [3] ancillary and

supporting industries in the investment promotion strategies now being implemented or continuously to be implemented.

**Table III.5-1 Investment Promotion Strategies of MIDA**

(Prepared from documents of MIDA)

<b>A. General Investment Promotion Strategies</b>	
(i) General Publicity	<ul style="list-style-type: none"> <li>• Continuation of overall publicity on investment environment of Malaysia through news articles and advertisements.</li> <li>• When budgetary allocations are possible, employment of advertising and PR companies of international repute as agents for promotion of investment in specific countries and regions.</li> <li>• Effort in obtaining cooperation of airline companies, hotels, and travel agents for inviting foreign reporters.</li> <li>• Effort in making publicity of informations on specific industries.</li> </ul>
(ii) Promotional Media	<ul style="list-style-type: none"> <li>• Improvement of quality and content of printed matter.</li> <li>• Continued improvement of content of films, audio visual slides, and VTRs and introduction of latest audio visual projection methods.</li> </ul>
<b>B. Specific Investment Promotion Strategies</b>	
(i) Overseas Investment Promotion Missions/Delegations	<ul style="list-style-type: none"> <li>• Continuation of dispatch of general overseas investment promotion missions/delegations with specific objectives.</li> <li>• Emphasis on dispatch of individual, small sized group type missions of officials and private sector members for holding direct contacts with potential overseas investors.</li> </ul>
(ii) Local Seminars	<ul style="list-style-type: none"> <li>(a) Encouragement and support for holding of investment promotion seminars by State Economic Development Corporations aimed at potential domestic investors. Further, requests for assistance from domestic banks and chambers of commerce and industry.</li> <li>(b) Holding of investment promotion symposiums in Malaysia aimed at potential overseas investors. (new MIDA strategy of high priority). Participation of SEDCs in planning of such seminars. Further, sponsoring</li> </ul>

- of visits by overseas investors to the states, holding of state-level mini seminars, visits to factories and industrial estates, and holding of meetings.
- (iii) Registry of Investors and Contract Manufacturers (RICOM)
- Effort in matching up partners for joint ventures and uncovering subcontractors.
  - Cooperation with banks, chambers of commerce and industry, and industry associations and liaison with domestic and foreign organizations dealing with technical transfers.
- (iv) MIDA's Overseas Offices
- Intensification of the investment promotion activities of MIDA overseas offices. More stress to direct and consistent contacts with potential manufacturing companies particularly those in the promoted industrial sectors.
  - Reinforcement of activities of offices in countries with long term potential
  - Increasing office staff in countries with immediate potential, newly establishing offices in new countries, or increasing the number of offices in countries with existing offices (for example, West Germany, U.S., and Japan).
- (v) Role of Malaysian Embassies/High Commissions
- Dispatch of embassy staff well versed in situation of Malaysian economy and details of incentives.
  - Man-on-the-spot activities for promotion of investment in countries with no MIDA offices.
- (vi) Project Reports
- Preparation of specific project reports including cost comparative studies with competing countries.
- (vii) Appointment of Investment Advisors
- Requests for stationing of advisors from key investor countries in MIDA (currently advisors from West Germany, Canada, and Japan being stationed)

### **3. Proposed Comprehensive Strategy for Investment Promotion**

#### **(1) Basic Policies**

A provisional evaluation of the past investment promotion activities of MIDA would indicate that they have been generally successful. Further, at least, major accomplishments have been made up to now in the attraction of large corporations.

Therefore, the following may be given as the basic policies for the comprehensive strategy:

##### **Basic Policies for Comprehensive Strategy**

- [1] Continuing with current activities or raising the general level of activities
- [2] In particular, strengthening much more activities for promotion of investment in Malaysia by overseas small and medium sized enterprises
- [3] Strengthening activities for the promotion of joint venture projects between Malaysian companies and overseas companies

Among the above basic policies, regarding the promotion of investment from overseas small and medium sized enterprises, there are few small and medium sized companies, even in Japan, which have enough leeway for allocating sufficient time and labor for the collection and analysis of information on their own when investing overseas, as opposed to the large corporations. Therefore, some measure should be taken bearing this in mind. Further, regarding the promotion of joint venture projects, consideration is given to the wishes of the Malaysian government and industry. Despite the efforts by existing Japanese affiliated companies and other export oriented foreign capital affiliated companies to use local companies, there are still few successful cases of parts procurement from local companies and joint venture projects between local companies and overseas companies. In the future, it will be necessary to strengthen efforts to increase the opportunities for participation in related industries at the same time as promoting local companies by obtaining a grasp of the inhibitory factors, so that the local companies can serve as a part of the export-oriented supporting industries.

#### **(2) Framework of Strategies**

The current MIDA strategies for investment promotion may be classified into [1] general strategies consisting primarily of advertisement activities and [2] reinforcement of various types of events, organizations, and institutions. With respect to this, from the viewpoint of linkage of individual activities and the viewpoint of obtaining the information pointed out in this Development Study, it is recommended that use be made of the following framework:

##### **Framework of Comprehensive Strategies**

- i) Survey Activities

- [1] Collection of information - domestic and foreign
- [2] Analysis and processing of information (preparation)
- ii) Investment Promotion Activities
  - [1] General investment promotion activities - periodic, daily activities, events
    - domestic and foreign
  - [2] Individual investment promotion activities - periodic, daily activities,
    - individual promotional activities
    - overseas small and medium scale enterprises and local companies
- iii) Planning and Coordination of Programmes
  - [1] Drafting of plans for new programmes
  - [2] Evaluation and coordination of existing programmes
  - [3] Reinforcement of liaison among programmes

(3) Summary of Proposed Activities

The gist of the program activities is as follows:

Fig. III.5-2 is an overall chart of the strategies prepared based on the above framework of classification.

i) Survey Activities

MIDA engages in considerable periodic and individual surveys of all types as part of its activities for coordinating industrial development as the presiding organization over the same. The majority of the surveys for investment promotion activities may make use of these survey findings or serve as additions or supplements to the same.

[1] Collection of information: The requisite information from the standpoint of potential investors includes institutional information (investment procedures, incentives, investment related laws, regulations, etc.), information on the investment environment (industrial estates, the labor situation and wage trends, investment trends, comparative data for the different states), industrial information (state of individual industries, production and import/export statistics, etc.), corporate information (lists of companies, summaries of individual companies), general economic trends, etc.

Note that the side handling these investment promotion activities would require, in addition to the above information, information on potential overseas investors, trends in foreign investment in the countries targeted, industrial trends, information related to third country investments, etc.

[2] Analysis and processing of information (preparation): The information collected naturally should be used internally for planning investment promotion programmes, revising programme plans, etc., but it will be necessary to process it from the viewpoint of provision of information to potential investors.

It would be desirable to prepare the information provided with emphasis on [1] the promptness of information, [2] the detailedness of information, and [3] the accessibility of information.

ii) Investment Promotion Activities

[1] General investment promotion activities: The general investment promotion activities would be aimed at the dissemination of information and the creation of opportunities for promoting investment by potential investors through the same. These activities would include general advertising activities, responses to inquiries, reception of visitors, and other periodic and daily activities and the dispatch of missions/delegations, holding of seminars, invitations of reporters, and other event type activities. These are already underway and may be said to be generally productive.

On the other hand, regarding the attraction of overseas small and medium sized enterprises, small and medium sized enterprises in general have little leeway for independently collecting and analyzing information. In Japan's case, the first step they take is often to obtain information from official Japanese organizations, banks, etc. Therefore, while this is already being done in part, it is necessary to reinforce the provision of information to such intermediaries of information and further to obtain stronger feedback of information on potential investors from such intermediaries.

[2] Individual investment promotion activities: The individual investment promotion activities are designed for more positively attracting potential investors. The points which should be stressed in particular include stronger enticement of investment from overseas small and medium sized enterprises and promotion of joint venture projects.

Regarding the promotion of investment from overseas small and medium sized enterprises, as repeatedly mentioned, these companies have little leeway for engaging in surveys on investment, checking up on procedures, and dealing with those procedures. Therefore, stronger direct consulting and advice by MIDA at the stage close to where the final decision is made are of growing importance.

On the other hand, regarding promotion of joint venture projects, it is necessary to strengthen the existing RICOM. As overseas investors seeking Malaysian partners see it, there is much room for improvement in the current RICOM system in terms of the number of companies listed and the content of the individual information on

the same. Further, it would be necessary to spread knowledge about the existence of RICOM among domestic and foreign investors.

iii) Planning and Coordination of Programmes

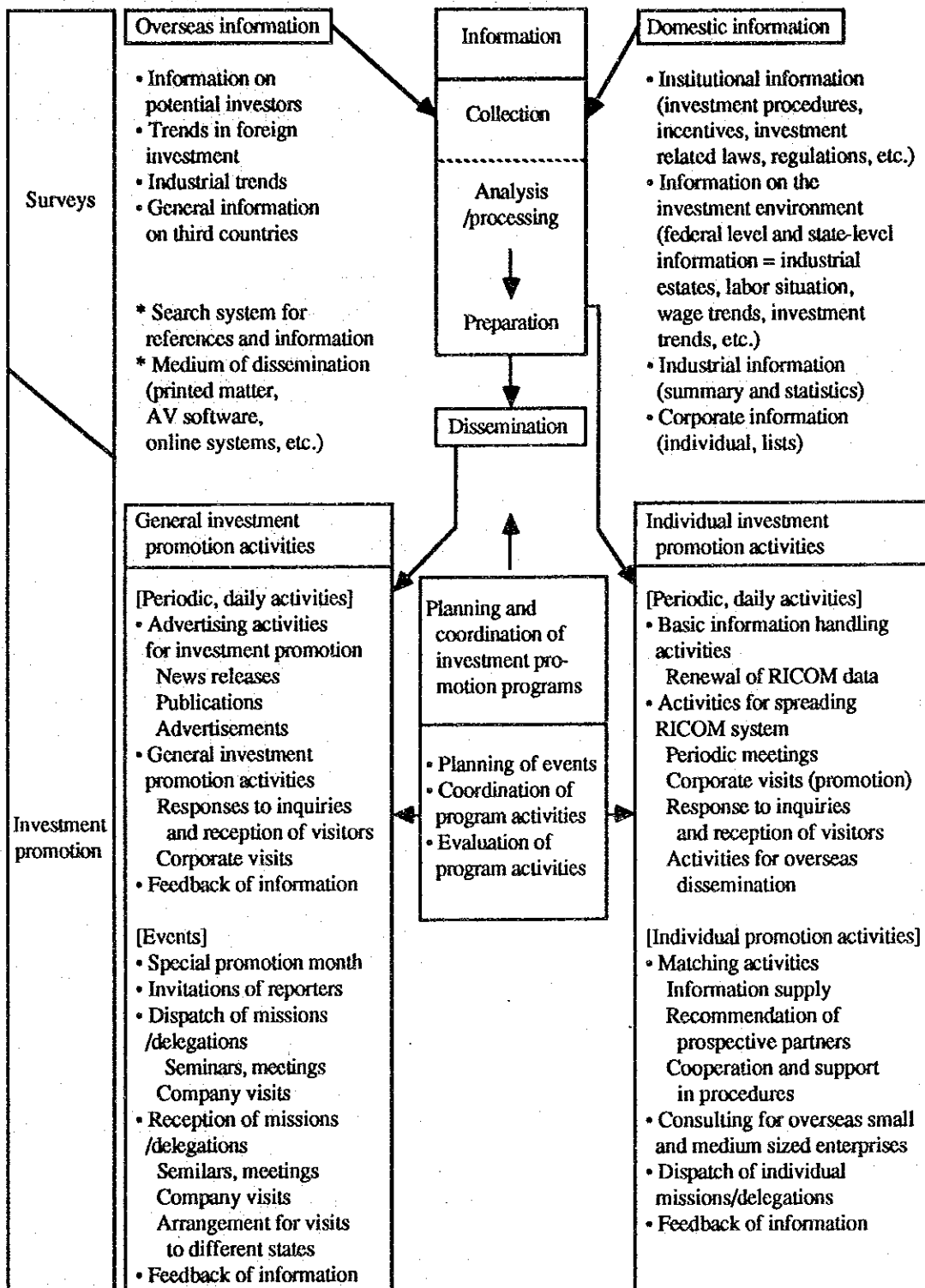
[1] Planning and drafting of new programmes: Proposals for new programmes would be solicited widely internally by an investment promotion task force with members composed of the related divisions and these put together to form overall plans.

[2] Evaluation and coordination of existing programmes: The information obtained in the investment promotion activities should be used as feedback and put to good use in subsequent investment promotion activities. On the other hand, there have recently been remarkable changes in investment trends and the investment environment. To deal with these, a system should be established for periodically evaluating and making necessary adjustments to the existing programmes. Note that it would be important for such programmes to be evaluated by a periodic meeting with outside parties such as the private sector, including foreign capital affiliated companies.

[3] Reinforcement of communication among programmes: Along with the expansion of programmes and the increase in the amount of work entailed, there is a tendency for inefficiency due to duplication of work, omissions of important matters, and mutual misunderstandings due to the lack of communication among the parties in charge of the programmes. The regular liaison among the divisions in MIDA are considered good, but in the future care must be given as well to exchanges of information and coordination among programmes through these periodic meetings.



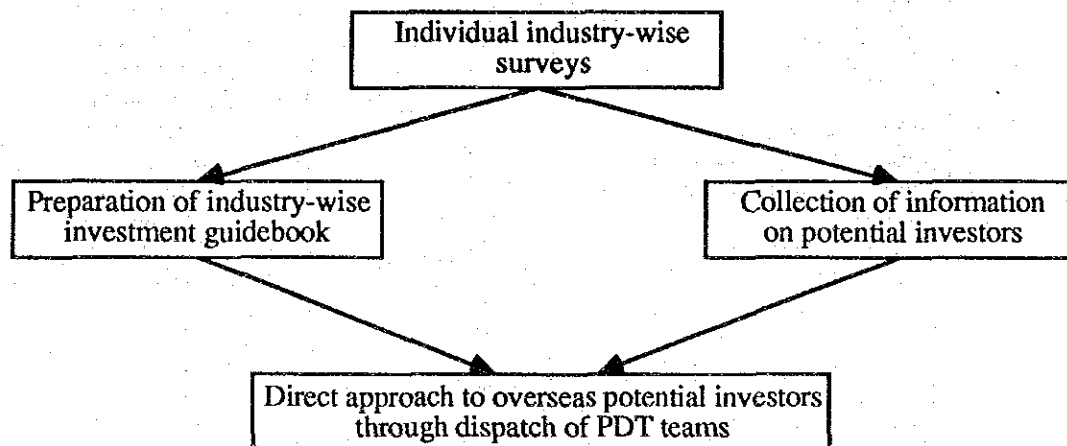
Fig. III.5-2 Overall Chart of Investment Promotion Activities



#### 4. Proposed Individual Programmes for Investment Promotion

##### (1) Programme for Systematic Promotion of Investment Using Industry-Wise Surveys as Basis

Using as a basis the findings of the first year and second year studies of this Development Study, the following series of investment promotion programmes have been systematized.



Of course, the above series of investment promotion programmes should be continued for the industries covered by the third year study as well, but it would be desirable for these to be systemized in MIDA and performed for industries other than those covered by this Development Study too.

##### (2) Continued Use of Investment Advisors of Foreign Nationality in MIDA Headquarters

MIDA headquarters even now has stationed investment advisors of foreign nationality dispatched from Japan, Canada, West Germany, and other nations. As investment by small and medium scale enterprises, which have little experience in overseas investment, is expected to increase in the future, for the time being it is considered necessary that these foreign nationality investment advisors continue to be used. The activities of these investment advisors which are envisioned would be as follows:

- 1) Reception of investment promotion missions/delegations from specific countries

In the future, it is expected that the number of visits by missions/delegations from local areas overseas (missions hosted by local authorities, local banks, local chambers of commerce and industry, etc.) or missions hosted by overseas

industry associations will increase much more. In particular, looking at the handling of such missions from countries not using English as their principal language, sufficient results can not really be expected if MIDA merely uses interpreters for explaining MIDA policies or incentives and the domestic situation in Malaysia (in particular the investment environment and economic conditions in the local regions). There is a great need for presentations by experts well versed in the industrial and economic situation of the respective foreign countries.

2) Promotion of investment by small and medium scale enterprises from specific countries and consulting for the same

Regarding the promotion of investment by small and medium scale enterprises from specific countries, first it would be necessary to prepare and update more information on Malaysia in the corresponding languages. There have already been prepared special language materials on the overall situation in Malaysia, the investment system, etc., but there is still insufficient information on the state level. Further, the already prepared material should be constantly updated. Note that much of the already issued material has not been suitably translated, so care must be taken in supervising the translations. In this regard, it would be very effective to have the materials checked by experts well versed in the situations both in Malaysia and the target countries.

Further, regarding the investment in Malaysia by overseas small and medium scale enterprises, a greater demand for MIDA's consulting service function is foreseen, especially regarding promotion of joint ventures with local Malaysian companies and siting in regional states. Therefore, advice and consulting services using foreign experts and tailored to overseas small and medium scale enterprises will become more important.

(3) Reinforcement of RICOM System for Introducing Investment Partners

To attract new foreign capital companies in the future and to promote domestic companies, it will be important to promote capital and technical tie-ups between foreign and domestic companies. Therefore, it would be desirable to further augment and make better use of the RICOM programme currently being run by MIDA. Specific measures for this would be as follows:

1) Improvement of RICOM list

RICOM was started in 1986 and had registered 135 Malaysian companies as of November, 1989. MIDA has started gradually the work to computerize the RICOM list.

The present RICOM list (printed) seems to be lacking both in the number of companies covered and in the information given in the company summaries. The staff

in charge state that more details are available from the company registration forms and that they can provide the same if asked, but considering the use of RICOM information in overseas, the information required for judging the size of the companies etc. should be incorporated. Further, this would lighten the load of work in responding to inquiries.

Regarding the items of information included, basically the format used for the forerunner of the RICOM information, i.e., "Your Potential Partner for Joint Ventures in Malaysia", would be sufficient. Further, it is important to input the data into a computer for the management and maintenance of RICOM. On the other hand, considering the use in overseas, at the present moment, use in the form of printed matter would be easier.

2) Reinforcement of RICOM Publicity

To make RICOM more effective, it is considered necessary to more widely publicize the existence of RICOM along with augmenting its content. In Malaysia, newspapers etc. are used for general advertising, but stronger publicity overseas would be desirable.

3) RICOM Promotion Conference

It is considered necessary to establish a group for promoting RICOM and making it more effective. Industry associations of local companies, groups of foreign affiliated companies, and other parts of the private section should be made to participate (even as quasimembers) and the conference used as a forum for discussions of evaluations of the results of RICOM, pinpointing of problems, and formulation of countermeasures.

(4) Reinforcement of Activities for Provision of Investment Related Information

Potential investors would find it extremely significant if they were able to acquire easily and quickly the information required for making decisions on investment. Therefore, the reinforcement of MIDA's activities for the provision of investment related information would be a most effective means for investment promotion. The specific measures for reinforcing these activities would be as follows:

1) Preparation of Materials and Statistics Meeting Information Needs

There have been remarkable changes in investment trends and the investment environment in Malaysia in these past one or two years. The targets for the supply of information have spread, in Japan, from the large sized corporations in the past to the small and medium sized enterprises. Further, the research divisions of banks etc. have been showing great interest in the promotional materials of MIDA as a means of offering their customers better service. In view of this situation, it is necessary to prepare materials and statistics meeting these various information needs. Therefore, it is necessary, naturally, to obtain a firm grasp of the information needs and clarify which

points should be emphasized in preparation of various materials and statistics, i.e., [1] the timeliness of the information, [2] the detailedness of the content, or [3] the accessibility of the information (ease of acquisition of the information by persons requiring the same). However, in the case of statistics, continuity is also stressed, so two types of statistics should be readily available, for example, statistics enabling an easy grasp of the current situation and trends at one glance and statistics for use for detailed analysis.

## 2) Reinforcement of Channels for Provision of Information

The media used for providing information include printed matter and audio visual materials. It is necessary to continue to diversify and improve the information media. On the other hand, a look at the channels by which information prepared by MIDA is transmitted to potential overseas investors shows that information is transmitted directly by the MIDA headquarters, overseas offices, etc. and further transmitted indirectly by related overseas organizations, banks, etc. Further, general level information is transmitted more widely through general domestic and foreign newspapers, magazines, and other mass media. Therefore, MIDA should not only reinforce this direct flow of information, but also strive to make greater use of these indirect means of transmission. In particular, related organizations, banks, etc. in the overseas countries are the first places that potential overseas investors contact and conversely are places from which MIDA can obtain information.

## 3) Improvement of Information Service Function

MIDA has an internal library which is used by its staff and may be used by general businessmen and other outsiders as well. The reference materials, statistics, etc. are relatively well equipped.

On the other hand, some of the free or non-free materials prepared by MIDA are distributed through the counter of the Administration Division and others through the Computer Section.

As part of the strengthening of the information service function, it would be advisable to have all the reference materials available for outsiders being handled solely through the library. And it would also be desirable to locate the library at the ground floor of the MIDA Building so that all the visitors including foreign businessmen could utilize quite freely.

## (5) Reinforcement of Activities of MIDA Overseas Offices

To attract overseas small and medium scale enterprises and promote joint venture projects with local companies, further efforts of the overseas offices are needed in collecting information on trends of the local industries in the countries concerned and information on small and medium scale enterprises there, and further in individual

activities for attracting and persuading superior foreign companies to invest. Greater activity is essential. For example, in Japan, there are numerous small and medium scale enterprises with superior technical expertise in the local regions in addition to the metropolitan areas.

In response to the ever-increasing volume of business from the specific key countries, it is suggested that the number of personnel sent overseas be increased and that these individuals receive adequate training in the language and culture of their destination before leaving Malaysia.

It is also important that sufficient budget be allocated in order to recruit senior and experienced local staff (preferably university graduates) for the MIDA overseas offices who are capable of assisting the personnel sent abroad.

**(6) Increase in the Number of Technical Interpreters and Translators**

As the attention focused on Malaysia as a potential site for investment by small and medium scale enterprises from specific key countries such as Japan, South Korea, and West Germany increases, so does the need for interpreters and translators capable of working in these languages. At present, however, there are very few such technical interpreters and translators in Malaysia.

In order to promote investment by small and medium scale enterprises from these countries in the future, Malaysia must work to expand education programmes for these languages and increase the number of capable interpreters and translators. Furthermore, until it becomes possible to meet language needs with Malaysian nationals, restrictions on entry visas and working permits should be relaxed for translators and interpreters of foreign nationality in order to assist the corporate activities of foreign investors.

**5. Areas in which Assistance from Overseas is Anticipated**

These afore-mentioned measures by MIDA for strengthening of its investment promotion activities can all be implemented by MIDA on its own, however, in the implementation of the individual projects proposed, a greater effect could be achieved if the following support could be obtained from overseas:

- (1) Program for systematic promotion of investment using industry-wise surveys as basis
  - Invitation of short-term experts for handling individual industrial surveys
  - Provision of information on potential overseas investors
- (2) Continued use of investment advisors of foreign nationality in the MIDA headquarters

- Invitation of a long-term expert as investment advisor
- (3) Reinforcement of RICOM system for introducing investment partners
  - Invitation of short-term expert for improving RICOM system
  - Provision of information on overseas companies using RICOM