

**STUDY ON INDUSTRIAL SUB-SECTOR
DEVELOPMENT IN THE REPUBLIC OF
THE PHILIPPINES**

INTEGRATED SUMMARY REPORT

August 1992

Japan International Cooperation Agency (JICA)

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CR (3)
92-142

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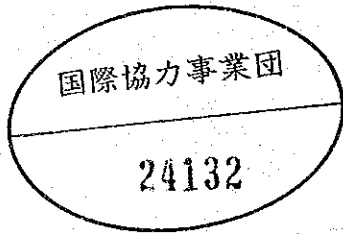


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Abbreviations

ASTI	Advanced Science and Technology Institute
BETP	Bureau of Export Trade Promotion
BOI	Board of Investments
BPS	Bureau of Product Standards
BSMBD	Bureau of Small and Medium Business Development
CB	Central Bank of the Philippines
CEBU-FAME	Cebu Fashion Accessories Manufacturers and Exporters, Inc.
CFIP	Chamber of Furniture Industries of the Philippines
CIB	Credit Information Bureau
CITC	Cottage Industry Technology Center
CITEM	Center for International Trade Expositions and Missions, Inc.
DA	Department of Agriculture
DAR	Department of Agrarian Reform
DBP	Department of Bank of the Philippines
DECS	Department of Education, Culture and Sports
DENR	Department of Environment and Natural Resources
DOLE	Department of Labor and Employment
DOST	Department of Science and Technology
DTI	Department of Trade and Industry
FAMAPHIL	Fashion Accessories Manufacturers' Association of the Philippines
FIB	Furniture Industry Board
FOBAP	Foreign Buyers Association of the Philippines
FPRDI	Forest Products Research and Development Institute
FTSC	Foreign Trade Service Corporation
ITAP	Information Technology Association of the Philippines
ITCC	Information Technology Coordinating Council
ITDI	Industrial Technology Development Institute
ITG	International Trade Group
ITTI	Information Technology Training Institute
METFI	MIAP-MM Educational and Technological Foundation, Inc.
MIAP	Metalworking Industries Association of the Philippines
MIRDC	Metals Industries Research and Development Center
NAPOLCOM	National Police Commission
NCC	National Computer Center
NCI	National Computer Institute
NEDA	National Economic and Development Authority
NMYC	National Manpower Youth Council
PADEC	Philippine Association of Data Entry Corporations
PCA	Philippine Coconut Authority
PCHI	Philippine Chamber of Handicraft Industries, Inc.
PCS	Philippine Computer Society
PDDCP	Product Development and Design Center of the Philippines
PHILTOY	Philippine Toy and Novelty Manufacturers Association, Inc.
PIITC	Philippine International Trading Corporation
POMA	Philippine Oleochemical Manufacturers Association
PSA	Philippine Software Association
PTTC	Philippine Trade Training Center
SBGFC	Small Business Guarantee and Finance Corporation
TLRC	Technology and Livelihood Resource Center
TUP	Technological University of the Philippines

I. Background and Objectives of the Survey

I. Background and Objectives of the Survey

1. Background

The Study on Industrial Sub-Sector Development in the Republic of the Philippines was carried out over a period of two years starting in March 1990. Based on an October 10, 1989 implementing arrangement (I/A) between the Department of Trade and Industry of the Philippines and the Japan International Cooperation Agency (JICA), the survey targeted six industrial sub-sectors.

Following is a short history of the study, from initial preparations to the actual survey:

December 1987	President Aquino made a request to former Japanese prime minister Takeshita for assistance in planning industrial development.
December 1988 March 26-31, 1989	The Republic of the Philippines submitted a TOR to Japan. JICA dispatched a preliminary fact-finding mission (agreement was reached on a framework for technical cooperation and four sub-sectors to be targeted by the survey).
July 2-21, 1989 October 6, 1989	Preliminary survey is carried out (selection of products). The JICA Scope of the Study mission and the Department of Trade and Industry reached formal agreement on an I/A for the survey.
March 15-29, 1990 March 28, 1990	First field survey (first-year) Holding of a steering committee meeting and signing of the minutes
June 4 - August 17, 1990	Second field survey August 15: Signing of the minutes
November 11-22, 1990	Interim deliberations and supplementary surveys November 21: Signing of the minutes
March 11-19, 1991	Preparation of a draft report and final deliberations March 18: Signing of the minutes
May 1991 June 10 - August 8, 1991	First-year Final Report is submitted to Philippine side. First field survey (second-year) August 7: Signing of the minutes
September 5, 1991	Meeting is held with Undersecretary Tomas I. Alcantara to discuss implementation of a comprehensive review.
November 16-30, 1991	Interim deliberations, supplementary surveys November 28: Signing of the minutes
March 10-18, 1992	Deliberations on Draft Final Report and meetings on the proposed Integrated Summary Report March 17: Signing of the minutes
June 1992	Second-year Final Report is submitted to the Philippine side.
July 20-28, 1992	Deliberations on Final Report July 28: Signing of the minutes

2. Objectives

The current study, covering six selected sub-sectors, was designed to recommend plans for the development of internationally-competitive industries and the promotion of exports by these industries.

The study, which consisted of field surveys, third-country surveys, and Japanese surveys, worked to identify issues from both the supply and demand view points.

3. Sub-Sectors Targeted by the Study

The following sub-sectors and products were surveyed:

First year:	Metal engineering (Die making for metals)
	Wooden furniture
	Computer software
Second year:	Toys (Stuffed toys)
	Fashion accessories (Costume jewelry)
	Oleochemicals

4. Integrated Summary Report

The integrated summary report was designed to summarize the results of the two-year survey and contribute to implementation of the development plans. The two-year survey laid out comprehensive development plans for the six targeted sub-sectors from the standpoint of promoting each individual sub-sector. The integrated summary report is an attempt to (1) review the problems from the common standpoint among the sub-sectors studied and enhance the efficiency and effectiveness of the development plans; and (2) select priority projects from the standpoint of government assistance in developing each of the sub-sectors. The report also offers suggestions concerning activities thought to be necessary for implementation of each optimum priority project.

It is hoped that this report will serve as a guideline for activities during implementation of the development plans. Current conditions, problem areas, and development strategy suggestions for each sub-sector are also summarized briefly from the first- and second-year final reports. For further details, please refer to the original reports.

II. Issues in Sub-Sector Promotion and the Development Plans

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1. Basic Directions for Sub-Sector Promotion

(1) Importance of Sub-Sector Promotion

Sub-sector promotion is an important strategy for revitalizing the Philippine economy. Development plans for specific sub-sectors should be steadily implemented based on cooperation between the public and private sectors. This type of approach can already be seen in the DTI/BOI initiative, and the current sub-sector study is one example. It is hoped that this type of approach will be firmly established further in the future.

The basic directions for sub-sector promotion can be summarized as follows:

First, the global environment surrounding the Philippines should be carefully monitored to determine the country's strengths that can be used in efforts to industrialize. Studying the strategic choices made by neighboring Asian NIEs in the past would also aid in achieving export-oriented industrialization and a favorable cycle of sustainable growth.

As the international division of labor proceeds, corporations are making greater efforts to globalize their operations. The Asian NIEs were quick to respond to this change in the international environment, achieving a transition from import-replacement-oriented industrialization to policies favoring export-led growth. Industrialization in these nations was achieved by specializing in fields in which the country was thought to possess an advantage, aggressively introducing new technologies, and improving productivity. This is true not only of the NIEs but of ASEAN countries like Thailand and Malaysia as well.

Second, sub-sector development cannot involve only a handful of large, and privileged corporations, a pattern often seen in the past; instead, ties between industries and between large and small companies must be strengthened. The development of small business itself is also an important precursor to sub-sector promotion.

Small businesses in the Philippines have yet to achieve the standards of technology, production management, and corporate management needed to directly access export markets and high-quality domestic markets. Their access to the funds needed to modernize facilities is also limited. In this sense, the promotion of exports at small businesses will not be easy. However, this type of development is critical and must be considered as a basic direction for industrial development strategy.

Third, given the restrictions imposed by the existing debt burden, the government should continue to work towards the formation of a favorable cycle centering around investment promotion. At present the country faces a vicious spiral of low growth resulting in a low savings rate and sluggish capital formation, which in turn hinders growth. Aggressive efforts to attract foreign investment could put a stop to this cycle.

Competition for foreign investment among Asian nations continues to intensify. Viewed from a worldwide perspective as well, the former Soviet Union, Eastern Europe, China and Vietnam are all competing for a limited supply of foreign capital investment. The task of the Philippines, therefore, is to improve its overseas image and improve the investment climate by beefing up infrastructure, thereby leading to a better environment for doing business.

It is hoped that DTI/BOI will see the early 1990s as a good opportunity for the Philippines to attract more foreign investment. In order to gain more than merely expressions of interest from investors, the government should continue with its policy of easing regulations. Overseas investors are concerned about the direction of foreign investment policy to be taken by the new administration.

The Foreign Investment Act of 1991 is seen as actively encouraging foreign investment, while at the same time providing for a transition period. As important foreign investment policy decisions are implemented, the following points should be taken into consideration while aggressively pursuing foreign investment.

1. In line with the scheduled implementation of the Foreign Investment Act of 1991, it is desirable that important policy decisions be announced collectively in a package that clarifies their objectives and interrelations to the outside world, and especially towards interested investors.

2. Important decisions made in line with this implementation should be consistent.

Last, are those items related to sub-sector development procedures. In connection with this, government support should also be secured in the area of trade policy.

The following measures are recommended to promote development in each of the sub-sectors:

1. Opportunities to access export markets and local markets with higher quality standards should be enhanced. This will result in higher exports while increasing awareness at individual firms of the needs of these markets in terms of technology, production management, marketing and management.

2. To comply with the needs of these markets, efforts must be made at the company level to improve production technology, production management, marketing and management. This will contribute to the development of markets and the promotion of tie-ups with overseas companies, further paving the way for independent initiatives in the future.

3. These improvements should be promoted by enhancing infrastructure, technology, the financial system, and the educational and vocational training systems.

One of the conditions for this will be providing motivation for industry improvements in connection with the needs of export markets.

The Export Development Bill, presented before the Congress in November 1990, is expected to play an important role in this respect. The bill focuses around the government proposal of export promotion policies and the reinforcement of a system of responsibilities for coordinating these policies. It indicates the possibility of a clear separation of divisions for the planning and monitoring of basic policies under a comprehensive vision for trade promotion.

(2) Issues During the Transition to the New Administration

Under the banner of economic and social democratization, the Aquino administration took power in February 1986 and strived to rebuild the nation's economy with an eye to eliminating poverty, repaying a huge accumulated foreign debt, creating jobs, and establishing social equality.

After shrinking in 1984-85, the economy grew by 1.5% in 1986. The following year saw the implementation of a mid-term development plan and the establishment of the Omnibus Investment Code, which boosted foreign investment and helped to support average annual growth of 6% during the 1987-89 period. In 1989 the Multilateral Assistance Initiative (MAI) and Philippine Assistance Program (PAP) were realized, paving the way for servicing of the country's accumulated foreign debt.

The attempted coup d'état in December 1989, however, greatly damaged the country's overseas image as a destination for tourism and investment. The devastating earthquake in Baguio the following July coupled with the Gulf crisis in August, which boosted prices of petroleum products, fueled inflation, slashed incoming foreign exchange and exacerbated unemployment, pushed the economic growth rate down to 3.1%.

Further natural disasters, including the June 1991 eruption of Mt. Pinatubo and the November typhoon in Leyte, inflicted further damage on the economy, and actual GNP growth plunged to -0.05%. Other negative economic factors included the U.S. pull-out from Clark Air Base following the June eruption and the decision not to renew the U.S. lease on the naval base at Subic Bay.

Looking back over the six years of the Aquino administration, the first three years saw the revival of a near-dead economy, the creation of jobs, and the opening of a way to overcome poverty. During the administration's later years, however, a string of natural disasters combined with social instability to hinder reorganization of the market economy. Many problems were left unresolved, including a growing debt service burden, a need for sound finances, and the deep-rooted problem of poverty.

(3) The Ramos Administration Plan for Social and Economic Reconstruction

On July 27, 1992 newly-inaugurated President Ramos delivered his State-of-the-Nation address before the joint session of the upper and lower houses of Congress. In it, he emphasized a commitment to eliminating public unrest and rebuilding the nation and revealed a plan to establish a Presidential Commission to Fight Poverty. Finally, the president revealed a plan to establish an Energy Department as well as policies to improve government services and relieve unemployment.

Basically, the new government will promote democratization of the economy and society, carrying on the policies of the previous administration in a more comprehensive fashion while at the same time promoting the development of industrial sub-sectors.

Under the new administration, the Department of Trade and Industry has established the following macroeconomic growth targets for the coming six years as a means of overcoming problems like inflation, unemployment, and the deficit in the country's international balance of payments.

1. Raise per-capita national income from the current \$760 to \$1,000.
2. Sustain real GNP growth of 10% a year.
3. Reduce the national poverty level from 55% to 30%.
4. Increase exports to \$23 billion, from \$10 billion in 1992.

5. Generate at least a million jobs a year.

In order to meet these targets, the DTI is currently studying investment incentives believed necessary to increase production capacity in the numerous industrial sub-sectors. Achievement of the goals will require both domestic and foreign investment, and the DTI expects foreign investment to bring with it new products, higher technical standards, and technical innovations as well as opening up world markets to Philippine products.

In addition to promoting investment, the DTI plans to alleviate restrictions on investment and simplify the necessary procedures. For example, the Omnibus Investment Code of 1987 is set to be reviewed with an eye on today's needs, with the BOI to submit proposed revisions to the Congress.

The basic directions of Philippine trade policy will remain unchanged under the new administration, but it is hoped that promotion as a comprehensive policy package will help to attract foreign investment.

Table II-1: Philippine Economic Indices (1986-91)

Economic index	1986	1987	1988	1989	1990	1991
GNP (billions of pesos)	614.7	703.4	822.9	961.9	1,132.4	1,253.8
Per-capita GNP (\$)	538	596	642	700	730	726
Real growth in GNP (%)	1.9	5.8	6.7	5.7	3.1	Δ 0.05
Rise in consumer prices (%)	0.8	3.8	8.8	10.6	12.7	17.7
Unemployment (%)	11.1	9.1	8.3	8.4	8.1	9.0
Foreign exchange reserves (billions of dollars)	2.46	1.96	2.06	2.32	1.99	4.47
Exports (billions of dollars)	4.84	5.72	7.07	7.82	8.19	8.84
Imports (billions of dollars)	5.04	6.74	8.16	10.42	12.21	12.05
Balance of trade (billions of dollars)	Δ0.2	Δ1.02	Δ1.09	Δ2.6	Δ4.02	Δ3.21
Balance of payments (billions of dollars)	1.02	Δ0.44	Δ0.39	Δ1.47	Δ2.69	Δ1.04
Accumulated foreign debt (billions of dollars)	28.26	28.65	27.92	27.62	28.55	29.8 (as of Nov.)
Exports to Japan (billions of dollars)	0.85	0.98	1.42	1.59	1.62	1.76
Imports from Japan (billions of dollars)	0.87	1.12	1.42	2.04	2.23	2.35
Balance of trade with Japan (billions of dollars)	Δ0.02	Δ0.14	-	Δ0.45	Δ0.61	Δ0.59

Source: 1991 Philippine Statistical Yearbook

Note: Δ means negative.

2. Features of Selected Sub-Sectors and Recommendations of Promotion and Development Strategies for Each Sub-Sector

2-1 Metal Engineering (Die Making for Metals)

(1) The International Development of the Parts Processing and Machinery Assembly Industries and the Die Making Industry

In assembly industries such as the automotive and home electrical appliance sectors, firms in the industrialized countries shifted some of their production to bases in developing countries at an early stage. In the past, most shifts of production were aimed at maintaining or expanding the market where the production facility was located, but in recent years an increasing number of such operations have been established with the objective of exporting products, mainly home electrical appliances and consumer electronics products, to third-country markets. This change in global environment for the assembly industry has resulted in a similar change for the parts industry through moves such as increased local procurement of the components needed for local assembly.

The NIES, once thought to be optimal locations for the establishment of assembly industry, have been hit by rapidly increasing labor costs and unfavorable exchange rate fluctuations in recent years. Consequently, an increasing number of firms which initially gave strategic precedence to the NIES are now shifting their operations to ASEAN countries.

In response to the changes in the economic environment noted above, the following changes have occurred in the parts industry:

1. Local production of parts and components and procurement from neighboring countries are both increasing, replacing imports from the advanced nations.
2. An increasing number of companies in Japan and the other industrialized countries are viewing Asia as the most attractive parts supply base in their global strategies and thus establishing their procurement centers in the region.
3. Efforts to develop an organic linkage among heretofore independent production operations in Asia are emerging. Automobile and parts manufacturers having a wide range of tie-ups across Asia are studying the possibility of mutually complementary division of labor systems such as the so-called "Brand-to-Brand Complementation Scheme." Similar movements can be seen in the home electrical appliance and electronics fields.

However, the development of die making industries in the developing countries lags behind the international development of assembling industries and moves toward localization of parts manufacturing industries. Development in this industry requires not only improved metal engineering technologies but also better design technologies, the securing of suitable die materials, and establishment of the production management technologies required to maintain delivery schedules. Even in the NIES, there are very few die manufacturers capable of producing dies of high enough precision to satisfy the needs of the export-oriented processing and assembly industries. Sources of large and high-precision dies remains limited mainly to Japan and Western Europe.

(2) Current Situation of the Philippine Die Making Industry

Today there are estimated to be fewer than 100 firms which can be classified as die manufacturers, whether for in-house use or outside sale. Based on the results of the questionnaire survey and interviews, only about 10 of these firms were specialized in die manufacture. This group includes most of those companies capable of producing high-

grade dies such as progressive dies and precision dies for electronics, semiconductor, and electrical equipment manufacturers. Virtually all of die manufacturers are located in Manila and surrounding areas, where user industries are concentrated.

(3) Basic Strategies to Promote Development of the Die Making Industry

Development of the die making industry must be accompanied by development in the parts processing industry, which constitutes the main source of demand for dies.

Often in developing countries, growth in the parts industry does not necessarily benefit the die making industry, while buyers continue to rely on imported dies. ()

In the case of the Philippines, the existence of 1) a vicious circle between the lack of development of processing and assembling industries which use dies and the lack of development of the die making industry, and 2) another vicious circle between the lack of development of peripheral supporting technologies and R&D and the lack of development of the die making industry, which should spur the development of these technologies, have hindered the development of the die making industry. In order to accelerate growth in the die making industry, these vicious circles will have to be broken, i.e., the development of the processing and assembly industries will have to be promoted together with improvements in die-related technology, including peripheral technologies.

Possible means of achieving this include the following:

1. To promote development of the Philippine processing and assembly industries while making full use of the international development process of the world processing and assembly industries.
2. To achieve the transfer of technology to the die making industry and to upgrade the industry by strengthening linkages with the local processing and assembly sectors.
3. To attempt qualitative and quantitative improvements in the parts (processing) industry based on improvements made in the die making industry. ()

In order to achieve this type of development, the following two points will have to be achieved:

1. To prepare an investment environment in which the Philippines is viewed as a base for international operations by the processing and assembly industries.
2. To achieve certain improvements in the areas of technology, management, and production management, thereby creating opportunities for the utilization of the Philippine die making industry as a partner by processing and assembly firms.

2-2 Wooden Furniture Industry

(1) Current Situation of the Philippine Wooden Furniture Industry

The number of furniture manufacturers in the Philippines totals approximately 15,000. More than 60 percent of these are said to be cottage industries with capital of no more than 250,000 pesos. The development of the country's wooden furniture industry has been fuelled by domestic demand. Local demand for furniture in the Philippines can be divided into two categories: those products intended for low- and middle-income groups and those intended for high-income consumers. In addition, demand from hotels and U.S. military bases throughout the Far East including the Philippines represents a large market for medium- and high-grade furniture. ()

Structural features of the wooden furniture industry include; 1) a tendency toward specialization in carved or antique furniture, 2) a labor-intensive production on order system, 3) a wide variation in the size of manufacturers, 4) the strong tendency of small and medium enterprises in provincial areas to operate as subcontractors, and 5) a substantial volume of exports in the form of sanded frames, mainly carved chairs. Some rattan furniture makers are attempting to develop speciality (combination) furniture or wooden furniture because of the unstable supply of good quality raw rattan. According to BOI's sectoral development study of the furniture industry, roughly 90 percent of the rattan and cane furniture is destined for the export market, with the remaining 10 percent sold locally. This is contrast to the case of wooden furniture, of which only 10 percent is exported and the remaining 90 percent is sold on the domestic market.

Most of the wooden furniture makers export woodwork, mainly small items such as fittings, ornaments and shelves, in addition to furniture. Woodwork exports in 1988 amounted to US\$47.08 million, or 2.7 times the value of wooden furniture exports (US\$17.57 million). The main markets for Philippine-made wooden furniture include the United States, which accounts for more than 60 percent of the total, followed by Japan, Hong Kong, Australia and the United Kingdom.

(2) Basic Strategies to Promote Development of the Wooden Furniture Industry

The key to the development of the Philippine wooden furniture industry as an export industry will depend on the achievement of the following two conditions: 1) the strengthening of export marketing activities; and 2) the improvement of the fundamental industrial performance to meet the needs of export market.

1 Strengthening Export Marketing Activities: The strengthening of export marketing activities is required so that the present export capability can be utilized as effectively as possible, while at the same time increasing the understanding of export market needs by increasing opportunities for contact with export markets.

2 Improving the Performance of the Industry and Firms: The most effective means of improving the fundamental performance of the industry and firms are for firms to acquire the business know-how through tie-ups with firms in industrialized countries. In establishing such relationships, however, the local firm is necessary to have a technology and management capacity which is attractive to overseas buyers or firms. It is therefore necessary to meet as soon as possible the basic technology and management requirements for the export business.

3 Development of Economic and Technological Infrastructure: Together with efforts made by firms and industry, the development of following economic and technological infrastructures is required to achieve the tasks stated in the above.

- a. The improvement of assistance system for facility modernization and management efficiency improvement
- b. The development of assistance system to grade-up design development capacity
- c. The arrangement of training systems in the furniture industry sector
- d. The promotion of standardization of raw materials, auxiliary materials, components and products

2-3 Computer Software

(1) Current Situation of the Philippine Computer Software Development Industry

There are reportedly about 300 software development and data entry companies in the Philippines, of which there are about 150 major ones. They employ an estimated 20,000 to 30,000 workers. The industry is a new one, with most companies having been established about 10 years ago.

Hardware Environment: There are about 1,000 mainframes and minicomputers installed, of which about 60 percent are IBM. While there are no official statistics, it seems that there are about 100,000 personal computers. Computers are spreading in use to a wide range of fields such as manufacturing, distribution, finance, educational institutions, and the government sector.

Software Environment: The development companies may be classified into foreign affiliates, large sized domestic companies, and independents. The work engaged in is mostly development of applications software, with some systems software. The costs required for development are one-fourth to one-fifth those of Japan. The domestic market was worth an estimated US\$10 million in 1988. Export destinations include mainly such English speaking regions like the U.S., Canada, Europe, Australia, Singapore, and Hong Kong. Exports by BOI registered companies in 1989 totaled about US\$3.48 million.

Data entry companies may be classified into specialists in offshore work, specialists in domestic work, and in-house work. Most of the data entry is of texts and numerals. Strong points are the low costs and the large numbers of workers familiar with English and keyboards. They are oriented overseas stronger than software development companies, and the U.S. is the largest market, but the Caribbean countries, India, and Sri Lanka are strong rivals. Exports by BOI registered companies in 1989 totaled about US\$8.49 million. Many companies' transactions are done using magnetic tapes or floppy disks. Only one company utilizes international telecommunications for transactions. The accuracy rate is said to be between 99.95 percent and 99.99 percent.

(2) State of Export Markets

In the global computerization, computers are downsizing and information processing speeds increasingly faster. Along with this, construction of network systems and integration of different systems are becoming trends in software development, so it is expected that demand will increase for network development and systems integration.

(3) Basic Strategies to Promote Development of the Computer Software Development Industry

In general, a software development sector develops in tandem with that country's computerization. Therefore, the development targets for the software development sector often are studied as part of that country's computerization plans. In the case of the Philippines, however, the country has not made sufficient progress in computerization itself and, rather, computer software development has gone ahead with the aim of meeting export demand.

The computer software development sectors of Japan and the U.S. are, on the other hand, suffering from severe shortages of engineers. This shortage is expected to further worsen in the years ahead, forcing companies to farm out as much work as possible overseas or improve their hardware environments and software development environments so as to deal with the shortage.

In view of this situation, the Philippines must establish a development program which focuses on this overseas demand. The program is examined based on the following two points of view.

1. Creation of Opportunities for Accessing Export Market: The industrialized countries are suffering from shortages of manpower and are facing growing software demand, so the conditions for software development exports by the Philippines are falling into line, but there is extremely insufficient access to the export markets.

2. Importance of Opportunities for Development of Advanced Software Domestically: For the software development companies of the Philippines to win high marks in the export markets and increase the scope of orders they receive, they must by all means try to improve their development capabilities. Improvement of capabilities in development technology would be made possible for the first time by participation in much sophisticated development work. As already mentioned, however, the Philippines is still insufficiently computerized and has not yet reached the stage where it provides, on its own, sufficient opportunities for technical development. Considering this point, it would be extremely effective if the government would create such opportunities by launching large scale development projects, which would contribute to raising the level of software development companies.

If it is difficult to create such development opportunities, then consideration may be given to establishment of a facility offering training in advanced development technology. In the future, such a facility would have to offer training and be able to contribute to the promotion of the computerization of the country as well.

2-4 Stuffed Toy Industry

(1) The Stuffed Toy Export Market and the International Development of the Industry

Stuffed toy manufacturing is a typical labor-intensive industry, with personnel expenses generally accounting for 30 - 50 percent of production costs. As a result, the major exporting countries have changed with time. Japan, which was among the main exporting nations in the 1970s, gave up the position to R. Korea and Taiwan when its labor costs increased. In the latter half of the 1980s, China and Thailand began to replace R. Korea and Taiwan as the prime manufacturing bases.

The market for stuffed toys is characterized by extreme fluctuations in consumer preferences. In the distribution of stuffed toys, buyers versed in market trends play an important role; thus, producing nations serve only as production bases. Sometimes vendors stand between buyers and manufacturers.

(2) Current Situation of the Philippine Stuffed Toy Industry

No accurate data are available regarding the total number of stuffed toy firms. However, the number is estimated at around 104 on the basis of the number of BOI-registered firms, the PHILTOY membership and various data of PCHI (Philippine Chamber of Handicraft Industry). Of these firms, it is estimated that 19 specialize in exports. The remaining 85 are mostly cottage or small and medium-size enterprises, and many of them are engaged in subcontracting.

As can be seen from its history, the Philippine stuffed toy industry is traditionally export oriented. It has developed with the support of U.S. buyers and R. Korean manufacturers who have close relationships with them.

As is the situation in other developing nations, the stuffed toy industry in the Philippines is based on close relationships with buyers or vendors.

Buyers and vendors overseas regard the Philippines as a production base, with marketing, product development and raw material purchases made by R. Korean and Taiwanese vendors. Because these vendors have networks with two or more buyers, manufacturers which have close relations with these vendors can maintain high rates of operation and can export almost 100 percent of their production. Such enterprises, however, account for only around 8 percent of the entire industry.

The other firms deal directly with buyers. Some firms do business by planning their production on the basis of long-term contracts with specified buyers, while others do transactions with buyers on a spot basis.

To do business with buyers, manufacturers must be able to make counter samples and patterns. Contracts are concluded on the premise that manufacturers have reached a certain technological level. Few manufacturers without experience can attract the attention of buyers. Manufacturers with long-term contracts with specific buyers maintain stable operating rates which are higher than those of other manufacturers. But such firms account for a mere 11 percent of all manufacturers.

In contrast, manufacturers operating on a spot contract basis generally lack a steady flow of orders and their operation rate is low.

(3) Basic Strategies to Promote Development of the Stuffed Toy Industry

Under the current situation, it has already become difficult for the Philippine stuffed toy industry to maintain price competitiveness in the low-priced product market. Thus the existence of the Philippine stuffed toy industry is currently based on non-price competitiveness and fundamental goals in the future should be based on the establishment of status in the medium and high-grade product markets where non-price competitiveness works as an important factor. The Philippine industry will maintain non-price competitiveness through 1) production technology and quality control levels adequate for buyers, and 2) the ability of workers to speak English, which makes giving directions on the factory floor simpler.

However, this non-price competitiveness is possessed only by firms which have teamed up with overseas capital and a small number of local firms of middle standing. The remaining majority of firms lack ability in pattern making, quality control and other areas necessary for manufacturing medium and high-grade products. Unless efforts are made to nurture such firms, the size of the Philippine stuffed toy industry will inevitably shrink. One result of this would be a reduction in the infrastructural facilities required by the stuffed toy industry and this disadvantage would outweigh the Philippine industry's advantage in non-price competitiveness. That is why nurturing of the majority of local firms should be considered in parallel with the fundamental goals stated above.

Efforts to bolster price competitiveness must be the first priority, even in the medium and high-class product markets. Price competitiveness may be bolstered by lifting the currently low operation rate. Expansion of orders from markets which have delivery times different from those of current customers would improve the operation rate and bolster price competitiveness.

On the other hand, active efforts to make known the industry's ability to manufacture medium and high-grade products are required to establish a position in the

medium and high-grade product markets, and thus exploitation of new buyers is absolutely necessary.

As for the remaining majority of local firms, it is necessary for the time being to take measures to give them price competitiveness in the low-priced product market. However, such actions alone will not bring about improvement of the corporate quality of stuffed toy firms. Nurturing of pattern makers and study of quality control manuals are also necessary to receive orders from the medium and high-grade product markets.

The possibility of local raw material purchases is one of the most important conditions for selecting a production base from the viewpoints of buyers and vendors. The Philippines has one plush manufacturer with the present capacity or future potential to produce articles qualified for export. It would be appropriate to provide this firm with encouragement measures as an exporting firm and for the user industries to understand the significance of nurturing the firm and collaborate with it.

2-5 Costume Jewelry Industry

(1) Current Situation of the Export Market of the Costume Jewelry

In place of the costly precious metals and gemstones used in fine jewelry, costume jewelry uses inexpensive base metals which have been plated, synthetic gemstones, plastics, textiles, and a variety of natural materials. Designed with an emphasis on fashion and lacking the lasting value of fine jewelry, these pieces have a short life cycle and are generally mass-produced by machines.

The three leading exporters of costume jewelry in 1988 were Hong Kong (\$321 million), the R. Korea (\$259 million), and W. Germany (\$175 million). Together these three countries accounted for roughly half of worldwide exports of \$1.6 billion. Asia was responsible for 50% of all exports, and Europe for 41%. Philippine exports of \$19 million represented only 1% of the total.

Asian exports of costume jewelry have been successful because this is a labor intensive industry and the region has a large supply of cheap labor. Asian producers use different materials in each country and have targeted different sectors of the world market. Virtually all exports are low in price.

(2) Current Situation of the Philippine Costume Jewelry Industry

The Philippine costume jewelry industry consists of exporters, assemblers, manufacturers, and other related firms. Most of the exporters are also engaged in assembly and manufacturing. In Cebu, however, exporters and manufacturers have relatively distinct functions, and the manufacturing divisions at the exporters are quite small.

Most are located in Cebu and surrounding areas, and many are cottage industries with just 5-10 employees. They are numbered at anywhere from 1,000 to 2,000; the actual figure is uncertain.

(3) Basic Strategies to Promote Development of the Costume Jewelry Industry

The Philippines' use of wood, shell, paper and paper mache has gained a reputation among buyers for its innovativeness. No other country can supply costume jewelry using these materials. However, Philippine products are grouped into the Class C and Class D markets of the U.S. costume jewelry market. None of these products has

been able to penetrate the Class B market, and they are hardly sold even in the Class C market. In Japan as well, the Class D market is the main destination for Philippine goods. (For details on the A~D market classification system, please refer to the appropriate sections in the second-year report.)

Buyers make the decision to purchase from a country when consumers demand the kinds of products for which that country is known. Thus, buyers turn to the Philippines only when there is substantial demand for Class D costume jewelry. As long as demand for this Class D jewelry does not increase, neither will imports from the Philippines. A temporary boom may result in a rush on orders to the Philippines, but once the boom is over sales are bound to grow sluggish once again.

In the small Class D market, the Philippines has already garnered a large share. Exports dependent on this segment, therefore, have limited potential for growth.

When considering penetration of Class A-C markets, however, there is a lack of the materials and processing technologies required to develop suitable new products, and the development of supporting industry cannot be seen. In particular, the metalworking techniques so necessary to success in today's market are virtually nonexistent in the Philippines, and there are no local manufacturers of needed metal components. Even shell processing techniques are not advanced enough to produce products suited to Class C and higher markets.

If the country is to expand costume jewelry exports, it will have to go beyond the confines of the Class D market which is the present targeted market.

In the short-term, the Class C market should be developed based on operations at existing corporations. In the mid- to long term, the industry should set its sights on the Class B market by promoting tie-ups with overseas companies.

2-6 Oleochemical Industry

(1) The Oleochemical Product Market and the International Development of the Industry

Among raw materials for oleochemicals coconut oil and palm kernel oil, which have the same characteristics and uses because of the similarity of their chemical compositions, are in direct competition with one another in the global oil and fat markets.

Production of palm kernel oil was a marginal 600,000 metric tons (MT) in 1981 while production of coconut oil was 2.89 million MT. However, palm kernel oil production grew steadily through the 1980s by an average annual rate of 6.4 percent while coconut oil production stagnated during the decade. In 1990, production of coconut oil and palm kernel oil was recorded at 3.29 million MT and 1.43 million MT respectively.

The world's major oleochemical manufacturers are currently moving their production bases from their own countries to Southeast Asia and expanding their production of basic oleochemicals and derivatives.

Malaysia is becoming the world's greatest supplier of fatty acids. At present, as well as the production expansion plans already approved by the Malaysian government, there are additional plans which, if approved, would increase annual production up to 580,000 MT. Production capacity would thus be at the same level as that in the U.S. It is expected that the majority of the fatty acids produced in Malaysia will be exported. Malaysia can thus be said to have an extremely large influence in the world market. In

recent years, fatty acid production has also increased in countries including Indonesia and India.

Production of fatty alcohols is expected to increase in Southeast Asia in the future. Malaysia will be at the center of this production. It is estimated that the world's present natural fatty alcohol production capacity stands at 522,000 MT. This is expected to increase 240,000 MT to 762,000 MT by the end of 1992.

Tendencies toward expanding production of glycerol as well as intermediate derivatives in Southeast Asia can also be seen.

(2) Current Situation of the Philippine Oleochemical Industry

15 firms were registered with the BOI as of March 1992.

Coconut production is vulnerable to weather fluctuations. Unless coconut oil prices and supply can be stabilized through the replanting of coconut trees, the use of fertilizer, and increased harvests, the shift to palm kernel oil is expected to become even more pronounced.

Many problems remain with government policy toward the coconut sector, including production surcharges, export taxes, a slowness to adopt hybrid varieties, and inadequate fertilization.

Since the domestic market is small, as mentioned above, oleochemical manufacturers of both basic oleochemicals and derivatives depend on exports. Main user industries for surfactants and industrial agents include textiles, rubber, plastics and chemicals. However, they are still underdeveloped in the Philippines.

(3) Basic Strategies to Promote Development of the Oleochemical Industry

As is the case with numerous other countries, most Philippine oleochemical manufacturers are tie-up ventures with overseas firms. Cocomchem and D&L are the only major firms of Philippine capital. Each firm basically has the capacity to expand its operation based on its particular management strategy. It follows that as a development strategy it is necessary to provide support for the creation of an industrial environment which allows each of these firms, including those which will enter the industry in the future, to fully demonstrate their capacities. In other words, what is necessary is an industrial environment in which Philippine oleochemical firms may compete on equal conditions with firms in competing countries.

From this standpoint, the following are believed necessary.

1. The provision to existing firms of incentives in line with those offered to firms in competing countries, particularly Malaysia
2. Security of stable supplies of coconut oil
3. Elimination of barriers to new investment from overseas

In areas where it is believed that firms will as a matter of course, or should, make efforts according to their own management plans, development should be left to those firms. However, areas where this cannot be expected, for reasons of the limitations on the Philippine oleochemical industry, should be given separate consideration. On this point, it is often the case that though the Philippines may have a need at the national level for development in certain areas, little attention will be paid by the individual firm in terms of the international development of the oleochemical industry. This is due to the fact that

most of the oleochemical firms in the Philippines are either multinational corporations or tie-up ventures with overseas firms, and activities are carried out fundamentally in accordance with the concerns of these firms. Therefore there is always the possibility that these firms will move their production bases to more advantageous regions rather than expend more of their resources than necessary in the Philippines. Thus it is strongly emphasized that R&D activities based on Philippine needs should be promoted.

3. Sub-Sector Development Project Recommendations

Based on the recommended development strategies described above, suggestions were offered concerning specific development projects for each sub-sector. The relationship between these projects and the problems they are expected to resolve is illustrated in Tables II-2 to II-7.

The development projects were formulated through the following process:

- 1) Submission of scenario in an inception report
- 2) Presentation of problem areas, based on field surveys, in a progress report
- 3) Presentation of outline of project recommendation in an interim report
- 4) Submission of a detailed project outline in a draft final report

All of the projects reflect the results of deliberation by a technical committee composed of representatives from the public and private sectors.

Based on these deliberations, recommendations were offered for each project concerning timing, priority, and the conditions for effective implementation. Implementation period was classified into the following three groups:

- A: Those projects which should be implemented immediately
- B: Those projects for which preparations should be begun immediately
- C: Medium- to long-term projects

For those projects in category B, further work is required to determine need, feasibility, and profitability. Thus, preparations should be started as soon as possible.

Projects falling into category C are recommended to be implemented in response to the development of sub-sectors, although there is no pressing need to begin implementation or preparations.

Those projects thought to be especially effective in promoting sub-sector development were designated as key projects and indicated with a double asterisk (**).

The key projects for each sub-sector are listed below.

		<u>Recommended implementation timing</u>
Die Making for Metals	-Establishment/Assignment of Government Agency for Industrial Policy Planning and Monitoring	A
	-Advisory Project for Upgrading Technology and Product Quality	A
	-Establishment of Die Making Industry Assistance Center	B
Wooden Furniture	-Organization of Activities for Exhibition in Foreign Furniture Fairs	A
	-Advisory Project for the Improvement of Wooden Furniture Technology and Management	A

Computer Software	-Improvement of Access to Overseas Software Development Industry	A
	-Establishment of Computer Software Development and Technology Institute	B
Stuffed Toys	-Improvement of Contact Windows for Buyers	A
	-Promotional Activities Focused on the Medium and High-grade Product Markets	B
	-Promotion of Order Booking from Markets with Different Shipment Seasons	B
Costume Jewelry	-Improvement of Design and Materials Development Capability	A
	-Establishment of Promotion and Assistance Center for Cebu Costume Jewelry Industry	B
Oleochemicals	-Establishment of Coconut R&D System	B/C

Table II-2: Objectives and Development Programs for the Die Making Industry

Industry	Sub-sector issues	Effective measures	Development projects								
			Establishment/assignment of government agency for industry planning/monitoring	A**	C	B	E**	Promotion of die/mold related standardization	Recommendation on the promotion of exports of metal worked parts	Activities for the promotion of die-makers with die-making firms overseas	
Metals and machinery industries overall	(1) Strengthening of sectoral approach (2) Expansion of financing programs for facility modernization	<ul style="list-style-type: none"> - Establishment of basic sector policy and strengthening of monitoring system 1. Provision of complementary measures for credit 2. Establishment of loans for modernization 	X						X		
Die making industry	(1) Improvement of die making technology 1. Mastery of basic die technology	<ul style="list-style-type: none"> 1. Awareness of the importance of these efforts and key points 2. Mastery of technology through individual instruction at companies 3. Promotion of core companies 4. Grade-up of the sub-sector 	X	X		X				X	
			X								
			X								
			X								
	2. Modernization of facilities and equipment	<ul style="list-style-type: none"> 1. Increased awareness of the importance of these efforts 2. Introduction of suitable facilities and equipment 3. Development of public and common facilities 4. Funding assistance 	X	X		X					
			X								
			X								
			X								
	(2) Promotion of tie-ups with foreign firms for increasing technology transfer (3) Improvement of a technology infrastructure 1. Expansion of technical supporting services	<ul style="list-style-type: none"> 1. Development of public and common facilities 2. Promotion of private-sector firms specializing in supporting services 				X					
	2. Localization of production of die materials 3. Improvement of R&D, testing, and technical guidance facilities 4. Promotion of standardization of dies and die components 5. Training of engineers and technicians	<ul style="list-style-type: none"> 1. Increase in an instructor staff 2. Facility and operation-related improvement 1. Dissemination of standards and industry's active participation in the system 2. Enhancement of inspection system 1. Increased awareness of market needs 2. Promotion of technology transfer 3. Improvement of university-level education - Greater export promotion measures 									
Processing and assembly industries	Expansion of die/mold demand with the development of the parts and assembly industries										X

Note: "Schedule" symbols: A = Should be implemented immediately, B = Preparations should be begun immediately, C = Medium- to long-term project, ** = Key project

Table II-3: Objectives and Development Programs for the Wooden Furniture Industry

Tasks for Industrial Promotion	Effective measures	Development projects																						
		Organization of activities for participation in foreign furniture fairs	A	A**	Advisory project for the improvement of wooden furniture technology and management	B	Facility modernization assistance project	Project to assist in the formation of cooperatives in specified districts	C	C	Project to improve design capabilities	Project for the improvement of training systems in the furniture industry sub-sector	B	Promotion of the standardization of production processes, materials and components	B	Long-term continuous dispatch of trainees overseas	B	Promotion of tie-ups with foreign firms	C					
(1) Improvement of the consciousness of quality and the cost/delivery schedule management	1. Recognition of the necessity and points to be improved 2. Individual guidance to firms	X		X	X											X				X				
		X		X	X							X												
(2) Acquisition/introduction of advanced production technologies	1. Acquisition of basic wood-working technologies 2. Introduction of production management technologies			X	X															X				
		X		X	X																X			
		X		X	X																	X		
		X		X	X																	X		
(3) Modernization of facilities	1. Preparation/application of appropriate institutional financing 2. Establishment of technical assistance systems for introducing appropriate second-hand facilities 3. Assistance in introducing common facilities 4. Assistance in forming/developing cooperatives			X	X																X			
				X	X																	X		
				X	X																		X	
				X	X																		X	
(4) Improvement of procurement of raw and auxiliary materials	1. Establishment of supply systems of furniture-use plywood 2. Reduction of import duties on auxiliary materials 3. Standardization and establishment of testing systems																				X			
																						X		
																							X	
(5) Improvement of training systems in the furniture industry sub-sector	1. Systematization of activities for participating in foreign trade fairs 2. Guidance by furniture experts of the export markets 3. Assistance to firms' sales promotion activities 4. Strengthening of information gathering and research activities	X		X	X																X			
		X		X	X																		X	
		X		X	X																			X
		X		X	X																			
(7) Improvement of product development capabilities	1. Training of staff necessary for product design/development capabilities 2. Strengthening of information gathering and research activities 3. Strengthening of acceptance of designs by the industry 4. Development of design protection systems																				X			
																							X	
																								X

Notes: "Schedule" symbols: A = Should be implemented immediately, B = Preparations should be begun immediately, C = Medium- to long-term project, ** = Key project

Table II-4: Objectives and Development Programs for the Computer Software Industry

Industry	Tasks for industrial promotion	Effective measure	Development projects									
			Program to provide increased opportunities of financing	Strengthening of access to overseas software development industries	Formulation of the marketing company for Japanese market	Establishment of computer software development and technology institute	Implementation of a public project with large scale software developments	Invitation of overseas instructors or dispatch of teachers and students	Continuous dispatch of trainees overseas	Introduction of EDP engineer certification system		
		Schedule	D	A	C	B**	C	A	A	A	D	
Computer Industries Overall	Promotion of national computerization	1. Promotion of usage of computer in government						X				
		2. Development of computer education						X				
Computer Software Development Industry	(1) Upgrading software development capability	1. Acquisition of advanced software development technology			X	X		X			X	
		2. Improvement of hardware and software tools				X						
		3. Continuous contact with the latest technical movement in overseas		X		X					X	
(2) Strengthening of overseas marketing activities	Strengthening of overseas marketing activities	1. Usage of mainframe				X						
		2. Introduction of software tools		X		X						
		3. Receiving and/or dispatching missions		X								
		4. Measure to cope with language barrier in Japanese market		X	X	X					X	
(3) Improvement of infrastructure	Improvement of infrastructure	1. Improvement of communication facilities										
		2. Increase in no. of hardware	X			X						
		3. Secure substitutional power supply source	X									
(4) Training of computer software engineers	Training of computer software engineers	1. Upgrading of computer education in educational institution							X		X	
		2. Improvement of hardware and tools in educational institutions				X						
		3. Provision of software development opportunities domestically			X	X					X	
		4. Measure to encourage personal technical level		X		X					X	
Data Entry Industry	Strengthening of overseas marketing activities	1. Receiving and dispatching missions		X								
		2. International exchange by industries		X								
		3. Assistance for overseas marketing		X								

Notes: "Schedule" symbols: A = Should be implemented immediately B = Preparations should be begun immediately C = Preparations are recommended in accordance with the required preconditions are fulfilled D = Medium to long-term project ** = Key project

Table II-5: Objectives and Development Programs for the Stuffed Toy Industry

Promotion Objectives	Effective Measures	Development Projects											
		Creation of a definite contact window for buyers	Joint marketing activities for generating medium to high-end product market	Promotion of order booking from markets with different shipment seasons	Fostering designers/pattern makers	Project to adequate quality control	Seminars on improvement of export trade business practice	Staffed by subcontractor network formulation project	Campaign for deterring from illegal design copying	Scheme for joint purchase/stock operation of raw materials	Improvement of cost estimation method for bidding	Cooperation extended to domestic plush manufacturers to improve local plush supply capability	Compilation of industry statistics
(1) Strengthening the international cost competitiveness of medium to large firms 1. Strengthening the cost competitiveness	Schedule	A **	B **	B **	B	B	A	B	B	A	B	B	B
	1. Improvement of capacity utilization ratio by increasing order booking	X		X						X			
2. Strengthening the subcontractors					X	X	X						
2. Strengthening marketing capability	1. Sales promotion for potential market	X									X		
	2. Appropriate correspondence to buyer's inquiry	X											
(2) Strengthening the sub-sector by upgrading MCSMEs	1. Upgrading of design capability				X								
	2. Promotion of export business					X	X			X			
	3. Strengthening the subcontractors				X	X	X						
(3) Improvement of conditions of the sub-sector	1. Improvement of raw materials supplying system										X		
	2. Promotion of export business					X	X						
	3. Replication of financial system												X
	4. Understanding of actual figure of the industry/make appropriate plan											X	

Notes: *Schedule* symbols: A = Should be implemented immediately
 B = Preparation should be begun immediately
 C = Medium to long-term project
 ** = Key projects

Table II-6: Objectives and Development Programs for the Costume Jewelry Industry

Promotion Objectives	Effective Measures	Development Project							
		Sales Promotion Project for Penetrating the Class C Market	Improvement of the System for Easy Access from Buyers	Project to Improve Design and Material Development Capability	Establishment of the Promotion and Assistance Center for Cebu C/J Industry	Campaign Project to Deter Design Imitation	Seminars on Improvement of Export Trade Business Practices	Construction of the Cebu Costume Jewelry Manufacturing Village	Program to Encourage Investment by Foreign Costume Jewelry Manufacturers and Related Parts Producers
(1) Penetration to New Market 1. Full Utilization of Existing Potentiality	Schedule	A	A/C ¹⁾	A**	B**	A	A	B/C ²⁾	C
	1. Attracting new (potential) buyers	X							
	2. Improvement of route for inquires from buyers		X						
2. Upgrade Product Development and Marketing Capabilities of Export Sector	3. Improvement of information gathering system	X							
	1. Upgrading PDDCF's assistance capability for design/material development			X	X				
	2. Establishment of assisting system for market information analysis and product development among fashion related industries			X	X			X	X
	3. Appeal to new market	X			X				
	4. Improvement of route for inquires from buyers								
	5. Improvement of raw material supplying system								X
(2) Program for Upgrading Existing Costume Jewelry Export/Manufacturing Sector 1. Acquisition of Process Technology and Production Management Technology 2. Improvement of Working Condition and Infrastructure	6. Establishment of rule of export business					X			
	1. Acquisition of basic metal processing technology				X				
	2. Promotion of understanding the necessities of quality control and process technology				X		X	X	X
	3. Technology transfer from advanced foreign firm								X
	1. Improvement of productivity with introducing machinery and equipments				X				
	2. Improvement of communication between orderer and sub-contractor								X
	3. Stabilities of electricity supply								X
	4. Supply the working condition will not be influenced by weather								X

Notes: "Schedule" symbols: A = Should be implemented immediately, B = Preparations should be begun immediately, C = Medium- to long-term project, ** = Key project
 1) [A] = not include opening and operating pilot shop or show room. 2) [B] = as pilot project only.

Table II-7: Objectives and Development Programs for the Oleochemical Industry

Promotion Objectives	Effective Measures	Development Projects			
		Granting of Investment Incentives Equal to Those Granted in Malaysia	Removal of Barriers to Procurement of Raw Materials	Establishment of R&D System	
(1) Stable Supply of CNO in Both Volume and Price	Schedule	A	A	B / C ** 1)	
	1. Continuation/Expansion of the Replanting Schemes Industrial Policies to Promote the CNO-Related Industries				
	2. Improvement of Coconut Cultivation a. R&D for Improving Seeds b. From Small Farming to Corporate Management			X	
	3. Rationalization of Distribution of CNO			X	
	4. Improvement of Quality of CNO			X	
(2) Development of the Oleochemical Product Markets/Security of Scale Economy in Production	5. Measures to Deterioration of CNO in Distribution			X	
	Improvement of Investment Environment to Make the Most of the Private Sector	X	X		
(3) Removal of Barriers to Procurement of Related Chemicals and Intermediates			X		
(4) Development of Independent R&D	1. Activation of the R&D Network			X	
	2. Backups from Private Firms	X		X	
	3. Addition of Functions as an International Center for Coconut-Related Studies			X	

Notes: "Schedule" symbols:

- A = Should be implemented immediately
- B = Preparation should be made immediately
- C = Medium to long-term project
- ** = Key projects

1) "B" means augmentation of each separate theme in the existing R&D network, while "C" means establishment of a comprehensive R&D system.

III. A Cross-Sectional Review of Sub-Sectors

III. A Cross-Sectional Review of Sub-Sectors

1. Sub-Sector Development Stages and Characteristics

(1) Stages of Development in Targeted Sub-Sectors and the Role of Development Projects

A smooth transfer from planning to implementation will be critical to the success of the development programs/projects. The development projects are regarded as action plans for implementation in a sense.

The development program should be implemented firstly, in an integrated manner that takes into account the role to be played by individual projects within the comprehensive framework and does not focus solely on individual projects. Secondly, bodies with responsibility for implementation must be set up to allow smooth preparation and coordination. (For further details on the bodies for each sub-sector, please refer to Chapter 5 in the first- and second-year reports.)

Also important is an understanding of current stage of development of each sub-sector. Figs. III-1 to III-6 illustrate timing, expected results, and interrelationships for each project. The development projects should be implemented in an integrated manner, taking into account the stage of development of each sub-sector, so that the projects will complement each other.

(2) A Cross-Sectional View of Sub-Sector Characteristics

The development plans were drawn up with a spotlight on the characteristics of each sub-sector. When viewed in cross section, sub-sectors can be broken down into four categories based on their characteristics:

Type 1 Wooden furniture, costume jewelry, stuffed toys

1. Industries utilizing local resources
2. Non-traditional industries with great potential for exports
3. Existence of corporations with the power to lead an export drive
4. Only one industry association

Type 2 Computer software

1. Knowledge-intensive industry
2. Has potential to increase service exports utilizing plentiful manpower
3. Exporting firms can be divided into software development and data entry
4. Three industry associations

Type 3 Die making for metals

1. The supporting industries such as a closely linked home electrical appliances, automobile industries with a wide range of user industries
2. Aims to realize export potential
3. Aims to expand product fields suitable for export
4. Only one industry association

Type 4 Oleochemicals

1. Working to raise the degree of processing of local materials; centered on the production of basic oleochemicals
2. Aims to expand exports of finished products such as surface-active agents
3. Aims to develop export products
4. Only one industry association

Based on these classifications, the following awareness is needed concerning a basic framework for the development program and a procedure for beginning implementation.

Concerning the first category, the handling of short-term export promotion policy will be the focus of activities. It is important to provide motivation for implementation and begin work on projects with an implementation body in an organized manner. Even the ten-year plan released by the DTI designated furniture, costume jewelry and toys as short-term export promotion items.

For the second category, efforts will be needed to form an industry consensus and improve motivation for implementation of the development program.

Concerning the third category, program implementation must be supported from both supply and demand sides in order to expand the range of exportable product groups. Metal die making supports a wide range of supporting, or "linkage" industries. The expansion of exportable product groups should be carried out in the medium- to long-term while taking into account development conditions in user industries.

The fourth category has an intimate relationship with the coconut-producing sector. Government policy for the promotion of coconut-related industries and coordination between managing/supervisory agencies are both important. In the medium to long term, the industry will diversify its production from basic oleochemicals to include derivative products as well.

Figure III-1: Die Making: Development Stages and Expected Effects of Development Projects

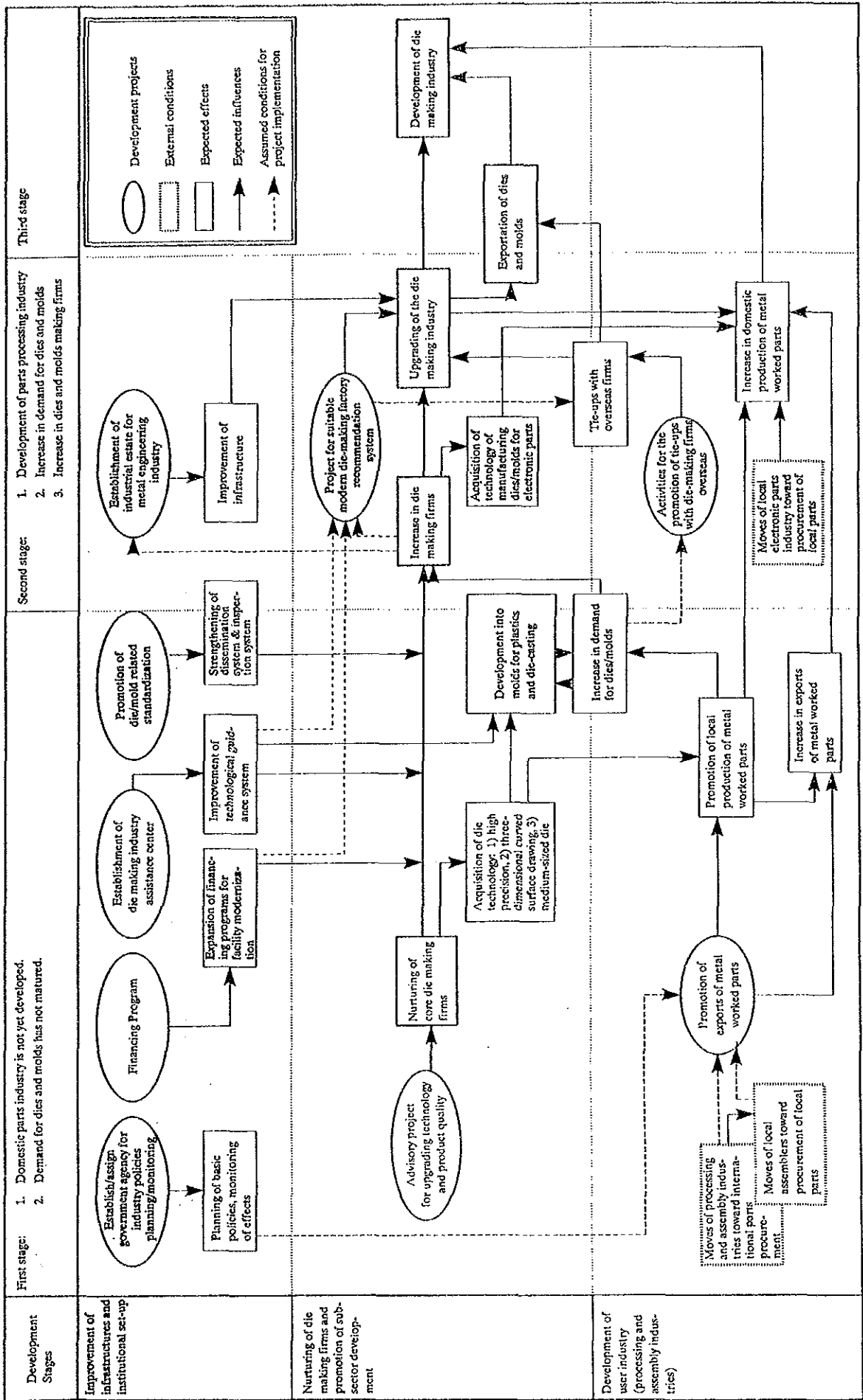


Figure III-2: Wooden Furniture: Development Stages and Expected Effects of Development Projects

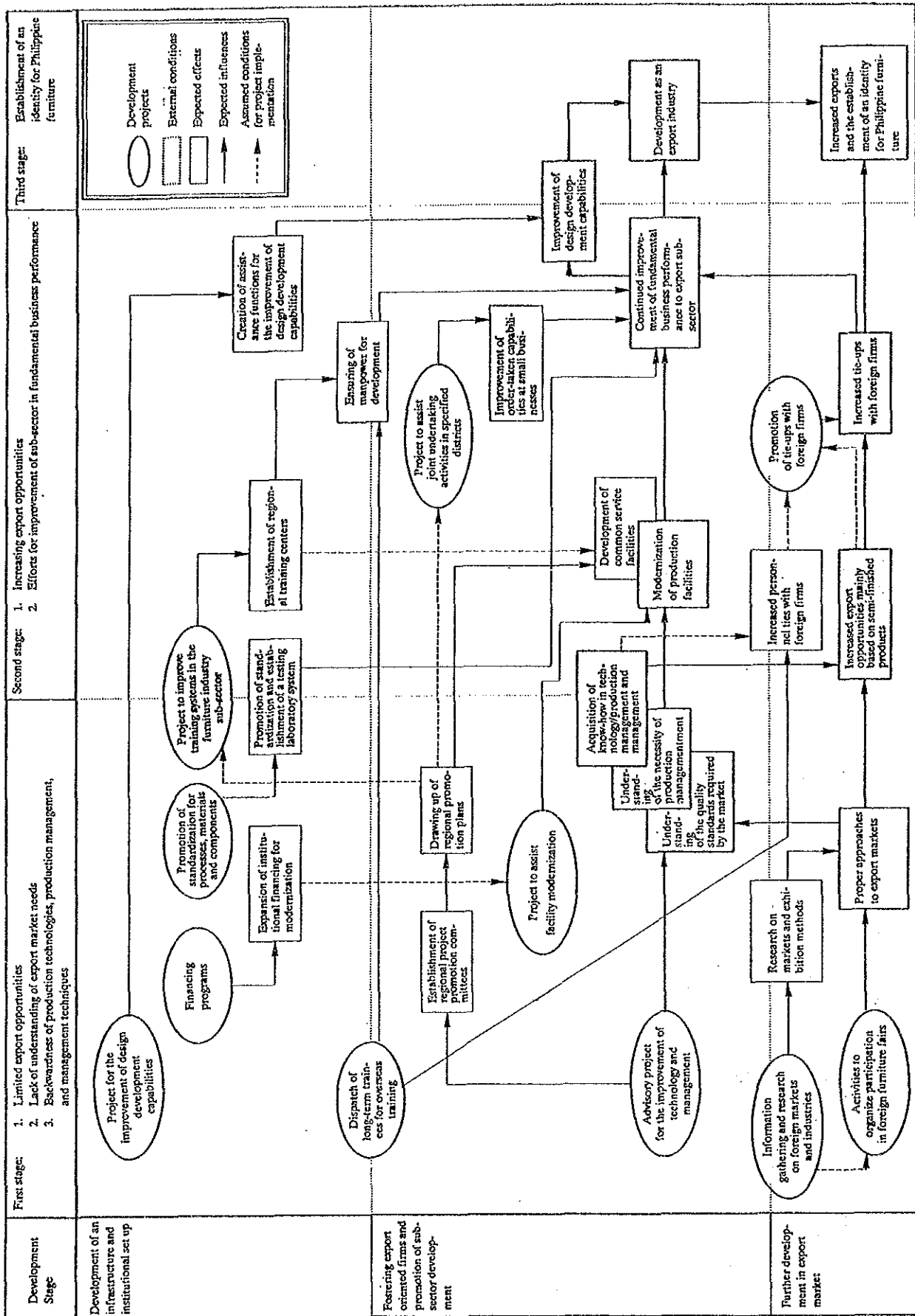


Figure III-3: Computer Software: Development Stages and Expected Effects of Development Projects

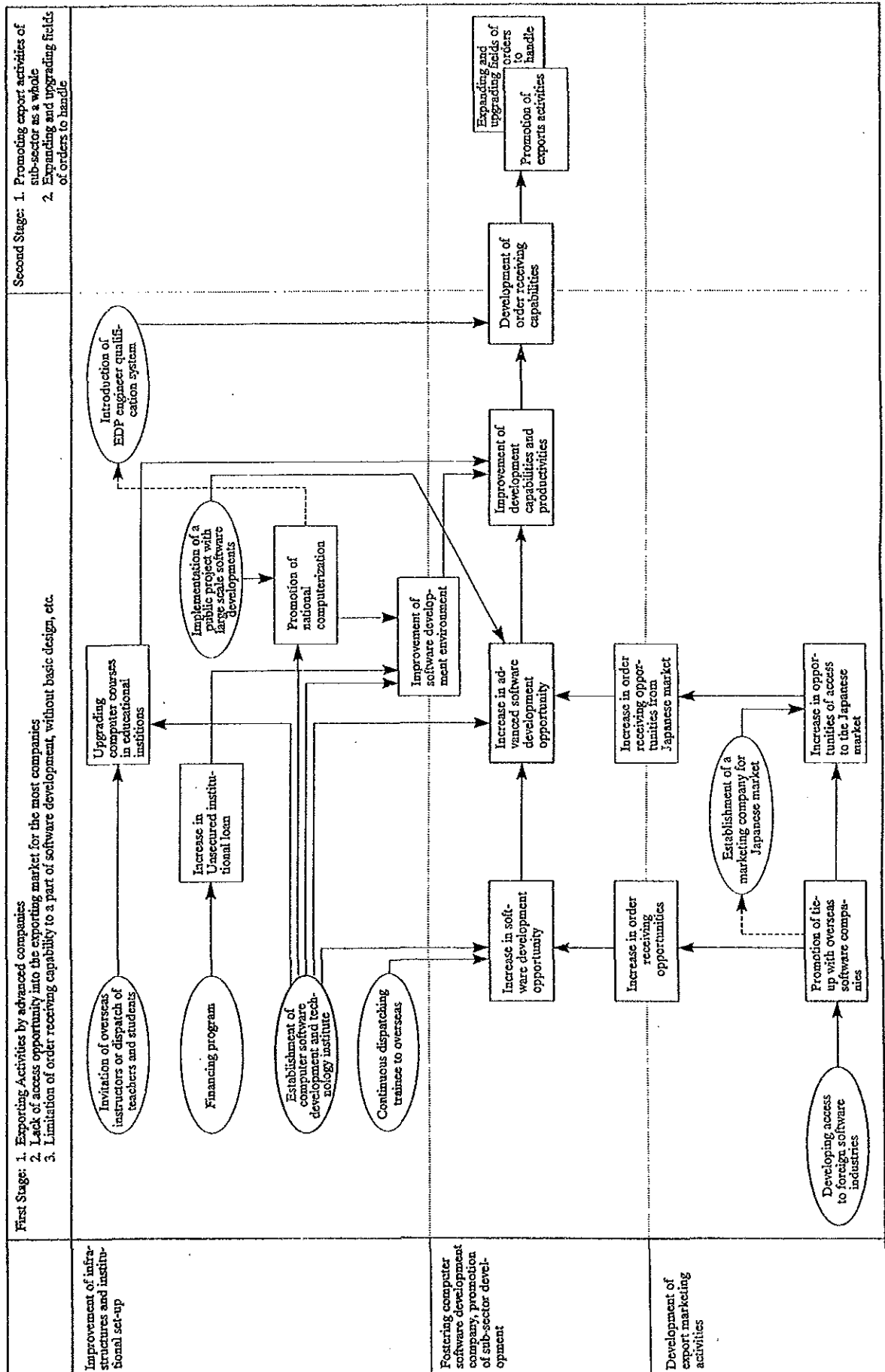


Figure III-4: Stuffed Toys: Development Stages and Expected Effects of Development Projects

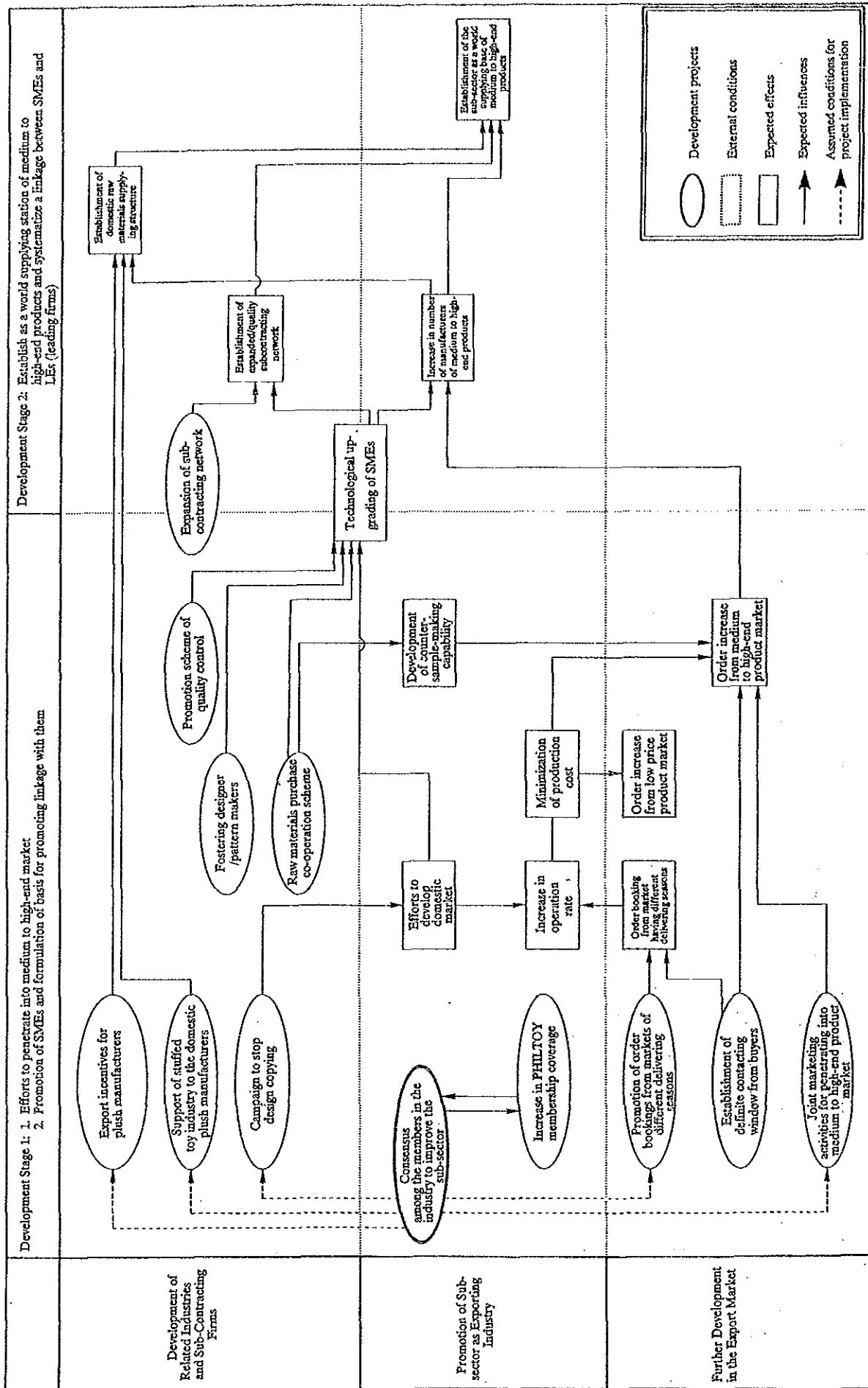


Figure III-5: Costume Jewelry: Development Stages and Expected Effects of Development Projects

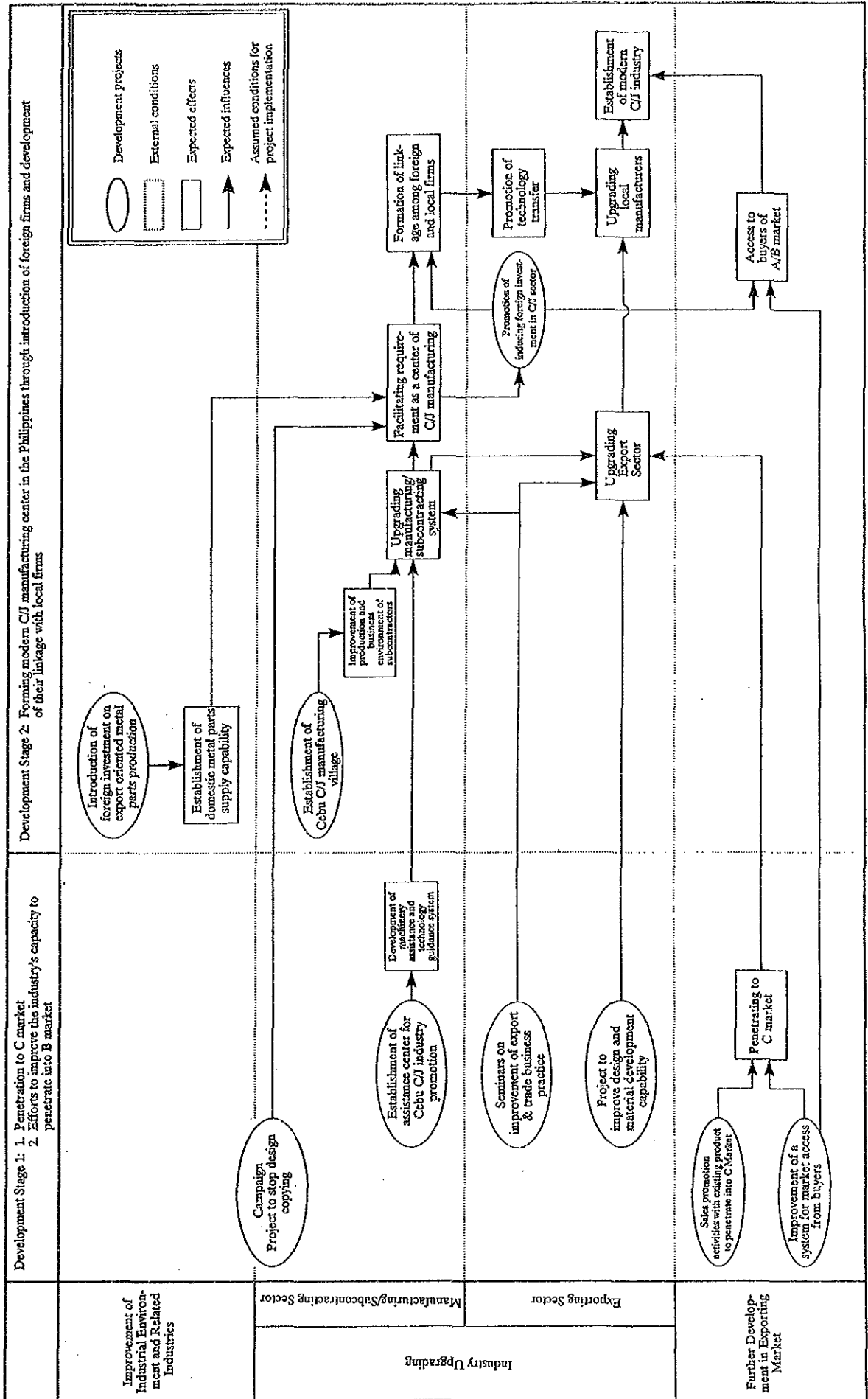
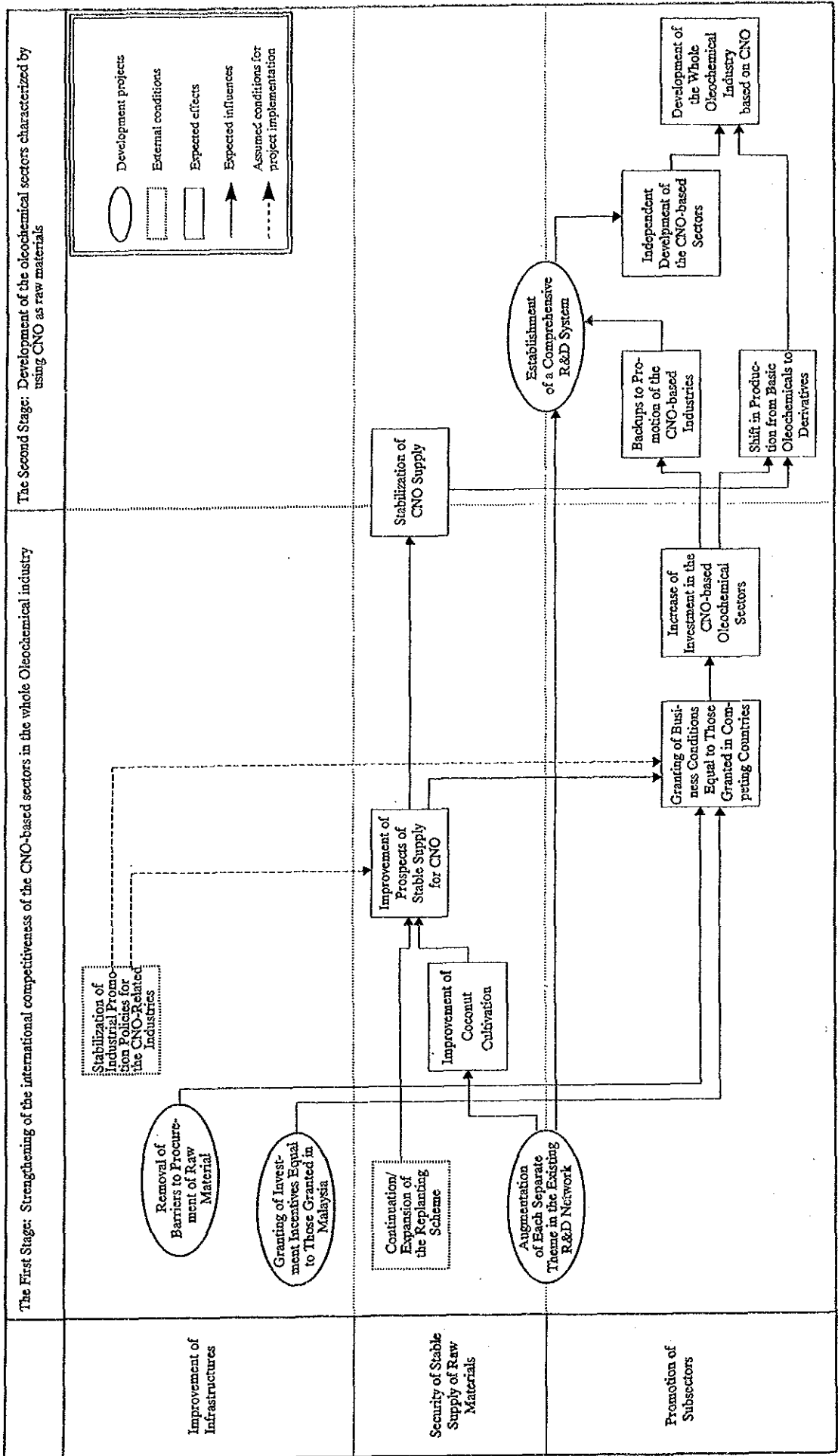


Figure III-6: Oleochemicals: Development Stages and Expected Effects of Development Projects



2. Structure for Promoting the Development Program

It was suggested that the following type of implementing body be established in each of the sub-sectors to take advantage of the comprehensive nature of the program during its implementation. Specifically, there are numerous steps leading up to implementation, and some of the individual projects may be interrelated or based on the implementation of another project. Therefore, an implementing body with appropriate monitoring and coordinating functions should be established, and within this body involved organizations must work together with an eye on the overall program. During implementation of the current program, the following two organizations are recommended as implementing bodies with functions for comprehensive promotion and coordination.

1. General secretariat: To trace the progress of each project, call together and coordinate related bodies as needed, and make revisions in projects.
2. Advisory committee: To be periodically convened by the general secretariat. The secretariat will report to this committee on its activities, and the committee will offer advice and assistance.

In the present study, the BOI and private sector representatives participated in technical committees (T/C) and held discussions with the survey team during the process from the tracing of sub-sector conditions and problem areas up to the creation of the development program. In addition, whenever steering committee (S/C) meetings were held, representatives were present from DTI organizations like BETP, CITEM, PTTC, BSMBD, and BPS as well as DOST, NMYC, CITC, CB and DBP. This brought in opinions from a wide variety of viewpoints, including trade and investment promotion, technical development, human resources development, and financial aid.

After completion of the first-year survey, the Philippine side formed a Technical Working Group (TWG) consisting of members from the technical committee described above and began to implement the development projects recommended by the survey team. This was also noted in the minutes of the second-year field survey (August 7, 1991).

Table III-1 lists the members of the technical working groups for each sub-sector covered in the first-year survey.

Table III-1: Members of the TWGs for the First-year Sub-sectors

	Industrial Assn.	DTI/Investment		D T I / I T G				DTI/Domestic			DOST			Other Gov't Agencies		
		B O I	X	BETP	CITEM	PTTC	PDDCP	BSMBD	BPS	CITC	MIRDC	NMYC	C3	Others		
Die-making	MIAP	X		X		X		X		X		X				
Wooden Furniture	CFIP	X		X		X		X		X		X		DOLE, DENR, TIRC		
Computer Software	PSA, PADEC, ITAP													ASTI, NCC, NAPOLCOM DECS		

The TWGs held periodic meetings starting in August-September 1991, in some cases meeting as often as once a month. Specifically, the groups carried out preparations for implementation of recommended development projects, including the determination of bodies to supervise implementation or preparations and, when necessary, the drafting of project proposals for foreign assistance applications. The TWGs also established a project progress monitoring format (see Table III-2) that illustrates the roles to be played by each involved organization and used this to monitor project implementation.

The main developments noted by the Philippine side during the draft integrated report discussions in July 1992, by sub-sector, were as follows:

1) Die making for metals

- Concerning the project to establish a Die Making Industry Assistance Center, MIRDC and MIAP had prepared independent proposals, but these were integrated into the MIAP proposal. Work is moving ahead, with plans to be operational around 1994 by three implementing bodies: MEFTI (MIAP-MM Educational and Technological Foundation, Inc.), TUP (Technological University of the Philippines), and DTI.

2) Wooden furniture

- With the aim of contributing to the development of the furniture industry, the CFIP's request, drawn up during TWG deliberations, for establishment of a Furniture Industry Board (FIB) was approved by the Secretary of Labor and Employment on February 5, 1992. After the approval, the CFIP completed the procedures for the establishment of a foundation. The FIB management committee met on July 25 to appoint its executives. Through these processes, FIB was formally established. The FIB will work to supply skilled labor and develop technology and human resources for the furniture industry. Other responsibilities will include supplying market information, dispatching selling missions, participating in international exhibitions and trade fairs, developing new products and designs, and sponsoring seminars.

3) Computer software

- The NCC was the central force in drawing up a project proposal for establishing an Information Technology Training Institute (ITTI) and gaining consent of related industries.

- The NCC would like to proceed with development of a National Crime Information System as one of the "Public Projects Entailing Large-Scale Software Development." Approximately 610,000 pesos were earmarked by the government for a preliminary study of this F/S. Furthermore, it is now certain to receive a part of the budget for the introduction of computer terminals.

4) Stuffed toys

- In view of the importance of "clarification of contact windows for buyers", one of key projects which were recommended in the final report, an agreement has been reached concerning the establishment of a data base system within related government agencies and industry associations for the supply of corporate informations, with an aim of quickly dealing with inquiries from and business meetings with foreign buyers. The preparation is now underway to conclude the Memorandum of Agreement by the end of August regarding role-sharing among related organizations.

5) Costume jewelry

- CEBU-FAME has already announced its policy to progress with activities for the improvement of qualities and marketing in close contacts with CITEM and PDDCP. It has also revealed its determination to implement recommended development programs. FAMAPHIL has also expressed their basic stance toward the supporting of the implementation of the recommended projects.

6) Oleochemicals

- A basic consensus has been formed among people concerned on the implementation of projects to strengthen R&D within the framework of Coconut R&D Network activities. Discussions are also underway concerning required testing equipment/materials along with the selection and examination of priority fields of R&D (Table IV-8).

Such joint efforts by the government and private sectors to realize development programs should be highly evaluated.

Table III-2: Form of Monitoring (Sample: Die Making for Metals)

SUBSECTOR : METAL ENGINEERING
 UPDATE AS OF : NOVEMBER 1991
 UPDATED BY : METAL AND ENGINEERING DEPARTMENT

CONCERNS/OBJECTIVES :	STRATEGY :	ACTIVITIES/ACTION PLAN :	RESPONSIBILITY :	TIMETABLE :	ACCOMPLISHMENT :	PROBLEM AREAS :	NEXT STEP :
A. MARKET	Promotion of exports of metal-worked parts	1. In implementing the MYDPs, measures to promote the exports of metal-worked parts shall be strengthened.	1. BOI	1. On-going	1. The export of parts has been made a condition in the MYDPs.		1. Monitoring
		2. Technically advanced firms overseas shall be encouraged to set-up parts procurement centers in the Philippines.	2. BIEP, BOI, CITEH	2. On-going	2. Trade and investment missions have been sent abroad.		2. Follow-up
B. TECHNICAL PRODUCTION	Promotion of tie-ups with die-making firms overseas	1. Formation of an organization to promote tie-ups with overseas firms	1. MMAP, BOI, BIEP, CITEH	1. Immediate implementation November, 1991 - February, 1992	1. BOI is already undertaking this task.		1. Consolidate efforts/funds from other agencies concerned.
		2. Establishment of a data base, information gathering and mission dispatch	2. BOI, MMAP, BIEP, CITEH, MIRDC	2. Immediate implementation November 1991 - onwards	2. The various agencies have their own data base and efforts		2. Consolidate efforts of these agencies.
		3. Development of personal relations through the continuous dispatch of trainees overseas.	3. JICA, UNDP, UNIDO	3. Immediate implementation November, 1991 - December, 1993	3. Forthcoming		3. Draw up the program/action plan (Including seminars and work-shops)
	Establishment of an advisory project for upgrading technology and product quality	1. Nurturing potential core firms in modern die-making techniques by guiding them in production and management technologies.	1. BOI, DOST (MIRDC)	1. Immediate implementation January, 1992 - December, 1992	1. Forthcoming		1. Draw up the program/action plan (Including seminars and work-shops)

3. Development Issues and Efforts Common to All Sub-Sectors

(1) Introduction

In the preceding two-year study, development strategies for each of the sub-sectors were discussed, and recommendations for each of the sub-sectors were then offered for a comprehensive development program. The object of the current study is to draw up comprehensive development programs for each of the six sub-sectors selected in advance. However, a look at the development projects for each sub-sector shows that there are many common issues and that, in many cases, it would be more efficient to carry out projects covering several sub-sectors facing common problems than projects dealing with individual sub-sectors only. The following section will provide a basis for creating more efficient development projects based on an understanding of common problems and current efforts to deal with them.

The recommendations of the current survey were drawn up based on an analysis of the six sub-sectors. Thus, they do not necessarily give an accurate reflection of problems in other sub-sectors. All efforts were made, however, to ensure that the problems faced by other sub-sectors could be dealt with together with these.

The basic development strategies common to the sub-sectors and discussed earlier in Section II will be listed again here. These basic strategies target subjects to be tackled commonly by each sub-sector.

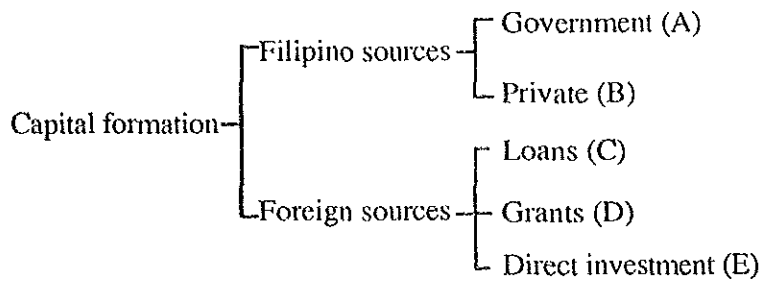
1. Increase opportunities to facilitate access to export markets and to demand at the upper end of the domestic market. By so doing, firstly increase in exports, and at the same time improve the understanding of each firm on the requirements of these markets in regard to technology, production management, marketing and management.
2. In order to comply with the needs of these markets efforts must be made at the individual company level to make improvements in production technology, production management, marketing and management. This will contribute to develop markets or to promote the formation of tie-ups with overseas companies, further paving the way for independent initiatives in the future.
3. Industry improvement work should be supported by improvements to the infrastructure, technology, the financial system, and the educational and vocational training system.

(2) Investment Promotion

1) Outline

In the economic cycle, attention is being focused on the role to be played by foreign investment. The need for foreign investment is being amplified by the difficulties of managing the economy under the restrictions posed by a sizeable debt burden.

The funds supporting total capital formation in the Philippines consist of the following elements:



The Philippines is being forced to manage its economy under the restrictions posed by a sizeable foreign debt burden. Therefore, private direct investment will play a critical role. There are limits on the expansion of (A), (C) and (D) due to budgetary constraints and debt management and repayment requirements. Regarding (C) and (D), a framework outlining the size of the fund inflow for the period 1989-92 has been established under international financial cooperation centering on the IMF.

For the Philippines, the decisive factors in promoting domestic capital formation will be domestic private capital (B) and foreign direct investment (E). In particular, (E) offers an inflow of foreign capital without a corresponding increase in debt.

The domestic investment rate of 15 percent as of 1990 is lower than the 20-percent-plus figure shown in the second half of the 1970s, when stable medium-term growth was achieved. It is also lower than the rate required to create jobs. A Letter of Intent sent to the IMF in March 1989 set the desirable annual average rate of growth for 1989-92 at 6.5 percent and targeted the corresponding investment rate at 23 percent.

Foreign investment not only contributes to increased production and job opportunities but also helps to boost productivity through the transfer of production and management technologies. Furthermore, it contributes to more effective utilization of local resources and improved industrial efficiency. In particular, the attraction of capital to export-oriented industries boosts foreign exchange earnings and helps to trim the foreign debt burden. In the May 1989 Philippine Assistance Program agenda, a net increase of 60 percent a year was predicted for private direct investment during the period 1989-92. Reflecting this forecast, the BOI, which serves as a window for foreign investment, began setting the annual foreign investment attraction target based on project cost starting in 1988.

2) Current Situation and Problem Areas

The inflow of foreign investment into the Philippines bottomed out in 1986 and continued to rise through the first half of 1991.

During 1989-91 it was feared that the string of natural disasters to hit the islands -- drought, the earthquake in northern Luzon, the typhoon in the Visayas, and the eruption of Mt. Pinatubo -- would push down foreign investment, but foreign investors remained steadfast.

It should be pointed out, however, that 1991 BOI-authorized investment (representing paid-in capital) dropped 7.9 percent on the year to 21.5 billion pesos, in contrast to a 34 percent increase to 23.4 billion pesos the year before. It appears that some foreign investors are waiting to see what, if any, policy changes take place after the May 1992 elections.

In particular, investment from Japan, Taiwan and Hong Kong, countries that led the rapid growth recorded in 1989-90, dropped significantly in 1991. Taking into consideration the growing competition from neighboring countries like Vietnam and China, there is growing awareness in the Philippines of the need for more extensive investment incentives.

The review of investment policy begun by the DTI/BOI in 1989 culminated in the Foreign Investment Act of 1991. And as mentioned earlier, the government plans to consider applying the Condominium Act to industrial parks and introducing systems for accelerated depreciation and net loss carry-over to improve the investment environment. Of the wide range of measures to promote industrialization, a review of investment policy is the most urgently needed.

Direct investment by and technical tie-ups with foreign companies bring with them not just capital but production technology, management technology, and marketing expertise as well. Essentially, they involve a transfer of the full range of business resources.

The technical committees and technical working groups for the six sub-sectors covered by the current survey suggested that the development projects be promoted using capital and technical tie-ups with overseas companies as a foundation. Especially high expectations were voiced for die making for metals and oleochemical fields, reflecting the broad range of supporting industries in both of these sectors. For die making industry it was suggested that further links were needed with user industries containing numerous foreign companies. In the case of the oleochemical field, it was recommended that, at the very least, investment incentives similar to those already in place in Malaysia should be established.

Concerning stuffed toys and fashion accessories, the foreign affiliates that had moved into the materials processing field were praised for having contributed to an overall increase in the supply capacity of these sub-sectors.

In the wooden furniture and computer software fields, there is a noted trend of growing access to foreign firms less to promote direct investment than to expand business opportunities. In the furniture sector it was suggested that tie-ups with Japanese companies and experts would be necessary in order to develop products suited to the Japanese market. In the computer software field, meanwhile, the recommendation was that Philippine companies are expecting test orders.

3) Directions for Responses

It will be necessary to monitor successful instances of investment, improve the Philippines' image abroad, and lead the nation's economy into a cycle of growth.

In this sense, the proposed upcoming shift in BOI functions is important. As deregulation proceeds, current BOI functions such as the restrictive authorization procedures and the distribution of incentives are gradually losing their weight.

In place of these functions, it is suggested that the organization shift its emphasis to: 1) organizational improvements to allow the proposal of industrial development policies and the implementation of sub-sector-related surveys by DTI/BOI itself; and 2) aggressive activities to attract foreign investment.

Table III-3: Foreign Investment in the Philippines
(equity base in million pesos)

	1983	1984	1985	1986	1987	1988	1989	1990	1991
Japan	56	568	485	454	591	2,015	3,428	7,437	5,778
U.S.	2,029	1,709	1,087	458	740	3,229	2,852	1,446	2,394
Taiwan	5	13	13	7	186	2,317	3,232	3,419	330
Hong Kong	48	168	63	149	570	566	2,886	5,064	228
China*	18	43	112	38	169	557	740	441	564
U.K.	60	34	355	135	210	485	308	477	7,826
Other	762	1,366	335	353	961	814	4,035	5,086	4,392
Foreign capital total	2,978	3,901	2,450	1,594	3,427	9,983	17,481	23,370	21,512
Filipino capital total	2,239	2,214	2,251	1,553	4,932	7,421	22,203	24,663	22,185

*: Resident Chinese in the Philippines

Source: Compiled from BOI statistics

(3) Improvement of Financial System for Sub-Sector Promotion

1) Outline

The capital raising functions of the financial market of the Philippines cannot be said to be sufficient - not in the banks, the capital market, or the nonbank sector. To improve this situation, some comprehensive measures are required. It would be difficult, it is believed, to see any effective improvement in the short or medium term.

The Philippines is also facing difficulties in raising funds overseas. At the present time, the Philippines cannot procure capital overseas except for direct investment and grants and loans from international organizations and foreign governments.

Due to these limits in procurement, the money supplying function of the financial market of the Philippines itself is showing signs of shrinking. Numerous areas have to be improved to enable the financial market to function properly in supporting future economic development. In particular, the accessibility of the market to small and cottage sized firms is limited.

Government institutional financing draws much upon funds from foreign governments and international organizations, but is still not being sufficiently utilized.

2) Current Situation and Issues

a) Fund Procurement

1. Fund Procurement on the Financial Market: The problems which the banks are facing are that there is little in the way of funds available for loans and that what is available cannot sufficiently meet the future increase in the demand for funds. The reasons are that 1) there is little trust in banks, 2) there is little attraction in placing savings in them, and 3) capital is leaving the country. While it is difficult to raise funds domestically, however, the lifting of the ban on peso-denominated loans by foreign financial institutions may have a quick-start effect on the market once the economic environment recovers.

In the capital market, the reasons why household funds and corporate funds are not put into stocks and bonds are that there are still few companies listed on the market and those that are lean to certain industries and that when stocks are issued, they tend to be picked up by relatives of the issuers as the latter fear takeovers. On the distribution market, issuing companies are not that aggressive when it comes to the circulation of their stock. On the bond side, almost all the bonds issued are government treasury bonds (TB). Even these are picked up exclusively by the central bank: no system is set up for circulating these among general investors. In this way, the capital market is still immature and it will probably take a long time before it is able to take on the role of supplying long-term funds.

In the nonbank sector, there are many problems in the Philippines in both leasing and venture capital, which might otherwise be expected to be effective for subsector promotion. It is difficult to make use of these at the present. Leasing would be effective as a means for modernization of facilities in cases where collateral would be difficult to secure, and it would be desirable to run studies on how to make active use of this system.

2. Fund Procurement from Overseas: Direct investment from abroad has increased in recent years, but still is not that brisk. Private foreign financial organizations are very negative in some respects over providing funds due to the existence of the giant cumulative debt in the Philippines and the high country risk resulting from the political instability, which means a lower probability of repayment of the debt. Five schemes have been adopted to resolve the problem of the cumulative debt. They have as yet had little effect in clearing up the cumulative debt, but the amount being cleared up is increasing.

3. Domestic Fund Procurement by Government: One way to help the government raise funds domestically is to improve the efficiency of taxation. With the present low rate of taxation, where the tax supplementation rate is said to be about 10 percent, it would be difficult to launch any aggressive fiscal programs.

b) Supply of Funds

1. Supply of Funds in the Financial Markets

Improvements are urgently required on the four points outlined below.

- The collateral requirements of financial organizations: Businesses which do not have the required collateral find it extremely difficult to raise funds. This in turn prevents businesses from developing to their fullest potential. The following measures should be examined: 1) expansion of the credit guarantee system; 2) establishment of an information system for credit inquiries; and 3) introduction of supplemental measures to make up for the low credit standing of businesses by establishing organizations such as business cooperatives.

- Low level of management efficiency among financial institutions: Improvement of the management efficiency at financial institutions is absolutely necessary to cope with the huge demand for funds. Improvement of management efficiency will lower the cost of loans and in turn may lower the interest rates on loans.

- Insufficient availability of long-term loans: The ratio of long-term loans is as low as 10-20% of all loans. The Development Bank of the Philippines is situated as a wholesale bank for long-term financing in the Philippines financing system. In order for this system to be successful, incentives are required to encourage the commercial banks to be more positive in handling long-term loans.

- Insufficient availability of loans for export promotion: Although there exists the packing credit system for exports, in many cases the central bank closes their windows for this credit and businesses are not able to avail themselves of this service. Actually, the unrestricted implementation of packing credit would increase the amount of money in circulation, resulting in fears of inflation. In addition, there is a limit to the amount of foreign currency which the government can make avail of.

2. Supply of Funds by the Government

Some of the negative factors responsible for this situation include: 1) the strict loan conditions such as severe collateral requirements; 2) the lack of incentives offered to financial institutions handling loans; and 3) the complexity of loan handling procedures. Since the funds available to small and medium businesses in the financial markets are limited, these sorts of problems encountered by the institutional financing system need to be resolved at the earliest possible time.

3. Direct Loans for Businesses from Overseas Financial Institutions

Whether the business is a joint venture with foreign capital or a local business, all loans taken from overseas must receive prior approval from the central bank. The central bank screens applicants very rigidly and grants approval in only a few cases. However, some improvement has been seen since the beginning of 1990, and since then a more flexible stance has been adopted in regard to export businesses. If one considers the limited capacity of money markets and the government supply funds and the fact that there is little prospect of an improvement in the short or medium term, the only way open for large and medium-size businesses to raise funds on a large scale is to engage in direct investment or to make direct loans from overseas. Further improvement is necessary for the direct loan procedure in this regard.

c) Recent Development of Financing Programs for Small and Medium Scale Businesses

There is a development of financing program to assist the various types of economic development under the Window III of DBP. It includes,

1. Export Financing Program for the Philippine Chamber of Handicraft Industries, Inc. (PCHI) and Foreign Buyers Association of the Philippines (FOBAP)

This is the financing program allocating fund for FOBAP and PCHI members, and a good example of credit supplementation through industry association for small and medium enterprises, which have insufficient credit capacity. This type of program may be applicable also to other sub-sectors.

The loan available by the program is up to 500,000 pesos without collateral, while the collateral is required for the exceeding amount. In the case of the program provided by TLRC, the maximum amount of loan available is limited to 70% of P/O or L/C. The interest rates also vary among the DBP and TLRC; 20.5% for the former, while 18% for the latter. Qualified borrowers are limited to the members of PCHI and FOBAP. Appraisal investigation is carried out not only by CIB (Credit Information Bureau), but also by PCHI through factory interview. The borrowers must submit their post dated check when the loan is disbursement.

The membership of PCHI is opened to those who are engaged in handicrafts industries either directly or indirectly. There are some industrial associations, including PHILTOY, which joins the PCHI as an association. The demand for financing is weak at

present and amount of outstanding loan is small compared to amount available for the loan.

In the case of small and medium enterprises, they are often unfamiliar with the loan application procedure. It is recommended for the industry associations to assist their members in the loan application as one of their activities. PCHI is collecting the loan processing fees at 2% of loan amount, and this can be utilized as a fund of activities of the association.

2. Others

Further, the Window III of DBP has a possibility to develop financing programs focusing on specific sub-sector promotion.

3) Direction of Measures

The financial measures for the promotion of the subsectors concerned must be considered in two groups: measures for the improvement of the fund procurement of large and medium sized firms, which play the lead role in the subsectors, and measures for small and cottage sized firms. There are limits to the fund procurement and supply capabilities on the financial markets and it would be difficult to quickly improve the same. Considering this situation, it is necessary, it is believed, to promote direct investment from overseas and direct borrowings by companies from foreign financial institutions. It is also necessary to assist in the preparations of credit supplementation means for small and cottage sized firms. Specifically, to provide credit information for individual firms lacking the same, consideration should be given to 1) the use of a business certification system, registration system, etc. as an alternative means of providing credit information on small and cottage sized firms and 2) the active use of information from industrial organizations, regional chambers of commerce and industry, etc.

(4) Improvement of Technical Standards

1) Outline

In general, only a limited number of Philippine products have succeeded in meeting international standards for quality and design. Reasons for this include qualitative factors, such as a lack of basic expertise and technology and poor product development capabilities; quantitative factors, such as the shortage of skilled workers, technicians, and engineers; and infrastructure-related problems such as insufficient R&D at the national and corporate levels and a shortage of related R&D facilities, both of which are needed to support technical development.

To improve technical standards in the Philippines, efforts are needed, first, to strengthen the foundation for technical development by establishing R&D facilities and by developing and introducing through joint ventures and tie-ups with foreign firms R&D methods and technologies most suited to the Philippines. Second, education and training must be made more effective and must reflect changes in production technology and industry structure, organizational changes, and development strategies in these industries.

2) Current Situation and Issues

1. Die Making for Metals

The Philippines faces a serious shortage of basic expertise concerning die and mold design and processing technologies. According to NMYC, the trainees who have

completed machine operator and welding courses at training facilities across the country number 1,020 and 1,025, respectively, but there have been only 36 graduates of the design course and 16 graduates of the die making course (1989). Taking into account the importance of the die making industry, which serves as a foundation for all manufacturing activities, the pool of workers trained in metalworking, while sizeable overall, is improperly distributed. This imbalance needs to be redressed at an early date.

At present, vocational education and training institutes include NMYC, MIRDC (public), Don Bosco, Dual Tech, the Meralco Foundation (vocational school), and MIAP (industry association). All of these suffer from a shortage of instructors, a lack of facilities, and inadequate funding, making it difficult for them to function effectively as training institutes.

2. Wooden Furniture

Few educational institutions teach practical woodworking techniques, and there is no system through which educational and training bodies can work together on curricula and instruction content and make mutual use of past experiences. Furthermore, there is a lack of practical expertise concerning wooden materials, furniture manufacturing technology, and related know-how and marketing.

3. Computer Software

In general, priority is given to the quantitative securing of engineers, and improvements in quality are often left by the wayside. In addition, supervisors of both school and company education programs are lacking in terms of quantity and quality.

4. Stuffed Toys

Design and patternmaking abilities are wanting at small businesses especially, and there is also a quantitative shortage of such personnel. Concerning design, the PDDCP, which needs to play a leading role, has entrusted the design of stuffed toys to designers and patternmakers for gifts, furniture, and houseware. Furthermore, their present work is closer to the copying of illustrations than to actual design and patternmaking.

5. Costume Jewelry

This sector also suffers from a shortage of qualified designers. One of the reasons for this is that there are no facilities for the training of costume jewelry designers, and designers in many cases lack even basic design techniques.

6. Oleochemicals

Concerning Philippine R&D in this sector, private companies have invested large sums on their own in basic research, new product development, and the establishment of manufacturing technologies. Since many of these firms are foreign affiliates, however, they depend on their parent companies for management and technology strategies, and in fact there are few cases of independent R&D in the Philippines.

3) Directions of Measures

The improvement of technical standards in the Philippines will require that government and industry join together to establish a policy formation process with certain goals. In 1990 the Philippines began implementation of the Ten Year Science and Technology Master Plan (STMP), with DOST responsible for three main strategies: 1)

modernization of the production sectors through massive technology transfer and through strong linkages with industry and academe; 2) upgrading of R&D capability; and 3) development of science and technology infrastructure and manpower development.

As specific measures for the improvement of technical standards, implementation of the following programs and projects is recommended. During proposal and implementation, compatibility with the ten-year master plan should be taken into account. Furthermore, concerning the development of specific policies, the Philippine side should supplement independent efforts with tie-ups with the industrialized nations for technology transfer, the invitation of experts, and the foreign dispatch of trainees. Effective utilization of these tie-ups will be an important key to guaranteeing the effectiveness of the proposed programs.

1. Creation and enhancement of training and research facilities and the strengthening of ties intra related organizations

Beginning with NMYC, which is under the control of the Department of Education, virtually all training and educational institutes suffer from a shortage of trainers and training facilities. In the case of the die making sector, instructors and trainers should be trained through a program for the long-term dispatch of instructors abroad and through the Advisory Project for Upgrading Technology and Product Quality. In the furniture sector, most of the instructors will be trained by CFIP or in a third sector centering on CFIP. In addition, a system should be set up whereby related organizations can work together on the development of curricula and instruction content and take advantage of each other's experience. This could be achieved through the creation of an instructor pool for dispatch and through the shared use of machinery and facilities.

When considering possible directions for creating and enhancing training and research facilities in the Philippines, the experiences of the Asian NIEs should be of value. In Singapore, for example, the government's Economic Development Board has worked together with the governments of industrialized nations and private companies to set up and operate joint training centers, where training is carried out as a part of technology transfer. In Taiwan, vocational training centers for the training of skilled craftsmen have been established one each in the north, central, and southern regions of the country. 16% of all die manufacturers rely on these centers for the training of their skilled craftsmen. Under this system, companies send their employees to the centers for training during working hours (costs are borne by the company), and workers are given a pay raise after completing the program. They are, however, required to stay with the sponsoring company for a given period of time. Another system is the in-company training program, under which companies accept students from industrial schools for practical training. Students are then obligated to work for the company for 1-2 years upon graduation. School holidays are used to provide in-house training to the students, who in return are given scholarships.

2. Creation of a technical support system

A system should be established for the continuous upgrading of technology and the training of local instructors through the implementation of projects most suited to current conditions in each industry.

In the die making sector, for example, a local instructor pool should be formed focusing on instruction in the areas of technology and production management through the Advisory Project for Upgrading Technology and Product Quality. In terms of facilities, the establishment of a Machinery Processing Industry Upgrading Assistance Center has been proposed. This will require the preparation of facilities for technical

instruction coupled with 1) the transfer of practical technology rooted in basic die making technologies and 2) training in machining techniques for the die making sector in particular. The central staff for this center should be chosen from the local instructor pool to be formed through the Advisory Project for Upgrading Technology and Product Quality.

In the costume jewelry sector, the establishment of a Promotion and Assistance Center for the Cebu Costume Jewelry Industry has been proposed. Its possible role lies in helping manufacturers and subcontractors to upgrade R&D in the areas of quality control, materials and processing technologies. It is suggested that a qualified consultant (product specialist) be engaged from abroad during the initial stages of operation, both to train local staff as future instructors and to help with the operation of the center.

3. Promotion of R&D, upgrading of technology development capabilities

Participation in projects requiring high technical standards would be the most efficient means of improving technical capacities, as seen from the experience of many industrialized nations. In the case of industries with insufficient opportunities for domestic development, like the Philippine software industry, large-scale system development projects considered important must be established locally and technical capabilities developed through the participation of private-sector software development firms in this project.

For the promotion of R&D, active efforts must be made to strengthen and expand the functions of related organizations. One of these is the PDDCP. To improve costume jewelry design and material development capabilities, for example, the PDDCP should be enhanced so that it can play a leading role in gathering and analyzing design information and developing new designs and materials. In addition, industry must have better access to its services. Specifically, a costume jewelry design section should be set up within the apparel and fashion department, and costume jewelry supervisors should be appointed. These individuals are to cooperate with other materials research institutes (MIRDC, ITDI, FPRDI, etc.) and the Promotion and Assistance Center for the Cebu Costume Jewelry Industry in the R&D of new materials and processing technologies for costume jewelry.

This is partially true of the stuffed toy industry as well. For example, rather than appointing a single designer to develop and provide stuffed toy designs on his own, efforts are needed to coordinate training programs for stuffed toy designers and patterners and to improve design capabilities throughout the industry.

Concerning the oleochemical industry, there are at present few firms engaged in independent R&D. The strengthening of coconut R&D activities is therefore proposed as a means of promoting joint coconut-related industrial and agricultural research with the primary objective of contributing to the development of the Philippine coconut industry and oleochemicals.

Progress in R&D is possible only when it is tied to production technologies. In order to obtain maximum benefit from R&D, therefore, the technical support systems discussed above should be set up in each sector to support the gradual acquisition of production technologies.

4. Acquisition of technology through the dispatch of trainees abroad

The long-term dispatch of trainees to industrialized nations is an effective means of developing human resources, particularly when the industrial environment of the country in question is lacking. Private-level dispatches would be most realistic in terms of

contributing to business and technical tie-ups and joint ventures with foreign corporations in the future. Meanwhile, a system should be established whereby government dispatches will be implemented continuously under a cooperative framework consisting of government bodies and industry associations, and whereby these trainees, upon returning to the Philippines, will serve as instructors or advisors.

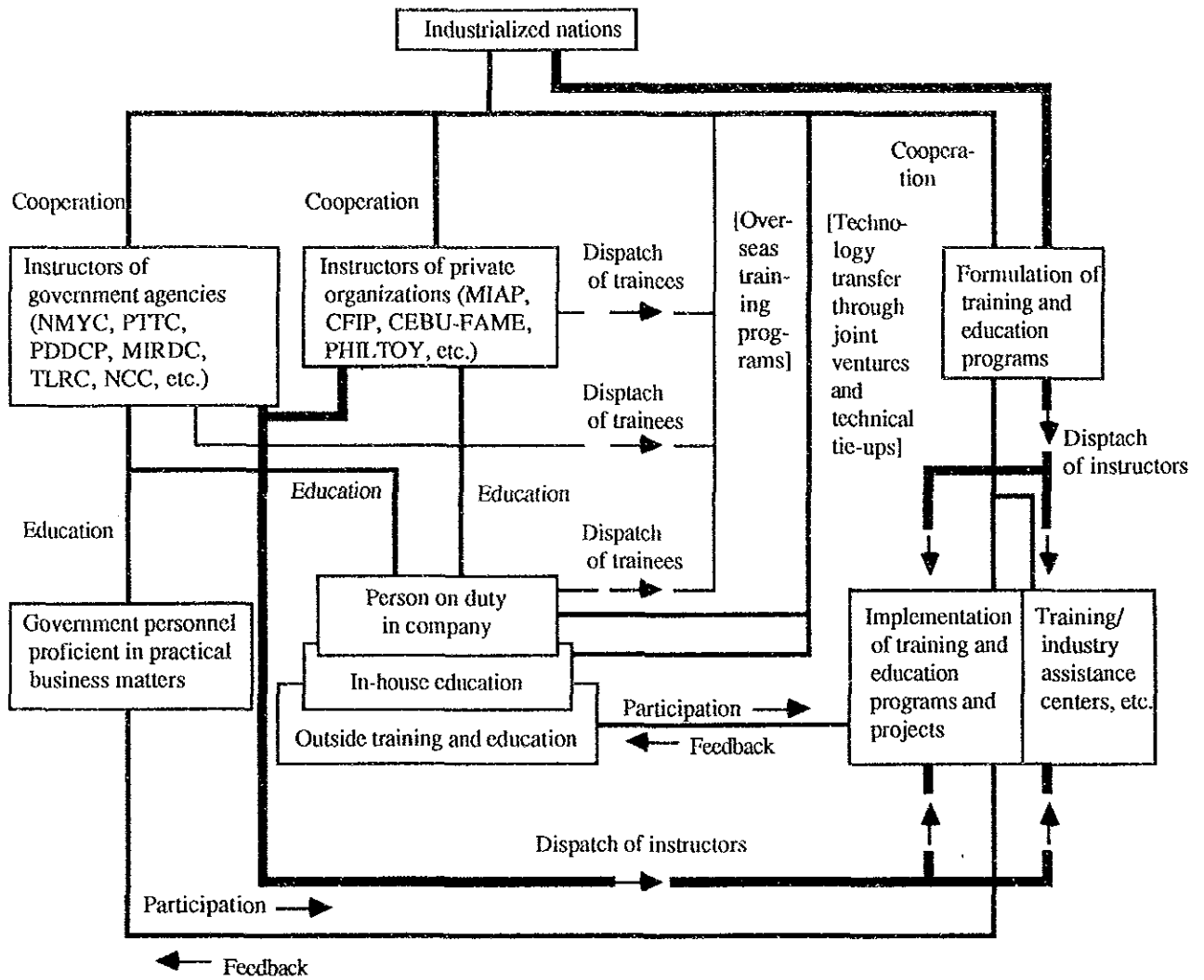
5. Technology transfer via joint ventures and tie-ups with foreign companies

Technology transfer through joint ventures and tie-ups with leading foreign companies is an extremely effective means of stimulating product development and boosting product quality. By establishing tie-ups with foreign corporations, Philippine companies can not only introduce technology, modernize plant facilities, and improve quality control but also acquire marketing expertise, including design development.

In the case of dies and molds, for example, die making technologies are theoretically a part of the organized body of plasticity engineering, and many of them are based on technical expertise gained from actual experience. Taking this into account, the promotion of technology transfer from advanced overseas companies will be indispensable to the upgrading of technologies for the plastic working of metals.

The importance of technology transfer lies less in the simple buying and selling of patents and the supply of expertise than in specific, concrete education and training on the plant floor, which leads to the stratified accumulation of a series of practical, realistic technologies in the host country. When promoting tie-ups with foreign corporations for technology transfer, therefore, it is important that the foreign firm provide instruction and stimulate technical development through the placement of orders with local firms. In the future, this will lead to independent development by local firms and a technological spread effect on other local companies. To help in this process, a development program should also be established at the national level.

Possible Framework for Cooperation with Industrialized Nations



(5) Strengthening of Product Development and Marketing Activities

1) Outline

In April 1991 the DTI outlined a five-point strategy for exports. According to this strategy, short-term policies from 1992 through 1995 should promote new export companies and product development focusing on resource-based export industries. The medium and long term plan, from 1995 onwards, places an emphasis on export of high-added-value products and works to promote high-tech products, exports under Philippine brand names, and market diversification.

Concerning the wooden furniture, stuffed toy, costume jewelry and computer software sub-sectors, the development and expansion of export markets is thought to be possible if an export marketing structure is established and aggressive marketing efforts are undertaken immediately.

These four sub-sectors share a common industrial structure in the sense that they all have companies capable of leading an export drive and, with organized marketing efforts, are capable of capitalizing on latent export capabilities.

The basis of all marketing is to provide customers with products and services capable of satisfying market demands at an appropriate time and through the proper distribution channels.

In many cases, export business in the Philippines consists simply of waiting for visits from U.S. buyers and is dependent on received orders. As a result, there is considerable room for improvement in comparison with the NIEs and other ASEAN countries in terms of design and product development capabilities, research and analysis of export market structure and trends, market development efforts, and awareness of global competition.

2) Current Situation and Issues

1. Wooden Furniture

For furniture exporters, it is essential to take into consideration such factors as climate, customs, and the housing situation in the target market. Also needed is an adequate understanding of market needs and a suitable lineup of products. Moreover, since furniture is a durable consumer good, not only appearance-related elements such as design and materials but also functionality and durability are taken into consideration. Philippine wooden furniture is typified by Western-style traditional carved furniture and uses as a selling point the fact that it is "hand-carved" or "hand-made." In recent years, however, inexpensive machine-carved pieces of a similar nature have appeared on world markets, and Philippine manufacturers need to be fully aware of cost competitiveness in addition to such factors as processing accuracy, strength (durability), and product uniformity.

Also needed are improved procurement channels for raw materials and auxiliary materials (adhesives, paints, metal fittings, etc.) coupled with better processing and finishing techniques.

2. Stuffed Toys

Character products and "idea products" reflecting current trends or topics account for the majority of production. The Philippines share long-running cultural ties with the

U.S., the largest buyer for this industry, and TV programs and other aspects of the U.S. mass media are incorporated in design efforts. This provides the Philippines with a distinct advantage in dealings with the United States. In other words, the ability to understand easily the characteristics and tastes of the characters wanted by the buyer puts the industry at a considerable advantage over countries like Thailand and China, whose cultures and languages differ significantly from those of the buyer. In the future, it will be important to study the mid- and up-range U.S. markets. Success in these segments will require the training of patterners able to create patterns from images and quality control staff capable of checking for delicate shades of expression in each product.

In the case of licensed goods and other character products, the U.S. is generally the source of fads and hit products. If the industry can establish a strong position in the U.S. market, marketing to other nations should be easy. In this sense, too, it is important to gather and analyze information on popular product designs and materials.

3. Costume Jewelry

Although the Philippine costume jewelry industry is backed by a plentiful supply of natural materials and a large labor force for processing these materials, it has yet to move beyond the boundaries of handicrafts. Costume jewelry is a fashion product; quality standards and finishing appropriate to the product level are needed, as is the ability to develop designs. The lack of a good infrastructure, however, limits the development of designs and products. This is because most of the firms in the industry are small businesses, many of which lack even the most basic tools and equipment. The industry relies on imports for high-quality equipment, tools, metal components, adhesives and paints, but imports are difficult to procure because of high cost and complex import procedures. The lack of development in metalworking processes, including plating, is also serving as a major obstacle to the expansion of product lines and the development of designs and products.

4. Computer Software

The Philippine software industry has relied on exports from its inception. At present, major customers include the U.S., Canada, Australia and other English-speaking nations. The software development sector concentrates on the development of application software for personal computers, and in many cases development is limited to programs only. In such cases, the purchaser is responsible for drawing up the basic and detailed design, which requires advanced technology. The data entry sector, meanwhile, is characterized by low wages and English alphabetic input, and competitors include countries under the same conditions, like India, Jamaica and Sri Lanka.

Further promotion of the software development industry will require the upgrading of technology, the expansion of business activities to include basic and detailed design, and the ability to develop all types of application software.

In addition to expanding business in the current English-speaking export markets, the sector should also make efforts to access the Japanese market, which offers tremendous latent demand. In Japan as well there is a large demand for services at the SE and SA level rather than simple programming, and upgrading of the technologies described above will be essential. Efforts to penetrate the Japanese market must be accompanied by mastery of the Japanese language as well as stronger activities to introduce Philippine software companies in Japan.

3) Direction of Measures

1. The need to promote latent export capabilities for products and services

Exhibition in major overseas trade fairs and exhibitions offers companies a chance to promote themselves and their products. Too, they give buyers a chance to find new companies, and are an important point for the creation and expansion of business dealings for both sides. It would be effective to make greater use of such opportunities in order to access overseas buyers and potential partners. In this sense, firms must continue efforts to upgrade product development and technology and hone their ability to respond quickly to business opportunities. Efforts to promote the Philippine industry to overseas buyers would also be effective.

Strategic points for export expansion differ for each sub-sector. In order to make an appeal to the market, these strategic points must be understood and carried through with effective measures.

2. The need for overseas market research

Establishing a position in export markets for Philippine products and services will require a transition from passive acceptance of buyer-specified orders to the active proposal and marketing of medium- to high-range products. Naturally, this will require better manufacturing technology and quality control. Target markets suited to the current level of products and services must be selected, and approaches should be made to the most suitable distribution channels.

3. The need for an export business capable of surviving on the global market

Foreign buyers view the Philippines as a place to subcontract production or processing. Indeed, most Philippine companies give priority to the occasional profit over business risks and investment for the future. However, business capable of surviving on the global market will require the following elements:

a) Building of partnerships: One thing pointed out by all U.S. and Japanese firms who have dealt with Philippine companies is that the ability to deal with problems like shipment delays, differences with the sample, and quality irregularities is essential. A stable, long-term business relationship is more dependent on the building of a sense of partnership or mutual trust than it is on matters of products and services.

b) Improvements in the system for responding to buyer inquiries: The company lists and data held by government-related organizations and industry associations are myriad. When a foreign buyer or potential partner attempts to make a first contact with a Philippine company, it usually either goes through a Philippine agent or uses the telephone book. A directory and inquiry service should therefore be set up to provide overseas buyers with easier access to Philippine companies. Similar systems and materials established by Taiwan and Korea in their drives toward export-led industrialization should prove valuable as case studies.

(6) Promotion of Industrial Standardization and Quality Control

1) Outline

In the Philippines, there are large differences in the extent to which the private sector tackles standardization and improvement of quality. Industries which produce products for domestic consumption by the general public and the industries which supply raw materials and intermediate goods to those industries find that, due to the low level of

income of the consumers, their markets are oriented toward inexpensive products. Producers therefore tend to slash costs at the sacrifice of quality.

As opposed to this, industries which produce export goods and the industries which supply raw materials and intermediate goods to those industries are making an effort to maintain and improve quality. The majority of these work with quality levels and product standards set based on buyer specifications, so work on the basis of the standards indicated by the buyers rather than domestic Philippine standards.

There is a group of companies, most local firms introducing technology from abroad and foreign affiliates, which sell using brands or other companies' names which have certain established reputations on the domestic market. These companies are working to maintain and improve the levels of quality of their own products. They are anxious over the fact that low quality products simultaneously circulate in the market and this causes a loss of trust of the consumer in Philippine products and that the spread of low quality, cheap products might drive out, even temporarily, good quality products. Therefore, they are generally positive when it comes to government standardization.

2) Current Situation and Issues

In recent years, the number of companies which realize the need for modernization of the domestic industry in anticipation of livelier investment from abroad following economic stabilization has been gradually increasing. Central and local chambers of commerce and industry, in particular, are beginning to positive take up the issues of improvement of technology and quality.

The approach to standardization and improvement of quality in the private sector consists of the following:

1. Approach at a level of individual enterprises to promote quality control within their organization, utilizing the outside training courses for such purpose.
2. Approach at a level of industry, participating in such activities as discussions with BPS on the administration of standards, joining the Technical Committee for Standards Formulation, the planning and implementation of programs for improvement of technology and quality.
3. Approach at a regional level, such as the promotion to establish the regional testing and inspection centers, and the implementation of regional programs attached to the programs for the improvement of technology and quality which are pursued in the Metro Manila region.
4. Approach based on the quality control promotion organizations are cores at the central level.

In many cases, the strata of enterprises that join industry associations is limited to the large- and medium-scale enterprises, and therefore the approach at the industrial level is centered on the strata of such enterprises. On the other hand, the strata of small-scale enterprises is active through the industry associations of the regions and the regional Chambers of Commerce. In the case of cottage industry, no approach is made generally to quality control or only at an enterprise level at best.

The industrial standards system of the Philippines is administered on the basis of three pillars, namely, the establishment of the Philippine National Standards (PNS), the Import Commodity Clearance (ICC) system.

The PS Certification Mark System consists of voluntary certification and mandatory certification. The mandatory certification is designated from the standpoint of safety of the consumers and the maintenance of fair trade, and it is based on a part of the product standards of PNS, the PNS other than the product standards designated by BPS such as code of practice and labeling methods, and the product standards other than PNS designated by BPS.

ICC is a system to prevent the distribution in the country of inferior imported goods, and at present designated as target articles are electric wires, electrical materials, electrical parts, electrical products, fire extinguishing equipment and systems, fire extinguishing accessories and some of the articles which are the objects of the mandatory certification under the PS Certification Mark System. These object goods are inspected to check whether they meet PNS, or in the absence of PNS the international or foreign standards adopted by BPS, before clearing customs, and ICC is issued to only goods which meet those applicable standards.

If considering the future development of the Philippine society, economy, and industry, three main effects may be expected from industrial standardization and quality control:

1. A contribution to the promotion of exports through establishing confidence in the quality of Philippine products in export markets. As a measure for this, it is necessary to devise ways to prevent exports of low quality goods and to assist in the improvement of technology and quality.
2. A contribution to greater import substitution, in particular, import substitution and further export industrialization at the level of the materials and parts industries. At the present time, the materials used by domestic industries are low in quality, so export industries and large manufacturers rely in large part on imports for the materials and parts they use. The quality and standards of domestic products will desirably be improved to enable materials and parts to be procured domestically. In the future, further, foreign affiliated export industries with much sophisticated technology will hopefully enter into and expand in the Philippines in line with the current government policy of encouraging foreign investment. Such entry and expansion will require, as a precondition, the existence of industries to supply the necessary materials and parts.
3. A contribution to dispersion of industry to regional areas and promotion of indigenous industries. Specifically, first, various testing and inspection facilities, technical guidance organizations, and opportunities for training for improvement of technology and quality should be set up so as to be available to regional industries as well and, second, standardization and quality control should be spread throughout the regional areas as well so that products of local industries previously handled only in the indigenous markets can compete in the central market as well.

3) Direction of Measures

Seen from the way the industrial world has tackled industrialization standardization and the improvement of quality up to now, companies must 1) acquire the technology for improving quality on their own, 2) engage in thoroughgoing quality control on their own, and 3) develop their own quality control technology so that the industrial standardization and improvement of quality can have practical effects.

Implementation of a comprehensive program to enable companies, in particular small businesses, to do these is considered necessary, but the following are especially important in the strategy for promotion and development of the six subsectors surveyed:

- 1) Correct recognition of the quality demanded in the export markets through quality control seminars run for individual products and the transfer of technology for the quality control for maintaining this from advanced companies.
- 2) Establishment of a system of development and promotion of industrial standards based on the technical standards necessary for small businesses to control quality.
- 3) In quality control, importantly, an accurate grasp of the representative characteristics indicating the quality and an evaluation of the quality control. Further, public ownership of inspection facilities which are required for inspection but are economically difficult for small businesses to own on their own, and the provision of these for use by such businesses.

(7) Strategic and Intensive Implementation of Small Business Promotion Measures and Activation of Industry Organizations

1) Outline

The Philippines has been slow to take up measures to promote small businesses as a result of past government policies for industrialization centered on large-scale development projects. As a result, there are many indigenous small businesses which do not have access to markets stressing quality - either export markets or the domestic market.

If these small businesses are to try and newly enter the export markets or the section of the domestic market where high levels of quality are demanded or try to increase their sales activities there, they must be assisted in raising themselves up to a level where they can compete equally with the large companies and companies of the advanced countries in those markets by certain promotional measures. It is also necessary to continually monitor if the mechanism for enabling the small businesses to compete equally is functioning properly and to take appropriate measures as needed.

In the Philippines, industry organizations have been formed in all the industrial sectors by the major companies operating there. These organizations were in general mostly set up for the purpose of exchanging information, mutual training, and some sort of joint action. The various major organizations in the Philippines have for a considerable time now been representing the views of the industries and have served as pipelines for communication with the government. The bulk of the organizations' activities has been due to the medium level companies, which have played a leading role in improving the standing of their industries. It is necessary to consider assisting such activities so as to try to resolve the problems faced by small businesses.

2) Current Situation and Issues

a) Promotion of Small and Medium Enterprises

In the metal and machinery industrial sector, there are foreign capital affiliated assembly type companies such as auto manufacturers and electrical machinery manufacturers and there are indigenous small and medium sized metalworking businesses which have been slow to modernize their facilities and technology. The linkage between the two has been cut. Therefore, the automobile industry relies mainly on imports to

procure its parts. The domestic small and medium sized metal and machinery firms are only able to supply a limited range of simple parts.

In the wood and wooden product industrial sector, large scale firms dominate the lumber industry, while small and medium sized firms are predominant in the wooden furniture industry. The former have introduced large-scale facilities and are engaged in capital intensive operations, while the latter rely in part on handwork. The advanced companies among them are partially engaged in exports, but have not yet reached a level of technology and quality earning them a solid reputation in the international market. The other small and cottage sized businesses mostly target the indigenous market and while would hope to export face many obstacles in doing so.

The stuffed toy sector basically arose as an industry directed toward the export market. Some medium sized firms have tied up with foreign capital companies and are engaged in sophisticated operations, but most of the companies are small or cottage sized companies which cannot obtain guidance in technology, financing, marketing, etc. and are suffering from sluggish orders.

The computer software development industry includes some investments by affiliates of large financial related companies, foreign capital firms, etc., but most of the companies there are cottage-sized operations due to the fact that the businesses can be started up with a relatively small amount of funds. These cottage-sized enterprises find it difficult to absorb advanced technology and therefore are concerned about falling behind technologically in the future.

The costume jewelry industry is oriented toward the export market, but the regional companies in Cebu still include numerous cottage-sized enterprises which are the result of numerous private enterprises founded with reference to the techniques of surrounding companies. Almost all use natural materials which can be obtained locally and export for the low priced product market. No sources of guidance in improvement of technology, marketing, and management exist. Up until now, therefore, these enterprises have not been able to evolve from small-scale cheap product oriented industries.

As mentioned earlier, certain promotional measures must be taken to support the efforts of these small and medium sized businesses to improve themselves to a level where they can compete equally with the large companies and companies of the advanced nations.

The need for a policy of promotion of small and medium sized enterprises has become rapidly apparent in recent years and efforts are being made to strengthen existing programs. RA6977, known as the "Magna Charta" for small and medium enterprises, for centralized implementation of small business programs for financial, technical, and managerial guidance, previously carried out in a dispersed fashion, has been approved by the President. Based on this, the Small and Medium Enterprise Development Council has been formed with the participation of the DTI, DOLE, DENR, DOST, DAR, and DA. RA6977 is designed to make an overall reform of the small business programs through the SMED Council. The following are some of the major goals of its reforms:

1. Reevaluation and rationalization of previous small and medium enterprise promotion plans and departments in charge
2. Establishment of a Small Business Guarantee and Finance Corporation (SBGFC)
3. A compulsory change forcing all financial institutions to earmark 10 percent of their financial resources for small businesses

Among these, the central bank has already presented guidelines for the compulsory allocation of financing of financial institutions. Further, preparations for the establishment of the SBGFC are now underway and the rationalization of small business promotion plans and departments in charge is being studied.

b) Activities of Industry Organizations

The chief activities of industry organizations in the Philippines generally include undertakings for guidance and study/research activities, representation of the interests of the industry and coordination activities.

However, when the situations of the six sub-sectors under study and the needs of developing these sub-sectors are considered, the monitoring and understanding of the actual situation of the sub-sectors is the foundation of all undertakings for their improvement and development and activities for this purpose should be given priority for implementation. The undertakings for guidance and research, representation of the interests of the industry and coordination activities currently being done should also be done more actively. Rationalization undertakings, mainly unification of quality, measurements and standards, should be considered so far as they do not restrict free transactions.

In addition to the above-mentioned undertakings, the following measures are necessary in the Philippines:

1. Since the financing system for small and medium enterprises is insufficient, the industry associations are recommended to assist to provide basis for financial guarantees or mutual aid systems to help develop the financing system.
2. It is recommended to study the possibility of undertaking such activities as undertakings to complement the government's activities by informing individual firms of various encouragement and preferential treatment programs and assisting them in procedural matters when applying for these programs, thus, contributing to the improvement of the management of the industry.

Further, desirably communication and coordination of opinions among current related organizations will be pushed forward and, when a large number of government related institutions related to an industry implement their programs, the industry organizations will be able to convey their own opinions to the government and, in that process, convey to the various government institutions the opinions on which the industries have reached a consensus and therefore indirectly coordinate the activities of the various government institutions.

The operational standings of all the organizations are currently weak. While there may be permanent representative offices, these are staffed by at most one to two permanent staff members. Further, the offices are in most cases set up in rooms borrowed from member companies. Consideration is required to enable this operational standing to be strengthened.

3) Direction of Measures

The above-mentioned Magna Charta of small and medium sized enterprises included in a comprehensive manner the matters necessary for a small business policy of the Philippines. At the present time, however, with the cumulative debt and the lack of fiscal funds, it is difficult to expect any substantial effect through broad, overall implementation of the small business promotion policy. Rather, it is necessary to change the perspective from even-handed assistance measures to strategically placed assistance.