

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

No. 14

BOARD OF INVESTMENT (BOI)  
PHILIPPINE ECONOMIC ZONE AUTHORITY (PEZA)  
THE REPUBLIC OF PHILIPPINES

# THE FOLLOW-UP STUDY ON INDUSTRIAL PROMOTION IN THE PHILIPPINES

## MAIN REPORT

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MARCH 2000

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## Preface

The Government of Japan has decided to conduct a follow-up study through the Japan International Cooperation Agency (JICA) for two programs implemented in the Republic of the Philippines, namely the "Cavite Export Processing Zone Development and Investment Promotion Program (ended in September 1990)" and the "Industrial Sub-sector Development Program (ended in June 1992). The study is designed to review and analyze actions taken by the Philippine government after the programs and major changes in the industries and enterprises covered by the programs, measure the effect of the policies, measures and programs implemented on the basis of the recommendations made in the programs, and compile the results of the study into a database for future use.

The JICA sent a study team led by Mr. Masayasu Sakanashi of UNICO International Co., Ltd. to the Philippines between January 12 and February 25, 2000, and the study team discussed with government officials, conducted field surveys in the study area, and carried out data compilation, analysis and other works in Japan to complete this report.

I sincerely hope that this report will contribute to the development of data on effectiveness of cooperation in industrial promotion in the Philippines.

I would like to express my gratitude to various parties for assistance and cooperation extended during the study.

March, 2000



Kimio FUJITA

President

Japan International Cooperation Agency

March, 2000

Mr. Kimio FUJITA  
President  
Japan International Cooperation Agency  
Tokyo, Japan

### Letter of Transmittal

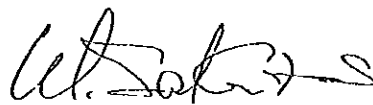
I am pleased to submit a final report on the "Follow-up Study on Industrial Promotion in the Philippines).

We conducted the follow-up study under the contract awarded by your corporation for three months from late December 1999 to the end of March 2000, for the purpose of examining two programs implemented in the Republic of the Philippines, namely the "Cavite Export Processing Zone Development and Investment Promotion Program (ended in September 1990)" and the "Industrial Sub-sector Development Program (ended in June 1992). We reviewed and analyzed actions taken by the Philippine government after the programs and major changes in the industries and enterprises covered by the programs, measured the effect of the policies, measures and programs implemented on the basis of the recommendations made in the programs, and compiled the results of the study into a database for future use.

The study reviews relevant facts and views collected from individual enterprises and government organizations through the series of interview surveys and evaluates how the policies, measures and programs recommended in the two programs have contributed to the target industries in an objective manner. In addition, the study makes recommendations for future policies and programs. We have compiled the results of the study into a database to facilitate the future use.

Finally, I sincerely hope that this report will be used for the development of data on effectiveness of cooperation in industrial promotion in the Philippines and will contribute to further research and study on this important subject.

Respectfully Submitted



---

Masayasu Sakanashi  
Team Leader  
The Follow-up Study on  
Industrial Promotion in the Philippines



## Abbreviation

AIR	Agri-industrial Restructuring
BCDA	Bases Conversion Development Authority
BETP	Bureau of Export Trade Promotion
BOI	Board of Investment
BPS	Bureau of Product Standards
BSMBD	Bureau of Small and Medium Business Development
CALABARZON	Cavite, Laguna, Batangas, Rizal and Quezon
CBI	Center for the Promotion of Imports from developing countries (of the Netherlands)
CEZ	Cavite Economic Zone
CFIF	Cebu Furniture Industries Foundation
CFIP	Chamber of Furniture Industries of the Philippines
CHED	Commission of Higher Education
CITC	Cottage - Industry Technology Center
CITEM	Center for International Trade Expositions and Missions
CJC	Costume Jewelry Center
DECS	Department of Education, Culture and Sports
DBP	Development Bank of Philippines
DENR	Department of Environment and Natural Resources
DOST	Department of Science and Technology
DTI	Department of Trade and Industry
ECOZONE	Economic Zone
EPZ	Export Processing Zone
EPZA	Economic Processing Zone Authority
FAMA-PHIL	Fashion Accessories Manufacturers' Association of the Philippines
FAME	Fashion Accessories Manufacturers and Exporters, Inc.
FTZ	Free Trade Zone
GFSME	Guarantee Fund for Small & Medium Enterprises
ICD	Industrial Cluster Development
IT	Information Technology
ITAP	Information Technology Association of the Philippines
ITDI	Industrial Technologies Development Institute
MFA	Multi-fiber Agreement
MIAP	Metalworking Industries Association of the Philippines

MIRDC	Metal Industry Research and Development Center
NCC	National Computer Center
NEDA	National Development Office
NSO	National Statistics Office
PCA	Philippine Coconut Association
PCCI	Philippine Chamber of Commerce and Industry
PDDCP	Product Development and Design Center of the Philippines
PEZA	Philippine Economic Zone Authority
PFS	Philippine Foundry Society
PFTC	Philippine Furniture Training Center
PHILEXPORT	Philippine Exporters Confederation, Inc.
PHILTOY	Philippine Toy and Novelty Manufacturers Association, Inc.
POMA	Philippine Oleochemical Manufacturers Association
PSA	Philippine Software Association
PSDI	Philippine Software Development Institute
PSY	Philippine Statistical Yearbook
PTMI	Philippine Toy Manufacturers Association
PTTC	Philippine Trade Training Center
PV	Pole-Vaulting
SAPROF	Special Assistance for Project Formation
SBGFC	Small Business Guarantee and Finance Corporation
TESDA	Technical Education and Skills Development Authority
TLDC	Technology and Livelihood Development Center
TLRC	Technology and Livelihood Resource Center

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# CHAPTER 1

## INTRODUCTION



# **1 Introduction**

## **1.1. Background and Objective of the Study**

JICA's Industrial Development Study Division has been conducting a series of follow-up study to examine and evaluate the current state of development plans, programs and projects that were envisaged and recommended in the development studies conducted by JICA in the past.

This follow-up study (referred to as "the Follow-up Study") covered the following two studies that were selected from among the JICA's development studies conducted in the past concerning the industrial sector in the Philippines.

1. Study on the Cavite Export Processing Zone Development and Investment Promotion in the Republic of the Philippines (referred to as the "CEPZ Study")
2. Study on Industrial Sub-sector Development in the Republic of the Philippines (referred to as the "Industrial Sub-sector Study")

The CEPZ Study was completed in 1990, after it was carried out with the Export Processing Zone Authority (EPZA), the implementation agency for the Cavite Export Processing Zone (CEPZ) development project and the Board of Investment (BOI) of the Department of Trade and Industry (DTI) as counterparts, over one year from 1989. The Industrial Sub-sector Study was completed in July 1992 after it was carried out with BOI as the counterpart for two years from 1990. The backgrounds and objectives of those two studies and the recommendations made were presented in Chapter 3 concerning the former study and Chapter 4 concerning the latter study respectively.

JICA has conducted a number of follow-up studies on the development studies that had been completed in the past. Covered in those follow-up studies were a broad review of (a) the general status of the past studies, such as the number of studies carried out, the fields covered by the studies, and the progress of on-going studies being carried out, (b) any adoption for implementation on the recommendations made in those studies, and (c) a future outlook for particular industries, areas and/or projects that were covered by the previous studies.

In recent years, as a basis for improving efficiency and effectiveness of ODA, it is required that a result of technical assistance provided under ODA is evaluated with

quantitative indices. For this end, it is more valuable to indicate with simply visualized indices on the effects that had been derived from the recommendations made in the development studies, Japanese ODA.

As a basis for examining possible improvement of the assistance and recommendations provided, JICA will utilize the outcome of research made by researchers on applicable development theories. For this end, JICA needs to provide them with data and information conducive to their research so that their research could derive more practical and applicable outcome.

In view of these requirements, JICA has designed to conduct this Follow-up Study, particularly focusing on the development of analytical data showing the effect of technical assistance made through JICA's development studies for the promotion of industrial development in the Philippines.

In this context, the objective of this Follow-up Study was broadly set as follows:

- 1) To review the actions taken by the Filipino government and industries following the two previous studies, and to measure the effect of the policies and programs as well as projects recommended in those studies; and
- 2) To compile and incorporate the outcome of the Follow-up Study into a database.

## **1.2. Scope of the Study, and Outline of the Study Work**

### **1.2.1. Scope of the Study**

The scope of the Follow-up Study is summarized as follows.

#### **(1) Industrial sub-sectors selected for the Follow-up Study**

Industrial sub-sectors selected for the Follow-up Study are ten; six sub-sectors of metalworking (die and mold manufacturing in particular), wood furniture, computer software, toys (particularly stuffed toys), costume jewelry, and oleochemicals that had been studied in the Industrial Sub-sector Study, and four sub-sectors of electric and electronics, automotive parts, textiles and apparels, and plastics processing that were selected as the priority industries for investment promotion in the CEPZ Study.

## **(2) Study area**

Geographically, this Follow-up Study mainly covers the Manila and Cavite areas. Besides the study in these areas, Pampanga and Cebu, two major production centers for wood furniture, were added for the survey of that industry, while the survey of the costume jewelry industry was made mainly in Cebu where a large number of establishments concentrates.

### **1.2.2. Outline of the Study Work**

#### **(1) Overall schedule**

Following the initial preparatory work carried out in Japan, the field survey was conducted in the Philippines from January 12 to February 25, 2000. Then the home-office work was carried out to make an analysis of data and information collected in the field survey, development of a database and preparation of a final report. Major activities carried out in each phase of the work are summarized as follows:

- 1) First home-office study work
  - a. Review of the previous studies
  - b. Collection of data and information available in Japan
  - c. Preparation of an implementation plan for the field survey
  - d. Preparation of questionnaire for interview with government agencies, relevant institutions and industrial associations
  - e. Preparation of questionnaire for interview with relevant enterprises
- 2) Field survey
  - a. Collection of data and information in the Philippines
  - b. Interview survey of government agencies, relevant institutions and industrial associations
  - c. Interview survey of relevant enterprises
- 3) Second home-office study work
  - a. Compilation and analysis of the results of the field survey and of data and information collected
  - b. Development of a database on the analysis of effects derived from the policies and programs recommended in the CEPZ Study and Industrial Sub-sector Study (collectively referred to as "the Two Previous Studies")
  - c. Analysis of correlation between the effect of the recommended policies and programs and the development of relevant industries
  - d. Preparation of a final report

(2) Major activities in the field survey

The field survey consists of the collection of published information available in the Philippines, including publications and statistics relevant to the Follow-up Study, and interview and discussions with relevant government agencies, institutions, industrial associations and enterprises. A subcontract was made to a local consulting firm regarding listing of organizations and business establishments to be visited, distributing the questionnaire, making appointments for visit and interview, and collecting, assorting and recording the responses to the questionnaire (data input to computer and tabulation).

For the sake of conducting the interviews, the questionnaire prepared during the first home-office work (as amended during the field survey to reflect actual conditions) was delivered in advance, and interview was carried out by using the questionnaire, while requesting to furnish additional reference materials and data.

There were some enterprises that did not accept interview by the study team for various reasons, to which the study team requested to response on the questionnaire without interview.

Government agencies, institutions, industrial associations and enterprises visited for the interview and discussions are listed below.

a. Government agencies and institutions

Those visited for the interview and discussions are shown in "Appendix 1.1 The List of Organization Visited".

b. Industrial associations

Industrial associations visited for interview and discussions are also shown in "Appendix 1.1 The List of Organization Visited".

c. Enterprises

Surveyed with the interview and/or questionnaire are 23 enterprises for the survey related to the CEPZ Study and 87 enterprises for the survey related to the



Industrial Sub-sector Study, including those who responded in the questionnaire only. Breakdown of the number of surveyed enterprises into industrial branches is shown in Appendix Chapter 2 Table 1-1. The forms of questionnaire used for the interview of enterprises are shown in Chapter 1.2.3 and Chapter 1.2.4 in the Separate Volume..

### **1.3. Methodology for Assessment of Effects derived from the Two Previous Studies**

#### **1.3.1. Framework for the Study**

The Follow-up Study was designed to make assessment of the effects derived from the Two Previous Studies, that is, contribution to industrial development and investments in the country. More specifically, it calls for analyzing correlation between policy measures recommended in the Two Previous Studies and the effects derived from, and building a database on those analysis and assessment. To meet these requirements, the assessment was made by means of (a) defining the items to be assessed, (b) setting evaluation criteria on those items, and (c) analyzing the effects in terms of thus defined assessment items and by using the evaluation criteria.

Although both the CEPZ Study and Industrial Sub-sector Study were designed with a common objective that was to prepare a basic plan for industrial development and investment promotion in the Philippines, as those two studies differed in specific objectives and nature of study, substance of the effects derived from the studies should be distinctive on the respective study. In view of these features, specific items for assessment and evaluation criteria were established individually for each of those two Studies, while following the basic evaluation items set commonly for both Studies.

The basic evaluation items adopted in this Follow-up Study are as follows:

- 1) For assessment of the effects to the development goals set in the Two Previous Studies:
  - Effectiveness
  - Relevance
  - Impact
  - Sustainability

2) For assessment of the effects of recommendations on policy measures, action programs and projects indicated in the Two Previous Studies:

- Relevance
- Impact
- Sustainability

The assessment of the effects of recommendations was performed at the following two levels:

#### First level

- a. Broad evaluation on the recommendations made for the promotion of investments in the CEPZ as proposed in the CEPZ Study.
- b. Broad evaluation on recommendations made for the promotion of six industrial sub-sectors and export sector as proposed in the Industrial Sub-sector Study.

#### Second level

To evaluate the effects of the specific policy measures, programs and projects recommended, particularly the effects brought about on the industrial development and/or investments as a result of the implementation of those recommended measures, programs and/or projects, as follows:

- a. Regarding the recommendations made in the CEPZ Study: Evaluation is made on the effects to the achievement of investment promotion.
- b. Regarding the recommendation made in the Industrial Sub-sector Study: Evaluation is made on the effects to the development of the targeted six industrial sub-sectors and also to the promotion of SMEs and exports.

Specific items set for the assessment of effects derived from the CEPZ Study are described in Chapter 3, and those relating to the Industrial Sub-sector Study in Chapter 4.

### **1.3.2. Approach and Methodology Used for the Follow-up Study**

To carry out the Follow-up Study according to the framework defined above, the following approach and methodology were used for the evaluation and assessment of the effects:

(1) General approach

The Follow-up Study is structured in the following four steps:

- 1) First-step: Review and analysis of the country's macroeconomic conditions and social development plans in the past, including:
  - a. Progress of socio-economic development in the Philippines since the early 1990's when the Two Previous Studies were conducted;
  - b. Changes in socio-economic development policy, and industrial policy in particular;
  - c. Changes in the country's economic environment; and
  - d. Industrial development targets, issues and key policies in the current Medium-Term Development Plan.
  
- 2) Second-step: Review of the development and current state of the projects and industries studied in the Two Previous Studies, and analysis of major factors that had substantial impact on such development. This analysis also considers impact on the industrial development by external economy identified in the first-step study:
  - a. The current status of the CEPZ, the progress of industrial investments in the CEPZ, and the current state of operation by the CEPZ locators, especially by major industries.
  - b. The current state of export performance and the development of SMEs in the six industrial sub-sectors studied in the Industrial Sub-sector Study.
  
- 3) Third-step: Review the state of implementation and/or application/utilization of the policy measures recommended in the Two Previous Studies, while collecting opinions of beneficiaries on those recommendations:
  - a. Review of the contents of policy measures, action programs and projects recommended in the Two Previous Studies, and background and rationale for the recommendations;
  - b. Review on how have the recommended policy measures, action programs and projects been implemented, applied or utilized; and
  - c. Collection of the opinions of beneficiaries including their evaluation on the recommendations.

- 4) Fourth-step: Overall assessment on degree of the effects brought about by the policy measures, action programs and projects recommended in the Two Previous Studies. This assessment uses the two-pronged approach:
  - a. Extent that those recommended policy measures, action programs and projects have been actually implemented or utilized; and
  - b. Correlation between the development or current changes in the projects and/or industries studied in the Two Previous Studies, and impact of the recommended policy measures, action programs and projects on such development or changes.

(2) Basic data and information used for analysis and evaluation in the Follow-up Study

In carrying out the Follow-up Study in line with the overall approach mentioned above, the analysis and evaluation were made by using the data and information collected during the initial preparatory work in Japan and then the field survey in the Philippines. (See Fig. 1-1 for the relationship between the general approach and evaluation/assessment items as stated above, and basic data and information used for the analysis and evaluation as specified below.)

1) First-step study

- a. Analysis based on the Development Plans, other official documents and statistics published by the Government of the Philippines.
- b. Analysis of information collected through interview with relevant government agencies.

2) Second-step study

- a. Analysis based on data and source materials provided by relevant institutions and industrial associations.
- b. Analysis of information collected through the interview with relevant institutions and industrial associations.

3) Third-step study

Analysis of information collected through the interview (including responses to the questionnaire) with selected enterprises.

4) Fourth-step study

Overall evaluation on the basis of the results of the second- and third-step studies

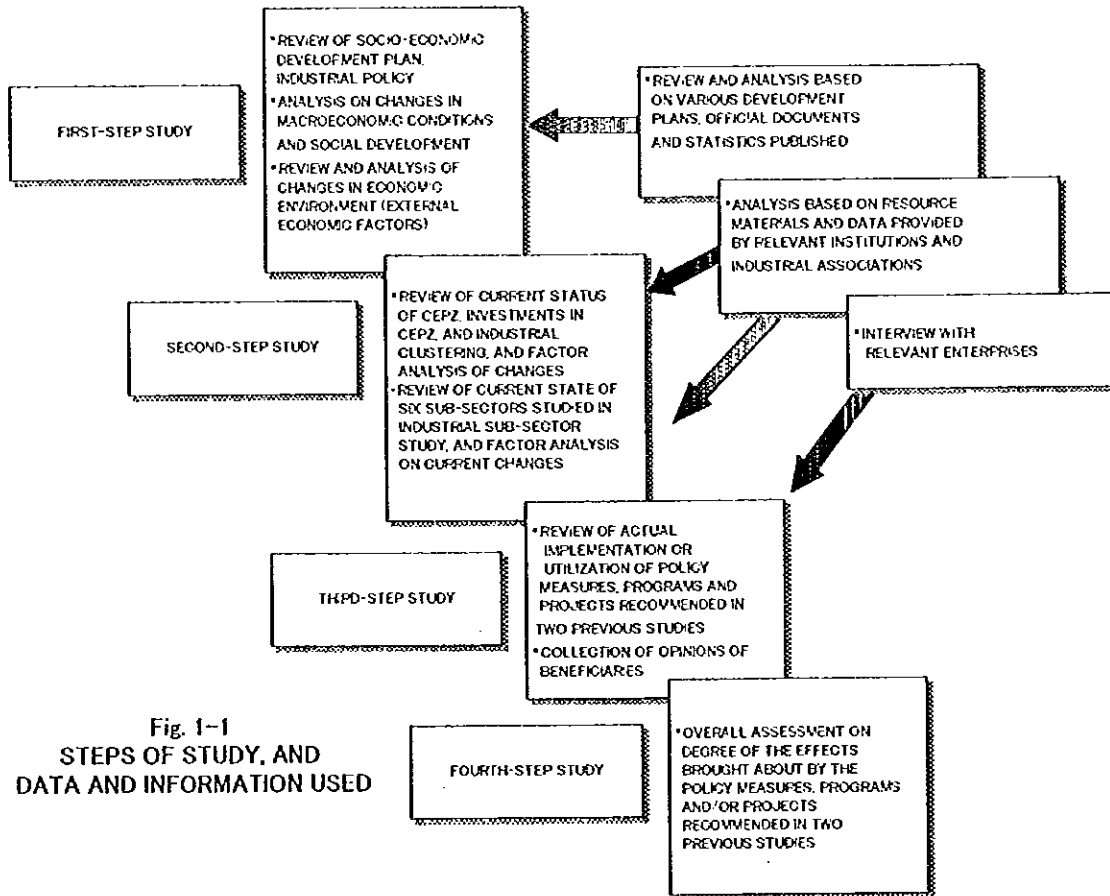


Fig. 1-1  
STEPS OF STUDY, AND  
DATA AND INFORMATION USED

(3) Analysis and evaluation methods and limitation of available data

- 1) Evaluation of contribution to achievement of the development goals in general and objectives of the policy measures and/or projects recommended

This evaluation is made with macroscopic level of trend analysis, as conducted in the first-step study, on the socio-economic development initiatives and also based on the result of review on the published official documents related to the Development Plans and economic environment. Quantitative analysis and assessment were attempted, where possible, by using those official statistics and other available data. It must be noted, however, that the scope of quantitative

analysis was confined to a macro-level analysis of industrial development and structural changes due to limited data available.

2) Assessment on degree of the effects brought about by the recommendations (measures, action programs and projects) made in the Two Previous Studies

This phase of assessment was conducted on the basis of the results of the second- and third-step studies, as mentioned in (1) above. As the basis for this assessment, review and analysis of the current status, including development or any changes, of industrial sub-sectors taken up for the Follow-up Study; the main factors for such development and changes; and the effects of the policy measures, programs and projects recommended in the Two Previous Studies were performed by using data and information furnished by BOI, PEZA and other government agencies and institutions, and industrial associations as well as information collected through interview (including responses to the questionnaire) with relevant enterprises. In the evaluation process, as described later, evaluation criteria and indices for each item were established first. Data and information collected were translated into the indices using the criteria. However, as responses to the questionnaire were limited in number and also no detail figures showing managerial performance were not released by the respondents, the study team was unable to perform quantitative analysis and had to be content with qualitative evaluation.

#### **1.4. Structure of the Report and Building of the Database**

##### **1.4.1. Structure of the Report**

This report consists of the following four chapters:

1. Introduction
2. Major trends in and major characteristics of industrial investment and industrial performance in the Philippines
3. Effects derived from the CEPZ Study
4. Effects derived from the Industrial Sub-sector Study

Chapter 2 “Major trends in and major characteristics of industrial investment and industrial performance in the Philippines” reviews changes in the country’s industrial development policy and the environment surrounding the industries over the past decade

since the early 1990s when the Two Previous Study were conducted. It broadly analyzes major trends in industrial investment and industrial performance during the period as well as any changes and characteristics of industrial structure. This review and analysis form the basis for assessing the effects to the development goals that have been derived from the outcome of the Two Previous Studies, as described in Chapter 3 and 4. More specifically, the review and analysis relate to (1) trends of industrial investments and industrial growth, and changes in industrial structure in the Philippines in the past; and (2) external economic factors influencing industrial investment and industrial growth, such as policy background and economic environment.

Chapter 3 “Effects derived from the CEPZ Study” describes, at the top of the background and objective of the Study and a summary of the recommendations made, review of the current state of EPZA (currently PEZA) and CEPZ and the development of other Special Economic Zones and industrial clustering in the region. The review includes the current operation of locators in CEPZ and any constraints and difficulties being encountered by them. The chapter finally presents the results of assessment on the effects that have been derived from the policy measures and programs recommended in the CEPZ Study, together with the basis of evaluation and recommendations on measures to be taken for further improvement.

Finally, Chapter 4 “Effects derived from the Industrial Sub-sector Study” describes, at the top of the background and objective of the Study and a summary of the recommendations made, review of the current state of the six industrial sub-sectors studied in the Study compared with the conditions of those industries at the time of the said Study as well as the current position of the recommendations made in that Study. The chapter finally presents the results of assessment on the effects that have been derived from the policy measures and programs recommended in that Study, together with the basis of evaluation and recommendations on measures to be taken for further development.

#### **1.4.2. Building the Database**

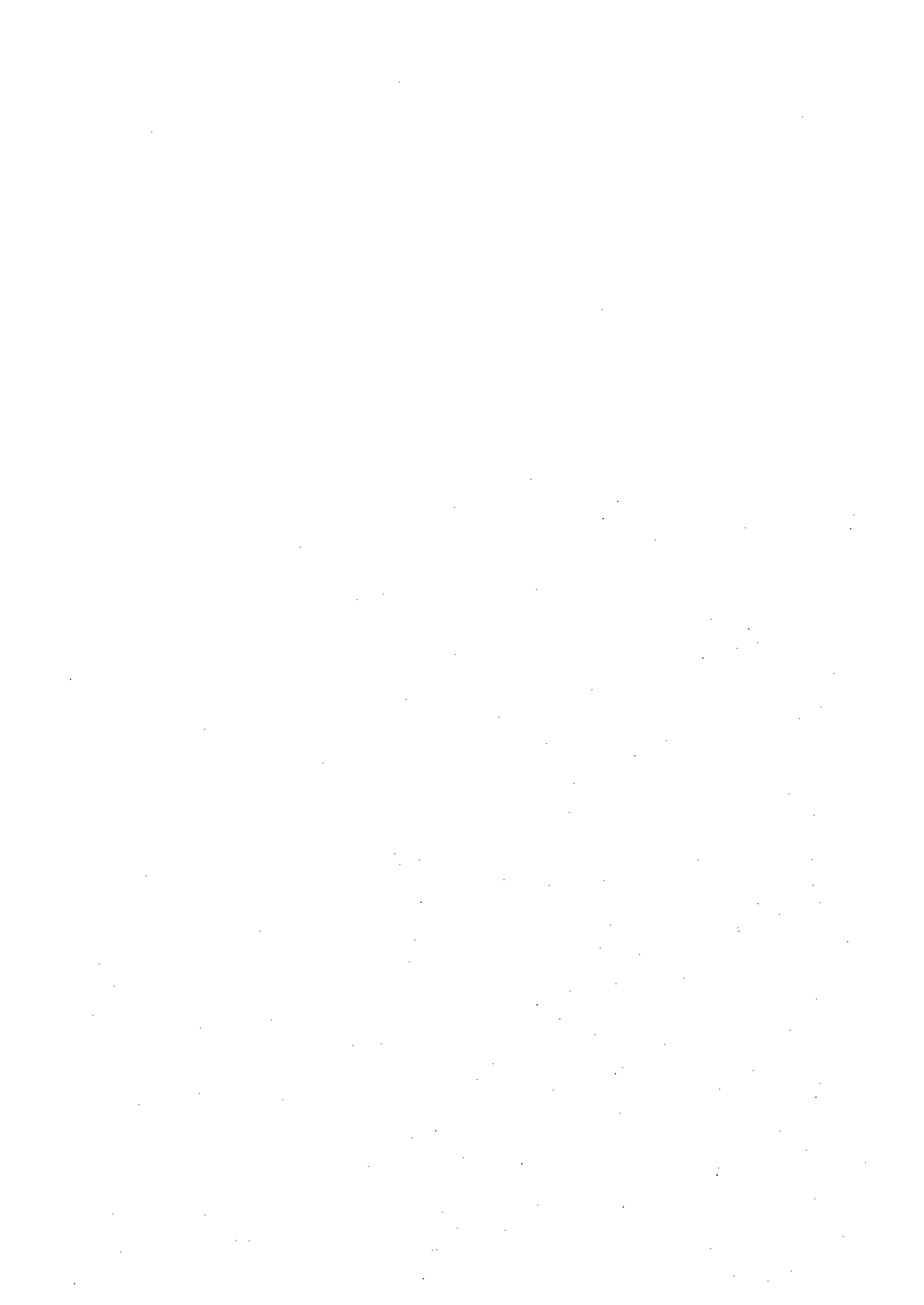
Basic data collected during the Follow-up Study, responses by selected enterprises to the interview and questionnaire surveys, the assessment items, evaluation criteria and indices adopted for the assessment of the effects in the Study were incorporated into a

database for future use. A list of the database built is given in the annex part of this report.



## CHAPTER 2

# OVERVIEW OF SOCIO-ECONOMIC PERFORMANCE, INDUSTRIAL INVESTMENT AND INDUSTRIAL PRODUCTION IN THE PHILIPPINES



## **2. Overview of Socio-economic Performance, Industrial Investment and Industrial Production in the Philippines**

### **2.1. Socio-economic Performance**

#### **2.1.1 Medium-Term Development Plans and Basic Policies for Economic Development**

##### **(1) Basic Development Policies in the Past Medium-Term Development Plans**

The Philippines is implementing the Medium-Term Development Plan (1999-2004) following the past two Development Plans (1987-92 and 1993-98). The nation has pursued structural reforms, activation and enhancement of competitiveness of productive and service sectors, social reform and development, and enhancement of infrastructure and macroeconomic fundamentals for the foregoing economic development. The main objectives for the development strategies in the past Medium-Term Development Plans are enumerated below.

##### **1. Reforms of economic structure**

- 1) To gradually free the economy from ineffective government interventions, and to pursue deregulation.**
- 2) To lift a system of protection which engendered inefficiency in the production and distribution of goods and services, while pursuing privatization of government entities engaged in essentially private activities.**
- 3) To expand close relations with international markets while enhancing competitiveness of domestic industries.**

##### **2. Activation and enhancement of competitiveness in productive and service sectors**

- 1) Reforms of policies concerning agriculture and natural resources**
  - i. To increase productivity, competitiveness, market adaptability and sustainability of the country's agribased industries**
  - ii. To promote sound natural resources management**
  - iii. To push a more vigorous implementation of the Comprehensive Agrarian Reform Program (CARP).**
- 2) Reforms of policies concerning industry and services toward opening up the economy**
  - i. Measures to liberalize, deregulate and privatize economic sectors**
  - ii. Promotion of export and foreign investment**

### **3. Social reform**

- 1) To pursue the social and human development aiming at reducing poverty and sustaining the improvement in the quality of life of peoples**
- 2) To achieve sustained growth and facilitate people empowerment within the framework of sustainable development**

### **4. Infrastructure development**

- 1) To liberalize the telecommunications industry and deregulate air and water transport**
- 2) To improve the road and bridge network, enhance water management concerns and solve the power crisis.**
- 3) To focus strategic infrastructure projects in growth centers.**
- 4) To promote the development of infrastructure on the basis of BOT schemes with legislative facilitation of BOT Law.**

### **5. Macroeconomic policies**

- 1) To promote stable economic growth with healthy fiscal balance leading to generally lower interest rates.**
- 2) To control inflation.**
- 3) To pursue the financial reform.**
- 4) To promote the global integration of the Philippine economy that bring about increases in exports and capital inflows.**

## **(2) Basic Development Policies in the Present Medium-Term Development Plan**

The present Medium-Term Development Plan (1999-2004) adopts the principles of the development policies in the past two Medium-Term Development Plans as enumerated in the previous section. At the same time, it forms the initial medium-term development plan in the framework of the Long-Term Development Plan up to the year 2025, which was published as “The Philippine National Development Plan – Directions for the 21<sup>st</sup> Century” in 1998”. The basic policies in the present Medium-Term Development Plan are enumerated below.

#### **1. Vision for Development**

- Sustainable development and growth with social equity**

#### **2. Mission Priority**

- Acceleration of rural development**
- Delivery of basic social development services**
- Strengthening competitiveness**
- Sustained development of infrastructure**
- Ensuring macroeconomic stability**

- Reforming governance
- 3. Policies and strategies for social reform and development
  - 1) To preserve present gains and enhance access to basic services and development opportunities
  - 2) To address the shortfalls and inequities in social expenditures
  - 3) To promote the preparation of human resources, vulnerable groups, and society and culture at large for further globalization and modernization.
  - 4) To achieve social cohesion and social capital formation
- 4. Policies and strategies concerning agriculture agrarian reform and natural resources
  - 1) Enhance of productivity and competitiveness
  - 2) Diversification of production and resource use
  - 3) Access to land and other productive resources
  - 4) Promote environmental sustainability
- 5. Policies and strategies concerning industry and services
  - 1) To establish and develop globally competitive industries
  - 2) To increase employment and income opportunities, particularly in the countryside
  - 3) To create employment and income opportunities in poverty-endemic areas
  - 4) To accelerate and sustain the services sector's growth with improving its productivity and enhancing the country's international competitiveness as a service provider
  - 5) To develop the service sector to high quality and value standard
  - 6) To develop a high value-added service economy that effectively and efficiently delivers the service needs of modern agriculture and industry.
- 6. Policies and strategies concerning infrastructure development
  - 1) To expand private sector involvement in infrastructure
  - 2) To use integrated planning to address the diverse issues in developing infrastructure
  - 3) To intensify the shift in infrastructure investments from the highly developed megacenters like Metro Manila to the designated regional growth centers
  - 4) To promote infrastructure development linked with agri-industrial development, tourism enhancement and environmental management through physical regional planning to achieve balance in development
- 7. Main macroeconomic policies
  - 1) Policy goal
    - Immediate goal: Earliest recovery from the economic crisis in 1999 through structural reforms and a stabilization program.

- Future goal: To vigorously pursue a more equitable distribution of wealth and poverty reduction.
- 2) Main policies and strategies
- i. To pursue monetary policy aiming to ensure macroeconomic stability, focusing on the maintenance of low and stable domestic inflation rates while supporting growth targets.
  - ii. To promote a sound balance of payments through a healthy trade, underpinned by an essentially market-determined exchange rates.
  - iii. To improve the regulatory and supervisory framework of the financial and banking sectors.
  - iv. To pursue an attractive environment for investment by encouraging the participation of foreign banks.
  - v. To operate the government's credit policy within the framework of market-oriented interest rates and full-cost recovery. (To rationalize credit programs by phasing out directed credit programs by government non-financial institutions and government-owned and -controlled corporations by February 2001.
  - vi. Capital market development centering on developing financial instruments responsive to the needs of an increasingly globalized market; measures to generate long-term savings; measures to increase competition in the pension fund market; encouraging the participation of private institutions in housing finance.
  - vii. Establishment of a tax system that is responsive to the funding requirements of development expenditures, neutral and efficient with respect to resource allocation.
  - viii. Tax reform rationalizing fiscal incentives and subsidies and tax rebates in line with the eliminating of distortions in pricing and resource allocation.
  - ix. Employment generation in line with the thrusts to reduce poverty, improve income and redistribute wealth.

### **2.1.2. Social and Economic Development During the Previous Two Medium-Term Development Plan Periods**

#### **(1) Economic growth in the past**

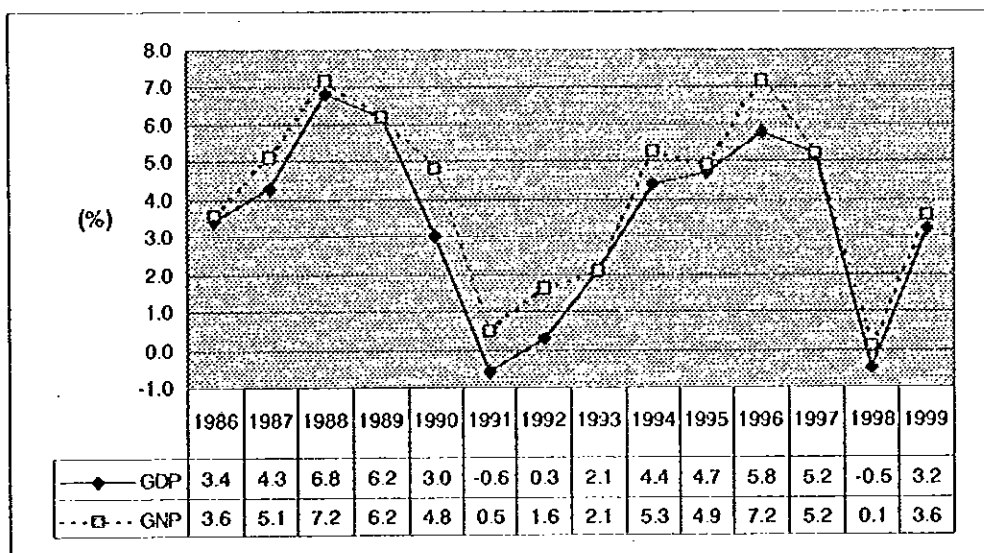
In the 1990s, the economy of the Philippines underwent a series of hardships. The major earthquake that hit Baguio in July 1990 and the eruption of Mt. Pinatubo in 1992

caused severe damages to the national economy. After some recovery in the mid-1990s, it was hit by the economic crisis that damaged East Asia in 1997. Then, the country's agricultural production declined sharply due to the El Nino Effect that accompanied draught in 1998, causing the economy to shrink again.

Fig.2-1 shows the GNP and GDP growth rates between 1985 and 1999. Over the 14-year period, the economy of the Philippines clearly went through several cycles of "growth and stagnation." During the medium-term plan period between 1987 and 1992, the real growth rate of GDP reached its peak at 6.8% in 1988 and dropped sharply to negative growth of minus 0.6% in 1991. Then, it gradually recovered to reach 5.6% in 1996. However, the economic crisis in Asia drove industrial production down in 1997. In 1998, agricultural production plummeted due to the severe draught, hardest in the past 31 years, resulting in negative growth of GDP (minus 0.5%). These economic ups and downs indicate that the country's economic structure still lacks resilience against internal or external shocks including natural disaster.

According to the 1999 figures announced on January 28, 2000, GDP grew 3.2% and GNP 3.6% in real terms, as driven by increased agricultural production under favorable weather conditions, some recovery of industrial production from the Asia crisis, and growth of the service sector.

Fig. 2-1 Trend of GNP/GDP Growth Rates



Source: NSO

Fig.2-2 shows real growth rates of gross domestic investment (GDI)<sup>3)</sup> and exports in the Consumption Factor GDP and ratio of these two factors to GNP during the period from 1986 and 1999.

The Philippines has been heavily depending on investment and exports as major sources of economic growth. As seen in Fig.2-2, the real growth rate of GDI, after declining sharply to 1.9% in 1990, continued to grow at 4 to 6% annually until 1993. Then GDI recorded momentum of high growth at 12 to 20% annually for four years from 1994 to 1997. In 1998, however, GDI showed negative growth of minus 14%, for the first time during the period, due to the economic crisis encountered in Asia. Similarly, exports grew steadfastly at around 8% from 1992 to 1994, after negative growth of minus 17% in 1991. Then, significant growth was recorded at around 12% in 1996 and 1997, after declining to 3.5% in 1995. In 1998, however, the Asia crisis forced the growth rate of exports down to a negative 16% as like as GDI. In view of ratio to GNP, GDI continued to represent over 20% of GNP every year between 1990 and 1997. The ratio of exports to GNP also accounted for around 30% in 1993, and then grew every year reaching over 50% in 1998.

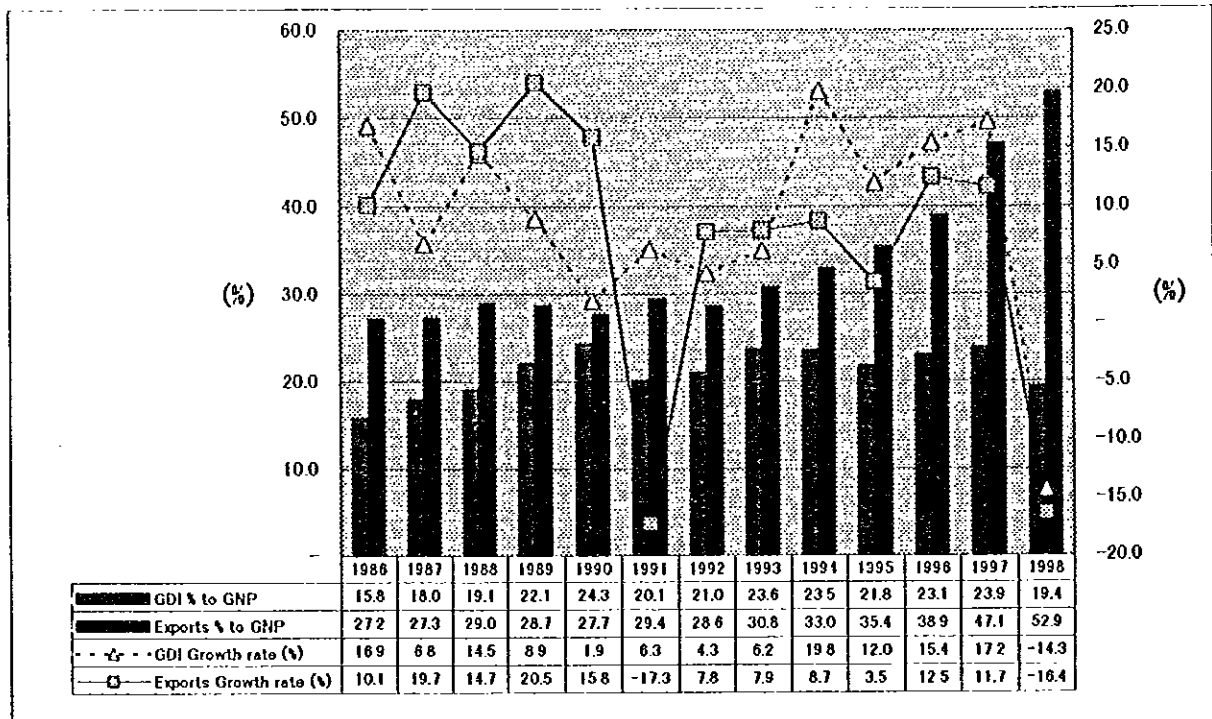
As shown in Fig.2-1, both GDP and GNP registered negative growth in 1991 and 1998, concurrently with rapid declines in exports. Furthermore, the negative growth of GDI adversely affected as well. The sharp decline of GDI growth in 1990 reflected to GDP and GNP in the following year. In 1988, as GDI declined to a negative growth, it immediately affected to GDP and GNP in that year. This clearly shows that the Philippine economy is largely susceptible to fluctuations of investment and exports. To ensure sustainable growth of the economy in the future, therefore, it is critical to promote investment and export on a continuous basis. At the same time, however, attention should be paid to rapid growth of imports during the period. In particular, the country's trade balance turned into a deficit in 1989, which expanded up to 1997.

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<sup>3)</sup>Gross Domestic Investment (GDI): The value of capital formation in the Consumption Factor GDP



Fig.2-2 Real Growth Rates of GDI and Exports  
in Consumption Factor GDP and  
Ratio of These Two Factors to GNP



Source: NSO

GNP per capita and its growth rates between 1993 and 1998 are shown in Table 2-1. Real GNP per capita, after declined by 2% in 1993, continued steady raise annually to reach \$1,100 – 1,200 between 1995 and 1997 from \$826 in 1993. In 1998, however, it dropped to \$914 due to the overall economic downturn.

Table 2-1 Per Capita GNP

	1993	1994	1995	1996	1997	1998
- Per Capita GNP (In Peso, at current prices)	22,399	25,304	27,877	31,451	34,203	37,062
- Per Capita GNP (In US\$, at current prices)	826	958	1,084	1,200	1,161	914
- Per Capita GNP Growth Rate (%) (at 1985 constant prices)	-2.0	2.7	2.4	4.8	2.6	2.1

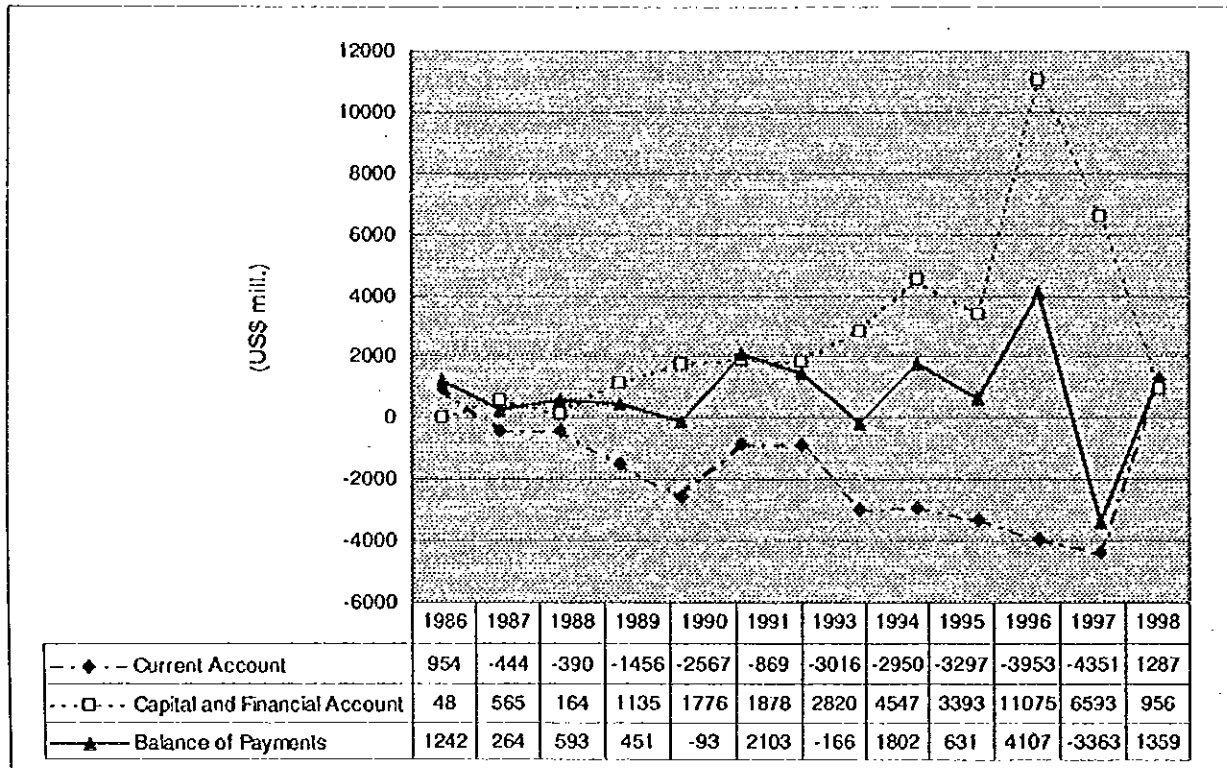
Source: NSO

(2) Balance of payments

The balance of payments in the past 12 years is shown in Fig. 2-3.

The balance of payments was severely affected by the repeated economic setbacks. The current account turned into a deficit in 1987, which grew continuously to minus \$2.57 billion in 1990. The deficit reduced slightly in 1991 but went back to a consistent growth pattern, reaching minus \$4.35 billion in 1997. In 1998, the current account turned into a surplus for the first time in previous eleven years, which amounted to \$1,290 million. During the period, the deficit was covered by a surplus in the capital account, resulting in a surplus in the balance of payments recorded up to 1996, except for 1990 and 1993 when \$90 million and \$170 million in deficit were reported respectively. In 1997, however, the significant deficit in the current account led to a \$3.36 billion deficit in the balance of payments, thus creating a critical position. Then, the surplus in the current account in 1998 improved the situation, recording a surplus of \$1,360 million in the balance of payments.

Fig.2-3 Balance of Payments (1986 – 1998)



Source: NSO

The current account is chiefly governed by merchandise trade balance. As pointed out earlier, the Filipino economy is heavily dependent upon exports as a major source of growth. Since 1990, a portion of non-traditional exports in the country's total exports has increased year after year with the government's vigorous efforts for export promotion, especially foreign investment promotion. However, the bulk of industrial exports was made by processing imported raw materials or semi-finished products, so that increased industrial production had accelerated imports of capital goods (e.g., equipment for production) as well as raw materials and semi-finished products. Meanwhile, the term of trade has been deteriorating due to unfavorable export price trends caused by sluggish international markets and keen competition with other exporting countries, adversely affecting the current account balance. It is therefore critical to increase net value added by industrial exports through promotion of high-tech, capital-intensive and knowledge-intensive industries as well as supporting industries to form mutually complementary inter-industrial linkages, particularly inducing foreign investment that can contribute to that direction.

The capital account is primarily comprised of foreign direct investment and medium- and long-term loans made under bilateral or multilateral aids. To maintain the capital accounts in a surplus, therefore, promotion of foreign direct investment is very important.

### (3) Inflation and interest rates

Table 2-2 shows annual inflation rates and trend of average banking interest rates in the Philippines between 1993 and 1998.

Table 2-2 Inflation Rates and Trend of Average Banking Interest Rates  
(1993 – 1998)

	1993	1994	1995	1996	1997	1998
- Inflation Rate ' (1988 = 100)	7.6	9.0	8.1	8.4	5.0	9.0
91-day T-bill rate (% p.a.)	12.3	13.6	11.3	12.4	13.1	15.3

Source: Banko Sentral ng Pilipinas, NEDA

The central bank maintained adequate monetary control in response to the increased demand for funds accompanying economic growth. As a result, market interest rates were directed to lower levels and inflation was kept in check at a single digit rate, an average of 7.3% between 1993 and 1998. Nevertheless, the pursuit of macroeconomic policy for further controlling the inflation while lowering the interest rates, is required to accomplish stable growth of the economy.

#### (4) Social development

The results of household income surveys conducted in 1994 and 1997 are summarized in Table 2-3. The average household income in 1997 rose by 21% in real terms compared to 1994, and the percentage of population below the poverty line decreased 3.4 points from 35.5% in 1994 to 32.1% in 1997. These figures implicate a definite increase in income level. Nevertheless, in view of the fact that there is still a large difference in income level between urban and rural areas and also that the poverty rate is at a relatively high level, creation of employment opportunities and income sources particularly in rural areas remain vital issue in the area of social development.

Table 2-3 Average Income; Poverty Incidence; and Per-capita Poverty Thresholds (1994 and 1997)

	Average Income, in Peso at 1988 Prices			Poverty Incidence (%) <sup>a/</sup>		Per Capita Poverty Thresholds, in Peso <sup>b/</sup>	
	1994	1997	% Change	1994	1997	1994	1997
Philippines	42,800	51,790	21.0	35.5	32.1	8,885	11,388
Urban	58,220	75,059	28.9	24.0	18.5	9,831	12,642
Rural	27,526	30,682	11.5	47.0	44.4	7,946	10,248

(Notes)

a/ Proportion of families whose annual income fall below the annual per capita poverty thresholds to total families.

b/ Per capita thresholds is the minimum amount required by an individual to satisfy basic food and non-food requirements in a year.

Source: National Statistical Coordination Board

Employment trends between 1993 and 1998 are shown in Table 2-4. The unemployment rate declined slightly in 1996 and 1997 but rose again to a 10% level in 1998 to reflect the economic slump. The creation of employment opportunities will become more important.

Table 2-4 Trend of Employment (1993 – 1998)

	1993	1994	1995	1996	1997	1998
Labor Force (in '000)	26,879	27,654	28,382	29,733	30,355	31,056
Employment (in '000)	24,382	25,032	25,676	27,186	27,715	27,911
By Sector						
- Agriculture	11,139	11,286	11,147	11,645	11,319	10,933
- Industry (Manufacturing)	3,804	3,948	4,139	4,430	4,629	4,582
- Services	2,457	2,539	2,617	2,696	2,732	2,716
- Services	9,439	9,798	10,391	11,112	11,763	12,387
Full-time employment (%)	64.9	65.4	64.8	62.6	65.5	63.4
Unemployment rate (%)	9.3	9.5	9.5	8.6	8.7	10.1
Job Created (in '000)	686	650	644	1,510	529	196

Source: NSO

Table 2-5 compares literacy rates and participation rates for elementary and secondary school in 1993 and 1997. Although some improvements have been made, the participation rate of secondary school is still at a relatively low level.

Table 2-5 Basic Literacy Rate and Participation Rate for Elementary and Secondary School

	1993	1997	
		Actual	Target
Basic Literacy Rate (%)	89.90	93.90	93.53
Participation Rate (%)			
Elementary	85.37	95.09	95.10
Secondary	57.62	64.22	64.20

Source: Medium-Term Development Plan

### 2.1.3. Economic Growth and Employment Targets in the Current Medium-Term Development Plan

Economic growth and employment rates targeted in the current Medium-Term Development Plan (1999 - 2004) is shown in Tables 2-6 and 2-7.

During the period of the current Medium-Term Development Plan, GNP growth is targeted at an annual growth rate of 5.2% - 5.8% in real terms, while GDP growth in the range between 4.7% - 5.3%. This GNP/GDP growth was projected in an assumption that investments be made at an average level equivalent to 21.1% of GNP. Hence it is

obvious that investment should be realized at the same or higher rate than the projected real growth rate of GNP, and thus the investment promote should be more important.

The average growth rate of employment is targeted at 3.28% to 3.52% per annum. As the average growth rate was 2.7% per annum between 1993 and 1998, further efforts are required to meet the target. The manufacturing and service sectors are expected to create more jobs. Thus, promotion of industries capable of creating a large number of jobs is expected. At the same time, development of rural industries should be given of high priority, and that means support for SMEs will play a vital role.

Table 2-6 Growth Scenario in the Medium-Term, 1999 - 2004

	1999		2000		2001		2002		2003		2004		Average		
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	
Gross National Product															
real growth rate (%)	3.0	3.7	5.3	5.9	4.6	5.1	5.9	6.4	6.6	7.1	7.1	5.7	6.4	5.2	5.8
Per capita GNP, in Peso (1985 = 100)	12,895	12,920	13,296	13,396	13,567	13,795	14,076	14,394	14,718	15,103	15,292	15,292	15,785	13,949	14,227
Per capita GNP, in Peso (nominal)	41,542	42,204	45,625	47,040	49,571	51,831	54,001	57,266	59,003	63,459	63,634	63,634	69,554	52,229	55,229
Gross Domestic Product															
real growth rate (%)	2.6	3.2	4.8	5.4	3.9	4.6	5.4	5.9	6.1	6.6	6.6	5.2	5.9	4.7	5.3
Per capita GDP, in Peso (1985 = 100)	12,200	12,264	12,522	13,656	12,752	12,973	13,170	13,465	13,700	14,079	14,137	14,137	14,628	13,080	13,511
Per capita GDP, in Peso (nominal)	39,515	40,092	43,197	44,475	46,623	48,732	50,584	53,669	54,985	59,201	58,987	58,987	64,584	48,976	51,801
Sectoral Breakdown (%)															
Agriculture, Fishery and Forestry	3.0	3.5	3.5	4.1	0.5	1.5	3.5	4.3	4.0	4.6	4.6	1.0	2.0	2.6	3.4
Industry	1.4	2.0	5.0	5.6	4.3	5.4	6.0	6.6	6.8	7.5	6.6	6.6	7.2	5.1	5.7
- Mining and Quarrying	5.5	5.9	6.0	6.5	7.0	7.5	6.0	6.5	7.0	7.5	7.5	7.5	8.0	6.5	7.0
- Manufacturing	1.1	1.7	4.4	5.0	4.0	4.5	5.6	6.0	6.3	7.0	5.8	5.8	6.3	4.5	5.1
- Construction	0.0	0.5	5.9	6.4	6.5	7.5	6.7	8.0	8.0	9.0	9.0	9.0	10.0	6.0	6.9
- Utilities	4.0	5.0	7.4	7.8	7.0	7.3	7.5	7.9	8.0	8.8	7.5	7.5	8.6	6.9	7.6
Services	3.5	4.0	5.3	5.8	4.7	5.3	5.6	6.0	6.4	6.7	5.8	5.8	6.4	5.2	5.7
(Assumption															
- Population g.r. (%)	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1
- Domestic Savings Rate (% of GNP)	21.1	20.8	20.8	21.3	21.3	21.8	21.8	21.9	21.9	22.2	22.2	22.2	21.5	21.5	21.5
- Foreign Savings (% of GNP)	-2.1	-1.2	-1.2	-0.6	-0.6	-0.2	-0.2	0.6	0.6	1.3	1.3	1.3	-0.4	-0.4	-0.4
- Investment (% of GNP)	18.9	19.6	19.6	20.7	20.7	21.6	21.6	22.5	22.5	23.5	23.5	23.5	21.1	21.1	21.1
- Incremental Capital Output Ratio	6.8	4.0	4.0	4.9	4.9	4.0	4.0	3.7	3.7	4.5	4.5	4.5	4.7	4.7	4.7
- Inflation Rate (%)	8.0	9.0	6.5	7.5	6.0	7.0	5.0	6.0	4.5	5.5	4.0	4.0	5.0	5.7	6.7
- 50% probability of El Niño occurring in 2001 and 2004. Historically, the El Niño occurred every 3 years (i.e., 1982-83; 1986-87; 1989-90; 1994-95; 1997-98)															
Assuming that El Niño will not occur in 2001 and 2004, the following growth path is possible:															
Real growth rate (%)															
GNP	3.0	3.7	5.7	6.1	5.8	6.4	6.3	6.6	6.5	7.0	6.3	6.3	7.3	5.7	6.2
GDP	2.6	3.2	4.8	5.5	5.3	5.9	5.8	6.2	6.0	6.5	6.3	6.3	7.0	5.2	5.7
Agriculture, Fishery and Forestry	3.0	3.5	3.5	4.5	3.8	4.7	4.1	4.3	4.2	5.2	4.5	4.5	5.6	3.9	4.7
Industry	1.4	2.0	5.0	5.5	5.7	6.4	6.7	7.0	7.0	7.4	7.4	7.4	8.0	5.5	6.0
Services	3.5	4.0	5.3	5.8	5.6	6.0	5.8	6.2	6.1	6.4	6.3	6.3	6.7	5.4	5.9

(Source: NEDA)

Table 2-7 Projected Employment by Sector, 1999 - 2004

	1999		2000		2001		2002		2003		2004		Average	
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
Labor Force (in '000)	31,332	31,833	32,771	32,772	33,738	33,738	34,733	34,734	35,758	35,758	36,813	36,813	34,274	34,275
Growth rate (%)	2.50	2.50	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.88	2.88
New Jobs (in '000)	756	861	982	1,033	902	1,051	1,052	1,099	1,212	1,243	1,081	1,152	994	1,073
Employment (in '000)	28,667	28,772	29,629	29,805	30,531	30,856	31,583	31,955	32,795	33,198	33,876	34,350	31,180	31,489
Growth rate (%)	2.71	3.09	3.36	3.59	3.05	3.52	3.45	3.56	3.84	3.89	3.30	3.47	3.28	3.52
of which:														
- Agriculture	11,258	11,287	11,474	11,554	11,526	11,724	11,769	12,004	12,046	12,311	12,155	12,513	11,704	11,901
Percent share	39.27	39.26	38.73	38.77	37.75	38.00	37.26	37.57	36.73	37.08	35.88	36.43	37.60	37.89
- Industry	4,825	4,648	4,831	4,868	5,055	5,106	5,316	5,376	5,600	5,673	5,901	5,986	5,221	5,276
Percent share	16.13	16.15	16.30	16.33	16.56	16.55	16.83	16.82	17.08	17.09	14.72	17.43	16.72	16.73
- Services	12,784	12,828	13,324	13,383	13,950	14,026	14,500	14,575	15,149	15,214	15,829	15,851	14,254	14,313
Percent share	44.59	44.58	44.97	44.90	45.69	45.46	45.91	45.61	46.19	45.83	46.70	46.15	45.68	45.42
Productivity (in '000)	31.80	31.85	32.26	32.41	32.54	32.75	33.14	33.49	33.86	34.37	34.49	35.19	33.01	33.34
- Agriculture	15.78	15.80	16.02	16.09	16.02	16.10	16.24	16.41	16.49	16.74	16.51	16.81	16.18	16.32
- Industry	68.95	69.03	69.33	69.60	69.43	69.94	70.00	70.78	70.96	72.11	71.78	73.27	70.08	70.79
- Services	32.47	32.52	32.90	32.97	32.81	33.13	33.34	33.80	33.96	34.57	34.39	35.32	33.29	33.72
Unemployed (in '000)	3,166	3,060	3,143	2,966	3,207	2,883	3,150	2,779	2,963	2,580	2,937	2,463	3,094	2,785
Unemployed rate (%)	9.95	9.61	9.59	9.05	9.51	8.54	9.07	8.00	8.29	7.16	7.98	6.69	9.06	8.18
Full-time Employment (%)	66.25	66.26	67.14	67.23	68.36	68.58	69.14	70.14	69.78	72.04	71.35	73.84	68.77	69.68
- Agriculture	45.00	45.00	46.00	46.00	47.00	46.50	48.00	48.50	49.00	51.50	50.00	53.40	47.50	48.48
- Industry	80.53	80.34	81.63	81.34	81.55	82.34	82.06	83.34	83.04	84.34	84.59	85.36	82.24	82.84
- Services	79.80	79.87	80.08	80.87	81.23	81.88	81.53	82.87	81.30	83.87	82.75	84.87	81.12	82.37

(Source: Department of Labor and Employment)



## **2.2. Changes in Industrial Development Policies and Industrial Environment In the Philippines**

### **2.2.1. Industrial Development Policy and Main Thrusts**

#### **(1) Industrial development policy in the past Medium-Term Development Plans**

As stated in 2.1.1 (1), the government has been pursuing the following basic development policy in the past two Medium-Term Development Plans:

- Reforms of economic structure
- Activation and strengthening of competitiveness of production and service sectors
- Social reforms
- Intensification/enhancement of infrastructure development and macroeconomic fundamentals to support the above thrusts

In pursuing these policies, the Government paid more attention to the industrial development and promotion, and struggled the implementation of industrial development strategies based on forward looking export-oriented industrialization, trade liberalization and globalization that emphasized (a) promotion of exports, particularly non-traditional exports and (b) promotion of industrial clustering in and diversion into growth potential regions. Specifically, the core measures concentrated were:

1. Fostering and promotion of non-traditional export industries, particularly intensive promotion in the export industries having great growth potential.
2. Investment promotion, particularly foreign investment promotion for the development of new export industries.
3. Development of industrial growth zones and promotion of industrial investments in those zones.
4. Promotion of SMEs in rural areas which comprise a majority in the Filipino industries.

The following legislation were promulgated to form the legal basis for pursuing the industrial development policy:

- 1) Export Development Act in 1994
- 2) Omnibus Investments Code in 1987
- 3) Foreign Investments Act in 1991
- 4) Special Economic Zone Act in 1995

In pursuing the industrial development and promotion, the Government paid regard to the “sustainable development in harmonization with environmental protection” emphasized in the Philippine Agenda 21, while also attaching importance to the close coordination with the policy for the promotion of R & D emphasized in the “Science and Technology (S & T) Master-plan” that had been adopted as the framework of long-term strategy for the development of science and technology in 1990. Another issues placed particular emphasis were:

- ✧ Development of adequate infrastructures, particularly assurance of stable supply of electric power, and development of road and telecommunication network to meet increasing demands; and
- ✧ Assurance of the supply of efficient labor forces, particularly with intensification of human resource development and establishment of orderly labor-management relationships.

## (2) Reforms of the public administration system related to industrial development

The Department of Trade and Industry (DTI) is responsible for the Government’s industrial and trade policy making and implementation, of which industrial development and investment promotion fall under the jurisdiction of DTI’s Board of Investment (BOI). In implementing its tasks, BOI works together with the following DTI offices, other government agencies, and trade organizations and industrial associations.

1. DTI offices and related organizations
  - 1) Bureau of Export Trade Promotion
  - 2) Bureau of Small and Medium Business Development
  - 3) Bureau of Product Standards
  - 4) Philippine Trade Trading Center (PTTC)
  - 5) Cottage Industry Technology Center
2. Department of Science and Technology (DOST) and its research organs
  - 1) Metal Industries Research and Development Center (MIRDC)
  - 2) Industrial Technologies Development Institute (ITDI)
3. Department of Environment and Natural Resources (DENR)
4. Department of Labor and Employment (DOLE) and its related organization, Technical Education and Skills Development Authority (TESDA)

In 1995 the Philippine Economic Zone Authority (PEZA) was established under the Special Economic Zone Act of 1995 and to which the former Economic Processing Zone Authority (EPZA) was transferred. Then PEZA was authorized an administrative

authority for granting approval, licensing and incentives for investment related to the investments for ECOZONE developers and locators, and thus its authority and administrative power were expanded. The Bases Conversion Development Authority (BCDA), established in 1992, has jurisdiction over ECOZONES developed in the former U.S. military bases (including Clark and Subic).

Under the establishment of those agencies, power and authority related to the approval, licensing and granting of incentive for investment projects is vested as follows:

- 1) Investment other than ECOZONES: BOI
- 2) Investment for the development of ECOZONES under the jurisdiction of PEZA (PEZA ECOZONES) and investment by locators in PEZA ECOZONE: PEZA
- 3) Investment by locators in ECOZONES developed in the former U.S. military bases: BCDA
- 4) Investment by locators in ECOZONES developed and managed by other agencies: Each agencies concerned

### (3) Industrial Development Policy in the Present Medium Term Development Plan

The basic policies for industrial development in the current Medium-Term Development Plan were enumerated in 2.1.1 (2). Among those policies, the Government has adopted to pursue the promotion of exports and investments, especially foreign investment continuously following the policies previously implemented as the core for industrial development. In addition to these core policies, the promotion of SMEs has been emphasized in the current Development Plan.

The current Development Plan, as mentioned earlier, is the initial phase of Medium-Term Development Plan in the Long-Term Development Plan towards 21<sup>st</sup> Century (1999 – 2025). Hence the industrial development policies indicated in the current Development Plan is the first step for the implementation of long-term industrial development strategy as envisioned in the Long-Term Development Plan. The long-term industrial development strategy envisioned in the Long-Term Development Plan and the industrial development policies and thrusts indicated in the current Development Plan are summarized below.

#### Long-Term Industrial Development Strategy

The long-term industrial development strategy has adopted two major long-term strategies, namely, (1) the Agri-Industrial Restructuring (AIR) Strategy and (2) the Pole-Vaulting (PV) Strategy.

The basic concept and main components of these two strategies are described below.

## A. The AIR Strategy

### Strategic Objective

- 1) To raise the growth, productivity and global competitiveness of the production sector;
- 2) To strengthen inter-industry as well as production and market linkages; and
- 3) To achieve higher levels of employment and domestic value added contribution to growth.

### Main Components

There are three main components as enumerated below.

#### *a. Conducive Policy Environment*

The continued pursuit and refinement of wide-ranging macroeconomic and sectoral policy reforms for AIR supportive of sustainable development objectives.

- 1) Strengthen the country's macroeconomic fundamentals, ensure macroeconomic stability, and promote sustained growth.
- 2) Continue to improve and reorient the country's industrial protection system, and pursue tariff adjustments with complementation of the following measures:
  - Maintain a competitive exchange rate.
  - Rationalize the rise in wage rates based on productivity improvement and capability to pay.
  - Encourage domestic and foreign investments in the intermediate goods or supporting industries.
  - Promote efficient financial intermediation services especially in the rural areas.
- 3) Improve further the investment climate, such as the provision of better and more infrastructures, assurance of peace and order, and so on.
- 4) Strengthen labor-management cooperation and coordination, to establish a suitable workplace and create conditions that are conducive to enhancing labor productivity.

#### *b. Industry Cluster Development Approach*

To accelerate the AIR process through an Industry Cluster Development (ICD) approach, involving:

- 1) Forming industry clusters and providing the necessary support systems for ensuring inter-linkages.
- 2) Deepening vertical inter-industry linkages or input-output/buyer-seller/user-supplier relationships.

- 3) Geographic concentration for selected industry clusters and geographic concentration and prioritization in the provision of infrastructural services.
- 4) Implementing selected and time-bound sectoral and micro-level interventions.

***c. Strong Institutional and Infrastructural Support Structures and Expanded Government-Private Sector Coordination – Private Sector Coordination***

- 1) Improvements in the quality of government support services.
- 2) The provisions of adequate, appropriate, strong and efficient institutional and infrastructural support to small and medium enterprises.
- 3) The establishment of institutions intended to intensify technological development, acquisition, diffusion, commercialization and adaptation.
- 4) Close and effective coordination and consultation among concerned government and non-government agencies, institutions and organizations, with strong participation from the private sector.

**B. The Pole Vaulting (PV) Strategy**

- To promote the advanced development of the service sector, ensure its international standing and maintain its status as a fast-growing sector that effectively delivers the service needs of modern agriculture and industry, and transform the country into a center of quality, innovation and excellence in Asia. In this regard;
- To pursue strategic liberalization of trade in services; and
- To accelerate the pace of market-oriented reforms and development programs subsequently converting the country into the following during the first 5- to 10-year period:
  - a. Knowledge Center in the Asia Pacific
  - b. Shopping Paradise in East Asia
  - c. T3 (Telecommunications, Transportation/Trade and Tourism) Hub in the Asia Pacific
  - d. Medical Center in East Asia
- To envisage that the Philippines can attain the vision of being in front by 2025, with fulfillment of the foregoing, advancing to accomplish the following:
  - a. Food Basket in East Asia
  - b. Financial Center in East Asia
  - c. Maritime Power in Asia

### Industrial Development Policies and Strategies in the Present Medium-Term Development Plan (1999–2004)

The industrial development policy in the present Medium-Term Development Plan that has been formulated in the framework of the foregoing Long-Term Industrial Development Strategy includes the following policies and strategies:

- 1) To raise productivity by improving or eliminating the constraints causing higher business costs.
- 2) To strengthen forward and backward linkages among productive sectors.
- 3) To establish fair trade customs and competitive mechanism.
- 4) To make appropriate science technology available to meet industrial needs.
- 5) To promote long-term investments by domestic and foreign capitals.
- 6) To promote the development of small and medium enterprises.
- 7) To promote industries conforming to environmental regulations and standards.
- 8) To promote integration between industries and regional communities.

### Target of Medium-Term Industrial Development Plan

The target of the Medium-Term Industrial Development Plan is indicated below.

Sector	Development Target		Main Steps
	GVA Growth Rate (%/year)	Share (%) in GVA	
1. Mining & Quarrying	6.5 – 7.0	1999: 1.3 2004: 1.4	Raise yields with investments for improvement of mining operation
2. Manufacturing	4.5 – 5.1	1999: 24.7 2004: 24.8	Expansion of electrical/electronic machinery, food manufacturing and garment sectors
3. Construction	6.0 – 6.9	1999: 6.0 2004: 6.5	Proceeding of infrastructure development
Industrial Sector – Total	5.1 – 5.7		

#### (4) Export Development Plan (1999 – 2001)

The Philippine Export Development Council (PEDC), with DTI, formulated the Philippine Export Development Plan (1999 – 2001), aiming to accelerate export promotion under the present Medium-Term Development Plan. Summarized below are the strategies for the major manufactured exports, their export target and export promotion as well as the strategies for the development of export manufacturing industries.

### The Strategies for the Development of Main Export Manufacturing Industries

The development strategies for the selected six growth-potential industries are enumerated below.

Sector	Main Development Strategies
1. Garments	<ol style="list-style-type: none"> <li>1) Promoting investments by investors who can bring in new technologies to upgrade and diversify production, thereby effectively utilizing the quota under the Multi-fiber Agreement (MFA).</li> <li>2) Upgrading plant facilities and skills to raise quality and productivity.</li> <li>3) Improvement of workplace and establishing more productive labor-management relationships.</li> </ol>
2. Fashion Accessories and Leathergoods	<ol style="list-style-type: none"> <li>1) Promoting export growth and encouraging export reporting under the Implementing Rules and Regulations of the Jewelry Act.</li> <li>2) Accrediting assay offices for gold and silver to gain confidence of buyers.</li> <li>3) Identify strategic partners for the sourcing of raw stones and technology and develop local lapidaries.</li> </ol>
3. Furniture	<ol style="list-style-type: none"> <li>1) Liberalization and facilitation of lumber and other raw material imports.</li> <li>2) Deployment by DTI and industry associations for identifying new source of growth in high end market.</li> <li>3) Promotion of manufacturing and marketing of furnitures to meet a trend towards smaller living and office spaces derived from the rapid development of telecommunication technology.</li> <li>4) Improve access to financing by the furniture sector, and disseminate information on available financing packages.</li> </ol>
4. Coconut Oil and Other Vegetable Fats/Oil	<ol style="list-style-type: none"> <li>1) Promote the program for replanting with high-yield coconuts.</li> <li>2) Provisional measure to permit importation of copra for maintaining the world market share.</li> <li>3) Raise capacity utilization of existing coconut oil extraction plants by taking the foregoing means.</li> <li>4) Ensure the supply of raw materials for vegetable fats and oil.</li> </ol>
5. Electronics	<ol style="list-style-type: none"> <li>1) Vigorously promote the development of electronic service industry.</li> <li>2) Continuous upgrading of capabilities and manpower skills.</li> <li>3) Aggressively promote and pursue an international subcontracting program.</li> </ol>
6. Other Emerging Products	<ol style="list-style-type: none"> <li>1) Development of pollution control equipment and other environmental products.</li> <li>2) Development of new food products such as health and organic foods.</li> <li>3) Development of medical and home health-care equipment and devices.</li> </ol>

### **Export Target up to 2001**

The export target up to 2001 set in the Philippine Export Development Plan is given in Table 2-8. It is targeted to increase the exports by about 70% from US\$29.5 billion in 1998 to US\$50.0 in 2001, of which 82.2% will be by manufactured exports comprising 93.5% by electronic products, 3% by machinery and transport equipment and the remaining 3.5% by oleochemicals. It is projected to increase the manufactured exports in 2001 as much as 86.5% from those in 1998, with increases in the export of electronic products by 93.4% and machinery and transport equipment by 46.5%.

As for consumer goods, including garments; gifts, toys and houseware; fashion accessory and leathergoods; furniture; and footwear, the exports in 2001 are targeted to increase by 16.9% compared to the 1998 exports. The 2001 exports of consumer goods will account for about 8.7% of the total exports in that year, and comprise 58.7% by garments, 11.7% by gifts, toys and houseware, 11% by furniture, 10% by fashion accessory and leathergoods, and the remaining 8.6% by footwear and other goods.

Among the consumer goods, the largest increase in export is projected for furniture by 48%, followed by fashion accessory and leathergoods by 24.4%, and garments and gifts, toys and houseware by 13% respectively.

### **Main Strategies for Export Promotion in the PEDP**

Enumerated below are the main strategies for export promotion adopted in the PEDP.

- 1) Expansion and improvement of financing facilities for SMEs – provision of special credit facilities, including development financing programs for SMEs, improvement of access to credit and financing terms for SMEs.
- 2) Development of capital market for SMEs.
- 3) Further improvement of environment for investments that is conducive to promoting domestic and foreign investments – development of ECOZONES for promoting industry clustering in selected regions.
- 4) Immediate finalization and implementation of the IRRs of important provision under the Export Development Act, and provision of unified investment incentives.
- 5) Reduction of bureaucracy and red tape.
- 6) Expansion and improvement of power and energy supply, transport and telecommunications with reduction of supply costs.
- 7) Formulation of a reasonable but effective local tax structure that can bring the long-term sustainability of industries.



(Table 2-8)

(FOB Value in US\$ Million)

Product Groups	1998	1999		2000		2001	
	(Actual)	Value	Change %	Value	Change %	Value	Change %
<b>TOTAL PHILIPPINES</b>	<b>29,496</b>	<b>34,982</b>	<b>18.60</b>	<b>41,813</b>	<b>19.53</b>	<b>50,000</b>	<b>19.58</b>
<b>CONSUMER MANUFACTURES</b>	<b>3,716</b>	<b>3,844</b>	<b>3.46</b>	<b>4,086</b>	<b>6.30</b>	<b>4,345</b>	<b>6.32</b>
Garments	2,260	2,314	2.39	2,430	5.00	2,551	5.00
Gifts, Toys and Houseware	449	461	2.66	484	5.00	508	5.00
Fashion Accessories and Leathersgoods	348	358	2.91	394	10.00	433	10.00
Furniture	323	361	11.66	415	15.00	478	15.00
Footwear	147	148	1.20	149	0.62	149	0.02
Other consumer manufacturers	188	201	6.93	214	6.34	225	5.13
<b>FOOD AND FOOD PREPARATIONS</b>	<b>1,274</b>	<b>1,279</b>	<b>0.43</b>	<b>1,290</b>	<b>0.82</b>	<b>1,303</b>	<b>1.03</b>
Processed Food	573	578	0.84	581	0.59	584	0.46
Fresh Food	700	701	0.10	708	1.00	719	1.50
<b>RESOURCE-BASED PRODUCTS</b>	<b>1,328</b>	<b>1,406</b>	<b>5.86</b>	<b>1,491</b>	<b>6.04</b>	<b>1,578</b>	<b>5.87</b>
Coconut Products	546	606	11.00	673	11.00	747	11.00
Mineral Products	287	289	0.44	290	0.37	290	0.24
Forest Products	23	20	-14.16	19	-4.53	20	1.50
Tobacco	30	29	-3.63	28	-4.20	26	-5.45
Other Resource-based Commodities	441	462	4.74	481	4.19	495	2.93
<b>INDUSTRIAL MANUFACTURES</b>	<b>22,045</b>	<b>27,148</b>	<b>23.15</b>	<b>33,465</b>	<b>23.27</b>	<b>41,115</b>	<b>22.86</b>
Electronics	19,873	24,842	25.00	30,973	24.68	38,426	24.07
Construction Materials	97	97	0.11	97	0.10	97	0.08
Metal Manufactures	334	337	0.74	339	0.54	339	0.08
Chemicals	340	344	1.13	346	0.55	344	-0.64
Machinery & Transport Equipment	852	944	10.79	1,086	15.00	1,248	15.00
Textile Yarns and Fabrics	196	215	9.59	236	9.59	255	8.15
Non-metallic Mineral Manufactures	20	19	-1.03	19	-1.03	19	-2.34
Petroleum Products	158	157	-0.53	156	-0.53	153	-1.84
Other Industrial Manufactures	174	194	11.12	214	10.59	234	9.26
<b>SPECIAL TRANSACTION</b>	<b>1,135</b>	<b>1,305</b>	<b>15.00</b>	<b>1,482</b>	<b>13.57</b>	<b>1,659</b>	<b>11.94</b>

(Source: Philippine Export Development Plan: 1999-2001)

### Key Strategy for Export Industry Promotion

The PEDP proposes a key strategy for the promotion of competitive industries for export that is based on industry clustering in the regions having growth potential. The concept of the industry clustering and its main thrusts are as follows:

#### A. Concept of Industry Clustering

The clustering is defined as the grouping of firms and companies existing in an industry; the allied business which support the industry through the provision of such goods, services, machinery or equipment, and specialized inputs (e.g., knowledge); and the buyers (both domestic and foreign) – all operating under an environment shaped by government administration, the physical and cultural heritage, and available infrastructure (soft and hard).

Rationale for this strategy is:

- Enabling to foster the growth of industry while sustaining market promotion and marketing;
- Contributing to support the regional development by the Government; and
- Allowing smoothly inter- and intra-regional business linkages in the private sector.

#### B. Program for Promoting the Industry Clustering

The clustering will be promoted under the following four groups:

- **Group 1: *Factor-Driven Industries*** with a traditional resource base, high labor intensity with relatively semi-skilled to highly skilled workers, existing technology base, and stable or growing markets.
- **Group 2: *Investment-Driven Industries*** utilizing second-wave technologies, medium to high-labor intensity with relatively semi-skilled to skilled workers, and stable or growing markets.
- **Group 3: *Innovation-Driven Industries*** utilizing knowledge-intensive technologies, high capital intensity, highly skilled labor, and growing to new/emerging markets.
- **Group 4: *Trend/Opportunity-Driven Industries*** that emerge following a trend and for which tremendous world demand is present.

The following pilot projects will be promoted for the industry clustering:

1. *Home furnishings cluster in Sebu*: cluster of furniture and decorative craft sub-sectors.
2. *Electronic cluster in CALVARSON*
3. *Multimedia content development cluster in the National Capital Region*

#### *4. Agri-industry cluster in the North Mindanao.*

### **2.2.2. Business Environment and Investment Climate in the Philippines and Changes in External Factors**

#### **(1) External impacts on business environment and investment climate**

Since the late 1980s, the Philippines have undergone a number of external factors that adversely affect her business environment and investment climate, as summarized below:

- 1) An attempted coup in December 1989 and the impairing of the country's image in the international community;
- 2) A major earthquake in Baguio occurred in 1990;
- 3) Inflation due to the Gulf Crisis in August 1990 accompanied by a sudden rise in petroleum products, and decrease in remittance of money from people working in the Middle East and a rise in unemployment rate;
- 4) Damages caused by natural disasters and economic impacts in 1991, including the eruption of Mt. Pinatubo and a typhoon in Leyte;
- 5) The withdrawal of U.S. air force from the Clark base due to the damage made by the eruption of Mt. Pinatubo and the returning of the Subic naval base due to the Government's refusal to renew the lease agreement, and their negative economic impacts;
- 6) Direct impacts of the economic crisis that hit East Asia in 1997; and
- 7) Economic damage due to the severe draught caused by El Nino in 1998.

The country has been weathering these crises and maintaining the industrial development process to this date. Clearly, two factors have contributed to economic growth through the difficulties. In addition to committed efforts of local industries, active inducement of foreign investment has enabled rapid expansion of high-tech export industries, led by the electric and electronics sector, which have served as a major impetus.

#### **(2) Infrastructure development**

In addition to a series of hardships that damaged the economy, business environment in the Philippines was deteriorated due to power shortage and a lack of other infrastructures up to the early 1990s. In 1992, repeated power outages caused industrial production to fall down significantly. Transportation and communication networks were not capable of meeting growing demand and hindered many companies in making vital business communication and shipping their products.

In response to the urgent needs for sufficient power supply and infrastructure development, the Government took a series of initiatives to develop the environment that allows the private sector's participation in infrastructure projects, which was considered to be an efficient and effective means to drive the infrastructure construction process. First of all, the Government launched liberalization of the transportation, communication and energy sectors in order to eliminate economic inefficiencies inherent in monopolized markets through privatization. Secondly, it introduced a "flagship scheme" to promote infrastructure development with a strategic focus on key industrial centers by using the BOT approach to encourage infrastructure projects led by the private sector.

Through these efforts, power supply was improved in the mid-1990s and infrastructure development progressed in key industrial areas such as the CARAVALSON area. Nevertheless, the rate of progress has still to catch up with the accelerated pace of industrial growth in recent years. As recognized in the Long-Term and the current Medium-Term Development Plans, infrastructure development continues to be a key issue to be overcome if the country is to ensure further industrial development.

### (3) Changes in the international business environment

Industry in the Philippines has been growing steadily with expansion of existing export industries and the emergence of new export industries through the inducement of foreign investment. As the existing export industries mainly consist of labor-intensive, light industries such as textile and garment, furniture and toys, they are recently facing competitive pressure from China and Vietnam where abundant labor forces are available at lower costs. To survive competition, they are essentially required to have competitiveness in non-price factors such as diverse product offerings and differentiation based on design or other features appealing to the market.

Recently, many foreign companies are operating in ECOZONES. They manufacture electric and electronic parts or automotive parts. Their customers (i.e., leading electronics manufacturers and automobile makers) become increasingly global in terms of sourcing, which will affect these suppliers based in the Philippines in various ways.

Most of the part manufacturers located in ECOZONES are concentrating to supply their products solely to the specific customers to which they are subordinating. Once those customers change their procurement policies toward globalized international logistics, those part manufacturers may be forced to diversify their products and markets to cope with such changes in procurement system by the customers.

In particular, with the waves of liberalization and globalization of economic and trade activities within the framework of WTO, APEC and ASEAN, it is a major challenge for

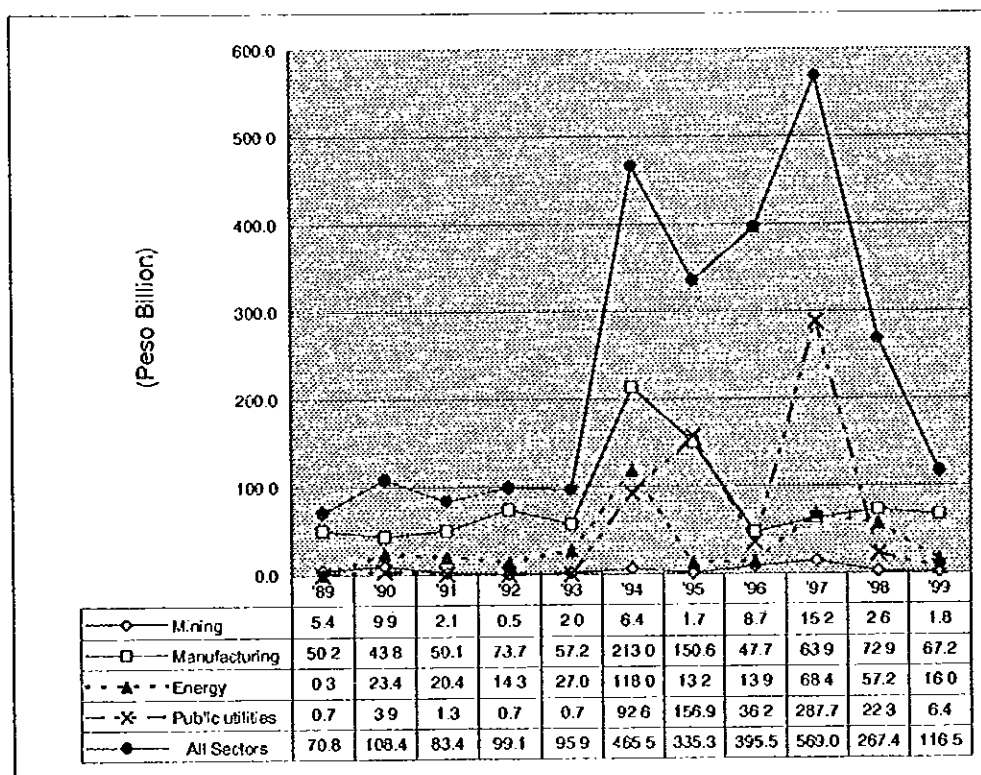
industry in the Philippines to establish and maintain comparative advantages that allow them to ensure sustainable growth.

### 2.3. Industrial Investment in the Philippines

#### 2.3.1. Industrial Investment Trends and Investment in EPZs and ECOZONES

Yearly changes in investment on an BOI-approved basis are shown in Fig.2-4. Investment in the Philippines grew rapidly between 1994 and 1997. The average amount of investment during the four-year period was 4.6 times that during the previous period (1990 – 1993). Even if the devaluation of the peso is taken into account, the net growth rate is close to three times. In 1998 and 1999, investment declined due to the economic crisis and recession in industrialized countries, but it exceeds the amount of investment in 1991 and 1992.

Fig.2-4 Investments in Industrial Sector approved by BOI



Source: BOI

Among sectors, the manufacturing industry has been receiving major portions of investment. In particular, investment in the sector showed high growth rates in 1994 and

1995. As investment in energy and utilities sectors grew rapidly during the same period, investment in the manufacturing sector lost share but maintained approximately 45% of the total. After a major setback in 1996, investment in the sector remained at a stable level despite the lackluster economic conditions outside the country, indicating that the manufacturing industry continues to attract investment.

It should be noted, however, that the amount of BOI-approved investment does not include investment in ECOZONES that are under the jurisdiction of PEZA and other government agencies. Table 2-9 shows the total amount of investment approved by BOI, PEZA and other agencies in 1997 and 1998, and foreign direct investment included therein. As seen in the table, investment by enterprises registered with BOI accounted for 77% of the total investment in 1997 and 71% in 1998, while those registered with PEZA (ECOZONES' locators) represented 22% and 26% respectively. Investments approved by these two agencies accounted for 97 to 99% of the total investment for industrial sector in the Philippines, and those approved by other agencies remained only 1 to 3%. Foreign Direct Investment (FDI) approved by BOI and PEZA accounted for 70% and 28% of the total FDI in both years. Share of FDI in total investment was 35% in 1997 and 46% in 1998.

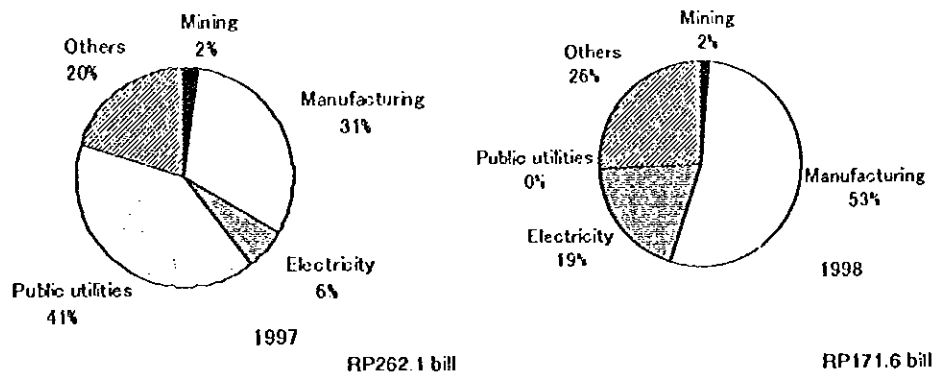
Table 2-9 Total Investments and Foreign Direct Investment (1997 and 1998)

	(Peso Billion)							
	1997				1998			
	BOI	PEZA	OTHERS	TOTAL	BOI	PEZA	OTHERS	TOTAL
(A) Investments - Total	570	160	13	743	267	96	12	375
Composition by Agency	77%	22%	2%	100%	71%	26%	3%	100%
(B) FDI	184	74	4	262	120	48	4	172
Composition by Agency	70%	28%	2%	100%	70%	28%	2%	100%
(C) FDI % in Total Investments	32%	46%	31%	35%	45%	50%	33%	46%

Source: Foreign Direct Investment Quarterly Reports

Fig.2-5 shows breakdown of foreign direct investment by sector in the above two years. The manufacturing sector gained a large share in both years. Although it was outpaced by the utilities sector in 1997 and share was relatively small at 31%, it held a dominant 53% share in 1998.

Fig.2-5 Composition by Sectors in Foreign Direct Investment



Source: Foreign Direct Investment Quarterly Reports

Investment in the Philippines concentrates in the industrial sector, especially the manufacturing industry, and foreign direct investment plays a major role. Foreign direct investment in the manufacturing sector accounted for 46% of total investment in the sector in 1997 and 63% in 1998.

### 2.3.2. Changes in Investment Composition in the Industrial Sector and Major Factors

Table 2-10 shows breakdown of BOI-approved investment in the manufacturing industry between 1985 and 1999 by industrial subsectors. Top five subsectors in the investment for manufacturing industry between 1985 and 1989 were: (1) rubber; (2) electrical and electronics; (3) textiles and garment; (4) food processing; and (5) construction materials. During the ensuing five-year period (1990 – 1994), investment grew appreciably in the areas of basic metal, chemical, construction materials, and machinery (transportation equipment in particular). Top five subsectors in the investment in that period were: (1) construction materials; (2) basic metal; (3) chemical; (4) electrical and electronics; and (5) textile and garment as well as machinery. Then, between 1995 and 1999 during which investment in the manufacturing sector decreased from the previous five-year period, four subsectors gained more than an average growth rate, namely chemical, textile and garment, paper and paper products and construction materials.

Top five subsectors in the period were: (1) construction materials; (2) chemical; (3) textile and garment; (4) electrical and electronics; and (5) machinery.

Table 2-10 BOI-approved Investment by Major Industrial Subsectors  
(Manufacturing Industries)

Industrial Subsectors	Aggregate Investments (in Peso Billion)			Growth Indicator (agst. previous)		Composition (%)		
	1985-89	1990-94	1995-99	1990-94	1995-99	1985-89	1990-94	1995-99
Food processing	3.24	13.09	9.83	4.0	0.8	10.4	3.0	2.4
Wood working	1.62	5.18	2.12	3.2	0.4	1.8	1.2	0.5
Paper & paper products	1.76	5.92	9.45	3.4	1.6	2.0	1.3	2.3
Rubber processing	28.38	23.21	5.58	0.8	0.2	32.2	5.3	1.4
Textiles/garments	10.18	29.72	60.58	2.9	2.0	11.6	6.8	15.1
Chemical, drug & pharmaceutical	2.28	45.87	97.50	20.2	2.1	2.6	10.4	24.2
Petroleum refinery	1.88	5.69	2.92	3.0	0.5	2.1	1.3	0.7
Plastic processing	1.31	0.17	0.14	0.1	0.9	1.5	0.0	0.0
Construction/housing components	9.99	121.92	162.38	12.2	1.3	11.3	27.8	40.4
Basic metal processing	0.47	84.41	9.60	179.2	0.1	0.5	19.2	2.4
Electrical & electronic machinery & component	14.83	41.10	19.71	2.8	0.5	16.8	9.4	4.9
Machinery & equipment <sup>1</sup>	3.80	23.09	11.24	6.1	0.5	4.3	5.3	2.8
Others	8.35	39.66	11.30	4.8	0.3	9.5	9.0	2.8
<b>Total</b>	<b>88.09</b>	<b>439.03</b>	<b>102.35</b>	<b>5.0</b>	<b>0.9</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: BOI

The recent investment trends indicate that investment in the manufacturing sector has been concentrating in six subsectors, i.e., construction materials, chemical, basic metal, electrical and electronics, and textile and garment, and machinery. Among them, the first three subsectors are capital intensive in nature and involve a relatively large amount of investment. Thus they account for large portions even though the number of projects is small. On the other hand, a majority of investment in the electric and electronics, and machinery sectors were parts and components manufacturers that require a relatively small amount of investment, and the investment in the textile and garment sectors also was dominated by garment manufacturers requiring a relatively small amount of investment as well. A higher share of investment occupied by these three sectors implies that a large number of companies have invested in these industries. Thus, the investment trends show



that electrical/electronics and textile/garment industries have been undergoing dynamic development during the past decade.

As the figures of BOI-approved investment exclude the investment in ECOZONES after 1995, investment in the country's manufacturing industry needs to be analyzed by adding investment in ECOZONES approved by PEZA and other agencies after 1995. However, as there is no published statistics showing subsector-wise breakdown of investment in ECOZONES except for PEZA ECOZONES, analysis was made by tabulating the data showing the BOI-approved investment and PEZA-approved investment. It can show the overall structure of investment in the manufacturing sector, since these two figures account for almost all of the investments in the country as analyzed earlier. As shown in Table 2-10, BOI-approved investment between 1995 and 1999 totaled 402,350 million peso. During the period, 226,900 million peso were invested in manufacturing industries operating in ECOZONES under the approval of PEZA (56.4% of BOI-approved investment). The breakdown by subsector shows that the electrical and electronics industries accounted for 66.8% of total, or 151,600 million peso (Table 2-11).

Table 2-11 Composition by Sector of Investment in PEZA ECOZONES

Industrial Subsectors	%
Electronic parts & products	50.5
Electrical machinery	16.3
Basic metal products	9.9
Transport & car parts	6.8
Precision & optical products	5.5
Rubber & plastic products	1.5
Garments & textiles	1.3
Leather products	1.2
Other manufactures	7.0
All Industries	100.0

Source: PEZA

Table 2-12 shows percentage share of each key subsector in the aggregate investment (BOI-approved investment plus PEZA-approved one) made between 1995 and 1999. The electrical and electronics industries represented the highest share of 27.2% (particularly the electronics industry), followed by the construction and housing components industries (25.8%). The chemical industry ranked third (15.5%), the textile and garment industries fourth (10.1%), the machinery industry fifth (6.2%) (especially, the transportation equipment industry including automotive) and the basic metal processing industry sixth (5.1%). These six subsectors accounted for approximately 90% of total investment in the manufacturing industry.

Since the late 1980s, investment in the manufacturing sector in the Philippines has focused on modern subsectors including electrical/electronics, textile/garment, machinery, chemical and basic metal processing, mostly for export production. Thus, investment in the sector has been driven by promotion of export industries.

**Table 2-12 Composition by Sectors of Investment in Manufacturing Sector  
(Approved by BOI and PEZA)**

Industrial Subsectors	%
Food processing	1.6
Wood working	0.3
Paper & paper products	1.5
Rubber processing	0.9
Textiles/garments	10.1
Chemical, drug & pharmaceutical	15.5
Petroleum refinery	0.5
Plastic processing	0.6
Construction/housing components	25.8
Basic metal processing	5.1
Electrical & electronic machinery & component	27.2
Machinery & equipment	6.2
Others	4.8
Total	100.0

Source: Tabulated by the Study Team based on BOI and PEZA statistics

## 2.4. Industrial Production Trends

### 2.4.1. Industrial Production and Its Position in the National Economy

Table 2-13 shows yearly changes in real growth rates of GDP and Sectoral Value Added (SVA) of the industrial sector and the manufacturing sector (based on the 1985 constant prices), as well as their percentage share in GDP.

Table 2-13

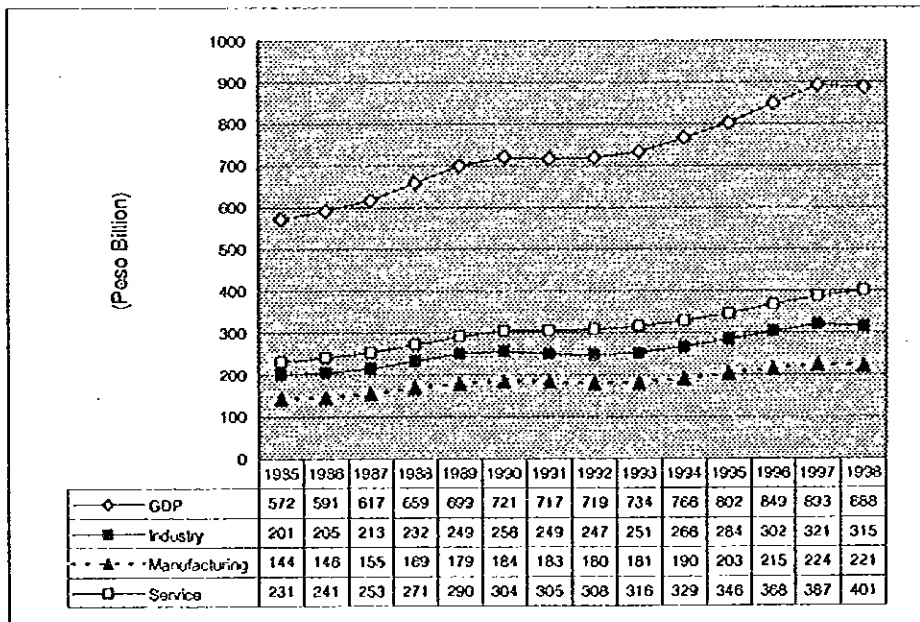
Real Growth Rate of GDP, Real Growth Rate and Percentage to GDP of SVA of Industrial Sector and Manufacturing Sector

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
GDP													
Growth Rate (%)	3.42	4.31	6.75	6.21	3.01	-0.58	0.31	2.12	4.39	4.68	5.85	5.15	-0.54
Industry Sector													
Growth Rate (%)	2.30	4.01	8.75	7.38	2.56	-2.67	-0.51	1.65	5.77	6.72	6.41	6.14	-1.91
% to GDP	34.69	31.59	35.21	35.62	35.46	34.71	34.41	34.25	34.71	35.39	35.58	35.92	36.42
(Manufacturing Sector)													
Growth Rate (%)	1.81	5.57	9.52	5.81	2.66	-0.44	-1.73	0.75	5.01	6.77	5.58	4.22	-1.13
% to GDP	24.76	25.06	25.71	25.61	25.52	25.56	25.03	24.69	24.84	25.34	25.27	25.05	24.90

Source: NSO

Fig.2-6 shows the changes in GDP, SVA by the industrial sector, and that by the manufacturing and service sectors, all indicated in 1985 constant prices.

Fig.2-6 GDP and SVA of Industry/Manufacturing and Service Sectors



Source: NSO

SVA by the industrial sector has been representing around 35% of GDP. Slightly below the service sector, the industrial sector constitutes a major element of the Philippine

economy. Within the sector, the manufacturing industry accounts for 70% of total value added by the industrial sector (25% of GDP) and is definitely the most influential production sector for the country's economic development.

As seen in GDP, the manufacturing sector has been undergoing repeated cycles of "growth and stagnation." After recording a real growth rate of 9.5% in 1988, it slowed down rapidly to register negative growth in 1991 and 1992, during which natural disasters (earthquake and volcanic eruption) and power shortage caused industrial production to decline dramatically. Then, production gradually recovered with increased power supply and continued real growth at 5% - 6% annually between 1994 and 1996. In 1997, however, it fell again to a real growth rate of 4.2% due to the effect of the Asia crisis and turned into negative growth in 1998. As announced at the end of January 2000, industrial production in 1999 showed some recovery with a real growth of 1.4% over the previous year.

#### **2.4.2. Industrial Structure of the Manufacturing Sector and Position of Export Industries**

Table 2-14 shows changes in the industrial production structure and growth trend of the manufacturing sector in the last 13 years. In 1985, major manufacturing subsectors were petroleum refining, food, chemical, basic metal, beverage and tobacco, which together accounted for a combined share of around 71%. The second-tier group was textile/garment, electrical/electronics and transportation equipment with a 15% share. In the subsequent decade, production by electrical/electronics and transportation equipment subsectors grew significantly, followed by basic metal, non-metallic mineral and textile/garment. It led to some changes in production shares in 1995 compared to the 1985 shares. While food remained in the top, electrical/electronics gained a second-rank share significantly over the share of petroleum refining and chemical. Following these four subsectors, the transportation equipment sector was ranked to fifth. The textile/garment subsector (garment in particular) also increased share to some extent. Growth of these subsectors owes much to the fact that they have developed to major export industries in the country. As pointed out earlier, the marked increase in investment directed to electrical/electronics, textile/garment, machinery, chemical and basic metal processing subsectors is primarily intended for export production.

Production by these industries recorded a significant decline in 1998, due to sluggish exports from the country.

Table 2-14

Production Structure and Growth of  
Major Manufacturing Subsectors

	% to Total Manufacturing				Growth Rate (1985=100)		
	1985	1990	1995	1998	1990	1995	1998
Food	20.5	23.2	20.7	33.6	176.2	235.7	412.0
Beverages	6.3	5.9	5.3	3.6	181.4	271.8	202.6
Tobacco	5.9	3.2	2.7	2.4	113.1	156.4	148.2
Textile	4.6	4.8	3.2	4.2	193.5	189.0	266.8
Wearing apparel	2.2	4.3	3.9	1.6	213.8	310.3	133.8
Wood and wood products	2.4	1.8	0.8	3.2	151.7	132.2	554.1
Furniture and fixtures	0.5	0.7	0.5	0.6	254.5	222.5	270.2
Paper and paper products	2.4	2.2	2.3	2.9	154.2	255.9	353.5
Chemical & chemical products	10.0	12.2	11.6	6.1	132.9	283.3	160.3
Petroleum products	21.6	11.9	12.4	17.4	118.1	204.4	309.9
Rubber products	1.3	1.5	1.0	1.4	170.2	151.4	225.4
Non-metallic mineral products	0.4	3.2	3.5	3.3	197.2	347.6	359.0
Basic metal	6.7	7.5	7.2	6.8	273.4	425.6	427.0
Electrical machinery/electronics	4.8	8.6	12.5	5.0	193.9	616.1	264.2
Transport equipment/machinery	3.6	6.8	9.9	5.0	826.2	2767.8	1515.9
Miscellaneous	6.8	2.2	2.5	2.9	57.6	252.5	309.8
<b>Total Manufacturing</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>200.2</b>	<b>400.9</b>	<b>342.2</b>

Source: NSO

Table 2-15 shows changes in the structure of exports between 1986 and 1998. Exports from the Philippines increased to \$7,820 million in 1989 against \$4,840 million in 1986, then to \$13,480 million in 1994 and \$29,500 million in 1998. These increased exports largely came from non-traditional exports, particularly manufactured exports. The share of non-traditional exports substantially expanded from 71% in 1986 to 91% in 1998. A majority was non-traditional, manufactured goods (industrial products), which share soared from approximately 60% of total exports in 1986 (83.6% of non-traditional exports) to 88% (97% of non-traditional exports) in 1998.

Key components of the export-oriented manufacturers are electrical/electronics, transportation equipment, other machinery and garment industries. As clearly seen in the above table, exports of electrical and electronic products, which accounted for 19% of total exports in 1986, gained a 58% share in 1998. Also, share of transportation equipment surged from a scant 0.9% to 11.2% during the same period. Garment exports grew strongly until 1994 and have been remaining flat thereafter. Although share of garment has recently been on the decline, it is still one of the country's three major export items.

This export structure indicates that export industries form an important part of the manufacturing sector in the Philippines.

Table 2-15 Changes in Export Structure (1986 -- 1998)

	% to Total Export				Growth Rate (1986-100)		
	1986	1990	1994	1998	1990	1994	1998
Traditional Exports	26.3	17.6	11.2	5.6	112.7	118.0	129.3
Non-traditional Exports	71.2	81.1	86.9	90.9	192.5	340.1	777.6
Non-traditional, manufactures	59.5	73.2	81.0	88.4	208.2	379.2	905.2
Processed Food and beverages	2.4	2.5	2.5	1.1	176.9	266.3	275.2
Textile yarn, fabrics	0.9	1.1	1.3	0.8	211.4	393.2	550.0
Garments	15.5	21.7	17.6	8.0	236.2	315.8	313.3
Travel goods and handbags	0.2	0.5	0.6	0.6	358.3	633.3	1,516.7
Footwear	0.6	1.0	1.3	0.5	251.6	567.7	435.5
Wood manufactures	1.0	1.4	1.0	0.4	238.8	263.3	240.8
Furniture and fixtures	1.8	2.3	1.8	1.1	212.4	269.7	364.0
Chemicals	5.0	3.2	2.3	1.1	107.4	125.9	139.5
Non-metallic mineral products	0.4	0.7	0.7	0.4	316.7	533.3	588.9
Copper metal	3.6	3.4	2.0	0.6	163.4	157.0	103.5
Machinery & Transport equipment	0.9	1.8	3.5	11.2	333.3	1,042.2	7,373.3
Elect. & electrical equipment, parts & telecom	19.0	24.0	37.0	58.2	213.7	542.3	1,066.8
Misc. Manufactured articles, nes	3.3	4.0	3.8	1.6	206.3	325.8	288.1
Others	4.8	5.5	5.7	2.8	195.2	333.3	357.6
Non-traditional, unmanufactured	11.7	7.8	6.0	2.5	112.7	141.9	131.0
Total Exports	100.0	100.0	100.0	100.0	169.1	278.5	609.2

Source: NSO

### 2.4.3. Industrial Structure: Changes and Features

As discussed earlier, the manufacturing sector in the Philippines has been expanding significantly with extensive investment by both domestic and foreign capital over the past decade. In the process, its structure has gone through a variety of changes and has developed distinctive features, as summarized below.

#### (1) Structural change of the manufacturing sector

The manufacturing sector has undergone the following structural changes in its development process to this date:

- 1) Rapid development and expansion of small- and medium-sized export industries, particularly labor-intensive processing industries;
- 2) Sectoral changes in major export industries;
- 3) Rapid deployment of foreign-affiliated export industries in PEZA ECOZONES and other economic zones; and
- 4) Less development of basic industries as compared to rapid growth of processing industries.

Recent growth of the manufacturing sector has been driven by small- and medium-sized export industries, particularly labor-intensive type. Leading subsectors are electrical/electronic parts, precision machining and parts, and textile and garment. Textile and garment industries registered rapid growth in the mid-1990s and became major export industries. However, they are facing difficulties in keen competition with low-cost manufacturers in China, Vietnam and other emerging exporters. Although a large number of small manufacturers exported low value added products, such as underwear in the past, they have lost price competitiveness, and have been replaced with larger manufacturers who make medium to high grade apparel products using latest production lines and advanced technologies.

Instead, the electrical and electronic parts subsector has emerged as a key exporter. Many manufacturers in this category are operating in ECOZONES where they can enjoy various incentives including favorable income tax treatment, and free imports of production equipment and raw materials. They are specialized in export production and are mostly foreign enterprises. While some produce automotive metal parts and other precision parts, manufacturers of electrical and electronic parts are dominated in number. Most of them have started operation in the mid-1990s or later, including those who have come on stream only recently. They chiefly supply their products to major electrical/electronics manufacturers, automotive makers and primary component manufacturers. While some suffered from the recent global recession and were forced to operate far below capacity, many have begun to receive orders from foreign customers and are expanding production after 1999.

In the machinery and electrical/electronic subsectors, there are a number of large enterprises (both local and foreign) and medium-sized enterprises which are operating in locations outside ECOZONES. Many of them make products for both export and domestic markets. They have steadily been growing and expanding over the past decade, but less than dramatic growth partly due to still limited domestic markets. In particular, local enterprises of small and medium sizes generally remain stagnated while some are expanding through modernization efforts in terms of equipment and technology.

As basic industries, including iron and steel, petrochemical and other chemical products, are poorly developed in the country, locally available raw materials are limited and the above parts industries are forced to depend on imports. Also, motor vehicle, household appliance and other assembly industries are lagged behind compared to neighboring countries. As a result, supporting industries for assembly manufacturers, such as metalworking, have not fully developed to force parts suppliers to rely on imports and the inter-industrial linkage has yet to have sufficient breadth and depth to drive self-sustained, autonomous growth.

The country has a number of export-oriented, light industries that have built on traditional cottage industries taking advantage of local resources and labor force, including furniture (wooden and rattan-based) that was the subject of this Follow-up Study, fashion accessories, and toys (stuffed toys). The furniture industry (particularly wooden) and the fashion accessories industry have successfully established their position as export industries, whereas toy and other labor-intensive industries are losing advantages in competition with manufacturers in China and other countries which boast low-cost labor force.

The oleochemical industry, which is also the subject of the Follow-up Study, is one of major export industries based on the country's major agricultural resource (coconut oil) and has been steadily growing. Nevertheless, it faces keen competition with emerging exporters such as Malaysia and Indonesia and has to overcome various issues including assurance of stable supply and price stabilization of coconut oil to be used as raw material, if it is to achieve sustainable growth.

Finally, the Philippine government envisages the development of the IT industry in the Long-Term Development Plan and sets forth a vision to develop the country into a global IT center. The similar vision has been pursued by Singapore and Malaysia that have already produced some results, while the Philippines has still to move it into an operational stage. While the computer software industry (also the subject of the Follow-up Study) is expected to play a critical role in development of the IT industry by promoting human resource development, it needs to be fostered within the framework of a broad-based industrial development strategy in consideration of potential impacts of the IT industry's on a wide range of industries, thereby ensuring balanced growth of the IT industry as a whole.