# Contribution of Infrastructure to Economic Growth and Poverty Reduction

Japan Bank for International Cooperation

# Republic of the Philippines

# Comprehensive Impact Study for Metro Cebu Development

Final Report

March 2004

Global Group 21 Japan, Incorporated

## Introduction

This report was prepared by Global Group 21 Japan, Inc. to investigate the Comprehensive Impact Study for the Metro Cebu Development Project on commission from the Japan Bank for International Cooperation (hereinafter referred to as "JBIC") in the year 2004.

The subject of this study, *"Metro Cebu",* is the second largest city in the Philippines to which JBIC had provided assistance surpassing well beyond 100 billion yen in total.

In the light of its accountability to the Japanese public and the importance of feeding back lessons for its future projects, JBIC conducts evaluation of its projects every year. At the same time, JBIC recognizes the importance of evaluation not only from an individual but also from a comprehensive viewpoint. Therefore, JBIC initiated this comprehensive impact study for a number of different yen-loan projects in Metro Cebu since the 1970s.

In this study, the development planning process for Metro Cebu has been divided into three development cycles for purposes of analyses and organization, namely: (1) the first cycle (1978-1986) which covered the period of the physical development planning of regional growth centers; (2) the second cycle (1987-2003) during which regional urban development for sustainable growth was promoted; and (3) the third cycle (2004 and beyond) which envisions the dispersion of growth away from Metro Cebu.

This study evaluated the impact of a number of different yen-loan projects in the Metro Cebu area using the "Urban Development Model" concept. The "Urban Development Model" is the analytical framework for sequencing the urban development and economic development processes where; (1) the central and local governments prepared overall development plans for the region and Metro Cebu; (2) JBIC or other donor agencies assisted both the central and local governments in implementing infrastructure projects identified in the development plans; (3) the development of infrastructure stimulated private capital investments; (4) the level of economic development achieved during the period had positive impact on poverty reduction in the project areas, as a direct consequence of central and local government support of the general development policies.

The evaluation of a number of different yean-loan projects examined following the DAC's five evaluation criteria (i.e., validity, efficiency, effectiveness in attaining the objective, impact, sustainability). As for the projects funded by private enterprises, surveys and questionnaires were sent out to the Metro Cebu local enterprises as well as the Japanese and Philippine companies for data collection and analysis. Moreover, the statistical software called "SAS" was used for the impact analysis of the "Urban Development Model"

and regional economic growth. On the other hand, for the analysis of poverty reduction, both quantitative (based on various poverty indexes) as well as qualitative analyses (using focus group discussions) were used.

Finally, but not least, it is important to mention that in preparing this Report, we sought and received evaluative observations and analyses from a number of real experts on the Metro Cebu yen-loan projects. Prominent among these were the departments and agencies of the Philippine Government involved in the preparation and implementation of yen-loan projects; the Cebu Investment Promotion Center (CIPC), Metro Cebu Japanese Chamber of Commerce and Industry; Professor Michihiro Kaiyama of Saitama University, as well as Masaharu Nagashima; Assistant Professor of Saitama University; and Professor Yoshio Sakakibara of Sakushin Gakuin University. Finally, the Team is grateful for the patience and understanding of the JBIC staff.

March 2004

Yoshio Sanaka (Study Team Leader)
Global Group 21 Japan, Inc.

## List of Abbreviations

| | |
|---|---|
| ADB: | Asian Development Bank |
| AFTA: | ASEAN Free Trade Area |
| AIDAB: | Australian International Development Assistance Bureau |
| APEC: | Asia-Pacific Economic Cooperation |
| APIS: | Annual Poverty Indicators Survey |
| BLGF: | Bureau of Local Government Finance |
| CIDA: | Canada International Development Agency |
| CIPC: | Cebu Investment Promotion Center |
| CMP: | Community Mortgage Program |
| CPA: | Cebu Port Authority |
| DBM: | Department of Budget and Management |
| DepED: | Department of Education |
| DFID: | Department for International Development |
| DILG: | Department of Interior and Local Government |
| DOF: | Department of Finance |
| DOH: | Department of Health |
| DOLE: | Department of Labor and Employment |
| DOTC: | Department of Transportation and Communications |
| CPA: | Cebu Port Authority |
| DPWH: | Department of Public Works and Highways |
| DPWTC: | Department of Public Works, Transportation and Communication |
| DST: | Department of Science and Technology |
| DSWD: | Department of Social Welfare and Development |
| DTI: | Department of Trade and Industry |
| EU: | Europe Union |
| FDI: | Foreign Direct Investment |
| FIES: | Family Income and Expenditures Survey |
| FNRI: | Food and Nutrition Research Institute |
| IAD: | Integrated Area Development |
| ILO: | International Labors Organization |
| IRA: | Internal Revenue Allotment |
| JBIC: | Japan Bank for International Cooperation |
| JICA: | Japan International Cooperation Agency |
| LGC: | Local Government Code |
| LGU: | Local Government Unit |
| MCDP: | Metro Cebu Development Project |
| MCDPO: | Metro Cebu Development Project Office |
| MCIAA: | Mactan Cebu International Airport Authority |
| MCLUTS: | Metro Cebu Land Use and Transport Study |
| MDF: | Municipal Development Fund |
| MEZ: | Mactan Economic Zone |
| MPWH: | Ministry of Public Works and Highways |
| NEDA: | National Economic Development Agency |
| NGO: | Non-Government Organization |
| NHA: | National Housing Authority |
| NPC: | National Power Corporation |
| NSCB: | National Statistical Coordination Board |
| NSO: | National Statistical Office |
| PEZA: | Philippine Economic Zone Authority |
| PRSP: | Poverty Reduction Strategy Paper |
| RCDP: | Regional Cities Development Project |

| | |
|---|---|
| RDC: | Regional Development Council |
| SAPROF: | Special Assistance for Project Formulation |
| SEC: | Securities and Exchange Commission |
| T/A: | Technical Assistance |
| TOR: | Terms of Reference |
| UNDP: | United Nations Development Programme |
| USAID: | United States Agency for International Development |

# Final Report

**Republic of the Philippines**

**Comprehensive Impact Study for Metro Cebu Development**

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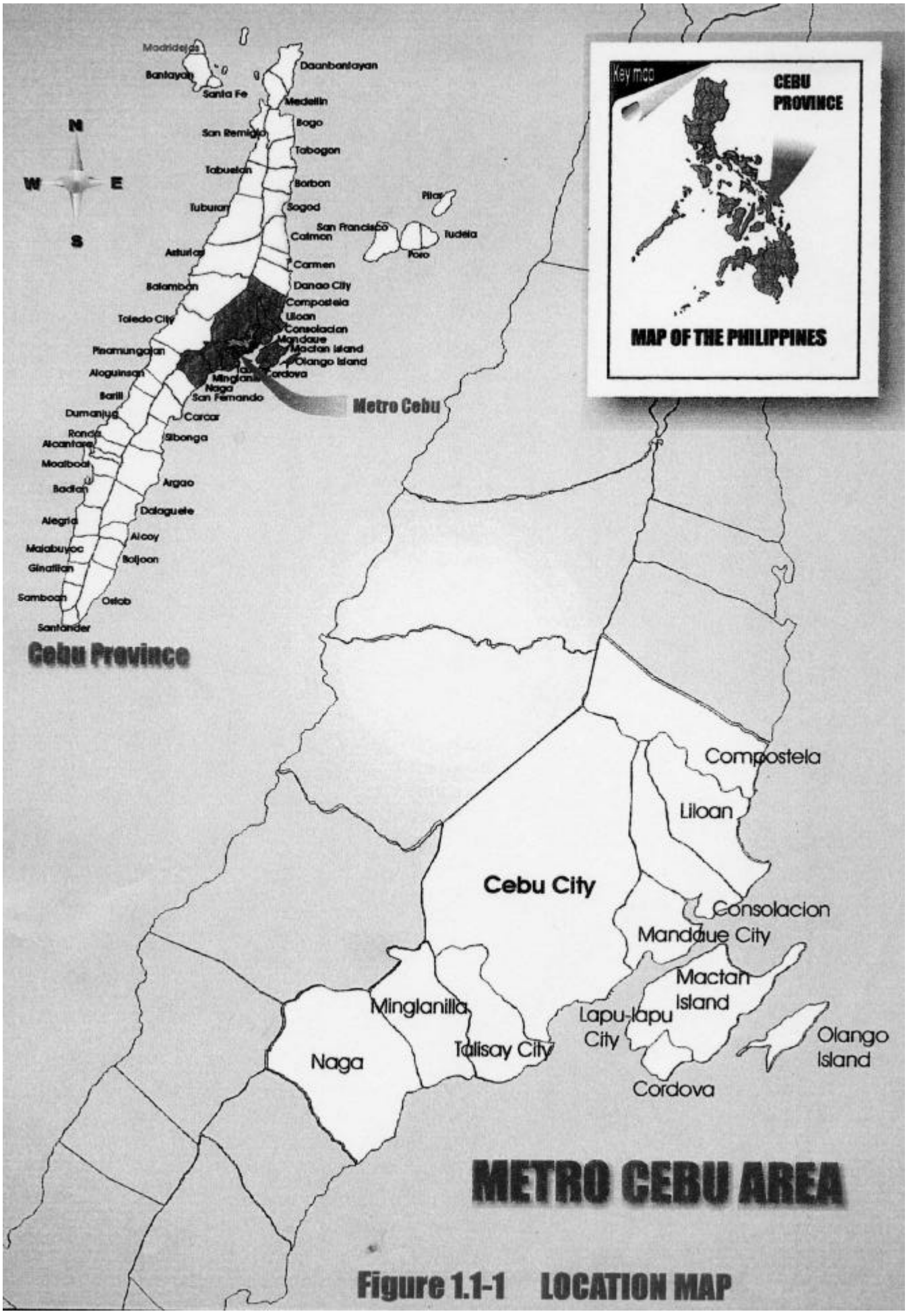
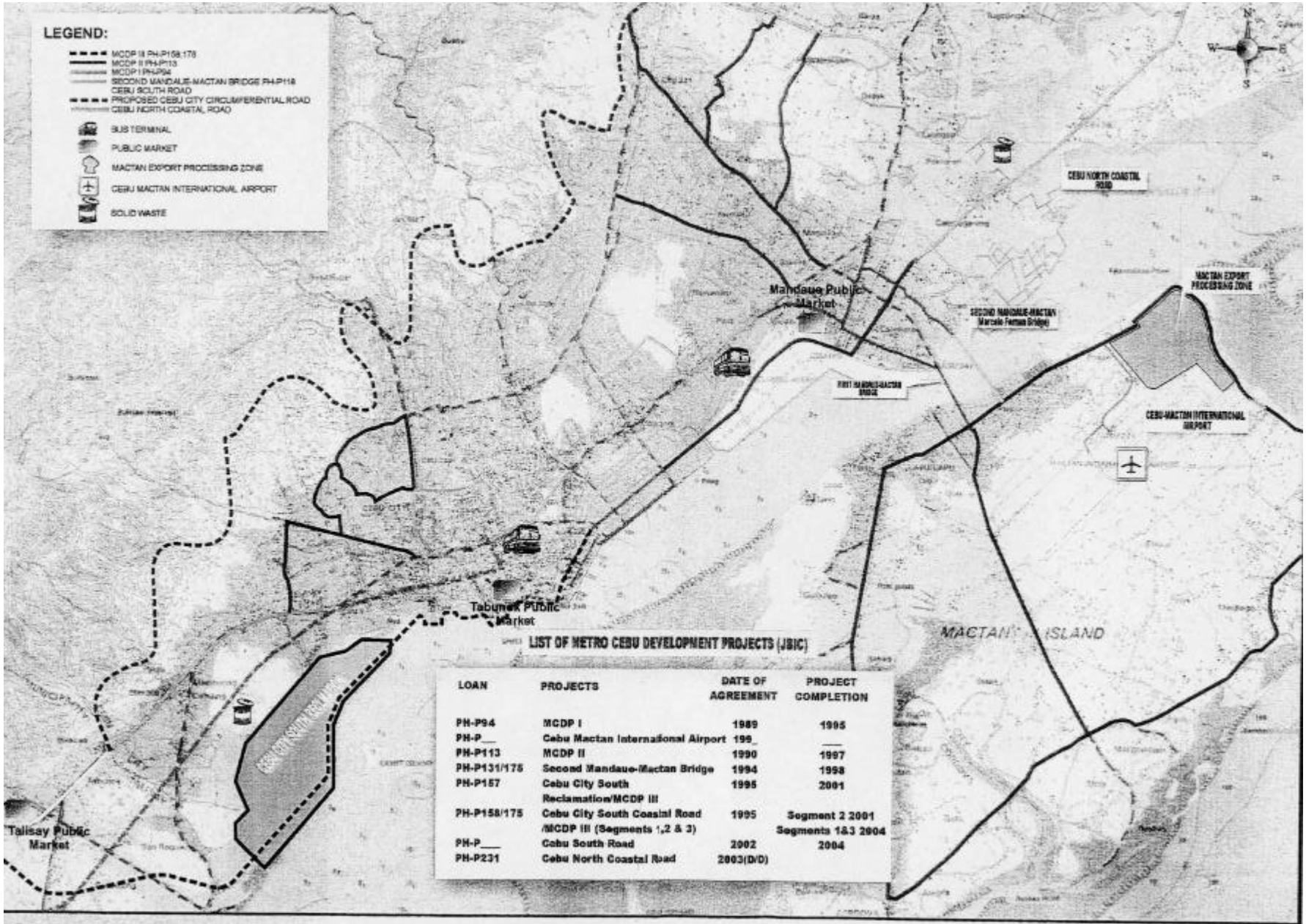



**Figure 1.1-1 LOCATION MAP**




| LOAN | PROJECTS | DATE OF AGREEMENT | PROJECT COMPLETION |
|---|---|---|---|
| PH-P94 | MCDP I | 1989 | 1995 |
| PH-P___ | Cebu Mactan International Airport | 199_ | ___ |
| PH-P113 | MCDP II | 1990 | 1997 |
| PH-P131/175 | Second Mandaue-Mactan Bridge | 1994 | 1998 |
| PH-P157 | Cebu City South Reclamation/MCDP III | 1995 | 2001 |
| PH-P158/175 | Cebu City South Coastal Road /MCDP III (Segments 1,2 & 3) | 1995 | Segment 2 2001 Segments 1&3 2004 |
| PH-P___ | Cebu South Road | 2002 | 2004 |
| PH-P231 | Cebu North Coastal Road | 2003(D/D) | |

# METRO CEBU DEVELOPMENT PROJECTS

# 1. RESEARCH BACKGROUND

## 1.1 Research Background and Objectives

The Japan Bank for International Cooperation (hereinafter referred to as "JBIC") has been providing financing for numerous infrastructure development projects in various developing countries, including those in the Asian region, thereby contributing to the economic growth and poverty reduction efforts in these countries.

In the light of its accountability to the Japanese public and the importance of feeding back lessons to future projects, JBIC conducts evaluations of its projects every year. At the same time, JBIC recognizes the importance of the evaluation not only from an individual but also from a comprehensive viewpoint. Therefore, in order to increase the level of performance of future yen-loan projects in developing countries and to effectively attain the stated goals of economic growth and poverty reduction, JBIC initiated this comprehensive impact study for a number of different yen-loan projects in Metro Cebu.

Based on the "Urban Development Model" concept and supported by rational, objective data, this study attempts to evaluate the yen-loan financed projects implemented in Metro Cebu. The study not only quantitatively analyzes each project, but also comprehensively examines the projects' contributions to economic growth and poverty reduction. In addition, the study includes constructive feedback for future JBIC-financed projects aimed at the development of Metro Cebu and other regions in the Philippines.

Regional development in the Philippines is expected to proceed at an accelerated rate of decentralization. However, most Local Government Units (LGUs) have limited experience and capacity for planning and implementing projects that meet the people's basic needs. Furthermore, most cities still have insufficient market demand and limited business opportunities to attract private sector investments. Therefore, there are lessons to be learned and recommendations which have been formulated through analyses of past and present development experiences in Metro Cebu that will contribute greatly to future economic development of various cities and LGUs in the Philippines.

**<Box 1> Definition of "Metro Cebu"**

The subject of this study, "Metro Cebu," is not a specific administrative district. It is defined rather as an urban area centered at Cebu city, consisting of several LGUs and encompassing a physical planning and market-economy within the physical influence of an urban development plan and an infrastructure improvement program with the objective of alleviating present or anticipated urban problems. With this definition, Metro Cebu includes four cities (Lapu-lapu City, Talisay City, Cebu City, and Mandaue City) and the six municipalities (Lilo-an, Minglanilla, Naga, Compostela, Consolacion, and Cordova) roughly encircling a 25 km radius area centering on Cebu city.

Metro Cebu's population increased from about 940,000 in 1980 to about 1.27 million in 1990, and 1.68 million in 2000 --- or an increase of 180% within two decades. Ninety percent of Metro Cebu's area, approximately 80,000 ha consists of farmlands and forests. The developed area has the following land-uses: residential, 60%; commercial, 10%; industrial, 5%; transport and public utilities, 13%. Urban development has been expanding along the eastern coastal seaboard along the highway corridor. The completion of the first Mactan Bridge in 1976 made possible land transportation and reduced travel time between mainland Cebu and Mactan Island.

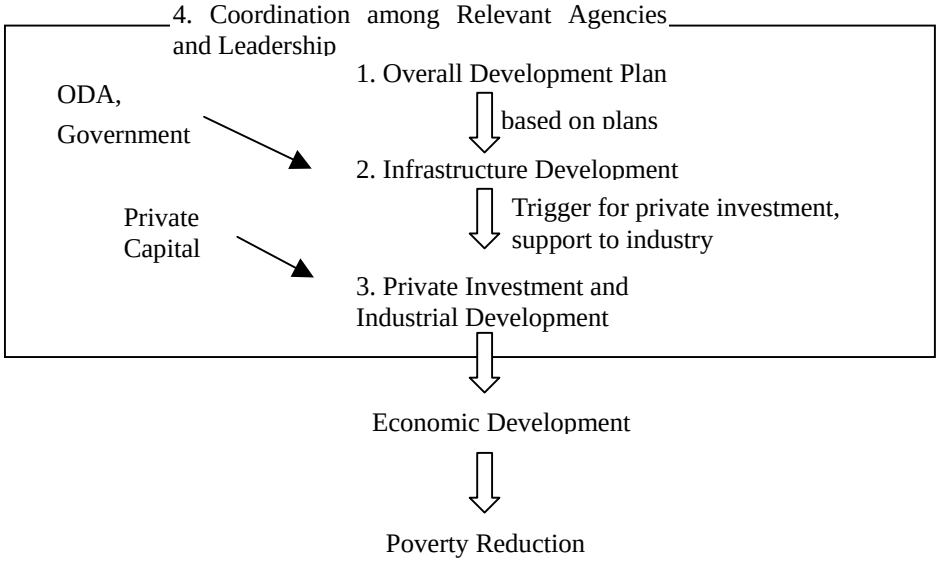
## 1.2 Framework of Analyses

From the findings in the JBIC preliminary investigation (April 2003), this present Metro Cebu impact study was based on an "Urban Development Model" (Fig. 1-1). This model provided the analytical framework for sequencing the urban development and economic development processes where: (1) the central and local governments prepared overall development plans for the region and Metro Cebu; (2) JBIC or other donor agencies assisted both the central and local governments in implementing infrastructure projects identified in the development plans; (3) the industry development by private capital investments stimulated through the infrastructure development. Moreover, in this model (4) the role of central and local government is supported that they play as a leader or supporter in the formation of the general development policies.

The study examines the processual inter-relationships of these factors (1~4), the dynamic transformation of either their synergetic or counteractive effects, and eventually the manner by which these have resulted in overall economic development. To determine even further economic contributions, the study also investigates links between these factors and existing problems, with emphasis on quantitative analysis of private investments and local government policies in Metro Cebu. It also comments on the impact of these interventions on the economic development and poverty reduction in the region. Finally, the study concludes with an overview of lessons learned from the Metro Cebu projects and recommends expanding these objectives into other regions in the

Philippines.

**Figure 1-1: Urban development model and flow of investigation and analysis**



# 2. DEVELOPMENT PLANS AND INFRASTRUCTURE DEVELOPMENT PROJECTS

## 2.1 Development Plans in Central Visayas (Region 7)[1]

In this study, the development planning process for Metro Cebu since the 1970s has been divided into three development cycles for purposes of analyses and organization:

The first cycle (1978-1986) pertains to the physical development planning of regional growth centers.
The second cycle (1987-2003) promotes the regional urban development for sustainable growth.
The third cycle (2004- ) envisions the dispersion of growth from Metro Cebu.

The first cycle starts with the initiation of the initial five-year development plan (1978), during which crucial incidents such as the assassination of Senator Aquino (1983), the financial crisis (1984-85), and the EDSA revolution which culminated in the overthrow of the Marcos government (1986).

The second cycle includes four consecutive administrations under the Aquino; Ramos; Estrada; and Arroyo governments. In the latter half of the 1980s, the political climate under the Aquino administration was unstable because of numerous coup attempts. However, until the 1997 Asian currency crisis, the entire Philippines, including the Central Visayas region, enjoyed an improved economic and business climate under the more stable period of the successor Ramos administration during which the Foreign Investments Act was also vigorously implemented. The investment plans for Metro Cebu Development (1), (2), and (3) were also either finalized, funded, and/or implemented during this period.

Lastly, the third cycle beginning 2004 to the present, is regarded as the period of development resulting from the implementation of various yen loan development projects in Metro Cebu.

In summary, the general flow of development progresses in three stages: the first cycle covers the decade when the central government pursued the development of the regional growth center approach; the second cycle covers the period when the Regional Development council of Central Visayas actively promoted investments in urban industrial and public infrastructure and acted on newly emerging problems resulting from rapid urbanization. The third cycle embarks at the period of a noticeable dispersal of economic and urban growth away from Metro Cebu to its peripheral areas

[1] The Foreign Investments Act was officially enacted in 1991 during the Aquino administration. Prior to that time, the act was known as the Omnibus Investments Code of 1987 (Executive Order No. 226

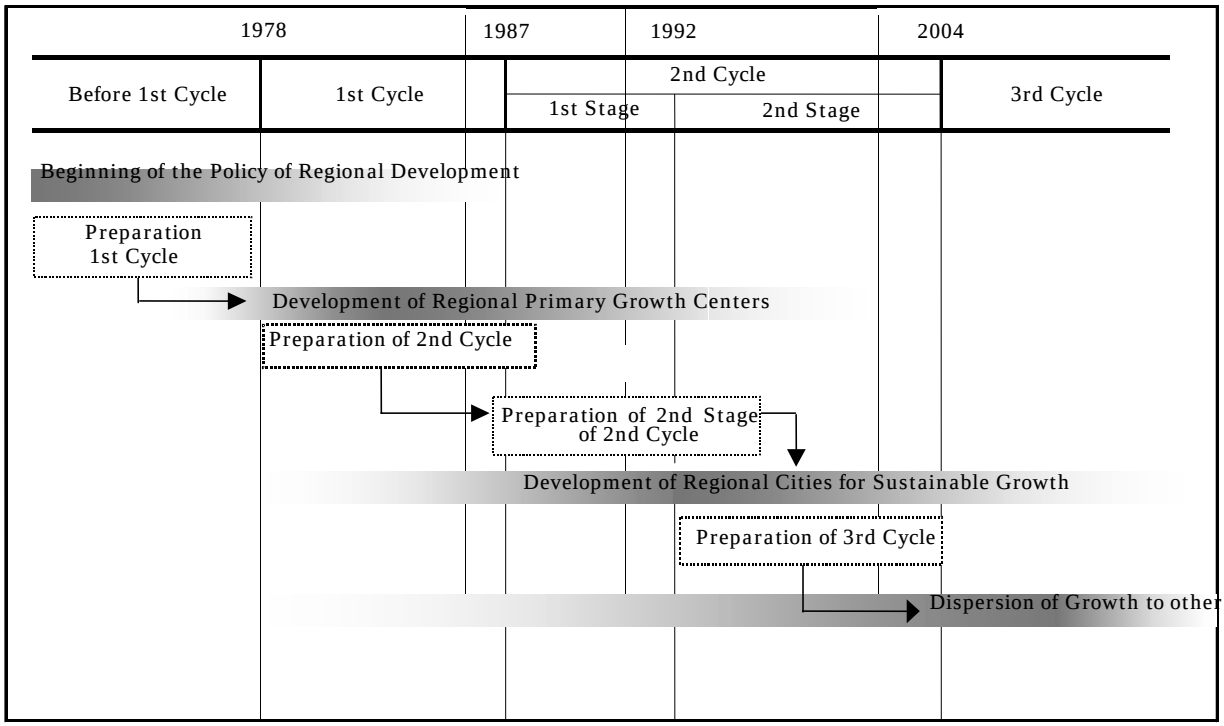
and the Central Visayas region. (Figure 2-1)

During each cycle, projects which were identified from the development planning policies in the previous cycle were implemented and were coinciding with project development for the next cycle. The basic philosophy employed in the first cycle was based on the regional development strategy which was formulated since the latter half of the 1960s.

The second cycle can be further divided into two phases --- the first dealing with preparation and planning, the second with investment programming and implementation. Thus, during the first stage of the second cycle, more detailed implementation plans were made based on the general project plan developed in the first cycle; while in the second stage, completed plans in the first stage were implemented. In the third cycle, regional dispersal policy which was the main point in the first and second cycle was implemented in the form of the construction of the main artery and feeder roads in Metro Cebu's central business district. The gradation bars in the Figure 2-1 indicate the specific policies formulated in each development cycle which were sustained continuously throughout the different, subsequent periods.

The following section reviews and evaluates the contents and characteristics of the regional development plans and projects, as well as the implementation of infrastructure development in each cycle.

**Figure 2-1: Development Plans and Progression of Implementation of the Three Cycles**




Note) The division into cycles is based on the composition of the infrastructure development which promoted growth especially in Metro Cebu and focuses on the yen loan projects implemented through the inter-action between the regional development policy and specific investment programs or plans in a particular cycle. And it means there might be same type of infrastructure development before or after the cycle, even though the details were not described in this report.

## 2.2 Infrastructure development of the regional primary growth center: The First Cycle (1978-1986)

### 2.2.1 Characteristics of development planning

The First Cycle may be described as the period of formulation, foundation-building, and preparation of national government policies on regional development including rational urbanization strategies in the regional plans. The philosophy in formulating development plans for primary growth centers and other regions[2] may be found in various resource-assessment, preliminary physical plans, and investigative reports made by the central government organizations prior to this cycle. The infrastructure development plans implemented during the first cycle are considered to be the realization of these previous policies.

Based on the regional conditions assessment surveys conducted with technical assistance from the United Nations Development Program (UNDP) between the latter half of the 1960s and 1970s, each regional framework was reviewed jointly by a Study Team of the Presidential Advisory Council on PublicWorks and Community Development and the Institute of Planning, University of the Philippines, and the Department of Public Works, Transportation, and Communications (DPWTC). From initial discussions and conclusions came an assessment of rational, appropriate allocation of resources and investments along desirable regional functions and spatial and environmental strategies based on an area development approach. In 1976, the Study Team's technical planning unit, the DPWTC, a central government organization, formulated a study called *The Physical Perspective Plan for the Philippines* (the Plan). This Plan indicated that the over-concentration of investments, services, employment, and population in Metro Manila was the main reason for the outflow of population from other regions of the country --- which was suffering primarily from the absence of employment opportunities, livelihood, and stable income sources. Consequently the development gap and income inequalities between Metro Manila and other regional cities had widened considerably.

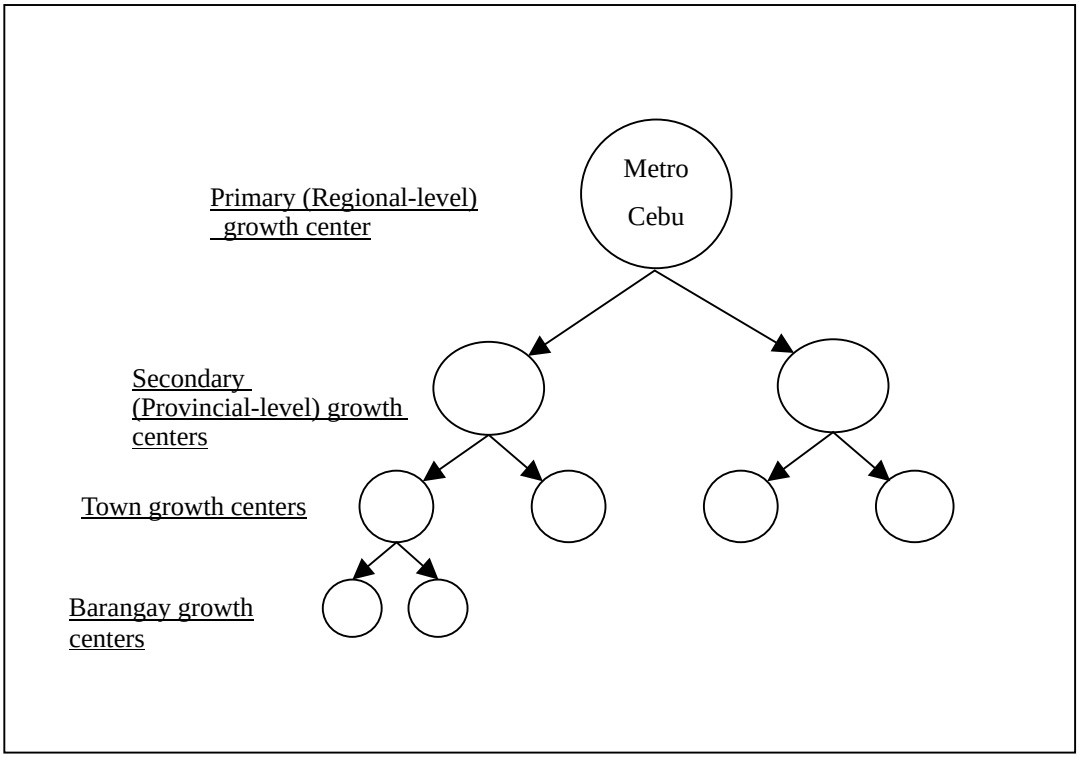
The Plan recommended promulgating policies towards the dispersal of industries to other regional growth centers to create employment opportunities in these areas and achieve a more rational population distribution. Since over-concentration of industries in Metro Manila was hindering regional growth, the Plan recommended the promotion of industrial diversification including establishment of more industrial facilities in other regional growth centers which have potentials of higher resources and for value added activities.

[2] Although the term *region* in the Philippines often refers to a geographic area [diocesan district], the term *regional development* in this paper refers to the general meaning of development of a region.

The Plan also emphasized the importance of infrastructure development to support industries in regional growth centers and to de-concentrate both population and economic activities in Metro Manila. It regarded the Metro Cebu area as a primary growth center, together with Metro Manila and Metro Davao based on a hierarchical development strategy that positions secondary and tertiary growth centers under the primary growth center. Successively, starting with a technical assistance from UNDP and IBRD, the National Economic Development Authority (NEDA) and its Region 7 Office with the Regional Development Council (RDC), drafted the prototype regional development framework plan [1978-1982:] *"Central Visayas Regional Development Plan (1978-1982)"*. This document discussed an integrated area development (IAD) approach in its chapter on Commercial Development --- a strategy viewed as an extension of the hierarchical development concept described in *The Physical Perspective Plan for the Phillipines*.

The system, as seen in the Figure 2-2, of the hierarchical development strategy in Metro Cebu consists of four strata: the primary center, province level, town level, and barangay level. [3]

**Figure 2-2: Concept of Hierarchical Growth Center of IAD Approach**




The infrastructure development within regional growth centers should produce a counter-magnet, centrifugal effect on regional and urban population concentrations. The systematic organization, or

the establishments of linkages among growth centers, should further help alleviate urban density problems, ultimately promoting regional development.

Table 2-1 lists the major development plans prepared during the First Cycle concerned with the development of Metro Cebu.

**Table 2-1: Major Development Plans Prepared during the First Cycle**

| No. | Regional Development Plans | Year |
|---|---|---|
| 1 | 1978-1982 Central Visayas Development Plan | NA |
| 2 | 1984-1987 Central Visayas Development Plan Update | July 1985 |
| 3 | Central Visayas (Region 7) 5-year Development Plan 1978-1982 (includes 10-year Development Plan 1978-1987) | September 1977 |
| 4 | The Physical Perspective Plan for the Phillipines | March 1976 |
| 5 | Metro Cebu Land Use and Transportation Study (MCLUTS) | February 1981 |

Table 2-2 lists the development projects implemented during the First Cycle within the national government's policy framework of developing regional growth centers.

**Table 2-2: Main Projects Implemented During the First Cycle**

| No | Project Name | Started from | Started - Completed |
|---|---|---|---|
| 1 | Port Cargo Handling Equipment Expansion Project (1) | 1983 | 1985 |
| 2 | IBRD Third Port Project (Port Cebu) | 1984 | 1985 |
| 3 | Mactan Export Processing Zone | unknown | 1979 |
| 4 | Cebu Diesel Plant (I) | unknown | 1978 |
| 5 | Cebu Diesel Plant (II) | unknown | 1982 |
| 6 | Port Cargo Handling Equipment Expansion Project (2) | 1991 | Canceled |
| 7 | Metro Cebu Interim Improvement Program | unknown | 1983 |
| 8 | Naga Power Plant (I) (II) | unknown | 1981-1986 |

### 2.2.2 Evaluation of Infrastructure Development Projects

The following subsections evaluate these projects based on the five criteria of the Development Assistance Committee (DAC) namely, relevance, efficiency, effectiveness, impact, and sustainability.

**(1) Relevance**

This section reviews the appropriateness of projects on Table 2-2. They are viewed as investments implementation of the overall policy objective of infrastructure development to promote the growth of primary regional centers. The Philippine central government developed the Mactan Economic

Zone 1 (MEZ-1, previously known as Mactan Economic Processing Zone with their own budget, adjacent to Mactan International Airport in 1979.[3] A strategy of attracting foreign investments through incentives and adopting export oriented industrialization to enhance economic growth appears consistent with the national government policies for the development of primary regional growth centers.

**Photo 2-1 Mactan Economic Zone 1 (MEZ 1)**

Source: CIPC

In the early1980s, World Bank and JBIC co-financed a series of port development projects. Under the Port Cargo Handling Equipment Expansion Project (1) of the Philippine Ports Authority, loading machines such as a Level Luffing Crane (LLC) was acquired. This was supplemented by the Third Ports Project, financed by World Bank to promote such infrastructure development through expansion of port facilities and container terminals to expand capacities of regional ports of primary growth centers.

Also during the First Cycle, the National Power Corporation (NPC) built a diesel and thermal power plant in Naga under the auspices of the Cebu Diesel Power Plants Projects 1 & 2 and Naga Power Plan (I) (II); the plant enhanced the supply capacity of electricity (total newly installed capacity of 184.8 MW)I in Cebu province. It is highly significant that infrastructure development helped create the economic and industrial zone as a nucleus for the development of regional growth centers. Of note is the appropriateness of the national government's emphasis especially on ports development in Central Visayas because of Metro Cebu's limited potential in land transportation network contrasted with its strong regional economic function as the dominant commercial and transport hub for Visayas and Mindanao islands and regions.[4]

[3] The Mactan Economic Zone 1 was previously known as Mactan Export Processing Zone. In 1995 it was renamed as MEZ, based on the provisions of the Special Economic Zone Act.

[4] The plan to develop Mactan International Airport (Cebu) as another outward-looking transportation system (or the expectation to develop such an airport) was implemented during the second cycle. However, the master plan for infrastructure development was prepared in 1982 during the first cycle. Taken together, both the port and airport development projects helped attract and increase investments in this area.

**(2) Efficiency**

The Port Cargo Handling Equipment Expansion Project (1) was completed in June 1986, three and a half years later than the scheduled completion date of December 1982. The delay resulted from changes made to the project plan as a result of coordination with the co-financing partner, the World Bank and the difficulty of hiring a suitable project consultant. In order to equip the container-ready facility, the implementation schedule had to be coordinated with the World Bank component. Although such an adjustment was necessary, this delay impacted on the overall time-line for the development of regional growth centers. The Port Cargo Handling Equipment Expansion Project (2) included the procurement of container, cranes, and transfer cranes; however, the project never materialized due to the cancellation of the yen-loan itself and the coordination problems with related agencies on procurement items[5]. The inability to introduce container handling equipment constricted port operations and efficiency in Metro Cebu's bustling inter-island commerce and comparatively slowed down its development as a primary regional growth center. Under the Port Cargo Handling Equipment Expansion Project (1), there was little discrepancy between planning and practice because the initial plan was adjusted to withhold the procurement cost of equipment under the foreign currency portion of the budget. However, substantial overruns occurred in the domestic currency portion of the budget --- more likely as a result of changes to the original plan.

**(3) Effectiveness**

At the time of its development in 1979, the number of resident industries within MEZ-1 (previously known as Export Processing Zone) was only three; but by 1990 this had grown to a little over thirty-four. Thus, achievement level and infrastructure impact on the growth and development of MEZ-1 appeared to have retarded during the First Cycle.

A level lifting crane (LLC) and a forklift truck (FLT) obtained under the Port Cargo Handling Equipment Expansion Project (1) were mainly used during the second cycle; both these equipment have reached their economic life and purpose and were supposed to be de-commissioned in October 2003 based on the 1987 evaluation report. Although so far, their performance efficiency (operation rate) can not be ascertained. The reason for the evaluation result is primarily because cargo handling was servicing mostly non-container freight at that time. In addition, international standardization was yet evolving in the Philippines and the LLC was used mainly for various shapes of packing. Nonetheless, it is evaluated that introducing the LLC and forklift greatly contributed to Cebu Port's cargo management and operations at that time. After the cancellation of the Port Cargo Handling Equipment Project which was supposed to procure container cranes (2), the freight

[5] Actually, the argument over the necessity of container cranes resulted when freight transaction volume was reconsidered.

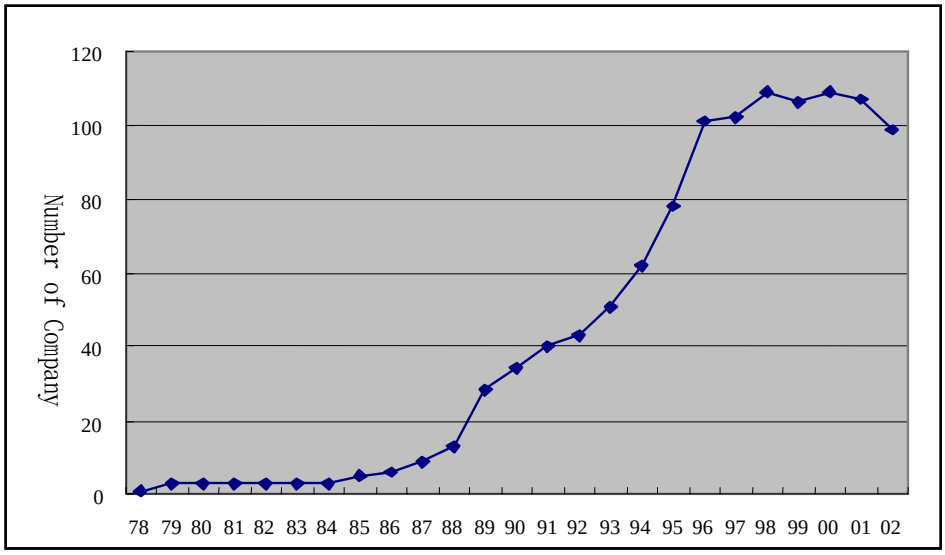
operations company introduced the gantry and transfer cranes to the Port during the second cycle (1996-1997). This coincided with the full operations of the Cebu Diesel Power Plant (I) and the Naga Power Plant (I), and (II) --- which was rehabilitated in 1992. Since the time of this field survey, these plants are still operational and continue to provide important power sources for the Cebu-Negros-Panay system which covers the entire Cebu island.

**Photo 2-2: Port of Cebu**
Level Luffing Crane (LLC) (in operation since 1985) but is planned for de-commissioning after reaching its operational life.

### (4) Impact

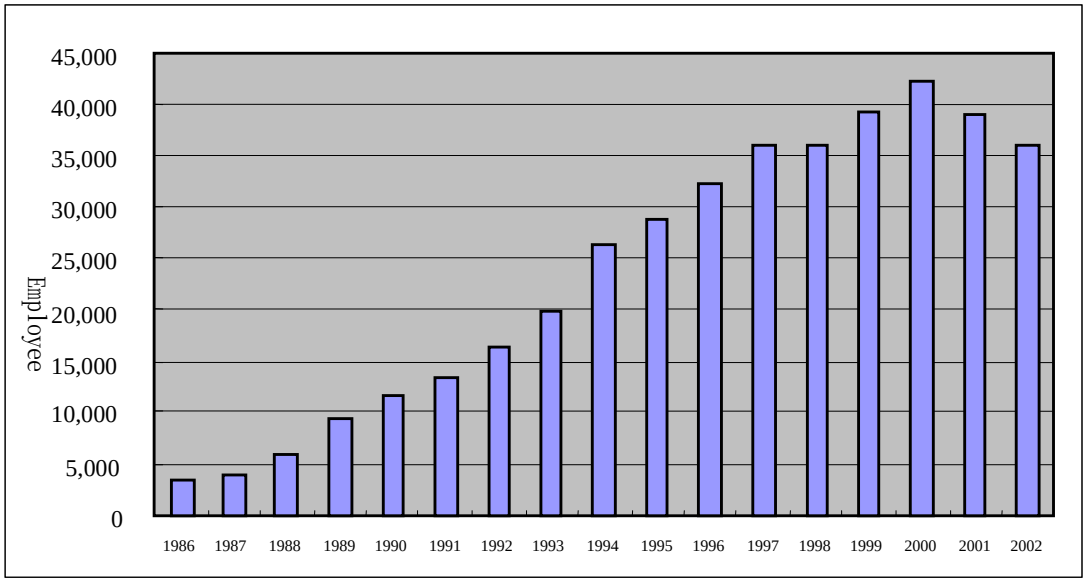
Figure 2-3 shows the small number of resident industries during the First Cycle but which sharply increased to 103 in 1998 (Second Cycle) parallel to the growth in employment opportunities (Figure 2-4) and export value (Figure 2-5).

**Figure 2-3: Changes in Number of Resident Industries and Employment in MEZ-1**



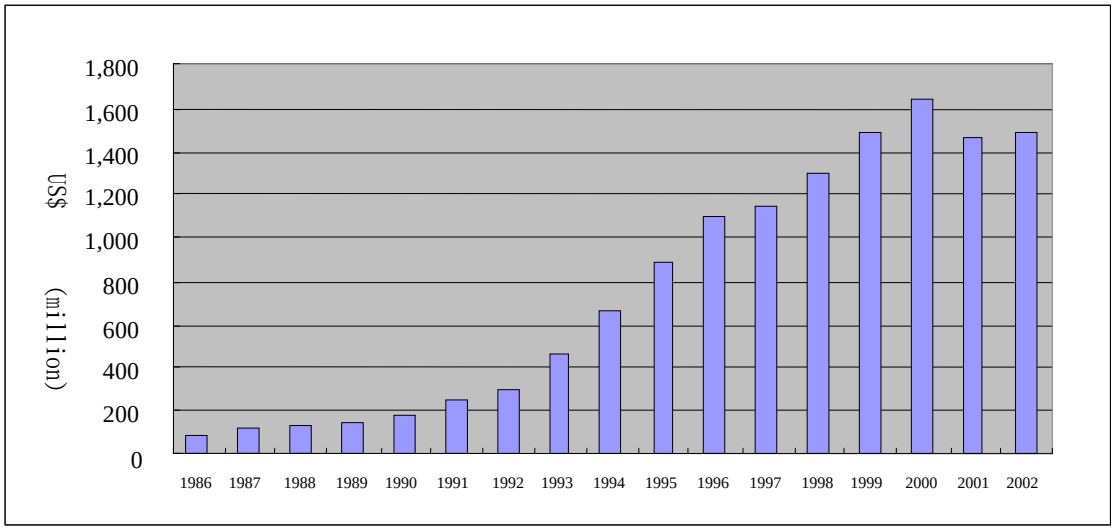

Source：PEZA、CIPC、DTI
N.B.: Statistical data sometimes slightly fluctuate even in the same year, perhaps due to seasonal factor in data collection. While MEZ-1 was established in 1979, the 1978 data shown on the above chart seems to indicate there industries registered prior to its establishment.

**Figure 2-4: Changes in Number of Employment in MEZ-1**




Source：PEZA

**Figure 2-5: Export Value of MEZ-1**



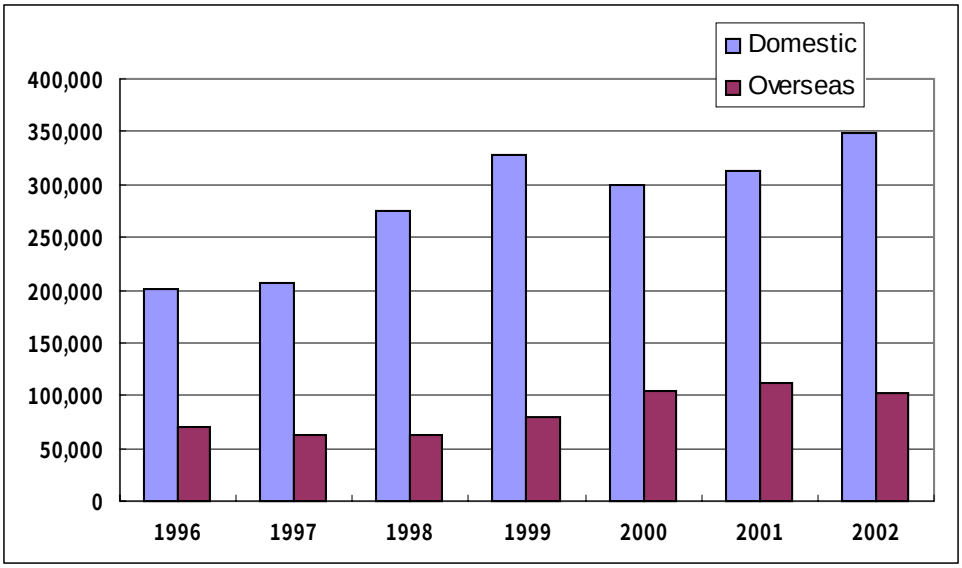

Source：PEZA

According to data as of September 2003, fifty-nine of the 104 resident industries in MEZ-1 are Japanese direct investments. After the burst of the bubble economy, Japanese enterprises focused on cost reduction, and alongside yen appreciation, many companies were shifting their production overseas. The MEZ-1, being one of many other host investment havens, contributed in creating new employment opportunities and export values and in promoting Metro Cebu as a regional growth

center. This zone gradually expanded its inclusive land area with the increasing number of resident industries. The land area, at the time of survey in November 2003, now occupies 150 has. Thus the First Cycle emerges as the stage when the foundation for Metro Cebu's growth was laid down.

The 1987 evaluation report on Cebu Port indicated that freight transaction volumes at that time remained flat and types of packaging were slowly shifting to containers. However, evaluating the impact of the introduction of cargo-handling machinery could not be performed since the performance indicators on transaction volume during the First Cycle were unavailable. But except for its reduced import volume beginning with the 1997 Asian currency crisis, transaction volume at Cebu Port increased consecutively in 1998 and 1999 (Second Cycle) and steadily posted positive performance over the last three years. (Fig. 2-6 & 7)

**Figure 2-6: Changes in Volume of Container Cargo Transaction (TEU)**

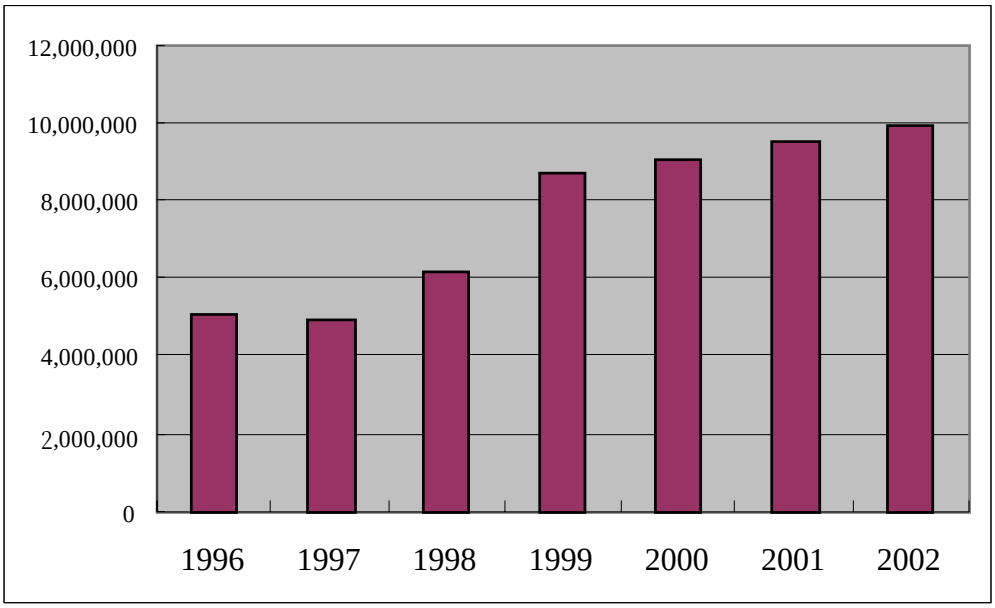



Source: CPA

N.B. (1) TEU: Twenty-foot equivalent units

(2) Domestic volume technically includes transaction volume at the Port of Toledo, which only accounted for 2% of the total in 2002; Metro Cebu's Port of Cebu evidently takes up the substantially bigger volume.

**Figure 2-7 Changes in Transaction Volume of Non Container Cargo (Bulk Cargo/ Break Bulk Cargo (T)**




Source: CPA

N.B The figure can be considered to be the volume of cargo handled in Metro Cebu since the data pertain to transaction volume of the Base port.

**(5) Sustainability**

With the full occupancy of MEZ-1 by resident industries, a number of special economic zones were also established, namely the Mactan Economic Zone-2, Cebu Light Industrial Park, New Cebu Township Economic Zone, and the Asiatown IT Park were also established in the 1990s. Whether these zones would thrive amidst international competition would greatly depend on profitable management of industrial facilities to surmount challenges ranging from cost reduction, product quality improvement, and capability to cope with turn-around time requirements. In terms of infrastructure development, meeting demands in electric power and water supply, management of industrial waste and garbage has emerged as crucial considerations in industrial complexes.

In addition to its equipment ownership for power generation, MEZ-1 is now implementing its wastewater treatment facility through another yen loan.[6] At the time of the survey in November 2003, an Independent Power Project Company (IPP) has been operating and maintaining the diesel and thermal plants in Naga under a long-term contract. The Visayas Electric Distribution Company (VECO) and Mactan Electric Distribution Company (MECO) each distribute power to regions using

[6] The yen-loan project is called the *Environmental Development Project for the Special Economic Zone.* At the time of the field survey (October 2003), construction was to begin in November 2003 and the facilities will be operational by January 2005.

a grid managed by National Transmission Corporation (Transco)[7]. There are additional plans for progressive development of power supply capability, such as the power transmission project for Leyte Island (Leyte – Cebu HVAC electric feeder line Project Stage 2).

Currently the Metropolitan Cebu Water District (MCWD) operates and manages water supply distribution, such as the Carmen water supply project; it also plans to develop new water supply resources through Build-Own-Operate (BOO) .[8] scheme with long-term contracts

At the time of this field survey (November 2003), the Port Authority[9] that manages and maintains the Port of Cebu is planning to expand its piers to promote more international sea traffic and commerce. A new Cebu International Baseport in Consolacion located in northern Metro Cebu (i.e., outside the present port location at the congested Central Business District) is expected to handle international container crates as part of its development vision.

Generally speaking, from the resulting impetus in economic activities and following through the planned infrastructure investments, the sustainable development of Metro Cebu as a primary growth center is steadily progressing.

### 2.2.3 Preparation made during the first cycle for the second cycle

In response to the rapid population growth and the twin, inter-related problems of centralization and over-concentration of development and investments in Metro Manila, on the one hand, and on the other, the continuing outmigration, absence of economic opportunities, and infrastructure inadequacy in other regional cities, the national government embarked on the preparation of projects during the First Cycle whose implementation carried through in the Second Cycle period. Under a technical assistance from the Australian government, the national government began in 1981 the Metro Cebu Land Use and Transport Systems Study (MCLUTS). The Study suggested the applicable land use and transportation systems strategy for Metro Cebu (especially in Cebu, Mandaue, and Lapu Lapu cities). The Study proposed short-, medium-, and long-term policies, guidelines, programs, projects, schedules, and recommendations with 2000 as target year of completion. Simultaneously, under a World Bank technical assistance, the then Ministry of Public Works and Highways (MPWH) was also drafting the Regional Cities Development Project (RCDP) being proposed for bank financing.

[7] VECO covers Cebu City, Mandaue City, Consolacion town, Lilo-an Town, Talisay Town, Minglanilla Town, Naga Town, and San Fernando Town, while MECO covers Lapu Lapu City and Cordova Town.
[8] Under the BOO system, the private sector raises funds to build a facility, as well as operates and manages the site for a certain period of time – twenty-five years in this case. Ownership is not transferred to the public until the BOO investor recoups the original capital expended for the facility.
[9] The private sector operates cargo handling at the port.

Thus, MPWH prepared the infrastructure development for urban life such as urban services, public markets, garbage treatment and so on.

## 2.3 Urban Development Plan of Regional Cities for Sustainable Development: The Second Cycle (1987-2003)

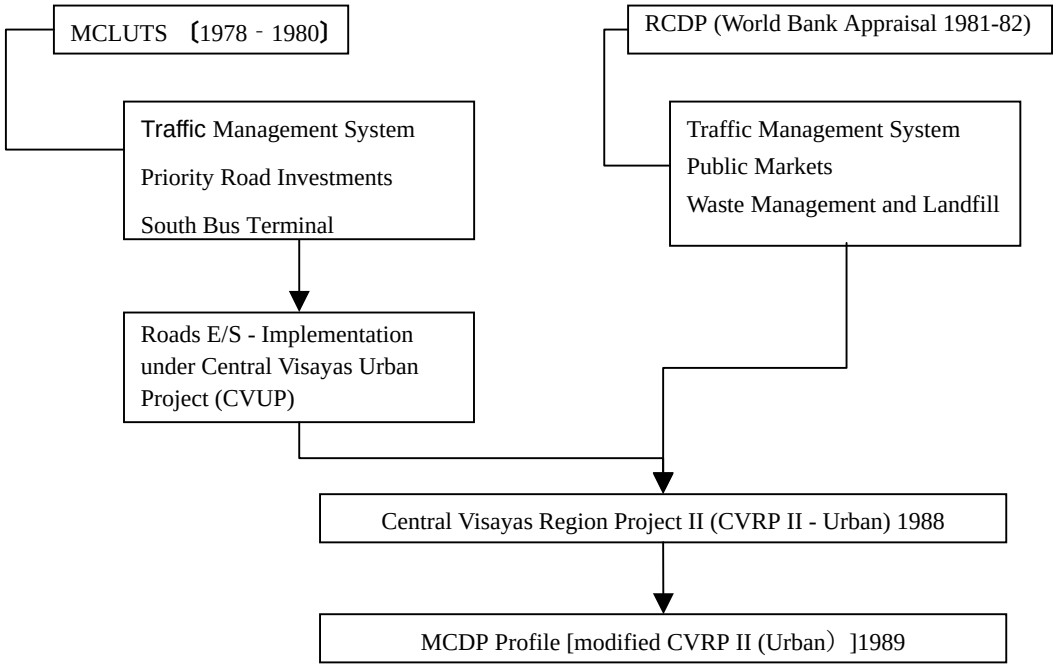
The period of the Second Cycle (1987-2003) situates the contribution of the regional growth center strategy to Metro Cebu's urbanization and its sustainable development. Plans and projects prepared during this period focused on how this primary growth center could achieve even higher and more efficient levels of urban services and functions. The Second Cycle may be divided into two periods: the first half pertaining to planning and project development activities (1987-1991) of investments and implementation programs for regional cities including those in Metro Cebu; the latter half covered actual financing and implementation (1992-2003) of these projects.

### 2.3.1 Formulation of Implementation Plan for Regional Cities Development Projects

Following through the preparation of development plans for World Bank-proposed projects for regional cities in the First Cycle, the national government continued to finalize actual financing and implementation throughout the Second Cycle. Concurrently, project proposals from the 15th Yen Loan and after the 16$^{th}$ Yen Loan plans were set out based on the Special Assistance for Project Formation (SAPROF) conducted by JBIC (then OECF). By 1991, the projects were consolidated in a Metro Cebu Medium-Term Plan was drafted.

The Plan embodied the Metro Cebu Development Projects (MCDP, as these were later called) and comprised several elements. It was based among others on the feasibility study for the *Central Visayas Regional Development Project II (Urban) or CVRP-II (Urban)* prepared in 1983 under a World Bank technical assistance. However, the urban transportation planning *framework* of this study draws predominantly on the previous *Metro Cebu Land Use and Transportation Study* (MCLUTS 1981) prepared during the First Cycle under an Australian Government technical assistance. Hence, *project* planning for urban infrastructure services such as urban arterial roads, public markets and waste management took off from the feasibility studies conducted by the then Ministry of Public Works and Highways (MPWH) for the World Bank's *Regional Cities Development Project* (RCDP). Subsequently, in the briefing document, *Metro Cebu Development Project: Profile of the Projects included in the15$^{th}$ Yen-loan (1989),* the various project components in MCLUTS and RCDP were consolidated into the MCDP. Figure 2-8 shows the evolution and relationships of MCDP and its projects.

**Figure 2-8: Evolution of Metro Cebu Development Projects In Relation to MCLUTS and RCDP**




The overriding objectives of *MCDP Profile* were - to support the development strategy of local government units (LGUs) for purposes of improving basic urban infrastructure and contribute positively towards decentralization efforts which the national government was continuously promoting. The MCDP's goals sought to - present solutions to rapid demographic over-concentration; expand and strengthen economic potentials of LGUs; respond to the needs for employment creation; and reinforce the Regional Development Council for Central Visayas (RDC 7), the regional line offices, and LGUs. Among the proposed projects it actually submitted were - the arterial road improvements in Metro Cebu, especially in Cebu and Mandaue cities (in the central business district); the traffic management system; and the South Bus Terminal --- all of which were considered in the 15$^{th}$ Yen Loan. To achieve efficient investment and more effective urban impact, JBIC dispatched a Study Team under a SAPROF facility to further investigate projects excluded from this first yen loan (December 1988~March 1989). The SAPROF concluded that the goals and objectives of investments for Metro Cebu project plans were aiming to develop the regional economy; ensure a fair distribution of benefits resulting from such development; improve residential and urban environment; attract export-oriented industries including tourism; and establish a regional trade and business center. The SAPROF also proposed a long-term infrastructure investment framework for Metro Cebu.

In 1991, the Metro Cebu Development Project Office updated its *Medium - Term Plan for*

*Development Projects of Metro Cebu* consisting among others of an implementation program for project investments from 1991 and 1999 (Stages 1 through 5). This document suggests that in order to promote Metro Cebu as an industrial growth area by attracting export-oriented industries and enhancing its commercial and business functions as a primary regional growth center. The improvement of urban road network was its first priority. The updated Plan also prioritized the urban road network based on three arterial highways running north and south connected to the grid sub-network system. From this planned network, the Plan assumed that the linear expansion north-south urban corridor development pattern would be achieved. The investments included an urban infrastructure development plan for Metro Cebu particularly for the cities of Cebu, Mandaue, and Lapu-Lapu and were implemented under the 16th yen loan (1990). These included 55 km of urban arterial roads, two public markets, a north bus terminal, and waste management system with a Landfill Project in southern Cebu City --- both of which are still operational. Also during this first half of the Second Cycle (1990), the MCDPO submitted a yen loan application for the Phase III of the Metro Cebu Development Project (MCDP III) under the *E/S*[10] *Package loan* --- the detailed designs and feasibility studies of which were completed in 1993.

### 2.3.2 Implementation and Evaluation of Regional Cities Development Projects

The table below lists the projects which were either implemented or in operation during the second period of the Second Cycle.

**Table 2-3: List of Projects During the Second Period of the Second Cycle**

| No. | Name of Project | Estimated Years of Planning and Implementation | Actual Years of Operation |
|---|---|---|---|
| 1 | Metro Cebu Development Project (1) | 1981 ~ 92 | 1992～1995 |
| 2 | Metro Cebu Development Project (2) | 1981 ~ 94 | 1994～1998 |
| 3 | Metro Cebu Development Project (3I) | 1989 ~ 2003 | 2004 (scheduled) |
| 4 | Mactan Cebu International Airport | 1982 ~ 1997 | 1996 |
| 5 | Second Mandaue-Mactan Bridge | 1990 ~ 1998 | 1999 |
| 6 | Expansion of Mactan Export Processing Zone, MEZ-2, New Building Project of New Cebu Township, IT Park | Unknown | Unknown |
| 7 | Water Supply Project（Early Works、Main Works） | 1990 | 1997 |
| 8 | Mananga Water Supply Project (Phase 1) | 1990 | 1999 |
| 9 | Gas Turbine Project（LBGT） | Unknown | 1991 |
| 10 | Cebu Power Plant (II) Rehabilitation | Unknown | 1992 |
| 11 | Layte – Cebu HVAC Transmission Project | 1997 | 1997 |

N.B.: *Year of planning and implementation* includes the year of applicable infrastructure development cited in the oldest plan or study report available.

At the time of survey in 2003, the projects below would make positive contribution to the urban development of regional cities under discussion.

[10] E/S: Engineering Service

**Table 2-4: List of Projects Evaluated with Positive Contribution**

| No. | Project Name | Operation Year |
|---|---|---|
| 1 | Mananga Water Supply Project (Phase 2) | 1999 |
| 2 | Carmen Water Supply Project | Interrupted |
| 3 | Buhisan Dam Rehabilitation Project | 2004 |
| 4 | Lusaran Dam Construction Project | Unknown |
| 5 | Quiot-Pardo 100MVA Substation and Power Line Project | 2004 |
| 6 | Leyte-Cebu HVAC Power Line Project (Stage 2) | 2005 |
| 7 | Cebu-Mactan Power Line Project | 2005 |

**(1) Relevance**

During the Second Cycle, the Metro Cebu Development Projects (MCDP I, II and III) comprised components such as new construction and expansion of arterial highways; development of transport management systems; new construction of the North and South bus terminals and public markets; development of waste management and landfill systems. The implementation of these projects intended to alleviate deterioration of urban life services such as traffic congestion and waste collection---along with the population increase, intensive land use development, growth of the urban market economy, and creeping deterioration in the quality of urban life and services. These public investments also aimed at improving efficiencies in urban functions which would trigger investments. Under the Mactan (Cebu) International Airport Development Project, the new construction of a terminal building, renovation of the existing buildings, extension and renovation of runways and taxiways were implemented to ensure safety and meet increasing demand in passengers and freight traffic. The Second Mandaue-Mactan Bridge was constructed to connect and establish safe transport mode between Cebu and Mactan Islands as well as lessen inter-city traffic congestion problems. At the same time, infrastructure improvement projects such as expansion of Mactan export processing zone, facility improvement for power and water supply were also being undertaken. With continuing population concentration in Metro Cebu, it is thus considered appropriate to have implemented investment decisions to deal with problems of urbanization and, during the early stages, prepare the development foundations of urban infrastructure for its sustainable growth.

**Photo 2-3 MCDP (I) Cebu South Bus Terminal**

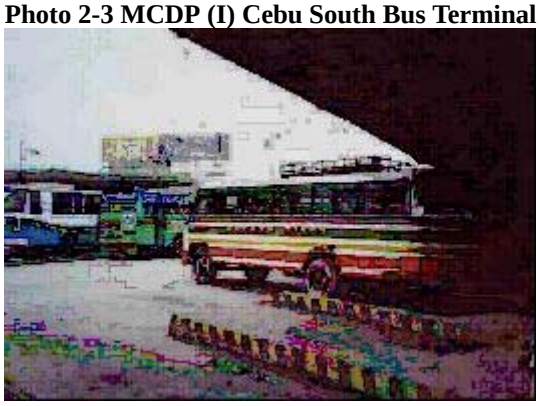
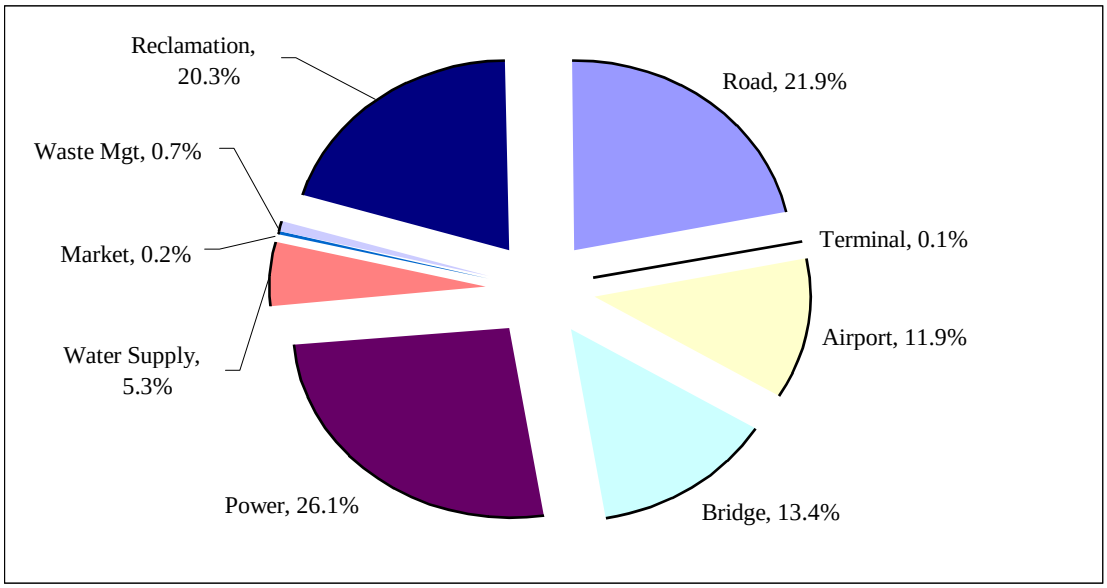


**Photo 2-4 Mactan (Cebu) International Airport Parking**

Figure 2-9 shows the sectoral shares of public investments (mostly using the estimated amount) based on the best possible data available for the study. The Leyte-Cebu HAVC Power-line Project (I) was included in the analysis even though the project site is not in Metro Cebu because the project greatly affects the Metro Cebu's power supply. Aside from the largest share of the power sector due to the substantial project scale (26.1%), sectoral shares of projects in land transportation and traffic sector such as on roads (21.9%), on bridges (13.4%) were also relatively high in proportion. On the other hand, investments for the development of public markets and waste management system were relatively low (0.2% and 0.7% respectably). The SAPROF Report confirmed that Metro Cebu's development pattern was transformed from a circular pattern with its nucleus in a central business district suggested in the MCLUTS to a linear pattern stretching north to south due to its geographical limitation. Priority investments on land transportation and traffic sector were thus recognized as appropriate policy instruments considering that transportation improvement would positively contribute in decongesting the urban city core, on the one hand, and in expanding regional growth to other the peripheral regional cities in the third cycle, on the other.

**Figure 2-9: Sectoral Share of Investments** (Current Prices in Japanese Yen)




(Source) JBIC and Executing Agencies (DPWH、MCWD, Etc.)
(Note) The Yen Loan Project was calculated based on the project cost at the time of appraisal, and the other was calculated based on the performance value. Exchange rate was applied to the rate at the time of project completion.

The Cebu City South Reclamation Project (1995, 20th Yen Credit) in southern Metro Cebu was planned to generate employment opportunities and accelerate economic development expected from the development and expansion of MEZ 1. Resolving problems of increasing urban unemployment and population over concentration due to immigration to Metro Cebu was also an intended objective of this project. However, at the time of this survey for this impact study, its construction was still underway and industries have not yet moved in. With the economic upbeat in the first half of the 1990s when the occupancy rate of MEZ-1 rose rapidly, the project was deemed appropriate at the time of investment decision. But by the time of appraisal, its competitive edge and momentum as an investment location might have diminished. On hindsight, while evaluating its appropriateness would still be premature at this stage, nonetheless it would seem that with private financing of industrial complexes in Metro Cebu in the 1990s, other than a yen-loan resource might have been better explored before according priority to the project.

The detailed design of projects proposed under the SAPROF study is shown on Table 2-5. The MCDP and other projects funded by non-yen loans are indicated with O on the appropriate columns. The estimated years of operation of the projects at the time of SAPROF study are also indicated. The results of the reviews indicated some projects were not implemented. For example, the road and sewage maintenance, MCWD Project Program II Project Phase II, Mabolo Cebu Urban Redevelopment Project. According to stakeholders, projects which were

not implemented were; those under regional agencies or local governments which could not muster sufficient support from national government; those with insufficient peso counterpart or investment cover from agencies or LGUs; and/or; those which did not have either a competitive edge or were not economically feasible or financially viable. However, the insufficient management (and absence) of Metro Cebu's drainage system causes perennial flooding problems during rainy months. In addition, chronic water supply shortage and its concomitant high cost to consumers are also observed. Informal dwellers continue to dump waste and garbage in Metro Cebu's creeks and rivers causing increased maintenance costs for de-clogging over-capacity drainage system, flood protection, and water supply. During the project prioritization and development in the Second Cycle, regional agencies and city governments should have had included urban re-development and social infrastructure.

**Photo 2-5 A road in Cebu city**

Typical street scene in Cebu city after the rain. Because of inefficient drainage systems puddles appears shortly after the rain.

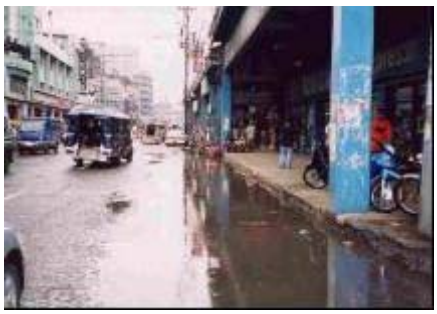


**Photo 2-6: MCDP (III) Cebu South Coastal Road Project Viaduct Section, Segment 3A**

Construction site of viaduct section with slum areas in the background

**Table 2-5: 15th Yen Loan Projects and Suggested Projects Based on 1989 SAPROF Survey and Status**

| Items | Estimated Year of Operation [1] | MCDP 1 | MCDP 2 | MCDP 3 | Other Financing | Not Implemented (NI) /Unknown |
|---|---|---|---|---|---|---|
| Projects for the 15th Loan | | | | | | |
| Metro Cebu Road Improvement | 1994 | ○ | | | | |
| Traffic Control System | 1994 | ○ | | | | |
| South Bus Terminal | 1991 | ○ | | | | |
| Suggested Projects based on SAPROF Survey | | | | | | |
| Metro Cebu Road Improvement (Other national and local roads) | 1994 | | ○ | | | |
| Road and Drainage Maintenance | 1994 | | | | | Partially implemented |
| Metro Cebu Waste Management | 1994 | | ○ | | | |
| Mandaue and Talisay Public Markets | 1993 | | ○ | | | |
| Cebu North Bus Terminal | 1993 | | ○ | | | |
| Local Government Units Tax Levy Enhancement | 1992 | | | | | Unknown |
| Mandaue Coastal Road (Causeway) | 1994 | | ○ | | | |
| Metro Cebu Tourism Development Project | 1994 | | | | | Unknown |
| Consolacion Resource Development project | 1994 | | | | | Unknown |
| Construction Management Technical Assistance | | | | | | ○ |
| MCWD Program II Project Phase II | 1996 | | | | | NI |
| Mabolo Cebu Urban Redevelopment | 1995 | | | | | NI |
| Cebu South Coastal Road | 1996 | | | ○ | | |
| Cebu City South Reclamation | 1997 | | | ○ | | |
| Metro Cebu Flood Prevention | 1998 | | | | | Unknown |
| Cebu Sewerage Maintenance and Treatment Facility | 1998 | | | | | Unknown |
| Cebu Food Processing Complex | 1996 | | | | | Unknown |
| Hillside Bypass | 1999 | | | | | NI |
| 2nd (Mandaue-Mactan) Bridge | 1999 | | | | 1995; 1996 (19th and 21st yen-loan) | |
| Metro Cebu Public (Light) Rail Transit System | 1999 | | | | | NI |
| Lahug Airport Relocation and Redevelopment of Vacant Lot | 1999 | | | | 1995; private sector | |

[1] JBIC SAPROF team conducted a survey of projects proposed for the 16th yen loan (1989); thus the year of operations for the 15th yen loan projects coincided with the year time of the appraisal. [2] F/S - Feasibility Study

**(2) Efficiency**

Table 2-6 below summarizes the review of projects implemented during the Second Cycle in terms of their operational years, estimated and actual costs. Since the indicative parameters of the various projects differ, a simple lateral comparison was not possible. For example, the urban traffic system recommended in the MCLUTs was programmed for implementation from 1986 to 1990 but in reality it was completed in 1995 --- which means some 5 to 10 years of delay. In addition to delays in staging project implementation, right-of-way acquisition (ROWA) often took an unexpectedly long time which invariably also became one of the main causes for project delays. With regard to projects included in MCDP (2), a time-line comparison from SAPROF study to implementation indicated a four-year delay. The identified urban road projects which were delayed for four years also encountered problems in ROWA. Such similar problems occurred in MCDP (1) (2) mainly because there were insufficient efforts, absence of prior information, and limited coordination with regional agencies and local governments on their specific roles, functions, and resource-contribution for ROWA activities. The Cebu City South Reclamation and Cebu South Coastal Road (MCDP 3) was still being implemented in November 2003. Compared with the programmed schedule in SAPROF, significant delays were noted primarily due to national government approval process for their yen-loan financing. However, as for the relocation of residents, not only the involvement of residents and stakeholders, but that of local government such as Talisay City is observed.

There were some components in the MCDP (2) which appeared to have substantially exceeded the cost estimate at the time of appraisal, mainly due to the foreign exchange differentials and increases in cost of right-of-way acquisitions. Since the estimated cost of each component of this project is not as high as the other projects, the amount of overruns would appear insignificant.

**Table 2-6: Project Comparison by Sector, Cost, and Year of Operation**

| Project / Component | Sector | Year of Start to Operation | | | | Project Cost | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Original | | Actual | Gap (Year) | Original (a) (Million Yen) | | Actual (b) (Million Yen) | Gap (Million Yen) | (b)/(a) (%) |
| MCDP (1) Roads | Road | MCLUTS | 86-90 | 1995 | 9 | Appraisal | 2,063 (Yen Loan Only) | 2,027 (Yen Loan Only) | 36 | 98.2 |
| MCDP (1) Traffic Control | Road | MCLUTS | 1986 | 1995 | 9 | | | | | |
| MCDP (1) South Bus Terminal | Land transportation | Profile | 1992 | 1992 | 0 | | | | | |
| MCDP (2) Roads | Road | SAPROF | 1994 | 1999 | 5 | Appraisal | 3,329 | 3,583 | △254 | 107.6 |
| MCDP (2) North Bus Terminal | Land transportation | SAPROF | 1993 | 1994 | 1 | Appraisal | 56 | 69 | △13 | 123.2 |
| MCDP (2) Mandaue Public Market | Construction | SAPROF | 1993 | 1996 | 3 | Appraisal | 136 | 241 | △105 | 177.2 |
| MCDP (2) Talisay Public Market | Construction | SAPROF | 1993 | 1994 | 1 | Appraisal | 42 | 73 | △31 | 173.8 |
| MCDP (2) Waste Management System | Waste | SAPROF | 1994 | 1997 | 3 | Appraisal | 669 | 1,246 | △577 | 186.2 |
| MCDP (3) Cebu City South Reclamation | Industry | SAPROF | 1997 | 2004 (Tentative) | 7 | Appraisal | 16,420 | Under construction | – | – |
| MCDP (3) Cebu South Coastal Road | Road | SAPROF | 1996 | 2004 (Tentative) | 8 | Appraisal | 24,521 | Under construction | – | – |
| 2nd Mandaue-Mactan Bridge Project | Bridge | SAPROF | 1999 | 1999 | 0 | Appraisal | 9,163 | 15,565 | △6,402 | 169.8 |
| Mactan (Cebu) International Airport Development Project | Airport | Appraisal | 1995 | 1996 | 1 | Appraisal | 14,387 | 12,835 | 1,552 | 89.2 |

N.B. 1) *Year in Service* uses the year when the particular infrastructure project was identified, proposed, or programmed for investment in the oldest plan or study report available. The *Year of Operation* for MCDP 2 road projects uses the year of issuance of Certificate of Substantial Completion; for the Mactan (Cebu) International Airport, the year of partial opening of its international and domestic airline services is used.
2) Project cost uses the estimate at the time of appraisal.

### (3) Effectiveness

To attain sustainable regional growth and urban development which can provide high level of quality urban services for primary regional cities, projects such as development of urban traffic systems and road network, public markets, waste management systems, and water/electric power supply were financed and implemented in Metro Cebu.

The urban road network under the MCDP (1, 2) is distributed throughout Metro Cebu and rehabilitated and improved the north-south central arterial axis running through Cebu and Mandaue

cities. In addition, new lateral roads were widened and were more efficiently connected to this main artery; new traffic lights at major intersections were installed. The total urban road improvement system made positive contribution to the better, smoother traffic flow on both directions. Moreover, the newly constructed Mandaue Causeway under MCDP (2), functioned as a parallel by-pass road to decongest traffic volume along the central urban arterial road. Both the Mandaue Causeway and the Cebu south coastal road --- now currently being constructed under the MCDP (3) plan --- establish the alternative urban road transport to form Metro Cebu's second longitudinal arterial corridor.

**Photo 2-7: Traffic light**
Intersection of General Maxilom Avenue and M.J. Cuenco in Cebu City. The traffic light was installed under MDCP (I).

**Photo 2-8: Second Mandaue-Mactan Bridge**

The Second Mandaue-Mactan Bridge which connects the main island of Cebu with Mactan Island ---where the International Airport and special economic zones are located --- was completed in 1999. In the same year, traffic volume along this second bridge was 18,000 cars daily, and together with the first bridge, combined with a 40% increase of total bridge traffic volume of 46,000 cars daily.

**Table 2-7: Changes in Traffic Volume of Old Bridge and the Second Mandaue- Mactan Bridge**

| Date of Traffic Estimation and Actual Survey | The First Bridge | | The Second Bridge | | Total Car/Day | |
|---|---|---|---|---|---|---|
| | Estimated | Actual | Estimated | Actual | Estimated | Actual |
| 1992 Appraisal | 19,106 | - | - | - | 19,106 | - |
| 1998 | 29,208 | - | - | - | 29,208 | - |
| 1999 Completion | 9,851 | 27,764 | 20,817 | 18,140 | 30,669 | 45,904 |

Source: JBIC Post-Project Completion Evaluation Report

The opening of the second bridge solved chronic urban traffic congestion problems of the first bridge by shortening bridge crossing time and improving time predictability. These twin benefits resulted in better, more efficient flow of goods and people, which eventually enhanced economic growth. Bus terminals were placed at both northern and southern ends of Metro Cebu to reduce transport flows of bigger public conveyances in inner city traffic. The South Bus Terminal which was built in 1992 increased its service volume from 205 in 1998 to over 300 in November 2003. Retail concessionaires in the terminal also increased from 34 in 1988 to little less than 90 by the same year. Passenger volume was estimated at about 18,000 daily in November 2003. The North Bus Terminal had suffered slightly from its inconvenient location and access to other commuter destinations and transport modes. However, passenger satisfaction appeared to have improved with a 90% achievement of the initial target in 2000 previously during the 1989 JBIC appraisal. Furthermore, its operation has been showing signs of positive fiscal health.

**Table 2-8: Changes in service volume and resident shops in Cebu South Bus Terminal**

| Particulars | 1988 | 1993 | 2001 | 2003 |
|---|---|---|---|---|
| Daily service volume | 205 | 250 | 335 | 300 + |
| Number of shops | 34 | 50 | 95 | 90 - |

Source: Interview results, JBIC Post Project Completion Report

The public markets in Mandaue and Talisay cities are expecting improvements in their sanitation facilities, reduction of surrounding traffic congestion, and revenue performances. The markets are located at the northern and southern ends of Metro Cebu's central business district --- evidently intended to improve consumer-trader market flows. Although the Mandaue market burned down in 2001, transaction volumes still have been sustained and remained active at the present site. Together with the bustling Talisay market, both contribute in improving urban community services. Due to its location, this market however, is one of the causes of traffic congestion especially with the recent proclamation of Talisay as a city. Plans for moving their locations and new construction are being prepared for both markets.

The waste management system includes the Inayawan sanitary landfill in Cebu City. Its 80% garbage collection rate in its coverage contributes to the improvement of urban quality of life of the residents; its efficiency is reduced by problems of insufficient soil cover and other sustaining operations.

**Photo 2-9 MCDP (2)**
Inayawan sanitary landfill

**Photo 2-10: MCDP (2)**
Talisay City Tabunok Public Market.

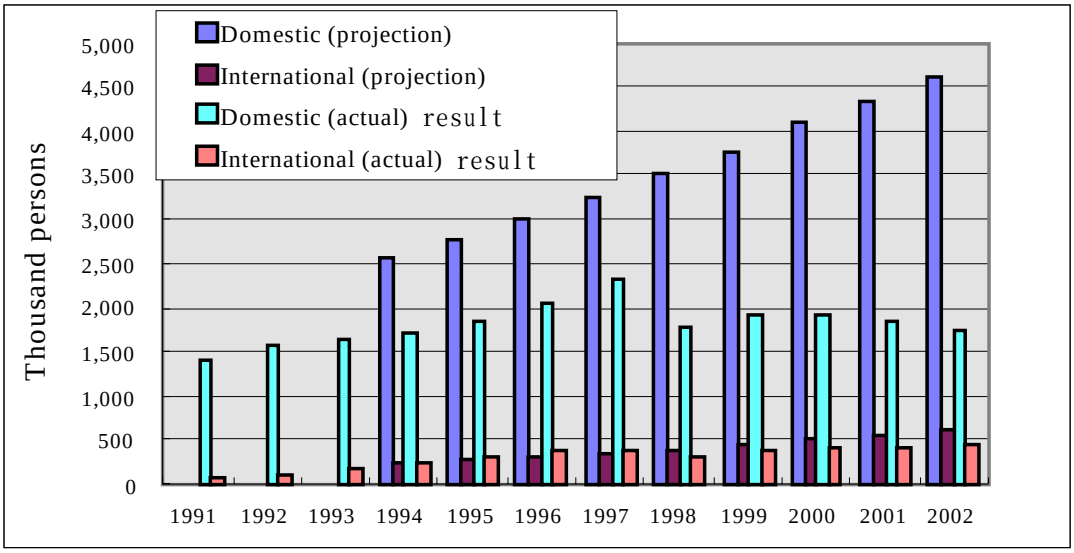
During the Second Cycle, several infrastructure utility projects were also completed - the Mananga Water Supply Project (I) and other water supply projects as well as the Leyte-Cebu HVAC Power Line Project (I) and Electrical Power Station Rehabilitation Project. In 2002, the daily average production rate of Metropolitan Cebu Water District (MCWD) was 14,000,000 $m^3$ while Managa Water Supply Project (Phase 1) completed in 1997 produces daily average of 3.300,000 $m^3$. MCWD's overall water supply capability greatly increased.

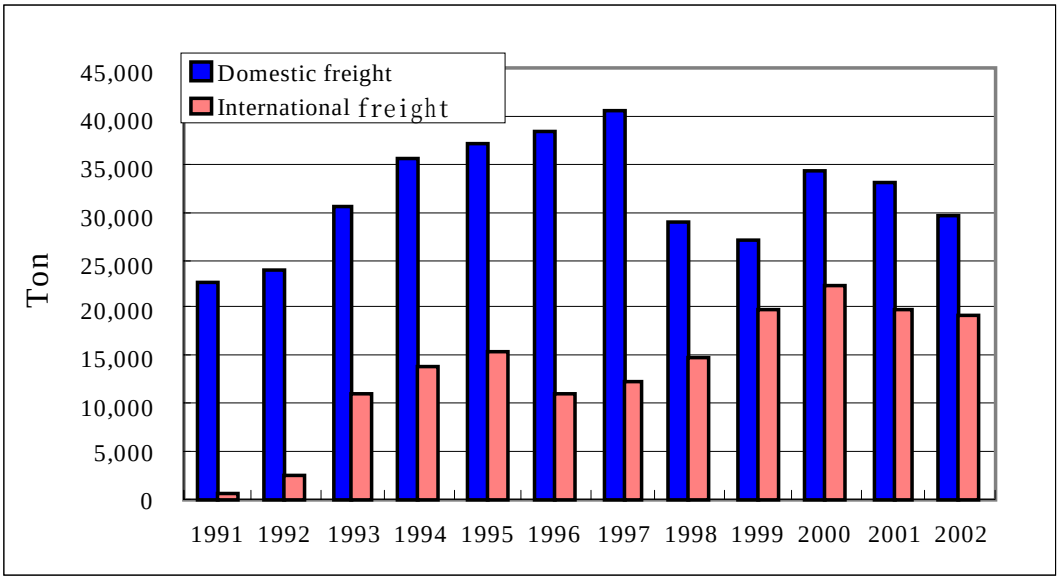
On the other, with its completion and operations in 1997, the transmission capacity of the Leyte-Cebu HAVC Power Line Project (I) is 200MW (actual base 180MW) and accounts for a high supply proportion of the entire Cebu-Negros-Panay power cycle capacity of 732MW (October 15, 2003).

Several industrial economic zones were also operational during the Second Cycle --- the Mactan Economic Zone-1 expansion; the Mactan Economic Zone-2 (43 resident industries in September 2003); the Cebu Light Industry and Science Park (2 locators); the New Cebu Township Economic Zone (2 locators); the Asiatown IT Park (2 locators). In 1997, the Cebu City South Reclamation Project started its construction.

The following Figure 2-9 shows the changes in passenger and freight volume at the Mactan (Cebu) International Airport. In 1997, the series of cancellations of direct flights by airline companies to Hong Kong and Kansai Airports gravely affected volumes of incoming passengers and cargo that were on the rise, and were way below their estimated values; both revenue sources still languish from the negative impact of this unexpected Asian economic downturn.

**Figure 2-10: Changes in Passengers and Freight Volume, Mactan (Cebu) International Airport**




Source: Mactan (Cebu) International Airport Authority (MCIAA).
N.B.: Projection is based on the 1995 appraisal documents as follows: 339,000 tons for domestic freight and 14,600 tons for international freight. The 2000 projections were --- 530,000 tons and 36,100 tons respectively for domestic and international freights.

As previously stated, while targets-achievement and benefits-impact of some projects were not fully

realized due to a number of inter-related factors including economic and financial force majeure conditions, generally speaking, the successive infrastructure project investments in Metro Cebu led to its higher levels of urban development with more diversified, sophisticated functions. Thus satisfactory progress on the development of this primary growth center is observable during this Second Cycle.

**(4) Impact**

The evaluation results shared by the beneficiary population converged on overall positive impressions of Metro Cebu's urban transport network development. There is unanimous perception that the new transport network under MCDP (3) have contributed immensely in traffic decongestion, shorter travel time and reduced transport cost, and bigger, greater accessibility of the people to and from their destinations. As a whole, the beneficiary consensus is that improvements in Metro Cebu's traffic conditions had contributed to a much, better urban traffic. At the time of the impact survey, the planned Cebu South Coastal Road was still under construction; however it is anticipated more positive reactions are expected from the urban population with its full opening.

**Photo 2-11: MCDP (3) Cebu City South Reclamation Project**

**Photo 2-12: MCDP (3) Cebu South Coastal Road Project**

Wave dissipating embankment of Causeway section

From the impact survey results on road projects under MCDP (I), most of the interviewed people did not perceive any negative environmental impact. However, in terms of social impact, there were some adverse comments from some people who re-located their temporary dwellings (built on the

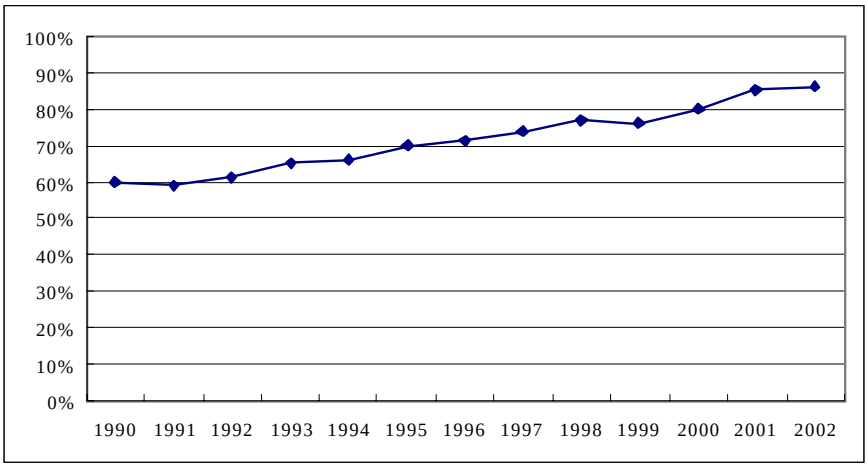
streets) and felt they did not receive sufficient compensation.[11] In the present implementation of a portion of the Cebu south coastal road in Talisay City (MCDP 3), the implementing agency conducted previous consultations with affected residents on similar issues and agreed on amounts of compensation and transfer activities.

The construction of new urban services such as bus terminals and public markets contributed positively in increasing the revenues and profitability and in strengthening management capabilities of local governments. At the time of the November 2003 survey, the cities of Mandaue and Talisay were already planning the relocation and new construction of their new public markets. This is reflective of their positive evaluation of dual impacts of markets on LGU revenues and cash position and profitability on the one hand, and better urban services for its residents, on the other. For its waste management system, Cebu City in turn is addressing problems of increasing volume and management cost by planning to offer public social education while simultaneously studying increased rates in the treatment of company wastes.

Figures 2-11 and 2-12 show the electrification and water supply distribution rates of the Visayas Electric Distribution Company (VECO) and the Metro Cebu 'Water District (MCWD) for its Metro Cebu franchise district --- where throughout the 1990s, electrification and water supply rapidly increased. Despite this upward trend, however, the electricity demand and supply gap is still big with a very low distribution rate at barely 50% (Figure 2-12)

[11] Based on interviews during this study, resident relocation was implemented during the construction of a section of Imus - MJ.Cuenco link (MCDP I) which was occupied by informal dwellers. The MCDPO (regional office) with cooperation from Cebu City's Urban Poor Committee, extended appropriate assistance by providing transport, water and power supply to remove negative impressions on the new road construction and expansion. The MCDPO also relocated their makeshift hawkers' market on the street to a smaller but more permanent roadside market on the same area but without obstructing traffic flow and pedestrian sidewalks.

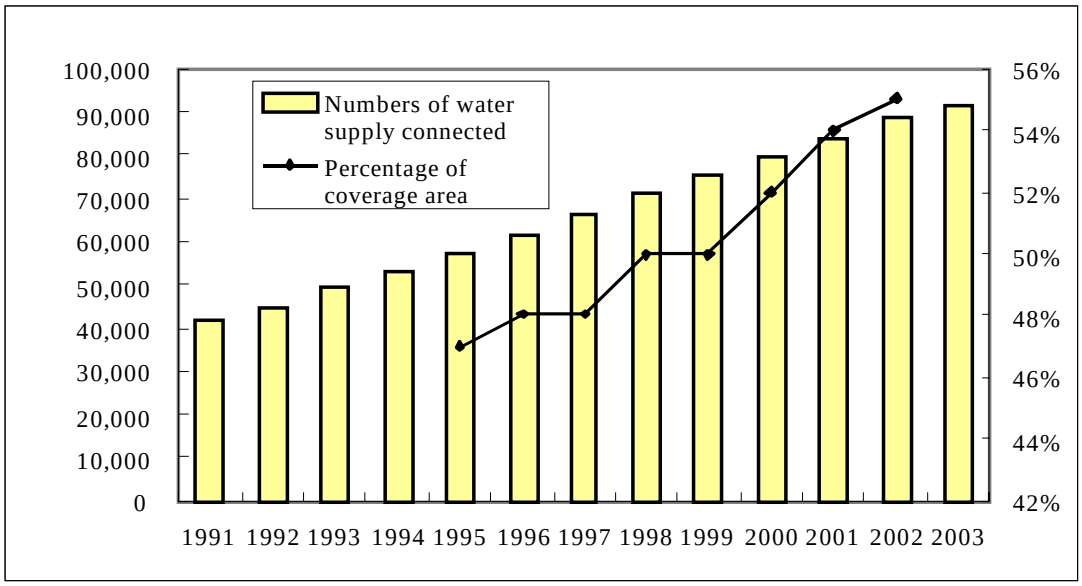
**Figure 2-11: Metro Cebu Electrification Rate in VECO Franchise Area (In %)**




Source: VECO

N.B.: The household electrification rate in the coverage area by VECO including the cities of Cebu, Mandaue, Talisay and the towns of Consolacion, Lilo-an, Talisay, Minglanilla, Naga, and San Fernando.

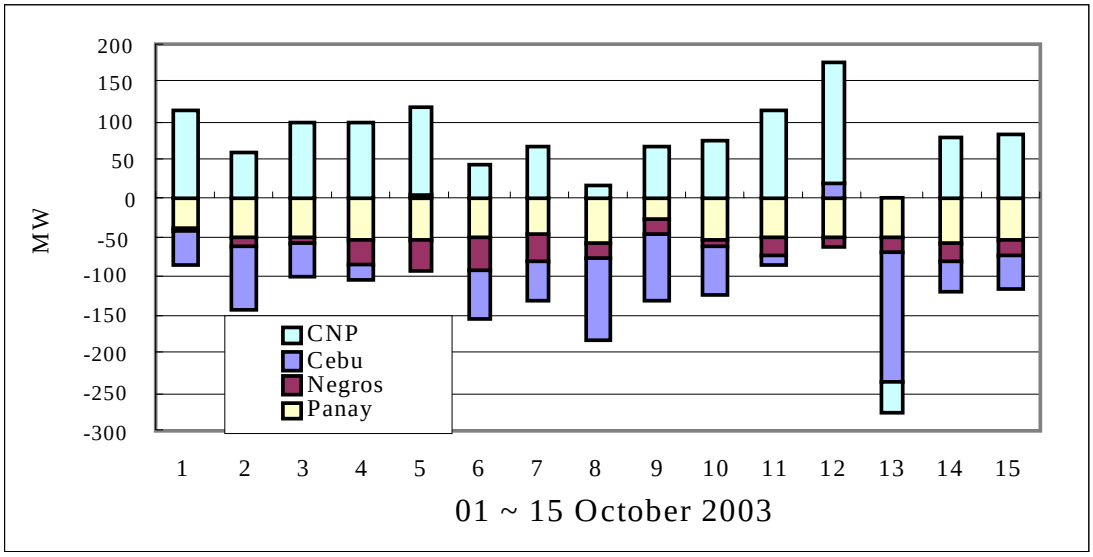
**Figure 2-12: Number of Water Supply Connections (Left Axis) and Percentage of Coverage Area (Right Axis)**




Source: MCWD

N.B. The number of water supply connections and the percentage of MCWD coverage area includes (the cities of Cebu, Lapu-lapu、Mandaue, and Talisay and the towns of Compostela, Consolacion, Cordova, and Lilo-an).

**Figure 2-13: Power Supply and Demand in Cebu-Negros-Panay (CNP) Network (Service Capacity and Peak Load)**




Source: Transco, October 1 to 15, 2003
NB: This figure shows the situation of total power excess and deficiency and power situation in the CNP (Cebu-Negros-Panay) system. CNP power insufficiency is also evident in each province. Power supply along the transmission line between Cebu-Leyte compensates for energy insufficiency. However, when power generation is stopped during plant system maintenance, etc., shortage occurs in the whole system such as on October 13.

The construction of the new Cebu (Mactan) International Airport made it possible to handle big capacity passenger planes. Existing buildings were renovated and new passenger terminal and facilities were built; the runway was extended from 2,900m to 3,100m --- all under a yen-loan financing. The impact of this development project was highly evaluated because the airport now functions as an international gateway of the entire Philippines and even within the Asia Pacific region. Furthermore, increase in tourism development and revenues, and in the production of export items from the economic zone is verified through actual numbers. However, as described earlier, the Asian currency crisis and resulting cancellation of direct routes to Hong Kong or Kansai stagnated passenger volume and revenue performance.

From a policy perspective of evaluating the strategy of promoting a primary regional growth center, only the airport appears to have achieved below-par performance results after several years of completion. And for the most part, this is largely induced by external factors which affected its profitability, i.e. inability of the airport to achieve revenue and volume targets and meet increasing demand due to reduced international flights arising from the Asian currency crisis and SARS epidemic. In contrast, the impacts of power and water supply have shown to have been well received based on the sustained increases in subscriber growth and utilization rates.

### (5) Sustainability

The following section discusses the performance of four cities (Cebu. Talisay, Mandaue, and Lapu-Lapu) in terms of their per capita tax and other incomes (excluding service and grant in-flows), their shares in Internal Revenue Allotment (IRA), real property tax, business tax, as well as actual levels of their maintenance and operating costs. Except for Cebu City, the two other cities exhibit a high growth rate of 4 - 6% in their total income sources for the various periods under study.

**Figure 2-14: Cebu City: Tax Income・Miscellaneous Income Per Capita, Maintenance and Other Operating Expenses (MOOE) 1995 / Pesos**

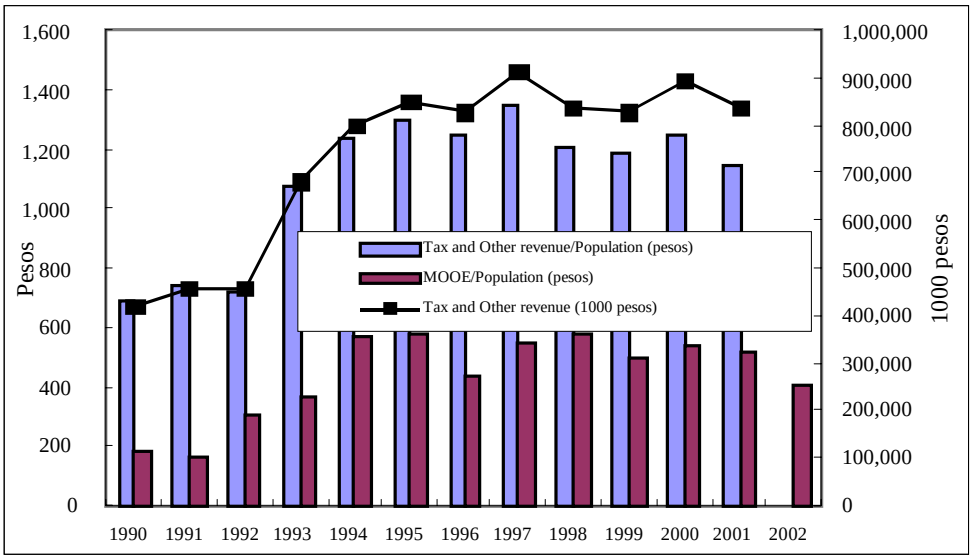



**Figure 2-15: Talisay City: Tax and Miscellaneous Revenue Per Capita 1995 In Pesos**

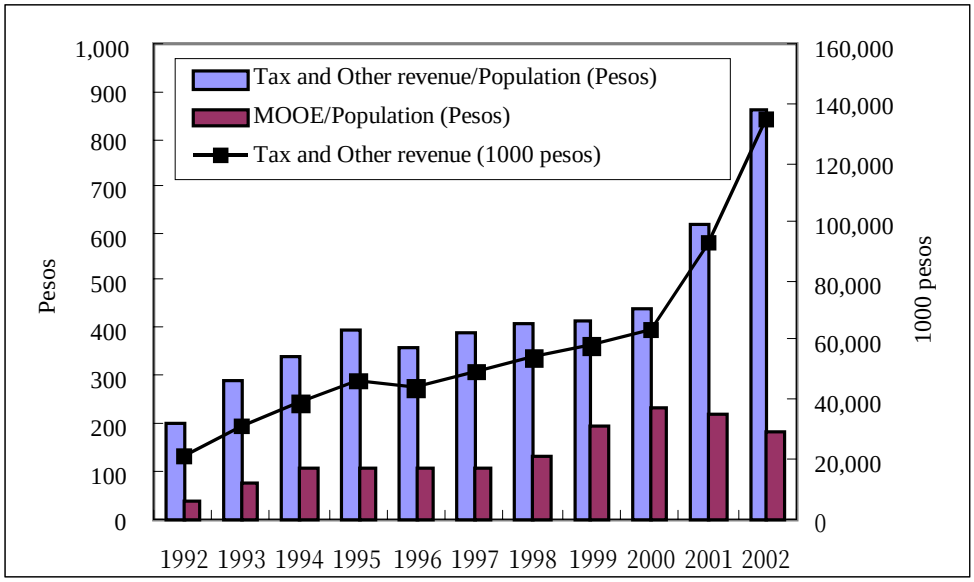


**Figure 2-16: Mandaue City: Tax and Miscellaneous Revenue Per Capita 1995/Pesos**

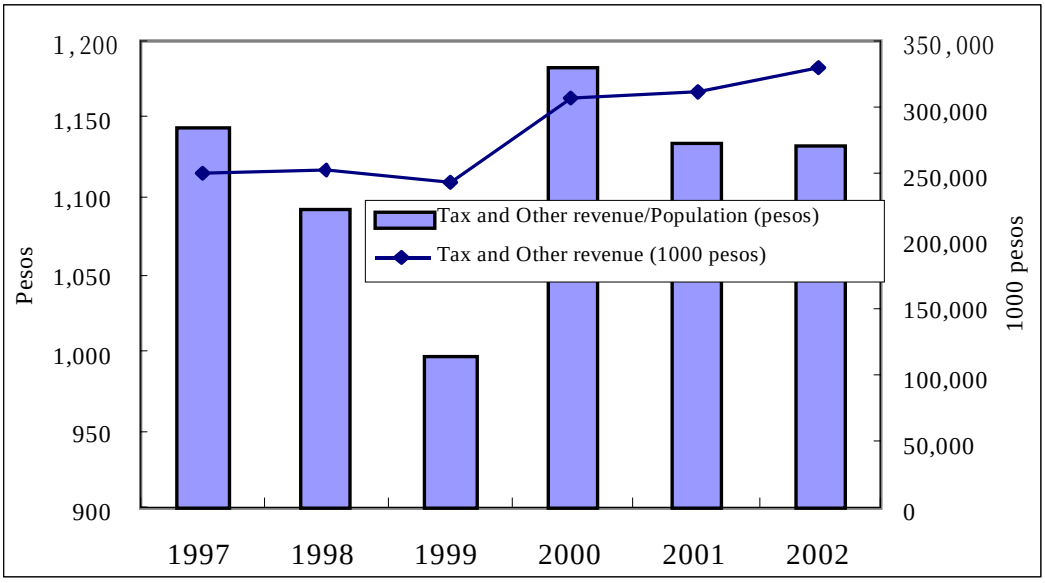
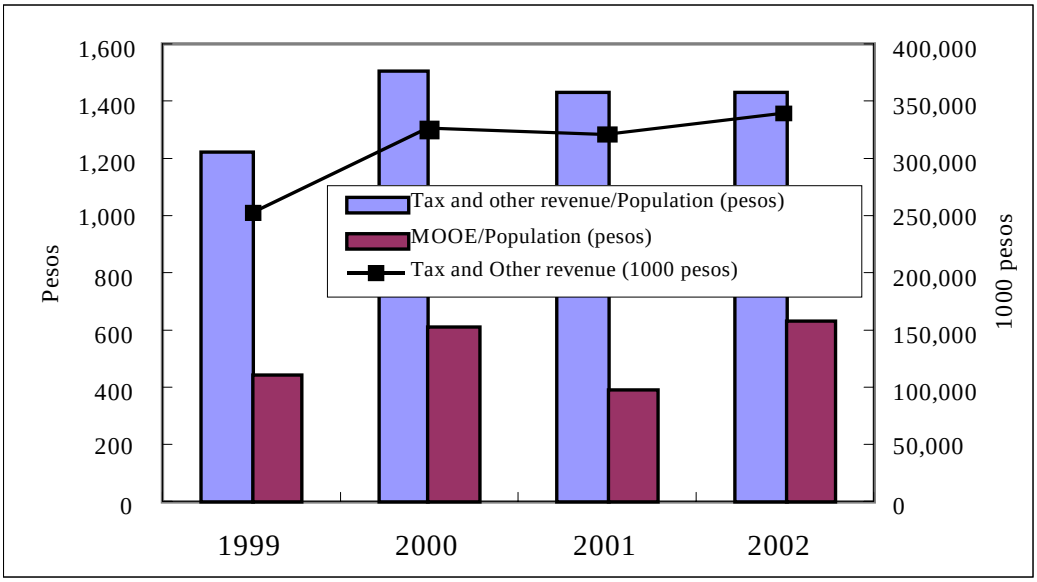



**Figure 2-17: Lapu-Lapu City: Tax and Miscellaneous revenue per capita; MOOE 1995/ Pesos**




Source: LGUs
NB: Tax and Miscellaneous Revenues of Cebu City do not include debt service and grant in-flows including inter-fund transfer/inter-government transfer such as Special Education Fund. In case of Mandaue City, tax and miscellaneous revenue also do not include debt service and grant in-flows.

Each project category in a city would be under several forms of Operational Management. Urban roads and bridges are maintained either by District Engineering Offices of Department of Public Works and Highways (DPWH) or the Departments of Engineering and Public Works (DEPW) of cities. Traffic operations and maintenance including signals are maintained by traffic management offices of cities. Other investments have different operations and management schemes. For example, the South Bus Terminal is owned and operated by the Cebu provincial government while the North

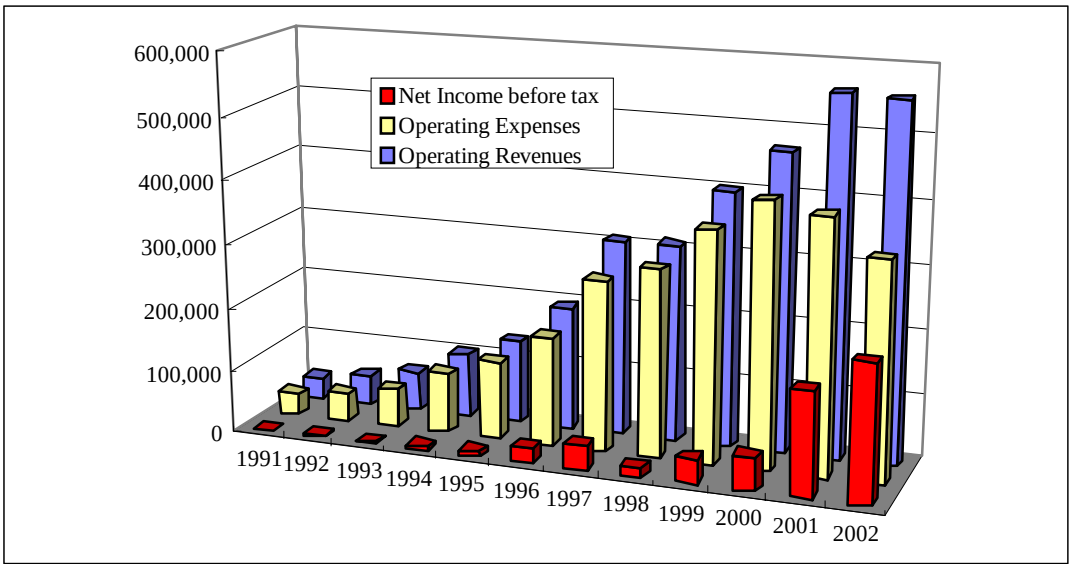
Bus Terminal is operated by a non-government corporation --- the Cebu Provincial Bus Operators –Multiple Purpose Cooperative (CPBO-MPC) under a management contract with Cebu City which in turn leases the facility from its owner, Mandaue City.

For the Second Mandaue-Mactan Bridge, a Mactan – Cebu Bridge Management Committee was organized by the Regional Development Council (RDC) of Region VII/Central Visayas. It is responsible for planning and coordinating its development, operation, and maintenance with other agencies; it has managed to raise funds from both private and public sectors to defray roadside lighting costs. Physical maintenance however is directly under DPWH Region 7 Office which also functions as its secretariat.

The Mactan-Cebu International Airport Authority (MCIAA) is in charge of the operation and management of the international airport. At the time of the field study survey, the authority was repaving a portion of damaged runway surface. Figure 2-17 shows that revenues of the airport have steadily grown with increasing pre-tax profits due to its cost reduction measures over the last three years.

In summary, each of these completed projects are being managed and operated by specific agencies --- thus ensuring their sustainability after their completion.

**Figure 2-18: Changes in P&L of MCIAA**




Source: MCIAA

### 2.3.3 Second Cycle Investment Preparations for the Third Cycle

During the Second Cycle period, investments policies and implementation programs of projects were being prepared to follow through and carry over the on-going projects to the Third Cycle: the period when growth dispersal policy away from Metro Cebu would be stimulated. This objective was based on the review and assessment of previous regional development policies and investments which needed to be re-framed to the perspective of a *"balanced regional development"*. [12]

The concept of dispersing growth from a primary growth center to the larger regional area has been documented since the *1976 Physical Perspective Plan* and in the five-year regional development framework plans. In the 1976 Plan, major cities and towns in 13 regions were delineated as primary, secondary, tertiary growth centers and special centers (i.e., exclusively tourism or industrial areas). Correspondingly, the *Central Visayas Development Plan 1978-1982* also promoted the regional growth dispersal as one of the development objectives --- in concrete terms, dispersion of economically feasible industries in the Metro Cebu triangle (cities of Cebu, Mandaue, Lapu-Lapu city) with the recommendations for the industrial sector. The regional policy adopted for Metro Cebu was similar to Metro Manila's central policy to promote dispersion of population and industry away from the National Capital Region. Since then the growth dispersal policy to other parts of the Central Visayas region has repeatedly appeared in successive development plans drafted during the First and the Second Cycles. This policy has continuously been regarded as an important element as it is closely tied to the comprehensive approach towards regional development. At one point in 1986, comprehensive regional approach was de-emphasized by a sectoral developmental approach --- nonetheless, it has never been completely dropped and eventually became a policy cornerstone of the approach to regional development. The concept was also adopted in the *Central Visayas Mid-term Plan 1999-2004* drafted in 1998. This *Mid-term Plan* set a goal in developing Central Visayas as one comprehensive economic unit with its objectives of: establishing many urban growth centers to achieve spatially well-balanced development of the region; creating a comprehensive system from which both a city growth center and surrounding region can mutually benefit; and providing higher access for development opportunities. However, it also recognized that the previous development model promoting a Hierarchy of Settlements had not fully achieved its purpose of dispersing industries and could not reach the level of well-balanced, sustainable industrialization.

*The Physical Perspective Plan for the Philippines* published in 1994, critically analyzes the previously accepted Integrated Area for Development (IAD). According to this Plan, the IAD

[12] As seen on Table 6-8 in Chapter 6, which compares the annual average population growth rate of the Philippines, Central Visayas region, Province of Cebu, and Metro Cebu, the urban growth rates of Metro Cebu and Province of Cebu between 1995 and 2000 were increasingly higher while the growth rate in the rural area was declining.

approach intended to stimulate economic, social and spatial development of collective regions, but in reality the approach was adopted and limited for financing prospective development projects. The Plan also provides alternative strategies to space planning (Cases 1 through 3). The framework of Case No.3 resembles Case No.2, as shown on the following discussion of two alternative strategies for Cases No.1 and No.2.

Case No.1 attempts to achieve growth targets in Metro Cebu, Tagbilaran City (Bohol province), Dumaguete City (Negros Oriental province). On the other hand, Case No.2 postulates a growth stimulus strategy for each of the centers in towns, provinces, and region as part of dispersal strategy. The following table summarizes the approaches and description of each case. Case No.1 is adopted in the *Central Visayas Development Plan 1984-1987 Update*, while Case No.2 was adopted in the *Central Visayas Development Plan 1978-1982 Update*. Although the Plan itself did not clearly state what "case" was finally adopted for each contextual region, in the final analysis, the regional development planning approach and project investments similar to *Case No.1: Metro Cebu Oriented Development* were those which were actually implemented.

**Table 2-9: Alternative Strategies of the Physical Perspective Plan for the Philippines**

| Item | Case 1 | Case 2 |
|---|---|---|
| Basic Approach | Promoting development of urban growth centers at Metro Cebu and provinces | Promoting developments of regional, provincial, and town growth centers as an aid of growth dispersion |
| Objective | Primary objective: rapid regional economic growth<br>Secondary objective: growth dispersion | Steady and healthy growth |
| Strategy | Redevelopment of Metro Cebu promotes temporary interim GRDP increase. In addition, development of provincial growth centers plays a role in dispersal of growths. | Proposal for three-layer urban hierarchical settlements system for dispersion of income and opportunities |
| Impact on population influx | Temporary increase in population influx into Metro Cebu may be observed; it is expected to be resolved as provincial growth centers develop. | Decrease in population influx from rural area is expected |
| Development of infrastructure | Management and improvement of relationship between regional and provincial growth centers | Evenly dispersed infrastructure projects |

During the Second Cycle, the JICA also prepared the study, *Cebu Province Integrated Development Plan Investigation* (1994). The master plan envisioned year 2010 as a temporal planning horizon and re-stressed the importance of *"the development of growth centers and dispersion of growth"*. It also brought up the need for a hierarchical development system to assign higher urban functions to higher-order growth centers to address underdeveloped areas in the entire Cebu province. Considering dispersion and market economics between its settlements, the Plan recommended

several arterial road development projects linked to Metro Cebu as the nerve-end of growth and international gateway: a north-south growth corridor; a circumferential road running through the mid-west growth center centering around the coastal industrial city of in Toledo; several other important sub-regional consumer-industry districts; and an east-west road which would become a backbone for the spatial development framework. It is evident that the ODA projects and some yen-loan arterial road projects to be completed during the Third Cycle (~2004) were planned at this stage.

## 2.4 The Third Cycle (2004~): Dispersion of Growth to Other Regional Cities

The Third Cycle is characterized as the period when the policy of growth dispersal revolving around Metro Cebu and the adjacent regional areas would be realized. Although the Central Visayas regional development framework plan for this period has yet to be been drawn up, there are on the one hand, distinct trends on growth dispersal to other regional cities and towns which were already recognizable during the second half of the Second Cycle.

The completion of yen-loan projects in the Second Cycle has gradually been influencing Metro Cebu's land-use and urban growth re-direction. What is evident is a definite centrifugal population re-distribution away from Metro Cebu's core cities of Cebu, Mandaue, and Lapu-Lapu towards the other northern, western, and southern cities. The immediate urban radius of this physical transformation is within a 25- to 30-km distance from Metro Cebu's Central Business District (CBD).

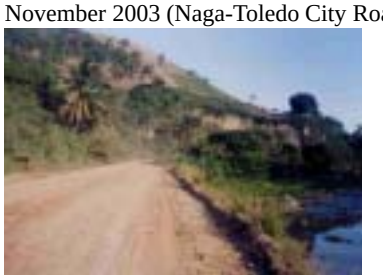
Several observations may be made. First, during the First Cycle period, the distance between Metro Cebu and proximate towns funneled population movements and activities to the CBD which is the center of economic opportunities, work, education, services, and regional administration. This resulted in concentrated, intensive land-use development in its urban confines. The completion of yen loan inter-modal transport projects during the Second Cycle --- the widening of arterial roads in the CBD (MCDP 1 and 2); the Second Mandaue-Mactan Bridge; the international airport; and World Bank-assisted Cebu North Road and Cebu South Road --- opened up and shifted population movements to Metro Cebu's periphery, or its southern, northern, and eastern physical boundaries with Cebu province. These receiving cities and towns --- or secondary centers --- thus have been undergoing the early stages of growth at the beginning of the Third Cycle. This physical evolution of a primary urban growth area to its spill-over to secondary growth centers coincides with the planning vision and expectations of *Case 1*; however the anticipated decline in rural emigrants and the balancing out of infrastructure investments across a region --- which is postulated under *Case 2* ---

would not be foreseen primarily due to the spatial economic and hierarchical interplay between production and distribution functions on the one hand, and transport functions.

Second, on modal terms, the most noticeable land-use development in these secondary growth centers continues to be low- to medium- cluster or subdivision housing --- evidently in response to the increasing demand from an increasingly affording population --- itself an indicator of income improvements of the settling classes. Third, mixed development comprising of small to medium commercial buildings-cum-residence have sprouted along the new arterial road corridors and intersections catering to nearby residential districts. Fourth, at this initial period of the Third Cycle, this emerging growth in secondary centers has already been inducing population and growth away from Metro Cebu's primary centers by bringing the outer southern and northern urban fringes into the mainstream of its economy. This transformation of Metro Cebu's settlements in its primary and secondary centers has been induced and re-directed by the development of its urban transport infrastructure. Finally, the next set of projects in the Third Cycle are expected to support regional economic integration and strengthen production relationships between Metro Cebu and other next-order rural towns and cities (over a 25 - 30 km radius from Metro Cebu CBD) ) and sustain the regional *growth-cum-dispersal* continuum. Table 2-10 shows the list of currently on-going projects; those in the planning process (investment pipeline); or those already completed but with broader economic impact on the growth dispersal and population movements to secondary centers within the Third Cycle.

**Photo 2-13 Arterial Road Development Project (3)**
Construction site of the section between Talisay-Naga-San Fernando-Carcar (Cebu South Road)

**Photo 2-14: Arterial Road Development Project (4)**
November 2003 (Naga-Toledo City Road) in the process of contractor-selection



The following table lists projects currently undergoing, in process of planning or already completed but still subject to continue in terms of growth distribution that is one of the main objectives of the Third Cycle.

**Table 2-10: List of Projects in the Third Cycle and Population Movements in Secondary Growth Centers**

| No. | Project Name | Year in Service |
|---|---|---|
| 1 | Northern Cebu Road Improvement Project (MandaueConsolacion) | 1997 |
| 2 | Northern Cebu Road Improvement Project (Consolacion-Jagnaya Port, San Remegio) | 1998 |
| 3 | Central Cebu E-W across road（Cebu-Balambam） | 2000 |
| 4 | Arterial Highway Network Development Project (III) | 2002 (estimated) |
| 5 | Arterial Highway Network Development Project (IV) | 2004 (estimated) |
| 6 | Arterial Highway Network Development Project (VI) | 2005 (estimated) |
| 7 | Ceb-Toledo Wharf Road Project | Interrupted |
| 8 | Inner Ringway Project | Unknown |
| 9 | New Cebu Port Project | 2009 (estimated) |

# 3. OVERVIEW OF PRIVATE INVESTMENT AND DEVELOPMENT OF INDUSTRIES

## 3.1 Confirmation of Private Investment and Development of Industries

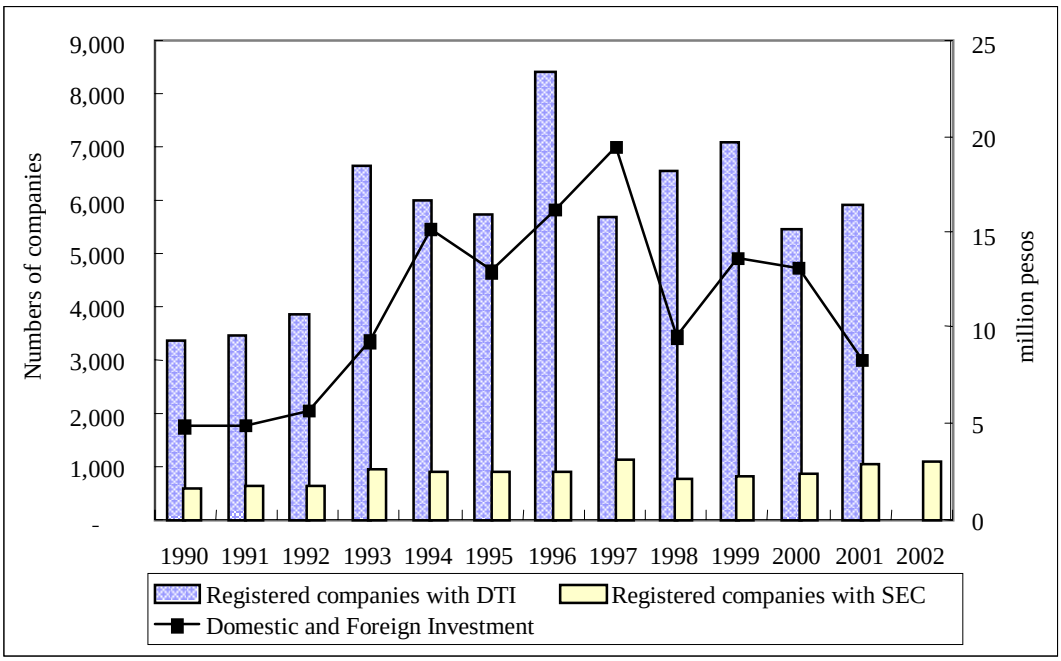
### 3.1.1 Change in Size of Investment Capital in Metro Cebu

Figure 3-1 represents the general investment trend and activities for Metro Cebu in the years between 1990 and 2002. The figures are based on the estimation made by (a) adding the numbers of investment amount in securities registered with the Securities and Exchange Commission (SEC); (b) the initial investment amount made by new business registered with the Department of Trade and Industry (DTI); and (c) Foreign Direct Investment (FDI) amount --- which results in the investment amount registered with Mactan Economic Processing Zone/ Philippine Economic Zone Authority.

The investments in the Metro Cebu sub-region have been showing steady growth. From the 1990 level of ₱ 4,838.0 million (3,343 new firms registered with DTI; 583 new companies registered with SEC) to its peak in 1996-97, investments reached ₱ 17,849 million (DTI new registration: 7,759 firms; SEC registration: 1,011 firms). However, the upward performance was severely affected by the 1997 - 1998 Asian currency crisis which caused a sharp decline in 1998 (DTI registration: 6,541firms; SEC registration 752 firms). At one point the number recovered its 1995 level, but the decline continued again to ₱ 8,349 million in 2001. As described earlier, despite the attempts made during the First Cycle period to promote export-oriented industrialization through the establishment of MEPZ with the legislative enactment of foreign investment incentives, the series of unfortunate events held up the Philippine economy: unpredictable natural catastrophes as well as political instability together with ever-present bleak investment climate brought about by the nationalization of key industries --- to name a few --- all combined as major capital disincentives which have been hovering over the country since the martial law era. As a result, the Philippine economy was left way behind those of Thailand, Malaysia, and Indonesia when these ASEAN countries maximized the second wave of overseas FDI boom from the late 80s to the early 90s. However, with the passage by Philippine Congress of foreign investment law in 1991 and the improved political stability under the Ramos administration, overall investor confidence was restored in the country's business environment. What made the recovery possible included not only a series of deregulations such as in banking (1994), foreign currency, foreign capital --- but also in economic enhancement efforts through the development of special economic zones and various promotion efforts to attract FDI. Furthermore factors, such as the strong yen during the period of Japans' bubble

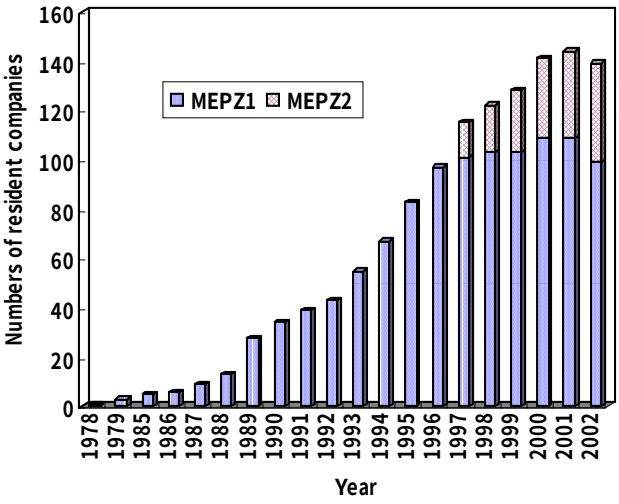
economy, assisted Japanese companies which were prospecting for new overseas investment opportunities to locate in Cebu island due to rising local labor costs and land shortage in Thailand or Malaysia. As a result of Japanese companies' business and economic ventures, investment activities of local industries were stimulated as well. From 1990 until right before Asian currency crisis, the ratio of amount invested in industrial complexes to the entire amount invested in Metro Cebu's domestic market was 9.6%. (Figure 3-1) The size of investments may appear small since most investors were light industrial --- such as parts manufacturing --- than heavy industrial, firms. Resident FDI companies were able to maintain low overhead --- other than labor, only machinery cost was considered in added value cost --- since industrial zones are directly managed by PEZA.

**Figure 3-1: Investment Condition in Metro Cebu (1990～2002)**




Changes in the number of foreign based companies in MEPZ / Special Economic Zone from the early 1990 to 2000 are traced on the following Figure 3-2. By 1988, the numbers had increased to two digits and since then these steadily grew. The number of foreign based companies had been in single digit in the late 1970s when MEPZ was established until 1987; this grew to 34 companies in 1990 and by September 2003, more than quadrupled to 151.

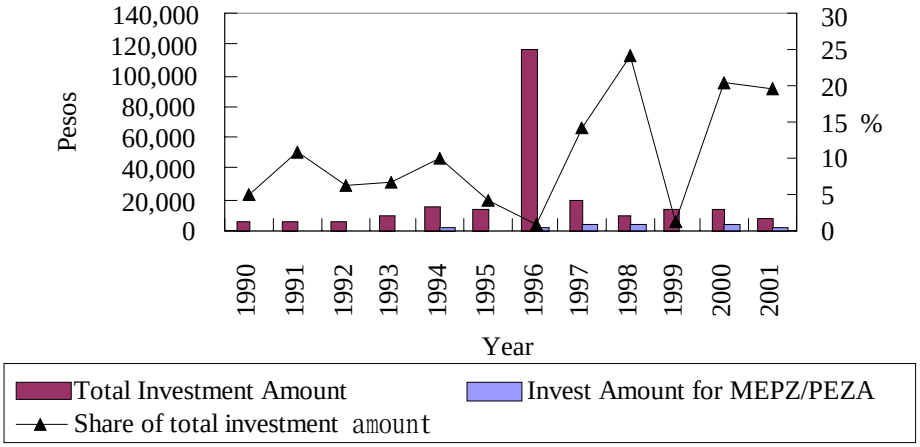
**Figure 3-2: Changes in Resident Companies In MEPZ Industrial Complex**




Source: CIPC, PEZA, DTI

As a parallel reflection of the steady inflow of resident companies in MEZ-1 and II above, the ratio of investment amount also increased from 5.1% in 1990 to 14.2% in 1997. Again, as a direct result of the Asian currency crisis the amount of domestic investments rapidly dropped. However, the ratio of foreign investment amount rose to 24.2% and helped cushion its adverse effects on local employment. Except for the year 1999, investment levels were still maintained at 20% and this was highly indicative of Metro Cebu's dependence on FDI. (The reason why FDI investment amount dropped suddenly in 1991 is inconclusive, but probably this could be due to Japanese economic recession.) (Figure 3-3)

**Figure 3-3: FDI Total Investment Amount**



Metro Cebu's increasing dependence on FDI in socio-economic terms is shown on Figure 3-4 *Changes in Employment in Industrial Complexes* and on Figure 3-5 *Export Amount by FDI*. In 1990, the employment size by FDI used to be 11,678 persons, and constantly grew to 19,710 persons by 1993; 32,811 persons by 1996; and 50,065 persons by 2000. However, this declined to 48,114 and further to 43,989 persons in 2001 and 2002, respectively. The FDI employment ratio to the total employment in Metro Cebu was 1.8% in 1993; it became 2.8% in 1996 and to 3.7% in 2000, and declined to 3.4%. in 2001. On the other hand, total export amount of FDI was US$ 186 million in 1990, and climbed by six times to US$ 1,103 million in 1996. In 2001, the total amount reached US$1,756 million, which was 9.4 times the 1990 figure. As for the ratio of export amount by FDI to the total exports of the entire Metro Cebu, the figure grew exponentially from 27.9% in 1990 to 67.6% in 1996. Despite the 58.8% decline in 2001, FDI still retained a commanding 60% share of total Metro Cebu exports.

**Figure 3-4: Employment in Industrial Complexes**

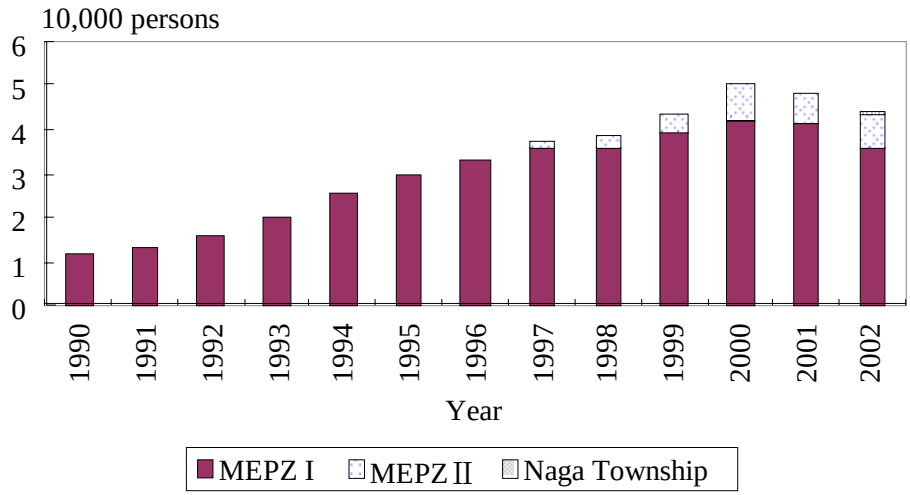



**Figure 3-5: Export by FDI**

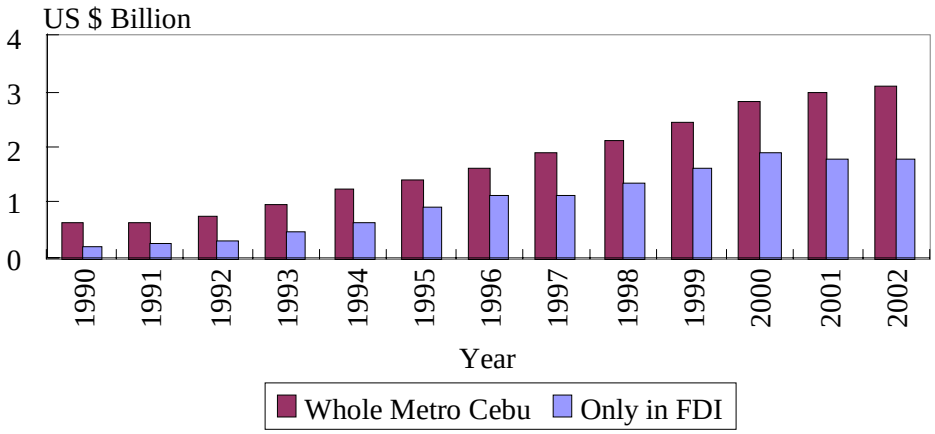
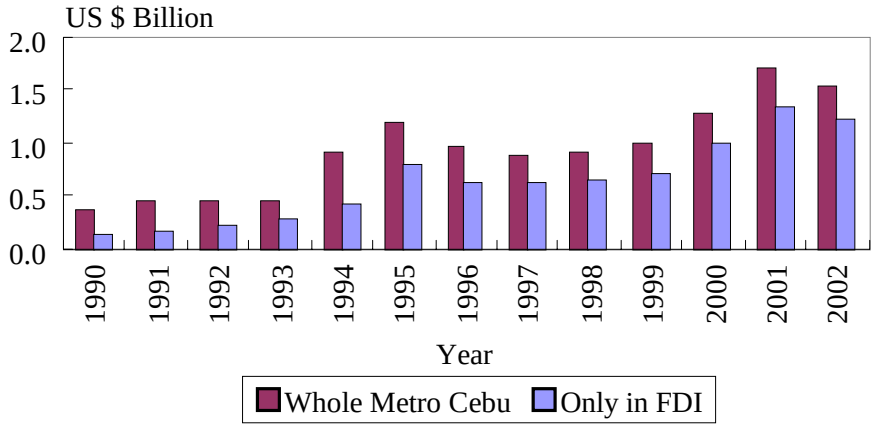


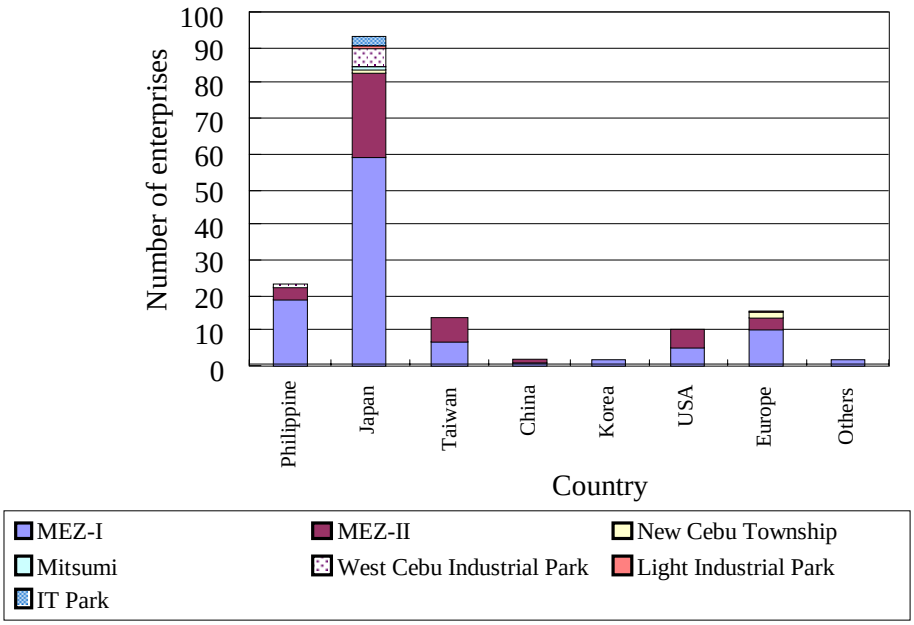
**Figure 3-6: Imports by FDI**




### 3.1.2 Breakdowns by Nationality, Industry, and Investment Amount

The resident industries in Cebu are summarized by nationality and by special active zones on the following Figure 3-7. Among Cebu's seven economic zones registered and approved by PEZA, the five industrial zones of MEZ-I; MEZ-II; New Cebu Township; Light Industrial Park; and IT Park, which are all located in Metro Cebu were the subjects of this study. The Mitsumi special zone, though located outside of the study area, 40 km north of Metro Cebu, is the largest foreign-based industry employing more than 16,000 and is a significant yen-loan beneficiary. West Cebu Industrial Park is the heavy industry center in Cebu Island, with Balamban town as its nucleus, located on the west coast of Cebu island, 63.9 km north of Cebu city. It is a newly developed industrial complex and also a significant yen-loan beneficiary when included in the Metro Cebu's expanded geo-economic influence. In the Metro Cebu subject area, there are 87 Japanese companies (56% of the total 155 foreign-based companies), followed by the Philippines, U.S.A., and Taiwan in decreasing order.

**Figure 3-7: Foreign based Companies in Cebu by Nationality and by Economic Zones**




Source: consultant made based on the materials provided by PEZA.

Looking further at the investment amounts by nationality and industry, Japanese companies are engaged in manufacturing of parts for electrical and electronics products, parts (in some cases whole products) for optical or precision measuring equipment, die-casting, machine tooling, manufacture of textiles and sawn products, wood working or production of IT software related industries, as supposed to home electronics of American firms, leather craft such as purses/handbags, manufacturing of rubber products, and clothing of European companies.

## 3.2 Investigations on Investment Objectives

The Study Team administered a series of questionnaire and interview surveys focusing on Japanese companies being the largest nationality-investor in Metro Cebu area to find out the investment objectives of overseas corporations and their effects on local industries. Furthermore, the Cebu Investment Promotion Center (CIPC) was commissioned to carry out questionnaire and interview surveys of selected companies on their perceived impact of infrastructure development projects to local industries.

### 3.2.1 Results of questionnaire and interview surveys of Japanese Companies

With the cooperation of Cebu Japanese Chamber of Commerce (CJCC), questionnaire forms

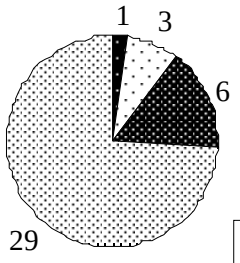
were distributed to 81 Japanese companies in MEPZ (out of which 40 responded[13]. Aside from the questionnaire survey, 17 Japanese based companies were also interviewed, with the cooperation of CJCC. Selection was made from electronics related industries, optical and precision equipment, die-casting, machine tooling, textiles and sawn products related industry, woodworking, software related industries. The response turn-out was 70.4%.

**<Analysis of the survey results: questionnaire and interview>**

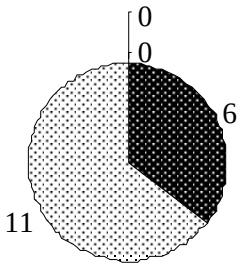
1. Investment timing

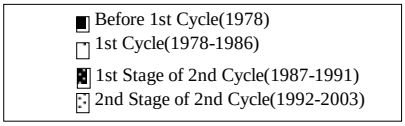
Most overseas companies (71.4% of total) moved into Cebu during the *second stage* of the Second Cycle (1992-2003) while 12.4 % moved in during the *first stage* of the Second Cycle (1987-1991), which means 92.8% of all responded companies moved into Cebu during the Second Cycle when the regional development plan and implementation of project investments for sustainable growth were on stream. As stated above, the reasons why Japanese companies rushed to Cebu during this time could be attributed to a combination of various factors: the rapid improvement of business environment such as the enactment of the foreign investment law (1991), an improved economy under the stable Ramos administration, and the series of deregulation policies; the effect of strong yen during Japan's bubble economy; and increasing labor costs and land shortage in Thailand and Malaysia. Japanese companies were scouting for more overseas production centers other than what they already had.

Number of the respondent (questionaire)




Number of the respondent (interview)




[13] 1 of the 40 responses was “unavailable response”, therefore, 39 results appear in tabulation.

2. Decisive factors for initial investments

A number of questions were asked on these factors.

(1) Why did you decide to move into Cebu when there were other choices of other regions in the Philippines or other ASEAN nations?

As shown in the following table, the deciding factor to invest into Cebu was quality of labor and labor with relatively low cost. 1990s was the era for Japanese companies to move their product bases to overseas, and the result of the questionnaire and interview supported this trend.

- The deciding factor was the quality of labor with relatively low cost

| | Responses | Questionnaire | Interview | Total |
|---|---|---|---|---|
| 1 | Favorable government investment policy | 10 | 3 | 13 |
| 2 | Relatively low local taxes | 1 | 0 | 1 |
| 3 | Geographical advantages in terms of transportation | 13 | 6 | 19 |
| 4 | Relatively high labor quality | 17 | 9 | 26 |
| 5 | Relatively low labor cost | 26 | 9 | 35 |
| 6 | Ease in employing engineers | 6 | 6 | 12 |
| 7 | Weather and climate (no typhoon) | 5 | 2 | 7 |
| 8 | Low incidence of labor issues | 4 | 5 | 9 |
| 9 | Client requests | 6 | (Note) | 11 |
| 10 | Infrastructure (Roadway, port and harbor, airport, electricity, water supply and sewage systems, etc.) | 11 | (Note) | 19 |
| 11 | Low utility costs (electricity, water and sewage, waste disposal, etc.) | 0 | 1 | **1** |
| 12 | Accessibility to the markets | 4 | 2 | 6 |
| 13 | Local procurement of parts and materials | 3 | 1 | 4 |
| 14 | Relatively low management and maintenance costs | 10 | 4 | 14 |
| 15 | Comfort (Amenities) | 6 | 2 | 8 |
| 16 | Political stability and security | 3 | 1 | 4 |
| 17 | LGU's various efforts and political leadership for regional development | 0 | 1 | 1 |
| 18 | Other | 5 | 7 | 12 |

(Note). Question Nos. 9 and 10 were not asked during the interviews.

(2) Was the infrastructure development a key factor for investment decisions?

The 11 companies who answered "infrastructure" for the question (1), were further asked if the infrastructure was the most important factor for the investment, and one (1) company answered that it was the most important, while eight (8) companies replied that it was not the highest, but still the key factor. As discussed in the previous chapter, infrastructure in Metro Cebu as a regional primary growth center such as the availability of port facilities and power supply had been developed over time since the late 1970s under the export oriented policy to invite foreign capital. This must be the reason why infrastructure may not have been listed as the factor of highest importance since the infrastructure development is regarded to be common. In addition, information on the schedule and progress of new infrastructure investments provided a firm basis for their decisions to locate in Metro Cebu knowing that conditions would continue to improve.

| | Responses | No. |
|---|---|---|
| 1 | It was the most important factor to invest in the area | 1 |
| 2 | Though not the highest importance, investment would not have been made without development | 8 |
| 3 | Though it was considered as the factor, investment would have been made even without infrastructure | 2 |

(3) Which infrastructure development was particularly important? (Multiple answers)

The nine (9) companies, who answered "the infrastructure development was the most important", or "though not the highest importance, investment would not have been made without development" to the above question (2). They indicated that development of airport facilities were the most important followed by stable power supply.

| | Type of development project | Questionnaire |
|---|---|---|
| 1 | Stable electric supply | 5 |
| 2 | Telecommunication | 3 |
| 3 | Port facilities | 3 |
| 6 | Airport facilities | 7 |
| 9 | Others | NB |

N.B: It shows "-"due to multiple answers.

3. Evaluation on infrastructure development (Results of interview survey)

(1) Satisfaction with infrastructure development

Companies assessed the present conditions of infrastructure development as having been improved compared with the time when they made their initial investments. This result implied that the infrastructures developed mainly in Second Cycle such as the development of airport facilities, industrial complex centering on MEZ-I/MEZ-II, the construction of the new second bridge, and development of new roads, were positively evaluated. Although some respondents were not exactly satisfied with the present condition, no companies were thinking of withdrawing their investments from Cebu for such a reason. There were just as many companies which were quite satisfied as those uncertain about their future condition.

| Category | Beginning of Investment | Present | Future |
|---|---|---|---|
| Very satisfied | 2 | 3 | 2 |
| Quite satisfied | 6 | 9 | 6 |
| Quite unsatisfied | 4 | 4 | 6 |
| Very unsatisfied | 1 | 0 | 1 |

(2) What are to be improved (in terms of infrastructure) if you are not satisfied with investment environment of Cebu? (Multiple Answer)

The need to provide a stable power supply topped the responses to improve the present infrastructure conditions; followed by recommendations to improve water supply and sewage systems, roadways, waste management and telecommunication respectively. Improvements in power and water supply and sewage system were noted as the most crucial needs since the time of the respondents' investments to Cebu, therefore more immediate government action should be required to deal with such problems is thus necessary.

| | Responses | Questionnaire NB1 | | Interview | Total |
|---|---|---|---|---|---|
| | | ○ | ◎ | | |
| 1 | Stable electric supply | 29 | 12 | 8 | 37 |
| 2 | Water supply and sewage systems | 21 | 3 | 7 | 28 |
| 3 | Roadways | 22 | 4 | 3 | 25 |
| 4 | Telecommunication | 13 | 3 | 3 | 16 |
| 5 | Port facilities | 6 | 1 | 1 | 7 |
| 6 | Airport facilities | 9 | 2 | 2 | 11 |
| 7 | Waste management | 15 | 2 | 8 | 25 |
| 8 | Bridge | 1 | 0 | 1 | 2 |
| 9 | Marine transport | (NB2) | | 5 | 5 |
| 10 | Satisfied with present infrastructure | 0 | 0 | 0 | 0 |
| 11 | Others | 2 | 0 | 2 | 4 |

(NB 1) ◎ indicates the item highest of the importance

(NB 2) There was no answer for marine transport under the questionnaire survey.

4. Dealing with local companies and transfer of technology

(1) Whether to have business deals with local companies: 13-YES, 4-NO

Business transactions with local companies vary but are limited mainly to procurement of external, non-plant parts such as consumer products, electric parts, jigs for assembly or supporting jigs. Almost all procurement of processed parts is bought either from Japanese parent, or Japanese based, companies within an EPZ brought in for that purpose and Manila. A majority of companies would be more open to expand their business with local companies if cost and quality could meet their expectations. It is noteworthy that cumbersome paper-work and procedures in dealing with companies outside of EPZ are the obstacles to business potentials with local companies.

(2) Technical collaboration with local companies:  1-YES: 16 NO

Majority of companies replied that the majority of Japanese companies are small to medium-size manufacturers and therefore, they do not have excess resources to invest in technical training and establish local technical collaboration like a large corporation.

(3) Technical level of local companies

All surveyed companies had some dissatisfaction with the technical level of local companies; many even felt they did not trust their competence. Their management quality, ability to keep turnaround time, and cost efficiency --- all fell short of their expectations. The majority opinion implied that inadequate management style of entrepreneurs or business owners need to be reformed.

5. Systems and administrative procedures for investment

In terms of the systems and administrative procedures for investment, many companies advocated more active policy on promoting foreign investments and more efficient government services that included the improvement of government efficiency through computerization and simplification of procedures in procurement of parts outside the EPZ, and preferential courtesies in granting VISA or in the processing of VAT returns.

6. Investment climate

- Of the total 56 companies, five or six answered that they were satisfied with the present investment climate. However, none of the companies interviewed has either decided or has been considering relocating their production center to other countries such as China. This indicates that the present investment climate in Cebu is generally viewed as favorable even when compared with other countries.
- “Relatively low labor cost” with “relatively good labor quality” was one of the top reasons for choosing Cebu as the place for their investments. Many of the companies evaluated Cebu’s general investment condition to be competitive --- contrasted with a third possible region or country --- provided labor cost would remain competitive in either yen or dollar terms (despite a possible higher nominal wage) and relatively high labor quality would be maintained. Progressive infrastructure development was the third highest reason which influenced their investment evaluation and decisions. Furthermore, regarding with those infrastructures which many companies showed their dissatisfaction, it is perceived that companies perceived further infrastructure advancement would result in their higher satisfaction level with the investment climate.

Several companies, such as those owning a parts manufacturing factory and are either buying or sourcing parts and materials from Japanese based companies in Manila were extremely dissatisfied with the exorbitant shipment cost between Cebu and Manila and that it took too much time and perennially delayed arrivals. Besides this, there were many companies that advocated early completion of basic IT infrastructure development and south coastal road construction which are lagged behind the schedule.

7. Future Management Strategy

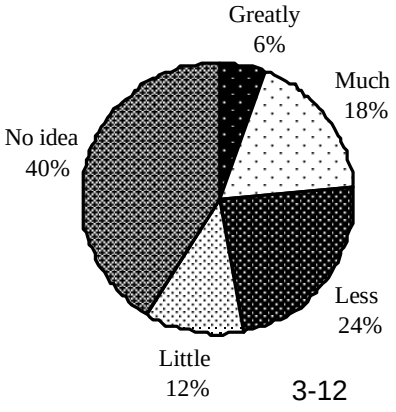
(1) Continuity of Production and Activities in Cebu

Sixteen of the 17 companies replied that they were planning to continue staying in Cebu. One company who located in Cebu a year ago was reconsidering relocation in the following year. The reasons for their continued investments were based on their comprehensive evaluation of Cebu as a stable staging ground to nurture their investments compared with other regions and countries. Some companies perceived that Cebu's investment climate might be unsuitable for large corporations producing finished products, and it would only ideally function as a production center for a small to medium-size businesses in view of its infrastructure levels and capacities; other companies also showed hesitation in encouraging large manufacturing firms of finished products to locate in Cebu.

(2) How are these factors --- i.e., growth of China and accelerating trends in Free Trade Agreements (FTA) with Asian countries --- affecting future decisions on their management strategy?

For this question, 40%of interviewed companies answered uncertain on its effects, and 36% responded "less effects" or "little effects" while 24% perceived the FTA as affecting "great" or "much" on their investment decisions. A large number of firms however felt China's presence would overturn price competitiveness.

**Figure 3-8: Influence on Decisions for Management Strategy**



### 3.2.2 Questionnaires and Interviews with the Local Companies

The CIPC, which was commissioned to conduct the surveys, sent out 277 questionnaires of which 100 firms responded. The locations and categories of respondent-companies are shown on Figures 3-9 and 3-10. Aside from the questionnaire, an interview survey was also conducted for 11 local companies to find out the current status and the issues of the local companies and compare more detailed conditions of local and Japanese based companies. These accounted for (a) the results of questionnaire/interview surveys with Japanese based companies and (b) the draft final JICA report on *"Small Business Development Plan Implementation Support Program in the Philippines"* (October, 2003). This section presents a survey analysis.

**Figur 3-9: Location of Respondent -Companies**

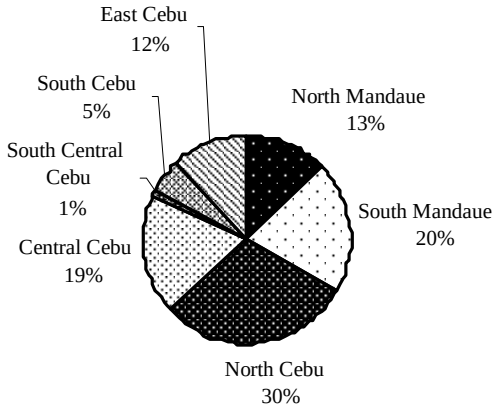
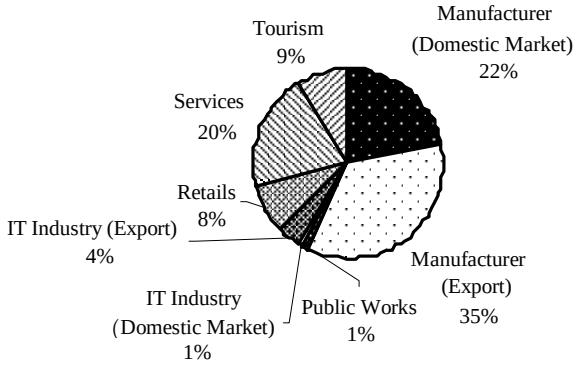



**Figure 3-10: Respondent-Companies by Category**




Result of analyses

1. Year of Business Establishment

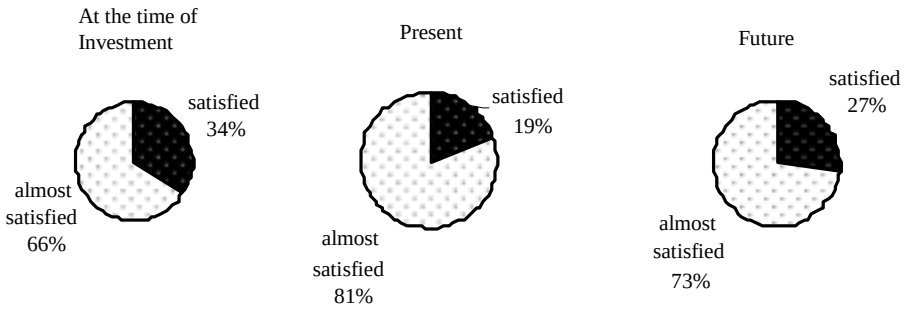
Among 100 local companies, 68 companies (68%) started their business in the Second Cycle;

15 companies (15%) in the First Cycle (1978-1986); and 17 companies before the First Cycle (pre-1978).

2. Investment conditions

While 34 % of companies replied they were very satisfied when asked about initial investment conditions during the period of business establishment, 19%, this is 15% decrease, responded “very satisfied” at the present. However, 27% answered “very satisfied” to more optimistic perceptions on future investment conditions. The positive responses would also be indicative of the general behavioral optimism of Philippine society.

**Figure 3-11: Investment Environment in Cebu**




3. Contributory factors for business development

62% of the companies answered that Cebu’s geographically advantageous location was the key factor which benefited the growth of companies, followed by the infrastructure development and easiness of employing technical workers. This can be attributed to the Cebu's commercial history as an island entrepot functioning as a dominant regional market for collection, distribution, and transshipment of inter-regional goods and processed foodstuffs within the southern Philippines, including Mindanao, Samar, or Leyte. Infrastructure development and ease in employing technical workers were also listed as some of the biggest factors.

**Table 3-1: Contributing Factors for Business Development**

| | Contributing factors | No. of Responses | % |
|---|---|---|---|
| 1 | Geographical advantages | 62 | 62 |
| 2 | Infrastructure development | 59 | 59 |
| 3 | Ease in employing technical workers | 45 | 45 |
| 4 | Low incidence of labor problems | 43 | 43 |
| 5 | Accessibility to the markets | 41 | 41 |
| 5 | Political stability | 41 | 41 |
| 7 | Procurement of parts and materials | 35 | 35 |
| 8 | Low labor costs | 34 | 34 |
| 8 | Weather and climate | 34 | 34 |
| 10 | Low management and maintenance costs | 33 | 33 |
| 11 | High labor quality | 30 | 30 |
| 12 | Governmental policy | 28 | 28 |
| 13 | LGU's leadership | 27 | 27 |
| 14 | Relatively low local taxes | 18 | 18 |
| 15 | Low utility costs | 7 | 7 |
| 16 | Others | 1 | 1 |
| | TOTAL | - | - |

*Multiple answers were accepted in this question

4. Perceived infrastructure projects positively affecting local companies

As for the question on the type of infrastructure development which positively affected business, 82%replies the development in telecommunications, followed by the airport and port facilities (second and third ranked). Because of Cebu's coastal and island topography, infrastructure development is indispensable for local companies to run their business.

**Table 3-2: Perceived Contributions of Infrastructure Projects to Local Companies**

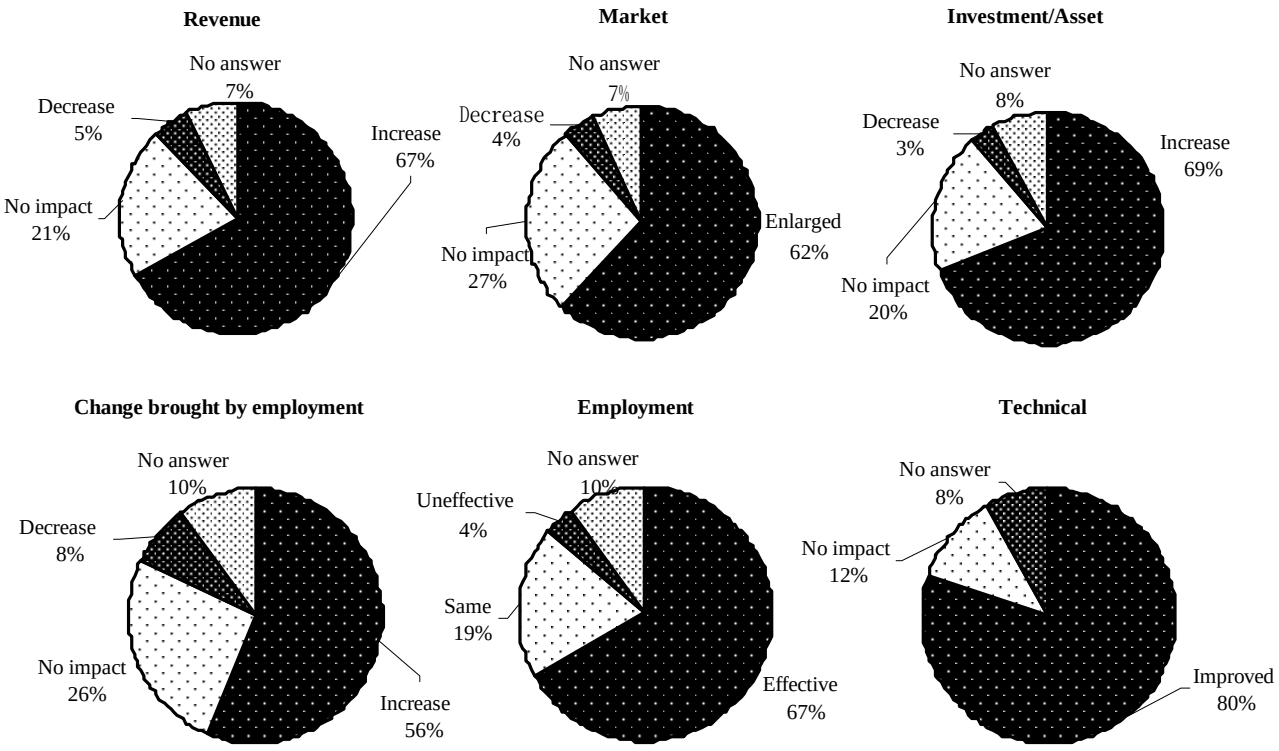
| | Infrastructure Projects | No. of Responses | % |
|---|---|---|---|
| 1 | Telecommunication | 82 | 82 |
| 2 | Airport development | 70 | 70 |
| 3 | Port and harbor development | 67 | 67 |
| 4 | Stable electric supply | 63 | 63 |
| 5 | Bridges | 56 | 56 |
| 6 | Roadways | 54 | 54 |
| 7 | Water supply and sewage system | 23 | 23 |
| 8 | Waste disposal | 11 | 11 |
| 9 | Others | 2 | 2 |
| | TOTAL | - | - |

*Multiple answers were accepted in this question.

5. Impact of infrastructure development to local companies (Figure 3-12)

Many respondents also cited improvements in the areas of sales, market share, size of investment and/or asset, size of employment, or technical reform due to infrastructure development. For example, 67% of respondents answered that annual sales had grown with the effects of infrastructure development. Advancement in sales were mostly attributed to the improvement of local traffic conditions --- for example companies located near the two Mactan Bridges benefited greatly due to shorter delivery time which resulted in clientele expansion as reflected on their significant sales growth. Development in airport facility contributed to the increase in number of tourists and buyers --- actualized in sales and promotions in tourism and export industry. Improved traffic conditions also affected the local people's working condition with shorter commuting time and it is reflected in the rise of productivity.

**Figure 3-12: Respondent-Companies' Perceived Impact of Infrastructure Projects**




6. Which infrastructure development projects need to be further improved? (Table 3-3)

Despite the number of infrastructure projects implemented in Metro Cebu, some companies replied that further improvements were still needed and identified the following; (a) water supply and sewage systems (expensive rate); (b) roadways (traffic congestion); (c) waste

management; (d) stable electric supply and its rate; (e) port facility and (f) airport facility . In addition, the following were also cited: expansion/improvement of telecommunication system in order to reduce high cost of telecommunications and telephone rates; lowering costs for the marine transportation.

**Table 3-3: Proposed Infrastructure Improvements**

| | Infrastructure | Frequencies | % | Requests |
|---|---|---|---|---|
| 1 | Water supply and sewage systems | 81 | 81 | ・Water bills in Metro Cebu are higher than in other cities |
| 2 | Roadways | 80 | 80 | ・Traffic congestion<br>・Replacement of connecting roads |
| 2 | Waste management | 80 | 80 | ・Sidewalk garbage/ litter are conspicuous |
| 4 | Stable electric supply | 69 | 69 | ・Electricity rates are higher in metro Cebu than in other cities |
| 5 | Ports and harbors | 38 | 38 | ・Presence of squatters; unsanitary surroundings |
| 6 | Airports | 26 | 26 | ・Direct international flights between Cebu and other principal cities in the world<br>・Infrastructure developments to enhance inter island accessibility |
| 7 | Bridges | 24 | 24 | ・Construction of a third Mactan Bridge |
| 8 | Telecommunications | 23 | 23 | ・Promotion of telecommunication developments<br>・High telecommunication cost<br>・Promotion of local software development for the local markets<br>・High IT communication costs<br>・Shortage of IT engineers |
| 9 | Others | 0 | 0 | ・Lowering costs for marine transportation and deregulation of port services<br>・Inability to compete with other Asian countries in attracting investors and tourists due to the lack of a world trade center<br>・Business support by LGUs<br>・Implementation of a rational regional income tax<br>・Effective tax collection<br>・Too much intervention of DTI in businesses<br>・Improvement in safety and order |
| 10 | Satisfied with current infrastructures | 10 | 10 | |
| | TOTAL | - | - | |

*Multiple answers were accepted in this question.

7. Comments from the respondents

(1) The respondent-companies indicated the following four items as problems they were facing:

- Increased competition under the policy of international free trade and deregulation. Heavy import tariff in the 60's and 70's used to protect domestic companies; with the lifting of tariffs under international free trade, small businesses or industries now face severe competition.
- Threat of the unstable power supply – In the beginning of the 1990s, the entire Philippines suffered a power shortage. At that time, the government allowed foreign companies to produce power provided that certain calculation methods are followed to determine power rate adjustment. However, the present government under the pressure from a lobby group altered the calculation method for rate adjustments. As a result, there is a chance the company which supplies electricity to Cebu's circuit would frequently knock out the power to check its deficit.
- High telecommunications rate – Internet connection charges are very expensive compared with those in Japan or in the United States. While companies of IT industries are urging rate reductions, local ISPs are insisting that further reduction is not possible. This high rate has tremendous disadvantage for the companies utilizing IT.
- Difficulties in establishing business relationship with Japanese based companies – Most local supporting industries have difficulty to establish business relationship with Japanese based companies

(2) According to the NSO *Surveys of Establishments in the Philippines in 2000*, the number of businesses in the country in 2000 was 822,930. Of these, 6.0% or 49,179 businesses were located in the Central Visayas region including Metro Cebu. Among the total number of regional businesses, micro businesses accounted for 90.4% or 44,466; small businesses, 8.6% or 4,247; medium-size businesses 0.5%, or 220; and large businesses 0.5% or 246. This means 99.5% of businesses in the region would be small and micro sized businesses. The previously cited JICA report is an analytical composition of the interview survey of mid- to small-size companies in the entire Philippines. The report listed the following 9 items as operational challenges for these companies (i.e., micro companies are included in the category of small companies in the report).

The biggest problem in general management was particularly identified in the report as *"order inconsistency."* The second problem was *"difficulty in market development"* followed by *"low standard of skilled labor and job hopping."* The other challenges were:

- Difficulty in receiving bank loans
- Low standard of skilled labor and job hopping
- Rise in wages
- High import tariff for the procurement of raw or in-process materials and parts
- Decrepit product technology and machinery
- Order inconsistency
- Difficulty in meeting quality price and turnaround time given by clients
- Difficulty in market development
- Lack of trustworthy business partners

In this JICA study, the causes of and countermeasures to these problems were explored. The report identified *"seasonal change in demands"* and *"competition with imported goods (from China in particular)"* as root causes of the problem of *"order inconsistency"* which could be improved by *"active government support and implementation."* The study also noted that the cause of as *"difficulty in market development"* was *"lack of information,"* and *"lack of promotion.*", and these problems could be resolved by collection of more information, participation in trade fairs, and exertion of greater company efforts to develop new products As for *"low standard of skilled labor and job hopping"* it is caused by *"lack of training for the workers and insufficiency of skills"* and that these could be surmounted by providing more quality and quantity of trainings and seminars and by mechanization. The companies in JICA survey were also suffering from the problem in financing. Lack of mortgage and high interest rates were principal causes of the problem.

While differences exist in the extent of problems because of company sizes and types, similar management problems have been cited in both the JICA report and the survey results in the current study of local companies in Metro Cebu.

**Box 2: Definition of mid/small (/micro) companies and numbers of these companies in Region VII**

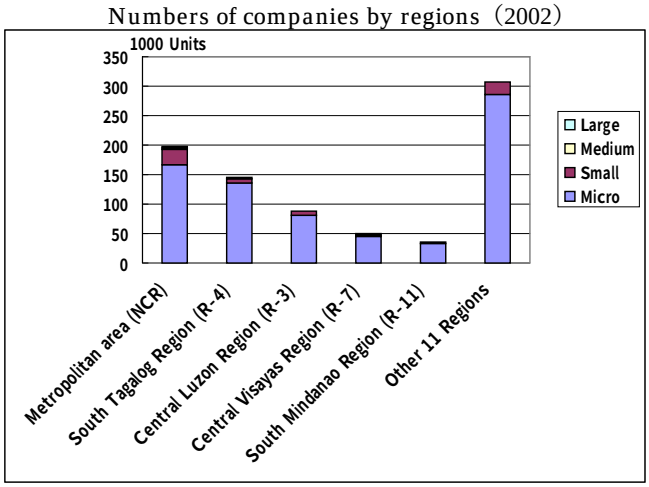
Scales of companies in the Philippines are defined either by amounts of total assets excluding land value or by the number of employees. This definition was revised under the Decision No l. made by the Small and Medium- Sized Enterprise Definition Committee (SMEDC) in January 2003. The definition is applicable to all companies regardless of their type of business, sectors they may belong to, or how they are organized.

**Definition of Small and Medium sized companies in the Philippines**

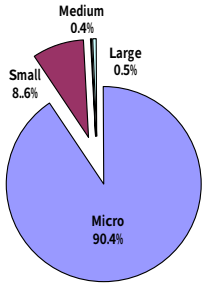
| | Total Asset Amount excluding land value | Number of employees |
|---|---|---|
| Micro | Under P3,000,000 | 1－9 |
| Small | P300,000,001－P15,000,000 | 10－99 |
| Medium | P15,000,001－P100,000,000 | 100－199 |
| Large | Over P100,000,000 | Over 200 |

In accordance with the definition, Central Bank of the Philippines (BSP) sent out an official notice approved by Monetary Board in March 2003, stating that the banks assume the definitions of BSP in terms of scales of companies. Thus, for small and medium companies finance program, the above definition is applied.

Numbers of companies by regions（2002）




Composition of companies in the Central Visayas region (2002)



## 3.3 Results of Investments

As described earlier, Japanese and other foreign companies started to move in Metro Cebu for "relatively low labor cost" and "relatively high labor quality" as the investment factors. Newly registered local companies also grew steadily from the 1990s alongside the FDI growth until the 1997 Asian currency crisis. At this inroad, the infrastructure development such as airport, road and bridges played a key role for the companies to run their business, and was trigger to promote preliminary private sector investments. However, whether Metro Cebu can achieve secondary ripple effects of growth would altogether constitute another evolutionary economic cycle -- and would hinges in two expected preconditions as shown in the result of questionnaire survey.

(1) Development of local supporting companies which can supply parts or raw materials for foreign based companies, resulting in effects on local productivity and employment opportunities.

(2) Increase in income and consumption of employees of foreign based companies to bring about local productivity and employment opportunities in local industries such as consumer goods and services. An increase in production and employment opportunities rounds up to further consumption, production, and employment with further multiplier effects. There is a cycle with further multiplier effects which an increase in production and employment opportunities augments their income, and this stimulates their consumption behavior, and returns to an increase in production and employment.

From the interview survey results, the effect described in above (1) was limited. Business relations between foreign and local companies were limited to supplies for stationery, packing materials, equipment maintenance parts, tables for assembly, exhaust ducts, hard-wiring, printing of operation manuals, and similar off-the-shelf items. Other than that, Japanese based companies were hardly dealing with local companies. Parts were mostly procured from Japan or through Japanese based companies in the same economic zone. The surveyed companies commented that skills level and management style of local companies were not reliable because of their product inferiority, higher prices, and their inability to meet turn around time. Most Japanese based companies do not manufacture complete products but parts for other manufacturing industries. Neither do they have excess resources or asset to nurture support industries through technology transfers. In this sense, establishing a 100% foreign-owned (Japanese) company with an enclave-based capital could also appear to be a multiplier down-side, an inevitable element in technology transfer and in the growth and development of inchoate local companies.

In terms of effects stated in the Item (2) above, the consistent growth of private consumption may be confirmed on Figure 3-13. Household consumption had stagnated between 1990 and 1994; but grew rapidly from 1994 until the 1997 Asian currency crisis. After that the growth rate maintained the 1997 levels for several years until 2000. In summary, Cebu's household consumption rate experienced leveling-off periods twice: during the early 1990s and after Asian currency crisis, but it never recorded negative growth. Such positive growth is mainly attributed to increasing export volumes of Japanese based companies in the 1990s and constant supply of fresh money due to expanding size of employment and income among Metro Cebu's literate.

**Figure 3-13: Changes in Metro Cebu's Household Consumption Cebu (1985 Price Index)**

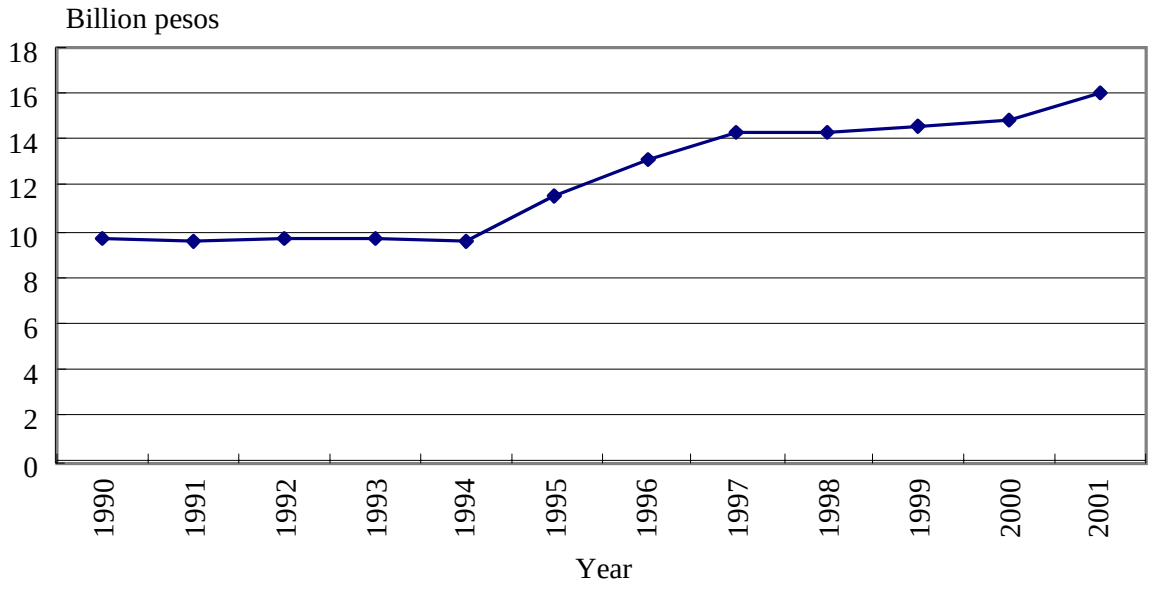
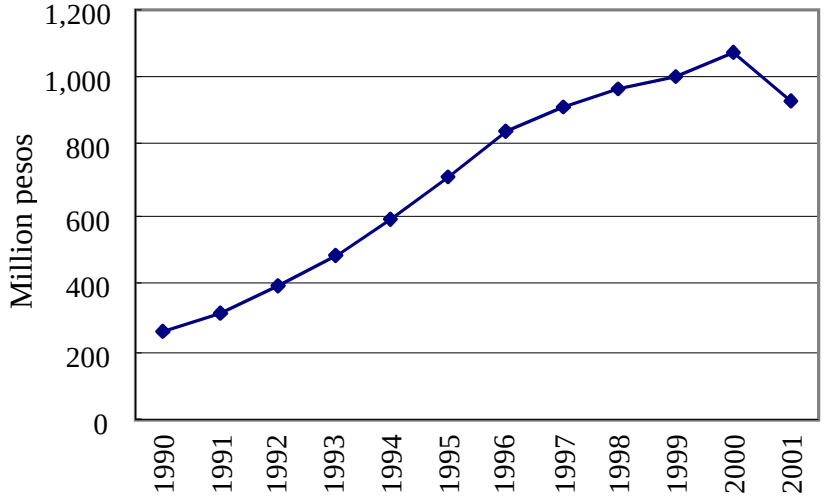



**Figure 3-14: Changes in Wages Paid by Resident Companies in MEZ-I（1985 Price Index）**



# 4. LEADERSHIP AND COORDINATION OF RELATED AGENCIES

## 4.1 The First Cycle and Transition to Regional Development

(1) Changes in national policy towards regional development

The origin of regional planning, or regional development dates back to the Marcos administration (1972-86). Presidential Decree No. 1 issued in September 1972 promulgated the implementation of the national government's Integrated Reorganization Plan (IRP) which eventually led to the systematization of national and regional planning procedures. Regional development plans, investment programs, project evaluation and prioritization were thus formulated and strategies and approaches to regional plan implementation were institutionalized.

The Presidential Advisory Council on the government integrated reorganization adopted the recommendation prepared through the survey implemented by the Planning and Project Development Office of the Department of Public Works, Transportation and Communications (PPDO-DPWTC) and National Economic Development Agency (NEDA) with the support of UNDP. As a result, the county's administrative regions were re-classified into 16, and Regional Development Council (RDC) was established in each administrative region. An RDC of each region was composed of regional offices of central government agencies, local governments (limited to cities and provinces in a region) and a NEDA regional office which performs area planning and secretariat functions for the RDC. In terms of sectoral development, there was little difference in basic roles and functions of regional and central offices. But with the regionalization of national agencies, sectoral development priorities were re-focused to specific physical areas in contrast with previous policies of central offices which were oriented predominantly to the National Capital Region --- (Metro Manila) and Central Luzon then the leading agricultural region.

NEDA also prepared a number of resource and investigation studies as well as infrastructure development plans both on national and regional levels in cooperation with PPDO-DPWTC. Noteworthy was *The Physical Perspective Plan for the Philippines (1976)*[14] where a proposed national infrastructure investment program, with an accompanying policy-framework and development strategy for each of 12 regions (excluding Metro Manila) prepared. The resources, economic potentials, prospects for regional and urban development, and obstacles to regional

[14] See details on 2.2 The First Cycle (1978-1986): Development of the regional development centers and 2.2.1 Characteristics of the development plan.

growth were analyzed framework of planning for regional development strategy was recommended. It also proposed the development of the country's three leading cities ---namely the Metro Manila Area, the Metro Cebu Area, and Metro Davao Area --- as the primary growth centers for Luzon, Visayas, and Mindanao (termed as the *Tri-Polar Growth Strategy).*

(2) Metro Cebu within the context of regional development plan

The basic development approach for Metro Cebu Area was (and continues to be) the dispersal of the increasingly concentrated economic and population in Metro Manila by adopting strategies of industrial development and resource management of its upland and coastal areas. Simultaneously, these twin strategies would coincide with the foundation-building through provision of necessary infrastructure to promote industrial activities in this primary growth center in the Visayas area. Before this period, there were little attempts to integrate regional development with investment plans of each central government agency. With a region-based approach, public investments and projects for Metro Cebu would be implemented by each central government agency to support its principal functions for a primary growth center to be ensured. Thus each sector policy was to adopt an area-based approach and strategies and it was expected to strengthen the efficiency and effectiveness of public investment. Therefore, prioritized ODA projects in regions including Metro Cebu emerged as major investments of the national government.

(3) Drafting national and regional development plans and coordination of related agencies

“The Five-year Development Plan: 1978-1982”, “Ten-year National Development Plan:1978-1987”, and “Long Term Development Plan: 1978-2000” were the start to implement the major development program and project. On a parallel with these national plans, a regional development plan was prepared in each region. Most projects identified in the 1976 prospective were involved in a regional development investment program for investment period from 1978 to 1982.

After the regional infrastructure development plan, like NEDA’s Development plan and the Central Visayas Regional Development Framework Plan and Regional Development Investment Program, were prepared, a series of technical assistance studies were conducted for Metro Cebu (and Metro Manila as well) and involved various government agencies. The activities included among others, urban land use and transport planning, infrastructure investment programming for ODA, including yen-loan projects, industrial planning and development, as well as promotions of private investments. Table 4-1 summarizes the roles of related agencies for various ODA projects and/or private investments in Metro Cebu. Figure 4-1 shows the relationships and policies in the NEDA 1978-1982 Plan including those in the Regional Development Framework

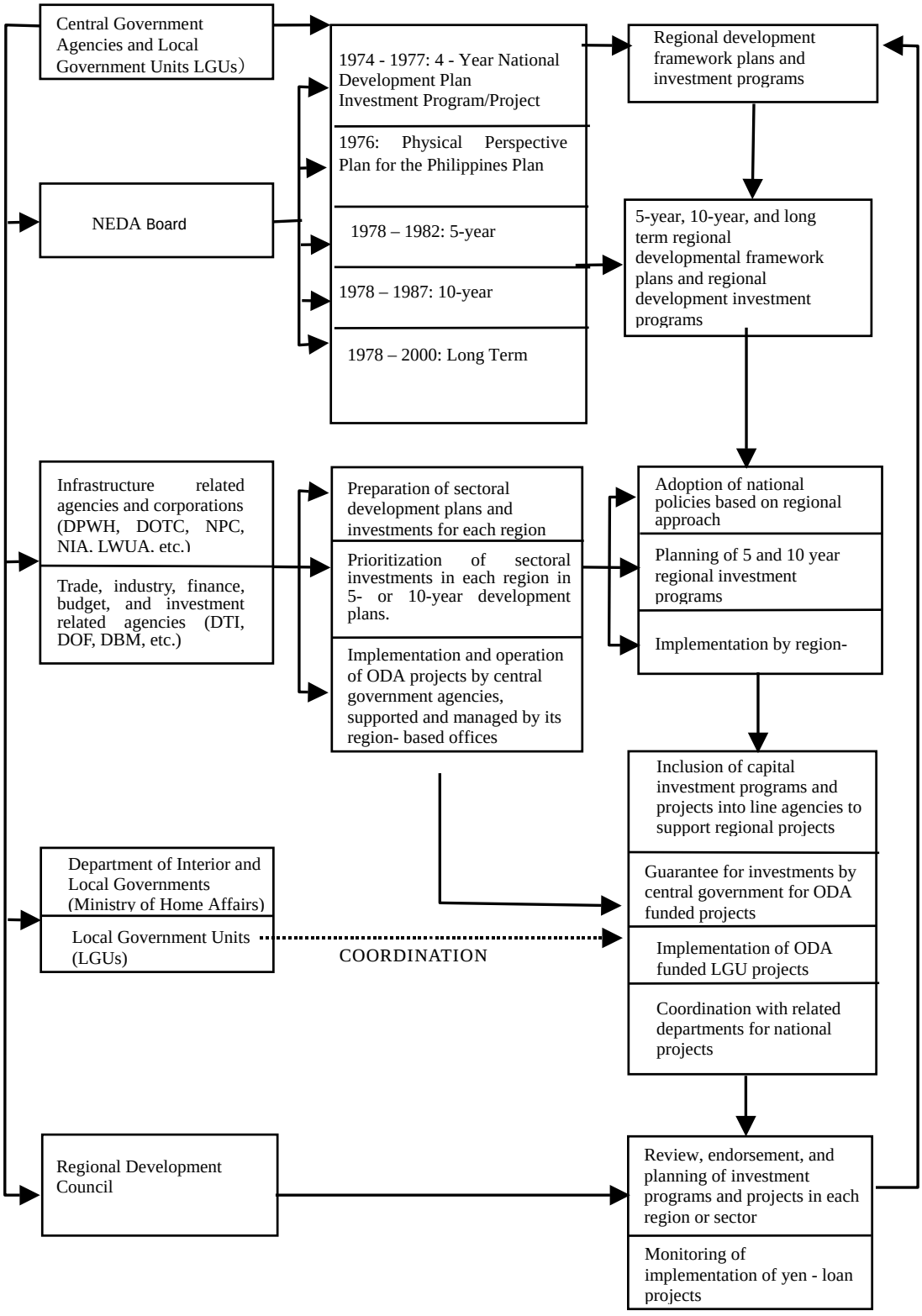
Plan and Investment Program of the Central Visayas Region

The related agencies and the regional offices drew up regional development plans side by side. As a result, many of the investment projects proposed to the central government as priority regional infrastructure investments were already included in the 1987-1982 Regional Investment Programs. IN this manner, region-based main infrastructure development projects have come to be implemented under the cooperation and coordination within the related agencies..

**Table 4-1: Major Policies, Roles, and Functions of Related Government Agencies in Metro Cebu Development**

| Departments (Ministries) Including Local Governments | Major Policies, Roles and Functions In Metro Cebu Development |
|---|---|
| National Economic and Development Authority (NEDA) | ◆ Review, evaluation, and recommendation of ODA projects proposed by DPWH, DOTC, MCDP for NEDA Investment Coordination Committee (ICC)<br>◆ Monitoring and evaluation of ODA projects |
| Department of Public Works and Highways (DPWH) | ◆ Supervision and coordination of MCLUTS (1978-1979) with NEDA, DOTC (1978 – 1980), and DPWH regional offices<br>◆ Planning, supervision, and maintenance of MCDP (national) urban roads, traffic management, and related works; arterial roads network project; the second Mandaue-Mactan Bridges and so on |
| Department of Transportation and Communications (DOTC)<br>Mactan-Cebu International Airport Agency (MCIAA) and Cebu Port Authority (CPA) | ◆ Establishment, funding, and operation of OECF-IBRD supported Cebu port projects and OECF supported Mactan-Cebu International Airport project<br>◆ Independent operation and management including planning and financial management of international port and/or airport facilities. |
| Bureau of Local Government Finance Municipal Development Fund Office (BLGF-MDFO)<br>Department of Finance (DOF) | ◆ Provision of budget for fund allocation of MCDP ODA projects<br>◆ ODA fund management including subsidy fund |
| Department of Budget and Management (DBM) | ◆ Budget planning, operations, and management of peso counterpart of central government projects |
| Cebu City, Mandaue City, Lapu-Lapu City, Talisay City, and Cebu Province | ◆ Planning, management, operation, and repayment of ODA funded projects<br>◆ Fund recovery of enterprises and loan repayment to the central government |
| Mactan Export and Process Zone (MEPZ)<br>Philippine Economic Zone Authority (PEZA) | ◆ Promotion of industrial development and export-oriented investments through provision of basic facilities and incentives through the special economic zones |
| Department of Trade and Industry (DTI),<br>Bureau of Investments (BOI) | ◆ Establishment of the national policies, strategic plans, incentives, and preferential treatment of trading and industries<br>◆ Promotion of local, national, and international investments to Cebu<br>◆ Approval processes of Cebu-based trade and industrial activities<br>◆ Management of the Department of Trade and Industry |
| Central Visayas Regional Development Council (RDC 7) | ◆ Coordination and supervision assistance in the implementation of Metro Cebu ODA projects |
| Cebu Investment Promotion Center (CIPC) | ◆ Assistance to private sector<br>◆ Promotion of industrial investments and other business in Cebu |

**Figure 4-1: Preparation of Development Plans and Regional Investment and Sectoral Programs**



## 4.2 The Second Cycle (First Period): Preparatory Period for Regional and Urban (City) Development Projects

(1) Planning and preparation of implementation system lead by region-base

The first half of the Second Cycle may be regarded as foundation-building by central government to establish the support system for its decentralization policy and a region-based system in planning and preparation of the project implementation by region-base. These included the establishment of the Municipal Development Fund (MDF; 1984/1987) [15]; the Metro Cebu Development Project Office (MCDPO; 1988) under Regional Development Council (RDC); the enactment of new Local Government Code (1991); the increase in the ratio of Internal Revenue Allotment (IRA) of local governments from national domestic tax revenues; the strengthening of regional decision-making with its political representations; and creation of region-based autonomous public transport corporations of central government agencies.

The RDC of Central Visayas Region (Region VII) was in charge of implementing MCDP (1) and (2).[16] The objective of NEDA's policy-decision was to promote decentralization under the regional development policy by enhancing RDC functions and authorities to execute MCDP(1) and (2) A Metro Cebu Development Project Committee and a Metro Cebu Development Project Office (MCDPO)[17]. The Metro Cebu Development Project Committee was establish under the RDC for purposes of managing MCDPO activities such as confirmation of the consistency of urban development and implementation plans with priority regional development investments appraisal and approval of sub-project; coordination of procurement systems of regional agencies and local governments; project inspection and monitoring; review and submission of MCDP annual implementation schedules, budget plans, and human resources; and endorsements of procurement activities/agreements to concerned central government offices. The MCDP committee was composed of the mayor of Cebu City (chair) and the mayors of cities and towns

[15] The MDF was actually established under the Presidential Decree 1914 (March 1984) but its operationalization was effected under Joint Circular 6-87 issued in August 1987 by DOF, BLGF, COA, and DBM.

[16] The RDC members include provincial governors and city mayors of the Central Visayas region such as Cebu provinces of Cebu, Bohol, Negros Oriental, and Siquijor, and the cities of Cebu, Mandaue, Lapu-Lapu, and Talisay; the regional directors of agencies such as NEDA, DPWH, DBM, DILF, and DOF. The NEDA VII regional office takes charge of administration and functions as its secretariat. A notable function of RDC is its approval of investment programs and projects in the region, project inspection and evaluation, as well as endorsement of all projects including those under ODA. In actual practice, ODA-funded projects are considered in the pipeline after these have been reviewed and endorsed by RDC; these are then evaluated and approved by the Investment Coordination Committee of the NEDA Board, and lastly approved by the President, as chair of the Board.

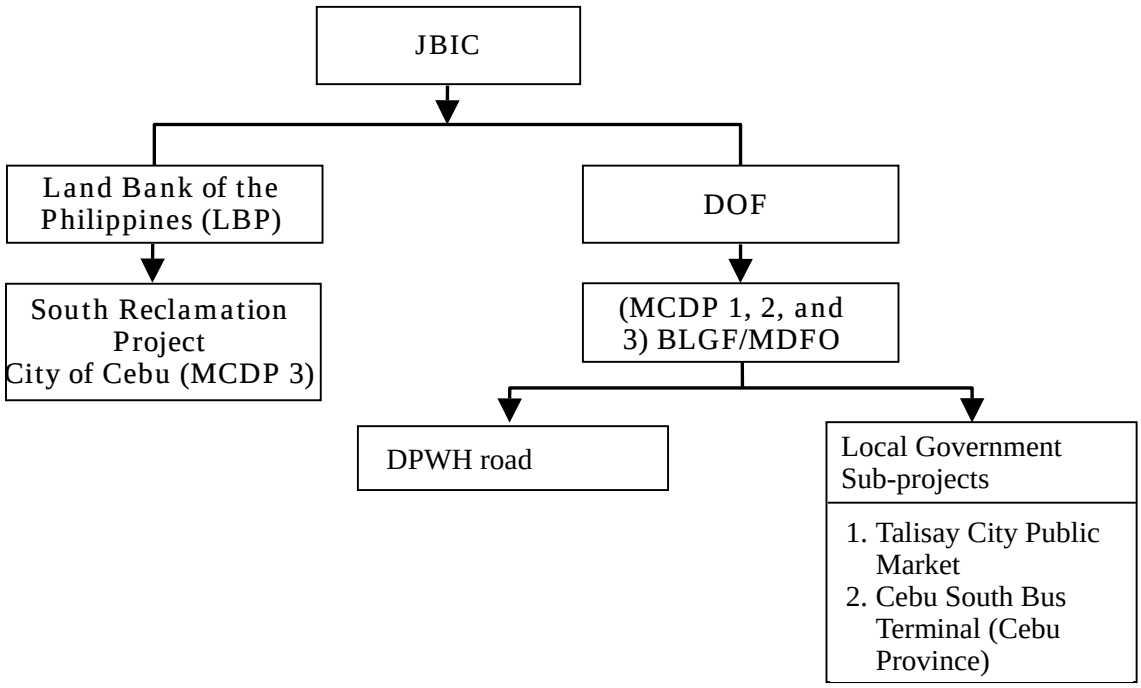
[17] As described earlier, the former MCDP was the Central Visayas Regional Project II (Urban Area). It functioned as a part of organization of Central Visayas Regional Project Office (CVRPO) funded by the World Bank, which was established under Executive Order 907 in 1983. As organized in 1988, the MCDPO was transferred from CVRPO to the RDC VII.

of Mandaue and Lapu-Lapu and Talisay (a town at that time), and the regional directors of national agencies of NEDA, DPWH, DOF, Department of Budget Management (DBM), and the seventh regional director of Department of Internal and Local Government (DILG). The MCDPO was in charge of administrative matters. Although final approval of actual project implementation still remained with the central government agencies --- as contrasted to an approval by regional agency of a subproject (e.g., the DPWH regional office who was also an MCDP Committee member, in case of its OECF-funded national road construction projects) --- the practical project implementation, work-flow took on the following procedure: the Committee would first recommend the results of their review and endorsement of priority ODA investment proposals to RDC; in turn, the RDC would pass its own endorsement for the approval of central government through a resolution. Therefore, the Committee took charge of actual project coordination and management work to implement multiple yen-loan projects in Metro Cebu; and simultaneously, the MCDP regional member-agencies were afforded both the opportunity and responsibility of discussing final recommendations on projects and activities before being approved by their central agencies. Also the Committee played a role to present the LGU’s mind. On the other hand, during yen-loan implementation, the MCDP Office (MCDPO) was responsible for project administration and management including procurement procedures (except approvals), activity-coordination with other related agencies and stakeholders, scheduling, implementation, and monitoring of sub projects implementation with executing agencies such as DPWH. Despite some limitations, the basic policy-objective and project management system enabled the region-based MCDP and LGUs to take the lead and initiatives in decision-making and implementing their yen-loan development projects.

(2) Organization of regional development support system by the central government

To assist the implementation of yen-loan projects of regional agencies and local governments in Metro Cebu, the central government institutionalized several systems. In MCDP (1) and (2), the Municipal Development Fund (MDF) which was established as a fund within the framework of DOF, provided direct, long-term financing under the rational conditions (1) (2) to Metro Cebu's local government development projects. Figure 4-2 shows the MDF scheme in which many MCDP yen-loan subprojects were funded and implemented. The same figure compares another other yen-loan scheme which was also supported and guaranteed by the central government to implement a sub-project of MCDP (3), namely the Cebu City South Reclamation. This project utilized a government financial institution (i.e., the Land Bank of the Philippines) to access the yen-loan.

**Figure 4-2: Financing Flows of Yen-Loans to MCDP (1, 2, and 3)**




At the time when MCDP (1) and (2) were being implemented, the Bureau of Local Government Fund (BLGF) under DOF managed MDF, and performed fund-management, such project management and project coordination with NEDA and JBIC. The BLGF performed as financial advisor to MCDP and directly worked with and coordinated funding activities with central budget and finance agencies without the need for other central agency inputs such as from DPWH). This resulted in the proper allocation and timely, efficient fund releases and loan disbursements to MCDP sub-projects.

The new Local Government Code (Republic Law 7160) enacted in 1991 recognizes that each municipality or city as major direct beneficiaries of the national development budget for its plans and projects. The law specifies the annual size of funds to be provided to local governments through an Internal Revenue Allotment (IRA) --- 30% share of 1989 Internal Tax Revenue for 1992 and 35% of the 1990 Internal Tax Revenue for 1993. Beginning 1994, as legally enacted, it constituted 40% of Internal Tax Revenue 3 years prior to the subject year.[18] During this period, the central government appointed a new chairman for RDC VII with the recommendation of the RDC 7 to replace the previously appointed official under Marcos

[18] Yasunori Yamamoto, 'Functional relationship of local municipalities and the central government in regional development', "Research on International Cooperation", Vol.14: No.1, April 1998 (Only Japanese). In addition, local government units can use the IRA to guarantee their MDF lending.

administration. This change also illustrated how a direct political channel to the central government to report the needs for the regional development and to realize the plan.
The Mactan (Cebu) International Airport Authority (MIAA) was established in 1990 with the enactment of Republic Act 6958. With their unity in sponsoring the bill, Representatives from Cebu thus played a crucial, important role in its organization. Under Republic Act No. 7621 in 1992, the Cebu Port Authority was also established in 1996as the first region-based port authority in Visayas and Mindanao. While the chairmen of the Boards of both MIAA and Cebu Port Authority were from DOTC and based in Metro Manila, the two transport agencies were given greater administrative autonomy and management authority in operational and financial policies.

## 4.3 The Second Cycle (The Second Period): Implementation of regional urban development projects – weak project coordinating organization and attendant problems in Metro Cebu projects

(1) Resulting problems from weak agency coordination and vague functional delineation
Under the MCDP (1) and (2) scheme, once an infrastructure facility is completed, another agency takes over and is responsible for its operations and maintenance (O&M); thus management is systematically shifted from a project implementing organization to a regular office of a line agency. With the eventual phasing-out of MCDPO which originally coordinated project implementation, agencies for O&M of some projects such as the urban arterial roads were undefined due to the absence of clear delineation of maintenance functions between local governments and DPWH regional/sub-regional offices. For several years, some completed MCDP (1) and (2) road projects were inadequately turned over and resulted in maintenance problems. Under MCDP (3), therefore, project implementation was transferred from the MCDPO under RDC 7 to City of Cebu and to DPWH. Post-project completion responsibilities for O&M by these two agencies were more clearly defined since the start of implementation. Furthermore, it is noteworthy that the minimal involvement of local governments in implementation was cited as a problematic situation in relocating residents during MCDP (1) and (2).

Consequently, exploring countermeasures to establish a responsible organization for the lateral coordination among various local government units and regional agencies --- functions performed for MCDP (1) and (2) by the previous MCDPO --- will result in more sustainable

and successful urban development projects from the Third Cycle onwards.[19] By establishing such a coordinating organization which can provide continuous monitoring, technical solutions and inter-urban management of common problems in Metro Cebu can be achieved only with full cooperation from all related regional agencies and local government units.

(2) Division of roles of central and regional government in promoting overseas investments

Presidential Decree 226 which evolved into the Omnibus Investment Act of 1987 sets the regulatory policies and procedures of foreign investments in the Philippines. Since then, after the enactment of foreign investment law in 1991, direct foreign investments rapidly grew and domestic investments in local industries also increased due to its synergistic effect.[20] During the second period of the Second Cycle, the Cebu Investment Promotion Center (CIPC) was established in 1994. The disparate functional roles of central and regional agencies performing activities to promote foreign investment activities were evident in the historical, multi-sectoral process of organizing the CIPC. Its antecedent developments included the drastic changes occurring in Southeast Asian countries such as the market-oriented economic reforms in Vietnam; the few FDI from Taiwan, Korea, and Singapore which propelled Thailand's export economy; and the rather knee-jerk, unsystematic FDI promotion efforts of the Cebu Chamber of Commerce and regional office of the Department of Trade and Industry (DTI).[21]

Because of these disparate promotion activities, the mayor of Cebu City, DTI VII, and the Cebu Chamber of Commerce took the initiative in establishing the CIPC. Its initial members included the mayor of Cebu as chairman, with representatives from cities of Lapu-Lapu and Mandaue, Consolacion municipality, Cebu province; the DTI Region VII office; and some representatives from private sector. The fund-sources of CIPC are from the private sector, Cebu province and Cebu City provides for almost its entire budget requirement. CIPC's foremost activities are: investment promotions to Cebu including public relations and administrative support to foreign

[19] During the First Cycle, the MCLUTS Study (1981) recommended establishing a Metro Cebu Development Authority under RDC to sustain regional policy and programs. The SAPROF Report (1989) also discussed the establishment of a regional development agency based on a proposed legislative bill to establish a Metropolitan Cebu Development Authority submitted to the House of Representatives in August 1988; this, however, has not yet been realized as of November 2003.

[20] With some exceptions in certain fields, 100% foreign share-holding is allowed to the maximum.

[21] The Overseas Trade Development Association, Cebu Investment Promotion Center, mentions investment promotion measures in its Study report (October 2002).

investor missions; assistance in resolving problems of investors including representations with PEZA; other assistance work for foreign investors and industrial companies outside of their corporate capabilities.

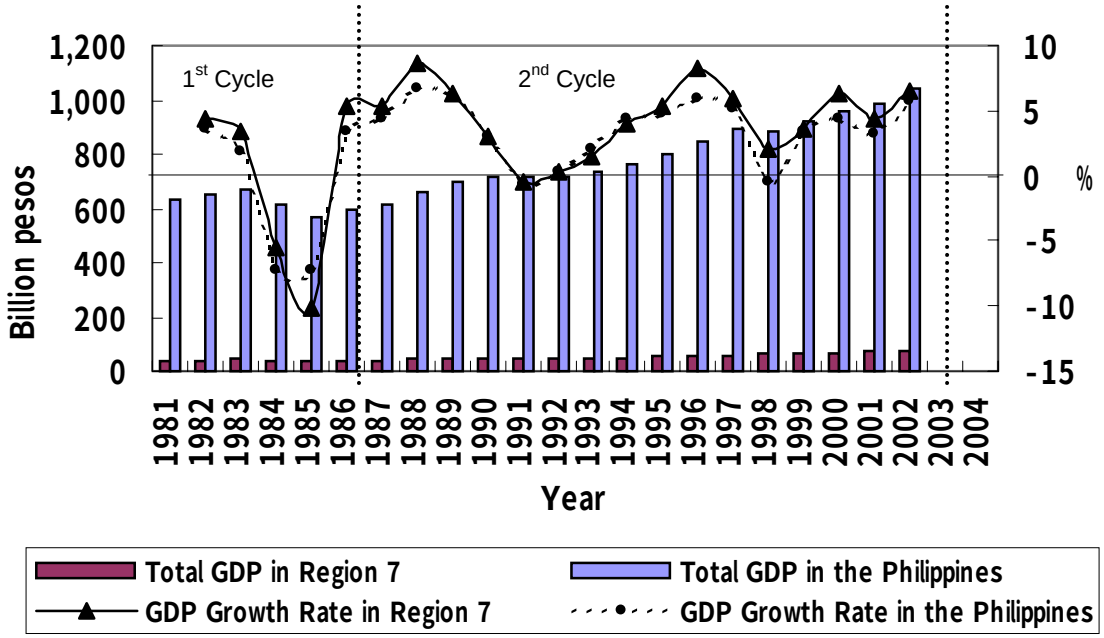
# 5. ANALYSES OF ECONOMIC AND RELATED DEVELOPMENT IMPACTS

## 5.1 Confirmation of Economic Development

### 5.1.1 Changes in Gross Regional Domestic Products（GRDP）

The economy of Metro Cebu, the subject area of the study, dominates and is the center of the Central Visayas' regional economic performance. As seen in Figure 5-1, its performance has been quite erratic with periods of decline and growth similar to that of the Philippines as a whole.[22] Actually, what is observable here is the fastest growth rate of the region has exceeded the fastest growth rate of the Philippines as a whole and this tendency holds true in both their negative growth performances.

**Figure 5-1:Changes in GRDP in the Central Visayas Region (1987-2002)<In 1985 Constant Prices >**




Source: National Statistical Coordination Board (NSCB) and NEDA Region VII

From Table 5-1 below, the actual average economic growth rates of Central Visayas region and the Philippines are compared by economic cycles. During the First Cycle (1982 to 1986), the

actual average economic growth rate of the Central Visayas region exhibited a negative growth of 0.54% --- which still performed slightly better than the country's overall lower performance of (-) 1.14%. In contrast, however, during the first half of the Second Cycle (1987-1992), Central Visayas' growth rate grew to +3.84% and surpassed that of the entire Philippines which managed a +3.35% for the same period. During the second half of the Second Cycle (1993-2003), the Central Visayas' growth rate posted its highest rate of +4.77% --- exceeding the country's highest economic growth rate at +3.87%.

**Table 5-1: Changes in Actual GRDP of Central Visayas Region/GNDP of the Philippines And Growth Rates (%) (1982 - 2002)**

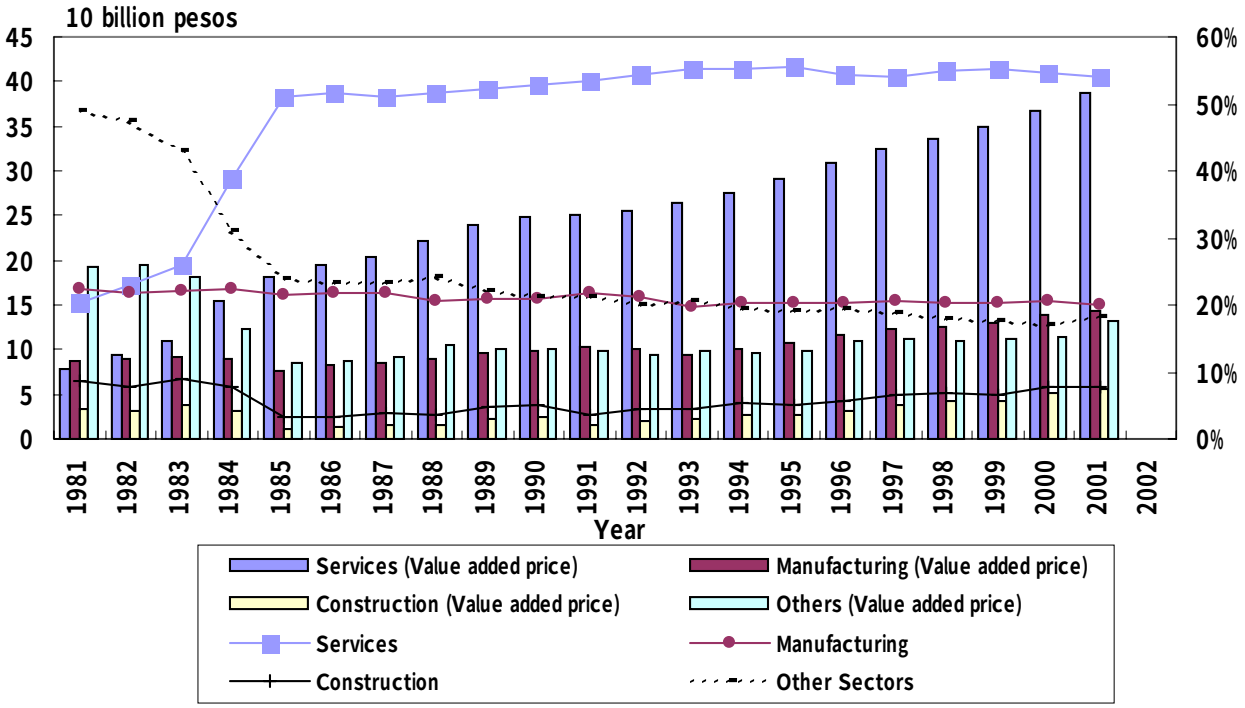
| Year | Central Visayas Region | | Philippines | |
|---|---|---|---|---|
| | Actual GRDP (In M Peso) (1985 Constant Prices) | Growth Rate (%) | Actual GDP (In M Peso) (1985 Constant Prices) | Growth Rate (%) |
| 1981 | 39,121 | | 630,645 | |
| 1982 | 40,816 | 4.33 | 653,469 | 3.62 |
| 1983 | 42,183 | 3.35 | 665,718 | 1.87 |
| 1984 | 39,838 | -5.56 | 616,963 | -7.32 |
| 1985 | 35,754 | -10.25 | 571,884 | -7.31 |
| 1986 | 37,680 | 5.39 | 591,423 | 3.42 |
| 1987 | 39,662 | 5.26 | 616,926 | 4.31 |
| 1988 | 43,107 | 8.69 | 658,583 | 6.75 |
| 1989 | 45,813 | 6.28 | 699,451 | 6.21 |
| 1990 | 47,193 | 3.01 | 720,691 | 3.04 |
| 1991 | 46,971 | -0.47 | 716,523 | -0.58 |
| 1992 | 47,086 | 0.24 | 718,942 | 0.34 |
| 1993 | 47,757 | 1.43 | 734,156 | 2.12 |
| 1994 | 49,663 | 3.99 | 766,368 | 4.39 |
| 1995 | 52,327 | 5.36 | 802,224 | 4.68 |
| 1996 | 56,615 | 8.19 | 849,121 | 5.85 |
| 1997 | 59,926 | 5.85 | 892,860 | 5.15 |
| 1998 | 61,174 | 2.08 | 888,075 | -0.54 |
| 1999 | 63,341 | 3.54 | 918,160 | 3.39 |
| 2000 | 67,353 | 6.33 | 958,411 | 4.38 |
| 2001 | 71,670 | 6.41 | 989,258 | 3.22 |
| 2002 | 74,895 | 4.50 | 1,046,083 | 5.74 |

Source : National Statistical Coordination Board (NSCB)
National Economic and Development Authority Region VII

[22] Since the data for gross regional domestic product of Metro Cebu area was not publicized, the study used the published data for GRDP of the Central Visayas region. Though unconfirmed, the share of Metro Cebu is said to be 80% of the GRDP.

Figure 5-2 shows the changes in the shares of Services, Manufacturing, and Construction sectors in the GRDP as well as their Value Added amounts. The Services grew more significantly than other sectors between 1981-2000. While the annual growth rates in Manufacturing and Construction were at 2.51% and 2.54% respectively, Services sector reached 8.29%. In 1981, the share of Services sector was merely 20% of the GRDP but significantly grew up to 54.2% in 2001. On the other hand, the share of Manufacturing decreased from 22.3% in 1981 to 19.9% in 2001 while the share of the Construction sector decreased from 8.5% to 7.7% for the same horizon.

**Figure 5-2: Changes in Added Value Amount by Industry and Share of GDRP (1981 - 2002) <1985 price standard>**




Source: NSCB NEDA Region7

## 5.2 Confirmation of significant external factors other than the Urban Development Model

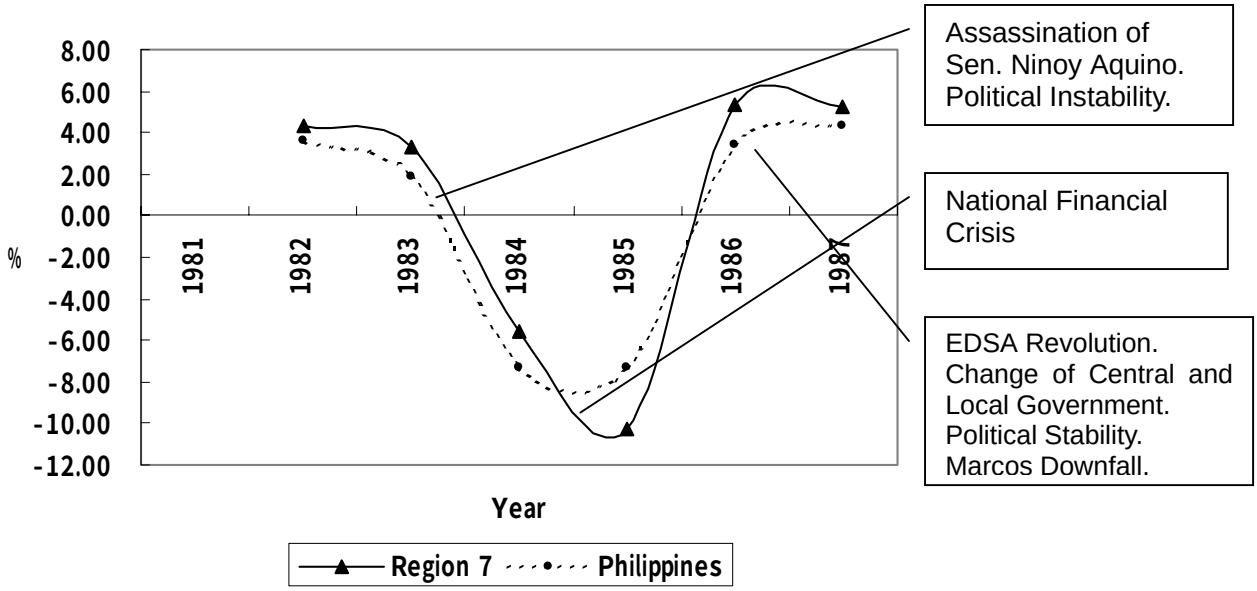
Central Visayas' regional economic performance has been influenced not only by national domestic factors but also by various international events aside such as the Gulf War in 1991, the Asian Currency Crisis in 1997, and the global impact of SARS (Severe Acute Respiratory Syndrome) in 2002. The following chapter attempts to show how and when these national and international incidents affected the regional economy. Effects will be observed in the changes of

actual growth rates of GRDP. Specific reference is made to the analytical framework of development cycles described in the Chapter 2 of the study: the First Cycle covers the period between 1978 and 1986; the Second Cycle from 1987 to 2003 --- with a first period coinciding from 1987 to 1991 and a latter period between 1992 to 2003.

### 5.2.1 The First Cycle (1978 - 86)

During the First Cycle (between 1978 and 1986), Metro Cebu's development was initiated by the central (national) government which prepared plans and conducted project preparation for regional development. As seen in Figure 5-3, it was also during this period when a series of dramatic events occurred and brought about an unstable economy and social upheaval in the Philippines. These included the assassination of former Senator Benigno S. Aquino. Jr. in 1983, then the foremost opposition leader to the incumbent former President Ferdinand E. Marcos; the Philippine financial crisis from 1984 to 1985; the turbulent months from January and February 1986 --- beginning with the "snap elections", the ensuing *EDSA Revolution,* and the downfall of the Marcos administration of 1986 to name a few.[23]

**Figure 5-3: Economic Development and Political/Economical Factors During the First Cycle (1978-86)**

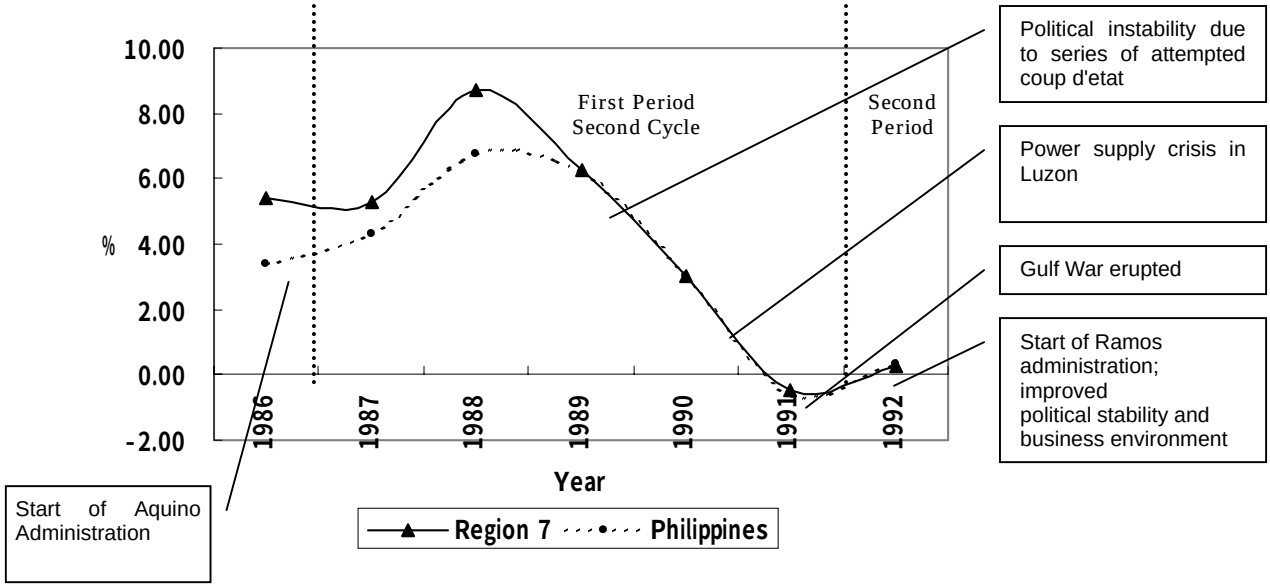



[23] The *EDSA Revolution* is known as the major political upheaval which forced former President Marcos to leave the country and seek refuge in Hawaii. Hours after he left, the people stormed the residence of the president. It is also known as the *February* or *People Power Revolution.*

### 5.2.2 The First Period (1987 to 1991) of the Second Cycle

The new Aquino administration assumed government in February 1986. During the first half of the Second Cycle (1987-91), regional development plans which were prepared during the First Cycle were taken over and the concrete plans were made for their implementation under regional government. This is the period when the Philippine economic performance underwent many ups and downs. The first three of its six year term saw the new government grappling with a series of threat of coups and constant political instability with the resistance to central and regional government reform. Government officials were also replaced with the people appointed by the new government and contributed to the general slowing down of local government functions and national administrative operations. In addition, chronic shortage of electricity generated by Luzon power plants caused daily shutdowns and service interruptions throughout the main island and seriously affecting manufacturing, commercial, and general business productivity. Despite the transitional setbacks, the mid-term structural reform initiated by IMF and World Bank and actively supported by international community led by Japan contributed to the Philippine economy's initial recovery and growth from 1987 through 1989. But due to the Aquino administration's inability to conform with the mid-term economic and structural reforms anticipated by the international community, the Philippine economy as expected gradually headed towards an economic downturn.

**Figure 5-4: Economic Development and Political and Economic Factors: the First period of the Second Cycle (1987 - 91)**



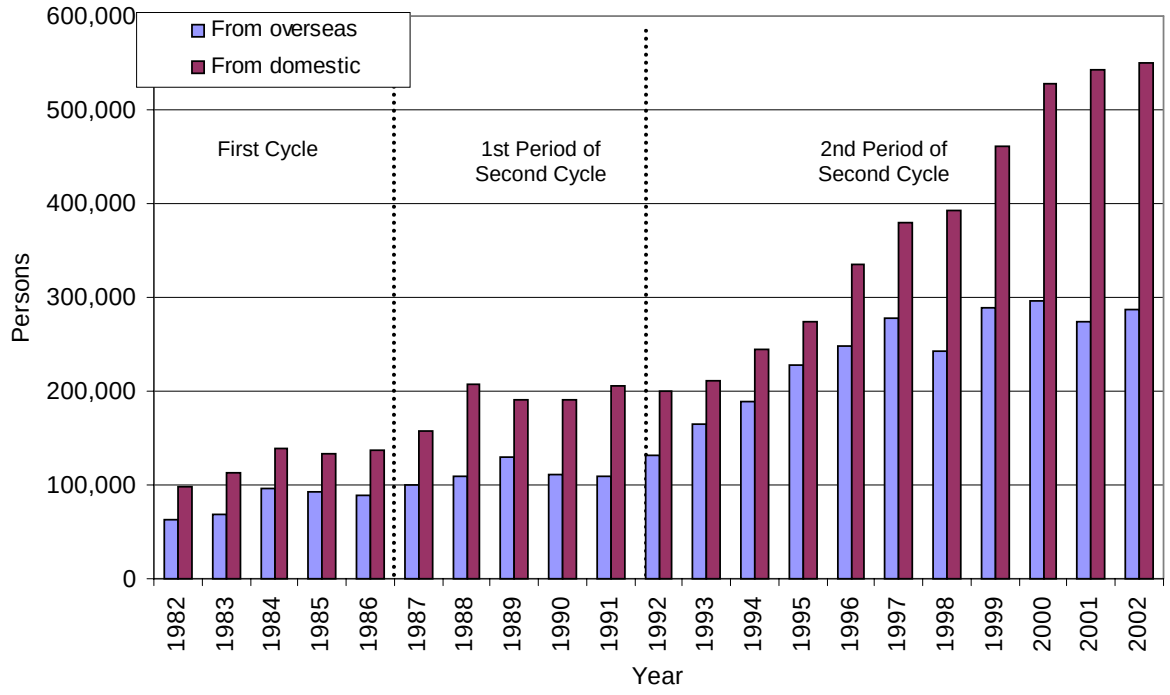
### 5.2.3 The Second Period (1992 - 2003) of the Second Cycle

Actual construction of Metro Cebu urban development projects (MCDP1) started in 1992 when the Ramos administration took over the Aquino government. With the restoration of democratic institutions and stable political environment, the Philippine and the Central Visayas regional economies as well achieved steady growth and witnessed increased private investments until Asian Currency Crisis in 1997. However, the successive almost cyclical political turmoil during the Estrada to Arroyo administrations again adversely affected both the national and the Central Visayas economic performance. By 1998, Central Visayas again recorded a negative growth. And despite a slight recovery from 1999 to 2000 and 2001, it started to decline again in 2002 (Figure 5-6). The after shocks of the Asian Currency Crisis (1997-1998); 9/11 terrorists attack on the World Trade Center in New York City, and the global SARS epidemic --- these external factors further exacted heavy toll on and negatively affected the international tourist industry in Cebu which has been growing steadily since 1990.

Due to Asian Currency Crisis, many local companies mostly engaged in import industry and with dollar denominated bank loans experienced repayment difficulties ---leading to a general slow down in the market economy, increased costs of materials, and eventually peso devaluation. Consequently bankruptcy of local industries followed one after another and unemployment rate climbed to 50,000 by 1998. Investments to local industries fell sharply --- and simultaneously. At the same time, Cebu lost numbers of tourists due to the cancellation of direct flights to and from Cebu, Hong Kong, and Kansai Airport. Its tourist industry was more than significantly distressed (Figure 5-5). Between 1999 and 2000, export performance of special economic zones (MEPZ-1 and 2) dipped similarly and continued its slide through 2001 --- starting mainly from the unstable peace and order situation in Mindanao and affecting investor confidence not only in the country's economy but also security as well.

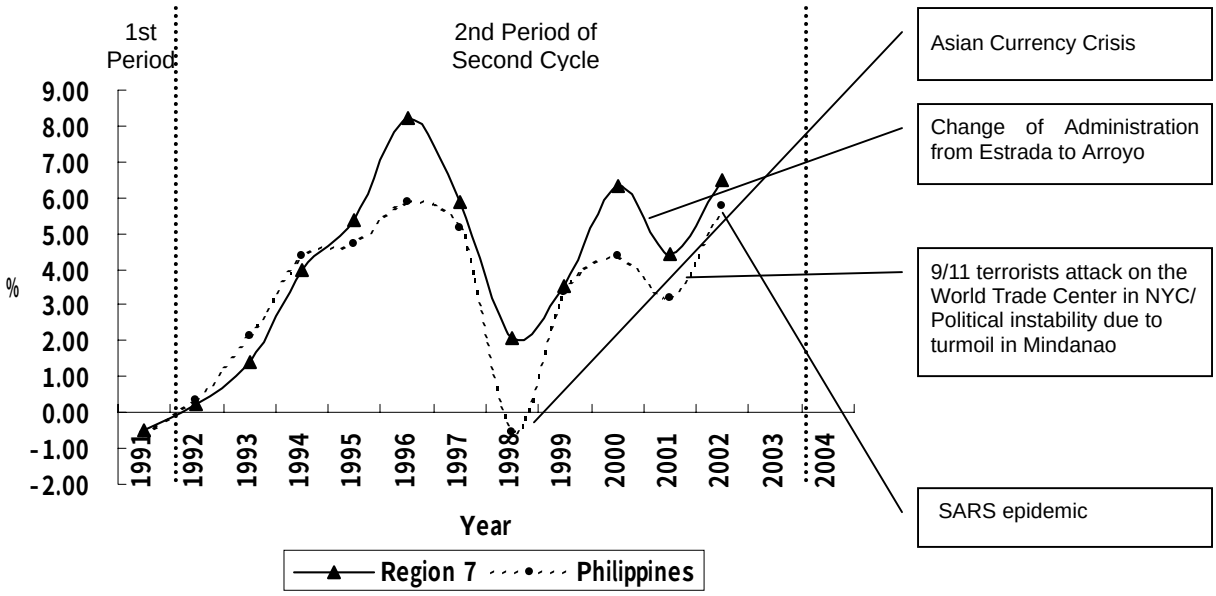
The SARS epidemic in the first quarter of 2003 discouraged American and European tourists away and badly affected Metro Cebu’s tourism economics; it recovered briskly however after WHO released the official safety statement on the Philippines and thereafter tourist reservations started picking up in the same fiscal year

**Figure 5-5: Visitors to Metro Cebu (Tourists, Returning Filipinos, Commercial Purposes)**




Source: Department of Tourism Region

**Figure 5-6: The Second Cycle（The Second Period：1992－2003）**
**Economic Development and Political/Economical Factors**

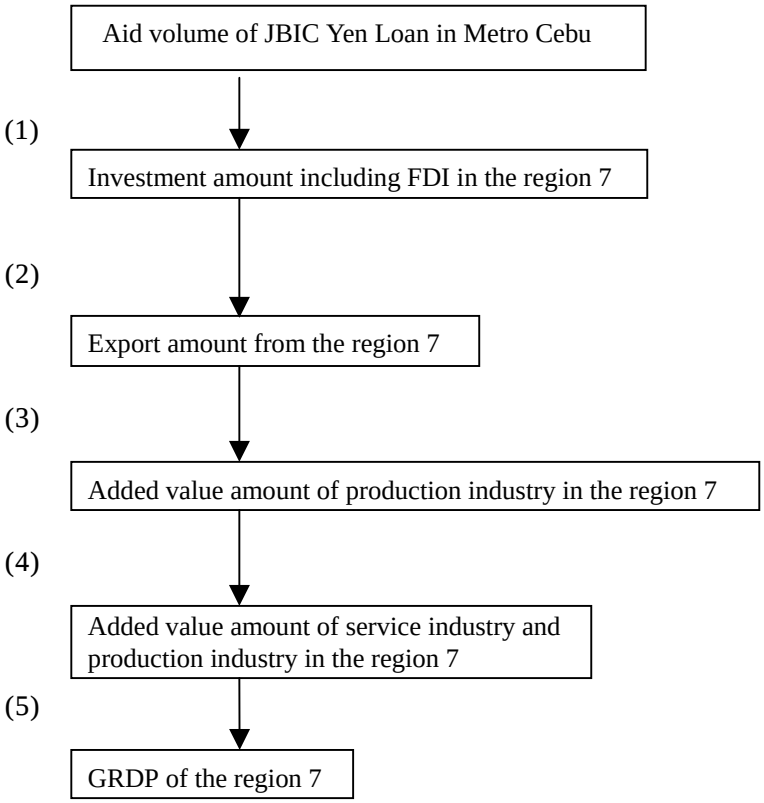


The local industry is also affected by the global free trade regime. The Philippines is not only a member of WTO, but also of the Asian Free Trade Area (AFTA) designated by Association of Southeast Asian Nations (ASEAN), and a member of the Asia Pacific Economic Cooperation Council. Under Common Effective Preferential Tariff (CEPT) scheme, members have agreed in principle to lower preferential tariffs in AFTA to 0~5%, in the Philippines from 30~50% by the year 2008. As an Individual Action Plan (IAP) since January of 2003, the Philippines adopted the preferential tariff rate of 3% for raw and middle materials and 10% for the finished products. The Philippines aims to further lower tariffs for the finished products to 5% from 2004 onward.

This international trend in free trade brings small-scale companies and industries with less global competitiveness under much more severe conditions. Excluding the electronics industries backed by FDI, Metro Cebu's traditional industries such as textile, apparel manufacturing, woodcrafts, furniture, small-scale household items or food products are already facing serious competition from China and other developing countries in the US and European markets. Distribution from these competitive countries is spreading not only in the export products market, but also to the domestic markets in the Philippines including Metro Cebu. Opening up to free trade will definitely result in more fierce and tougher competitive situation for them. Medium- to small- or even micro-scale companies are facing serious challenges to re-focus their mind-set with more effective tactics to stand against international competition.

## 5.3 Urban development model and impact on the Metro Cebu regional economy

In reviewing economic effects of yen-loan projects in Metro Cebu, each correlation and description of explanatory variables was analyzed by aid amount, investment amount, export amount, added value amount and individual consumption expenditure amount. The analyses also tried to show how increase in JBIC aid amount would have affected the export, GRDP and individual consumption expenditure amounts. The following analyses were made considering the urban development model, namely: infrastructure development -> increase in investment amounts -> economic enhancement.




The following analyses were based on the provisional impact analyses using the estimated yen loan amount invested to Metro Cebu and to the Region VII and qualified with sampling numbers or areas with available data. The analyses used the Statistic Analyses Software (SAS; Yule-Walker: regression analyses with auto-coefficient mechanism). Collected information used 1990 through 2001 data, values of which were adjusted to 1985 levels.

**(1) Relationship between Cumulative Aid Amount/Factor (CAF) by JBIC and Cumulative Investment Amount (CumInv)**

The following regression analysis was made to show relationship of JBIC's cumulative yen-loan amount between 1991 and 1999 (Lag2CAF: million pesos), variable with 2 years time lag, and cumulative investment amount to the Region VII between 1993 and 2001. Numbers in parentheses represent *standard error; "**t**"* represents coefficient t-value; *DW* represents Darvin-Watson ratio.

Regression formula (1)-1:

| | | | | |
|---|---|---|---|---|
| CumInv= | 12,033 | + | 11.0559 | Lag2CAF |
| | (3,389) | | | (1.6105) |
| | t=3.55 | | t=6.86 | |

$R^2$=0.8871

DW=1.0147

Lag2CAF: cumulative yen loan amount with 2-year time lag shows the cumulative loan investment amount of yen-loan projects implemented in Metro Cebu since 1991. Cumulative investment amount to the Region VII was used for dependent variables. Investment amount to the Region VII used in the analysis is the sum of (1) investment amount at the time of registration of the companies registered to MEZ and PEZA, mostly consisted of foreign capitals, (2) investment amount reported to SEC and (3) initial investment amount reported to DTI, which mainly consisted of domestic investment capitals. According to the regression analysis, the high relationship of yen-loan execution amount and cumulative investment amount is evident as seen in the coefficient of determination ($R^2$) where t-value appears statistically significant when the relative value of loan-execution amount for yen-loan projects is at the level of 1%. Moreover, from the DW ratio being 1.0147, it is not necessary to consider the occurrence of auto-correlation at the level of significance at 1%.

The following regression formula (1)-2 represents the analysis using cumulative investment amount of the companies registered to MEZ and PEZA at the time of registration (CumFDI: million pesos) instead of using cumulative investment amount to the Region VII as dependent variables.

Regression formula (1)-2:

| | | | | |
|---|---|---|---|---|
| CumFDI= | 755.8734 | + | 1.1343 | Lag2CAF |
| | (205.0764) | | | (0.1067) |
| | t=3.69 | | t=10.63 | |

$R^2$=0.9496

DW=1.6279

**BOX 3: How to read the regression analyses**

Regression (1) -1 is taken as an example and the analyses using regression are explained below:

CumInv = 12033 + 11.0559 Lag2CAF
(3389) (1.6105)
t=3.55 t=6.86
$R^2$=0.8871
DW=1.0147

(1) 12,033 means the section of regression. That is, even when the variable (Lag2CAF) with the time difference for two years about the total amount of the Japanese Yen Loan is 0, it is shown that the cumulative investment amount (CumInv) in the Region 7 is predicted to be 12,033 million pesos.

(2) 11.0559 means inclination of regression and is called a regression coefficient. When above-mentioned regression adds 1 million pesos to Lag2CAF, it shows that it is predicted that CumInv carries out the increase in 11.0559 million pesos.

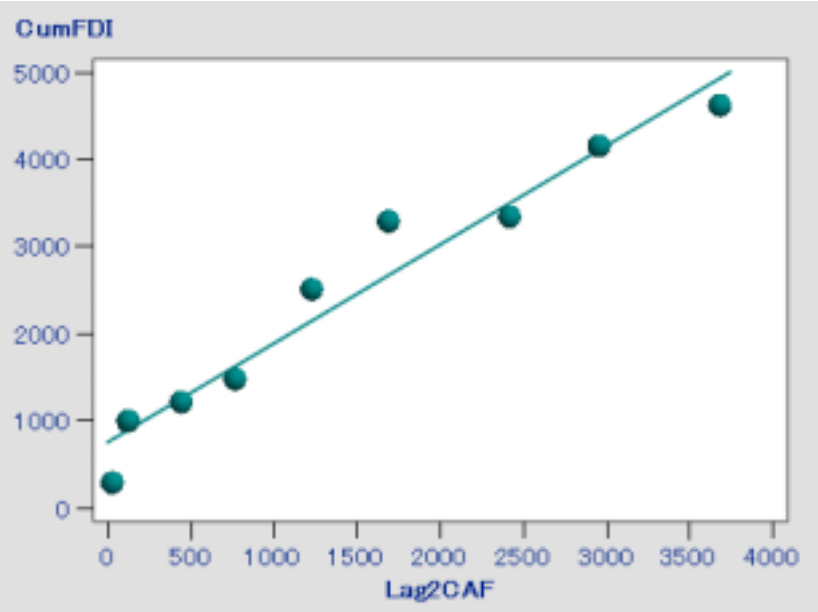
(3) What does (3389) mean? (4) What does (1.6105) mean?
Standard error is one index of expressing a specimen error and is the standard deviation of distribution in a specimen inferential point. That is, when the statistical value is calculated with the specimen repeatedly extracted from a population, that statistical value has a deviation whenever the specimen is extracted, but standard error is the index of the deviation at this time and expresses the accuracy of a statistical value.

(5) What does “t” mean and how much should the value be?
The “t” is the value which is devided by the regression coefficient by each standard error, and is the statistical value used for the statistical test method with t distribution in hypothesis test. In t-test, the critical value for risk ratio (significance level) and degrees of freedom should be calculated using t distribution table, and if previous t value calculated by a regression coefficient and standard error is larger than critical value, a null hypothesis will be rejected. In this analysis, “the result is statistically significant with 1% of the level” shows that probability of Zero for a section or a regression coefficient is 1/100.

(6) What does $R^2$ mean and how much should the value be?
$R^2$ is the statistical value to show how a regression explains the objective variable (dependent variable). If $R^2$ (decision coefficient) becomes 0.88, it shows that the regression can explain 88% of fluctuation of objective variable. If the number of observations is more than fixed, the more it is close to 1, the intimate the explanatory variable (independent variable) is related to the objective variable (the regression has explanation ability), and it is considered well if the degree is up to 0.8.

(7) What does DW mean and how much should be the value be?
Durbin-Watson Ratio is a statistical value for the test of the existence of self-correlation of residual (difference of an observation value and theoretical value) in regression analysis. When residual is seen as a time series, it is the index to confirm whether it is random or periodic. If residual is random, the value will be close to 2.

Dispersion chart for the regression formula (1)-2[24] (Unit: Million Pesos)




There is a high degree of relationship between the cumulative yen-loan execution amount and cumulative investment amount of the companies registered to MEZ and PEZA at the time of registration. The coefficient is statistically significant when the relative value of loan-execution amount for yen-loan projects is at the level of 1%. Moreover, from the DW ratio result, it is not necessary to consider the occurrence of auto-correlation at the 1% level of significance.

The following regression formulae --- (1)-3 and (1)-4 --- are results of regression analyses using cumulative investment amount reported to SEC in between 1992 and 2002 (CumSEC: million pesos) and initial investment amount reported to DTI (CumInitial: million pesos) instead of cumulative investment amount to Region VII as subordinate variables. Yen-loan projects loan execution amount used data between 1991 and 2001 with a one-year time lag.

Regression formula (1)-3:

CumSEC= 4,411 + 2.9043 LagCAF

(1,556) (0.5164)

t=2.83 t=5.62

$R^2$=0.7981

DW=1.0918

[24] While the regression formula used in the text was the analyses adjusted with auto regression error, the value used in the chart was the results of regular regression analysis. Accordingly, there was not much difference in the given results between the two --- regular regression formula (1)-2: CumFDI=756.0894 + 1.1344 Lag2CAF.

Regression formula (1)-4:

CumInitial= 5,546 + 5.8704 LagCAF

(1,941) (0.6479)

t=2.86 t=9.06

$R^2$=0.9112

DW=1.0184

As seen in the given coefficient of determination ($R^2$), the cumulative yen-loan execution amount and cumulative investment amount exhibits high relationship. Coefficient of yen-loan execution amount for yen-loan projects is statistically significant at the level of 1%. From DW ratios of regression formula (1)-3 and (1)-4, it is not necessary to consider the occurrence of auto-correlation at the 1% level of significance (or 1% meaningful level).

As stated above, the logarithmic analysis calculated from the data given by projecting the regression formulae (1)-1 ~ (1)-4 resulted in following formulae (1)-5 ~ (1)-8.

Regression formula (1)-5:

Log(CumInv)= 3.1162 + 0.4441 Log(Lag2CAF)

(0.0280) (0.009489)

t=111.13 t=46.80

$R^2$=0.9973

DW=1.9691

Regression formula (1)-6:

Log (CumFDI)= 1.7621 + 0.5273 Log(Lag2CAF)

(0.1074) (0.0364)

t=16.40 t=14.47

$R^2$=0.9721

DW=2.1709

Regression formula (1)-7:

Log(CumSEC)= 2.5134 + 0.4773 Log(LagCAF)

(0.0514) (0.0167)

t=48.89 t=28.61

$R^2$=0.9903

DW=1.9071

Regression formula (1)-8:

Log(CumInitial)= 2.4151 + 0.5740 Log(LagCAF)

(0.0426) (0.0138)

t=56.66 t=41.49

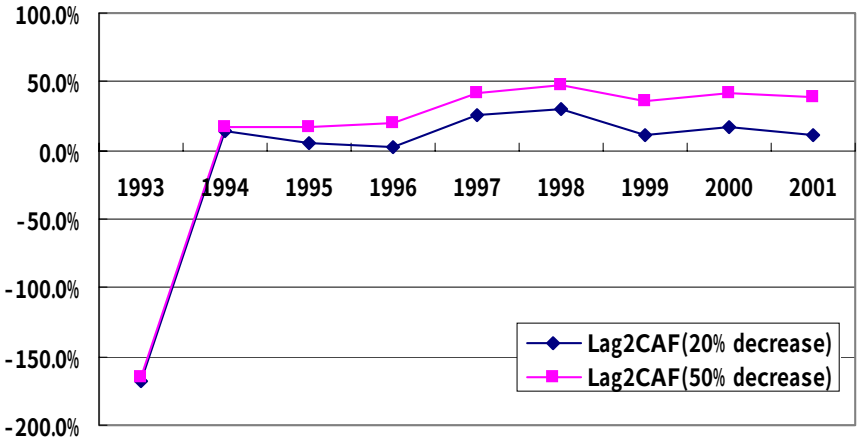
$R^2$=0.9954

DW=1.7022

Coefficients of determination are equally high in every case. Coefficients of yen-loan execution amount for yen-loan projects are statistically significant at the level of 1%. From DW ratios of regression formula from the given DW ratio results indicated that it is not necessary to consider the occurrence of auto-correlation at the 1% level of significance.

With respect to the CumFDI viz. regression formula (1)-2, in case of cumulative aid amount between 1993 and 2001 decreasing by 20% each year, i.e. cumulative aid amount equals to 80% of actual amount was compared to the case where cumulative aid amount would decrease by 50%, i.e. cumulative aid amount equals to 50% of actual amount, the following projection shows how the value of CumFDI would decrease as contrasted with actual value of Cum FDI.

Presumption of the impact which reduction of Lag2CAF gives to reduction in CumFDI




(N.B.) Projected value of CumFDI when compared to actual value of CumFDI exhibits further decrease when LagCAFActual decreased by 20% and 50%. Plus value indicates decrease, minus value indicates increase.

In averaging aid amount between 1993 to 2001, when aid amount decreased annually by 20%, the average cumulative investment amount at the time of registration of the companies in MEZ and PEZA increased only by 5.6% contrasted with the actual amount. When it decreases by 50% in the annual average, CumFDI is projected to decrease by 10.7%. When calculating the

average between 1994 to 2001, but excluding the 1993 data which shows an exceptionally low actual value, CumFDI would decrease by 14.6% in the annual average compared with the actual value. When it would decrease by 50%, it is projected to decrease by an average of 32.6% annually.

**(2) Relationship between Cumulative Investment (CumInv) and Export Amount (Exp)**

Variables were based on cumulative investment amount for Region VII from 1991 to 2000 with an adjustment of 2-year time lag (Lag2CumInv: million pesos) as an independent variable, export amount (Exp: million pesos) from Region VII during 1993 to 2002 as a dependent variable with the following regression analyses. Although export amount varies with overseas income and prices, i.e., exchange rate, the regression analysis uses a rather simple model maintaining the small-scale regional economy of Central Visayas as a price-taker bearing full competition in mind. In such model, it is considered that the exchange rate itself does not affect the export amount and all manufactured products are to be sold as well.

Generally speaking, the following analyses exhibit high relationship. Coefficient of Lag2CumInv is statistically significant at the 1% level. The DW ratio indicates that it is not necessary to consider auto-correlation at the 1% significance level.

Regression formula (2)-1:

| | | | |
|---|---|---|---|
| Exp= | 9,154 | + | 0.6525Lag2CumInv |
| | (2,945) | | (0.0899) |
| | t=3.11 | | t=7.26 |

$R^2$=0.8826

DW=1.6733

Instead of cumulative investment amount for Region VII, analyses were further made with variables based on cumulative investment amount for companies registered at MEZ and PEZA between 1990~2001 with an adjustment of one-year time lag (LagCumFDI: million pesos) and amount with an adjustment of 2-year time lag (Lag2CumFDI: million pesos). Coefficients of both LagCumFDI and Lag2CumFDI are statistically significant at 1% level.

Regression formula (2)-2:

Exp= 7,685 + 6.6974 LagCumFDI

(1,769) (0.5811)

t=4.35 t=11.53

$R^2$=0.9365

DW=1.8147

Regression formula (2)-3:

Exp= 8,685 + 7.4977 Lag2CumFDI

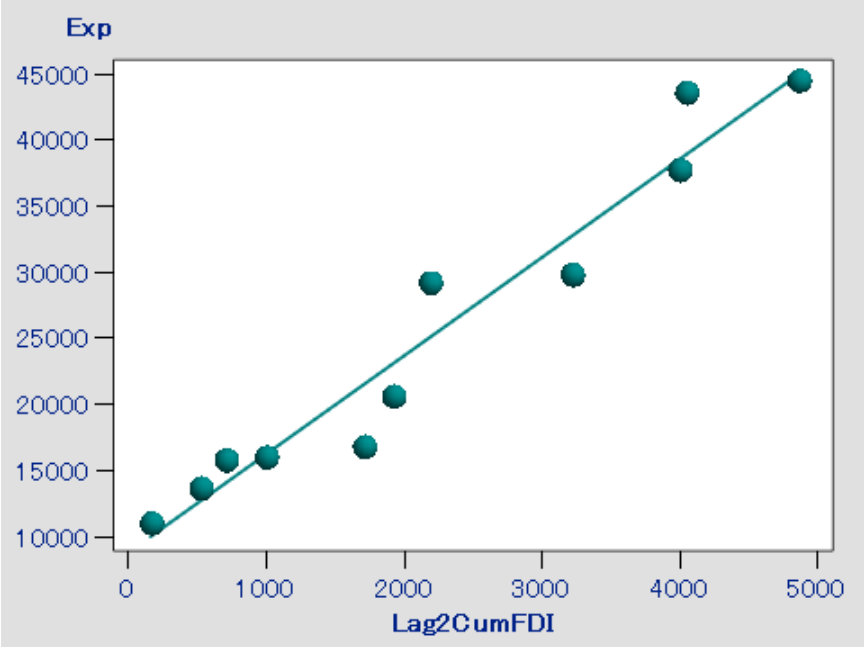
(1,516) (0.5680)

t=5.73 t=13.20

$R^2$=0.9561

DW=2.1273

Dispersion chart for the regression formula (2)-3[25] (Unit: million Pesos)




The determination coefficient ($R^2$) of the model using LagCumFDI of 1-year time lag as an explanatory variable (regression formula (2)-2) is greater than that using total investment amount with 1-year time lag, Lag CumInv as an explanatory variable (regression formula (2)-1). Thus regression formula (2)-1 is more convincing.

[25] While regression formula used in the text was the analyses adjusted with auto regression error, the value used in the chart was regular regression analysis results. Accordingly, there was not much difference in the given results between the two --- regular regression formula (2)-3: Exp = 8,829 + 7.4344 Lag2CumFDI.

Presumably the more immediate effect could appear since the companies with foreign capital engage in export oriented businesses. In addition, the regression coefficient of the model using Lag2CumFDI of 2-year time lag as an explanatory variable (Regression formula (2)-3) is greater than the one with LagCumFDI having a 1-year time lag as an explanatory variable (Regression formula (2)-2). This estimates the reflection of how the increase of export amount is affected the more time passes.

Following DW ratios of (2)-1,(2)-2, (2)-3 indicate that it is not necessary to consider auto-correlation at 1% level of significance.

The results of logarithmic analysis calculated from each variable in the above mentioned regression formulae (2)-2 and (2)-3 are as follows: coefficient of logarithm of LagCumFDI and Lag2CumFDI is statistically significant at the 1% level. Coefficient of logarithm of explanatory variables in the regression formulae (2)-4 and (2)-5 indicate adaptability of export amount to the cumulative investment amount of the companies registered at that time with MEZ and PEZA. DW ratio indicates that it is not necessary to consider auto-correlation at 1% significance level.

Regression formula (2)-4:

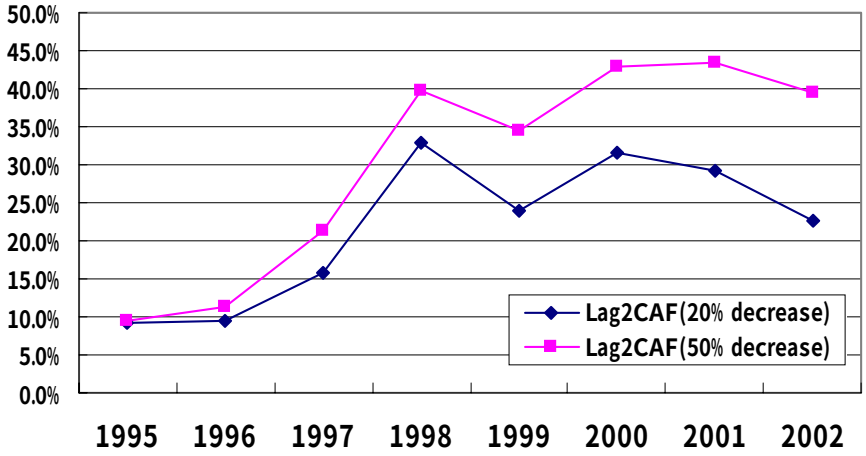
Log(Exp)= 3.1337 + 0.3744 Log(LagCumFDI)
(0.2680) (0.0825)
t=11.69 t=4.54
$R^2$=0.6961
DW=1.3931

Regression formula (2)-5:

Log(Exp)= 3.1134 + 0.3928 Log(Lag2CumFDI)
(0.2349) (0.0733)
t=13.26 t=5.36
$R^2$=0.7820
DW=1.4073

In analyzing actual cumulative aid amount (Lag2CAF) in relation to the Exp figure of the regression formula (2)-3, comparison was made with the figures when Lag2CAF decreased by 20% and by 50% during the period of 1995 through 2002. with the following results:

Presumption of the impact which reduction of Lag2CAF gives to reduction in Exp




(N.B.) Projection value of Exp as compared to actual value of Exp shows further decrease when LagCAFActual decreased for 20% and 50%; plus value indicates decrease.

In averaging out over the subject period, Exp figure decreased in the average of 21.8% when the aid amount decreased by 20% while the figure decreased by the average of 30.3% when the aid amount decreased by 50%.

**(3) Relationship between Export Amount (Exp) and Added Value Amount of Manufacturing Industry (CYMfg)**

The relationship between export amount of Region VII from 1991 to 2001 (Exp: million pesos) and added value of the manufacturing industry (CYMfg: million pesos) was projected and shown in the regression formula (3)-1.The model (3)-1 assumes that the added value of relative industry grows as exports increase, therefore, time lag is not calculated for the explanatory variables. Based on the regression analysis, coefficient of export amount is statistically significant at 1% level.

Regression formula (3)-1:

CYMfg= 8,673 + 0.1324Exp

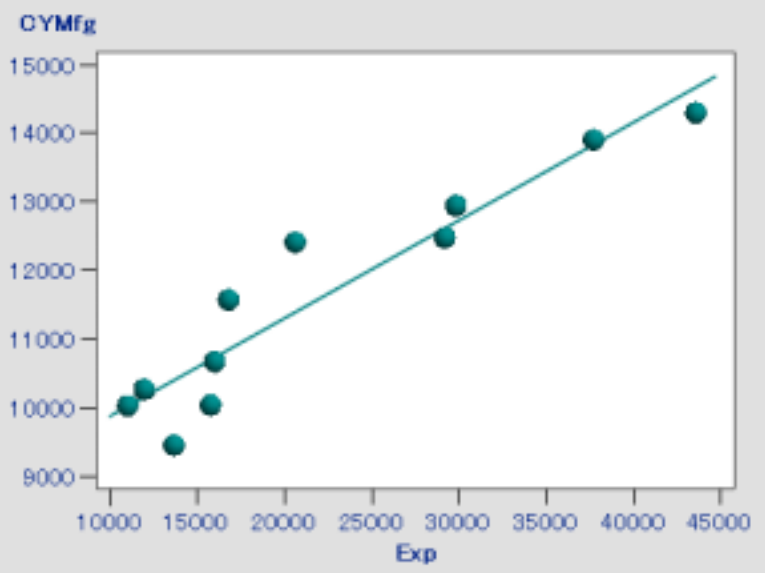
(563.4914) (0.0218)

t=15.39 t=6.06

$R^2$=0.8213

DW=1.5374

Dispersion chart of the regression formula (3)-1[26] (Unit: million Pesos)




The relationship between the export amount of Region VII from 1991 to 2000 with an adjustment of 1-year time lag (LagExp: million Pezos) and added value of the manufacturing industry from 1992 to 2001 (CYMfg: million Pezos) is projected as follows. Compared with the model without time lag adjustment, relationship is slightly lower in this model, but the coefficient of the export amount is statistically significant at the 1% level.

Regression formula (3)-2:

CYMfg= 8,558 + 0.1573LagExp

(743.7457) (0.0324)

t=11.51 t=4.85

$R^2$=0.7710

DW=1.4938

The results of logarithmic analysis calculated from each variable in the above mentioned regression formula (3)-1 is as follows: coefficient of logarithm for Exp is statistically significant at the 1% level The regression coefficient (0.2740) for added value of manufacturing shows variability in export amount.

[26] While regression formula used in the text was the analyses adjusted with auto regression error, the value used in the chart was regular regression analysis results. Accordingly there was not much difference in the given results between the two --- regular regression formula (3)-1: CYMfg = 8,445 + 0.1429Exp.

Regression formula (3)-3:

Log (CYMfg)= 2.8828 + 0.2740 Log (Exp)

(0.1842) (0.0427)

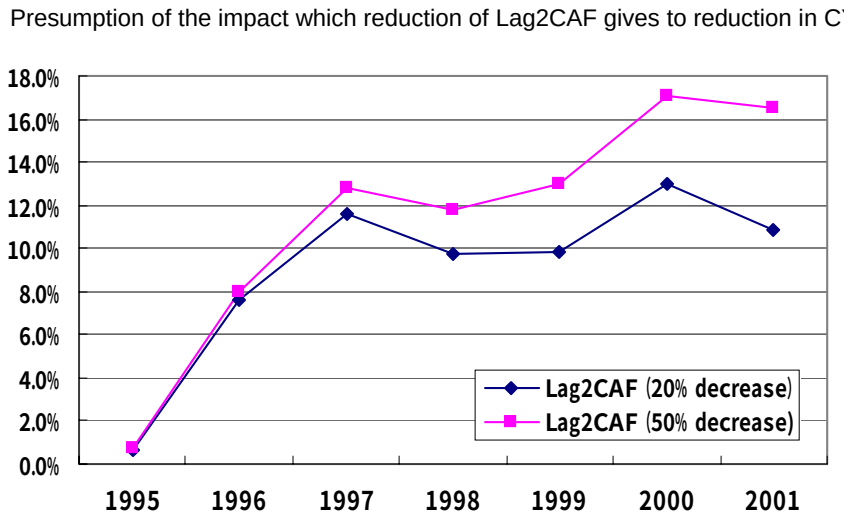
t=15.65 t=6.42

$R^2$=0.8373

DW=1.6062

DW ratio for regression formulae (3)-1, (3)-2, (3)-3 indicates that it is not necessary to consider auto-correlation at level significant of 1%.

In analyzing the above CYMfg figure of the regression formula (3)-1 and actual cumulative aid amount (LagCAF), comparison was made to the figures when LagCAF decreased for 20% and for 50% during the period of 1995 through 2002, with the following results:




(N.B.) Projection value of CYMfg as compared to actual value of CYMfg exhibit further decrease when LagCAFActual decreased for 20% and 50%; plus value indicates decrease.

In averaging the subject period, CYMfg figures decreased from actual figures from an average of 9.0% when the aid amount decreased by 20% and decreased in the average of 11.4% when the aid amount decreased by 50%.

**(4) Relationship of the Added Value Amount of Manufacturing (CYMfg), Population (POP) and Added Value Amount of Service Industry (GVS)**

Multiple regression analyses was made using added value of manufacturing industry in Region VII from 1990 to 2001 (CY Mfg: million pesos) and population for the same area (POP:

thousands) as explanatory variables and using added value of Service industry (GVS: million Pesos) as dependent variables. Population is considered to be a proxy variable explaining consumption, with the following results.

The coefficient of population is statistically significant at 1% level. The hypothesis that the regression coefficient of the added value of the manufacturing industry is zero is rejected at 5% significance level. Moreover, the F value shows that the hypothesis --- i.e., where the regression coefficient of an explanatory variable (both sides of CYMfg and POP are simultaneous) is zero at 1% significance level --- is rejected.

Regression formula (4)-1:

GVS= -22,853 + 0.7019CYMfg + 8.7963POP

(2,198) (0.2155) (0.8659)

t= -10.40 t=3.26 t=10.16

$R^2$=0.9964

DW=1.6426

$F^{27}$=1613.772

Furthermore, multiple regression analyses were made with added value of manufacturing in Region VII from 1990 to 2001 (CYMfg: million pesos) and numbers employed in the same area (Emp: thousands) as explanatory variables with added value of service industry (GVS: million Pezos) as dependent variable. As described in the model above, the variable, numbers employed, was used as proxy variable to explain consumption. The results of the analyses were as follows: coefficients of numbers of employed and added value of manufacturing were both statistically significant at 1% level. DW ratio does not indicate an occurrence of auto-correlation at the 1% significance level.

The coefficient for the regression formula (4)-2 (=12.4914) supports the estimate that as numbers of employees increased by 1,000 in the region, the added value of service industry (GVS) would also increase by 12 million pesos on condition that another explanatory variable (CYMfg) would be fixed.

[27] Value F is not given by regression analysis with auto-regression error but was given based on dispersion analysis under multiple regression analysis. This calculation method was applied to get F values in the report.

Regression formula (4)-2:

GVS= -16,106 + 1.9276CYMfg + 12.4914Emp

(3,501) (0.2318) (2.8385)

t= -4.60 t=8.32 t=4.40

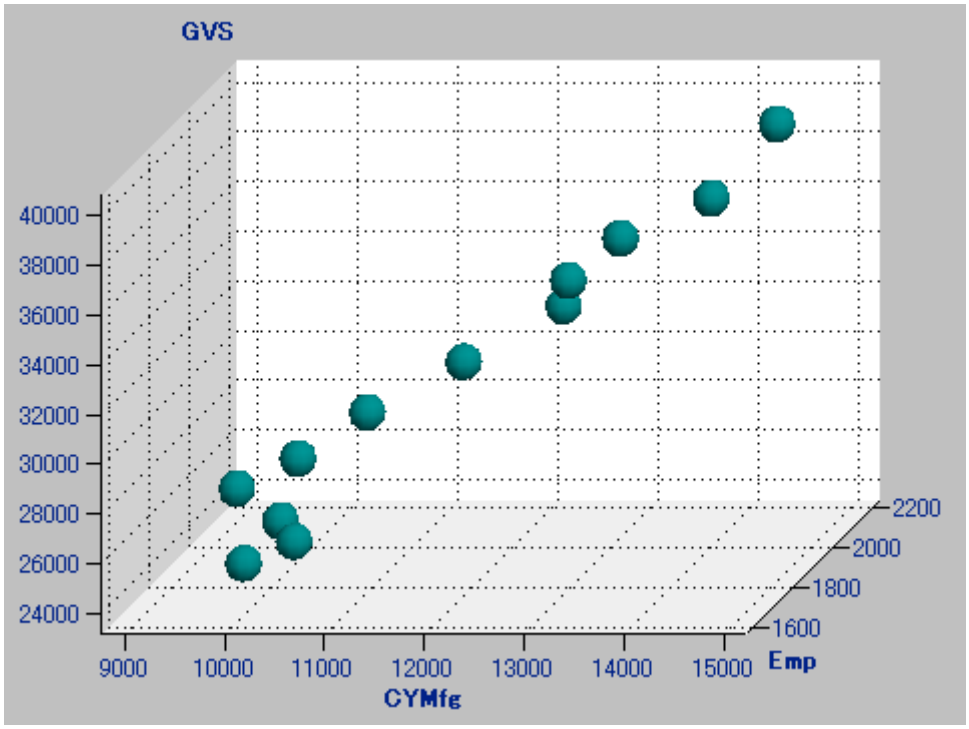
$R^2$=0.9872

DW=1.8535

F=371.5246

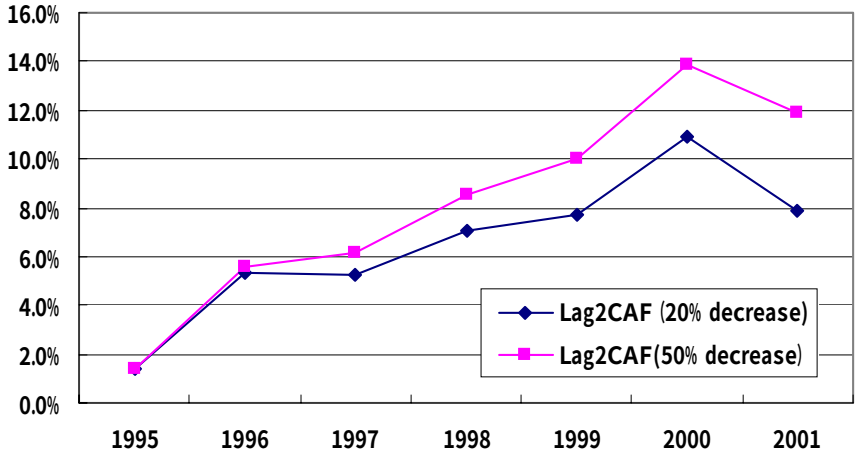
Dispersion chart in relation to the regression formula (4)-2: 3 Variables (CYMfg, Emp, GVS)

(Unit: CYMfg & GVS: million pezos/ Emp: persons)




In analyzing the above GVS figure of regression formula (4)-2, comparison was made between the actual cumulative aid amount (Lag2CAF) and the figures when Lag2CAF decreased for 20% and for 50% from 1995 to 2001,with the following results:

Presumption of the impact which reduction of Lag2CAF gives to reduction in GVS




(N.B.) Projection value of GVS as compared to actual value of GVS exhibit further decrease when LagCAFActual decreased for 20% and 50%. Plus value indicates decrease.

In averaging the subject period, GVS figure decreased from the actual figure by an average of 6.5% when the aid amount decreased by 20% while the figure decreased by an average of 8.2% when the aid amount decreased by 50%.

**(5) Relationship between Added Value Amount of Manufacturing Industry (CYMfg), of Service Industry (GVS) and Gross Regional Domestic Product (GRDP)**

The Added Value Amount of regional manufacturing industry and Added Value Amount of the regional Service Industry are the main elements of Gross Regional Development Product (GRDP: million pesos). The following formula represents relationship between variables. The data used were from 1987 to 2001. The coefficients of both CYMfg and GVS were statistically significant at 1% level. From DW ratio at the 1% significance level, auto-correlation was not evident. F value would indicate that the hypothesis would be rejected at the 1% significance level where the coefficient for explanatory variables (CYMfg and GVS) = 0.

Regression formula (5):

GRDP = 2004 + 1.6010CYMfg + 1.1668GVS

(1,219) (0.4367) (0.1432)

t=1.64 t=3.67 t=8.15

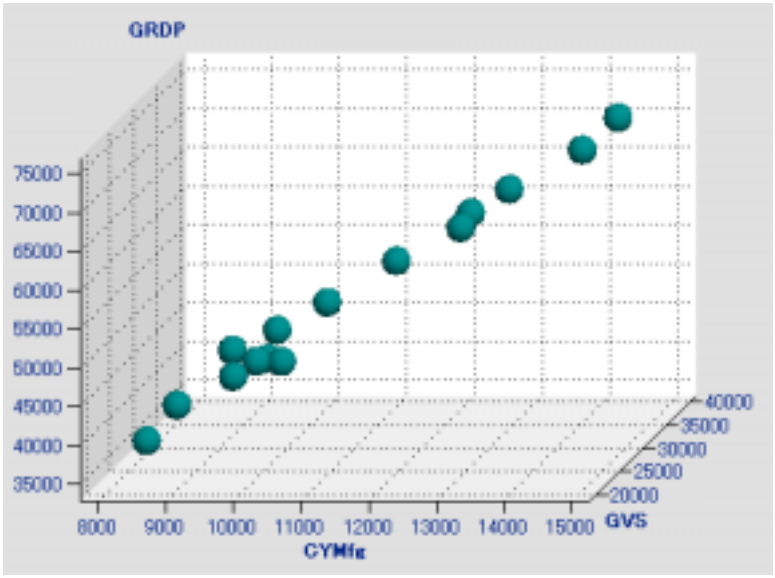
$R^2$=0.9961

DW=1.4285

F=2321.389

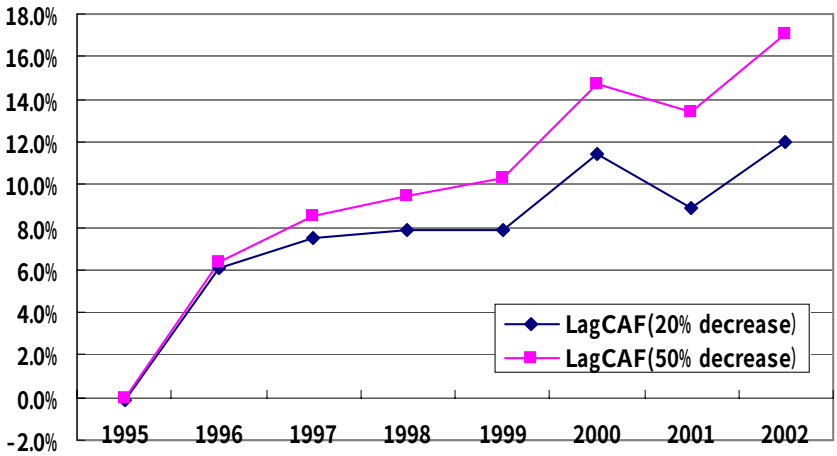
Dispersion chart in regard to the regression formula (5): 3 variables (CYMfg, GVS, GRDP)

(Unit: million pezos)




In analyzing above GVS figure for regression formula (5), comparisons were made between actual GRDP amount and when actual cumulative aid amount (Lag2CAF) decreased for 20% and for 50% during the period of 1995 through 2002, with the following results.

Presumption of the impact which reduction of Lag2CAF gives to reduction in GRDP




(N.B.) Projected value of GRDP compared to actual value of GRDP exhibits further decrease when LagCAFActual decreased by 20% and 50%; plus value indicates decrease.

In averaging the period, GRDP figure decreased from the actual figure by an average of 7.7 % when the aid amount decreased by 20% while the figure decreased in the average of 10.0 % when the aid amount decreased by 50%.

**(6) Conclusion**

In conclusion, high correlations were found among each variable. The results of the analyses show interrelations of each variable. Together with the interview results the flow and pattern of the urban development model *viz.* --- infrastructure development -> expansion of investment -> economic growth and the degree of such growth --- can be estimated.

Therefore, in conclusion,

(1) Urban infrastructure development projects financed by yen-loan assistance positively contributed to an improved investment environment.
(2) The increase in investments led to an increase in export volume and earnings. This applies especially to foreign companies who located in the special economic zones.
(3) The increase in export amounts by companies positively contributed to the growth of manufacturing industries in the region. In particular, increased exports led to the growth in added value of foreign-capital, regional manufacturing industries.
(4) The development of regional manufacturing industries led to the increase in the incomes of workers. Alongside population increases, the development in manufacturing industries led to expansion in consumption expenditure, which fuelled and propelled the growth and development of the service industry.
(5) The development in both manufacturing and service industries led to the increase and improvement of the gross regional production.

# 6. ANALYSIS OF POVERTY REDUCTION

The previous chapters have attempted to provide detailed analyses of several development hypotheses under an *"Urban development Model"*, namely - infrastructure development attracts private investments in foreign capital particularly for export-oriented industries, which in turn induces growth in industries, and eventually contributes to regional economic development. This chapter attempts to examine whether such economic development also had an impact on poverty reduction both qualitatively and quantitatively by providing further analyses of each contributory factor. Furthermore, a separate section reviews how yen-loan funded infrastructure projects in Metro Cebu have also contributed directly or indirectly to poverty reduction.

In addition to available statistical materials, the analyses also referred to published reports, documents, and book reviews. As part of this Study, focus-group discussions and interviews were held with non-governmental organizations, university social researchers, and other impact-related groups. Participants came from *barangays* within the direct influence of the yen loan projects and were selected from lists provided by MCDPO as of October 2003 based on their geographical locations, population sizes and distribution, and other factors. [28] Consequently there were a total of 11 discussion groups selected from over 70% of the total *barangay* population considered as being within the influence of Metro Cebu yen-loan projects. Participants were invariably *barangay* captains (chiefs), representatives of *barangay* councils, women, the youth, teachers and other representatives from public schools, and health workers. Aside from these group discussions, interviews were also held residents living in the southern Metro Cebu area; the neighboring communities of both North and South Bus Terminals and the Mandaue and Talisay Public Markets. To review the effects of infrastructure development on the creation of new job opportunities (i.e., recently-employed workers) and the manner in which poverty has been reduced, separate group discussion was held with workers of on-going yen-loan projects.

## 6.1 Confirmation of Poverty Reduction

This section seeks to describe the changes in the poverty conditions in Metro Cebu during the 1990s. It provides an overview of regional poverty conditions and reviews the poverty index based on monetary income, expenditure, and other social indices.

As shown on Box 4: *Measuring Standards of Poverty in the Philippines,* measurement standards

[28] Yen-loan projects include: Metro Cebu Development Projects (1), Metro Cebu Development Projects (2), the Mactan-Cebu International Airport Project, and the Second Mandaue-Mactan Bridge.

of poverty indices invite lively discussions and disparate opinions. In analyzing poverty conditions, this Study chose the official poverty indices of the Philippine government as these affords a relatively longer temporal analysis of changes in poverty conditions. In reviewing changes in Metro Cebu's poverty situation, the Study used the index of the urban area for the Central Visayas region as an alternative. The decision was based on the fact that 60% of the urban population in Central Visayas region resides in Metro Cebu. In addition, the data relating to the urbanized area of Central Visayas (or Metro Cebu's city-level) were used accordingly.

**Box 4: Measuring Standards of Poverty in the Philippines**

There are two standards used in measuring poverty in the Philippines -one is the standard used in official government measurement with the income basis; while the other is the standard used in World Bank measurement with the consumption basis.

Of these, the "official government measurement" is established by National Statistical Coordination Board (NSCB) with the cooperation of the Food and Nutrition Research Institute (FNRI). NSCB defines poverty as "the individual and family whose income is less than poverty marginal line (poverty line)" and "those who can not provide oneself sustainedly the basic needs in existence, safety and capacity building". This definition also establishes poverty line as "annual income per capita to be enough for basic needs in food and others". The poverty index is calculated the ratio of <population below the poverty line / the number of families> to <whole population / the number of families>.

In Philippines Poverty Assessment (The World Bank, 2001), the standard is based on the expenditure as the index to measure the welfare level of a family or individual. Compared with NSCB income-based measurement, the World Bank has adopted the expenditure base since (1) the income base has the risk of overestimating or underestimating the life standards when persons withdraw bank deposits, and/or receive/ borrow money from family members; (2) expenditure-based data are comparably more accurate than income data. Furthermore the World Bank and NSCB adopt different methods to calculate the poverty line (1) for food poverty line, the World Bank uses the average food items consumed by various poverty layers in each region, while NSCB uses the average food items consumed by a total regional population; (2) for expenditure in meeting basic needs for non-food items (non-food poverty line), the World Bank uses data based on non-food expenditure by poverty household where total expenditure is set around the food poverty line; the NSCB on the other hand, calculates non-food expenditure to set the food expenditure in relation to food poverty line mentioned above.

From the difference in these calculation methods, the government's official poverty line tends to exceed the World Bank's poverty line, and consequently, the government's poverty ratio emerges higher than the World Bank's (table below); however, for Cebu City, the deviation results in both measurements appear insignificant.

Estimation of Food Poverty Line and Poverty Line Based on Absolute Cost Approach for Basic Needs
(Annual Per Capita, 1997; In (Pesos)

| Institution | Food Poverty Line | | Poverty Line | |
|---|---|---|---|---|
| | Cebu Province | Cebu City | Cebu Province | Cebu City |
| NSCB | 6,021 | (Note 1) 6,709 | 8,341 | (Note 1) 9,403 |
| World Bank | 5,887 | 6,711 | 7,803 | 9,387 |

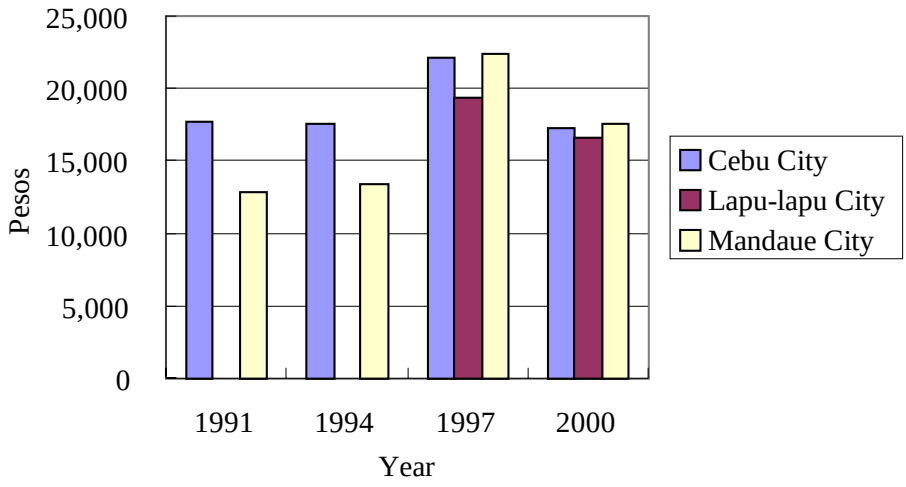
(Note 1) : Poverty line of urban areas in Central Visayas
Source: The World Bank (2001). National Statistical Coordination Board (2003).

**(1) Poverty index based on monetary income and expenditure**

As described in Chapter 5, Metro Cebu has been showing patterns of economic development as the primary growth center of the Central Visayas region and the second dominant urban area in the Philippines next only to Metro Manila, the National Capital Region. This is reflected in both the data on annual personal consumption expenditure (Figure 6-1) and employed population (Figure 6-2) [29]. Reflected in this economic growth are the changes in poverty condition from 1985 to 1997 where the ratios of needy families and poverty-level population have been showing steady improvements (Figure 6-3). The ratio of needy families used to be 47.7% in 1985 but improved to 18.1%; the ratio of poverty-level population was 51.5% in 1985 but also decreased significantly to 20.7 %. However, this encouraging trend reversed when the Asian currency crisis seriously hit the national and regional economies and affected average personal consumption expenditure (Figure 6-1) as shown on the ratios of needy families and poverty-level population from 1997 to 2000 (Figure 6-3).

Changes in the poverty-level population have not shown any constant improvements since the end of the 1980s to 2000. A reason for this phenomenon is the rapid population increase and concentration in the urban areas. [30]

**Figure 6-1: Annual Average of Personal Consumption Expenditure (1991, 1994, 1997, and 2000)**
Source: Family Income and Expenditures Survey 1991, 1994, 1997, 2000 National Statistics Office

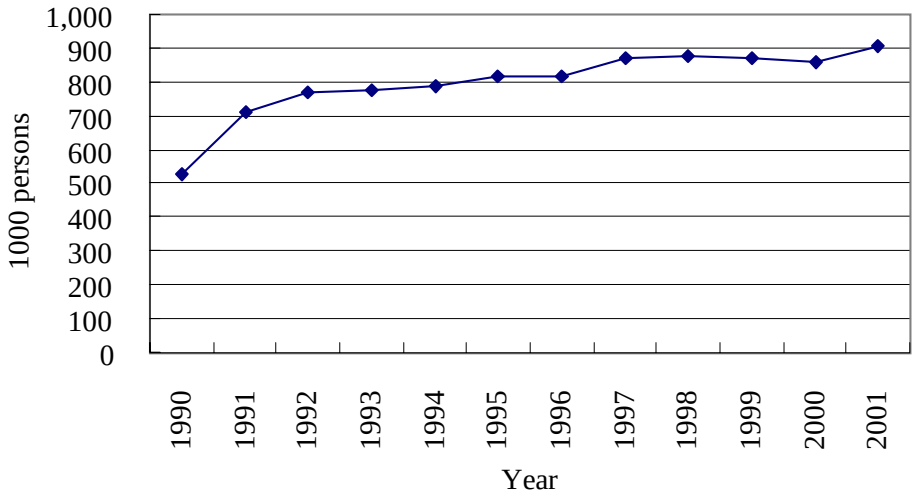



[29] Based on Family Income & Expenditure Survey (FIES) conducted by National Department of Statistics every three years.

[30] During the two periods: 1980-1990 and 1990-20000, the ratios of population increase in Central Visayas Region were 52.8% and 42.0% respectably. When these values are converted to annual average of population increase ratio, they become 4.3% and 3.6%, which exceed the population increase ratio of the entire Central Visayas region. (1.9% and 2.2% respectably). Increasing outmigration from agricultural to urban areas must have contributed to this trend.

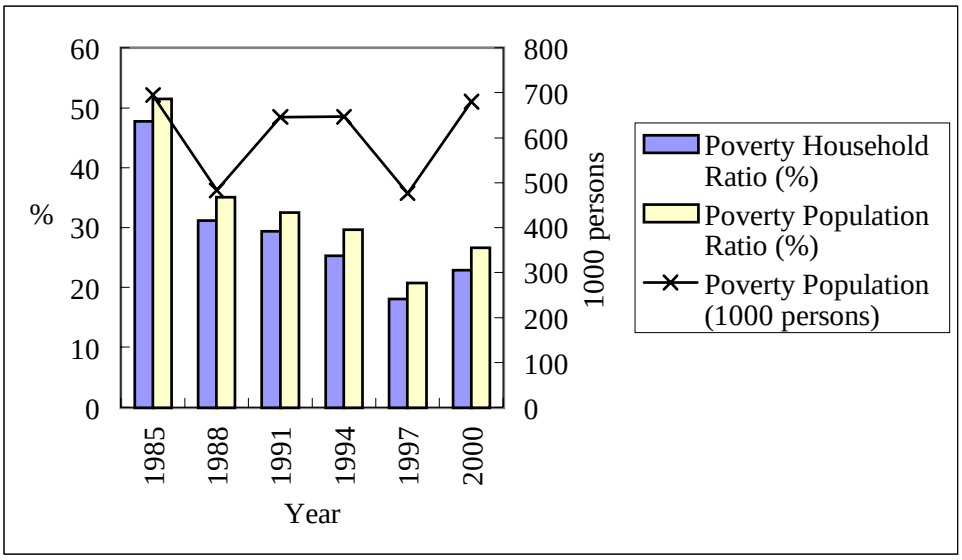
**Figure 6-2: Changes in Employed Population in the Central Visayas Region (1990-2001)**

Source: National Statistics Office, Integrated Survey of Households – Labor Force Survey



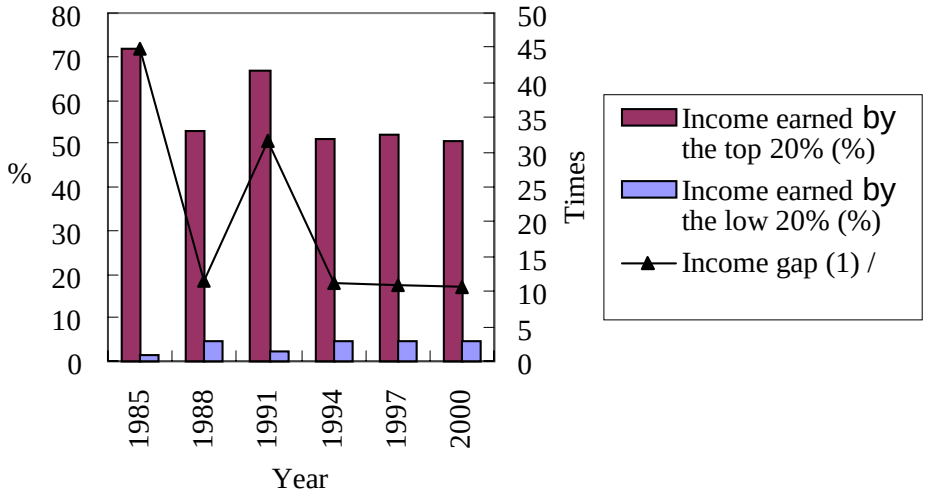

Looking at changes in disparities among income classes, in 1985 the total income of the top 20% of families in Central Visayas' urban areas region was about 45 times bigger than that of the bottom 20%. This apparent disparity narrowed to 11% in 1988. And while income disparity again widened in 1991, it managed to approximate its 1988 and 1994 levels. Despite some improvements, increments however have been small. (Figure 6-4)

**Figure 6-3: Poverty Condition in the Urban Areas of Central Visayas Region (1985-2000)**




Source: Data for 1985-1994: National Statistical Coordination Board (1996)
Data for 1997-2000: National Statistical Coordination Board (2003)

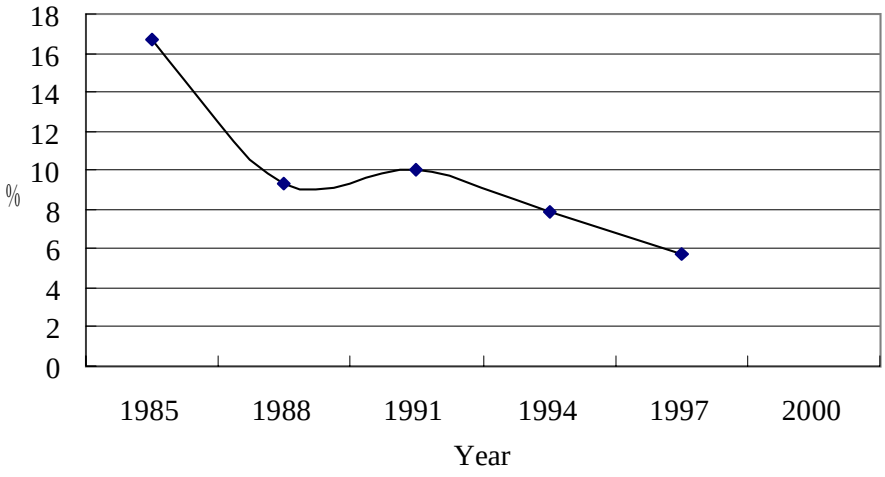
**Figure 6-4: Income Ratio by Income Classes in Central Visayas Region**




Source: Family Income & Expenditures Survey, 1985, 1998, 1991, 1994, 1997, 2000, National Statistics Office

On the other hand, the index of poverty depth --- which gives an idea of the extent of a population's average personal consumption expenditure in relation to poverty line --- indicated substantial changes over time with 16.7% being below poverty line (1985) to 5.7% (1997); in the intervening years, some relative improvement is noted in the situation of people below the poverty line.

**Figure 6-5: Index of Poverty Depth in the Urban Areas of Central Visayas Region**




Source: Philippine Poverty Statistics, NSCB, various years

### (2) Social indices

Other than income and expenditures, the Study also verified changes in poverty conditions based on social indices (Table 6-2). Throughout the 1990s social indices were observed to have improved steadily which were evident in the provision of social services and improvement in public health environment. [31]

As described above, from the end of the 1980s until 1997, regional poverty reduction efforts have been making progress based on indicators of income and consumption and living conditions. However, rapid urban population growth and the negative impact of the 1997 Asian currency crisis are observed to have dampened these positive gains in terms of income-consumption parameters. Nonetheless, improvements are evident in public health and the accessibility of the population to clean, potable water and electricity.

[31] The main reason for the declining rate of preventive immunization is attributed to shortage and high cost of imported vaccines due to the peso devaluation.

**Table 6-1: Changes in Various Social Indices in Major Cities of Metro Cebu**

| Social Indices | 1988 | 1991 | 1994 | 1997 | 2001 |
|---|---|---|---|---|---|
| Life expectancy at birth | | | | | |
| Metro Cebu (Note 1) | 33.3 | 17.8 | 21.5 | 18.6 | 14.1 |
| Immunization (All) (%) (Note 1) | | | | | |
| Cebu City | 50.9 | 79.6 | 91.3 | 95.6 | 59.1 |
| Lapu-Lapu City | 46.4 | 109.7 | 100.3 | 101.2 | 95.2 |
| Mandaue City | 42.6 | 62.4 | 96.5 | 112.8 | 110.8 |
| Moderately or severely low weight children under age of 5 (%) (Note2) | | | | | |
| Cebu City | NA | NA | 8.9 | 6.8 | 3.0 (Note 3) |
| Lapu-Lapu City | NA | NA | 10.5 | 3.4 | 2.1 (Note 3) |
| Mandaue City | NA | NA | 5.7 | 3.9 | 1.9 (Note 3) |
| Elementary enrollment rate (%) (Note 4) | | | | | |
| Cebu City | NA | 89.1 | 88.0 | 99.9 | 105.4 |
| Lapu-Lapu City | NA | 95.0 | 93.0 | 99.4 | 104.5 |
| Mandaue City | NA | 84.2 | 90.5 | 98.2 | 92.0 |
| Accessibility to safe water (%) (Note 1) | | | | | |
| Cebu City | NA | 96.5 | NA | 98.2 | 98.6 |
| Lapu-Lapu City | NA | 99.0 | NA | 98.5 | 100.0 |
| Mandaue City | NA | 100.0 | NA | 99.8 | 86.3 |
| Households using sanitary toilet (%) (Note 1) | | | | | |
| Cebu City | NA | 63.7 | NA | 69.0 | 85.7 (Note 5) |
| Lapu-Lapu City | NA | 35.0 | NA | 53.8 | 67.8 |
| Mandaue City | NA | 60.0 | NA | 61.5 | 78.0 |
| Households using electricity for illumination (%) | | | | | |
| Metro Cebu (Note 6) | NA | 75.0 | NA | NA | 86.5 |

Source: Office of Region VII/ Department of Health. Life expectancy rate at birth refers to number of infants who died before reaching one-year-old per thousand population. Since life expectancy rate depends significantly on factors such as health condition of mothers, infant care, educational level, this indicator reflects regional sanitary conditions and social, economic, nutritional, and educational levels of households.

Source: Regional Nutrition Council, 2000

Source: Office of Region VII/Department of Education

Source: Census of Population and Housing 1990, 2000; Numbers over 100% on immunization rate and elementary enrollment rate indicate that the city accepts children outside of the administrative area (i.e., coming/commuting from next town.)

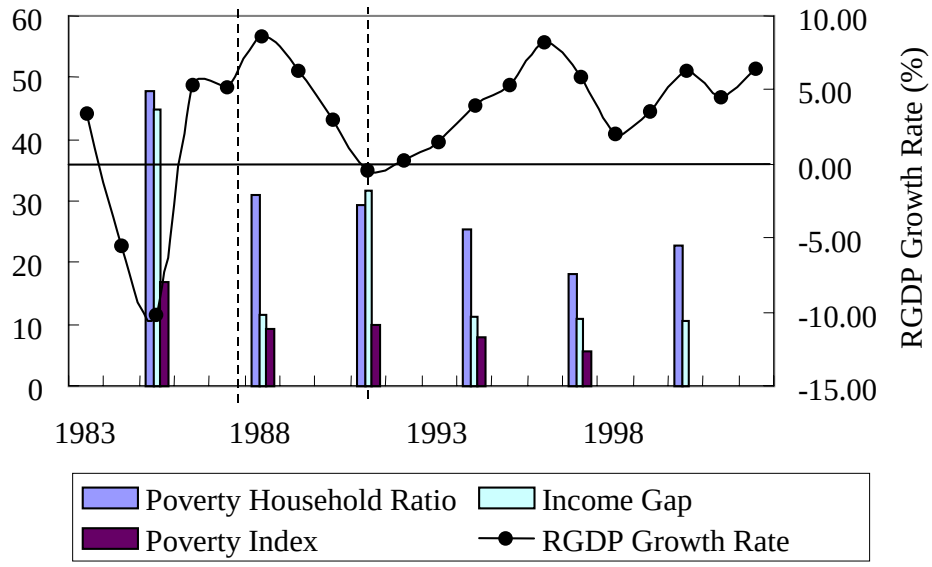
## 6.2 Analysis of factors in poverty reduction

Economic development and poverty reduction

Observing the changes in poverty indices from the end (1985) of the First Cycle (1977-1986) to the second half (2000) of the Second Cycle (1987-2003) shows improvements occurred twice --- the first during 1985-88 and the second from 1994 to pre-Asian crisis. The year 1985 signaled the events towards the end of the Marcos administration and also coincided with the drop in Central Visayas' RGDP to 10.25%. But beginning 1986, under the Aquino administration its RGDP posted its highest growth rate of 8.69%. This resurgent economic

expansion filtered through the poorer socioeconomic classes and eventually reflected in improved poverty indices. In 1990 and 1991, however, natural disasters such as the large-scale earthquake and eruption of Mt. Pinatubo which crippled the country's major food production basket (Luzon island) combined with successive declines in Filipino workers' overseas (dollar) remittances due to Gulf War crisis and buffeted the Philippine economy --- with far-reaching fall-out on Central Visayas' RGDP growth rate. During these intermittent years, regional urban poverty and regional income disparity worsened and widened considerably (Figure 6-5). Despite the increasing number of urban poor due to rural outmigration to Metro Cebu in 1988-91, the rates of needy households and poverty index still showed improving trends. The political stability under the Ramos administration and resulting improved investment environment also factored into Central Visayas' 4% growth in 1994. Consequently, income disparity narrowed down to its previous 1988 level similar to the sustained improvements in other regional poverty indices before the 1997 Asian crisis.

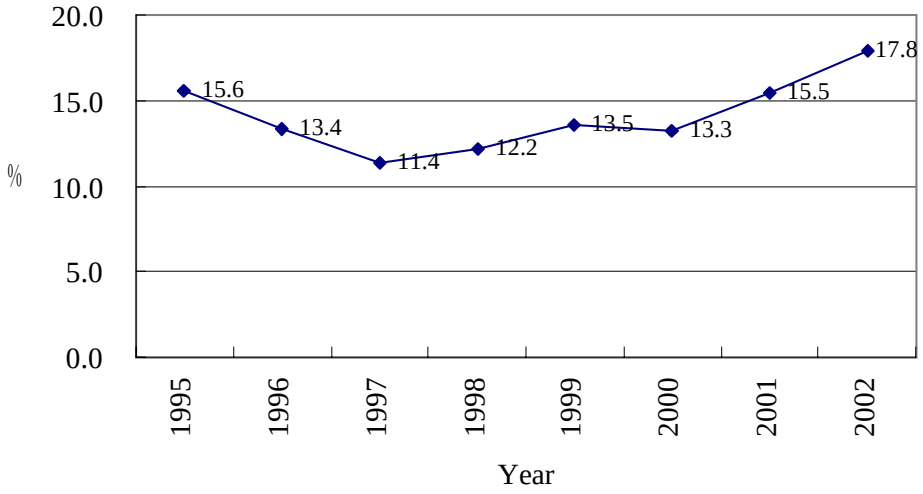
**Figure 6-6: RGDP Growth Rate and Poverty Index**




As described previously on Chapter 5, the Asian currency crisis started with the devaluation of the Thai Baht in July 1997 with its worldwide financial aftershocks affecting even Metro Cebu's. For the first time since 1991, Central Visayas' growth rate started its sudden downturn in 1998. The global El Niño phenomenon slowed down Philippine agricultural production jacking up prices of rural produce and food. The World Bank's *Philippine Poverty Assessment (2001)*, evaluated the Asian crisis' negative effects on Philippine poverty conditions as relatively mild;

but the most observable adverse consequences were in the poverty rates, poverty depth, and in consumer prices.[32] More than the El Nino phenomenon and most especially in urban areas, salary-cutbacks and worker lay-offs were prevalent amidst bleak business performance in a stagnant economy. The crisis hit the middle-income class the hardest. Poverty-predisposed people in urban areas survived the crises by reducing numbers of meals, increasing their work hours, and absenting their children from schools. Metro Cebu's unemployment rate climbed dramatically in 1998 and 1999 and only started showing token recovery in 2000 (Figure 6-6). In the years from 1997 to 2000, its average personal consumption (Figure 6-1), the rate of its poverty household, and rate of poverty population (Figure 6-3) --- all showed worsening indicators. Results of group discussions conducted for this Study confirmed that respondents had hardly perceived any relief or alleviation from poverty.

**Figure 6-7: Unemployment rate of Metro Cebu (1995 - 2002)**




(N.B.) A 10-month term is adopted throughout except for year 2002 where a 7-month period is used. The 1995 data are a sum for Cebu and Mandaue cities while the data after 1996 are the sums for Cebu, Lapu-Lapu and Mandaue cities.

Poverty and Urbanization

As a primary growth center of the Visayas regions and being second the largest metropolitan area next to Metro Manila, Metro Cebu expanded steadily from the late 1980s to the late 1990s --- or the Second Cycle period. Historically, Metro Cebu flourished as an entrepot town of merchants and attracted people of similar culture from nearby provinces. Its higher educational

[32] In order to analyze poverty conditions more comprehensively, the Annual Poverty Indicators Survey was started in 1998 covering sample provinces as a supplementary survey to the Family Income and Expenditure Survey (FIES) which surveys household income and consumption expenditure. The following year, a survey was conducted in all provinces but only limited results have been published as of this writing.

facilities especially universities and technical vocational schools further enticed emigrants from the rural areas of Cebu, its surrounding provinces, regions, and even from Mindanao. This is evident in the population growth from the 1980s particularly in the following suburbs --- Mandaue city and the towns of Consolacion and Liloa-an (Metro Cebu's northern suburbs); and Talisay city and Minglanilla town (Metro Cebu's southern suburb); and Lapu-Lapu city and Cordova in Mactan island (Metro Cebu's eastern suburb). Table 6-3 shows that while the annual average population growth rates of the entire country and Central Visayas Region were increasing at 2%, while those of the areas were over 4%.

**Table 6-2: Annual Average Population Growth Rate**

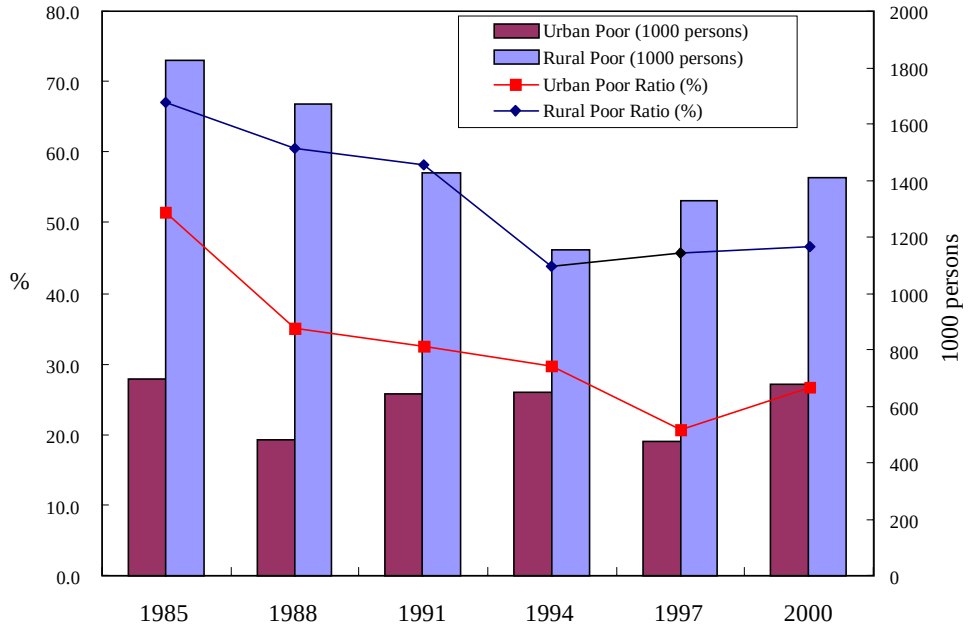
| Division | Annual Average Population Growth Rate (%) | | | |
|---|---|---|---|---|
| | 1970-80 | 1980-90 | 1990-95 | 1995-2000 |
| **The Philippines** | 2.75% | 2.35% | 2.48% | 2.20% |
| **Central Visayas Region** | 2.25% | 1.95% | 1.77% | 2.60% |
| **Cebu Province** | 2.47% | 2.38% | 1.96% | 2.83% |
| **Urban area** | 3.08% | 2.87% | 2.19% | 5.89% |
| **Rural area** | 1.90% | 1.86% | 1.70% | -1.17% |
| **Metro Cebu** | 3.71% | 3.01% | 2.35% | 3.41% |
| **Urban area** | 3.77% | 3.02% | 2.22% | 4.50% |
| **Rural area** | 3.23% | 2.90% | 3.41% | -8.33% |
| Cebu city | 3.44% | 2.16% | 1.62% | 1.76% |
| Compostela town | 2.28% | 2.33% | 3.71% | 3.53% |
| Consolacion town | 4.53% | 4.17% | 3.59% | 4.80% |
| Cordova town | 2.75% | 3.10% | 3.53% | 5.08% |
| Lapu-Lapu city | 3.56% | 4.01% | 3.52% | 4.53% |
| Lilo-an town | 2.97% | 3.49% | 3.64% | 4.96% |
| Mandaue city | 6.51% | 5.03% | 1.57% | 5.92% |
| Mingllanilla town | 2.91% | 2.82% | 3.60% | 4.46% |
| Naga town | 2.69% | 2.83% | 2.69% | 3.06% |
| Talisay city | 3.84% | 3.45% | 3.78% | 4.14% |

Source: Based on Census of Population and Housing 1990, 2000; calculated by the Study Team.

Rural - urban migration is mainly caused by spatial inequalities, socioeconomic disparities, and systemic preponderance of push-pull factors between underdeveloped and developing areas. Metro Cebu's emigrants may be classified into two broad groups: the first would consist of "first-time arrivals" in search of business opportunities or higher education and would more likely take up urban residence; the second would consist of unskilled workers from rural areas and who more likely would eventually absorb into the lower socioeconomic, poverty-prone classes. While the first category would comprise the supply of competitively-priced skilled

work force, the latter would susceptibly gravitate towards urban poverty class. Figure 6-7 compares Central Visayas' geo-economic distribution of poverty rates showing rural poverty being more pronounced, perceptibly higher, and a much more serious phenomenon. The rural poverty population more than doubles the urban threshold and between 1994 and 1997, disparity has widened. Higher minimum wages in urban vis-à-vis rural areas present one source of disparity and a major determinant in pushing rural population to seek better quality, and hopefully a more affluent, life.

**Figure 6-8: Poverty Rates in Urban and Rural Areas of Central Visayas Region**




Source: Data for 1985 - 1994 based on National Statistical Coordination Board (1996)
Data for 1997 - 2000 based on National Statistical Coordination Board (2003)

The Urban Poor Affairs Office (Lapu-Lapu city) interviewed urban squatters (previously rural emigrants) on their reluctance in returning to their rural origins despite their meager incomes and severe living conditions in urban areas. Their major reason: absence of money/cash-earning opportunity in rural areas. Rural people hardly even have any opportunity to make money and with little or no chances of being paid in cash for informal services for their household's daily needs. Thus, migration is perceived as the only remaining survival-mode of rural people to seek any miniscule opportunity urban life could offer.

This continuous influx of rural emigrants compounds urban population size and expounds into social problems such as unemployment, widening gaps between economic classes, proliferation of squatters, poor sanitation, traffic congestion, uncollected garbage, water and electricity

shortage. Migrants from surrounding provinces far outstrip job opportunities being created in Metro Cebu. When more skilled, educated work force is abundant, many unskilled workers comparatively have more difficulty looking for permanent jobs in the formal sector. This latter group engages in lower wage and often underemployed labor such as drivers, sidecar pedal-pushers, construction or cargo handling workers --- or in the ubiquitous urban informal sector, i.e., street vendors, laundry or house help, laborers from low-income families.[33] By and large, these are the people illegally occupying and stealthily constructing makeshift shelters on private and public areas --- the so-called slums or squatter colonies. [Etemadi: 2001]

Moreover, unmanageable, chaotic population influx has been further aggravating the slum and squatter conditions in numerous areas throughout Metro Cebu. Living conditions fundamentally lack basic services including water supply, sewage, electricity, or garbage disposal. According to the survey conducted in 1992 [Thirkell 1992], the number of illegally occupied areas then (public and private) was 561 in Cebu City with some 61,940 households --- or around 57% of its urban population. While the number of squatters may be imprecise, at the time of this Study (November 2003), the registered applicants for social housing programs of three cities numbered 57,643 in Cebu; 5,929 [34] in Lapu-Lapu, and 12,000[35] in Mandaue. In terms of household population, 40%, 14%, and 23% respectively are squatters or residents without addresses. These represent lower income class people applying for low income housing programs -- in other words, including not only squatter-families, but also urban residents without official addresses. However, the Urban Poor Affairs Offices/Department of Social Welfare of the three cities reported that there were more squatters than enumerated and confirmed their still increasing numbers.[36]

[33] *"Street vendors"* refer to people selling items on roads, sidewalks, and public premises such as food and drinks, newspapers, magazines, candles, fresh flowers, coals, or decorating materials.
[34] The Urban Poor Affairs Office of Lapu-Lapu City was established in February 1997 under the Office of Mayor.
[35] The Urban Poor Affairs of Social Welfare Department of Mandaue City was established in January of 2002 under the Office of Mayor. Thus the number here refers to registration over a 2-year period. It is estimated that there is a bigger number of squatters and households without addresses.
[36] About 60 % of Cebu city population, 70% of Lapu-Lapu city population, and about 40% of Mandaue city population is said to be residents without home addresses.

**Photo 6-1: A typical squatter settlement in Metro Cebu**

The seemingly irreversible expansion of urban poor colonies in Metro Cebu poses serious social problems as it not only affects urban environment and overall quality of life but also strains local government capabilities in grappling with increasing demands for better social services from an incessantly burgeoning population base. Metro Cebu's city and town governments constantly exert efforts to improve living conditions and environment of the urban poor. Through a Community Mortgage Program (CMP), local governments manage to acquire lands and build low-cost housing. CMP is a government-sponsored housing mortgage financing for low income households including those living within the poverty zone --- especially households in slum areas. CMP attempts to organize poor families in urban zones and provides up to 25-year long-term housing loans with low interest (annual rate of around 6%). Under CMP, organized groups, and not individuals, are encouraged to acquire land ownership and transfer residences as part of the housing loan for which, in turn, their services are hired to construct their own houses or to avail of basic needs such as water supply and sewage facility.

Regional and provincial governments are also aware of providing health services to squatter areas. To raise living standards, these local governments offer medical and public health services, health and sanitary education with the cooperation of NGOs. Moreover, technical trainings are offered; investment promotion and industry development activities are constantly promoted to create appropriate employment opportunities and meet increasing urban population demand.

City and town governments are continuously confronting problems and challenges of urbanization such as improvement of living conditions by providing better dwelling units for squatter families. While undoubtedly the emergence of urban squatter colonies is a causal

manifestation of rural outmigration and urban population convergence, regional economic development itself would be poised to contribute in no small measure to reduce its geographic poverty incidence.

## 6.3 Relation between infrastructure development and poverty reduction

This section reviews the direct, indirect, and qualitative relationship between infrastructure development implemented through yen-loan projects and poverty reduction. The results of the focus-group discussions conducted for this Study were used to analyze the positive and negative impact of these infrastructure projects.

**Photo 6-2: Focus-group discussion**

Participants in the focus-group discussions listed the positive impact of the series of yen-loan projects. These included the construction, expansion and improvement of roads and bridges which reduced traffic congestion, travel/commuting time, public transport costs for work, school or goods, and expanded/accessible area of residence or other activities. For example - (1) people residing in south Cebu city can easily commute to the industrial development in Mactan island; 2) before the opening of the Second Mandaue-Mactan bridge, students living in Mactan island wishing to pursue higher education in Cebu city only had one other, and a costlier, choice which was live in Cebu city. The construction of the Second Mandaue-Mactan Bridge afforded students a shorter commuting. Prior to its construction, it also took more than one hour on off-peak, and more than 2 during peak traffic to reach the Mactan-Cebu International Airport from Cebu city. After its construction, travel time has shortened and now takes less than 30 minutes even during the peak hours to reach the airport terminal. Roadside food businesses along the connecting road from Mactan island to Cebu city also benefited not only because it reduced transport time and cost of delivery of goods but also because tourist sales and revenues

increased. People also recognized the benefit of having traffic lights, street lights, and wider sidewalks which improved safety of pedestrian traffic.

In Lapu-Lapu city, the establishment of economic zones, development of Mactan-Cebu International Airport and its Mactan circumferential road network led to new locations of manufacturing and tourism industries. People now enjoy newly emerging hitherto non-existing services such as for spare parts, computers, souvenir shops, restaurants, and diving schools. Job opportunities for tour guides were reported to have increased.

The Talisay public market contributed to increased incomes of market vendors; activated collateral trading activities in its adjacent areas which led to improved living conditions of surrounding residents. People who benefited from this project were not only limited to stall owners but also included cargo-handling workers whose job opportunities increased with the additional market stalls and ancillary activities. On the downside, roadside street vendors and pedal-driven tricycles swarm in and out of the premises and give the impression of market congestion with unsanitary conditions. Moreover, its location along Cebu's southern coastal seaboard and intersection boundaries of Cebu city with the province, easily configures into daily traffic chokepoints.

For the Cebu North and South Bus Terminals, interviewed residents in the vicinity reported the following feedbacks. Prior to its development, there were chaotic bus schedules causing pedestrian and vehicular traffic congestions at their busy intersections. After terminals were constructed, people and commuting passengers appreciated improvements in convenience and comfort. Vending activities in and out of the terminals also increased and contributed to the earnings of lower income households.

In contrast, negative impressions were reported in the airport construction, road widening and rehabilitation, and the south reclamation project. As described in the previous chapter which evaluated infrastructure development, the common adverse reaction stemmed from the relocation of project-affected people at the project sites. The related observations were: the relocation areas were mostly occupied by poor people; or, those who were forced to move out ended up in poorer because they could not find alternative livelihood similar to their previous work which was proximate to their previous dwellings. While the local government offered training assistance, the affected people were still denied livelihood sources because either work or other opportunities were limited.

Along with road widening and rehabilitation, appropriate drainage was constructed and required land acquisition. Attendant problems such as flood occurrences during heavy rains were also reported. Flooding would also aggravate sanitary and public health situation with the possible outbreak of dengue fever virus. Traffic accidents were also reported to have increased -- the foremost causes being --- the propensity of public utility vehicles propensity to load as many passengers and to disregard traffic regulations; lack of necessary overpass or traffic lights for pedestrians; or inappropriate lamps used for street lighting.

While widening of sidewalks contributed to the improvement of pedestrian safety, it also had the negative effect of inviting street-side vendors to illegally occupy public spaces and that obstruct pedestrian traffic spilling over to the main roads. Some kind of action should be taken to regulate their activities.

The problems perceived about the Inayawan Sanitary Landfill Project included the following: “scavengers” collecting recyclable materials from the garbage disposal area for re-sale and income source pose security problems; from the aspects of public health and sanitation, groundwater pollution is evident and considered to be the main cause of prevalence of diarrhea among residents. Thus healthcare expenditure in the area has been increased. The Cebu City Health Department has advised people not to use ground water for drinking but only for washing clothes or for shower. Moreover, at the time of survey in October 2003, Cebu City is considering collecting waste management fee from industrial clients to use the revenues in improving healthcare services among residents in the Inayawan landfill area.

The financial impact on *barangay* level has also been reported.[37] Generally speaking, *barangay* income has increased because of land values (with their corresponding real property taxes) rose due to infrastructure development with the subsequent growth in Metro Cebu's industries and businesses. *Barangays* are able to use these revenues to construct small infrastructure and facilities for improving their basic social services and embarking on livelihood activities, based on the new local regulation which authorizes their allocation for these purposes.

The creation of employment opportunities through the implementation of yen-loan funded infrastructure projects has had positive effects on poverty reduction in Metro Cebu. Because most workers are locally hired, some project-affected people were able to find construction employment. Workers hired by contractors of yen-loan projects receive social security benefits and regular, timely monthly or weekly wages. One component of the Cebu South Coastal Road

[37] For more details about *barangays*, see footnote 3 of pages 2 - 3.

estimated the generation of 9,600 work-months over a 3-year construction period. Thus, more respondents during the focus-group discussions noticed improvements in their living conditions with their new-found capability to send children to school --- or even buy household appliances.

# 7. LESSONS LEARNED AND RECOMMENDATIONS

## 7.1 Lessons for the Future of Metro Cebu

Following the Urban Development Model discussed previously on Chapter 1, this present study has analyzed how yen-loan projects resulted in numerous positive impacts on society. In this model, several hypotheses were postulated: 1) that preparing comprehensive regional development plan(s) for a physical economic area and detailed investment plans for identified priority projects would be indispensable; 2) that some initial infrastructure facilities in a region would also be pre-requisite investments to secure additional assistance from either JBIC or other aid organizations; 3) that industrial development resulting from private investments in a region would tend to be strongly induced by well-developed infrastructure; 4) that a far-reaching development policy-making with parallel initiative, leadership, and supporting roles from regional and local governments would contribute to the overall economic development of a region --- eventually its poverty reduction.

In analyzing various comprehensive plans and infrastructure development, the years from the late 1970s have been divided into three cycles: The First Cycle (1978-1986) was considered as the period when the central government embarked on plans to develop Metro Cebu as one of three primary growth centers. During this period, plans for infrastructure projects, were implemented within the general policy framework of de-concentrating population and dispersing production functions from their highly dominant convergence in the National Capital (Metro Manila) Area. Alongside the power and water supply investments, the establishment of the Mactan Export Processing Zone triggered the series of development projects in Metro Cebu as the second primary growth center.

During the Second Cycle (1986-2003), as part of the central government's regionalization and decentralization policies, regional government bodies started taking charge of initiating urban development projects. To deal with its urban problems which were emerging by-products of population growth and concentration, infrastructure development for regional industries and urban social employment was subsequently pursued. From the Third Cycle (2004 onwards), and consistent with the policy directions of population dispersal away from primary urban growth centers, the regional growth impetus is being induced and re-directed to other areas of the region and outside Metro Cebu through the infrastructure investments. During the First Cycle, the start-up investment focused mainly on the development of the power and water supply and distribution and domestic and international ports. The Second Cycle projects addressed urban

infrastructure in the central core of Metro Cebu and the development of arterial road transport to influence growth patterns outside central Metro Cebu as envisioned under the Third Cycle.

With infrastructure development in place, a favorable free trade policy-regime on foreign investments and exports, and relatively competitive quality- and cost-based human resources prevailing in the late 1980s to the early 1990s, “the Second Investment Boom” in ASEAN member countries such as Thailand, Malaysia, and Indonesia also occurred in Cebu during this period. Despite sluggish beginnings, Japanese corporations eventually made significant investments in Cebu. Local industries also found the infrastructure development in roads, telecommunications, airport, port, and the Second Mandaue-Mactan Bridge extremely important to their business growth and emerging profitability. As earlier presented, looking at employment numbers, wage expenditures, and export amounts at MEZ-1, great economic benefits have been achieved in the region during this period with the increased presence of foreign corporations. At the backdrop of Cebu's improved infrastructure development has been the comprehensive development policy of regional government bodies to take on pro-active, complementary role underlined by the consistent support from the central government. Metro Cebu's local industries now face global competition with a rising China. A number of insufficient urban infrastructure still has to be translated into concrete public investments and enable Cebu to cope with the continuing population expansion which has yet to be addressed with a parallel (yet presently inadequate) growth dispersal policies. These inter-cyclical problems are associated with Cebu's own emergence as the second major employment destination of the Philippines--- which inevitably germinates the seeds for its further economic, technological, and urban transformation.

The challenges now facing Metro Cebu revolve around its capability of achieving further development and responding to new corporate demands as a primary growth center and or as competitive international business location. It must also cope with the organizational nurturing of local industries which are mostly medium- and small sized investments. Furthermore, sustainable development would also require continuous efforts in providing better, more rational urban expansion and improvements especially in the industrial environment sector and in the dispersal of development impact to regions and areas outside Metro Cebu.

### 7.1.1 Challenges to meet corporate and investor demands on a primary growth center

The establishment of Mactan Export and other zones with their preferential treatment of investments has been attracting foreign corporations to Metro Cebu. Apart from its infrastructure such as the proximity of the international airport, ports, and roads and bridges,

Metro Cebu's well established educational institutions offer high quality, competitively priced labor force. The prevalent adaptability of its society with its positive sociological acceptance of multinational business culture and management style --- and their English proficiency; the smooth employer-employee relationship; and the absence of unstable political conditions and disruptions --- all these have contributed to a positive, most conducive foreign investment climate.

However, resident corporations have raised serious concerns on power and water supply shortages; high transport costs between Cebu and Manila due to an almost agopolistic shipping industry; and industrial waste disposal. These companies perceive that, unless mitigated, such conditions would eventually impact negatively on their product competitiveness compared with those from other countries or regions. Moreover, especially with resident foreign companies in economic zones, there is negligible business relationship being developed with local companies. Therefore the ripple effects from successful but enclave-type foreign investments are expectedly limited and at best marginal.

### 7.1.2 Challenges to meet sustainable urban growth and development

Continuous immigration to Metro Cebu region creates second-order urban problems including underemployment and unemployment bred by growth itself; the widening gap between its socio-economic classes; the proliferation of slum settlements with unsanitary (and unsightly) living conditions; traffic congestion; insufficient waste management; shortage of water and electric supply; and delivery of inter-urban social services. These persistent urban problems mirror the gravity of the prevailing conditions in a burgeoning metropolis with a fairly limited geo-development landscape. The Inayawan sanitary landfill development financed by yen-loan has nearly reached its project life and could remain unutilized for the next seven years and requires a new replacement to its present location. Involving all of Metro Cebu's local governments is indispensable in providing for its continuous urban infrastructure development and sustainability.

### 7.1.3 Dispersal of development impact to areas outside of Metro Cebu

Due to the debilitating effects of population increase which deflate poverty reduction efforts, Metro Cebu had faced all sorts of urban problems. While development plans have aimed at growth distribution to other areas in the region outside of Metro Cebu, in reality, little progress if any has been made as initially expected. Since the beginning of the Third Cycle, the implementation of new arterial development corridors to other regional cities has started to link these areas with the economic mainstream in Metro Cebu. Therefore, to effectively shift Metro Cebu from its central advancement as an overarching dominant metropolis, various approaches

other than infrastructure development have to be employed to re-distribute regional growth impacts.

### 7.1.4 Developing Cebu's mid- and small-sized companies

The role of mid-to small-size companies in Region VII's economy is significant as these comprise 99.5 % of total regional businesses --- with economic activities of micro-sized units comprising 90%. Mid-or small-sized companies have always faced various management problems in financing; difficulties in market development; road product diversity. Their structure, industry characteristics, and their development problems are listed as follows:

- Growth limitations in manufacturing
- Investments concentration in particular industr(y)ies
- Characteristic absence of variety in product design, use, or function
- Dependence on exports of consigned goods after processing
- Undeveloped local subcontracting industries

At present, the fundamental structure of Cebu’s local industry is not yet directed to overcome these problems. Consequently, the following phenomena directly or indirectly affect the business profitability of the region's mid or small-sized local companies:

- Insufficient generation of employment opportunities by Cebu industries
- Accordingly, low business income due to small market relative to population size
- Tendency of skilled and educated workers to seek overseas work for better working opportunities; low employment rate of locally available skilled and educated workforce
- Weak economic base due to structural import dependence of industries on most procurement of raw materials.

Nonetheless, simultaneously addressing these problems of mid- or small- sized companies would contribute in overcoming their size and operational limitations.

## 7.2 Options for Future Development

### 7.2.1 Contributing factors in cost reduction and productivity improvement

In order for Metro Cebu to henceforth survive economic competition, better position its strength among other Asian or Philippine growth centers, and improve its locational advantage in global

corporate competition, there are key factors it must address: overcoming power and water supply shortages; managing industrial waste; and cost reduction in domestic ocean transport. To do so requires precise understanding of problems and business demands confronting its resident corporations. Accurately perceiving their problem-situations is indispensable in achieving realistic solutions. Ensuring a constant supply of competitively priced products while retaining a relatively high quality workforce would appear sustainable, but exerting best efforts in offering lower costs of transport and raw materials to resident corporations remains a formidable endeavor.

Moreover, to position Metro Cebu's development as a higher-order primary growth and international business center, it is also necessary for urban development stakeholders to maintain close communications with and be sensitive to private sector needs and requirements. For example, an IT related Cebu-based company intended to spin off its development department of manufacturing specialized information technology. To attract more, similar investments, assistance required by these companies must be closely monitored through close communications. Metro Cebu must be responsive to their needs. Providing rightly-timed solutions to problems faced by new business attracts synergistic investment activities. Moreover, efforts should be made to develop mid- and small-sized local companies by building and reinforcing inter-corporate network and business linkages between zone-based companies and ex-zone local firms. For example, developing internet expansion itself will make significant improvements. Figure 7-1 summarizes the structure of development problems, objectives, and prospective plans to assist the growth of mid- and small-sized local companies.

With its experience in Japan, JBIC can hold discussions with Metro Cebu on problems it currently confronts such as policies for assisting mid- or small- sized companies; environmental management for companies; urban infrastructure development especially on power and water supply. JBIC could offer establishing a more comprehensive system of dealing with common problems in the region.

### 7.2.2 Problems of urban development from a policy perspective

Although Metro Cebu is administratively subdivided into four cities and six towns, most urban problems --- such as waste management, traffic congestion, shortage of water, ever-increasing illegal residents --- are laterally shared with multiple local government units. This is also largely due to its narrow geographic configuration and proximate market influence in a small urban consumer economy. Hence, the cooperation of different LGUs would achieve more efficient results through synergistic efforts at reduced costs --- contrasted with piece-meal, individual

solutions. Organizing a workable city/town-level cooperation requires establishing a lateral organization active in planning and operation. In particular, solutions to problems of illegal residents must be formulated from multi-lateral socio-economic and physical planning aspects: organization of residents; provision of employment opportunities; development of social and housing infrastructure; relocation site preparation, among others. It is important for regional and local governments to communicate with informal settlers, develop their bargaining power, and facilitate capacity building through community organizations. Preparing a coordinated development plan for these activities at the RDC level and enhancing local government capability will be important ingredients in broadening and redistributing regional growth from now on.

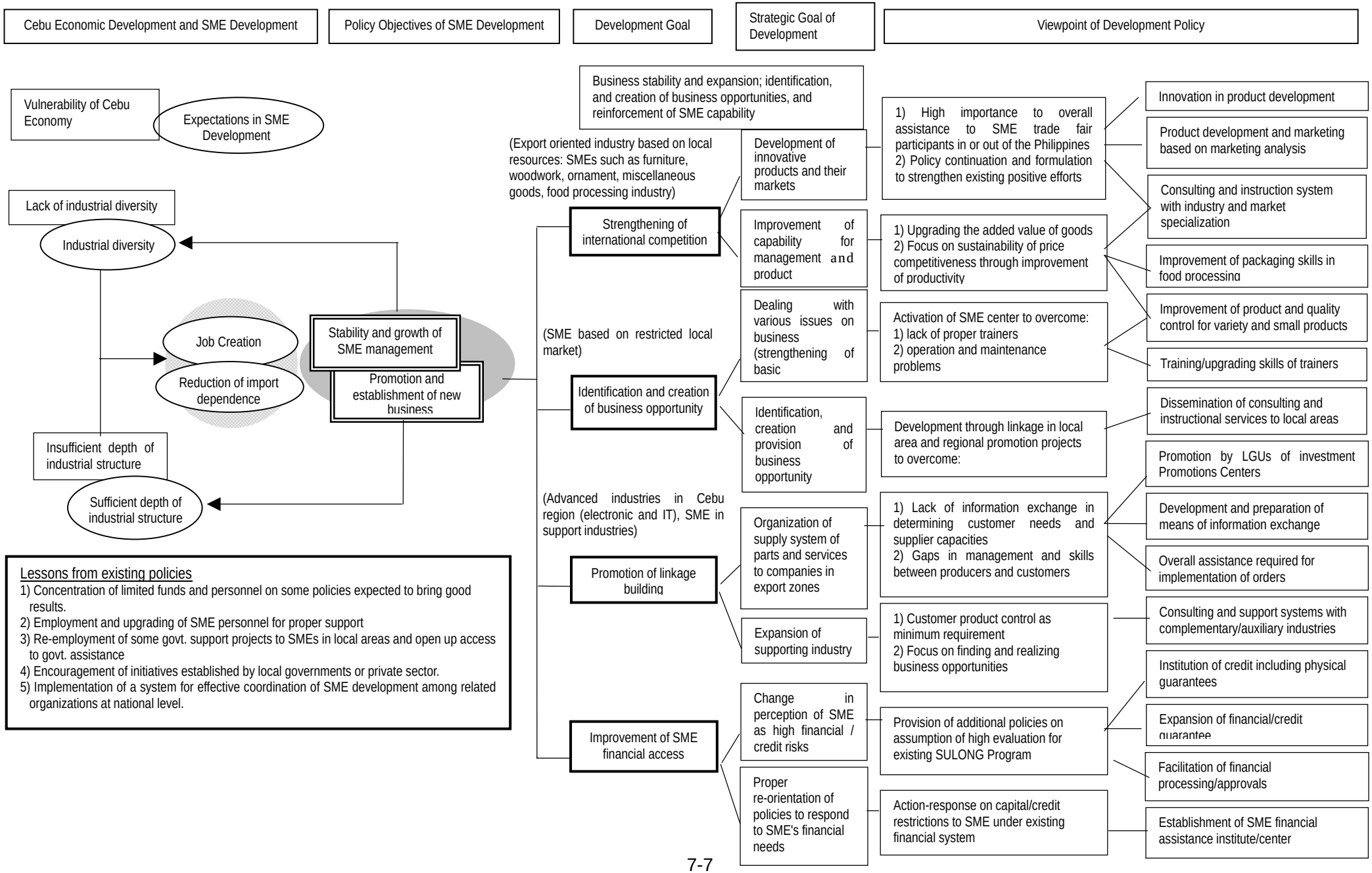
Promoting sustainable urban growth needs to allocate appropriate funds to implement infrastructure development. In developing Metro Cebu, the MDF was principally utilized. While two-step yen-loans were used for projects to generate local government income from the construction of public markets and bus terminals, grant-financing was extended by the central government for non-income-generating projects such as road construction, traffic, and waste management systems. In the 1990s, private sector financing constructed other industrial infrastructure such as Mactan Economic Zone 2 and the New Cebu Township Special Economic Zone. Exploring measures for cost efficient private investments as well as creating possible mixed fund-sources for new infrastructure development projects should be further explored.

In addition, funds for infrastructure maintenance and management should be appropriately provided. In the case of the Second Mactan Bridge for example, the DPWH has previously proposed a toll collection system from road users not so much for capital recovery of its yen loan financing but for defraying its maintenance costs. It is important to explore alternative fund sourcing possibilities appropriate for either cost-recovery or maintenance purposes.

### 7.2.3 Problems of Distribution

Providing incentives for distribution and infrastructure development must be linked together. Various measures i.e., tax incentives, concessional loan projects, and technical support must be explored and developed to successfully re-distribute demographic settlements and economic production functions away from Metro Cebu to other areas in the region.

**Figure 7-1: Structure of Problems, Objectives, and Prospective Plans for the Development of Mid- and Small-Sized Local Companies**



## 7.3 Feedback Items (Lessons Learned)

The following suggestions may be considered to select the regional cities for conducting a feedback seminar.

### 7.3.1 Application of *"urban development model"* to other regions

In applying the urban development model to other regions, some suggestions may be made after reviewing the feedbacks from this Study. In the model, four crucial factors are hypothetically defined as follows: 1) establishment of comprehensive regional development and project plans; 2) necessary infrastructure development to implement the plans; 3) industrial development by foreign private investments induced and encouraged by infrastructure development; and 4) strong presence and active support of regional and local government bodies.

In reviewing Metro Cebu's development within the context of this model, the hypothetical flow and development pattern are confirmed. The policy framework and infrastructure development of Metro Cebu have progressed on several phased growth stages starting from its planning and evolution as a primary regional growth center - ∅ to its subsequent development as the second dominant metropolis in the Philippines - ∅ and, the dispersal of regional development to its other peripheral towns and cities. At present Metro Cebu is going through a stage of urban development redistribution. A tightly-linked relationship between infrastructure development and private investment is also confirmed by interview survey results such as: *"investment decision would not have been made unless sufficient infrastructure was developed;"* or *"infrastructure development is (recognized as) a very important element for corporate growth"*. Positive correlation is also demonstrated between implemented financing of yen-loan projects and all fixed capital formation of durable items in the Central Visayas region alongside the significant results of regression coefficients which also supported this analytical finding. Moreover, Metro Cebu's development achieved its growth based on the leadership initiatives of its regional and local governments with parallel support from the central government, as discussed below.

### 7.3.2 System of regional leadership in urban development

Metro Cebu's growth progressed to its present urban development stage because the central government continually supported its region-led executive plans. From a regional perspective, the organization of a Metro Cebu Development Committee with its office (the MCDPO) under the RDC VII was noteworthy in assuming more active leadership functions. The Committee was established to take charge of managing and coordinating the implementation of yen-loan

projects such as reviewing and approving sub-projects; preparing project plans; administering funds and budgets; managing human resources; and drawing up procurement contracts. At first, its membership consisted of mayors and representatives of nearby cities and towns and regional directors of central government agencies. In turn, the MCDPO functioned as its technical and operating secretariat. In reality, final decision-making powers lay with the direct borrower of sub-projects meaning a local government unit (city, town, or province) or with DPWH as executing agency for national road projects. Under these circumstances, the Committee performed lateral roles to coordinate multiple projects, often representing (and lobbying on behalf of) local governments with central agencies on various technical, financial, and operational concerns. The office also supported subsequent project development and financial planning for executing agencies, i.e., DPWH or other regional agencies for other urban and regional ODA investments. Despite its organizational limitations, the establishment of a region-based coordinating organization enabled local leadership to process decentralized decisions on yen-loan project implementation. The experiences gained in establishing and operating such organization which coordinated multiple projects and functions simultaneously being implemented in a certain region under its administration, on the one hand, and being continuously supported by the central government, on the other, would make positive contributions in planning the development of other regions in the Philippines, or even in other Asian countries.

However systemic organizational shortcomings also became apparent in the management inability and administrative dilemmas after project completions. With its untimely phasing out, insufficient coordination occurred between MCDPO and recipient regional agencies on the final review and official turn-over of some completed projects in MCDP (1) and (2), notably the urban arterial roads. To pre-empt these post-completion problems in multiple, simultaneous yen-loan implementation, a proper organization with clearly defined operating procedures on project coordination and final disposition should be established to ensure continuing infrastructure maintenance and prolong the economic life of projects. Such an organization would be expected to be managed more effectively by a consortium of related regional bodies and local government units to deal with inter-urban, intra-regional problems and to extend technical assistance and appropriate countermeasures for each individual project.

### 7.3.3 Framework of central government support to regions

To implement region-led projects, the central government extended both technical advisory and financial support to Metro Cebu yen-loan and other ODA projects. These were in the forms of technical assistance accessed from multi-lateral and bilateral funding agencies; the creation of

the Municipal Development Fund (MDF) which accessed ODA to finance economic enterprises of local government units; increasing shares of local governments under the IRA which was enacted in 1991 and also concurrently providing an LGU mortgage facility to access MDF capital; the central government support to Bureau of Local Government Finance under DOF and to the MCDP Office and DPWH projects to name a few. With investment constraints of its regional offices and delimited functions as a regional body, by itself, an RDC would have difficulty achieving full completion even of region-based projects. The systematic support of the central government was obviously indispensable. Numerous forms of financial and technical grant assistance were provided by central government to the Metro Cebu projects despite their being initiated by the RDC.

## 7.4 Guidelines in selecting regional host-cities for a feedback seminar

The following suggestions may be considered in selecting regional cities for holding a feedback seminar:

1. The candidate city is a regional city confronting urban, as well as growth dispersal problems, and it should be expected to play a role as a primary growth center like Metro Cebu.
2. The candidate city should be facing urban problems shared with adjoining local cities or towns.
3. The candidate city should have the potential to grow domestically and internationally as a growth center of a surrounding region and even neighboring countries.