

2.3 Present Situation of Major Ports in the Surrounding Islands of Cebu Province

2.3.1 Socioeconomic Conditions and Hinterland Development

(1) Introduction

The economy of the Philippines achieved marked improvements in the last seven years. Since 1992 a program of stabilization and structural adjustment was introduced by the government, which gave positive results. The previous high and growing public sector involvement in the economy and fiscal imbalances were reduced lessening the threat of macroeconomic instability.

Privatization of many public enterprises was achieved and restrictions on foreign trade were reduced and tariffs rationalized. Domestic industries were deregulated and liberal BOT (build, operate, transfer) laws were adopted to encourage private sector involvement in a much-needed increase in infrastructure investment.

A number of export zones, industrial estates and growth center with tax other financial incentives for participants were set up. Greater political stability, together with economic reforms and progress, had produced a healthier climate in which growth resumed and trading activity expanded. The nature of the country's trades, both international and domestic, in the period up to the end of 1998 are outlined below.

The general socioeconomic, infrastructures and hinterland development conditions of the provinces concerned in the surrounding of Cebu Province are briefly described for understanding the impacts to the project planning.

(2) Province of Negros Occidental

1) Introduction

The province will become an economic tiger in Western Visayas in terms of food self-sufficiency and security, resource-based diversification, balanced agri-industrialization, and quality eco-tourism. All these will be complemented with efficient and effective delivery of basic socio-economic services.

The gateways in the province will be the Cities of Bacolod, Cadiz, San Carlos, Silay and the Municipalities of Pulupandan, Toboso, Escalante, Sagay, Manapla, Victorias, E.B. Magalona and Sipalay.

As major gateways, in Northern Negros, San Carlos City and Toboso will be positioned to improve the accessibility of Negros Island to Cebu while in Central Negros, Bacolod City, Pulupandan and Silay City will enhance the accessibility of Negrenses to Iloilo and the

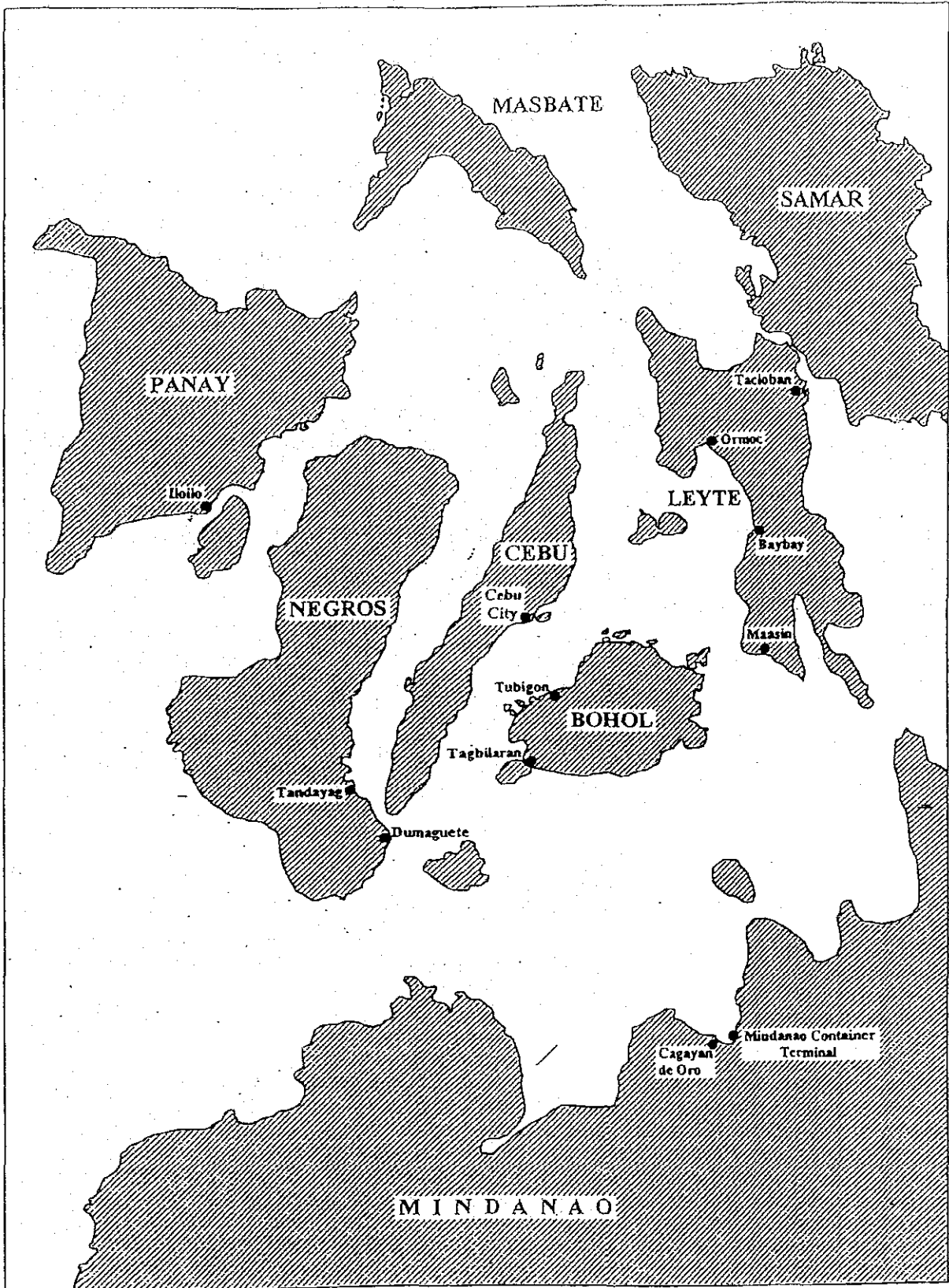


Fig. 2.3.1-1 Surrounding Islands of Cebu Province

National Capital Region.

2) Geography

a. Location/Boundary

Negros Occidental is one of the six provinces that compose Western Visayas or Region VI and located in the northwestern portion of Negros Island near the central part of the Philippine Archipelago. It is bounded on the north by the Visayas Sea and on the south by the Sulu Sea. On the southeast of Panay Island it is separated by the Guimaras Strait and on the east is the Tanon Strait and Negros Oriental.

b. Land Area and Distance

Negros Occidental is a longish stretch of land, which is approximately 372 kilometers from its northern tip, San Carlos City to Hinoba-an at the southern end. It has a total land area of about 792,607 hectares.

The province is composed of six cities with total land area of 181,082 hectares comprising some 22.85 percent of the total provincial area.

3) Meteorology

Climate	Wet season (June to September/October)	Dry season (December to May)
Rainfall	Rainy season: 2,575 mm -3.729mm	Dry season: Not distinct
Temperature	Min temperature: 22.2 °C	Max. : 36.3 °C
Relative humidity	Low in April/May: 42 mm High in June-October : 100 mm	
Tropical cyclone	Occur in rainy season in June to December and is classified as tropical depression, or tropical storm typhoon.	

4) Population

Western Visayas - Region VI is composed of six provinces, which are Aklan, Antique, Capiz, Iloilo, Guimaras and Negros Occidental.

In 1990, total regional population was 5,394,000 and is estimated to increase to 6,811,000 by year 2002 with a growth rate of 1.80 percent. The most populous province in Region VI is Negros Occidental accounting for approximately 40.86 percent of the regional population.

5) Resources

Fishery and Aquatic Resources in 1995

Commercial fishing catch	25,133,077 M. ton
Fishpond areas	9,333.14 has with 1,327 fishpond operators

Prawn ponds	3,361.14 has with 355 operators
Green bay mussel	66.82 M.Ton in 57.34 has with 49 farms
Oyster farm	1,737.81 M.ton in 47.58 has with 388 operators

Fishing is major source of income for the province. The fishing areas cover the islands, namely; the Visayas Sea on the north, the Sulu Sea on the South, Tanon Strait on the east and the Guimaras Strait and Panay Gulf at the southern portion of the province.

Since the province's fish production is more than the per capita consumption, the surplus is marketed to Manila and other neighboring provinces. Fishing season in the province is throughout the year.

6) Infrastructures

a. Land Transportation

Total Road length in 1995

National & Provincial road	1,767.96 km (100 %)
Concrete pavement	521.56 km (29.5 %)
Asphalt pavement	268.26 km (15.17 %)
Gravel	978.14 km (55.33 %)
National and Provincial	11,831.52 m
Pavement bride	9,272.12 m (78 %)
Temporary	2,559.42 m (22 %)

Existing situation shows that the road network of the province is predominantly gravel road. The province is currently undertaking (1995) a concreting program, for provincial road project that covers 72 km of road length.

b. Sea Transportation

Name of Ports	Characteristic
Pulupandan Port	Government national port, entry in the province of Negros Occidental. The present situation is very critical due to serious sedimentation problem in the area. Bigger vessels cannot anymore dock in the port. Currently undergoing improvement/ development.
BREDCO Banago Port	Private ports in Bacolod City for cargo transport For both cargo and passenger transport from and to Iloilo/Manila Undergoing improvement by its private owner, NENACO.
Danao Port San Carlos Port	Located in northern Negros Occidental. Currently undergoing improvement/ development. Gate to Toledo port in Cebu

c. Air Transportation

The Bacolod City Airport, is providing domestic air transportation in the province. This

existing airport is short with narrow runway and inadequate for bigger aircraft and insufficient physical and navigational facilities.

The long term program for air transportation is preparing the pre feasibility study for the possible transfer of the airport thus, looking for alternative sites in Silay City, Talisay, Murcia or Bago City.

d. Infrastructure Situation, 1993 - 2002

The goal of infrastructure as set under the "Negros Agenda 2000" is to provide of adequate, quality and highly accessible infrastructure facilities/services. It is envisioned that necessary infrastructure supports are in place to facilitate the diversification of the sugar industry, attainment of food self-sufficiency and security, development of eco-tourism, improvement of the quality of environment and the thrust of the province as the new economic tiger in the region.

The specific spatial objectives with the preferred strategy are as follows:

All national and provincial gravel roads and temporary bridges will be improved to increase the level of accessibility in the province. Over the plan period, fifty percent of all national and provincial road networks are to be concreted.

Existing seaports and airport and the Bacolod Airport will be upgraded. Private airports will also be developed through the initiative of the business community.

The development of water source and alternative power source will be given high priority to ensure the provision of adequate supply of such utilities over the plan period.

7) Economy

a. Provincial Employment Growth by Sub-sector

Negros Occidental is basically an agricultural province.

Income & Expenditure

Household income in 1990 P 1,644.48 / month

Household expenditures P 1,335.76 / month

Employment by Sector

The employment annual growth rate (EGR) of 2.35 percent in 1990 and 4.01 percent by year 2002

Agriculture	44.38 % (EGR in agriculture and finance is declining by about 0.20 percent)
Others	55.62 % (increasing trend in annual growth rate attributed to the gradual shift of a mono crop economy to more diversified activities amidst the unstable price of sugar in the market.)

b. Future Major Development Projects, 1994 - 2002

For the Province of Negros Occidental, some initial major development projects till 2002 have been identified as follows:

Sugar Industry 2000 - A master plan to make the industry competitive in the global market.

Airport/Seaport Development - A plan to provide the province with better airport and seaport facilities and services at Pulupandan, San Carlos, Cadiz.

8) National Sustainable Development Policy

Under this policy framework, the following priorities shall be adopted and promoted;

- Orderly economic growth;
- Balanced and dispersed agri-industrial
- Eco-tourism development;
- Sustainable use of natural resources;
- Environmental stability and integrity;
- Invulnerability to natural and man-made disasters,
- People empowerment.

9) Land Use Situation, 1993 - 2002

The rural population impact on sustainable production land indicates 22.48 percent. The largest sustainable production land is in Cadiz City with 312.85 sq.km, while Pulupandan has the least area with 3.64 sq.km. The total sustainable production land in the province is only 2,107.64 sq.km.

(3) Iloilo Port of Panay Island in West Visayas Region

1) Socioeconomic Structure of Region VI - Western Visayas

a. Land Use

This land distribution is shown below.

Land Use	Area(sq.km)	% share
Agricultural purposes	6,066.9	30 %
Pastureland	8,898.2	44 %
Forestland	4,246.8	21 %
Urban and built-up area	202.2	1 %
Wetland, fishponds, and river wash	808.9	4 %
Total Land Area about 6.7 % of the national area	20,223.1	100 %

b. Land Area and Population

Region VI has been an out migration region which may be attributed to the attraction of the island of Mindanao considered as "land of promise". The internal "push factors" include the substantial increase in the size of the farm population and labor force.

The Iloilo city is the second largest in the region after the Negros Oriental having 1.87 Million of population in 1995, in the land area of 5.32 km².

Table 2.3.1-1 Land Areas and Population by Province, Region VI

Province	Area (Sq.km)	% Share	Population (Million) in 1995	% Share
Aklan	1,818	9	0.40	7
Antique	2,522	12	0.46	8
Capiz	2,633	13	0.63	11
Iloilo	5,324	26	1.88	32
Negros Occ.	7,926	39	2.43	42
REGION VI	20,223	100	5.77	100

Source: Regional Handbook on Land Resources, Region VI.

c. Economic Profile

Gross Regional Domestic Product (GRDP) in 1997		
62.93 billion Peso (at 1985 constant prices)		
7.05 % of the total Gross Domestic Product of the Philippines		
Growth rate for 1996-1997	1.89 %	
Regional growth annual rate 1990 and 1997	3.43 %	
Share of sector in GRDP in 1997	Target growth rate 1998-2004	
Service sector	43 %	6.0 % per year
Agriculture, fishery and forestry sector	21 %	3.5 % per year
Industry sector	36 %	6.0 to 6.5 % per year
Family Income and Expenditure:		
Average family expenditure	78,706 Peso in 1997	
Average annual growth rate	12.06 % between 1990 - 1997	
Incidence of poverty:		
From 56.6 % in 1988 to 48.2 % in 1997 (national average of 37.5 %.)		
Labor Force and Employment:		
Economically active population:	4.08 million	
Sectors:		
Agriculture	67.1 %	
Non-Agriculture	32.1 %	
Agriculture, Fishery and Forestry:	Area (ha)	% Share
Sugar	0.576	45 %
Palay	0.448	35 %
Coconut	0.115	9 %
Corn	0.115	9 %
Total	1.28 Mil.	100 %

Nine major fishing grounds surround the region, which makes it one of the nation's top producers of fish. The Iloilo Fishing Port located in a 21-ha reclamation area in Iloilo City has a complete refrigeration facilities for fish and other fishery products

Trade/ Industry:

Food processing industries including sugar milling and marine / aquaculture processing. Dominate the industrial sector of the region accounting for almost 90 % of the manufacturing employment. Other industries are garments, furniture, handicrafts, concrete products manufacturing, metal working and ceramic production

Prospects of Exports/ Imports of Commodities:

Food and food preparation industries, covering sugar, molasses and prawns, have more than 68 % of the total exports with a average annual growth rate of 11.4 %.

Resource-based exports of copper concentrates and ramie fibers contributed 29 % to the total export earnings of the Region in 1990. Industrial manufactures of textiles and chemicals, are also gaining importance in terms of exports.

The composition of Region VI's exports is shown below.

Table 2.3.1.2 Composition of industry for the 3-year Exports of Region VI

1988 - 1990	
Industry	%
Food and Food Preparation	68.2 %
Resource-based Products	28.8 %
Industrial Manufactures	2.2 %
Consumer Manufactures	0.8 %
Total	100.0 %

Source: DTI

Raw sugar constituted the biggest bulk of export loaded from the Port of Iloilo while the copper concentrates composed the biggest value and volume of export loaded from the Port of Pulpandan (Negros Occidental).

d. Infrastructure Profile-Transportation

Mode of Transport	
Seaports	60 public and private ports consisting of 5 national ports, 29 municipal ports, and 26 private ports. The ports of Iloilo, Pulpandan and Hinigaran are classified as ports of entry open to international shipping, the rest are open to domestic shipping
Road Network	14,036 km of National, Provincial, Municipal, City, and Barangay roads (as of 1990).
Airports	Six national airport in region, but no international airport. Four trunk lines (Aklan, Capiz, Iloilo and Negros Occidental), one secondary (Aklan), and one feeder (Antique)

(4) Province of Bohol Island

1) Location and Land Area

a. Location

The Bohol is the tenth largest island in the Philippines, covering an area of approximately 411,726 ha with about 118 smaller islands. Bohol has the islands of Cebu at its northwest and Leyte at its northeast as its nearest neighbors. Bohol is about 700 km directly south of Manila and is about 30 km southeast of Mactan Island of Cebu.

b. Meteorology

Climate	Wet season (June to September/October)	Dry season (December to May)
Rainfall	Rainy season: Max. 282.7mm	Dry season: lowest 29.2 mm
Temperature	Min temperature: 19.0 °C (Mar)	Max. : 26.1°C (September)
Earthquake	Magnitude 5.6 recorded in 1996	
Tropical cyclone	Occur in rainy season in June to December and is classified as tropical depression, or tropical storm typhoon.	

c. Population

The Bohol had an estimated total population of 994,440, which is 19 % of Central Visayas population. The population had only increased by 1 % from 1995 to 1996.

2) Infrastructure

a. Road

The road network in the province consists of the circumferential road along the coastline and those in the interior that connect the interior municipalities with one another. The road classification of the province is as follows:

Table 2.3.1-3 Road Classification by Length and Type of Pavement

Classification	Length (Kms)	Percent (%)	Type of Pavement		
	Asphalt	Concrete	Gravel	Earth	Total
Bohol, Total	5,387.78				
City	66.60				
National	588.03				
Provincial	976.34				
Municipal	277.32				
Barangay	3,479.49				
Bohol	272.06	378.164	3,319.70	1,416.97	5,386.89
City	47.740	5.014	13.815	-	66.569
National	195.5927	173.615	218.477	-	587.6847
Provincial	8.820	56.425	910.593	-	975.838
Municipal	6.66	58.99	84.52	127.14	277.31
Barangay	13.25	84.12	2,092.27	1,289.83	3,479.49

b. Land Transportation

Bridge

National and Provincial

8,999.12m

Provincial Government Bridge

2,048.2 m (22.76 %)

Concrete or steel type bridges

656.67m (32.0 %)

c. Air Transportation

Presently, Bohol has two airports namely, the Tagbilaran Secondary Airport and the Ubay Feeder Airport. The Ubay Airport has been closed to traffic due to inadequate facilities and the upgrading of the runway.

With a 1,481 meter runway, the Tagbilaran Domestic Airport handles daily direct flights to Manila and Cebu serviced by Asian Spirit Airlines.

The existing facilities are inadequate, due to shorter runway, which cannot serve bigger aircrafts like Boeing 737.

d. Sea Transportation

Table 2.3.1-4 Port Classification and Ship Calls in Bohol

(as of June 1999)

Classification	Name of Port	Location	Ship Calls
1 Base Port	Tagbilaran Port	Tagbilaran City	3,154
4 Terminal Ports (under PPA)	Tubigon Port	Tubigon	2,014
	Talibon Port	Talibon	571
	Ubay Port	Ubay	690
	Jagna Port	Jagna	147
2 - Sub Ports (Municipality)	Catagbacan Port	Loon	350
	Getafe Port	Getafe	71

Characteristic of Major port

Port of Tagbilaran

Major port of entry of the province has a limited berthing space that can only accommodate one big ship like the Super-ferry and the fast ferries all at one time. The port of Tagbilaran is 41 nautical miles from Cebu City. Twenty ship-line calling at Tagbilaran port with destinations to Cebu, Dipolog, Dumaguete, Cagayan de Oro, Plaridel and Manila. Average number of ship calls in the Tagbilaran Port as of June 1999 is 300 for fast crafts and 778 conventional vessels every month with an average increase of ship-calls at 15 % per year.

Tubigon, Talibon, and Ubay ports

Serve conventional passenger-cargo vessels from/to Cebu City.

Ubay port: Serves regular trips of motor bancas from/to Maasin, Southern Leyte and Bato, Leyte due to Ubay's proximity to Leyte.

All of these ports have shortage of supporting facilities like transit shed, passenger terminal, parking area and berthing area, thus passenger and cargo handling are difficult. Only small vessels can dock on the ports except at the port of Jagna where bigger ones can be accommodated. All of the existing port facilities are inadequate for future demand.

Jagna Port: Serves as the province's gateway to the Mindanao Island.

PPA plans at some ports to:

Installation of fast-craft facilities and construction of navigational aid equipment at the port of Tagbilaran, and construction of berthing facilities at the ports of Tubigon and Ubay.

e. Municipal/fish ports and Private ports

There are sixteen municipal/fish ports and two private ports. The municipal/fish ports are namely below:

Table 2.3.1-5 Name and Location of Municipal and Private Ports

Category	Name of Port	Location
Municipal Ports	Baclayon Port	Baclayon
	Alburquerque Causeway	Alburquerque
	Guindulman Port	Guindulman
	Cogtong Port	Candijay
	Baybayon Port	Mabini
	Asinan Port	Buonavista
	Daet River Quay	Inabanga
	Inabanga Port	Inabanga
	Tapal Wharf	Ubay
	Maribojoc National Port	Maribojoc
	Manga Fish Port	Tagbilaran
	President. Garcia Causeway	President Garcia
	Loay River Quay	Loay
	Loon Port	Loon
	Bien Unido Port	Bien Unido
Clarín Port	Clarín	
Private Ports	Tantrade	Tagbilaran City
	Philippine Sinter Corp.	García - Hernandez

The ships presently using the above municipal/fish ports are small vessels, motor bancas, pump boats and fishing boats for transporting agricultural and seawater products and live animals from and to the nearby islands and Cebu City.

The four municipal/fish ports which are, namely: Guindulman Port; Port of Bien Unido; Loay River Quay, Loon Port and Alburquerque causeway were repaired/improved port facilities thereof funded from the Department of Transportation and Communication (DOTC).

f. Development Objectives of Infrastructures in Bohol

- To upgrade and improve the existing road network in Bohol to support the province's economic development
- To reduce operating costs
- To upgrade land, air and sea transportation facilities for the convenience and safety of the traveling public
- To establish and to strengthen urban-rural and inter-provincial linkages to guarantee the mobility of people and continuous and efficient flow of goods and services
- To convert timber bridges into permanent structures.

g. Development Targets

- To upgrade road-network, sea transport and traffic facilities for efficient province-wide

and nationwide mobility.

- a) Concrete paving of 60 kilometers road under 3rd District.
- b) Gravelling of 100.00 kilometers road under 3rd District.
- c) Improvement of six (6) sea ports under 3rd District.

- To provide for construction and maintenance of traffic facilities to include safety measures such as street signs, warning signs and other precautions for the safety of commuters, motorist and pedestrians.

(5) Province of Leyte

1) Physical Characteristics

a. Location and Land Area

The province of Leyte is located at the southwest portion of the Eastern Visayas Region. Leyte's total land area of 5,712.8 square kilometers constitutes 21 % of the regional total.

The eastern part of Leyte is more suited for agricultural production being of alluvial soils. The uplands have soils primarily form of hard igneous rock while the soils from shale and sandstone are concentrated on the western and southern coasts. These portions are either swamps or cultivated lands.

2) Population

a. Regional Population Growth by Province

Leyte has two cities, namely Ormoc and Tacloban, which serve as the commercial centers of the province. It has 49 municipalities and 1,642 registered barangays, with a total population of 1,635,156. Tacloban City is designated as regional capital of Region VIII, under the integrated reorganization plan.

Table 2.3.1-6 Projected Growth in Population:

Province	1996	2000	2005	2010
Leyte Province	1,541,627	1,669,361	1,844,013	2,036,938

3) Economy
a. Economic Index

**Table 2.3.1-7 Gross Regional Domestic Product (1990&1997)
By Industrial Origin at 1985 Constant Prices and Current Price**

Industrial Origin		1985 Constant Price		1997 Current Price	
Sector		1990	1997	1990	1997
A.	AGRICULTURE	5,952,527	9,839,267	17,347,824	6,478,527
	Agriculture & Fishery	5,858,276	9,723,687	17,347,824	6,478,527
	Forestry	94,251	115,580	-	-
B.	INDUSTRY	5,633,932	9,305,811	19,108,767	7,098,375
	Mining & Quarrying	173,938	225,815	182,736	117,007
	Manufacturing	4,396,770	7,609,047	13,817,519	5,021,441
	Construction	719,569	1,023,167	3,617,045	1,343,657
	Electricity, Gas & Water	343,655	447,782	1,491,467	616,270
C.	SERVICE	5,867,765	9,263,260	23,588,687	7,076,809
	Transport, Communication & Storage	669,477	845,571	1,741,070	747,954
	Trade	1,140,888	1,552,246	3,113,455	1,409,463
	Finance	183,945	241,425	534,827	224,505
	Dwellings & Real Estate	2,029,949	3,084,555	6,594,000	2,193,355
	Private Services	674,144	1,065,209	3,035,282	874,649
	Government Services	1,169,362	2,474,254	8,570,053	1,626,883
	TOTAL GRDP:	17,454,224	28,408,338	60,045,278	20,653,711

**Table 2.3.1-8 GRDP GROWTH RATE (%)
By Industrial Origin at Current Prices, 1994 - 1997**

Sector		94 - 95	95 - 96	96 - 97
A.	AGRICULTURE	9.55	15.40	1.90
	Agriculture and Fishery	9.86	15.40	1.90
	Forestry	(41.27)		
B.	INDUSTRY	19.46	11.30	8.30
	Mining & Quarrying	26.24	(18.10)	32.30
	Manufacturing	21.35	7.00	6.70
	Construction	13.53	32.00	9.40
	Electricity, Gas & Water	11.42	16.50	18.50
C.	SERVICE	13.85	18.60	15.40
	Transport, Communication & Storage	6.14	10.10	17.50
	Trade	15.86	12.40	3.00
	Finance	11.97	18.20	13.70
	Dwellings & Real Estate	12.04	12.70	9.10
	Private Service	14.64	19.20	15.60
	Government Service	16.71	29.80	26.10
	Gross Domestic Product:	14.14	15.20	8.90

Source: National Statistical Coordination Board

b. Major Hinterland Development Projects in the Province

The following projects are lined-up:

- The Regional Agro-Industrial Growth Center in Tacloban City, which was implemented in 1996,
- The Provincial Industrial Center (PIC) in Ormoc City, which will take-off in 1997,
- The Leyte Industrial Park in Palo,
- The Gypsum Board Manufacturing Plant at the Leyte Industrial Development estate in Isabel, Leyte,
- The Additional Power plant at Tongonan Leyte A and B with inter-connection to Cebu, Luzon and Mindanao, which started in 1997, and

4) Infrastructure

a. Land Transport

Total Length of Road	3,152.52 km
Total bridge length	12,153 m
Improvement Project	
Provincial Road	141.95 km
National bridge	65 m
Provincial bridge	345 m

Table 2.3.1-9 Motor Vehicle Registration Leyte Province, 1990 - 1997

Classification	1992	1993	1995	1996	1997
Private	14,216	16,344	20,525	31,919	26,167
Government	619	1,221	1,463	1,548	1,556
For Hire	3,128	3,829	3,973	4,551	5,106
Total:	17,963	21,394	25,961	38,018	32,829

b. Air Transport (Airport)

The Daniel Z. Romualdez Airport in Tacloban City is the aviation hub of Eastern Visayas, which is designed to accommodate Boeing 737 planes.

c. Sea Transport

Of the 24 seaports, two major ports are located in the cities of Tacloban and Ormoc. The Tacloban port is the center-shipping harbor in Eastern Visayas. Inter-island ships ply the Tacloban-Cebu-Tacloban and the Tacloban-Manila-Tacloban routes.

Passenger and cargo ships to and from Cebu anchor at the seaport of Ormoc City. This major port is an ideal jump-off point to the other trading centers in the Visayas, Luzon and the northern portion of Mindanao.

Table 2.3.1-10 Passenger Traffic by Port of Entry in Leyte Province

PORT OF ENTRY	1995	1996	1997
TACLOBAN	424,431	340,919	231,728
PALOMPON	180,099	144,125	159,129
ORMOC	555,821	953,644	990,285
BAYBAY	98,400	115,385	99,952
HILONGOS	122,48	65,812	132,643
MAASIN	121,023	224,511	191,702
BATO	132,742	111,869	92,411
CATBALOGAN	40,412	28,589	21,281
SAN ISIDRO	482,419	537,075	391,514
ALLEN FERRY	403,190	638,250	777,126
PINGAG FERRY	37,677	49,846	25,017
Total	2,598,672	3,210,025	3,112,788

Source: National Statistical Coordination Board

5) Infrastructure Development Plans, 1993 - 2002

a. Infrastructure Situation, 1993 - 2002

In general, the infrastructure facilities of the province are inadequate to deliver basic social services and support to the province's economic, industrial and social development.

b. Infrastructure Issues, 1993 - 2002

Issues confronting infrastructure development are:

- Limited budgetary allocation for priority infrastructure projects;
- Delay of construction activities in view of political environmental and community related problems;
- Natural calamities that caused extensive damage to existing infrastructure and resulted to a redirection of financial resources, thereby hampering the implementation of other infrastructure projects; and
- Need preserve the integrity of the environmental effects of construction and extraction activities.

c. Infrastructure Policies, 1993 - 2002

- With limited budgetary allocation there is a need to re-evaluate and re-prioritize infrastructure program projects for implementation.
- Evaluating and prioritizing infrastructure projects should appropriately consider projects that help mitigate the destructive effects of natural disasters such as earthquakes, typhoons and floods.
- New infrastructure projects may be constructed within environmentally critical areas (as identified by the local authorities, national agencies and/or regional and local level plans), provided that appropriate mitigating measures subject to environmental impact assessments and economic viability studies are incorporated.
- Capital expenditures on transport system will be for the completion of the major road networks and the rehabilitation and improvement of existing roads particularly in

productive areas. Existing ports and airport shall be improved to accommodate the projected increase in flow of passengers and commodities.

(6) Province of South Leyte

1) Location and Land Area

a. Location and Composition

Southern Leyte was one the provinces of Region VIII or the Eastern Visayas Region. It was bounded on the north by Leyte; on the east by the Pacific Ocean; on the south by the Canigao channel; and on the west by the Visayan Sea.

The province is composed of 19 municipalities and 502 barangays as of 1992. The municipality of Maasin, located within the province's northern territorial limits, is the provincial capital and the seat of the provincial government of Southern Leyte.

b. Land Area

Southern Leyte covered a total land area of 173,480 hectares corresponding to 8.1 % of the area of Eastern Visayas Region. Maasin, Silago and Sogod had the three biggest land area ranging from 19,270 - 19,780 hectares.

c. Topography

The topography of Southern Leyte was characterized by relatively flat lands along its coastal area.

d. Soil Type

The Department of Agriculture identified at least 22 soil types in Southern Leyte. The clay-to-clay loam series of soils predominated covering three-fifth (60 %) or a combined 104,845 hectares. These soils were suitable for the cultivation of palay, legumes or fibrous rooted crops.

e. Climate

Southern Leyte had two types of climate and was characterized by the absence of a dry season and the predominance of a very pronounced maximum rainfall from November to January. This type of climate prevailed in the eastern half of the province.

Climate Indicators	Annual Average
Average Output of Rainfall	1,531.2 mm
Number of Rainy Days per year	128.0
Mean Temperature	27.0 Deg. Cs.
Minimum Temperature	23.0 Deg. Cs.
Maximum Temperature	30.9 Deg. Cs.
Relative Humidity	78.0 %
Prevailing Wind Direction	SW

Source: PAGASA

2) Population

a. Population Size and Growth Rate

The annual regional population growth rate of 1.3 % from 1970 to 1990 which was even lower than the country's average annual growth rate of 2.8 % within the period.

b. Population Density

The 1990 population of Southern Leyte is 321,940 within the land area of 1,734.80 sq.km, thus the provincial density was placed at 185 persons per sq.km.

Table 2.3.1-11 Population Density by Municipality: 1990

Municipality	Density (Persons/sq.km)
Liloan	191
Maasin	327
Padre Burgos	152
Pintuyan	144
San Ricardo	216
South Leyte	185

Source: NSO

3) Economy and Industry

a. Major Economic Activities

The major economic activities in Southern Leyte were fishing and the production of copra, abaca, palay and corn.

**Table 2.3.1-12 Main Resource Base and Economic Activities
By Cluster of Municipalities**

Cluster of Municipalities	Main Resource	Economic Activities
Maasin, Macrohon, Padre Burgos and Limasawa	Agriculture	Abaca, palay, vegetable, root crops, copra, banana, and corn
	Fishing	Marine fishing and fishpond operations, port trading
	Abaca	Abaca craft (e.g. bags & other handicrafts) Decorticating / Stripping abaca
Liloan, San Francisco Pintuyan	Agriculture	Copra, palay, abaca, banana
	Fishing	Marine fishing, trading port
San Ricardo	Minerals	Small scale mining of gold, clay, copper

Source: Socio-Economic Profile, PPDO and Interview of Key Information

b. Fishing and Cargo flow through the ports in the province

Commodity

Municipal and Commercial Fishing

- Fishpond operators are located mainly in Maasin, Macrohon, Hinunangan and Padre Burgos.
- Capacities of fish boat ranged from 3.6 to 31.5 gross tons. Ring nets as fishing gears is used

Commercial fishing activities

- Mainly along the Visayan Seas, Leyte and Sogod Bays area
- 23 commercial fishing vessels are operating in Bontoc, Maasin, Sogod and St. Bernard. Padre Burgos is a major fish port in the province. In Padre Burgos alone, the volume of fish landed in 1992 reached to 93 metric tons.

Commodity Flow In the province

- Cebu remained the major source of commodities that were not sufficiently for the province. Apart from palay, commodities of vegetables, spices, corn, fruits, dry goods, animal feeds, farm inputs, flour, canned goods, construction materials and many other consumer items are supplied.
- Inward cargo
Cement and bulk of commodities and general cargo consisting of canned goods, dry goods and others.
- Outward cargo
Copra and logs are shipped out at the ports of Maasin, Malitbog, Cabalian, Sogod and Liloan.

4) Physical and Infrastructure Conditions

a. Road Network

The province's road density was among the lowest in the region which is 0.85 kilometers per square kilometer. Of the total road length of 1,473.8 kilometers, only one-tenth (11 %) were concreted while the remaining 89 % were rough roads paved with gravel and earth.

Table 2.3.1-13 Road Kilometer By Administrative Jurisdiction and By Type of Pavement: 1991

Administrative Jurisdiction	Type of Pavement				
	Concrete	Gravel	Earth	Total(km)	Share (%)
National	107.634	179.461	-	287.095	19.5
Provincial	7.931	314.310	28.606	350.847	23.8
Municipal	46.302	30.956	6.484	83.742	5.7
Barangay	2.670	347.387	401.830	752.160	51.0
Total (km)	164.537	872.387	436.920	1,473.844	100.0
% Share	11.2	59.2	29.6	100.0	

Source: D P W H, Southern Leyte

b. Land Transportation Routes

A total of 55 buses regularly plied the routes from/to Maasin and 12 destinations. The province was lined to Davao by 2 bus trips daily while 3 - 4 to buses transported passengers to Pasay daily. The Manila-based private buses were the PHILTRANCO and the INLAND Trailways.

There were two possible routes in going to Tacloban either via Baybay or via Sogod. A total of 17 buses plied these routes daily making possible the delivery and importation of goods to and from Tacloban.

c. Sea Transportation

- **Ports Service**

Sea transportation was served by one national port and 12 municipal ports strategically located along the coastal municipalities of Southern Leyte. The Maasin national port catered to large passenger and cargo vessels calling regularly from the neighboring commercial centers such as Cebu, Surigao, Nasipit and Manila.

The 12 municipal ports functioned as both fish landing ports and docking ports for inter-municipal boat transportation facilities. Inter-island vessels owned and operated by local shipping line companies made regular ship calls at Maasin, Sogod, Liloan and San Juan Ports.

- **Existing port facilities**

Port facilities in Maasin, Liloan, Cabalian, St. Bernard and Sogod remained unimproved despite continuous increase traffic volume in port activities. 7 municipal ports were used only as fish ports because of lack of lighthouses, wharves and other passenger dis/embarkation and cargo handling support structures.

Table 2.3.114 Existing Ports Classification in Province

Municipality	Number	Name / Classification
Ports:		
National Port		
Maasin	1	Maasin National Port
Municipal Ports:	12	
Bontoc		Bontok Municipal Port
Hinunangan		Hinunangan Municipal Port
Libagon		Libagon Municipal Port
Malitbog		Malitbog Municipal Port
Padre Burgos		Padre Burgos Municipal Port
Pintuyan		Pintuyan Municipal Port
St. Bernard		St. Bernard Municipal Port
San Juan		San Juan Municipal Port
San Ricardo		San Ricardo Municipal Port
Sogod		Sogod Municipal Port

Source: NFA and PPA

5) Necessity of Development

The more obvious causes of poverty in Southern Leyte included the following:

- Low productivity in agriculture and fisheries,
- Fluctuating demand and prices for export products, and
- Insufficiency of infrastructure, post-harvest and marketing facility for surplus agriculture products.

The province has geographical advantage and accessibility to major markets and is strategically linked to major centers in Visayas and Mindanao. In particular, it has established trading links with Surigao del Norte and Iligan City, which could serve as the jump-off points for the more lucrative markets of metropolitan Cagayan de Oro City and Davao City via the established sea routes.

a. Relative Isolation of Internal Cluster of Municipalities

The geographical and physical characteristics of Southern Leyte coupled with poor infrastructure and support facilities brought about the relative isolation among a number / cluster of municipalities.

Distance-wise, 50 % of the total number of municipalities was at least 112 kilometers away from the provincial center of Maasin.

The poor condition of roads and communication facilities further heightened the fragmentation of each cluster of municipalities.

The province has geographical advantage and accessibility to major markets and is strategically linked to major centers in Visayas and Mindanao. In particular, it has established trading links with Surigao del Norte and Iligan City, which could serve as the jump-off points for the more lucrative markets of metropolitan Cagayan de Oro City and Davao City via the established sea routes.

b. Minimal Volume of Surplus Products to Market

Except for palay, copra, abaca, and fish, majority of the agricultural outputs produced in the province could only provide for the immediate consumption of the farming households. Hence, the rural market economy consisted only of a very limited mix of products that generated very minimal income for the area in general and the farmer or fisherman in particular.

c. Fluctuating Demand / Prices of Export Products

Copra, which was highly dependent on the export market, specifically suffered much from the fluctuating demand and prices of this commodity as a result of trends in the world market. In more recent years, copra was subjected to competition from other vegetable oils particularly in the United States, which sensationalized the aflatoxin issue in copra oil.

d. Insufficiency of Infrastructure and Support Facilities for Marketing Surplus Products

The geographical and physical characteristics of the province coupled with poor infrastructure

facilities hampered the expansion of marketing efforts for agricultural produce aside from the more established channel for palay, copra, and abaca. For instance, a variety of vegetables, which were produced in Maasin, could not be easily transported to other areas within the province. Their highly perishable nature and the lack of storage and transport facility hampered marketing efforts of farmers who could get better buying price for these crops.

- **Land Transport Infrastructures**

Considering that majority of the municipalities within the province were more than 100 kilometers away from the provincial center, this situation greatly hampered intra-provincial trading activities because they redounded to additional transport costs for producers.

- **Sea Transportation and Port Facilities**

The existence of ports, which could accommodate cargo and passenger vessels in Southern Leyte, gives the province a distinct advantage in terms of enhancing its trade relations with the above-mentioned markets in Cebu and Mindanao.

e. Upgrading and Development of Infrastructure

Infrastructure development should first and foremost include the upgrading of provincial roads and the construction and upgrading of farm-to-market roads to link vital production areas to target markets. Along this purpose, it is also critical to improve existing primary and secondary seaports.

In the long term, the upgrading of the feeder airport must also be implemented to provide alternative transport facility for goods and passengers.

The development efforts of Southern Leyte should focus on the following areas:

- Intensification and diversification of agricultural and fishery production
- Upgrading of infrastructure facilities and support services
- Promotion of integrated livestock and poultry production
- Forestry and fishery resource generation
- Expansion of abaca-based processing industries

(6) Province of Camiguin

1) Physical Characteristics

a. Geographic Location

Camiguin is a pear shaped island province in the Northern tip of Mindanao. It is approximately 10 kilometers and 90 kilometers North of nearest point of Misamis Oriental and Cagayan de Oro City, respectively. It is bounded in the North by Bohol Sea, in West by Macajalar Bay, in the Southeast by Gingoog Bay and in the East by Butuan Bay.

b. Topography

Camiguin is a volcanic Island whose physical form consists of seven (7) volcanoes, both dormant and active. Because of the island's volcanic form, several hot sulfur springs and geothermal vents exist.

Dominated by high volcanic peaks, Camiguin has a small surrounding area of flat lowland terrain, which is found in the coastal area. Nearly 75 % of the island's 64.9 kilometers of coastline consists of coral reef formations.

c. Meteorology

Climate	Northeast monsoon season (October to April/May)
Rainfall	Northeast monsoon season: 2,300 mm
Temperature	Annual mean temperature: 23.6 °C (September-March) Max. : 25.6 °C (April-August)
Relative humidity	Average 76.77 % all year round
Wind speed	June to September, the southeast monsoons occur. Wind speeds during these period averages four (4) km per hour,
Tropical cyclone	Occur in southeast monsoon season in October to February and is classified as tropical depression or tropical storm typhoon.

d. Earthquakes

Sometimes strong earthquakes shake the entire island province, which may be attributed to the volcanic activity of the famous Mt. Hibok-Hibok. In addition, Camiguin is a part of the Northern Mindanao earthquake epicenter.

e. Soil Conditions

In Camiguin about 68 % of the soils are of a loamy texture. 30 % of the soils are of a clay type and the rest is either sandy or rocky mountainous types of soils. Camiguin has a medium to high fertility rating and are slightly acidic. The main agricultural areas have high organic matter and high available phosphorous and potassium contents, except the rocky foot slope.

f. Sustainability of Land Use and Environmental Considerations

Total Land use:	23,863 ha
Alienable and disposable (A&D) lands:	19,753 ha (82.78 % of total land area)
Sustainable land use:	18,260 ha (92.44 % of A&D land)
Under the development opportunity lands:	1,378 ha (6.98 % of A&D land)
Non-sustainable lands:	115 hectares (0.58 % of A&D land)

Substantial development activity along the coastline, which is vulnerable to storm surges.

g. Population and Settlements

For the period 1990-1995, the population of the four provinces of region 10 grew at an average of 2.33 % per annum. Camiguin's population grew from 64,247 in 1990 to 68,039 in 1995 an increase of 3,792 persons or 5.90 %. In the year 2002, the population of the region is projected to increase by 17.52 % with Camiguin increasing by 7.82 %.

2) Infrastructure Conditions

a. Road

Road

- | | |
|--|----------|
| a. Arterial circumferential national road of 64.085 km | |
| b. Concrete Pavement | 42.63 km |
| c. Bituminous surface Pavement | 11.54 km |
| d. Unpaved | 9.92 km |
| e. Provincial roads | 97.9 km |

Twenty of the twenty-one bridge on this road are standardized concrete structures.

b. Airport

The Camiguin Airport is being improved by replacing the bituminous surface with concrete, including the apron. In order to accommodate not only the F-50 type of aircraft but also 727 jet planes local and national officials are initiating moves to increase the runway length from 1,000 m to 1,500 m.

c. Sea Port

Presently, there are three (3) seaports operating in the province under the management of municipality and PPA Cagayan de ore PMO.

Balbagon port links Cagayan de Oro City and Cebu. Benoni Port links with Balingoan and Cagayan de Oro, and Guinsiliban Port, which have a Ro-Ro landing facilities links with Balingoan and Cagayan de Oro.

d. Irrigation

There are twenty communal irrigation projects within the Province. The goal of this initiative is to obtain rice self-sufficiency. In addition, there are 44 storm water facilities within the Province, with an additional 13 to be constructed in 2001.

3) Infrastructure Development Objectives and Action Plan, 1994 - 2002

The objective is to upgrade existing infrastructure and to maximize accessibility within development opportunity areas and tourism facilities.

a. Solid waste disposal.

None of the five (5) municipalities have identified their permanent sanitary landfill site. This problem is a barrier to the province's sustainable development objectives and the growing tourism industry.

b. Transport

Transport Sector: Conditions and Target

Road: The province has adequate road network but the condition of these roads need to be improved to facilitate the mobility of tourist as well as the populous. The ultimate goal is to replace the bituminous surface with permanent concrete surface and the remaining unpaved surface concrete also before year 2002.

Airport: The airport to be expanded to accommodate F-50, also 737 for passengers coming from Cebu and direct from Manila.

Sea Port: Benoni, Guinsiliban and Balbagon ports to be expanded to serve increasing commercial, trading activities and tourist.

4) Guided by the national policy, the province shall adopt and promote land use policies that:

a. Meets food self-sufficiency and food security in the long run. Consistent with the principles of sound agricultural development and agrarian reform.

b. Maintains and preserves environmental stability and integrity.

(7) Region of North Mindanao (Cagayan de Oro)

1) Present Socio-Economic Situation

a. Introduction

The economy of the North Mindanao province achieved marked improvements in the last seven years. Since 1992 a program of stabilization and structural adjustment was introduced by the government, which gave positive results. The previous high and growing public sector involvement in the economy and fiscal imbalances were reduced lessening the threat of macroeconomic instability.

Privatization of many public enterprises was achieved and restrictions on foreign trade were reduced and tariffs rationalized. Domestic industries were deregulated and liberal BOT (build, operate, transfer) laws were adopted to encourage private sector involvement in a much needed infrastructure investment.

A number of export zones, industrial estates and growth center with tax other financial incentives for participants were set up.

b. Land Area

The Northern Mindanao Region is composed of the provinces of Bukidnon, Camiguin, Misamis Oriental and Misamis Occidental. It covers an area of 1,403,293 ha.

Table 2.3.1-15 Land Area of Northern Mindanao

PROVINCE	Land Area (ha)	%	Alicenable Disposable Land (ha)	%	Forest (ha)	%
Bukidnon	829,379	59.10	336,412	51.16	492,966	66.10
Camiguin	25,265	1.8	20,771	3.16	2,209	0.30
Misamis Occidental	193,932	13.82	125,375	19.07	68,557	9.19
Misamis Oriental	354,718	25.28	174,959	26.61	182,044	24.41
Total	1,403,293	100.	657,517	100.	745,776	100.

Land Classification: Region X, 1991

c. Population

Based on the results of the 1995 census published by the National Statistics Office (NSO), the population of Region X is as follows:

Table 2.3.1-16 Population of Region

	CENSUS COUNT (000)			AAGR (%)	
	1980	1990	1995	1980-1990	1990-1995
Bukidnon	632	844	940	2.93	2.18
Camiguin	57	64	68	1.17	1.22
Misamis Occidental	386	424	459	0.94	1.60
Misamis Oriental	690	865	1,016	2.29	3.27
Total (Region X)	1,765	2,197	2,483	2.21	2.48
PHILIPPINES	48,098	60,703	68,432	2.35	2.43

Population Level: Region X, 1980, 1990, 1995

During the period 1990-1995, the region posted a 2.48 % annual growth rate, slightly higher than the national average of 2.43 %.

With more than 20 % of the country's population, Mindanao has a disproportionately low share of the foreign trade of the Philippines by value. This is a reflection of the nature of economic activity in the region, which, as reviewed, is predominantly agriculturally based with some heavy industries also present.

2) Transportation

a. Road

The present road density of the region is 0.76 km per km², which is way below the standard of 1 km per km². To make-up for this deficiency, the major arterial roads within the region had been upgraded to all weather use, including the Bukidnon-Davao Road and the Bukidnon-Cotabato Road. The need for more roads and an effective traffic management are imperative in the light of the unprecedented increase in the number of motor vehicles plying the region.

The continuing upgrading and modernization of major ports of entries in Northern Mindanao, especially the Cagayan de Oro and Ozamiz Ports, make travel by sea a major mode of transportation in and out of the region. Statistics showed an increasing trend in passenger and cargo traffic over the two (2) ports during the last few years.

b. Air Port

The Lumbia Airport in Cagayan de Oro City primarily serves air transportation in the region. It serves daily for PAL, Cebu-Pacific and other domestic air flights using both small or medium jet aircraft and propeller driven planes at limited frequencies.

c. Domestic Traffic Flows

Data from the National Statistics Office shows that the great majority of the movement of domestic traffic takes place on water compared with that moved by air or by rail. 99.7 % of the tonnage is water borne while by value 98.3 % moves by ship. In volume terms, traffic increased by 8.5 % in the year 1998.

Domestic trade was just 25 % of the size of international trade and was about 23 % of the tonnage moved overseas.

d. PPA Projections for Sea Transport

Domestic cargo traffic will grow 5 % to 96 million tones while foreign cargo traffic will grow 6 % to 92 million tones. Significantly, more port users are shifting to containerized cargo. In 1998, containerized cargo already took up approximately one fourth of the cargo traffic in the Philippines. Domestic container cargo with 6 % projected growth will be outpaced by foreign cargo with 8 % growth.

3) Regional Economy

a. GRDP

Northern Mindanao is a leading agro-industrial area and trade center of the Philippines, giving due importance to sustainable development and equitable utilization of its renewable resources that result to a broad-based social and economic growth. It is a major contributor in attaining the national vision of the decent level of well-being and welfare for every individual and family.

As a whole, the regional economy of Northern Mindanao noted significant gains during the years 1993 and 1994 after posting marginal growth from the years 1987-1992. Its Gross Regional Domestic Product (GRDP) grew by 4.7 %, way ahead of the targeted 4.17 % at the Medium Term Regional Development Plan and better than the national average of 4.3 %.

Table 2.3.1-17 GRDP of 1993 ~ 1994 by Industry Origin

	1993		1994		AAGR (%) (1993-1994)		% Achievement (Actual Target)	
	Target	Actual	Target	Actual	Target	Actual	1993	1994
Agriculture & Forestry	14,019	14,620	14,557	14,862	3.84	1.65	104.3	102.10
Agriculture	13,669	14,240	14,257	14,495	4.30	1.78	104.2	101.7
Forestry	350	380	300	367	14.29	3.46	108.6	122.3
Industry	9,649	9,769	10,131	10,815	5.00	10.71	101.2	106.8
Mining & Quarrying	536	209	574	226	7.06	8.19	39.0	39.4
Manufacturing	7,327	7,599	7,682	8,028	4.85	5.63	103.7	104.5
Construction	782	1,091	821	1,543	5.00	4.15	139.5	187.9
Elect. Gas & Water	1,004	870	1,054	1,018	5.00	17.00	86.7	96.6
Services	14,010	13,895	14,560	14,394	3.92	3.59	99.2	98.9
GRDP	37,678	38,285	39,248	40,070	4.17	4.66	107.31	102.10

The regional output of animal stocks, a combination of both backyard and commercial farms, grew by 12.9 %.

The fishery output, from all sources in the region, grew by 9.2 %.

The decelerated growth of the forestry sub-sector could be attributed to the decline in log production output in the region from 1992-1994 in view of the log ban implementation and selective logging policies in some key areas of production in the region. On the other side, mineral production, metallic and non-metallic production output grew by a modest 2.4 % during the years 1993 and 1994. The value of mineral production rose by an average of 4.3 % covering the same period.

b. Country's External Trade

The values of the country's imports and exports have grown at most impressive levels in recent years as shown in the Table 2.3.1.19 below:

Table 2.3.1-18 Philippines External Trade by Value 1994 - 1997
(Merchandise trade in US\$ billion)

Year	Exports		Imports		Total	
	Value	% growth	Value	% growth	Value	% growth
1994	13.5	18.5	21.3	21.2	34.8	20.0
1995	17.4	29.4	26.4	23.7	43.8	25.9
1996	20.5	17.7	32.4	22.2	53.9	23.0
1997	25.2	22.8	36.4	14.0	61.6	14.3

Source: Bangko Sentral ng Philippines and National Statistics Office

Growth rates in the early 1990's were much lower than these levels with exports increasing at 7 % to 8 % and imports by about 12 % by value annually. Two factors contribute to the

increasing value of the country's international trade namely increasing volumes and a higher value per ton of cargo. The Asian Development Bank calculates that for recent years these elements contribute about two thirds and one third respectively.

- **Exports**
 Manufactured products now account for 80 % of the country's exports. Within this category the dominance of capital and skill intensive products such as electronic equipment and electrical machinery is noticeable. Their share has gone up to 50 % of the total while in 1990 it was below 30 %.
 Garment manufacturing has declined in relative importance falling from 30 % in 1992 to below 20 % in 1995. The figures suggest that the growth in exports has resulted from expansion in industries, which, for the most part, are not located in Mindanao.
- **Imports**
 The major components of the country's imports, representing about 75 % of the total, are raw materials, intermediate goods and capital goods.
 Mineral, fuels and lubricants account for 10 %. Consumer goods represent only 10 % of the total imports, however, they are increasing strongly showing a rise of over 30 % in 1997 from the year before.
- **Trading Partners**
 The Philippines is strongly tied to its neighbors around the Pacific Rim as its trading partners. This is demonstrated in Table 6.3.21 below.

Table 2.3.1-19 Philippines Trading Partners - 1998

(Values as FOB in US\$ million)

Country	Exports to		Import from		Total Trade	
	Value	%	Value	%	Value	%
USA	10,100	34.3	6,424	21.8	16,524	28.0
Japan	4,228	14.3	6,031	20.4	10,259	17.4
Singapore	1,832	6.2	1,742	5.9	3,574	6.1
Taiwan	1,756	5.9	1,414	4.8	3,170	5.3
Hong Kong	1,326	4.5	1,300	4.4	2,626	4.5
Korea Rep.	513	1.7	2,186	7.4	2,699	4.6
Malaysia	1,141	3.9	943	3.2	2,084	3.5
Thailand	634	2.2	792	2.7	1,426	2.4
Indonesia	111	0.4	578	1.9	689	1.1
Sub-total	21,641	73.4	21,410	72.5	43,051	72.9
Total	29,496	100.0	29,524	100.0	59,020	100.0

More than 70 % of the country's foreign trade by value is with its neighbors around the Pacific Ocean. USA and Japan are the major trading partners.

- **Mindanao's Foreign Trade**
The statistics available from the National Statistics Office provide data for the country's foreign trade split between the three main island groups, Luzon, Visayas and Mindanao, and are based on port-by-port figures.

Figures recorded for 1998 are given in Table 2.3.1.20 below:

Table 2.3.1-20 Philippines Foreign Trade by Geographical Area - 1998
(Values in FOB in US\$ million)

Island Group	Exports		Imports		Total Trade	
	Value	%	Value	%	Value	%
Luzon	25,996	88.13	27,124	91.45	53,120	89.80
Visayas	2,191	7.43	1,797	6.06	3,988	6.74
Mindanao	1,309	4.44	739	2.49	2,048	3.46
Total	29,496	100.00	29,660	100.00	59,156	100.00

Source: National Statistics Office

4) Cagayan de Oro Port / MICT (Mindanao International Container Terminal) Hinterland

Overland distances to any part of Mindanao are not too great for cargo to move to or from the port. The major concerns are whether the road system is adequate to allow long distance journeys to be made by heavy vehicles and whether shipping services from the new MICT at Tagoloan are such that it is worth incurring additional overland costs in preference to using a closer port.

It is variously reported that the road from the central Bukidnon region will greatly improve the scope for the MICT to access the southern part of Mindanao.

With shipping links all leading to the north, the new MICT has a distinct advantage over ports on the south coast. Also, as roads are improved the hinterland for MICT can realistically be seen as being the whole of central Mindanao. Competition from other ports will of course mean that their hinterlands overlap that MICT with each port's influence declining with distance.

a. Iron Ore Philippines Hinter Plant

The industry is the Kawasaki plant within the Phividec area. About 11.6 million tones of cargo are handled annually at the adjacent private berth. Bulk is discharged and an equal tonnage of break bulk loaded. The majority of the traffic is foreign but about 20 % of the imports are designated as domestic. The port and plant are self-contained and create little impact locally other than through job creation and demand for power. Output annually is consistent.

b. Commodities

- Common

Over 300,000 tons is exported annually through Cagayan de Oro and a similar amount moves through General Santos. With significant amounts through Davao and smaller ports the total for Central Mindanao exceeds 1 million tons. It is registered as domestic cargo; almost half the total is containerized but with that process continuing a higher proportion will progressively move in this form. The main production area is Bukidnon. Techniques employed to grow, harvest, prepare the product for market and shipment are inadequate and a great deal could be done to boost cargo levels from this crop. Bagging and re-bagging is a feature of the trade, containers positioned near production sites would transform the transfer from land to ship. Some growths in volumes are predicted.

- Fertilizer

Imports of fertilizer to Mindanao are handled at most main government ports. At Cagayan de Oro the flow is about 260,000 tones of which the majority arrives in bulk from foreign sources with about one third being domestic moving in bags. Quantities show a steady growth pattern. Specialist cargo handlers with hoppers and bagging facilities are used at Cagayan de Oro.

- Coconut Oil

This cargo moves in liquid bulk form to foreign destinations. It moves through two main private ports. It is unlikely to be a prospective cargo for the new MICT port.

- Bottled Cargo

A major category of cargo in the domestic trade is bottled cargo, which exceeds 1 million tons for Mindanao. Of the total about one third is now containerized but a continuing transfer should be expected. Cagayan de Oro is the main port but the trade is widely spread. Inward movements slightly exceed outward flows.

- Cement

This product is a major export from the region in tonnage terms. It all moves in bulk from the private port of Alsons. Production is nearly 500,000 tons annually. Other plants may be in production further from the PIE-MO.

- Fruit and Vegetables

Exports of these products exceed 1 Million tons annually. A large proportion is already containerized through PPA Base Port at Cagayan de Oro, General Santos, Davao and Bugo, the private port of Del Monte, all handling reasonable flows.

- Other Natural Products

Exports from Mindanao include a number of agricultural and derivative industrial products such as, copra, lumber, wood products such as plywood and veneer, sugar,

dairy products and molasses. A review of the area's trade figures confirms the orientation towards primary industries.

- Light Industry

A scattering of light industries in the region of which those near Davao are the main concentration generates some cargo flows. The volumes are not very significant at Cagayan de Oro.

Imports to Central Mindanao are comprised of consumer goods for the population and crude minerals needed by heavy industrial plants located here to take advantage of available power and served by their own ports generally away from centers of population. Exports are made up of the products from these plants and a variety of primary industries. Based on value, the three main exports from the CIC in 1995 were reported as coconut oil (US\$ 128 million), canned & fresh pineapple (US\$ 48 million) and sintered ore (US\$ 21 million).

(8) Dumaguete City and Negros Oriental

1) Location

Dumaguete, is located in the southern portion of the province, near the mouth of the Banica River.

Dumaguete City is accessible to by various modes of transportation from major cities and locations in the region and in the country. It is approximately one-hour and ten-minutes commercial plane ride from Manila, the capital of the Philippines and the nation's primary international gateway.

Cebu City, on the other hand, which is the regional hub in Central Philippines and fast becoming the secondary international gateway especially to and from major Asian cities is just a two-and-a-half hour pleasant fast ferry ride. Direct road and sea links connect Dumaguete to municipalities of Negros Occidental and the northern portion of Mindanao.

2) Climate

The climate is characterized by minimum rainfall and short dry season lasting from 1 to 3 months. The average maximum temperature of the City is 34.31°C and the average minimum temperature is 22.85°C.

3) Soil

Dumaguete's soil types consist of San Miguel-Taal Complex, San Manuel Fine Sandy Loam, Dauin Sandy Loam, and Isabela Clay. The San Miguel-Taal Complex portion is mostly sandy with good drainage and is extensively cultivated to coconut and vegetables.

The San Manuel Fine Sandy Loam is of alluvial formation mostly found along the courses of rivers, while, a small level of the Dauin Sandy Loam is found along the coast where drainage condition is poor and the water table is very near the surface. The Isabela Clay is

characteristically black, coarse, powdery, and loose.

4) Population

	1990	1995	Annual Average Growth rate
Region Population :	925,311	1,025,247	Between 1990-1995 2.07 %
Population Density :	171.28	189.78	Persons / km ²
Major city :			
Dumaguete City:		1,660	Persons / km ²
Municipality of Bacong:		767	Persons / km ²
Mabinay:		441	Persons / km ²

5) Natural Resources

a. Existing Land Use

Total Land Area:	5,402.3 sq.kms	100 %
Production land within Alienable and Disposable land:	2,524.27 sq.kms	46.73 %, (used for irrigated rice or fishpond, cultivated annual crops, perennial tree and vine crops, and pastures).
Pasture within forestland:	1,061.82 sq.kms	19.6 % of total land area
Irrigated rice or fishpond:	98.49 sq.kms	1.82 % of total land area
Perennial tree and vine crops:	826 sq.kms	15.3 % of total land area
Forestland:	2,878.03 sq.kms	53.27 % of total land area
Non-forest:	1,931.91 sq.kms	35.7 % of total land area,
Production forest:	642.70 sq.kms	11.9 % of total land area
Forestry plantation:	245.42 sq.kms	4.54 % of total land area
Others:	58 sq.kms	1.07 % of total land area

b. Fishery and Aquatic Resources (in 1995)

	Area	Remarks
Fishpond	2,243.8 has	for the culture of Milkfish, prawns, shrimps and Tilapia
The area for brackish water fishpond:	2,027.0 has	307 fishpond operators
Privately-owned fishponds:	882.6 has	43.5% of water fish pond area 102 operators
Fish pond developed with Fishpond Lease Agreement (FLAS):	743.1 has	36.6 % of water fishpond area
Fish Production		
Commercial fish production:	2,964 metric tons	decreased by 33.46% of the 1994
Marine and inland municipal:	6,603 metric tons	

6) Socio-Economic Activities

a. Agriculture

Agriculture has been and will continue to be a major factor in the economic development of Negros Oriental. Moreover, agricultural products make up the bulk of the exports of the province. For the period 1991 through 1996, about \$312.7 million worth of agricultural products were exported out of the total exports of \$358.1 million. Seventy-five percent of the total value was due to the exports of sugarcane and its by-products with coconut and its by-products accounted for 12.3 percent.

The state of agriculture in the province of Negros Oriental is summarized in the following tables.

Table 2.3.1-21 Area Devoted to Agriculture in 1995

TYPE OF AREA	AREA (has.)
Cropland	245,427.6
Food Crops	91,677.0
Commercial Crops	153,750.6
Pasture and Range Land	106,182.0
By Irrigation	
Rain fed	237,751.6
Irrigated	7,676.0

Source: Office of the Provincial Agriculturist, 1996

Table 2.3.1-22 Quantity and Value of Production in 1995

Type of Commodity	Quantity in MT	Value in Pesos
Food Crops	284,734.900	1,796,337,980.00
Livestock and Poultry	9,670.648	694,784,120.00
Backyard (Dressed)	8,704.040	625,334,000.00
Commercial (Dressed)	996.608	69,450,120.00
Total	304,106.196	3,185,906,220.00

Source: Office of the Provincial Agriculturist, 1996

b. Livestock, Poultry and Dairy

	1995	1996
Total livestock, poultry and pets population:	2,231,009 heads	2,436,828
Work animals including carabao, cattle and horses:	129,063 heads	125,017 heads
Duck:	120,195	
Goat:	116,441	
Chicken:	1,561,470	
Turkey:	8,053	
Sheep:	1,306	
Swine:	222,030	

7) Manufacturing

a. Agro-Industry

Top manufacturing companies in Negros Oriental are registered at DTI whose products are exported to other countries. Hereunder is Table 2.3.1.23, showing the 1995 and 1996 Export Data.

Table 2.3.1-23 Export Data of 1995 and 1996

Company	Product	Volume (mt.)		Value (\$)		Destination
		1995	1996	1995	1996	
1. Dyno West farmers Corp. Philippines Inc.	Ammonium Nitrate	26,063.25	31,320.320	8,596,695.05	10,861,084.15	Indonesia, Thailand
2. Phil. Int'l Trading Corp.	Raw cane sugar, Blackstrap	88,028.05 28,725.00	94,581.726 -	38,429,968.69 3,376,500.50	40,282,905.00	Australia, Papua, N.G.
3. Cargill Phils. Inc. BNS-Tanjay Marketing Asso.	Molasses Phil. Crude Coco Oil	12,800.00 32,054.723	- 14,376,059	665,000.00 16,908,820.46	- 8,513,558.00	USA
4. Dumaguete Coconut Oil Mills	Phil Copra expeller cake	11,335,810	-	1,057,345.90	-	Japan, Taiwan, Indonesia, USA, Europe, Korea
Total		199,007.206	154,977.105	72,168,008.00	61,014,312.15	

Source: DTI, (1996)

Topping the exportation in 1995 is raw sugarcane, which reached 88,028.05 metric tons valued at US\$ 429,968.69. By 1996 the same product topped the list of exported product with a volume of P94,581,726 metric tons costing US\$ 40,282,905.00 brought to the U.S.A. by the Philippine International Trading Corporation.

Other products exported include crude coconut oil, exported to Europe and Korea earned the province US\$16,908,820.46 in 1995 but plunged to a cost of US\$8,513,558.00 in the following year due to a drop in production from 32,054.723 metric tons in 1995 to only 14,376,059 in 1996.

Ammonium nitrate showed a surge in volume between 1995 and 1996 where total exports were only 26,063.25 metric tons and US\$10,861,084.00. The product was exported to Indonesia, Thailand, Australia and to Papua, N.G., other products are blackstrap, molasses and copra expeller cake.

8) Number of Manufacturing Establishment, Its Capitalization and Location Registered at DTI, 1996

There are 11 type of manufacturing establishments, having a grand total of 591 manufacturing establishments dealing on various business activities under manufacturing companies operating in the province.

The total capitalization amounted to P174,462,429. Food, beverages and tobacco manufacturing has a total establishments of 260, with a maximum capital of P118,966,562. Gas and Steam (Sibulan Gas Corporation) in Sibulan has a minimum capital of P10,000. The major industries (sugar industry, copra industry) of the province is described below;

a. Sugar Industry

There are three (3) sugar centrals operating in the province, namely the Central Azucarera de Bais (CAB), established in 1915; the Herminio Teves Company Inc. (HTCI) in Sta. Catalina, established in 1968; and the Universal Robina Sugar Milling Corporation (URSUMCO) in Manjuyod that started its operation in 1975.

Table 2.3.1.24 summarizes the production data of the three (3) sugar mills in Negros Oriental for crop year 1988 - 1989 through 1995 - 1996. The figures were collated from data provided by the Sugarcane Regulatory Administration Bais-URSUMCO and Tolong Mill Districts.

From 1991 to 1995, sugar production gradually decreases from 3,295,623.55 kg in 1991 to 2,772,334.57 kg. in 1995. There is a reduction of the area planted to sugar from 31,109 hectares in 1992 to 30,187.59 hectares in 1996. The total number of planters also reduced from 4,833 in 1992 to 3,762 in 1996.

From 1990 to 1993, there was an average of 31,000.00 hectares planted/harvested to sugar. From 1993 to 1996, sugar area was reduced to an average of 30,000 hectares. The average price of sugar in 1995 amounted to P708.70, the highest price since 1988, then decrease to P595.34/lkg in 1996.

Table 2.3.1-24 Sugar Regulatory Administration Statistics on Sugarcane Production Province of Negros Oriental

Crop Year	Number of Planters	Area Harvested (M.T.)	Cane Production (M.T.)	Sugar Production (Lkg)	Value (PESOS)	Average Price (Pesos/Lkg)
1988 - 1989	-	21,262.45	1,248,508.498	2,178,914.77	918,072,389.90	421.34
1995 - 1996	3,762	30,187.59	1,968,360.050	3,163,405.86	1,883,287,446.00	595.34

Source: DTI, 1997

b. Copra Industry

One of the industrial products in Negros Oriental is coconut. Coconut plantation can be found in almost all areas in the province, although, there is an average increase in production for year 1992. The total "outflows" of the copra industry had gone high in 1992 and it went down in the year 1996.

c. Investment Profile

Under Industry, Manufacturing and Construction there are 78 business establishment, categorized into micro A, micro B, cottage, small, medium and large business. Micro A are business with P409,000.00 capitalization, micro B are those with a capital of P2,544,000.00,

cottage are those with a capital of 3,450,000 while the small, medium and large are those with a capital of less than P3,450,000.00. Of the 78 business names, 31 are micro A, 36 are micro B, and 11 are cottage.

The total number of employees reached 431 persons with the cottage industries having the highest number of employees of 224 followed by Micro B industries of 143.

Table 2.3.1-25 Investment Profile Broken Into Bracket in Province of Negros Oriental

Bracket	Number of BN	Capitalization	Number of Employee
Micro A	31	409,000	64
Micro B	36	2,544,000	143
Cottage	11	3,450,000	224
Small	-	-	-
Medium	-	-	-
Large	-	-	-
Total	78	6,403,000	431

Source: DTI, 1997

d. Employment

In 1995 the total population of about 1.025 million constitute the labor force of 519,000 which is about 50 % of the population. In 1996 statistical indicators showed that we had an employment rate of 94.2 % slightly lower than that of the previous year.

Following is a summary of employment statistics sourced from NEDA the province employment status vis-à-vis the rest of the Central Visayas. Industrial employment declined in 1996 a difference of 1.9 % from total employment. Likewise, manufacturing employment went down to 3.6 %, a difference of 2.1 % from its total employment in 1996.

Table 2.3.1-26 Summary of Employment Statistics, 1995 – 1996

	Negros Oriental	Central Visayas
a. No. of Employment		
1995	4,92,000	1,927,000
1996	505,000	1,970,000
b. Employment Rate		
1995	94.7 %	89.7 %
1996	94.2 %	89.6 %
c. Industrial Employment (%) to Total Employment)		
1995	9.6 %	19.8 %
1996	7.7 %	19.5 %
d. Manufacturing Employment (%) to Total Employment)		
1995	5.7 %	12.7 %
1996	3.6 %	12.6 %

Source: NEDA, (1996)

8) Infrastructure and Utilities

a. Land Transportation

• Number and Type of Transport Vehicles Registered in 1995

Number and Type of Vehicles	No. Vehicles	Remarks
1. Total registered vehicles	28,093	Increase of 6,875(2.40 %) from 1994
Dumaguete (LTO)	18,480	65.7 8%
Bais (LTO)	1,496	5.33 %
Bayawan (LTO)	8,117	28.9 %
2. Type of transport vehicle		
Private vehicles	22,237	Increase of 5,849 (35.69 %) from 1994
Transport vehicles for hire	5,356	Increase of 969 (22.09 %) from 1994
Government vehicles	500	Increase of 57 (12.87 %) from 1994

Note: LTO means Land Transportation Office

• Roads

There are 3 different routes that connect Negros Oriental to Negros Occidental. One route is along the coastal towns from Dumaguete to the northern boundary town of Vallehermoso up to San Carlos. Another is from Dumaguete City traversing the coastal towns in the southern portion of Negros Oriental up to the boundary town of Basay then to Hinoba-an, Negros Occidental. Still another route is from Dumaguete City to Bais City boundary going westward to the interior town of Mabinay and then to Kabankalan, Negros Occidental.

Table 2.3.1-27 Road Classifications in Type of Pavement and Length

Type of Roads	Length (km)	Remarks
1. National roads	370,977	Connecting Negros Oriental to its sister province of Negros Occidental with an average width and thickness of pavement for both asphalt and concrete of 6.10 and 0.25 inches respectively
Asphalt concrete Pavement	244,844	66 %
Gravel	126,132	34 %
2. Provincial road	533,908	
Concrete pavement	13,508	2.53 %
Asphalt	41,218	7.72 %
Earth/gravel	130,861	24.51 %
3. 55 farm-to-market roads	585,883	40 roads (72.73 %) are in fair condition, while 13 roads (23.64 %) are in bad condition, and only 2 are good.
Concrete pavement	15,350	2.62 %
Asphalt	48,218	8.23 %
Earth	176,819	30.18 %
Gravel	345,495	58.97 %

b. Air Transportation

The province has one airport located at Sibulan. It is classified as a trunkline airport which has 1,810 kilometers in length and 45 meters in width of runway. It has two runways with an asphalt overlay of 12 inches thick. The stopway is 50 meters in length and 45 meters in width with an overshoot allowance for a 737 jet of 310 meters.

- **Passenger and Cargo Traffic**

Passenger traffic in 1996, totaled 94,358, an average of 7,863 passengers per month of which 46,997 are outgoing, 54 are transit and 51,956 are incoming

In terms of volume of cargoes, the incoming volume of cargoes totaled to 801,665 kilograms and 330,767 outgoing or a gross total of 1,132,332 kilograms. This is 3.14 % higher than the 1995 volume of cargoes.

- **Airport Facilities**

The airport facilities and manpower compliments include one control tower with seven (7) controllers and two bay fire stations, three fire trucks (2 x 3,000 gallon and 1 x 6,000 gallon) and eighteen (18) firemen, six (6) airfield navigation technicians, four (4) mechanical plant operators and two (2) back-up generators, an 80 KVA and a 60 KVA.

- **Private Airstrip**

There are three (3) private airstrips in the province. One is located in Construction Development Corporation of the Philippines (CDC) P in Basay. Another one is in the Tolong Sugar Mill Company (TSMC) in Bayawan and another one is in Bais City owned by the Montenegros.

c. Sea Transportation

- **Number and Type of Shipping Lines**

There are a number of shipping lines that operate in the province, namely: William Lines-Gothong-Aboitez Lines, Sulpicio Lines, George and Peter Lines, Trans-Asia and the Negros Navigation. Aside from the passenger boats there are also fast ferries operating in the province such as the Supercat of the Aboitez, Delta, Sea Angels of the Negros Navigation and Water Jets.

Table 2.3.1-28 Port Facilities in the Province

Name of Ports	Port Facilities	
Dumaguete port	3 R.C Ringer Piers: 18 m x 142 m pier, 16 m x 81 m pier, and 12 m x 165 m pier including 9m x 11 m roll-on roll-off ramp, 1,945 sq.m. container yard and 315 sq.m passenger terminal.	Government port by PPA
Tandayag port	12 m x 24 m R.C. wharf and 15 m x 20 m R.C. beach ramp,	located 18 kilometer north of Dumaguete City, in Amlan by PPA
Guihulngan	one 6 m x 64 m. L-type R.C. finger pier.	located 116 kms north of Dumaguete City, Government port by PPA

Source: PPA (Philippine Ports Authority)

Table 2.3.1-29 Seaport by Ship Calls, Passenger Traffic and Cargo Volume

Name of Port	No. of Ship Calls	Cargoes (MT)	Passengers
Dumaguete Port	6,317	435,011	1,008,532
Tandayag Port	5,053	96,569	327,011
Guihulngan Port	1,295	540	128,471
Private Ports	2,554	540,356	11,579

Source: PPA 1997

d. Waterworks and Sewerage Facilities

As per IPHO report, Negros Oriental has 4,998 units of jetmatic pumps 2,813 of which are public and 2,185 are privately-owned, 988 artesian wells; 382 improved springs, and 1,840 open dug wells each of almost all of the municipalities in the province has a pipeline water system.

The implementation of the Central Visayas Water and Sanitation Project (CVWSP) in Negros Oriental where six municipalities were covered namely, Sta. Catalina, Siaton, Pamplona, Mabinay, La Libertad and Vallehermoso added the availability of potable water supply system in the province. Aside from the main water system six (6) Small Level II water systems were constructed.

e. Irrigation System

As of December 1995 the province has 71 irrigation systems with a total service area of about 7,080 hectares. Around 4,495 or 63.5 % of the total service area covered by Communal Irrigation System are constructed and assisted by the National Irrigation Administration (NIA).

31.7 % of the total service area or 2,245 hectares were constructed by the Department of Agriculture (DA), Department of Public Works and Highway (DPWH) and the defunct Farm System Development Corporation (FSDC) and the Presidential Arm on Community Development (PACD). The remaining 4.8 % or 340 hectares are serviced by private irrigation

system.

Majority of these irrigation systems are of the gravity type. This would include the 12 Small Water Impounding Project (SWIP) constructed by the DA and funded through the Comprehensive Agrarian Reform Program (CARP), Japan International Cooperation Agency (JICA) and other programs. These cover approximately 615 hectares of farmlands.

The following tables show the number of irrigation system and service area in hectares.

Table 2.3.1-30 Number of Irrigation System : 1995

System	Gravity	Pump	SWIP	Total
NIA Assisted	26	0	0	26
Constructed by Others	21	2	12	35
Government Agencies	0	0	0	0
Privately Owned	10	0	0	10
Total	57	2	12	71

Table 2.3.1-31 Service Area of Irrigation System (Has)

System	Gravity	Pump	SWIP	Total
NIA Assisted	4,495	0	0	4,495
Constructed by Others	1,585	45	615	2,245
Government Agencies	0	0	0	0
Privately Owned	340	0	0	340
Total	6,420	45	615	7,080

As per NIA investigations the province has an estimated potential area for irrigation development of 17,028 hectares but only 43% of the potential area have been developed and utilized for irrigation. Negros Oriental has 112 irrigation systems, constructed throughout the province.

The total number of rice farmer-members of irrigations in the province totaled to 5,038. Siaton has the biggest number of farmer member which totaled to 1,004 or 19.93%.

As to the number of service area, Canlaon City got the biggest area of 1,146 hectares followed by Sta. Catalina with 1,004 hectares and Siaton with 744 hectares.

9) Plans and Programs of Infrastructure Development for the Province

The six-year Master Plan (1998-2004) provides a framework in which future development will be undertaken in the Province. The Master Plan takes into account five (5) "minimum planning elements" as important considerations. These are: (1) land use; (2) circulation; (3) environment considerations; (4) community facilities; (5) and housing.

The overall goal of the Master Plan is to make the Province/Dumaguete "the most livable city in the Philippines" in a manner that is environmentally-sensitive, commercially-supportive, industrially-progressive, and pedestrian-friendly.

Based on its unique characteristic as a place and the need to disperse growth and development, two important strategies are outlined in the Master Plan - the University Town Approach and the Growth Point Approach. A major portion of the City's economic, social, and cultural life revolves around schools, colleges, and universities.

The provincial government intends to continue the programs of the following projects:

- The institutionalization of the Farmer's Field School and the Barangay Agricultural Development Centers;
- Expansion of health and social services;
- Open two community high schools in Barangays Avocado in Sta. Catalina and Nalundan in Bindoy;
- Installation of additional waterworks systems and irrigation projects for the homes and farms;
- Concreting of farm-to-market roads;
- One hundred per cent computerization of the Fund and Personnel Management Information Systems;
- Institutionalization of the cooperative movement. The Negros Oriental Provincial Employees Multi-Purpose Cooperative or NOPEMCO is now organized and in the process of registering with the Cooperative Development Authority; and

10) The Plan and Investment Policy

To the extent possible, private sector initiative and support will be tapped to finance the various projects and activities of the Plan. Schemes such as build-operate-transfer (BOT), build-operate-own (BOO), property swamps, leases, joint venture agreements, etc., are possible approaches that the city can undertake with private entities and organizations.

The policy on private investments will be such that local Dumaguete investors will be given priority and preference in the prosecution of a project or activity.

Complementing this investment policy shall be the requisite arrangement that local resources (human, material, etc.) will be employed when they are readily available. It should be recognized that the Plan not only will attempt to provide a framework for the physical development and growth of the city, it will also be an opportunity to stimulate economic expansion out of local resources and initiatives.