

3.2.2 Social Environment Conditions

(1) Cebu Baseport

1) Cebu City

a. General Profile

The City of Cebu is located along the coastal and eastern belt of the Island Province of Cebu. As defined by the Bureau of Land Location Movement No. 1, Cebu Cadastral Survey, it is 10 degrees 17N latitude and 123 degrees 54E longitude. It is bounded on the north by the Municipality of Consolacion and the City of Mandaue, on the South by the Bohol Strait and on the west by the Municipality of Talisay and the City of Toledo.

Cebu City has a total land area of 32, 800 hectares. Its terrain is relatively flat on the coastal plain and becomes rolling and hilly at elevations of 40 to 200 meters and then generally rugged at elevation of 200 to almost 800 meters above sea level. As of 1995, the population growth rate of Cebu City is at 2.2 % and 2000 population projection is pegged at 758,814. However, the inevitable floating or daytime population would further enlarge the city's population to over a million people.

b. Port Development

In response to the perceived development needs of the City of Cebu, the City Government created the Cebu City Waterfront Development Project (CCWDP) headed by City Councilor Firmo Dayao. This project aims to "revitalize the key core of the city... while maintaining a healthy and wholesome environment for residents." The project envisions developing a boardwalk modeled on San Francisco's Fisherman's Wharf, restaurants, souvenir shops, recreational facilities, and a world class ferry terminal. A planetarium and/or an oceanarium are also planned to "highlight the rich diversity of marine life existing in the surrounding waters."

The CCWDP planed seven physically distinct land use zones: a) Waterfront Commercial Zone, b) Waterfront Service Zone, c) Commercial Zone, d) Historical/Cultural Zone, e) Residential Zone, f) Institutional Zone, and g) Parking Area.

Land area for the Waterfront Commercial Zone is at 127, 000 sqm with total developable floor area of 492,000 sq.m. This shall comprise the area to be reclaimed, and the area bounded by Quezon Boulevard, Bureau of Custom Building, Aduana St, and ALU-TUCP. The purpose of this zone is to permit a wide range of commercial land redevelopment in front of the fast ferry terminal and boardwalk (e.g. establishment of a World Trade Center).

The Waterfront Service Zone shall cover the portion of reclamation area and the area between Maritima Building and the Bureau of Customs Building. Land area for the Waterfront Service Zone is approximately 28,000 square meters with developable floor area of 605,000 sqm. The purpose of this zone is to include only those uses that support the fast ferry terminal activities and facilities (e.g. fast ferry terminals, oil and water depots, parking spaces).

The Commercial Zone is mainly for the commercial redevelopment of areas along M.J. Cuenco Ave., Quezon Blvd., M.C. Briones St., P. Burgos St., Osmeña St., D. Jakosalem St., Legaspi St., and F. Urdaneta St. Developments include offices and shopping centers, high rise hotels and condotels, native product/crafts market, and food centers/restaurants. Land area for the commercial zone is approximately 107,437 square meters with total developable floor area of 605,000 square meters.

The Cultural/Historical Zone is for the preservation of the cultural/historical heritage area as well as to redevelop structures near this historical area conforming to theme of the area - Spanish Architecture. Areas to be preserved include Sto. Niño Church, Cebu Metropolitan Cathedral, Magellan's Cross, Fort San Pedro, Port Building, and Parian. Areas affected by redevelopment include the buildings along P. Burgos and Osmeña Blvd. Land area for this zone is approximately 59,000 sqm.

Residential-Commercial Zone is mainly for residential over ground floor commercial development, which serve as a resettlement housing for those affected by the project. The ground floor areas will be utilized for commercial purposes. Areas considered for residential zone is the area along D. Jakosalem St., Magallanes St., and F. Gonzales St. Land area is approximately 59,000 square meters.

Parks and Gardens Zone is for the development of a multi-faceted public park including passive and active recreation areas as well as major public facilities. Parks and Gardens include the existing Plaza Independencia, the perimeter of Fort San Pedro, the ALU-TUCP Centers, and the edge of Quezon. Land area is approximately 84,400 square meters.

Institutional Zone's purpose is to preserve the areas under the government institutions. This zone includes the existing City Hall block and the Bureau of Customs Building. Land area for this zone is approximately 8,270 sqm.

The Parking Area's purpose is to appropriate areas mainly for parking purposes. Areas bounded by M.C. Briones St., F. Gonzales St., and D. Jakosalem St., and areas along A. Jereza St. will be reserved for parking areas. Land area is approximately 6,600 sqm with developable floor areas of 52,800 sqm.

One of the major projects of the Cebu City Waterfront Development Project is the Fast Ferry Terminal and Reclamation Project (FFTRP). The FFTRP have the following objectives:

- To rationalize and maximize the use of existing Cebu port space and facilities;
- To provide a modern and efficient berthing and passenger terminal facility for fast ferries;
- To complement the planned improvements at the waterfront development project area.

The proposed fast ferry terminal will be situated near the Compania Maritima building at coordinates 10 degrees 17.4 min. latitude and 123 degrees 54 min. longitude. Although the proposed area falls within the jurisdiction of the Cebu Port Authority, a MOA signed in December 1997 authorizes the City Government to develop the area.

The terminal complex shall have a passenger terminal building with an estimated area of 20,000 sqm and built-in support facilities. It shall be equipped with berthing facilities that can accommodate up to 30 fast crafts at any given time. Apart from serving as links between Cebu and the neighboring provinces, the fast ferries are also expected to help ease the land transportation traffic between Mactan Island and Cebu City especially as they promote tourism links between Mactan Island and mainland Cebu.

c. Highly-Impacted Areas

As per estimate, the CCWDP is expected to displace 3000 residents of the affected areas. This shall include residents from barangays Ermita, Sto. Niño, San Roque, and Parian. The following are the information that describe the current situation of the barangays within the waterfront development project area:

Table 3.2.2-1 Total Population and Number of Households by Barangay

Barangays	Total Population		No. of Households	Household Size
	1990	1995	1990	
Sto. Niño	877	1,675	323	4
Ermita	5,381	6,526	1,311	4
Parian	5597	3,843	767	4
San Roque	4849	4,571	1,146	5

Table 3.2.2-2 Population Density

Barangay	Land Area (sq. km)	Population Density	
		1990	1995
Sto. Niño	0.28	3,132	5,962
Ermita	0.20	26,905	32,630
Parian	0.10	55,970	38,430
San Roque	0.46	10,534	9,936
Cebu City	279.45	2,162	2,370

d. Housing

In San Roque, along the sidewalks of P. Gomez, Legaspi Ext., Aduana, and Osmeña Blvd., many shanties are built. Most of these shanties are of light materials and are semi-permanent in nature. Some families live in old and abandoned buildings, which are subdivided into small rooms, where a family or two resides. Many families use their stores or stalls as their homes at the same time.

In Sto. Niño, upper floors of commercial buildings are used as residences of building owners, lessees, or renters. Many vendors also spend the night in their stalls. Ambulant “stallhouses” also exist. For Ermita, only two percent of the households own the lot where their houses are built. This is because majority of the land in Ermita is government-owned.

Table 3.2.2-3 Households and Stalls within the Waterfront Development Project Area by Location

Barangay	Location	Number
Sto. Niño	P. Burgos St.	24
	MacArthur/Palma or Osmeña Blvd.	277
	P. Gomez-A	15
	P. Gomez-B	31
San Roque	P. Burgos-Magallanes	39
	Aduana	17
	Pilot House	11
	Pier I	55
	George and Peter	9
	Co. Maritima	10
	Lapu-Urdaneta	12
Ermita	Sitio Bato	297 (503 families)
	Carbon Market	317 families
Parian	V. Gullas/Mabini	46

Source: DWUP, City Hall and Barangay Ermita Report

The major livelihood activities in the waterfront of Cebu City is still trading and merchandising. These economic activities range from the large commercial centers, wholesale and retail shops, hardware, and electrical supplies to the smallest vegetable vendor in Carbon and water vendor in Pier I.

Resulting from the presence of the ports and harbors in this area, shipping and transportation related activities contribute largely to the livelihood activities of the inhabitants of the waterfront. Apart from those who are directly employed by the shipping and fast ferry operators, several hundreds of stevedores, food vendors, sub-contractors, pedicab drivers, etc. generate their income from this area.

The total project area covers 37.26 hectares encompassing four (4) urban barangays: namely San Roque, Sto. Niño, Parian, and Ermita.

Table 3.2.2-4 Affected Land Area by the Project

Barangay	Total Area (has.)	Affected (has.)	%
San Roque	46	26.2	56.95
Sto. Niño	28	5.8	20.70
Parian	10	2.8	28.00
Ermita	20	2.3	11.50
Total	104	37.2	35.76

e. Buildings and Type

Table 3.2.2-5 Building Type and Corresponding Number of Buildings

Building Type	No.
Commercial	92
Institutional	8
Government	9
Residential (light materials)	131
Residential (semi-concrete)	14
Ambulant Stalls	128
Warehouse	16
Total	398

f. Land and Property Ownership

Land and property ownership is dominated by three landowners. These are: the local and national governments, the private sector, and the Catholic Church. The national government, represented by the national line agencies own 23.32 %; the Cebu provincial government owns 4.4 % and the Cebu City government, 17.58 %. Areas owned by the private sector comprise 17.93 % while the Catholic Church owns the remaining 48.12 %.

(2) Cebu South Reclamation Area (Talisay City)

1) General Profile

Talisay City is located in the eastern coast of the Island of Cebu. At the north and western part of the city lies the City of Cebu while the Municipality of Minglanilla borders its southern side. Talisay's coast faces Bohol Strait.

The estimated total land area of the city is 42.22 square meters. Talisay has 97,283 residents and has recorded 40.41 % intercensal population growth rate.

2) Port Development

The proposed port of Talisay City shall cover 1.8 square km. of reclaimed foreshore land located in Brgy. Tanke. This port is intended to be an agricultural and fish port as well as an interregional ferry port.

As an interregional ferry port, it is expected to service the influx of enrollees from Mindanao, Bohol, and other neighboring areas. As an agricultural port, it shall be the "central receiver" of agricultural products from the southern and northwestern municipalities of Cebu, Mindanao, Bohol, and other neighboring islands.

The agricultural port at Tanke shall also serve as fish port to allow the development of a fish market in Talisay.

Brgy. Tangke is the most affected area vis a vis Talisay's port development. To gain space for commercial and industrial purposes near the proposed port area, an estimated 1,000 households shall be displaced from Brgy. Tangke, Talisay (City Planning and Development Coordinator interview).

As a safety net, the City Government proposed the establishment of a Fisherman's Village within the vicinity of Tangke. This Fisherman's Village shall feature high-rise buildings, which shall house the displaced people of Tangke.

(3) Consolacion

1) General Profile

Consolacion lies at the eastern side of the Island of Cebu. Consolacion is bordered by Mandaue City at the southwestern side and is flanked by the Municipality of Liloan at the northwest. At its western side is the City of Cebu while its northern tip the Municipality of Compostela bound Consolacion. Its shoreline faces Bohol Strait.

Consolacion has an estimated land area of 42.05 square kilometers. Its largest barangay in terms of land area is Brgy. Tayud with 6.56 square kilometers;

The 1995 population of Consolacion comprised 3.43 % of Metro Cebu's population, and 1.68 % of the whole Cebu province.

In 1990, Consolacion's total population was 41,270 persons and by 1995, it increased to 49,205.

2) Highly Impacted Area

In an interview with the Municipal Planning and Development Coordinator, the projected area to be developed for the establishment of the port is the stretch along the coastlines and the foreshore land of Brgy. Tayud. This shall cover a 1-kilometer area.

Brgy. Tayud sits at a 6.56-square kilometer area. It lies at the southern tip of the Municipality of Consolacion and is bounded on the north by Brgys. Jugan, Nangka, and Tugbongan. On

the south, Tayud is bounded by Bohol Strait and on the west, Cansaga Bay serves as its natural boundary. On the east, Tayud is bounded by portions of Brgy. Jugan and by Liloan barangays; namely, Brgy. Tayud and portions of Brgy. Yati.

Brgy. Tayud has the highest population concentration in Consolacion with 5,225 (1990). It has a population density of 796.5 persons per square-kilometers and has a population growth rate of 37.43 %.

Along the coast of Tayud, institutions, infrastructure, industry, and residences exists. Comprising the industry sector in the site are the following: a shipyard, a rattan factory, and furniture factories. A monastery, Poor St. Claire Monastery, and a church, MSP Seminary, are also present. A feed mill is also located within the vicinity of the barangay's coastlines. An estimated 100 households in Sitio Bagacay, Brgy. Tayud are expected to be displaced. Sitios Baha-baha and Looc of Brgy. Tayud will also be affected once the project starts.

(4) Lapu-lapu City (North Mactan)

1) General Profile

The total population of Lapu-lapu City is 221, 094 as of 1999, with an average household size of 5.1. The total number of households is 43, 352 composed of 30 barangays, and 19 of which are in the mainland while 11 are in Olango Island. Total land area is 6, 424.1921 hectares. The largest barangay in land area is Brgy. Calawisan with 956.9963 hectares and most populous barangay is Brgy. Gun-ob with 29,925 residents.

2) Geographic Location

Lapu-lapu City is located in the island of Mactan near the middle section of the province of Cebu just across the eastern coast of Cebu City and Mandaue City. Part of the metropolitan Cebu area, the city is connected by two bridges, the 1st and 2nd Mandaue-Mactan Bridge. It is 13 km away from the port of Cebu and is bounded on the north and west by the Mactan Channel, on the south by the Municipality of Cordoba and on the east by the Bohol Strait.

3) Land Use

a. The Comprehensive Land Use Plan of the city was approved under SP resolution No. 2151 and enacted under Ordinance No. 258-2000 on April 14, 2000.

- The general land use is as follows:
- Urban commercial: 1,231.77 hectares (19.17 %)
- Tourism: 1,356.15 hectares (12.11 %)
- High Level Residential: 923.16 hectares (14.37 %)
- Low level residential: 1,226.83 hectares (19.10 %)
- Environmental Protection: 471.40 hectares (7.34 %)
- Recreation, Parks, and Greens: 184.79 hectares (2.88 %)

- Mixed Land Use: 323.30 % (5.03 %)
- Industrial/Special Economic Zone: 208.21 hectares (3.24 %)
- Airport: 473.58 hectares (7.37 %)
- Institutional: 25 hectares (0.39 %)

b. Planned Reclamation has the following land uses:

- Mixed land use: 712.62 hectares (60.10 %)
- Recreation, Parks, and Greens: 236.45 hectares (19.94 %)
- Urban/Commercial: 51.82 hectares (4.37 %)
- Tourism: 184.75 hectares (15.58 %)

c. Total Reclamation Area: 1,185.64 hectares

4) Existing Lapu-Lapu City Ports

There is only the presence of piers and causeways for motorized bancas, which serve as the main transportation between Mactan Island and adjacent islands. The bigger port facility is the Muelle Osmeña at the Poblacion which functioned as the main transport facility servicing Lapu-lapu City and Cebu City prior to the establishment of the two Mandaue-Mactan Bridges. As of now there is the existence of a Ferry Landing at MEPZ.

5) Port Development

The Mactan North Reclamation is considered to be the site of a port primarily for tourism purposes, but shall contain enough areas for port, commercial, and mixed-use purposes such as:

- Construction of a fast ferry terminal
- Commercial districts shall be developed to service the requirements of the tourism sector
- Long term, tourism activities in Mactan, especially on the high end international scenario, will be concentrated on tourism islands to be reclaimed north and south of Mactan
- A recreational area shall be designated (e.g. golf course) in the north and south reclamation area
- A considerable area shall be allotted for tourism development (World-class beaches, Hotels and Convention centers)

6) Highly-Impacted Area

The Barangay identified as the direct impact area is Brgy. Ibo. This barangay is situated at the northern tip of the island bounded on the northwest by the Cebu-Mactan Channel;

Population of affected Barangay

Table 3.2.2-6 Population of Affected Barangay

Barangay	Total Population		Household Population	Number of Households
	1995	1999		
Ibo	2,334	2,282	2,334	455

Table 3.2.2-7 Total Land Area and Current and Projected Density of the Two Affected Barangays

Barangay	Total Land Area (hectares)	Population Density (Persons/sq. km)				
		1990	1995	2000	2005	2010
Ibo	148.10	401	479	574	677	782

b. Mangroves

Mangrove stands are found in patches in the intertidal area in Barangay Ibo, Buaya, and Mactan with total area of 3 hectares.

c. Land Use

Land classification is industrial site as well as site of an export processing zone. MEPZ I is located in Brgy. Ibo, the whole zone is 100 % industrial and the land use is strictly enforced by the Export Processing Zone Authority. There is a prevalence of squatters at the southern and northern end of the zone. Mactan International Airport is a part of its land area.

d. Mactan Export Processing Zone

Located on the northwest coast of the island, it is 14 kms. Away from the port of Cebu and 0.5 kms away from the Mactan International Airport. The total developed area is 119.4 hectares composed of the management building area 3.9 hectares; park and other uses 26.1 hectares.

Table 3.2.2-8 MEPZ Land Utilization (As of 15 November 1993)

Land Use	Area (sq.m.)
I. Occupied Industrial Area	
Phase I	357,743.63
Phase II	236,177.68
Standard Factory Building (SFB) 1&2	25,000.00
Service Enterprises	32,219.75
Sub-Total	651,141.06
II. Road-Right-of-Way, Parks & Greens, Commercial Area	326,527.94
III. PAG-ASA Area and Proposed Building	
IV. Relocation Site	60,000.00
V. Administration Building, Substation & Warehouse	40,000.00
VI. Unoccupied Industrial Area	30,000.00
Reserved Areas	
Available Areas	
Sub-Total	46,000.00
	40,000.00
	86,000.00
TOTAL LAND AREA OF MEPZ	1,193,669.00

- Standard Factory Building
 - Leased out on a floor basis
 - Intended for small and medium-scale industries, which cannot afford to construct their own factory buildings and which do not need large areas for operation
 - Two buildings: total floor area of 8,748 sq.m. on a 3,924 sq.m. of land
 - Industries are mostly export-oriented and foreign-owned
 - Japanese firms: 38 establishments or 56 % of the total 68 firms
 - Filipino firms: 19 establishments or 28 % of the total 68 firms

- Products:
 - Apparel and finished products: 22 %
 - Electronics manufacturing: 18 %
 - Steel and metal firms: 15 %
 - Garment companies 13 %
 - Miscellaneous manufacturers: 24 %
 - Miscellaneous manufacturers include firms involve in chemical, furniture, medical/pharmaceutical, food, plastic, services, telecommunications, wood, and power companies

- Commercial establishments within MEPZ and Brgy. Ibo:

Table 3.2.2-9 Commercial Establishments (MEPZ Area and Brgy. Ibo)

Name	Type
Mactan Marina Hall	Shopping mall
Rizal Commercial Banking Corp.	Bank
Bank of the Philippine Islands, Inc.	Bank
PCIB	Bank
Land Bank of the Philippines	Bank
Bank of Cebu	Bank
Philippine National Bank	Bank
Far East Bank and Trust Co.	Bank
Pilipinas Bank	Bank
Prudential Bank	Bank
Sanaparo Ramen and Sushi	Restaurant
Anton's Restaurant	Restaurant
Majestic	Restaurant

e) Industrial Water Assessment

Among MEPZ's 68 operating enterprises, four of them were included in the top ten water users in Metro Cebu (August 1993 MCWD Survey)

f) MEPZ Garbage Disposal System and Proposed Sewage Treatment Plant

Solid wastes collected daily are disposed at Brgy. Ibo where an incinerator is located. The Incinerator capacity is 27 MT per day and the total volume of solid wastes collected everyday is 11 MT. Plans to establish a sewage treatment plant near the incinerator shall be designed to accommodate the industrial liquid wastes generated by enterprises inside MEPZ. The facility has a reserved area of 2.5 hectares and will employ an aerated lagoon biological process for wastewater treatment

- Domestic Wastes

At present the method of domestic garbage disposal is open dumping where continuous burning is carried out. Scavengers scout the 2.5-hectare dumping site (i.e. located between Brgy. Soong and Bankal) for recyclable and usable materials. Garbage comes from the collection of 19 urban barangays in the mainland with the frequency of once a day. The city has 20 garbage collection equipment consisting of 12 compactors, 3 bulldozers, 3 payloaders, and 2 rollers. The total number of workers is 133.

- Industrial Waste Disposal

Industrial wastes contain a mixture of various compounds including:

Table 3.2.2-10 Types of Pollutants

Types of Pollutants	%
Miscellaneous wastes	31.9
Fuel, oil, and grease	13.0
Non-toxic metal compounds	8.7
Organic compounds	8.7
Metals	6.5
Animal and food waste	5.1
Inorganic acids	3.6
Alkalis	3.6
Toxic waste compounds	3.6
Polymeric materials	3.6
Miscellaneous chemical wastes	3.6
Filter materials, treatment sludge	2.9
Metal oxides	1.4
Other organics	1.4
Interceptor wastes	1.4
Organic acids	0.7
TOTAL	100.0

Liquid wastes from industrial plants are disposed of in canals and drains that lead to the Cebu-Mactan Channel.

(5) Lapu-Lapu City (South Mactan)

1) Highly-Impacted Areas

Reclamation area covers a portion of Barangay Calawisan. This part of the barangay is partly covered by water during high tide and is presently used for fishpond purposes.

2) Calawisan Physical Profile

Calawisan is at the southern tip of Mactan Island with a total land area of 957 hectares. Bounded on the north by Brgys. Soil type is hydrosol clay. Hydrosol areas are accumulations or deposits of fine silts, clay, and sand forming themselves into a low delta. Such soils have very poor agricultural value because of poor drainage and high salt content. The recommended soil use are the planting of coconut trees, mangroves such type as bakhaw, api-api, pagatpat, tangal, larabay, nipa palm, and agolo. The area has a moderate flooding hazard same as that of the entire Mactan Island.

3) Population and Number of Households

Total population is 4,320 (1999) with a household population of 3,413; and 626 households.

4) Main Source of Livelihood

Fishpond areas located in Calawisan are estimated to have a total land area of 360 hectares. Presently, fisherfolks engage in the culture of "lato" seaweed (*Caulerpa lentillifera*). This enable the fishpond operators to harvest 24 times a year on the average at 10 "kaings" per hectare per harvest at 120 kilograms per year or a total average production of 28,800 kilograms per year. Lato culture has better return on investment than raising bangus.

5) Others

There is still in existence $\frac{1}{4}$ hectares of mangrove, which remains in the once thick stand in the intertidal area off Calawisan. There are industries engaged in stone craft and mactan stone extraction in Brgy. Calawisan such as GA Berdin Mactan Stone and HR Stonecraft.

(6) Minglanilla

1) General Profile

Minglanilla is located in the southeaster part of the island province of Cebu. The distance from Minglanilla's town center, Poblacion, from Cebu City is 15 kilometers. It is bounded on the east by the Bohol Strait, on the west by the City of Toledo, on the north by Talisay, and on the south by the municipality of Naga.

The municipality has an estimated total land area of 6,560 hectares and presently composed of 19 barangays. The largest barangay in terms of land area is Brgy. Tubod with 487.6066 hectares followed by Brgy. Cadulawan with 486.3098 hectares.

In 1995, the municipality of Minglanilla has a total population of 60, 678 and a considerable number of households at 11,385. The most populous barangays are Brgy. Tunghaan and Brgy. Tungkop with 6, 974 residents each. This was closely followed by Brgy. Pakigne with 6,941 residents.

2) Port Development

The Municipal Government of Minglanilla proposed a project dubbed as the Minglanilla Seaport and Reclamation Project, which aims to establish an international seaport and a complex. The project involves:

- a) The construction and operation of an international seaport in Brgy. Tulay, Brgy. Tungkop, Brgy. Calajoan, and Brgy. Tungkil;
- b) The reclamation of an approximately 500 hectares of land from the sea, fronting the whole of the coastline of the Municipality of Minglanilla; and
- c) The development of the reclaimed land into a complex consisting of:
 - Container Yard and Warehouses
 - Industrial-Economic Zone
 - Financial-Commercial Center
 - Residential Estate-Recreation Center

The total land area of the Minglanilla International Seaport and Reclamation Project would occupy a land area of 500 hectares.

In addition, the proponent envisions supplementing the Metro Cebu port facilities in terms of inter-island passenger, cargo, and container handling.

The Minglanilla Reclamation Project will consequently be developed into the integrated and modern International Transshipment Port complete with industrial, commercial, residential, and recreational complex. The Industrial Economic Zone will be located at the southern portion of the project. It will have direct and immediate access to the Port and Container Yard.

3) Highly-Impacted Areas

The project is expected to affect four barangays of Minglanilla: namely, Brgy. Tulay, Brgy. Tungkop, Brgy. Calajoan, and Brgy. Tungkil. These barangays lie in the coastal areas of Minglanilla facing Bohol Strait.

Brgy. Tulay has a total land area of 56.1771 hectares with 5,192 residents in 1995. It also registered 1,013 households in the 1995 municipal profile. Brgy. Calajoan, on the other hand, has a land area of 231.3900 hectares and has a population of 5,568; total number of households reached 1,046.

Brgy. Tungkil's land area is at 25.8792 hectares with a total population of 1,469. The number of households residing in the barangay is 266 households. Brgy. Tungkop has a land area of 252.6084 hectares and a population of 6,974 making it as one of the most populous barangays of Minglanilla. The number of households reached 1,324. Brgy. Tungkop's beach has once been a site of a *Bantayan sa Moros*, a watchtower, established during the Spanish era.

(7) Evaluation Matrix

Social Environment Evaluation Matrices are show in Tables 3.2.2-11 through 16.

Table 3.2.2-11 Evaluation Matrix - Consolation

Area	Social Environment Condition	Mitigation
Affected Barangays	➤ Barangay Tayud covering 1(one) kilometer of the shoreline, Sitio Bagacay	
Population	➤ Estimated 100 households will be affected and displaced	<ul style="list-style-type: none"> ➤ Information, Education and Communication about the project and impacts ➤ Consultation ➤ Negotiation for the purchase of land ➤ Social preparation ➤ Relocation
Economic Activities	<ul style="list-style-type: none"> ➤ Shipyard ➤ Feedmill ➤ Rattan furniture ➤ Employees (public & private) ➤ Fishing 	<ul style="list-style-type: none"> ➤ Consultation ➤ Negotiation for purchase of identified land area and access road and/ or relocation ➤ Alternative livelihood
Affected Infrastructures	<ul style="list-style-type: none"> ➤ Factories ➤ Shipyard ➤ Monastery 	<ul style="list-style-type: none"> ➤ Consultation ➤ Negotiation for purchase of identified land area and access road and/ or relocation
Historical and Archaeological Sites	NONE	
Use of Water Area	<ul style="list-style-type: none"> ➤ Fishing ➤ Dock for ships to be repaired ➤ Mangrove growing ➤ Shell gleaning 	<ul style="list-style-type: none"> ➤ Consultation ➤ Purchase and relocation ➤ Relocate fishing grounds

Table 3.2.3-12 Evaluation Matrix - Minglanilla

Area	Social Environment Condition	Mitigation
Affected Barangays	➤ Barangays Tulay , Calajoan , Tungkop and Tungkil . An estimated land area of 500 has. Land from the sea, fronting the whole coastline of the Municipality will be covered by the proposed International Seaport and Reclamation Project	
Affected Population	➤ An estimated of more than 300 families will be affected and will have to be relocated	<ul style="list-style-type: none"> ➤ Consultation ➤ Information, Education and Communication about the project and impacts ➤ Negotiation for the purchase of affected land ➤ Social preparation
Economic Activities	<ul style="list-style-type: none"> ➤ Fishing ➤ Buy & sell of commercial products 	<ul style="list-style-type: none"> ➤ Relocation of fishing area ➤ Alternative livelihood ➤ Relocation of commercial area
Affected Infrastructures	<ul style="list-style-type: none"> ➤ Semi-permanent structures ➤ Residential houses of cement, wood, galvanized iron 	➤ Consultation and negotiation and purchase and/or relocation of affected structures
Historical and Archacological Sites	➤ A Spanish period watch tower "Bantay Moros" is located in the beach of Barangay Tungkop.	➤ Preserve the site by adjusting plan of construction and/or relocate the site outside the identified area
Uses of Water	<ul style="list-style-type: none"> ➤ Fishing ➤ Fish & small commercial port 	<ul style="list-style-type: none"> ➤ Relocate fishing area ➤ Relocate fish & commercial port

Table 3.2.3-13 Evaluation Matrix - Mactan North (Barangay Ibo)

Area	Social Environment Condition	Mitigation
Affected Barangay	Barangay Ibo	
Affected Population	➤ An estimated 455 families	<ul style="list-style-type: none"> ➤ Information, Education and Communication about the project and impacts ➤ Consultation on port operations
Affected Infrastructures	➤ Factories and Commercial buildings covering 119.4 has.	➤ Consultation on port operations
Historical and Archaeological Sites	➤ NONE	
Economic Activities	➤ Mactan Economic Zone	➤ Consultation on the zone's scheme of operation
Use of Water	➤ Fishing	➤ Relocation of fishing grounds

Table 3.3.2-14 Evaluation Matrix - Mactan South (Barangay Calawisan)

Area	Social Environment Condition	Mitigation
Affected Barangay	Barangay Calawisan covering 360 has.	
Population	➤ An estimated 626 households	➤ Information, Education and Communication about the project and impacts ➤ Consultation and negotiation for the purchase of land
Economic Activities	➤ Sea weed (caulpera lentillifera) culture ➤ Marginal fishing	➤ Relocation of fishing area and sea weed culture ➤ Alternative livelihood
Infrastructures	➤ Industries engaged in stone craft ➤ Schools ➤ Houses	➤ Purchase and /or relocation of industries
Historical and Archaeological Sites	➤ NONE	
Use of Water	➤ Fishing ➤ Sea weed culture	➤ Relocation of fishing and seaweed culture areas

Table 3.3.2-15 Evaluation Matrix - Cebu Baseport

Area	Social Environmental Conditions	Mitigation
Affected Barangays	➤ Barangays Sto. Niño, Ermita, Parian & San Roque	
Population	➤ Estimated 16,615 total population	➤ Information, Education and Communication about the project and impacts ➤ Consultation and negotiation for the purchase and /or relocation
Economic Activities	➤ Large commercial centers ➤ Wholesale & retail shops ➤ Wet & dry market	➤ Consultation and negotiation for the relocation
Infrastructure	➤ port buildings ➤ commercial buildings ➤ market ➤ church	➤ Purchase and /or relocation of infrastructures
Historical and Archaeological Sites	➤ Sto, Niño church ➤ Cebu Metropolitan Cathedral ➤ Monument of Magellan's Cross	➤ Design to avoid the structures

Table 3.3.2-16 Evaluation Matrix - Cebu South Reclamation (Talisay City)

Area	Social Environmental Conditions	Mitigation
Affected Barangay	➤ Barangay Tangke with an estimate area of 0.76 sq. kl,	
Population	➤ Estimated 1,000n household are affected	➤ Information, Education and Communication about the project and impacts ➤ Consultation and negotiation for the purchase and /or relocation
Economic activities	➤ Fishing ➤ fish processing ➤ buy & of fish and vegetables	➤ Relocate and enhance fishing activities ➤ Relocate areas of commercial activities
Affected infrastructures	➤ semi-permanent residential and business structures	➤ Consultation and negotiation for the relocation
Historical and Archaeological sites	➤ NONE	

(8) Profiles of Provincial OutPorts

1) Toledo City

a. Physical Characteristics

Toledo is situated at the western coast of the island province of Cebu. On its western side, Toledo faces Ta on Strait. It is bounded on the north by the municipality of Balamban; on the south by the municipalities of Pinamungajan, Naga, and Minglanilla. Cebu City and the municipality of Compostela share territorial boundaries with Toledo at its eastern side.

Toledo has an estimated land area of 214.86 square kilometers. Its urban area comprises only a total of 13.17 square kilometers while its rural area has a larger landmass with 201.69 square kilometers.

b. Population

The total population of Toledo in 1995 reached 121,469 or 5.9 % of Cebu's entire population (2,064,101). The growth rate of the city in 1980-1990 was 2.73 % and dropped significantly in 1990-95 with 0.23 %--the lowest registered by a city. The total number of household in 1995 reached 22,955.

Toledo has 38 barangays; 2 barangays are classified as urban while the rest (36 barangays) are classified as rural. In the 1990 NSO data, the rural population of Toledo City accounts for 86.14 % of its entire population while its urban population accounts for 13.86 %. Its population density in 1990 was 557.5 persons per square kilometers.

c. Physical Infrastructure and Commercial Establishments

Toledo City is 57 kilometers from the provincial capital via the municipality of Naga and 49 kilometers via the Tabunok/Manipis Road.

Aside from land transportation, Toledo City offers a regular sea trip to the adjacent island province of Negros, particularly to San Carlos City, Negros Occidental. The wharf also serves as a docking post for cargo ships, especially during the operation of the Atlas Consolidated Mining and Development Corporation, a mining company based in the city.

Commercial establishments also abound in the City of Toledo. These include stores (i.e. wholesale and retail shops with current merchandise worth P600.00 or more, and gasoline stations), repair shops, lodging facility, recreational facility, and finance institutions.

d. Education

Almost all of the barangays have an elementary school. Only 6 barangays of the 38 (total number) barangays have no elementary school at all;

Eleven barangays have secondary level educational institutions. These educational institutions are mostly government-owned and operated; only a few are privately owned, such as the De La Salle High School operated by the religious order of La Salle. Generally, residents living in barangays with no secondary level schools send their children to the nearest and most accessible schools.

e. Health

Health facilities could be found in 17 barangays. Most of these facilities are barangay health stations where health volunteers and public health workers are assigned. Health volunteers called Barangay Health Workers (BHW) do regular monitoring of the health status of each barangay. Some facilities are hospitals and clinics located in more populous areas such as Brgy. DAS Lutopan and Brgy. Poblacion. In serious cases, patients are brought to the provincial capital for treatment.

2) San Remigio

a. Physical Characteristics

San Remigio is located in the northern part of the province of Cebu. It is 109 kilometers away from Cebu City, the provincial capital. It is bounded on the north by Hagnaya Bay; on the east by the municipalities of Bogo and Tabogon; on the south by the municipality of Tabuelan; and on the west by Tañon Strait.

Total land area is estimated to reach 8,377 hectares or 92 square kilometers, comprising 27 of its barangay. The largest barangay is Sab-a with a total land area of 9.04 square kilometers.

The municipality is predominantly flat as most areas have slopes from level to nearly level

(0-3 % slope). The lowland areas along the coastline are characteristically flat but undulate towards the inland areas from hilly to mountainous. The northern side of the municipality is relatively flat.

b. Demographic Characteristics

In 1995, San Remigio has a total population of 38,501 residents or 1.7 % of the entire provincial population of 2,064,101. It registered a population growth rate of 1.20 %--showing a decrease in few percentage points from 1990's growth rate of 2.0768 %.

Population density is 4.44 persons per hectare and is projected to grow by as much as 5.46 % by the year 2005. Among its 27 barangays, Brgy. Hagnaya and Brgy. Poblacion is the most densely populated with 15.93 each (1996).

Majority of the residents belong to the youth sector and the dominant age group is the 5-9 years old. In 1995, the dominant age group for both sexes is the 5-9-age bracket amounting to 5,350 or 13.82 % of the total population of 38,501.

c. Housing

There are 7,329 occupied housing units for 7,348 households. Most building type are single housing units with 7,290.

Most buildings in the municipality were established in the year 1986-1990; thus, relatively, most of the buildings need no or minor repairs. Buildings that need no/minor repair numbered 4,888 while those that need major repair totaled 1,890.

d. Energy and Water

In 1990, majority of the households in the municipality has no electrical service connections; 83.60 % of the total number of households relies on kerosene gas for lighting. However by 1997, only three barangays have no access to any power grid.

Most residents rely on community water system. This amounted to 42 % of the total number of households while tubed piped deep well supplied 17.30 %. More than forty percent (40.70 %) derived water from other sources (e.g. shallow well, spring, etc.).

e. Solid Waste Disposal

An efficient solid waste disposal system has yet to be adopted by the municipal government. Solid waste disposal relies on "traditional" modes of disposal. Generally, garbage is mostly left to rot in the streets since garbage collection is not consistent. Waste disposal depends on the initiatives of the townsfolk where garbage burning and throwing into waterways is common.

The number of households using septic tanks is only 12.40 % of the total number of households (7,348 in 1990) while those using open-pit toilets comprise 12.40 %. A

substantial number of households (45.05 %) do not have any toilet facility at all.

f. Health Situation

The primary unit that delivers health care services to the people of San Remigio is the Rural Health Unit and its Barangay Health Stations. The RHU's main health center is located in the Poblacion, which services the entire municipality. There are 12 BHS located in various barangays.

g. Port Development

The San Remigio municipal government plans to develop Hagnaya wharf serving as ferry and tourist transport facility. It is expected to usher commercial growth and development to the town. Thus, Brgy. Hagnaya is classified as an industrial zone and a site of a utility (i.e. Hagnaya wharf and facilities). Due to the barangay's strategic location and perceived potentials, the Hagnaya Bay Development was drawn out, which aims at constructing a fish port, a public market, and a bus/jeepney terminal in the area.

h. Highly-Impacted Area

Barangay Hagnaya is a 1.65-square kilometer barangay located at the northern end of the municipality of San Remigio. It is one of the original barangays since the Spanish Colonial Era.

The municipal government identified the barangay as one of its commercial and growth centers. This is emphasized due to its strategic location and growth potentials. At present, the wharf in the area serves as a major transportation facility since it serves as a jump-off point to Bantayan Island and other neighboring islands.

In 1990, Hagnaya is the most densely populated in San Remigio with a population density of 1,517 persons per square kilometers. Population in 1990 reached 2,503 residents and an intercensal population growth rate of 27.18 % for 1980 - 90.

Fishing is the main source of livelihood in the area. Activities related to fishing, such as fish vending, continue to flourish among barangay residents. Average fish catch using non-motorized banca is 5 kg a day. With a motorized banca, a fisherman could have an average fish catch of 15 kg a day. Alternative sources of income are also being tapped by barangay residents through poultry and livestock raising and other related activities.

3) Santa Fe

a. Profile

Santa Fe is a municipality comprising 10 barangays. Six of its barangays are located in the main island of Bantayan while 3 of its barangays are in Guinataan Island, northeast of Bantayan Island. Another island barangay, Hilantagan, is situated north of mainland Santa Fe.

The municipality of Santa Fe rests on a 33.30-square kilometer area. Mainland Santa Fe sits at the southeastern tip of Bantayan Island, which is separated from mainland Cebu by Tañon Strait. On its north, Santa Fe faces the Visayan Sea and part of Tañon Strait.

Of its 33.30 square-kilometer area, 2.95 square kilometers are urban while 30.35 square-kilometers are rural.

In 1995, Santa Fe has a population of 21,720 or 1.1 % of the total provincial population of 2,064,101. The population increased by a few hundreds from the 1990 population (20,827). In 1980-90, the growth rate was 2.81 % and declined to 0.78 % in 1990-95. The population density in 1990 was 625.4 persons per square-kilometer. The most densely populated barangay is Langub with 1,280 persons per square kilometer and the barangay with the highest number of population is Hagdan with 2968 (1990).

b. Energy Source for Lighting

Two main energy sources are used by the residents for lighting: electricity and kerosene (gaas). Majority of the households relies on kerosene (gaas). They accounted for 84.8 % of the total 3747 households in 1990 while those that have electrical connections numbered only at 561 families or 15 % of the total population.

c. Physical Infrastructure and Commercial Establishments

Barangay Langub, an offshore barangay situated in Guinataan Island, has no physical infrastructure in the barangay. The other barangays have at least one physical infrastructure. Considered as physical infrastructure are street pattern, highway access, barangay halls, churches, public plazas, and public markets.

As with other Cebu municipalities, almost every barangay of Sta. Fe has churches. Only two barangays - Brgy. Hagdan and Brgy. Langub - didn't have any churches within their vicinity. Brgy. Kinatarkan has a church - the single physical infrastructure of the barangay.

Public plazas are the second most numerous physical infrastructures in the municipality of Sta. Fe. These plazas serve as a recreational facility for the residents. Some public plazas have structures, such as slides and swings, which serve as playground for children.

Commercial activity in the municipality is centered on the commerce involve in fishing and

small-scale enterprises. Commercial activity is relatively highest and more diversified in Brgy. Talisay as stores, repair shops, recreational facilities, and a lodging facility is found in the barangay. This may be because it is the entry point of tourists and visitors from mainland Cebu.

d. Education

Almost all barangays of Santa. Fe have an elementary school.

Majority of the residents of Santa. Fe has an educational attainment of elementary level. They numbered 11,712 in 1995 where 5,902 are males and 5,810 are females. High school graduates numbered 877 (400 are males; 477 are females) while those that completed college totaled 424 (212 are males; 212 are females).

4) Carmen

a. Physical Characteristics

The municipality of Carmen sits at the eastern side of Cebu province. This 54.28 sq.-km municipality is bounded on the north by the Municipality of Catmon; on the south by Danao City; on the west by the hinterland barangays of the Municipality of Asturias while its eastern coast faces Camotes Sea.

Of Carmen's 54.28 sq.-km land area, 3.33 sq.-km are urban areas while 50.95 sq.-km are rural. Those classified as urban includes Brgy. Dawis Norte and Brgy. Poblacion. Twenty-one (21) barangays comprise the municipality of Carmen.

b. Population

The population of Carmen in 1995 reached 32,357 accounting for 1.6 % of Cebu's total population of 2,064,101. Of the 32,357 residents, 50.23 % are males and 49.77 % are females. The dominant age group for both sexes is the 5-9-age bracket with 4,226 or 13.06 % of the total population; this was followed by the 10-14 age group with 3,910 or 12.08 %.

The densest barangay is Cogon West with a population density of 8,308 persons per square kilometers. The least populated is Brgy. Cantumog with 608 residents. Almost half of Carmen's total population 10 years old and over are legally married.

Of the 27,731 household population 5 years old and over, 15,442 reached elementary education. Academic degree holders are 1,330 persons or 4.80 %.

c. Physical Infrastructure and Commercial Establishments

Commercial activity is mainly focused in wholesale and retail trading.

A port is located in Brgy. Cogon East. This port serves as transportation and docking facility for ferries plying the Carmen-Isabel (Leyte) navigational route. Land transportation is available via the road networks that traverse the entire coastal area of Cebu province. The

regular traffic flow in the coastal road along Carmen is pegged at 1001-5000.

5) Danao City

a. Physical Characteristics

The City of Danao is located along the eastern coast of Cebu. It is bounded in the north by the Municipality of Carmen; on the south, by the Municipality of Compostela and on its west by the Municipality of Asturias. The Camotes Sea serves as the natural boundary at its eastern side.

The city is situated in a 107.13 square-kilometer land area. It has a total of 105.53 sq.-km of rural areas and 1.60 sq.-km of urban areas.

b. Population

Danao City is one of the highly populated areas in the province of Cebu. In 1995, it registered a total population of 79,932 or 3.9 % of Cebu's total population of 2,164,101. The 1990-1995 population growth rate was at 9.22 % and its 1995 population density was pegged at 746.12 persons per square-kilometers.

The most thickly populated barangay in Danao is Poblacion with a population of 7,976 while the least populated is Brgy. Matagobto with 292 residents.

c. Physical Infrastructure, Educational Institutions, and Commercial Establishments

As one of Cebu province's component cities, Danao City has a relatively modern physical infrastructure. Eleven barangays have a street pattern, which means these barangays have a network of streets of at least three streets or roads. Highway access is relatively high, as the city is one of the areas where the national highway traverses. The national highway is accessible to 27 barangays.

Commercial activity is highest in Barangay Poblacion where a more diversified commerce is existent. Department stores also serve the consuming public of Danao. Sari-sari stores are usually found along the port areas and near schools.

Repair shops are also found near the national highway and sites accessible to motor vehicles. Auto repair shops and vulcanizing shops flourish along roads. Gasoline stations are also present in Danao City. Danao's port serves as a docking facility for cargo ships and a navigational route for ferries/boats plying the San Francisco, Camotes to Danao City and vice versa.

6) Argao

a. Physical Characteristics

The municipality of Argao is 66.9 kilometers southwest of Cebu City.

The municipality has an 18-km shoreline and a depth span of 29 kilometers from the coast to the interior boundaries on the western portion of the municipality. Total land area estimate reach 20,744 hectares,

Argao is composed of 45 barangays, 10 are located along the coastal portion and the rest are on the interior. The largest barangay is Brgy. Talaga with a land area of 9.07 square-kilometers while the smallest barangay is Lamacan with a land area of 0.72 square-kilometers.

The municipality has four major rivers, which empties into the Bohol Strait. These are Argao River, Sua-Balsa River, Bug-ot Tulic River, and Samaguan-Simala River. The major drainage river is the Argao River and nine other small rivers.

b. Population

Total population in 1990 reached 52,061 at a density of 262.6 persons per square kilometer. In 1990 Argao had 10,127 households with an average family size of 5.13. Population distribution is not even among the barangays; Brgy. Poblacion is the most thickly populated with 4,487. Population growth rate in 1990-1990 was 15.79 %.

c. Physical Infrastructure and Commercial Establishments

Highway access is almost present in all the barangays of the municipality of Argao. Thirty-eight barangays have highway access while 7 barangays have none.

Most commercial establishments are engaged in wholesale and retail trade. Wholesale and retail trading is active in seven barangays.

Argao, as a coastal municipality, has resorts in almost all of its coastal barangays. These beach resorts are especially designed for tourists and locals alike. Aside from resort owners, coastal area dwellers thrive mainly on fishing and coconut raising. Swine and livestock raising are also tapped as an alternative source of income.

d. Education

Population above 7 years old, which is about 42,388, only 6.89 % have not attended school; 59.67 % have elementary grades; 20.53 % have attended high school; 5.31 % have attended college while 3.59 % are academic degree holders. The major school that accommodates secondary education enrollees is the Cebu State College of Science and Technology, College of Agro-Industry and Forestry, Argao Campus.

7) Tuburan

a. Physical Characteristics

Tuburan is situated at the western coast of Cebu Island. It shares borders with Tabuelan in the north and on the south by Asturias..

Tuburan has a total land area of 234.81 square kilometers where 230.74 sq.-km are rural and 4.07 sq.-km are rural. The largest barangay in terms of land area occupied is Brgy. Montealegre with 16.13 square meters.

b. Population

Tuburan's population in 1995 reached 47,818 or 2.3 % of the entire provincial population of 2,064,101. Of the 47, 818 population, 50.27 % are males while 49.73 % are females. The dominant age group is the 10-19-age bracket, which is 26 % of the population.

The most densely populated barangay is Caridad with a population density of 950.4 persons per square kilometer. The least densely populated barangay is Libo with 38.8 persons per sq.-km.

c. Economic Activity

Tuburan generally relies on agricultural production involving the cultivation of corn, sugarcane, vegetable, and coconut. Agriculture in this municipality relies on traditional farming methods mixed with small mechanization (i.e. some sugar plantations). The use of chemical fertilizers and pesticides is low but the introduction of chemical fertilizers for sugarcanes and coconuts is high. Vegetable and corn production is primarily done for the immediate consumption of the family. Surplus agricultural products are sold to the market.

Along the coastal areas of Tuburan, communities thrive on fishing and gleaning. Fish catch is relatively abundant as coastal communities are along Ta on Strait, recently declared by DENR as a protected area. Fish catch is primarily for household consumption while the surplus is sold to the market for cash which would then be used for the purchase of agricultural products. Most fishermen are farmers at the same time - primary crop cultivated is coconut.

Commercial activity is primarily wholesale and retail trading. Stores are constructed near highways and main thoroughfares as well as where consumer demand is high. In Poblacion, a coconut timber saw mill could also be found. Financial institutions are also existent in at least 3 barangays.

A potential tourist spot in Molobolo is currently undergoing infrastructure development. The site has a hot spring and lies close to the shore. An entrance fee of P5.00 per person is collected by the municipal government. Resorts and lodging facilities have been made available near the site.

The Tuburan port also serves as a transportation and docking facility of the Escalante-Tuburan navigational route. Escalante is a town of Negros Occidental, a province located in the southern portion of Negros Island west of Cebu province.

8) Balamban

a. General Profile

The municipality of Balamban is situated 31 kms N 43°30' West from the City of Cebu. It lies on a coastal area facing Tañon Strait. It is bounded by Toledo City on the south; Danao City and the Municipality of Compostela on the east and Tañon Strait on the west.

Balamban's total land area is estimated to reach 243.59 square-kilometres representing 6.6 % of the total land area of Cebu. It is composed of 28 barangays.

In 1995, Balamban has a population of 49,983 or 2.4 % of the provincial population of 2,0624,101. Its population growth rate in 1990 was 1.02 % and increased in 1995 by a few percentage points with a population growth of 1.61 %. This population growth rate is below that of the provincial growth rate of 2.01 % (1995).

Population density in 1990-91 was 188.4 persons per square-kilometre and the population potential labour force was 25,098 (1990). The most densely populated barangay is Brgy. Aliwanay, with a population density of 9,325.9 persons per square-kilometre.

b. Housing and Other Buildings

Balamban faces a shortage of housing units. Of the 9,136 households, only 9,195 households occupy a housing unit. Housing backlog was pegged at 48 houses. The most numerous housing types are the single and detached houses with 9,095 houses.

Houses in the rural areas are usually made of light materials. Bamboo, nipa, and wood are commonly used as construction materials. Some houses, however, are made of concrete and galvanized iron especially in the urban areas of Balamban. Some houses shelter more than one family.

c. Education

Elementary level and secondary level education is provided to the residents of Balamban. The municipality of Balamban is one of the municipalities of Cebu, which have a good number of infrastructures related to education. For the primary level alone, seven government-owned and government-funded schools are operational while elementary educational institutions are present in 15 barangays.

d. Solid Waste Management

Garbage disposal is usually done by burning and dumping waste materials into pits. Some residents, however, dispose of their garbage along canals and waterways. The municipal government maintained that disposing of garbage along canals and waterways are minimal

and the volume of garbage collected remains "manageable and controllable".

e. Development Plan

Balamban is designated as the Philippine Economic Zone Area (PEZA) in the northwestern portion of the province. It aims to provide tie-up with domestic and foreign investors that would generate more economic activity in the municipality and the province in general.

- Goals
- Provision of basic social services.
 - Foster economic development and prosperity
 - Better quality of life

Table 3.3.2-17 Objectives of Balamban Development Plan

Industry	Objective
Agriculture:	Augment agricultural production and improve the living condition in the area by involving 60 % of the rural folk in technology transfer from CY 1992 to 2001. Attain equal distribution of wealth and income through cooperative development.
Livestock poultry production:	Promote livestock production dispersal. Encourage backyard poultry and livestock production limited to small-scale category
Fishing	Expand the fishing industry Involve 30 % of the fishermen's population in the improvement and modernization of fishing paraphernalia
Forestry	Improve the ecosystem through massive replanting of forest with various fruit trees.
Commerce and Industry	Pursue the expansion program and upgrade the trade, commerce, and industry of the town to meet its demands. Encourage medium industries in the area, particularly the mining industry, without impairment to the town's ecosystem
Tourism	Promote and develop the tourism potential of the area particularly the national park, historical land marks, and mountain resorts.
Education	Improve the quality of teaching profession. Reduce the problem of out-of-school youths and delinquent children.
Health	Meet the inadequacy of the medical health facilities and services and intensify health campaigns and programs. Improve the nutrition program of the town.
Social Welfare Services	Increase allotment of supplemental feedings for pre-schoolers and invite more sponsors to the day care centers to cover all barangays. Provide additional three personnel to three barangays particularly in the youth program, nutrition, and relief services.
Protective Services	Ensure complete protection of the residents and safeguard the area from insurgency. Conduct disaster preparedness training
Sports and recreation	Provide adequate spatial allocation for sports facilities and activities for passive and active sports.

9) Oslob

a. Physical Characteristics

Oslob is at the southern end of the island province of Cebu. Its coastline faces Bohol Strait. Bohol Strait serves as the natural boundary of Oslob in the east.

The municipality of Oslob is comprised by 21 barangays, which sits on an estimated land area of 133.67 square-kilometers. Urban areas rest on a 5.40 square-kilometer land area while the rural area has 128.27 square-kilometers.

More than half of the barangays of Oslob have portions located in coastal areas.

b. Population

National Statistics Office (1995) indicated that Oslob has a population of 21,686 or 1.1 % of the total provincial population of 2,964,101. 49.79 % of the population are males while 50.21 % are females.

Population density in 1990 was 148 persons per square kilometers. The densest barangay is Brgy. Daanglungsod with 267.6 persons per square kilometers while the least dense is Brgy. Canangka-an with 45.6 persons per square kilometers.

c. Infrastructures

In 1990, three barangays have no access to the highway except through minor roads; namely, Brgy. Canangkaan, Brgy. Cansalo-ay, and Brgy. Manlum. These barangays are located in the mountainous parts of the municipality. The highway traverses all the coastal barangays of Oslob; this highway connects Oslob with the rest of Cebu. Traffic flow in the highway reaches 501-1000.

A port is present in Oslob. This serves as a transportation facility for passengers going to Dumaguete, Negros Oriental. Only two Cebu-Dumaguete navigational routes by ferry are available; one is via the Santander route while the other is via Oslob.

Five barangays have a relatively active commercial activity; namely, Brgys. Calumpang, Daanglungsod, Lagunde, Nueva Caceres, and Poblacion. However, most of these barangays are engaged in small-scale enterprises engaged in wholesale and retail trading.

Elementary and secondary educational institutions are present in Oslob. However, these schools are sparsely distributed among the barangays. Only one secondary level institution is present in Oslob.

10) Santander

a. Physical Characteristics

Santander is located at the southern tip of the island of Cebu. The municipalities of Samboan and Oslob bounded Santander in the north while at its south, it faces the Liloan Point and the Ta on Point. Its western portion is bounded by Ta on Strait while at its east lies the Bohol Strait.

Santander sits on a 29.18-square kilometer land area. Urban areas accounted for an estimated 2.21 square kilometers while the rural areas have an estimated land area of 26.97.

b. Population

Santander ranks as one of the province's lowest population centers with a population of 12,382 in 1995. It contributed only 0.6 % of Cebu's total population of 2,064,101. The most thickly populated among the barangays is Brgy. Poblacion with 1,869.

Population growth rate in 1995 was at 0.86 %. Its population density was pegged at 424.33 persons per square kilometer (1995). It also has a negative growth rate of -2.75 % (1990).

c. Livelihood

Santander residents primarily rely on fishing and agricultural production using traditional farming methods. Fishermen are not only fishermen, but also engaged in farming, usually coconut cultivation and corn production.

Many residents, however, rely on the tapping of Santander's marine resources. Livelihood activities related to this include near-shore fishing, gathering of shells, sea cucumbers, etc., and deep-sea fishing. Fish-drying is also present as Santander is one of the province's main supplier of salted/dried fish. Fishing corporations owned by a few of the town's economic and political elite employ some Santander residents as deep-sea fishers and helpers for their commercial fishing vessels.

d. Physical Infrastructures and Commercial Establishments

Since the Cebu national highway traverses Santander, most barangays have highway access and street patterns. Transportation to hinterland areas is normally available via the use of a *habal-habal*, a motorcycle that has its seat extended to accommodate 4-6 passengers per trip. The regular ferry service from Santander-Dumaguete (and vice versa) is the main link between Cebu and Negros Island in this part of the province.

11) Poro

a. Physical Characteristics

The municipality of Poro is an island town located in Poro Island. It shares the island with the municipality of Tudela, which is located at its eastern side. At its north, Poro faces the northern portion of Camotes Sea and a portion of Kawit Strait. The island municipality of San Francisco bounded Poro at its west while the southern portion of Camotes Sea bounded it at the south.

Poro is situated in a 63.64-square kilometer landmass. The urban area accounts for 3.05-square kilometers while 60.60 square kilometers are rural. The largest barangay in terms of land area is Altavista with 7.72 square kilometers while the smallest is Eastern Poblacion with an estimated land area of 1.04 square kilometers.

A wide expanse of mangrove areas could be found at the shores of Brgy. Teguis at the southwestern side of the municipality. Scattered mangrove stands are also present in the intertidal areas in the coastal portion of the municipality.

b. Population

The 1995 NSO data indicates that Poro has 21,517 residents or 1 % of the total Cebu population of 2,164,101. In 1990, urban population numbered 2,105 residents while the rural areas have a total population of 17,041. The most thickly populated barangay is Esperanza with 2,427 resident while the least populated area is Brgy. Cansabusab.

In 1990, the population growth rate was at 0.78 % and increased by a few percentage in 1995 with a growth rate of 2.21 %. Seven of the 17 barangays registered a negative population growth rate. Population density in 1995 was at 338.10 persons per square kilometer. The most densely populated is Brgy. Eastern Poblacion with 1,020 persons per square kilometer.

c. Physical Infrastructure, Commercial Establishments, and Educational Institutions

Street patterns are existent in almost all of the barangays. Only five barangays have no street patterns; the rest of the barangays have at least three roads as a road network. Poro has virtually no access to any national highway due to its being an island town. Transportation to other towns, except San Francisco and Tudela, is through boats and ferries. A regular ferry rides from Poro to the neighboring island town of Pilar and vice versa is present.

12) Bogo

a. Physical Characteristics

The municipality of Bogo is located at the northeastern side of the province of Cebu. It is bounded on the north by the Bogo Bay and the southern tip of the Municipality of Medellin. On the south, Bogo shares boundaries with the Municipality of Tabogon while at its west is the Municipality of San Remigio. The eastern coast of Bogo faces the wide expanse of the Camotes Sea.

Bogo has 29 barangays lying on an estimated land area of 96.21 square kilometers. Rural areas have the largest landmass with 79.36 square kilometers while the urban area has 16.85 square kilometers.

b. Population

Bogo has a 1995 total population of 57, 509 residents or 2.8 % of Cebu's population of 2,064,101. It has a population growth rate of 2.24 % a few percentage points higher than the provincial average of 2.01 %. It has a population density of 597.74 persons per square kilometer.

c. Physical Infrastructures, Commercial Establishments, and Educational Institutions

The Cebu national highway also passes through Bogo. Thus, most barangays have access to the national highway, which serves as an important link to the other Cebu area especially to the provincial capital.

4. Present Situation of Cebu Baseport and Major Outports in Cebu Province

4.1 Port Activities

4.1.1 Sea Transport Network

(1) Outline of Marine Transport

In recent years, marine transport activities involving the Philippines have been developed remarkably in line with the great strides being taken to improve the socioeconomic situation of the country. According to the CPA statistics in 2000, international shipping accounted for 1.15 million tons of the volume quantity of the total foreign trade for year, highlighting the important role of marine transport.

Keeping in step with the global practice of container shipment, most of the general merchandise have been containerized. As for the other major commodities such as steel products, transport equipment, animal feeds, cereals etc, conventional vessels and/or bulk carriers are employed. Based on the CPA's data of 1999, the distribution ratio of total shipping container cargoes is about 21% foreign; 79% domestic in term of quantity. 60% of foreign cargo is containerized while 40% is non-containerized cargo.

(2) Trends in World Wide Container Shipping

Far reaching changes are under way in world container shipping and give the importance of the South-East Asia market as one major arterial trade zone-these will have considerable implications in investment requirements.

In general, it is apparent that the shipping market will be characteristic by development focusing on the further consolidation of ownership of major ocean going container lines. The past few years have witness considerable concentration of power in these markets both by mergers and acquisitions and by re-vitalization of the consortia approach.

These trends will be further boosted by the continued pressure to introduce larger vessels into the world trade. The effect will increase vessels sizes and consignment sizes that will increase competition for Hub-Port status. The physical berthing requirement of current larger container vessels is already a constraint in some places and this will intensify in the next few years.

The concentration of ocean going container handling at larger capacity terminals will be accompanied with the increase of transshipment cargoes. It also increases the demand of feeder services. In this service, some further increase in the size of employed vessels can be anticipated. Ports in the South-East Asia will face the harder competition with Singapore port

and other hub-ports.

Table 4.1.1-1 World-Wide Demand of Container Vessels Capacity

Year	Supplied Transport Capacity by TEU	Total Container Movement/Year	Annual Round	Comparison with Previous Year
1997	4,578,000	69,927,000 TEUs	15.28	--
1998	5,076,000	73,851,000 TEUs	14.55	- 4.70%
1999	5,436,000	81,813,000 TEUs	15.05	+3.40%
2000(e)	6,007,000	89,468,000 TEUs	14.89	- 1.10%
2001(e)	6,520,000	97,387,000 TEUs	14.94	+0.30%

(e): Estimate Source: Japan Maritime News, JICA Study Team

Table 4.1.1-2 Summary of World Container Fleet in Service and on Order by Vessels-type & Size

Kind of Vessel-Type	Under 1,000 TEU	1,000-1,999	2,000-2,999	3,000-3,999	Over 4,000
Fully Cellular Type	Total: ①4,237,048TEUs②2,563Vessels③717,510TEUs④247Vessels				
①Present Slots(TEU)	509,907	1,124,684	917,188	740,886	944,383
②Present Vessels	983	799	368	217	196
③Slot on Ordered	24,948	105,042	71,902	99,445	416,173
④Vessel on Order	39	70	32	29	77
RORO Container Type	Total: ①134,241TEUs②188Vessels③4,285TEUs④5Vessels				
①Present Slots(TEU)	54,092	43,939	20,660	15,550	0
②Present Vessels	141	33	9	5	0
③Slots on Ordered	1,585	2,700	0	0	0
④Vessel on Ordered	3	2	0	0	0
Semi-Container Type	Total: ①1,010,467TEUs②2,854Vessels③61,791TEUs④93Vessels				
①Present Slots(TEU)	845,659	164,808	0	0	0
②Present Vessels	2,729	125	0	0	0
③Slots on Ordered	36,631	25,160	0	0	0
④Vessels on Ordered	73	20	0	0	0

Source: Containerization International Year-Book, JICA Study Term

Table 4.1.1-3 Over 3,000TEUs Type Container Vessels Operating per Year

Year	Number of Vessels	Additional Capa./TEUs	Av Capa per/ Vessels
1998	56 Vessels	257,620 TEUs	4,600 TEUs/Vessel
1999	24 Vessels	121,988 TEUs	5,083 TEUs/Vessel
2000	61 Vessels	309,124 TEUs	5,067TEUs/Vessel
2001(e)	78 Vessels	415,294 TEUs	5,324 TEUs/Vessel
2002(e)	60 Vessels	321,342 TEUs	5,355 TEUs/Vessel
Total number of larger container vessel(Over 3,000TEUs vessel)Operating 519 Vessels			

(e): Estimate Source: Japan Maritime News, JICA Study Team

**Table 4.1.1-4 Major Regular Liner Service Containerized Cargo Grow in Future
Between Asia Area and USA Pacific Area Trade**

Year	Asia-US Pacific Coast (East Bound)	Comparison with Previous Year	US Pacific Coast-Asia (West Bound)	Comparison with Previous Year
1997	4,544,142 TEUs	-	3,151,598 TEUs	-
1998	5,442,108 TEUs	+19.8%	2,716,543 TEUs	-13.8%
1999	6,113,568 TEUs	+12.3%	2,903,061 TEUs	+ 6.9%
2000	6,553,271 TEUs	+ 7.2%	3,082,025 TEUs	+ 6.2%
2001(e)	6,955,814 TEUs	+ 6.1%	3,220,247 TEUs	+ 4.5%
2002(e)	7,300,000 TEUs	+ 5.0%	3,365,158 TEUs	+ 4.5%

(e):Estimate Source: Japan Maritime News, JICA Study Team

Table 4.1.1-5 Between Europe and US Atlantic Coast Area Trade

Year	Europe-US Atlantic Coast (West Bound)	Comparison with Previous Year	US Atlantic Coast-Europe (East Bound)	Comparison with Previous Year
1997	1,439,938 TEUs	-	1,182,519 TEUs	-
1998	1,648,088 TEUs	+14.5%	1,202,189 TEUs	+ 1.6%
1999	1,811,315 TEUs	+ 9.9%	1,181,580 TEUs	- 1.7%
2000	1,961,505 TEUs	+ 8.3%	1,216,570 TEUs	+ 2.9%
2001(e)	2,030,593 TEUs	+ 3.5%	1,247,832 TEUs	+ 2.6%
2002(e)	2,091,511 TEUs	+ 3.0%	1,279,028 TEUs	+ 2.5%

(e):Estimate Source: Japan Maritime News, JICA Study Team

Table 4.1.1-6 Between Asia Area and Europe Trade

Year	Asia Area-Europe Con'tal (West Bound)	Comparison with Previous Year	Europe Con'tal-Asia Area (East Bound)	Comparison with Previous Year
1997	2,650,000 TEUs	-	1,765,000 TEUs	-
1998	3,180,000 TEUs	+20.0%	1,500,000 TEUs	-15.0%
1999	3,420,000 TEUs	+ 2.7%	1,814,000 TEUs	+20.9%
2000	3,739,000 TEUs	+ 9.3%	1,923,000 TEUs	+ 6.0%
2001(e)	4,164,000 TEUs	+11.3%	2,048,000 TEUs	+ 6.5%
2002(e)	4,580,000 TEUs	+10.0%	2,170,000 TEUs	+ 6.0%

(e) Estimate Data Source: Japan Maritime News, JICA Study Term

(3) South-East Asia Area Container Trade Forwards Lager Feeder Vessel

The vessel size and structure of feeder vessel are suited to regular container handling facilities at port. Although a port may be equipped with efficient container handling facilities, the call structure of the vessel is the most important factor.

Many vessels now on order are for lager type container vessels. After completion of these vessels, the enlargement of vessel size and development of service routes in the coastal and island feeder container vessels will progress much more.

(4) Major Throughput Cargo Commodities of Cebu Baseport.

Major foreign cargo (import/export) and domestic cargo (in-bound/out-bound) commodity with respective shares in 2000 are shown in Table 4.1.1-7 (CPA statistic 2000 from Jan. to Apr.)

Table 4.1.1-7 Major Throughput Cargo Commodities

Foreign Containerized Cargo			
Export Cargo		Import Cargo	
Commodity	%	Commodity	%
Transport Equipment	M/M	Steel Products	67.6
		Machinery	8.5
		MFT Metal Goods	7.0
		Chemical Goods	2.9
		Steel Scraps	1.1
Foreign Non-Containerized Cargo			
Export Cargo		Import Cargo	
Commodity	%	Commodity	%
Chemical Goods	0.1	Chemical Goods	5.2
Agriculture Products	1.9	Crude Mineral	4.0
Charcoal	1.5	Agriculture Products	2.4
Abaca	0.8	Lumber	1.3
Metal Products	2.1	Animal Feeds	6.0
Steel Scraps	5.0	Paper Goods	1.6
Fish	0.4	Daily Products	0.6
Machinery	2.4	Textile	0.1
Textile	1.3		
Fertilizer	9.8		
MISC	74.7	MISC	78.9

(Continued)

Domestic Containerized Cargo			
Out Bound Cargo		Inbound Cargo	
Crude Mineral	2.4	Live Animal	7.8
Agriculture Products	0.8	Chemical Goods	2.4
Transport Equipment	1.4	Daily Products	1.7
Steel Scraps	0.8	Crude Mineral	0.6
Sugar	1.0	Fish	5.3
Petroleum	0.6	Petroleum	4.4
Wheat Flour	1.8	Rice	5.8
Coco Oil	0.8	Steel Scraps	0.3
Corn	1.2	Corn	9.5
Chemical Goods	7.4	Wheat Flour	2.1
Ply Woods	1.2	MFT Metal	1.1
Lumber	1.0	Agriculture Products	1.4
Textile	0.6	Textile	0.2
Cement	4.9	Animal Feeds	4.4
Steel Products	4.1	Bottled Cargo	1.5
MFT Metal	4.1	Furniture	0.5
Machinery	2.7	Steel Products	0.4
Fertilizer	3.1	Tobacco	0.2
Animal Feeds	8.1	Copra	0.6
Bottled Cargo	2.3	Lumber	3.3
		Paper Goods	1.7
		Machinery	1.0
MISC	49.7	MISC	44.4
Domestic Non-Containerized Cargo			
Out Bound Cargo		In Bound Cargo	
Cement	31.4	Rice	24.1
Steel Products	14.0	Corn	16.7
Chemical Goods	13.8	Lumber	13.7
Ply Woods	4.3	Crude Mineral	8.3
Crude Mineral	3.9	Agriculture Products	5.6
MFT Metal	2.2	Wheat Flour	5.3
Machinery	1.9	Fish	5.1
Fertilizer	0.7	Bottled Cargo	6.8
Petroleum	1.3	Copra	3.0
Coco Oil	2.5	Paper Goods	2.4
Furniture	0.2	Fertilizer	1.7
Textile	0.2	Live Animal	1.5
Transport Equipment	6.8	Sugar	2.4
Steel Scraps	0.1	Abaca	1.0
		Daily Products	0.1
		Tobacco	0.1
		Animal Feeds	6.9
MISC	16.7	MISC	4.7

(5) Present Foreign Vessel Calling at Cebu Baseport

Table 4.1.1-8 Regular Liner Service by Container Vessel

Name of Shipping lines	Calling Port		Service Frequency
	Previous	Next	
MOF (Zim Lines)	Kaoshiung	Kaoshiung	10 Days/Call
Ken Lines(Taiwan)	Manila	Kaoshiung	Weekly/Call
Maersk Sealand	Davao	Kaoshiung	Weekly/Call
Eastern Shipping	Manila	Phil Poet	2 Week/Call
Pacific Eagle Lines	Davao	Singapore	2 Week/Call
APL /NOL	Manila	Manila	Weekly/Call
R C Lines	Gen'l Santos	Singapore	2 Week/Call
Ye-Lan Shipping	Manila	Taiwan	10 Days/Call
Golden Shippinvg	Taiwan	Taiwan	Weekly/Call
Other 3 Shipping Co.,	-	-	Monthly Call
Average Calling Per Month			31 Vessels per Call/Month

Source: CPA Port Traffic Statistics Data, JICA Study Team

Table 4.1.1-9 Tramping Foreign Conventional Cargo Vessel (1st Quarter of 2000)

	Berthed Vessel		Anchored Vessel	
	Number of Vessel	Total of GRT	Number of Vessel	Total of GRT
Jan 2000	6 Vessels	33,006	4 Vessels	13,644
Feb 2000	13 Vessels	133,228	4 Vessels	20,270
Mar 2000	8 Vessels	62,358	10 Vessels	45,228
Total	27 Vessels	217,592	18 Vessels	79,142
Average/Month	9 Vessels	8,060	6 Vessels	4,397

Source: CPA Port Traffic Statistics Data, JICA Study Team

(6) Present Domestic Vessels Calling at Cebu Baseport (1st Quarter of 2000)

Table 4.1.1-10 Domestic Vessel Calling on Cebu Base-Port

	Total domestic Vessel		Ferry Vessel/Ro-Ro Vessel		Tramping Conventional Vessel	
	No, of Vessel	Total GRT	No, of Vessel	Total GRT	No, of Vessel	Total GRT
Jan 2000	1,790	2,334,970	1,289	2,025,487	501	309,483
Feb 2000	1,769	2,303,556	1,287	1,998,335	482	305,221
Mar 2000	1,996	2,474,932	1,418	2,146,463	578	327,932
Total	5,555	7,113,458	3,994	6,170,285	1,561	942,636
Average/Month	1,851	2,371,153	1,331	2,056,762	5,20	314,214

Source: CPA Port Traffic Statistics Data, JICA Study Team

(7) Present Domestic Ferry (Ro/Ro) and Passenger Vessels Net-Work of Cebu Baseport

Table 4.1.1-11 Each Service Route From Cebu Baseport (Average Per Month on 2000)

Vessels GRT Under 999 tons			
Previous Port	No of Vessel	Next Port	No of Vessel
Bato	6 Calls	Bato	6 Calls
Cabalian	3 Calls	Calbayog	3 Calls
Cabalian	3 Calls	Camotes	3 Calls
Calbayog	1 Call	Camotos	1 Call
Calbayog	4 Calls	Catabato	4 Calls
Calbayog	1 Call	Cagayan De Oro	1 Call
Camotes	1 Call	Cotabato	1 Call
Camotes	1 Call	Dumaguete	1 Call
Caraingan	4 Calls	Dumaguete	4 Calls
Cagayan De Oro	1 Call	Dumaguete	1 Call
Cotabato	1 Call	Dumaguete	1 Call
Dumaguete	22 Calls	Dumaguete	22 Calls
Dumaguete	7 Calls	Hilongos	7 Calls
FF Cruz	1 Call	Hilongos	1 Call
Hilongos	11 Calls	Hilongos	11 Calls
Hilongos	8 Calls	Isabel	8 Calls
Iligan	1 Call	Isabel	1 Call
Iloilo	1 Call	Isabel	1 Call
Isabel	1 Call	Isabel	1 Call
Isabel	4 Calls	Larena	4 Calls
Isabel	6 Calls	Liloan	6 Calls
Larena	3 Calls	Maasin	3 Calls
Maasin	6 Calls	Maasin	6 Calls
Nasipit	10 Calls	Nasipit	10 Calls
Ormoc	1 Call	Nasipit	1 Call
Ormoc	27 Calls	Ormoc	27 Calls
Palompon	4 Calls	Palompon	4 Calls
Santa Fe	2 Calls	Sogod	2 Calls
Surogao	1 Call	Sogod	1 Call
Surigao	2 Calls	Santa Fe	2 Calls
Surigao	1 Call	Surigao	1 Call
Tacloban	14 Calls	Tacloban	14 Calls
Tagbilaran	2 Calls	Tacloba	2 Calls
Tagbilaran	72 Calls	Tagbilaran	72 Calls
Tagbilaran	1 Call	Talibon	1 Call
Talibon	4 Calls	Talibon	4 Calls
Tubigon	20 Calls	Tubigon	20 Calls
Tubod	11 Calls	Tubod	11 Calls
Ubay	11 Calls	Ubay	11 Calls
Zamboanga	1 Call	Zamboanga	1 Call

Vessels GRT 1,000 - 2,999 tons			
Cagayan De Oro	14 Calls	Cagayan De Oro	14 Calls
Dapitan	2 Calls	Cagayan De Oro	2 Calls
Dumaguete	3 Calls	Dapitan	3 Calls
Dumaguete	18 Calls	Dumaguete	18 Calls
Iligan	1 Call	Dumaguete	1 Call
Iligan	10 Calls	Iligan	10 Calls
Iloilo	3 Calls	Iligan	3 Calls
Iloilo	9 Calls	Iloilo	9 Calls
Larena	1 Call	Iloilo	1 Call
Maasin	3 Calls	Iloilo	3 Calls
Maasin	1 Call	Larena	1 Call
Maasin	13 Calls	Maasin	13 Calls
Maasin	1 Call	Manila	1 Call
Maasin	5 Calls	Nasipit	5 Calls
Nasipit	4 Calls	Ormoc	4 Calls
Ormoc	5 Calls	Ormoc	5 Calls
Ormoc	6 Calls	Ozamis	6 Calls
Ozamis	15 Calls	Ozamis	15 Calls
Ozamis	5 Calls	Surigao	5 Calls
Surigao	11 Calls	Surigao	11 Calls
Surigao	1 Call	Tacloban	1 Call
Tacloban	2 Calls	Tacloban	2 Calls
Tacloban	1 Call	Tagbiralan	1 Call
Tagbiralan	6 Calls	Tagbiralan	6 Calls
Tagbiralan	1 Call	Tandag	1 Call
Tubigon	1 Call	Tandag	1 Call
Zamboanga	1 Call	Zamboanga	1 Call
Vessels GRT 3,000 - 3,999 tons			
Dumaguete	3 Calls	Dumaguete	3 Calls
Iloilo	1 Call	Ormoc	1 Call
Iloilo	2 Calls	Ozamis	2 Calls
Keppel	1 Call	Ozamis	1 Call
Ozamis	1 Call	Ozamis	1 Call
Ozamis	3 Calls	Tacloban	3 Calls
Tacloban	1 Call	Tacloban	1 Call

Vessels GRT 4,000 - 6,999 tons			
Cagayan De Oro	13 Calls	Cagayan De Oro	13 Calls
General Santos	2 Calls	Dumaguete	2 Calls
General Santos	2 Calls	Iligan	2 Calls
Iligan	3 Calls	Iligan	3 Calls
Iligan	1 Call	Manila	1 Call
Iloilo	1 Call	Manila	1 Call
Dumaguete	2 Calls	Dumaguete	2 Calls
Manila	2 Calls	Manila	2 Calls
Manila	3 Calls	Nasipit	3 Calls
Nasipit	5 Calls	Masipit	5 Calls
Nasipit	1 Call	Tacloban	1 Call
Nasipit	2 Calls	Tagbilaran	2 Calls
Ozamis	1 Call	Zamboanga	1 Call
Tagbilaran	2 Calls	Zamboanga	2 Calls
Vessels GRT Over 7,000			
Cagayan De Oro	9 Calls	Cagayan De Oro	9 Calls
Cagayan De Oro	5 Calls	Davao	5 Calls
Dadaingas	1 Call	Davao	1 Call
Davao	1 Call	Davao	1 Call
General Santos	3 Calls	Manila	3 Calls
Manila	37 Calls	Manila	37 Calls
Surigao	4 Calls	Nasipit	4 Calls
Surigao	8 Calls	Surigao	8 Calls
Tagnilaran	1 Call	Tagbilaran	1 Call
Tubigon	1 Call	Tubigon	1 Call

Source: CPA Traffic Statistics and, JICA Study Team

(8) Distance in the Cebu to the Surround Ports

To demonstrate the Cebu port strategic location, the distance in nautical miles between Cebu Baseport and various ports are shown in Table 4.1.1-12.

Table 4.1.1-12 Nautical Miles between Cebu Baseport / Various Philippines ports

Ports	Nautical Miles	Sailing Hours (by 15 Knots)
Aparri	828'	55.20Hrs (2.72 Days)
Balabac	462'	30.80Hrs (1.68 Days)
Balayan	333'	22.20Hrs
Batabgas	442'	29.47Hrs (1.55 Days)
Bislig	306'	20.40Hrs
Butuan	168'	11.20Hrs
Sorsogon	177'	11.80Hrs
Cagayan de Oro	128'	8.53Hrs
Cotabato	389'	25.93Hrs (1.19 Days)
Davao	584'	38.93Hrs (1.63 Days)
General Santos	485'	32.33 Hrs (1.83 Days)
Iligan	136'	9.07Hrs
Iloilo	179'	11.93Hrs
Legaspi	226'	15.07Hrs
Manila	405'	27.00Hrs (1.15 Days)
Nasipit	164'	10.93Hrs
Ormoc	62'	4.10Hrs
Puerto Princesa	362'	24.13Hrs (1.01 Days)
San Fernando	174'	11.60Hrs
Tacloban	152'	10.13Hrs
Zamboanga	254'	16.93Hrs

Source: Japan Coast Guard Sea Mile Table

Table 4.1.1-13 Nautical Miles Between Cebu / South-East Asian Ports

Ports	Nautical Miles	Sailing Hours (By 15 Knots)
Bangkok	1,625'	108.33 Hours (4days,12.5Hrs)
Busan	1,598'	106.53 Hours (4days,13.0Hrs)
Dalian	1,762'	117.47 Hours (4days,21.5Hrs)
Fuzhou	1,047'	69.80 Hours (2days,21.8Hrs)
Guam	1,285'	85.67 Hours (3days,13.7Hrs)
Guangzhou	1,138'	75.87 Hours (3days,13.8Hrs)
Haiphong	1,264'	84.27 Hours (3days,12.3Hrs)
Hirosima	1,571'	104.47 Hours (4days, 8.7Hrs)
Ho Chi Ming	1,203'	80.20 Hours (3days, 8.2Hrs)
Hong Kong	963'	64.20 Hours (2days,16.2Hrs)
Inchon	1,669'	111.27 Hours (4days,15.3Hrs)
Jakarta	1,589'	105.93 Hours (4days, 9.9Hrs)
Kaohssiung	822'	54.80 Hours (2days, 6.8 Hrs)
Keelung	968'	64.53 Hours (2days,16.5Hrs)
Kobe	1,614'	107.60 Hours (4days,11.6Hrs)
Kota Kinabalu	598'	38.87 Hours (1 day, 15.9Hrs)
Kuching	1,027'	68.47 Hours (2days,20.5Hrs)
Laem Chabang	1,175'	78.33 Hours (3days, 6.3Hrs)
Labuan	691'	46.07 Hours (1days, 22.1Hrs)
Nagoya	1,682'	112.13 Hours (4days,16.1Hrs)
Osaka	1,617'	107.80 Hours (4days,11.8Hrs)
Port Kelang	1,608'	107.20 Hours (4days,11.2Hrs)
Saipan	1,364'	90.93 Hours (3days,18.9Hrs)
Shanghai	1,132'	75.47 Hours (3days, 3.5Hrs)
Singapore	1,394'	92.93 Hours (3days,20.9Hrs)
Tanjong Mani	983'	65.53 Hours (2days,17.5Hrs)
Tokyo	1,791'	119.40 Hours (4days,23.4Hrs)
Truk Island	1,772'	118.13 Hours (4days,22.1Hrs)
Vladivostok	2,026'	135.01 Hours (5days,15.0Hrs)
Xiamen	1,012'	67.45 Hours (2days,19.5Hrs)
Xingang	1,913'	127.53 Hours, (5days, 7.5Hrs)
Yantai	1,727'	115.13 Hours,(4days,19.1Hrs)
Yokohama	1,781'	118.73 Hours,(4days,11.7Hrs)

Source: Japan Coast Guard Sea-Mile Table