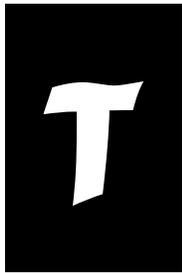


Chapter 1

INTRODUCTION

LOCATION



The Sarangani Bay Learning Area of the Coastal Resource Management Project (CRMP) is composed of 6 municipalities and 1 chartered city.

These are:

- Alabel
- Glan
- Kiamba
- Maasim
- Maitum
- Malapatan
- General Santos City

The area is located in southeastern Mindanao between $5^{\circ}33'25''$ - $6^{\circ}6'15''$ N and $124^{\circ}22'45''$ - $125^{\circ}19'45''$ E. Figure 1.1 shows the location of the profile area.

General Santos City (GSC) divides the Sarangani Province municipalities, with 3 municipalities on each side of the city. In this setup, GSC serves as the venue of commerce and trade of the surrounding municipalities, while Sarangani Province serves as the provider of agricultural products and manpower needs of the city. Sarangani Province is composed of the municipalities of Alabel, Glan, Kiamba, Maasim, Maitum, Malapatan, and Malungon. However, the Municipality of Malungon is landlocked. GSC is a chartered city belonging to the First Congressional District of South Cotabato.

The area forms part of South Cotabato-Sultan Kudarat-Sarangani-General Santos (SOCKSARGEN). SOCKSARGEN is the name for the current development and economic support package provided by the national government and foreign assistance

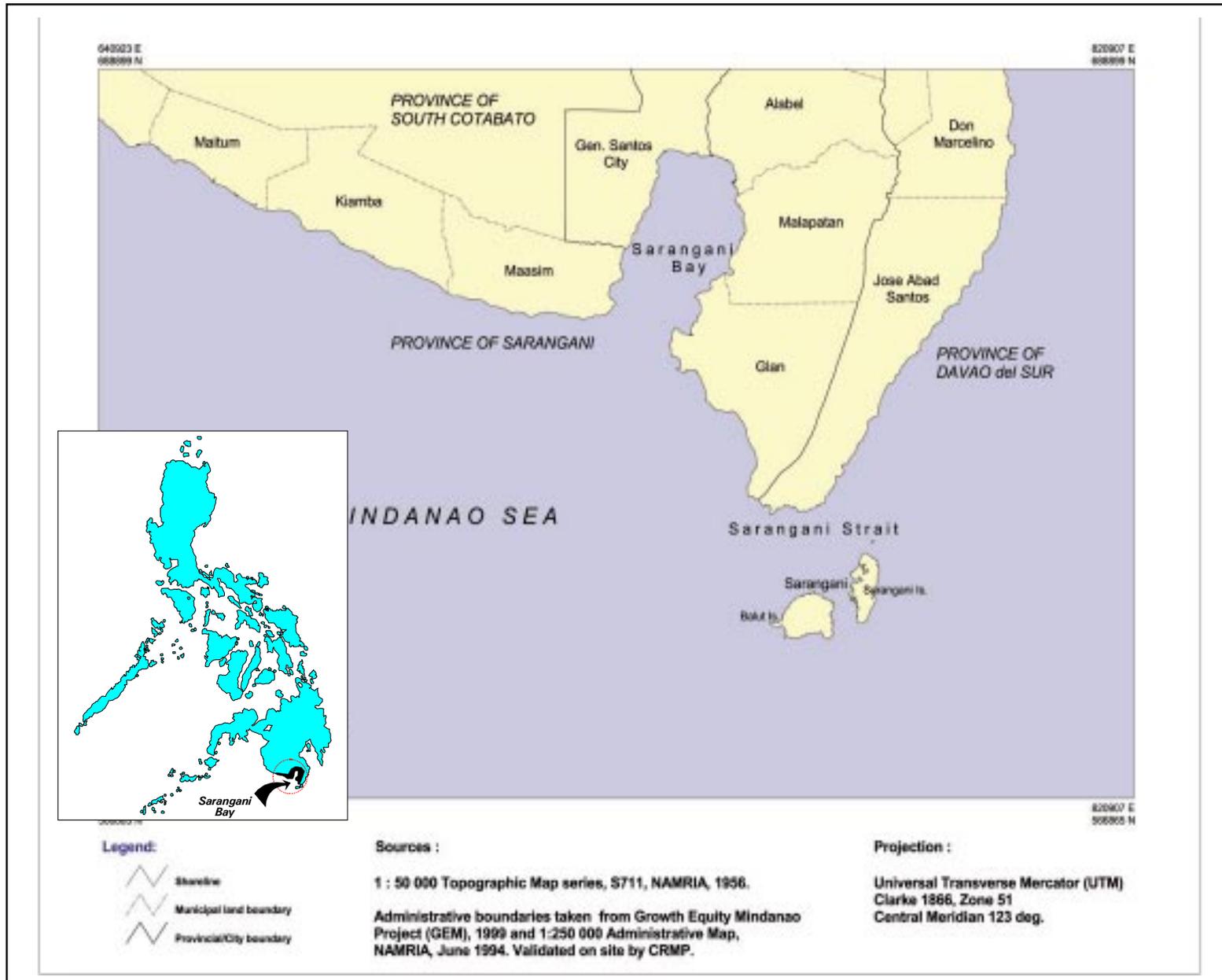


Figure 1.1. Map of Sarangani Bay.

groups. The area was identified as an alternative regional growth center based on its economic potential. In 1988, the United States Agency for International Development (USAID) undertook the funding and commitment to develop the area. Over the years, USAID has given over US\$200 million. Aside from this, the area also forms part of the Brunei, Indonesia, Malaysia, and Philippines-East ASEAN Growth Area (BIMP-EAGA). GSC is the nearest Philippine city to BIMP-EAGA, and is being eyed to serve as a hub for various investors entering the BIMP-EAGA market.

SHORT DESCRIPTION OF THE AREA

The entire profile area, with the exception of GSC, is mostly agricultural land. Each municipality has its own product. The most dominant crops produced are banana, coconut, corn, and rice. Aside from agricultural land crops, the area is the center of tuna fishing industry in the country. The newly built fish port situated at Tamber, GSC further improves the handling and transport of fishery products for domestic and international needs.

The coastal areas of the province and city have varied features. Some areas have clean and nice beaches particularly those towards the mouth of Sarangani Bay. Others are fringed with mangrove and coral reefs and some areas have a rocky shoreline. The coastal waters are oceanic in origin, clear and warm.

The whole area has fair weather condition throughout the year. There are no very distinct dry and wet seasons. Rainfall is fairly evenly distributed throughout the year with slightly more rainfall during the southeast monsoon (June to September). The area is safe from typhoons. It is situated near a dormant volcano (Mt. Matutum).

The economy of the profile area, particularly GSC, is growing very rapidly. Trade and investment will continue to grow due to the various infrastructure improvements that have taken place. By 1994, the commitment for infrastructure projects in GSC stood at PhP4 billion. Exports in the area increased by 80 percent in just 4 years (from US\$110 million in 1990 to US\$198 million in 1994). Since 1996, export value has reached US\$228 million. Primary exports include canned tuna, coconut oil, pineapple products, asparagus, bananas, shrimp, copra pellets, frozen and fresh tuna and other fish, and cut flowers.

GSC accounts for the second largest total daily fish landings in the country. It is the leading producer of sashimi grade tuna. This is because of a major tuna migration corridor in the Celebes Sea that has helped the city in its development as a fish processing and exporting center.

Due to the increase in development in the area, the population is also growing more rapidly than the national average. Details are discussed in Chapter 4.

HISTORICAL BACKGROUND

Sarangani Province dates back to the turn of the 15th century when Sarip Kabungsuan of Arabia arrived in Cotabato to introduce Islam. In 1914, the first batch of Christians settled in Glan and peacefully intermingled with the ethnic inhabitants of the province. In 1920, the first Ilocanos reached Kiamba. Between 1914 and 1934, settlers from Luzon and the Visayas began to open the vast lands in the area. Sarangani Province was initially part of South Cotabato, until 1992 when Republic Act (RA) 7228 created the Province of Sarangani. The name Sarangani is derived from a legendary sailor and warrior who lived in an island near the bay. According to legends, he frequently sailed across the bay to the Sultanate of Buayan, a stronghold of the Maguindanaos. His friendship and courage earned the respect of the Maguindanaos so they named the bay after him.

GSC and Sarangani Province have historical similarities primarily because they are in the same area. In 1939, General Paulino Santos, Sr. led 62 settlers under the National Land Settlement Administration's Social Justice Program for Filipino Farmers into the shores of Sarangani Bay. In 1948, RA 82 created the Municipality of Buayan. Six years later, in 1954, the Municipality of Buayan was renamed General Santos through RA 1107. On 8 July 1968, the Municipality of General Santos was converted to General Santos City through RA 5412.

Coastal resource management (CRM) in the area is still in its early stages. The Mindanao Growth Plan (MGP) identified the important coastal resources in the area and determined the main causes of depletion. In 1993, MGP completed a Coastal Area Management Framework Plan for Sarangani Province and GSC. The plan emphasized the active participation of local officials and the community in order to protect and conserve the resources of the bay. CRMP has built on this framework plan to prepare a comprehensive CRM plan.

Present data reveal that nearly half of the dipterocarp forest has been damaged or converted into agricultural land. In addition, more than half of the coral reef area has been damaged due to destructive fishing practices. Based on Department of Environment and Natural Resources (DENR) reports, more than half of the present mangrove forest has been damaged or converted into fishponds.

SUMMARY OF ISSUES

The issues related to integrated coastal management confronting the profile area can be categorized into 3 major issues:

- Environmental quality issues
- Resource exploitation issues
- Legal, institutional, and administrative issues

Sarangani and GSC have been targeted for rapid development. With development comes accompanying problems. Part of the environmental quality issue and one of the major problems is sedimentation. According to persons interviewed, this mainly comes from the upland areas and is due to destructive agricultural practices, illegal logging, and mining operations. This is further discussed in Chapters 2 and 7.

Another issue affecting the area is pollution from domestic wastes. Most coastal households do not have proper waste disposal systems. This contributes to the pollution in the bay. Another issue is industrial pollution. Fish canneries in GSC have been a source of complaint from residents. Pollution management appraisals conducted in 1993 and 1994 have also shown that most of the fish canneries do not have adequate wastewater treatment systems. DENR analysis has shown that discharges from these facilities do not meet the government standards for Sarangani Bay. These issues are discussed further in Chapter 7.

A major issue concerning resource exploitation is the encroachment of commercial fishers in municipal waters. This issue has legal and jurisdictional aspects. Various agencies at the national and local government level are joining hands to solve this problem. Other issues involving resource exploitation include destruction of coral reefs and mangroves, illegal fishing (such as the use of fine mesh nets and dynamite and cyanide), and overfishing.

Although Sarangani Bay was proclaimed as a protected seascape, thereby making it a part of the National Integrated Protected Areas System (NIPAS) of DENR, there seems to be little change in the current management of the bay. This is the main legal, institutional, and administrative issue. Currently, DENR has general administration of Sarangani Bay, but the coastal users believe that DENR is not focusing enough attention on Sarangani Bay as a protected seascape. They point to the fact that the Protected Area Management Board (PAMB) has been very unwieldy as a management group, because of the large number of members. In most cases, the PAMB has not been able to form a quorum.

As in most parts of the Philippines, enforcement of laws is very weak. Sarangani Province and GSC are no exception. In some cases, apprehension has been successful, but the prosecution of the offender is a problem. Details of all the issues are discussed in Chapter 7.

OBJECTIVES

The compilation of this profile for Sarangani is one of the steps taken by CRMP in the formulation of a CRM plan. The profile provides detailed background information and baseline data on Sarangani Bay and the local government units (LGUs) in the profile area. It provides broad information on the physical features, natural resources,

sociopolitical affairs, the local economy, laws and legal framework related to coastal resources and environment, and the prevailing issues and opportunities.

Information was based on various sources, primarily from secondary published and unpublished literature, including the Participatory Coastal Resource Assessments (PCRA), as well as interviews with key players in CRM in Sarangani Bay.

The specific objectives are to:

- Provide baseline information on the Sarangani Bay profile area;
- Determine actual and current conditions of coastal resources in Sarangani Bay;
- Educate readers about the need for CRM in Sarangani Bay and motivate them to take part in CRM;
- Identify additional studies needed or information not currently available, and the next steps that need to be taken;
- Identify the present issues and problems in CRM;
- Determine the present coastal management programs being undertaken by the province, the coastal municipalities, and the city.

SCOPE

The scope of this profile includes the 6 coastal municipalities of Sarangani Province (Alabel, Glan, Kiamba, Maasim, Maitum, and Malapatan) and GSC.

The physical features of the area are discussed in Chapter 2 and these include information on land area, topography, hydrology, soil, land uses, and climate. The natural resources are discussed in Chapter 3 and include mineral resources, forest resources, and coastal resources. Coastal resources are discussed in detail including mangroves, seagrass, corals, seaweeds, fisheries, beaches, and endangered species.

The sociopolitical setting is discussed in Chapter 4. It includes information on the political and administrative boundaries in the profile area, on the area's demography, and growth rate. It also includes age and gender composition, education, labor and employment, income, religion and ethnic groups, dialects, health, sanitation and medical care, settlements (type and ownership), roads, transportation and communication, and other related infrastructure or support systems. When data on coastal areas are lacking, provincial or municipal data are used instead.

Chapter 5 discusses the economy and focuses on coastal-related issues. Topics include fisheries, tourism, industries, agriculture, and forestry. Information on these industries includes the types and location, number of employees, revenues generated, and its social, cultural, and environmental impact.

The institutional and legal framework is discussed in Chapter 6. This includes the current state of the Philippine coastal zone laws. It also discusses the structure of the LGUs down to the *barangay* level. Details of development plans, activities, and projects related to fisheries and other coastal resources are included. Information on the funding for these projects, as well as the budget allocated for coastal activities is also provided.

Chapter 7 discusses management issues and opportunities broken down into environmental, economic, and political and institutional categories.

MAITUM			
FACTS AND FIGURES			
<i>Barangays</i>	(19):	Bati-an, Kalaneg, Kalaong, Kiambing, Kiayap, Mabay, Maguling, Malag (Pob.), Mindupok, New La Union, Old Poblacion (Maitum), Pangi (Linao), Pinol, Sison (Edenton), Ticulab, Tuanadatu, Upo (Lanao), Wali (Kambuhan), Zion	
Coastal <i>Barangays</i>	(7):	Kalaong, Kiambing, Mabay, Maguling, Mindupok, Old Poblacion (Maitum), Pinol	
Total Land Area:	324.4	km ²	
Coastal Land Area:	66.9	km ²	
Length of Coastline:	25	km	
Total Population:	35,009		
Population of Coastal <i>Barangays</i> :	15,472		

KIAMBA			
FACTS AND FIGURES			
<i>Barangays</i>	(18):	Badrasan, Datu Dani, Gasi, Kapate, Katubao, Kayupo, Ling (Lumit), Lagundi, Lebe, Lomuyon, Luma, Maligang, Nalus, Poblacion, Salakit, Suli, Tablao, Tamadang, Tambilil	
Coastal <i>Barangays</i>	(13):	Datu Dani, Katubao, Kayupo, Ling (Lumit), Lagundi, Lebe, Lomuyon, Luma, Nalus, Poblacion, Salakit, Suli, Tambilil	
Total Land Area:	418.2	km ²	
Coastal Land Area:	262.6	km ²	
Length of Coastline:	39.6	km	
Total Population:	39,717		
Population of Coastal <i>Barangays</i> :	32,217		

ALABEL			
FACTS AND FIGURES			
<i>Barangays</i>	(12):	Alegria, Bagacay, Baluntay, Datal Anggas, Domolok, Kawas, Maribulan, Pag-Asa, Paraiso, Poblacion (Alabel), Spring, Tokawal	
Coastal <i>Barangays</i>	(3):	Kawas, Maribulan, Poblacion (Alabel)	
Total Land Area:	540.5	km ²	
Coastal Land Area:	42.1	km ²	
Length of Coastline:	12.1	km	
Total Population:	46,527		
Population of Coastal <i>Barangays</i> :	21,639		

MALAPATAN			
FACTS AND FIGURES			
<i>Barangays</i>	(12):	Daan Suyan, Kihan, Kinam, Libi, Lun Masla, Lun Padidu, Patag, Poblacion (Malapatan), Sapu Masla, Sapu Padidu, Tuyan, Upper Suyan	
Coastal <i>Barangays</i>	(6):	Lun Masla, Lun Padidu, Poblacion (Malapatan), Sapu Masla, Sapu Padidu, Tuyan	
Total Land Area:	840.0	km ²	
Coastal Land Area:	463.8	km ²	
Length of Coastline:	15.3	km	
Total Population:	47,911		
Population of Coastal <i>Barangays</i> :	30,747		

MAASIM FACTS AND FIGURES

<i>Barangays</i>	(16):	Amsipit, Kabatiol, Kanalo, Nomoh, (Maasim),	Bales, Kablacan, Lumasal, Pananag, Seven Hills,	Colon, Kamanga, Lumatil, Poblacion Tinoto	Daliao, Kamanga, Malbang, Tinoto
Coastal <i>Barangays</i>	(12):	Colon, Kablacan, Lumasal, Poblacion	Daliao, Kamanga, Lumatil, (Maasim),	Kabatiol, Kanalo, Malbang, Tinoto	Pananag,
Total Land Area:	724.4	km ²			
Coastal Land Area:	376.2	km ²			
Length of Coastline:	43.1	km			
Total Population:	31,641				
Population of Coastal <i>Barangays</i> :	27,000				

GSC FACTS AND FIGURES

<i>Barangays</i>	(26):	Baluan, Dadiangas Lagao, San Isidro, Tambler, Upper Labay, Calumpang, North West,	Buayan, East Labangal, San Jose, Tinagacan, Apopong, City Heights, Dadiangas South, Fatima, Olympog	Bula, Conel, Katangawan, Mabuhay, Sinawal, Siguel, Batomelong, Dadiangas Dadiangas
Coastal <i>Barangays</i>	(13):	Baluan, Calumpang, South, Siguel	Buayan, Labangal, Dadiangas West,	Bula, Dadiangas Tambler,
Total Land Area:	536.1	km ²		
Coastal Land Area:	150.9	km ²		
Length of Coastline:	27	km		
Total Population:	377,034			
Population of Coastal <i>Barangays</i> :	172,965			

GLAN FACTS AND FIGURES

<i>Barangays</i>	(29):	Baliton, Margus, Calpidong, Datalbukay, Gumasa, Mudan, Poblacion, San Vicente, Sufatubo,	Batotuling, Burias, Congan, E. Alegado, Kapatan, New Aklan, Rio del Pilar, Small Margus, Taluya,	Batulaki, Cablalan, Cross, Glan Padidu, Lago, Pangyan, San Jose, Tango, Tapon	Big Calabanit, Glan Padidu, Laguimit, Pangyan, San Jose, Small Margus, Tapon
Coastal <i>Barangays</i>	(12):	Baliton, Burias, Gumasa, Poblacion, Taluya,	Batulaki, Cablalan, Kapatan, San Jose, Tango,	Big Margus, Glan Padidu, Lago, Pangyan, Small Margus, Tapon	
Total Land Area:	651.5	km ²			
Coastal Land Area:	220.0	km ²			
Length of Coastline:	64.3	km			
Total Population:	73,768				
Population of Coastal <i>Barangays</i> :	45,810				