

CHAPTER 1

THE HISTORY OF SIBUNAG

Sibunag is one of the two new municipalities created in the province of Guimaras through RA 7896. Such creation was validated with COMELEC Resolution en banc after the plebiscite conducted during the May 1995 election.

Situated Southeast of Guimaras Island facing Negros and is separated from that island by Guimaras Strait. It is composed of fourteen (14) barangays where the twelve (12) barangays were from the mother Municipality of Jordan and two (2) barangays were from Nueva Valencia. Sabang, San Isidro, Sebaste, Alegria, and Bubog are the coastal barangays while Maabay, Dasal, Ayangan, Ravina, Millan, Tanglad, Oracon and Concordia are the inland barangays and Inampulogan, which is an island barangay. It has a total population of 17,773 scattered among 14 barangays and a total land area approximately 147.40 square kilometer occupying 21% of the total land area of the whole province.

MYTHICAL ORIGIN

Even before it was created as separate Local Government Unit, Sibunag is named after its main river, abounds with spellbinding folktales and legends.

The tragic story of Guima and Aras (popularized by Guimaras writer, Romeo G. Garganera) happened in the shores of Sibunag as the ill-fated lovers desperately crossed the stormy sea to Baglas, now Negros, to escape the wrath of an angry father.

Legend also says that Sibunag, son of a deity and a mortal was stolen when only a baby. He was cared for and raised by a fairy. His numerous and amazing adventures and romance found niche in the hearts of folklore writers.

Sibunag river remains even today, not only the main source of gravel and sand supply of the province but also an important waterway from the mainland Guimaras to the island waters where the longest river in Guimaras could be seen with its tributaries originate from the springs of the three mountains of Dinalman, Bontoc and Tigbi, strategically located in Barangay Millan. By mouth of Sibunag River are wide areas of fishponds. Along its shorelines to Alegria and San Isidro are sources of bangus fry, bulgans, talakitok, mayamaya, kanlay, crustaceans especially the kamuntaha, lobsters, prawns and seashells.

THE FOUNDING

The first set of local officials were appointed by President Fidel V. Ramos of the Republic of the Philippines upon the recommendation of Governor Emily R. Lopez. They were appointed because of their own merits and qualifications as pioneers, their

deeds would surely be recorded in the history of Sibunag. They were representatives from groups of educators, professionals, agriculturist, businessmen, cooperative experts and health workers, which with their qualifications and dedication to duty Sibunag cannot fail.

On its first year of operation as a district and separate Local Government Unit together with the appointed local officials, personnel from the Provincial Government of Guimaras were handpicked by Mayor Gedalanga to collaboratively work for the fast tracking of its development.

The first set of Municipal Officials is as follows:

Hon. Ernesto L. Gedalanga	-	Municipal Mayor
Hon. Luben G. Vilches	-	Vice Mayor
Hon. Melinda B. Garganera	-	SB Member
Hon. Jaime F. Solis	-	SB Member
Hon. Rony F. Francisco	-	SB Member
Hon. Glicerio G. Edang	-	SB Member
Hon. Geminiano G. Galanto	-	SB Member
Hon. Jomel E. Galvez	-	SB Member
Hon. Juliet G. Maestral	-	SB Member
Hon. Gerardo C. Regidor	-	SB Member
Hon. Rolando V. Gamilong	-	SB Member (Ex-Officio, ABC President)
Hon. Daylenn G. Alonzo	-	SB Member (Ex-Officio, SK Fed. President)
Mrs. Cynthia T. Terre	-	MPDC
Engr. Ramier L. De los Reyes	-	Municipal Engineer
Mr. Paciano M. Opelario	-	Municipal Agriculturist
Mr. Kunaku A. Muyco	-	Municipal Assessor
Mrs. Josefina A. Galan	-	Acting Municipal Treasurer
Mrs. Ma. Luz E. Gabasa	-	Acting Municipal Accountant
Mrs. Merlinda E. Timbas	-	Municipal Budget Officer
Mr. Teofilo G. Guico Jr.	-	MLGOO
Ms. Marivic Londres	-	SB Secretary
Mrs. Ma. Leonora Theresa Jardeleza	-	-Private Secretary to the Mayor

Since August 16, 1995 to May 30, 1997 Municipal Officials and employees used the two (2) dilapidated classrooms of Liningwan Elementary School as temporary office where office supplies and equipments were only provided by the mother municipalities of Jordan and Nueva Valencia and the Provincial Government of Guimaras in order to promote the general welfare of the Municipality and its inhabitants.

For efficient and effective delivery of basic services the department heads and members of the Sangguniang Bayan with Mayor Gedalanga conducted dialogue and information campaign to the fourteen (14) barangays even without transportation. Thus, SAVE THE

CHILDREN FOUNDATION donated to the Office of the Mayor one service vehicle, which contributed much to the development of this new Municipality.

Upon the completion of the newly constructed municipal building the legacy of development under the leadership of Mayor Ernesto L. Gedalanga will always remain in the heart of every Sibunagnon and forever be a "SIBUNAG ON THE RISE".

MUNICIPAL MAYORS

TERMS OF OFFICE	NAMES
1995-1998	Ernesto L. Gedalanga
1998-2001	Ernesto L. Gedalanga
2001-2004	Pedrito V. Gange, Sr.
2004 -2007	Pedrito V. Gange, Sr.
2007-2010	Pedrito V. Gange, Sr.
2010 to present	Luben G. Vilches

GEO-PHYSICAL ENVIRONMENT

GEOGRAPHICAL LOCATION

Sibunag is a coastal municipality located at the southeastern side of Guimaras Island facing Negros Island. In astronomical terms, it is located approximately between 10°26.5' and 10°31.5' north latitude and between 122°31.5' and 122°36.5' east longitude. It is bounded on the north by the towns of Jordan and San Lorenzo, on the southwest by the municipality of Nueva Valencia, and on the southeast by the Guimaras Strait.

TOPOGRAPHY

ELEVATION

Most of Sibunag have low altitudes of from 0 to 100 meters, with a sizable eastern coastal strip ranging from 0 to 40 meters above sea level. A small northern portion has elevations from 100 to 260 meters above sea level. Inampulogan Island has low elevations of from 140 to 160 meters above sea level. It may be said that, generally, the lay of the land in the municipality slopes gradually towards the southwestern coastal areas.

SLOPE

Most of Sibunag have slopes ranging from 8 to 18 percent or from 4.4° to about 10.1° and which may be described as undulating to rolling. These are found in Brgys. Dasal, Maabay, Millan, Tanglad, Ayangan, Inampulogan and parts of Alegria, San Isidro,

Sabang, Bubog, Sebaste and Ravina Sur. The 0 to 3 percent or 0° to 1.6° slopes are located along the southeastern coasts and the small portion in Brgy. Ravina Sur. These are the flat or level lands. The 3 to 8 percent or 1.6° to 4.4° slopes, otherwise described as level to undulating, are of limited extent and are seen only in the southern portion of Brgy. Oracon Norte. The 18 to 30 percent or 10.1° to 16.7°, meaning the rolling to moderately steep lands, are also limited in extent, being seen only in parts of Brgys. Sabang, Bubog, Sebaste, Ravina Sur and Concordia Norte.

GEOLOGY

ROCK FORMATIONS

Most of Sibunag is underlain by keratophytes and andesite flows, i.e., extrusive igneous rocks that are dark grayish in color and consisting essentially of oligoclase and feldspar, i.e., crystalline minerals consisting of aluminum silicates mixed with either sodium, calcium or barium elements. This indicates the volcanic nature of the Sibunag bedrock that is related to that of Canlaon Volcano in nearby Negros Island. These are hard rocks that can ably support high structures or heavy infrastructures.

In the northern portion of the town may be seen quartz, diorite, granodiorite and andesite porphyry rocks. These are generally igneous rocks characterized as granular, crystalline, intrusive and may contain plagioclase, hornblende, pyroxene or biotite minerals. Again, these are also stable foundations for tall and heavy infrastructures and may be crushed to sand or gravel dimensions for construction purposes.

LANDFORMS

The topography of Sibunag may be characterized as ranging from coastal plain to strongly hilly. Most of the municipality's terrain is actually undulating to rolling and these portions may be seen in the middle bounded by coastal plains and rolling to moderately steep hills.

SOILS

Two soil mapping units were identified in the municipality of Sibunag under the Food and Agriculture Organization (FAO) soil classification system, and briefly described in the succeeding paragraphs.

1) Dystric Nitosols

The Dystric Nitosol soil mapping unit is the dominant soil in the province of Guimaras, where it was reported to be distributed in almost 45 percent of its land area, as well as in the municipality of Sibunag, where it was mapped in more than 70% of the total area.

This soil was derived from the weathering of volcanic rocks and other sedimentary rocks and is found on undulating to rolling areas. Dystric Nitosols are observed to be well drained, and have about 50 percent gravel on the surface. Its rooting depth extends to 40 to 60 centimeters below the ground, which is considered shallow to moderately deep for most agricultural uses. Physical and chemical analyses of the soils collected from the field showed that the mapping unit is slightly acid in reaction, has low amounts of nitrogen and phosphorus, and has sufficient amounts of potassium. Its cation exchange capacity (CEC) was found to be medium, and has a texture equivalent to sandy clay loam. The soil has a moderate potential for the production of orchard trees like mango, papaya, passion fruit, guava and cashew. The soil also shows moderate suitability to soybean, chilies, vegetables and pineapple. The Dystric Nitosols of Sibunag have marginal suitability for peanut, cassava, sweet potatoes, citrus, chiko, mangosteen, banana, rambutan, sour sop and coconut.

2) Orthic Luvisol

This soil unit has developed from limestone and other basic volcanic rocks. It was mapped in the barangay of Ravina Sur and Concordia Notre and the numerous islands on the eastern flanks of the municipality. The soil mapped under this class has undulating to steep slopes, and is moderately well-drained. Chemical analysis of the soils showed a deficiency in organic matter content and available phosphorus and potassium, while having at the same time a low cation exchange capacity. The soil unit has moderate suitability for the production of fruit crops like papaya, pineapple and passion fruit, and can only support pasture land uses. It has a marginal suitability for citrus, chiko, mangosteen, banana, rambutan, jackfruit, avocado and coconut.

Grassland/Pasture

Based on the existing land use map, a significant portion of Sibunag is under grassland or pasture that is often characteristic of undulating to rolling terrain that cannot be used for rice or level land agriculture. These grassland areas have slopes of 8 to 18 percent and can be used for crops needing well-drained soils or they can be planted to fruit trees or cash crops like mango, coconut, cashew and duhat. A lot of them are in the northern undulating and rolling terrain although significant patches can be seen in the southeastern barangays.

Agriculture

Another significantly extensive land use category in the study area is agriculture which is seen concentrated particularly in the southern portions of the town as well as in Inampulogan Island which are relatively flat and lower in elevation. These areas are planted to rice in the flatter watersheds sections and to mangoes and coconut in the more undulating and rolling terrain.

Urban/Built-Up

Patches of urban or built-up areas are seen in the barangays, particularly in road intersections such as those seen in Brgys. Millan, Ayangan, Maabay, Bubog, Alegria and, most importantly, Dasal where the municipal hall, public market and other government structures are located as well as in Maabay where the public market is sited. Most of these urban land uses are residential and, being still a newly created municipality, Sibunag has no commercial areas of significant extent. The few sari-sari stores are scattered among houses in the barangays. A fairly distinct commercial area is seen in the eastern tip of Inampulogan Island. The Central Business District and minor commercial areas should be in Dasal whose location is quite central in the community, a situation that should make the delivery of social services fast and efficient to all the barangays.

The institutional areas are those occupied by the municipal hall, barangay halls, health centers, schools and churches that are scattered over the town but the more noticeable over the landscape are those in Brgys. Maabay, Dasal, Inampulogan, San Isidro and Sabang, the last one being the largest.

There are some agri-industrial establishments in Millan and Alegria, i.e., these are the piggery farms in the town whose products find their market in Jordan, Iloilo City and Pulupandan, Negros Occidental.

Forest

Small areas of forest stands are found in Brgys. Ravina Sur, Ayangan, Bubog, San Isidro, Sebaste and Inampulogan, the last one being the most extensive. Those in the first four barangays are actually either planted trees or secondary forest growth particularly on the hilly topography. Much of the planted trees are kakawate and ipil-ipil which are used for charcoal making and household fuel in the town. There is a need to reforest many of the hills that have been denuded by kaingineros and fuel wood gatherers. These deforested uplands suffer from soil erosion and cause siltation and flooding in the lowlands. The forest stands in Sebaste and Inampulogan are mangrove trees that are still in relatively good condition. The stands in Sebaste show surrounding portions that have been cut already and need rehabilitation. In fact, many mangrove stands along the Sibunag coast have been denuded for charcoal and wood production.

Tourism

The tourism areas are found in Brgys. Sabang, Inampulogan, Alegria and Ravina Sur. Brgy. Sabang offers a coastal resort and bathing area for the town. Brgy. Inampulogan and its islands are, of course, tourist destinations for residents of Iloilo City, the municipality and Negros towns. There are the Nagarao Island Resort, Costa Aguada

Island Resort and Botanical and Zoological in Inampulogan, the Jesamar Beach Resort in Nauay Island, and the Us-usan Islet Resort.

Fishpond

The fishpond areas are located in the coastal areas of Brgys. Bubog, Sabang, Sebaste, Ravina Sur, San Isidro and Alegria. These have been carved from the mangrove forests of the coastal areas and are now used for the aquaculture of bangus and other fish species. There is a need to limit the expansion of fishponds or the conversion of mangrove stands to aquaculture activities considering that this forest type is important to the fishery industry in the municipality. It serves as the spawning, nursery, feeding and protection area for fishes and other marine life of the productive Sibunag coast.

MINERAL RESOURCES

The minerals found in the municipality are the sand and gravel that are deposited by fluvial erosion along the banks of the lower courses of Sibunag River, particularly in Brgys. Alegria and San Isidro. These sand and gravel deposits are collected for construction purposes within and outside the town.

COASTAL RESOURCES

Mangroves

Table 1. Mangrove Species Found in Sibunag, Guim

Scientific Name	Official Common Name	Location
<i>Rhizophora apiculata</i>	Bakauan-lalaki	Sabang, San Isidro, Inampulogan Is., Natunga Is., Alegria
<i>Rhizophora stylosa</i>	Bakau	Natunga Is., Inampulogan Is., Sebaste, Sabang
<i>Rhizophora mucronata</i>	Bakauan-Babae	Natunga Is., Inampulogan Is., Alegria
<i>Sonneratia caseolaris</i>	Pagatpat	Sabang, San Isidro, Alegria, Sabang, Sebaste
<i>Excoecaria agallocha</i>	Buta-buta	Natunga Is.
<i>Ceriops decandra</i>	Malatangal	Inampulogan Is.
<i>Avicennia marina</i>	Bungalon	Inampulogan Is., Alegria, Sabang
<i>Avicennia officinalis</i>	Api-api	Alegria, Sabang, Sebaste
<i>Nypa fruticans</i>	Nipa	Alegria
<i>Scyphiphora hydrophyllacea</i>	Nilad	Alegria

Sibunag municipality is mostly fringed with mangrove stands, the most extensive of which is found in Inampulogan Island, accounting for about 53% of the total mangrove cover for the whole of Guimaras Province. This island has about 210 hectares of mangrove cover, consisting mainly of *Rhizophora* species. Natunga Island has about 1.8 hectares of mangroves while other barangays like San Isidro, Alegria, Sabang and Sebaste have mangrove stands that are fewer than those two mentioned.

The table above summarizes the mangrove species composition in the mangrove stands of Sibunag:

Although the mangrove stand in Inampulogan is in a relatively good condition (with a density of 958 trees/ha) and had been spared from fishpond development, rampant woodcutting was reported to have been taking place. Natunga Island has also one of the best mangrove stands (density: 1,280 trees/ha), however, the areal extent is limited.

The mangrove areas in the Sabang-San Isidro area have a density of 600 trees/ha with a zone concentration extending up to 110 m from the shoreline. Fishponds exist from the 120 m to 170 m zone, an area that seems to be once a part of the mangrove stands.

Brgys. Alegria and Sebaste also have considerable mangrove stands where *Rhizophora spp* seem to be the dominant species. However, data on mangrove trees in these areas are quite limited.

Seagrasses

Ocular inspection revealed the presence of seagrass beds in some areas visited. In Brgy. Sabang and in Inampulogan Is., seagrasses were found growing along the muddy substrate, filling up the ecosystem between mangroves and coral reefs. There are a variety of seagrass species in the coastal barangays of Sebaste, Alegria and Sabang namely, *Thalassia hemprichi*, *Enhalus acoroides*, *Halodule sp.*, and *Syringodium sp.*

The seagrass species composition is summarized in the following table:

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Table 2 -Seagrass Species Found in Sibunag,Guimaras

Seagrass species	Location
<i>Thalassia hemprichi</i>	Alegria, Sabang, Sebaste, Inampulogan
<i>Enhalus acoroides</i>	Alegria, Sebaste, San Isidro
<i>Halodule sp.</i>	Alegria, Sebaste
<i>Syringodium sp.</i>	Alegria, Sebaste, Inampulogan

Coral Reefs

In a previous study conducted in the areas of Brgys. Alegria, San Isidro and Sabang, it was found that the coral reef area here is in poor condition, having a mean live coral cover of only 22.9%. This condition could be attributed to many factors such as blast fishing, high sediment load from the Sibunag River system that empties into San Isidro Bay, and pollution from garbage thrown in the coastal area (waste that mostly consist of plastic).

Around the islands of Sibunag municipality, coral reefs were found in varying state and condition. A study conducted by the U.P. Visayas (IMFO) revealed existing conditions that are described below.

Natunga Island

This place has a poor live coral cover with signs of massive destruction of the reefs. However, hardy coral species are still present, such as soft corals and hard coral species like *Torbinaria*, *Fungia*, *Millepora*, *Platygyra*, and *Leptoria*. This current reef condition has been attributed to blast fishing.

Inampulogan Island

This is the biggest island in Sibunag and the whole province of Guimaras. It is located 3.5 kms. east of Brgy. Sabang. It has a total reef area of 1.08 sq. km, and the second largest reef in the province. It has an average live coral cover of 47% and can be considered in fair condition. Although there are signs that new coral colonies are being formed, dead corals have been found in considerable quantities. Massive and branching types of *Acropora spp* dominate the reef. Other hardy coral species can be found such as the massive and branching types of *Porites*, *Millepora*, *Montipora* and *Pocillopora*.

Soft corals are also present in smaller quantities. Other reef species such as crinoids, gorgonians, sponges and torbinaria could also be found. Blast fishing, sedimentation, and wave action are considered to be the primary factors affecting the degradation of the coral reef in this island.

Us-usan Island

Us-usan Island (indicated in Namria maps as Susan Is.) lies west of Inampulogan Island off the coast of Bantigue Point. It has a reef that is reported to be larger in area than the land portion (0.212 sq. km). Its reef has a good coral cover (72.5%) with dead corals constituting smaller quantities. Coral species recorded in this area are: *Turbinaria*, massive *Acropora* and *Porites*, *Platygyra*, *Millepora*, *Xestospongia*, *Juncella*, *Lobophyllia*, table *Acropora*, *Heliopora*, *Seriatopora*, *Fungia*, *Sinularia* and *Lobophyton*. Concerted efforts of the island's inhabitants to protect their territory (including a barangay resolution from the barangay council) have spared the reef from blast fishing.

However, gleaning from reefs during low tide, sedimentation is also affecting the coral reefs.

Nauay Island

This island, which is located southwest of Inampulogan Island contains a reef area that is estimated to be about 0.05 sq. km. It has well-preserved reefs with excellent growth, having a live coral cover of 86% (hard corals, 60%; soft corals, 25%; dead corals, 8%). Nauay reefs are considered pristine with highest live coral cover and the lowest mortality index. This island is considered to have the best reef in the whole Guimaras Province and is being recommended as a marine park. However, high sediment load is causing low visibility in its waters and possibly affecting the corals, contributing to the degradation of the reefs. The reefs in this island contain many species, with twenty recorded coral genera, eighteen species of sponges, four hydrozoans, four ascidians, three gorgonians, four crinoids, and two sea anemone species. Four algal species and six seagrass species were also recorded in this area.

Nagarao Island

This island is located northwest of Nauay Island and southeast of Brgy. San Isidro, and is known for its Nagarao Island Beach Resort. It has a reef area of 0.098 sq. km. That is still in good condition and offers great underwater scenery to tourist divers visiting the island. The reef area has a good live coral cover that is placed at 81.4% (40% hard corals, 41.4% soft corals, and a min of 9.29% dead corals). It has the second highest live coral cover in the province and showcases a highly diverse group of both hard and soft corals. Massive *Porites*, *Pocillopora*, *Millepora*, *Hydnopora*, *Montipora*, *Seriatopora* and *Aglaophenia*, as well as table, massive and branching *Acropora*, *Platygyra*, and *Turbinaria* are among the hard corals that have been recorded in the area. Soft coral species include *Lobophyton sp.*, *Sarcophyton sp.*, *Nepthea sp.* and *Sinularia sp.* Accordingly, the efforts of the resort operator to protect and preserve the reefs have contributed greatly to the preservation of the reefs. As a result, the reefs of Nagarao have been spared from blast fishing and other anthropogenic threats.

The coral species composition found in the Sibunag area is summarized in the following table:

Table 3- Coral Species Found in Sibunag, Guimaras

Coral Species	Location
<i>Acropora nobilis</i>	Inampulogan
<i>Acropora pulchra</i>	Inampulogan
<i>Acropora sp.</i>	Sebaste, Us-usan Is., Nauay, Nagarao
<i>Montipora sp.</i>	Sebaste, Inampulogan, Nauay, Nagarao
<i>Leptoseris sp.</i>	Inampulogan
<i>Pachyseris p.</i>	Inampulogan, Nauay

<i>Euphyllia fimbriata</i>	Sebaste
<i>Plerogyra sinuosa</i>	Inampulogan
<i>Turbinaria sp.</i>	Inampulogan, Natunga, Nauay, Nagarao
<i>Hydropora rigida</i>	Inampulogan
<i>Hydropora sp.</i>	Inampulogan, Nauay
<i>Leptoria sp.</i>	Inampulogan, Natunga, Nauay
<i>Montastrea sp.</i>	Inampulogan, Nauay
<i>Platygyra sp.</i>	Inampulogan, Natunga, Nauay, Nagarao,
<i>Halomitra philippinensis</i>	Inampulogan
<i>Fungia sp.</i>	Natunga, Us-usan Is., Nauay
<i>Fungia gravis</i>	Sebaste
<i>Herpolitha simplex</i>	Sebaste
<i>Podabacea crustacea</i>	Sebaste
<i>Millepora sp.</i>	Sebaste, Natunga, Nauay
<i>Millepora tenera</i>	Inampulogan, Nauay
<i>Lobophyllia sp.</i>	Inampulogan, Sebaste
<i>Galaxea fascicularis</i>	Inampulogan, Sebaste
<i>Echinophyllia sp.</i>	Inampulogan
<i>Pectinia lactuca</i>	Inampulogan, Sebaste
<i>Seriatopora sp.</i>	Us-usan Is., Nauay
<i>Seriatopora hystix</i>	Inampulogan, Sebaste
<i>Stylophora sp.</i>	Sebaste
<i>Goniopora sp.</i>	Sebaste
<i>Goniopora stokesi</i>	Sebaste
<i>Porites sp.</i>	Us-usan Is., Nauay, Nagarao
<i>Porites cylindrica</i>	Inampulogan, Sebaste
<i>Porites lutea</i>	Inampulogan, Nagarao
<i>Porites nigrescens</i>	Sebaste
<i>Nepthea sp.</i>	Natunga, Nauay, Nagarao
<i>Sarcophyton sp.</i>	Natunga, Nauay, Nagarao
<i>Lobophyton sp.</i>	Natunga, Us-usan Is., Nauay, Nagarao
<i>Sinularia sp.</i>	Nagarao, Nauay
<i>Agalaophenia sp.</i>	Nagarao, Nauay

Fish Fauna

Major commercial species of fish caught off the waters of Sibunag Municipality are siganids, groupers, and sea catfish. Marine products taken other than fish are shrimps, blue crabs, lobsters, sea cucumbers and seaweeds. There is not enough data on fish catch in Sibunag due to scattered landing sites and improper monitoring of fish catch, resulting in lack of proper fish catch data.

Reef fishes of minor commercial significance but are nonetheless important to the ecosystem of the area have been reported in some reef areas. However, the reef in Sebaste was reported to have almost no fish.

CLIMATE

Climatic Type

Sibunag's climate is of Type I Classification, i.e., it has two pronounced seasons, dry from November to May and wet from June to October. The dry season from November to February coincides with the coming of northeast monsoon whose moisture-bearing winds drop their rainfall on the eastern coasts of the Bicol Region and Eastern Visayas and reach the municipality already in a relatively dry state. The dry season from March to May is even drier as the slow trade winds that pass through the eastern islands of the Bicol and Eastern Visayan regions reach the town after experiencing orographic precipitation. The wet season from June to October coincides with the southwest monsoon that dumps its moisture directly into the more open southern coast of Guimaras Island. This is the wind system and its hot wet season that allows farmers to plant their crops in the absence of irrigation facilities.

Temperature

Figure 2.2 shows the study area to have monotonously high temperatures throughout the year, but with the months of March to May and July to September exhibiting high temperatures. Actually, the mean annual temperature in the place is 27°C, which is the same as that of the country. The hottest mean temperature is 28.3°C. These high temperatures correlate with Sunny days, that with irrigation the town should be able to increase agricultural productivity.

Rainfall and Humidity

The average monthly rainfall in the town and surrounding areas is 197.03 centimeters that is below the national total of 237 centimeters. This could be attributed to the interior location of Guimaras Island within the Visayas Region particularly between the islands of Panay and Negros. The mean monthly relative humidity is high at 84.51 percent while the average monthly number of rainy days is 11.4. Figure 2.1 shows that the rainy months are June to October while the dry months are from November to February. This is corroborated by Figures 2.2 that show the months of June to December having high relative humidity.

Figure1- Rainfall

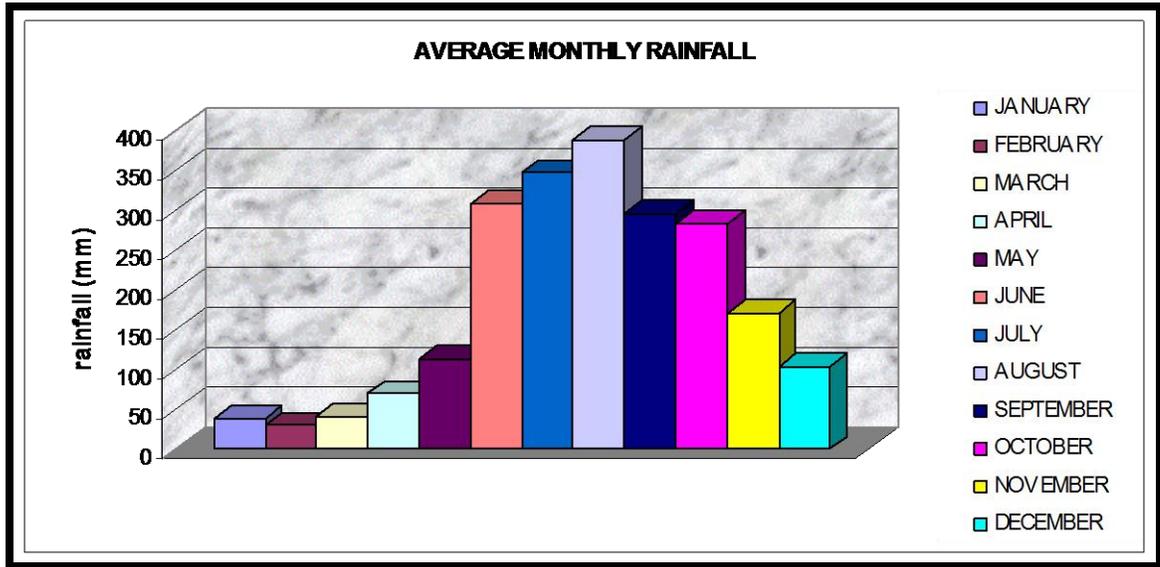
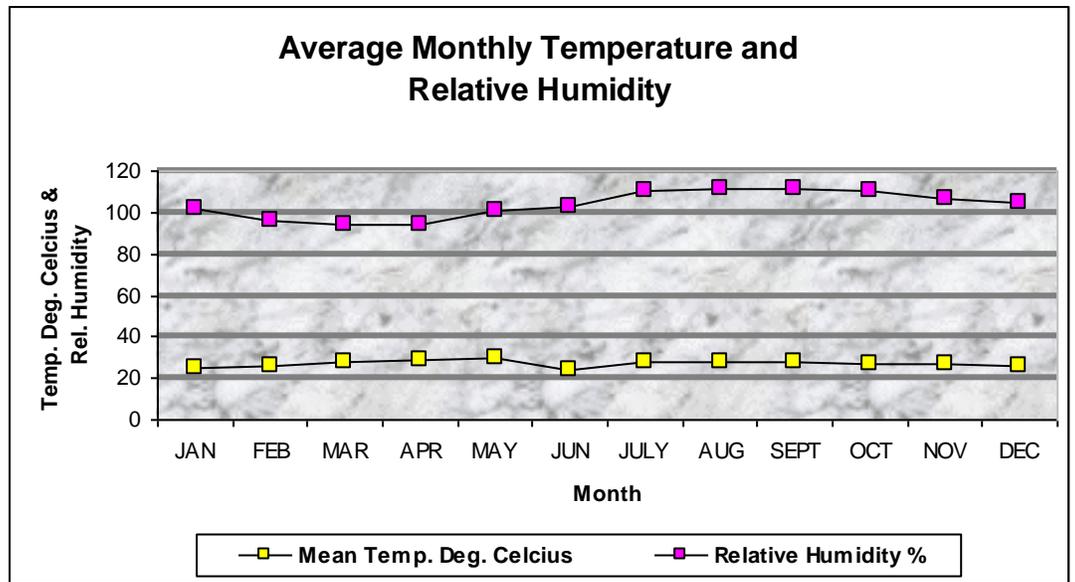


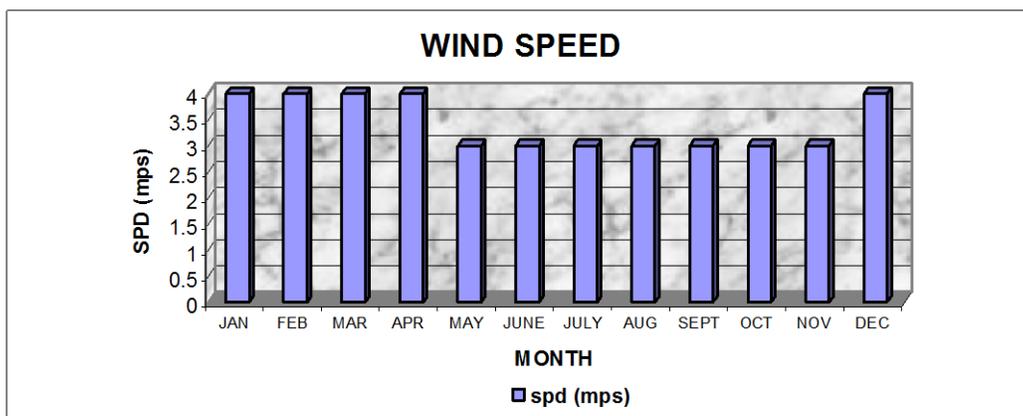
Figure 2- Temperatures and Relative Humidity



Winds and Storms

The predominant wind flow comes from north-northeast (northeast monsoon) from October to April, and the southwest (southwest monsoon) from May to September. The high wind speeds occur from December to April (Fig.3). The southwest monsoon brings much rainfall to the area, particularly as it blows in a northeasterly direction across Guimaras Strait from where it further absorbs more moisture. The northeast monsoon blowing from November to February and the trade winds blowing from March to May are relatively dry winds that bring limited rainfall to the area.

Figure 3-Wind Speed



FRESHWATER RESOURCES

Inland Surface Water

Sibunag has northwest-southeast trending rivers and creeks following the topographic configuration of the land. The most prominent and important river of the town is the Sibunag River from which the municipality got its name. It is a large river that has its headwaters in Brgys. Millan, Tanglad, Ravina Sur, Ayangan and Concordia Norte. The valleys around it are used for rice growing, and along its course; irrigation water is diverted to the farmlands. It debouches into the coast of Brgy. Alegria where its silt provides nutrients to the phytoplanktons and mangrove trees. This explains the presence of fishponds near the mouth of the river.

The Sibunag River has an important tributary - the Palong Creek whose headwaters come from Brgy. Maabay but flows through Brgy. Dasal. There is also the significant Sebario River in Brgy. Sebaste whose deposited silt supports a growth of mangrove trees near its mouth. The other creeks with names are the Panguiao Creek in Brgy. Dasal, Bigo Creek in Brgy. Bubog and Balabag Creek in Brgy. Sebaste which is actually a tributary of Sebario River.

Groundwater

Being hilly, the depth of the water table in most parts of Sibunag is not very close to the ground surface and wells have to be dug rather deep to reach the water table. However, in watershed areas and along the banks of rivers and creeks, groundwater is readily available with the water table being near the surface. Along the Sibunag River, groundwater is plentiful and this can be tapped for irrigation and domestic and industrial use. It is observed that in the islands with small watersheds and being close to the sea, freshwater is sometimes insufficient.

On hillsides when there are breaks in the water table, springs occur and these can be tapped for domestic water supply. In fact, in Brgy. Alegria, there is a large spring which the community has tapped in the sense that they pump the spring water to a water tank on top of a hill and allow the water to flow to the houses by gravity. There is a need to reforest the hills of Sibunag if sources of water like springs, groundwater and rivers and creeks can be sustained even during the dry months. Trees catch and absorb rainwater and allow it to flow back slowly to the lowlands and the sea, thus, giving time to residents to utilize the basic resource.