

## **Overview of the Siargao Comprehensive Tourism Master Plan**

The Siargao Islands was selected by the Tourism Infrastructure and Enterprise Zone Authority (TIEZA) as one of its Master Planned sites in the Philippines, considering the intent and objectives of the RA 9593 Tourism Act 2009. The Master Plan for Siargao Islands will be used as a basis in the formulation of the 25-year Comprehensive Tourism Master Plan in harmony with the National Tourism Development Plan (NTDP), the CARAGA Regional Development Plan, and the Siargao Islands Protected Landscapes and Seascapes (SIPLAS) Management Plan, among other existing higher-level plans.

The Siargao Islands Masterplan anchors on the tourism potential of the study area towards a comprehensive approach in addressing sectoral concerns – social, economic, environmental, institutional, and infrastructure, among others. As the study is comprehensive in scope, there is a need for more detailed studies for validation and implementation.

### **Study Area Profile**

Siargao is composed of nine (9) municipalities with 48 islands and islets. The project area (i.e., mainland Siargao and Socorro) covers a land area of 62,796 hectares and a marine area of 216,118, for a total of 278,914 hectares of protected landscape and seascape.

The SIPLAS or Siargao Islands Protected Landscapes and Seascapes, has a high potential for ecotourism given its diverse natural tourist attractions such as the internationally known surfing areas, long stretches of sugarfine white sand beaches, rock formations, lagoons, lakes, springs, caves, and vast area of mangrove forests. Hence, the Conservation Research Mapping and Systems Development (CRMSD) under the Department of Tourism (DOT) has identified Siargao as one of the key ecotourism sites in the Philippines.

The SIPLAS Management Plan subdivides Siargao Islands into eight (8) Tourism Management Areas (TMAs) to better manage its development. Siargao Islands is divided as follows:

- TMA 1 Surf Town – General Luna
- TMA 2 Island Capital – Dapa
- TMA 3 Gateway and Innovations Hub – Barangays Sayak and Esperanza of Del Carmen
- TMA 4 Western Siargao – (the rest of) Del Carmen
- TMA 5 Game Fishing Capital – Pilar
- TMA 6 Nature and Beach Destination – Burgos and San Isidro
- TMA 7 Northern Gateway – Santa Monica and San Benito
- TMA 8 Eco-Adventure Island – Socorro

With a population of 116,587 based on the 2015 Population Census, Siargao Islands make up 20% of the total population in the province of Surigao del Norte. Having been recognized as one of the top surfing sites in the world, there has been an influx of tourists in Siargao. The rise of its tourism industry called for increased business and employment opportunities, hence increasing the population. Among the fastest-growing municipalities in Siargao are General Luna (2.13%), Socorro (1.81%), and Del Carmen (1.36%), which are among the top

tourist destinations in the province as well. An additional increase in population in these municipalities can be expected as their tourism industry further develops.

### **Tourism Arrivals and its Impact**

Blessed with its natural features, Siargao Islands is the most visited tourism destination in the province of Surigao del Norte. It first reached its 100,000 mark on tourist arrivals in 2013 when direct flights became available in Sayak Airport. At present, its tourist arrival reached 135,429. General Luna is the top-visited destination in Siargao, contributing 39.3% of tourist arrivals. The concentration of tourists in General Luna can be mainly attributed to the well-known Cloud 9 and that accommodations, facilities, and services are concentrated in General Luna. This is followed by Socorro with 27.7%.

Given the rate of tourism arrivals, Siargao is projected to reach 2,603,295 arrivals by 2050, roughly ten-fold its expected arrival in 2020. In addition, this projection is higher than that of SIPLAS (2,169,693). General Luna remains the most visited in the projections with 853,905.

While the tourism industry contributes significantly to the economy in the short run, it has caused some sectoral concerns for the residents. Siargao's overall development has had difficulty in catching up with the sudden boost in the tourism industry. Among the top concerns are related to the environment preservation, waste management, capacity of healthcare facilities, cultural identity, and food security.

### **Tourism Framework Strategy**

With the increasing recognition that Siargao Islands is receiving, there is a pressing need to plan for the development direction of the Islands that would mitigate the maximize the gains from the tourism, mitigate its adverse effects, and allow for the sustainability of the environment and the livelihood of residents.

For tourism to be sustainable, it must take care of the community. That is why a series of public consultations and focus group discussions were conducted to assess the immediate needs and long-term aspirations of Siargaonons. The ten common themes were identified, namely: improve quality of life; enhance all leisure, nature, forest and agricultural assets; preserve and protect the Islands' identity; preserve cultural resources; establish healthcare facilities in all municipalities; strict implementation of laws and policies; public beach access; proper waste management; food security; and improve infrastructure.

Enveloped in this framework are five major tenets, namely: growth markets, enhancing the visitor experience, preserving the environment, providing authentic experiences, and building capabilities for tourism.

In consideration of the top aspirations of Siargaonons, the vision statements inherent in the CLUPs of all the municipalities, as well as the results of the SWOT Analysis; the team was able to arrive at a Tourism Framework

Strategy that can be summarized as follows: "A world-class destination that preserves the environment, celebrates Siargaonon people and values, and provides authentic visitor experiences."

## **Tourism Management Areas**

### **TMA 1 Surf Town - General Luna**

The municipality of General Luna has significantly boosted Siargao Island's tourism for the past years, and is one of the main reasons why the island continues to hold the title of being the Surfing Capital of the Philippines. General Luna is considered as the main tourist hotspot on the island, with around ten (10) surf breaks, more than twenty (20) resort accommodations and commercial establishments, and four (4) islands open for tourists.

At present, developments continue to rise and tourists continue to multiply; and with this rapid increase of commercial developments in General Luna, there is an urgent need to provide and strictly implement a Land Use Plan that will complement and aid to the adverse effects of over-development the town is currently experiencing.

### **TMA 2 Island Capital - Dapa**

The Island Capital comprises the entire municipality of Dapa. Dapa is considered to be the capital town of Siargao Island. It is known as the main commercial area on the island, as importation of goods and services go through the Dapa town center, and are then distributed to the rest of the municipalities. Because of the towns' advantageous location, it has been dubbed as the center of education, trade and commerce in the island. Additionally, locals and visitors currently traverse through the Dapa Ferry Terminal from neighboring islands almost daily; which makes Dapa the busiest town on the island. Many offices of local government agencies are located in this municipality such as the Provincial Government of Surigao del Norte Capitol, SIARELCO, DENR (Department of Environment and Natural Resources), PAMB (Protected Area Management Board), Philippine Ports Authority, to name a few.

### **TMA 3 Gateway and Innovations Hub - Barangays Sayak and Esperanza of Del Carmen**

The Gateway and Innovations Hub, also known as TMA 3, is composed of two (2) barangays: Sayak and Esperanza, which are both in Del Carmen. TMA 3 has a total land area of 1,182.7 hectares and a total population of 1,970 in 2019 (based on the Population Projection by Barangay 2011-2022 of the Comprehensive Land Use Plan of Del Carmen). The terrain of these two barangays is generally flat, and a spring serves as a water source for an ice plant, the public market, and LGU facilities. The area has a vast mangrove area, and the reef near the mangroves is the sanctuary for various and abundant hard corals.

### **TMA 4 Western Siargao - (the rest of) Del Carmen**

The Western Siargao, also known as TMA 4, is composed of fifteen (15) barangays of Pilar: Antipolo, Bagakay (Alburo), Bitoon, Cabugao, Cancoy, Caub, Del Carmen, (Poblacion), Domoyog, Halian, Jamoyaon, Katipunan, Lobogon, Mabuhay, Mahayahay, Quezon, San Fernando, San Jose, (Poblacion) and Tuboran. It has a total land area of 7,302 hectares and has a population of 35,851 in 2019 (based on projected population).

### **TMA 5 Game Fishing Capital - Pilar**

The Game Fishing Capital, also known as TMA 5, is composed of fifteen (15) barangays of Pilar: Asinan, Caridad, Centro, Consolacion, Datu, Dayaohay, Jaboy, Katipunan, Maasin, Mabini, Mabuhay, Pilaring, Punta, Salvacion, San Roque. It has a total land area of 6, 112.1 hectares and has a population of 27,415 in 2019 (based on projected population).

### **TMA 6 Nature and Beach Destination – Burgos and San Isidro**

The two (2) eastern municipalities of Siargao, Burgos and San Isidro, are destinations that are still unfamiliar to most visitors of the islands. Many local and international tourists know little about it because most visitors concentrate on the fame of Cloud 9. However, these two towns offer surf spots favorable to both beginners and professional surfers. Comparable to surf spots in General Luna, the mellow waves of Burgos and San Isidro turn into barrels of surf breaks when they get bigger.

Aside from its emerging tourism sector, TMA 6 is also rich in agricultural areas that will surely sustain its growing food demand. Bounded by Santa Monica, San Benito, and Pilar, it will surely have the capacity to support the agricultural sector of neighboring towns.

### **TMA 7 Northern Gateway – Santa Monica and San Benito**

The Northern Gateway, also known as TMA 7, is composed of six (6) barangays in San Benito: Bongdo, Maribojoc, Nuevo Campo, San Juan, Santa Cruz, Talisay; and 13 barangays in Santa Monica: Abad Santos, Alegria, Bailan, Garcia, Libertad, Mabini, Mabuhay, Magsaysay, Rizal, T. Arlan, and Tangbo. It has a total land area of 12, 593.7 hectares and has a population of in 2019 (based on projected population).

#### **San Benito**

Agri-production, marine sanctuary management, forest and watershed management, tourism, waste management (establishment of sanitary landfill or SLF)

#### **Santa Monica**

Agri-production (rice and corn), forest and watershed management, mangrove, MPA management, tourism Burgos and San Isidro share similar social-economic development, potentials for development and attractions. These attractions are scenic beaches, swimming beaches, highland areas, caves, falls and surf spots. In terms of agriculture, Burgos and San Isidro use lagoon and natural ponds as small water impound system for crop irrigation.

### **TMA 8 Eco-Adventure Island – Socorro**

The approved master plan of the Bucas Grande Flagship Tourism Enterprise Zone highlights ecotourism destinations with Socorro as its primary tourist service center. Existing sites include Sohoton Bay, Kanlanuk Bay, Socorro town proper, and San Roque.

## **Environmental Recommendations**

Comparing the estimated physical carrying capacity of the island of 733,990 persons per day to the projected daily population by the year 2050, which is 13,572 persons per day\*, Siargao can physically accommodate both current and future demands up to the year 2050 (at full development). However, based on the assessment of the other components of carrying capacity, such as the islands' infrastructure, it is apparent that Siargao is already unable to properly sustain its current tourism demand (e.g., power, water, solid waste). Siargao's tourism may continue to rise in the following years but it will be at the expense of reduced quality of visitor experience and increasing negative impacts on the local community and natural environment. Therefore, it is recommended that specific interventions be made in the various sectors of development.

The approach in providing recommendations on the preservation of the environment involves biodiversity conservation/protection, disaster resilience, and providing development guidelines in line with the E-NIPAS and SIPLAS, among others. Different strategies were proposed to conserve flora and fauna, marine and aquatic resource, and water supply sources; to improve air quality and waste management; to protect coastal areas, mountain and limestone; and to address issues on informal settlements and noise pollution.

On the other hand, disaster resilience and climate change adaptation are hinged on seven (7) major targets, such as: food security, water sufficiency, environmental and ecological stability, human security, climate-friendly industries and services, sustainable energy, as well as knowledge and capacity development.

Institutional Management - Environmental Protection and Enforcement is a vital issue in implementing the current legal setup. Prior to the approval of any new developments in the Island, its impact on the people and the community in terms of environmental or ecological balance and the measures that will be undertaken to prevent or minimize the adverse effects must be properly assessed.

In this regard, situational management recommendations focus on providing guidelines on the current legal set-up, integrating the master plan to local government plans, and changes arising from the E-NIPAS Act and the Integrated Protected Area Fund (IPAF).

Solid Waste Management - The general scenario of solid waste management in Siargao may be characterized by the following: poor implementation of ordinance on segregation at source, non-implementation of segregated collection system, lack of waste diversion facilities such as materials recovery facility (MRF) and composting facility, lack of buy-back centers/junkshops for the sale of recyclables, weak garbage collection system, absence of final disposal facility and continued operation of open dumpsites. In this regard, recommendations for immediate, short-, medium-, and long-term are provided. A waste-to-energy facility is also recommended which also addresses the need for power supply on the island.

### **Recommendations: Establishment of watershed facilities in the Tourist Management Areas (TMA)**

- TMA 6: Burgos and San Isidro
  - Considering the rise in sea level, wave actions or storm surges, and sea surface temperature, the coastal fisheries of Burgos and San Isidro are highly vulnerable.

Due to these climatic events, resilient architecture and planning are a major factor in improving the potential of its coastal areas for tourism purposes.

1.) **Burgos**

- Marine Protected Area (MPA) management, agroforestry and crop development, and forest and watershed management

2.) **San Isidro**

- Forest and watershed management, agricultural production (rice and coconut), mangrove protection and management, agroforestry, agri-fishery, tourism, and urban settlement management

TMA 7: Santa Monica and San Benito

1.) **San Benito**

- Agri-production, marine sanctuary management, forest and watershed management, tourism, waste management (establishment of sanitary landfill or SLF)

2.) **Santa Monica**

- Agri-production (rice and corn), forest and watershed management, mangrove, MPA management, tourism Burgos and San Isidro share similar social-economic development, potentials for development and attractions. These attractions are scenic beaches, swimming beaches, highland areas, caves, falls and surf spots. In terms of agriculture, Burgos and San Isidro use lagoon and natural ponds as small water impound system for crop irrigation.

- **Suggestions for Development and Implementation**

- 1.) Assess the condition of the water production area/watershed and the water quality of all existing and potential sources of water. Prioritize water production areas for protection, rehabilitation, and management.
- 2.) Demarcate on a map and on the ground line the priority water production areas.
- 3.) Identify appropriate on-site managers for these water production areas (e.g., water districts, barangay LGU, rural water associations, and private establishments such as large resorts, among others), and hold discussions and negotiations with them on the sustainable use and management of the water production areas.
- 4.) Facilitate the signing of agreement between the PAMB and the on-site managers for the management of the water production areas.
- 5.) Assist the on-site managers in the preparation of water production/conservation area management plans for each identified area and submit to PAMB for approval.

- **Multiple Use Zones (MUZ)**

MUZ: Water Conservation Areas

Water conservation areas are estimated to cover 5,296 hectares. Initially, watershed rehabilitation and protection will focus on catchment areas that support the Level 3 systems of four water districts and water sources of barangays.

Tourism Management Area	Target Area for Watershed Management
TMA 1 (General Luna)	Brgy. Malinao (Northwest), Brgy. Consuelo (Western)
TMA 2 (Dapa)	Brgy. Osmena (Southeast), Don Paulino, Union (North)
TMA 4 (Del Carmen):	Brgy. Roque
TMA 5 (Pilar)	Brgy. Datu
TMA 6 (Burgos & San Isidro)	Brgy. Bitaug (Southwest) Brgy. Santo Nino (South) Brgy. Macapagal, Roxas (South) Brgy. Santa Paz
TMA 7 (Santa Monica and San Benito)	Brgy. Garcia, (Southwest), Rizal (Southeast), Mabuhay (East) Magsaysay (Core), Libertad (Core), Brgy. Talisay (Poblacion – San Isidro), Nuevo Campo, Santa Cruz Pob., San Juan, Bongdo (inland)
TMA 8 (Socorro)	Brgy. Rizal