

This 5-Year Marine Protected Area (MPA) Management Plan was developed by the Local Government of Jagna, Bohol and its constituents, with technical assistance from the DENR-USAID Philippine Environmental Governance (EcoGov) Project.

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EXECUTIVE SUMMARY

The Municipal Fisheries and Aquatic Resources Management Council observed the decline in fish catch due to illegal and destructive fishing practices, and the destruction of marine habitats. This, together with the results of the Participatory Coastal Resource Assessment (PCRA) conducted in 2002 encouraged the Marine Protected Area - Technical Working Group (MPA-TWG) and the People's Organization (POs) of coastal barangays. The effort is aimed to protect, conserve, rehabilitate and replenish the coastal and marine resources of the barangay to ensure economic development and to boost the local tourism industry, and most importantly, to ensure that the future generation benefit s from these resources.

The Jagna Marine Protected Area Management Plan was formulated to serve as guide in the management of the sanctuary that includes among others fund sourcing, policy formulation and day-to-day operation. This plan was prepared through a series of participatory workshops and consultations. The plan is composed of four (4) parts which are briefly discussed below.

Chapter I introduces the rationale and the purpose of this sanctuary management plan, its historical perspective, the scope of the plan and its legislative authority. In general, this management plan aims to provide direction to the MPA Managers in carrying out their role in managing the sanctuary and will serve as the legal basis in the implementation of policies, regulations and activities. The plan covers a five-year period of action, from 2007 to 2012.

Chapter II discusses the seven (7) major components of the management content: regional and municipal setting which describes the physical and demographic profile of the municipality as well as the socio-economic setting of Barangay Libertad; the present condition of the coral reef resources; existing uses of the coastal environment; existing legal and management framework; potential threats and implications for management; the management plan itself, which takes into consideration the basic elements of good governance (participatory, accountability and transparency); and, the penal provisions. The Plan focuses on six (6) major programs, namely: administrative/organizational; enforcement; monitoring and evaluation; information, education and communication (IEC)/advocacy/capability-building; livelihood; and, sustainable financing.

Chapters III presents a glossary of the terms used in the document, and references and suggested reading materials. The action plans for the different management programs are presented in Annex I.

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CHAPTER I. INTRODUCTION

A. PURPOSE AND SCOPE OF THE PLAN

The municipal waters of Jagna used to be abundant in marine and aquatic resources until in the 1960's when illegal fishing activity, called the "muro-am,i" was introduced by Liloy Albino of Cabalian, Southern Leyte. Muro-ami operated for 20 years, and eventually destroyed the once rich condition of the coastal areas of Jagna. Adding to the worsening situation is the utilization of other illegal and destructive fishing practices such as trawl fishing or baling-baling, bahan, dynamite fishing and sediwi which is quite similar to the muro-ami, in the mid-1990's.

In 1999, the Local Government Unit (LGU) of Jagna signified its intention to avail of the Community Based Resource Management Project (CBRMP), which is a multimillion peso loan/grant program being implemented by the Department of Finance. However, the said proposal was not pursued by the new administration because of other priority projects.

Although the proposal was shelved, some people who understood the positive effects of the program opted to initiate rehabilitation activities by establishing their own version of "marine sanctuaries." The LGU, upon recognizing the positive attitude and interest shown by the people, took this as an opportunity, and provided funds and requested technical support from the Bohol Environment Management office through the Coastal Resource Management Project (CRMP).

On June 9, 2001, the Municipal Council enacted Municipal Ordinance No. 06-09-2001 declaring certain portions of the municipal waters particularly in the nine barangays of Jagna, namely Can-uba, Ipil, Cantagay, Bunga Mar, Pangdan, Nausok, Larapan, Tubod Mar and Naatang, as Marine Sanctuaries. The people's organizations of the nine coastal barangays were organized and capacitated to take charge in the management and operation of the established marine sanctuaries.

On April 10, 2002, Municipal Mayor Exuperio Lloren issued Executive Order No. 06 appointing 15 committed individuals from the LGU and private sectors to compose the MCRM-TWG. The LGU then came up with a clear cut policy and a sustainable plan. On May 21, 2002, Mayor Lloren then issued Executive Order No. 4, creating the Municipal Fisheries and Aquatic Resource Management Council (MFARMC). One main function of the Council is to review existing fishery laws, and it facilitated the drafting of and codification of the local fishery code. The Council also played an important role in the preparation of the Municipal CRM plan and even pushed for the establishment of marine sanctuaries.

A series of seminars and workshops was conducted in partnership with BEMO and BFAR, which included the Coastal Resource Assessment made on June 24 to July 5, 2002 in all 14 coastal barangays of Jagna.

This Marine Protected Area (MPA) Management Plan covers all marine sanctuary areas in Jagna. It outlines the management guidelines and strategies for the marine sanctuaries over a period of five (5) years, i.e. from 2007 to 2012. Moreover, the improvement of the socio-economic situation of the people and their dependence on coastal and marine resources are given attention by initiating strategic measures and activities necessary in maintaining biological, ecological and economical balance.

B. LEGISLATIVE AUTHORITY FOR THE ACTION

The MPA Management plan was conceptualized due to the fact that there is overwhelming evidence of marine resource degradation resulting from uncontrolled fishing activities of some fishermen whose minimal catch forces them to employ illegal means. The present municipal government recognizes the need to safeguard, preserve, protect and conserve the natural resources as a means of achieving food security for generations to come. Through a strong collaboration among the concerned agencies and various stakeholders, legislative initiatives are being adopted and implemented.

Members of Technical Working Group served as the drafting committee members for the preparation of this plan, and will eventually become core members of the MPA Management team of the municipality.

CHAPTER II. SITUATIONER

A. REGIONAL AND MUNICIPAL SETTING

Brief History

Jagna appears in historical documents as early as March 15, 1565 when Miguel Lopez de Legazpi was driven by unfavorable winds towards Jagna Bay after his expedition left Camiguin Island and headed for Butuan. Three days later, the first mass in Bohol was celebrated in Jagna shores by Fr. Andres Urdaneta and other friars aboard the flagship "San Pedro."

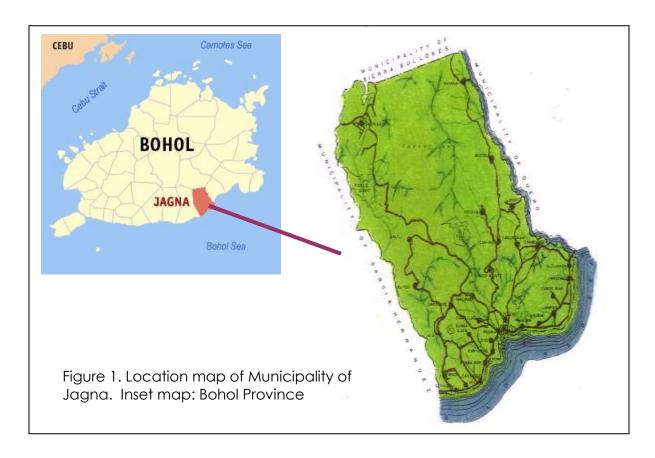


The Augustinian Recollect priest, Father Ambrosio Iturriaga, was the author of the Libro de Cosas notables of Jagna. Father Iturriaga clearly relates that 1631 was the year when the missionaries of Society of Jesus "erected the mission of Jagna under the invocation of Saint Michael Archangel" and September 29 has been the fiesta of the parish of San Miguel de Jagna since then.

Three towns bounded Jagna in 1850. These were Guindulman, Loboc and Dimiao. In 1879 the number was reduced into two in the wake of the separation and creation of new towns and parishes. These were García Hernández, which is ten kilometers west, and Duero, which is nine kilometers east.

Physical Profile

The Municipality of Jagna is 63 kilometers away from Tagbilaran City, the capital of Bohol, and it takes about one hour of travel by bus. With its modern port facilities, which serve as the entry and exit point to and from Mindanao, sea travel takes only 5 to 8 hours by ship to Cagayan de Oro City and Nasipit.



Jagna is bounded by the Municipality of Garcia Hernandez to the west, Municipality of Sierra-Bullones to the North, Municipality of Duero to the East and Mindanao Sea to the south. Comprising of 33 barangays, it has a total land area of 12,063 hectares, of which 2.62% comprises the Metro Jagna while the remaining 97.38% comprises the rural areas.

Of the 33 barangays, fourteen are coastal barangays. These are Can-uba, Ipil, Cantagay, Bunga Mar, Can-upao, Pangdan, Nausok, Larapan, Tubud Mar, Looc, Pagina, Alejawan, Poblacion and Naatang

Demographic Profile

As of 2000, the total population of Jagna is 30,643 and the total number of households is 5,957 (NSO 2000). Based on the Age-Sex Structure of the municipality, the female reproductive group constitutes 45% of the population while dependents comprise 40% of the population, or a ratio of almost 1:1. In 2005, the total population

is estimated at 32,107, and the total number of households is 6,200. The population per barangay is presented in Table 1.

Table 1. Population and Number of Household Per Barangay

Barangay	Total Population	Total No. of Household
JAGNA	32,107	6,200
1. Aleiawan	827	164
2. Balili	1,289	225
3. Boctol	1,175	231
4. Bunga Ilaya	811	161
5. Bunga Mar	1,307	251
6. Buyog	343	66
7. Cabungaan	1,155	201
8. Calabacita	1,589	290
9. Cambugason	970	191
10. Can-ipol	428	79
11. Canjulao	2,501	492
12. Cantagay	823	164
13. Cantuyoc	873	180
14. Can-uba	365	72
15. Can-upao	1,863	336
16. Faraon	571	114
17. lpil	304	60
18. Kinagbaan	430	82
19. Laca	293	55
20. Larapan	746	139
21. Lonoy	1,198	228
22. Looc	775	159
23. Malbog	1,076	207
24. Mayana	2,025	385
25. Naatang	549	106
26. Nausok	330	75
27. Odiong	1,036	208
28. Pagina	1,251	224
29. Pangdan	1,074	212
30. Poblacion	800	168
31. Tejero	1,398	281
32. Tubod Mar	546	119
33. Tubod Monte	1,413	275

The ten most populated barangays are Canjulao, Mayana, Can-upao, Calabacita, Pagina, Balili, Lonoy, Tejero, Bunga Mar and Cabungaan. The ten least

populated barangays include Ipil, Buyog, Nausok, Can-uba, Laca, Can-ipol, Kinagbaan, Faraon, Naatang and Tubod Monte.

Jagna has a young population considering the fact that those aged 35 years old below total 20,422 or 66.69% of the total age – sex population.

Socio-Economic Profile

The major means of livelihood in Jagna are farming and fishing. Farmers, which comprise the major occupation group in almost all the barangays, also include ornamental/other plant growers, farm workers, and livestock and dairy farmers. The fishermen consist of inland and coastal water fishermen.

As of 2000, there are 781 reported Overseas Contract Workers (OCWs) from Jagna, of which 54% are male while 46% are female (NSO 2000). Based on the Rapid Profiling of Migrant Workers of Jagna conducted by UNLAD-KABAYAN Migrant Services in 2002, there are 742 migrant workers in Jagna, approximately representing around 3% of the total population of Jagna and supporting up to 15% of the total households in the municipality.

Jagna is the center of trade and commerce in southeastern Bohol. It is a bustling town with a few medium, several small and a great number of micro enterprises, with varying number of employees. Most of the enterprises are into trading, particularly retail of various types and services. Only a few are into manufacturing and agribusiness. These establishments facilitated the influx and availability of good services in the locality. The employment and income these generate help reduce poverty.

AGRICULTURE

Crop Production

Several areas in Jagna are suitable for crop production. Root crop production includes camote, cassava, gabi and ubi. Though, mostly grown as backyard production, these serve as cash crops of the farmers. However, some upland barangays use root crop as substitute for rice in times of scarcity. Peanuts are also grown in Jagna and particularly abundant in Tubod Mar and are processed into various peanut products and are sold in the local market. The root crops are also processed into traditional delicacies either for home consumption or as source of additional income for the women.

Among the root crops, it is the ubi which has significantly increased its production volume. The Ubi Project of the Unlad Bohol which is into the forward and background linkaging of the ubi has influenced this development. In partnership with the Munipal Agriculture Office (MAO), both entities are assisting in the formation and strengthening of the ubi farmer organizations, in facilitating technical trainings and in ensuring improved production.

Livestock and Poultry

Generally, there is no full-scale commercial production of livestock and poultry in Jagna. Production of livestock and poultry products is basically backyard farming for home consumption. Yet, local production is not even enough to meet the demands of the local market so these are sourced out from neighboring towns, and in the case of poultry products, these are purchased from out outside the province.

Jagna has the potential to produce livestock and poultry products for its consumption capacity. It is important to come up with a comprehensive and integrated plan that addresses the concerns from production and post harvest technologies to marketing.

Fishery and Aquatic Resources. Fish products are mostly for local markets. In 2002, the volume of fish production from Jagna and Mindanao Sea reached 386 metric tons (150 m. tons of tuna, 150 m. tons of flying fish, and 86 m. tons of assorted fish). Inland fishpond area is estimated at 4,200 sq. meters located in 8 barangays. Majority of the fish catch are sold either to middlemen (57%) or directly sold to their neighbors (31%).

COMMERCE AND INDUSTRY

At present, there are 500 existing commercial establishments in Jagna with a total capitalization of PhP 25,117,947.00 based on the 2005 DTI registration records. These were able to employ hundreds of people. Establishments include banks and other lending institutions, business enterprises, distribution centers, lodging accommodation, funeral parlor, pawnshops and others. Table 2 presents the number of registered small establishments in Jagna.

Table 2. Small business establishments with legitimate operations inside the Jagna Public Market (Source: Mayor's Office 2005)

Establishment	No. of Reg. Establishment	Establishment	No. of Reg. Establishment
Vegetables	35	Feeds Retailer	5
Fish Vendors	26	Banana cue vendor	-
Dry goods	52	Spices	2
Meat Vendors	11	Gen Merchandise	4
Restaurants	15	Watch, Umbrella, Shoe Repair	4
Painitan	9	Videoke	5
Fresh Flowers	4	Humba Vendors	-
Rice & Corn Retailer	40	Frozen Foods	8
Tuba retailer	2	Pharmacy	8
Tobacco	5	Salted and Dried Fish	3

The two major industries in Jagna are motorela body-building and calamay-making. Calamay is produced regularly at a volume of 20,000 pieces per month, generating a monthly income of PhP 400,000.00 for 200 calamay-makers from Canupao, Looc, Pagina, Bunga Ilaya and Canjulao.

The art of making calamay was incidentally taught to the people of Jagna by Reverend Father Mariano Gutierrez de los Dolores, OAR. This Spanish Recollect priest administered the Parish of Jagna from 1825 until his death on August 3, 1855. It is originally manufactured from rice, called "malagkit" or "pilit", finely ground and mixed with the coconut milk and sugar, cooked until mixture becomes sticky, and finally placed in side the well-polished coconut shells trimmed with a red-colored ribbon for attraction. Calamay has gained



increasing popularity among the neighboring towns and provinces in the Visayas and Mindanao. It has become a by-word so much so that the good people of Jagna are called and identified with Calamay.

Meanwhile, the bodybuilding industry that employs 20 skilled and semi-skilled workers flourishes in Barangay Pangdan and uses steel plate as raw material.

Most of the motorelas used as public utility vehicles in Jagna, as well as a few jeeps are assembled in the municipality.

Aside from Calamay making, Jagnaanons are also engaged in some century-old but still productive minor business enterprises such as tableya making in barangay Canjulao, cookies in Pangdan, pot making and "dajok" in Tejero and metal works in Poblacion.

SOCIAL SERVICES

Education.

Jagna is becoming the center of learning in the southeastern part of Bohol. Aside from the primary, elementary and secondary schools which are dispersed in the barangays, Metro Jagna's educational facilities include three elementary schools, a school for special children, three private secondary schools, the TESDA vocational school and a college institution whose students are not only from Jagna but from other towns and provinces. The Central Visayas Institute (CVI), a private secondary school has gained national recognition because of its innovative educational system.

The school enrollment is quite high in the different school levels with a teacher-student ratio of 1: 31 and 1:33 in the district schools and high school respectively but there is also a significant drop-out rate and incidence of not being able to graduate in the elementary and high school. The inability of parents to continuously support the

education of children because of poverty /lack of income is very prominent in the upland barangays. The children are then forced to find work in and out of the community.

While Jagna has a 97% literacy rate, there is always the challenge of quality and responsive education. Issues on the low performance in aptitude tests, the lack of competent teachers, low reading ability and comprehension of students, insufficient knowledge of information technology and related issues are the concerns of the educational system. However, the LGU can assist in providing for an enabling environment for the growth and development of the teachers and students. Concerns for infrastructure facilities, school equipments and supplies and financial support for capability enhancement of teachers and students are some of the areas that can be responded to.

While the formal education is the focus of the educational system, vocational and informal sector education should be enhanced based on the needs of the communities and / or the sectors. The LGU, TESDA and other concerned agencies can come up with integrated curricula for specific courses.

Health

There are three healthcare providers in the municipality: the Municipal Health Office; the Teodoro B. Galagar District Hospital under the Provincial Government and the privately-owned Lim Community Hospital. There are also a few private medical and dental clinics serving the populace. To augment the understaffed personnel of the MHO are around two hundred eighteen (218) Barangay Health Workers who provide basic healthcare remedies, who monitor malnutrition cases and who check sanitary toilets in assigned areas. The TBGDH's lack of well-trained medical practitioners and specialists is complemented by regular visits of doctors. There are also accredited and non-accredited local midwives for expectant mothers, masseurs and therapists who provide health-related services.

The Municipal Health Office and a number of pharmaceutical firms and drugstores provide the needed medicines and some medical supplies of the populace. With the establishment of the Botica sa Barangay, the people, especially those in the upland barangays, can easily avail of the over-the-counter medicines. The LGU's partnership with PHILOS HEALTH, a US-based medical NGO has provided the municipality and the TBGDH with medical equipments and supplies, medicines and particular assistance to medical cases. The training on rehabilitation management for patients afflicted with different illnesses was conducted to medical practitioners on a provincial scope.

However, especially at the TBGDH, there are inadequate medical facilities, equipments, supplies and medicines for the medical needs especially of the marginalized. There is also the evident lack of medical practitioners with specialization. Almost always, emergency and non-emergency situations have to be referred to Tagbilaran City for urgent medical attention.

As health is an important concern of human development, there is a need not only to upgrade the capability of all-medical and health providers but also for them to undergo values and attitudinal clarification. In the relationship between the medical or health practitioner and the patient, it occurs that the psychological dimension plays the major role in the cure of the patient.

An intensive information and education campaign among the people should be undertaken to raise the awareness on health-related issues and concerns. Healthcare should not only be curative treatment but more on preventive measures.

The issue of proportionate number of medical personnel especially doctors and nurses to the population should be addressed if quality medical service is to be achieved. Basic medical equipments and needed materials and supplies should also be provided.

Basic Services. Water, electricity

Jagna has an abundant supply of water but it flows to the tributaries of its neighboring towns. This condition has deprived many barangays for adequate potable water and water source for their farmlands.

Access to safe and potable water to many Metro Jagna barangays and portion of an upland barangay is provided through the Jagna Waterworks System which is classified as Level III. Except for one barangay which has yet to install its water system and another barangay with a Level III water system, the rest of the barangays are in Levels II and I.

Yet, there is about 30% of the household population in Jagna which has no access to safe and potable water. Even the municipal waterwork system has yet to replace the old and small pipes into bigger ones and has to construct a bigger water reservoir to complete the ongoing rehabilitation work. The rehabilitation is necessary for the system to effectively and efficiently provide water service and expand service coverage to coastal barangays and Metro Jagna - from Brgy. Ipil to Brgy. Pangdan.

Most of the farmlands in Jagna do not have access to water supply. A significant number of ricefields are rain-fed. While there are irrigation dams, there is inadequate water supply during the long dry seasons. This situation has an adverse effect to food security.

Water supply inadequacy is a major concern now and in the future. A comprehensive plan to solve the issues for potable and safe drinking water and to ensure the supply of water to the farmlands especially to the ricefields is a primary necessity.

While the barangays in Jagna are 100% energized and about 97% of all households have electricity powered by the Jagna-based Bohol Electric Cooperative II (BOHEO II), issues such as high power rates, intermittent power fluctuations and brown-outs, inadequate lighting systems in some streets and places particularly in the commercial areas of Metro Jagna need to be addressed by the concerned agencies. The power facility is an important utility in a community.

B. RESOURCES

1. Physical Features

Topography

The municipality is predominantly comprised of steep hills and mountains. The coastal areas are normally flat but less than a kilometer away from the shoreline, the slope changes from gently sloping to steep hills and mountains.

Beaches and Other Spots

Can-uba Beach, is about 400 meters long, proudly extends with a slight curve from the boundary of Jagna to Garcia-Hernandez. One interesting features to note is that, unlike other shores, the water along the strand is deep and seemingly non-

receding, even at ebb or at low tides.



The Bunga Mar Public Beach, on the other hand, is noted for its white sand. It is more popularly known by fishermen for being the home of manta rays (sanga).

A number of private beach resorts are also being developed. These are Paseo del Mar in Barangay Pangdan, Delilah's Rock Resort and Batong Buhay Beach Resort both in Barangay Larapan, which cater to special occasions

such as weddings, birthdays, and other anniversaries and functions.

The Alejawan Public Beach located just near the eastern estuary of Alejawan River is another potential.

Another tourist potential is the Can-upao Cave, a silent witness to the pre-Hispanic tradition of the Jagnaanons. Yet it is still under developed. In addition, barangay Pangdan has the most popular tourist attraction in the municipality- the Ilihan Hill which offers a panoramic vista of the lowlands. It is also where the national shrine of the miraculous "Birhen sa Barangay" is located, where Catholic pilgrims from various places visit and pay respect to the Most Holy Virgin.

2. Biological Resources

Mangroves

Naturally grown mangroves of 400 stands of *Bakhaw* (*Rhizophora* sp.) and 30 trunks of *Pagatpat* (*Sonneratia alba*) exist only along the coastline of Barangay Canupao. Assessment results show that majority (70%) of the *Bakhaw* species are classified matured while *pagatpat* species has more or less equal percentage of young and mature trees.

Seagrass

Participatory coastal resource assessment results conducted by BEMO and CRMP TWG in April 2002 show that there are six (6) species of seagrasses in the coast of Jagna. Barangays Can-uba and Naatang have substantial seagrass cover as well as Barangay Ipil, Can-upao and Pangdan. These seagrasses grow mostly on rocks and rocky surfaces.

Estuaries

The municipality has five major estuaries. These are located in Barangays Alejawan, Pangdan, in barangay-boundaries of Pagina-Looc and Pagina-Poblacion, and in barangay Can-upao. Secondary small estuaries also exist in Barangays Poblacion, Larapan, Looc, Can-uba, Can-upao and Naatang.

Coral Reefs and Associated Organisms

An assessment of coral reefs in 10 out of 14 coastal barangays conducted by BFAR-7 revealed that the habitat condition of the areas is rated fair with an average live hard coral cover of 43.80%. Majority of the barangays have a fair rating of live hard coral cover ranging from 29.37% to 48.33%. Only two of the barangays assessed, namely Tubod Mar and Can-upao, have good and excellent habitat conditions, respectively. However, the CRA Technical Report (2002) pointed out that the reefs are threatened by human activities since there is a trace of dead corals with algae as well as coral rubbles in Barangays Ipil and Pangdan. Barangay Pagina, on the other hand, has no corals at all since the town's port is found in this area.

A total of 146 species from 27 families of coral reefs fishes were observed within the reefs of Jagna. Majority of the fish species noted in the coral reef ecosystem were the non-target species. Non-target fish species such as damselfishes and wrasses were varied and diversified compared to other species. Conversely, target species, such as parrot fishes and surgeon fish, were common in the area. Jagna reef obtained a mean of 9.52 diversity rating.

Common invertebrates observed were mostly sea urchins and sea stars.

Other important marine species in the locality are the manta rays, which are considered the main source of income of fisherfolks in Barangay Bunga-Mar. The

fishing of manta rays is totally banned after the said species have been declared endangered by the DA-Bureau of Fishery & Aquatic Resources (BFAR). Flying fish (Bangsi) is considered highly commercial species which have been noted a great volume of fish catch a year of which is especially noted during the months of April to May.

C. Existing Uses

Of the 14 coastal barangays, eight barangays serve as recreational venues for swimming and picnicking. There are public and private beach resorts, and all are for commercial purposes.

Based on the actual research made by some local historians and culture advocates, there are coastal barangays, such as Barangays Can-upao, Larapan and Can-uba, where wooden coffins are buried. These support the tradition that the pre-Hispanic community of Jagna would bury their dead along the caves in these areas.

As Jagna Bay was the sight of the landing of Legaspi's fleet in 1565, the whole coastal area has become a venue for the annual fluvial procession or the sakay-sakay of the centuries-old ivory icon of St. Michael, the archangel, to commemorate the victory of Jesuit missionaries and early Jagnaanon against the invading pirates from Mindanao.

The modern port in Barangay Looc being managed by the Philippine Ports Authority serves as the only gateway from Bohol to and from Mindanao outside of Tagbilaran City. However, its presence has somehow caused a hindrance in the establishment of marine sanctuaries in Barangays Looc, Pagina and Poblacion. There is also a fish port in Barangay Bunga Mar, but this has remained unused until now.

D. EXISTING LEGAL AND MANAGEMENT FRAMEWORK

As a complement to the R.A. 8550, the LGU enacted a total of eight legislations with the intention of protecting the environment and imposing appropriate penalties for violation of such policies. These include:

- Fisheries and Coastal Resource Management Code of Jagna, Bohol of 2005
- An Ordinance Declaring Certain Portion of the Municipal Waters of Jagna, Bohol, Particularly in the Barangays of Can-uba, Ipil, Cantagay, Bunga Mar and Naatang as Marine Sanctuary
- An Ordinance banning the use of Compressor as Breathing Device/ Apparatus in all Fishing Activities in the Municipal Waters of Jagna, Bohol

- A Modified Ordinance Banning the Possession and the Use of Compressor as Breathing Device/ Apparatus in All Fishing Activities within the Jurisdiction of Jagna, Bohol
- An Ordinance Banning Activities that will Result in the Spilling Oil into the Seas, and Inland Waters within the Municipality
- An Ordinance Creating the Bantay Dagat Task Force and Providing for its Composition
- An Ordinance Delineating the Boundaries of the Municipal Waters of the Municipality of Jagna, Province of Bohol
- An Ordinance Setting Up Rules and Regulation, Management, Operation and Maintenance of the Jagna Municipal Fishport

The establishment of the marine sanctuaries in Jagna further adheres to the provisions on coastal resource management stipulated in the Philippine Fisheries Code of 1998 (R.A. 8550).

E. EXISTING POTENTIAL THREATS AND IMPLICATIONS TO MANAGEMENT

Threats are imminent whether natural or man-made. Some of the existing potential threats that may affect the marine sanctuaries in Jagna include the following:

- Intrusion of commercial fishing boats
- Natural calamities such as storms/typhoons
- Overexploitation of marine resources
- Inland pollution and erosion
- Inorganic farming practices (e.g. use of fertilizers or pesticides)
- Political intervention
- Oil spill accident

When these threats happen, they may cause damages not only to the actual implementation but to the entire project in general.

CHAPTER III. THE MANAGEMENT PLAN

Vision

"Jagna is a progressive community, rich in coastal and marine resources which is a God-given wealth, protected and managed by a committed community to ensure food security & sustainable development for the improved quality of life"

Mission

To implement programs in order to achieve realistic level of sustainable development through good governance and people empowerment within the coastal area

Goals of the Plan

- To protect and manage the coastal and marine resources in order to attain food security
- To promote advocacy and awareness on environmental conservation
- To institutionalize MPA in the municipality to ensure commitment by all sectors in the municipality

Objectives of the Plan

- To strictly enforce the existing fishery laws
- To provide alternative livelihood programs
- To develop eco-tourism potential areas
- To adopt/establish effective monitoring mechanism
- To strengthen fisherfolk organizations
- To access logistic support from LGU and other funding institutions

Management Programs

1. Administrative/Organizational Program

This program highlights the organizational structure of the management group who will be responsible for the proper, efficient and sustainable implementation of the marine sanctuaries and the MPA management plan.

The creation of the organizational structure of the MPA Management Team (MPA-MT) of Jagna emanates from the mandate of Republic Act R.A. 8550, otherwise known as Fisheries Code of the Philippines. Since the LGU has already formed the Coastal Resource Management (CRM) Board, the MPA-MT shall be the direct implementing arm as far as marine sanctuary activities are concerned. To perform its functions, a President, Secretary and Treasurer will be elected. The Local Chief Executive shall head the MPA-MT in close coordination with the Sangguniang Bayan (SB). All operation and activities of the MPA-MT shall be well-coordinated with the CRM Board and under close supervision by the Municipal Agriculture Officer (MAO) and the MPDC.

The composition and functions of the key players and committees in the implementation of the Plan are as follows:

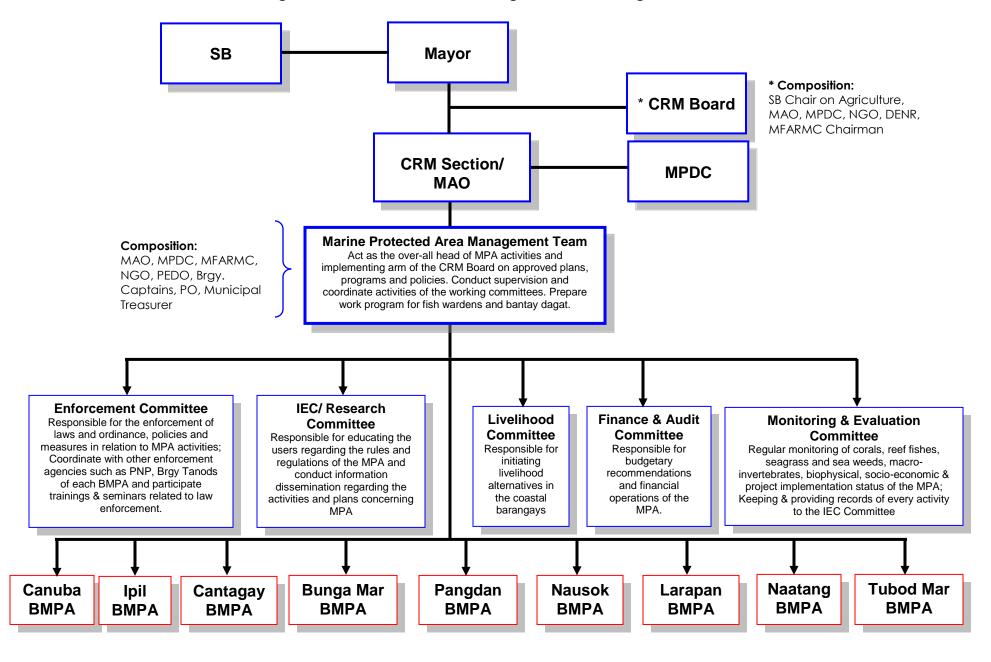
Municipal Mayor:

- Overall Manager of the Coastal Resource Management (CRM) Program
- Shall exercise general supervision and control over all coastal resource programs
- Execute and deputize law enforcer/ fish wardens and implements plans, programs, and projects

Sangguniang Bayan (SB):

- Enact resolutions and ordinances necessary for effective coastal resource management
- Grant franchise and enact ordinances for the issuance of permits, licenses, taxes, fees and charges
- Regulate activities relative to efficient and effective coastal resource management
- Specifically, the **SB Chairman on the Committee of Agriculture** shall:
 - Serve as the chairman of the CRM Board
 - Preside over all meetings of the CRM Board
 - Oversee the implementation of CRM Plans, programs and projects

Organizational Structure of MPA Management Team of Jagna, Bohol



CRM Board (CRMB):

- Formulate new ordinances, policies, recommend to the MFARMC for review and finally endorse to the SB for the legislation and enactment
- Spearhead the conduct of public hearing and consultations for newly formulated ordinances to various stakeholders
- Monitor and evaluate the MPA Management Team

Municipal Agriculture Officer (MAO):

- Ensure assistance and access to resources in the production, processing and marketing of marine products to fishermen and entrepreneurs
- Conduct continuous studies, researches, training programs for stakeholders
- Establish linkages and networking with BEMO, BFAR and other line agencies and NGOs for the technical and logistic support to the MPA Management Programs
- Provide livelihood alternatives to the stakeholders

Municipal Planning and Development Coordinator (MPDC):

- Integrate all economic, social, physical and other development plans and policies for consideration to the LGU program
- Conduct continuing studies, research and training programs for the LGU's capability in implementing coastal management programs
- Work in close coordination with the DA, PPDO and other line agencies and NGOs in whatever development initiatives pertaining to MPA management and livelihood programs

Municipal Treasurer:

- Manage internal and external funds for CRM/MPA programs
- Regulate fees/charges in the CRM/MPA activities such as snorkeling/diving fees, research, etc.
- Advice the Local Chief Executive and Sangguniang Bayan regarding disposition of Government funds
- Take charge of the disbursement of all LGU funds and such other funds entrusted to the LGU
- Implement efficient collection system of all taxes, fees and charges allowed by the LGU under the provisions of the LGC

Municipal Fisheries and Aquatic Resources Management Council (MFARMC):

- Chairman shall be a member of the CRM Board
- Conduct monitoring and evaluation of all municipal CRM activities
- Discuss issues and problems on CRM in the CRM Board meeting
- Collectively work with the CRM Board in the review of the existing municipal fisheries laws and ordinances and recommend to the SB for enactment

 Review policies recommended by the people's organizations and recommend solutions to the issues and problems presented

Peoples Organization (PO):

- Lead in the implementation of MPA management programs
- Ensure the proper and strict implementation of enacted Municipal Ordinances and existing fishery laws to the stakeholders
- Assist the LGU and other agencies in project monitoring and evaluation
- Provide feedback and reports to the MPA Management Team on issues and problems related to MPA management
- Assist and participate in the planning process for MPA management and livelihood development programs

Non-Government Organizations (NGO):

- Participate in the planning and implementation process and other CRM activities that require community participation
- Assist the LGU in coastal law enforcement
- Assist the LGU in monitoring and evaluation and recommend solutions to issues and problems
- Facilitate networking/linkaging for resource mobilization (fund sourcing)

MPA Management Team (MPA-MT):

- Act as the over-all head of MPA activities
- Serve as the implementing arm of the CRM Board on approved plans, programs and policies in relation to marine sanctuaries
- Conduct general supervision and coordinate activities of the working committees
- Submit periodic reports to the MPA management board and the CRMO
- Recommend plans, programs and policies to the CRM Board and CRMO, and for the adoption to the Sangguniang Bayan
- Prepare work program of Bantay Dagat
- Recommends for suspension and/or termination with cause of any erring member/ officers

The Working Committees

As the implementing arm of the MPA-MT, the Committees shall be responsible for the implementation of specific programs and activities as indicated in the MPA Management Plan.

The Working Committees shall be composed of all chairpersons of the different committees like enforcement committee, IEC/Research Committee, Livelihood Committee, finance and audit committee and monitoring and evaluation committee with at least four members, who can be trusted to perform the assigned tasks and responsibilities.

2. Information, Education, Communication (IEC)/Advocacy/ Capability Building Program

Under this program, IEC activities will be carried out using different media, particularly print (e.g. flyers, signboards, posters), radio programs, mobile information drive, public hearings, seminars and training. The integration of MPA and CRM concepts into school curriculum will also be facilitated. The target audience for the IEC/advocacy activities will be properly identified and planned. For example, public hearings will target 100-150 participants while seminars and trainings will target 20-30 participants. Other priority IEC activities include informing all fishermen's association and other organizations, proper orientation about MPAs for the PTCA and massive information campaign towards barangay and municipal officials.

Capability Building

The major objective of this program is for the MPA plan to be effectively materialized, be clarified and handed down from generation to generation. Officials, implementers and users should possess in-depth knowledge and skills to be able to fully know, not only the contents of the management plan, but also to equip themselves with various trainings and programs suitable to their needs and capabilities.

Below are the some of training and seminars necessary for an effective implementation of Jagna MPA Management Plan:

- 1. MPA management training
- 2. Fish warden capacity training
- 3. MPA project monitoring and evaluation training
- 4. Livelihood training (e.g. repair of fishnets)

The prospective trainees shall be the MPA Management Team and the fish wardens assigned per barangay.

3. ENFORCEMENT PROGRAM

Guarding and Patrolling System

There will be 24 personnel guarding on rotation basis for 24 hours. There will be six shifts, composing of 4 personnel for every 4-hour shift. The 4-man group per shift shall be composed of one Tanod, one Centennial force, 1 PNP and 1 volunteer.

Apprehension Procedures

- Proper implementation of IEC
- The arresting officer must be a member of the enforcement group.
- Violators must be turned over to the Barangay Official/Hall or other agencies concerned.
- Fines will be collected by the Barangay?
- The sharing schemes of fines shall be as follows:
 - o 40% to the Barangay CRM Trust Fund
 - o 30% to the arresting officers (as incentives)
 - o 30% to the CRMO

MPA Sites

The marine sanctuaries encompass mangroves and coral reefs. The total area of the marine sanctuaries is 69.36 hectares. These are located in the following areas of the municipality (see also Figure 2):

1. **Barangay Bunga Mar** - The marine sanctuary is situated at the southeastern part of Jagna, and with the following coordinates:

1:	N 9.83652°	E 124.36036°
2:	N 9.63618°	E 124.36167°
3:	N 9.63764°	E 124.38240°
4:	N 9.83800°	E 124.38082°

The total area of the marine sanctuary is estimated at 2.97 hectares with buffer zone of ___ meters extending seawards from all sides.

2. <u>Barangay Tubod Mar</u> - The marine sanctuary is situated at the eastern part of Jagna, and with the following coordinates:

```
1: N 9.66964° E 124.39961°
2: N 9.66859° E 124.40387°
3: N 9.66669° E 124.40417°
4: N 9.66589° E 124.40000°
5: N 9.66659° E 124.40044°
6: N 9.66820° E 124.40073°
```

The total area of the marine sanctuary is estimated at 11.88 hectares with buffer zone of ___ meters extending seawards from all sides.

3. <u>Barangay Pangdan</u> - The marine sanctuary is situated east of the town proper of Jagna, and with the following coordinates:

```
1: N 9.65311 ° E 124.38501 °
```

```
2: N 9.65176° E 124.38516°

3: N 9.65129° E 124.38185°

4: N 9.65103° E 124.37788°

5: N 9.66268° E 124.37740°

6: N 9.65305° E 124.38083°
```

The total area of the marine sanctuary is estimated at 15.20 hectares with buffer zone of ___ meters extending seawards from all sides.

4. <u>Barangay Nausok</u> - The marine sanctuary is situated east of Barangay Pangdan in the eastern part of Jagna, and with the following coordinates:

```
1: N 9.86326 ° E 124.38773 °

2: N 9.65196 ° E 124.38784 °

3: N 9.65193 ° E 124.39107 °

4: N 9.65303 ° E 124.39093 °
```

The total area of the marine sanctuary is estimated at 4.66 hectares with buffer zone of ___ meters extending seawards from all sides.

5. <u>Barangay Larapan</u> - The marine sanctuary is situated east of Barangay Nausok in the eastern part of Jagna, and with the following coordinates:

```
1: N. 9.65359 ° E 124.39860 °
2: N 9.65312 ° E 124.40035 °
3: N 9.65084 ° E 124.39520 °
4: N 9.86280 ° E 124.38458 °
```

The total area of the marine sanctuary is estimated at 8.56 hectares with buffer zone of ___ meters extending seawards from all sides.

6. <u>Barangay Ipil</u> - The marine sanctuary is situated at the southern part of Jagna, and with the following coordinates:

```
1: N 9.62951 ° E 124.35279 °

2: N 9.62832 ° E 124.35343 °

3: N 9.62611 ° E 124.34990 °

4: N 9.62698 ° E 124.34898 °
```

The total area of the marine sanctuary is estimated at 6.83 hectares with buffer zone of ___ meters extending seawards from all sides.

7. <u>Barangay Naatang</u> - The marine sanctuary is situated at the northeastern part of Jagna, and with the following coordinates:

```
1: N 9.67244° E 124.39781°
```

```
2: N 9.67238 ° E 124.39963 ° 3: N 9.67052 ° E 124.40067 ° 4: N 9.66979 ° E 124.39921 °
```

The total area of the marine sanctuary is estimated at 4.98 hectares with buffer zone of ___ meters extending seawards from all sides.

8. **<u>Barangay Canuba</u>** - The marine sanctuary is situated at the southern part of Jagna, and with the following coordinates:

```
1: N 9.62815 ° E 124.34332 °

2: N 9.62629 ° E 124.34398 °

3: N 9.62557 ° E 124.34077 °

4: N 9.62728 ° E 124.34020 °
```

The total area of the marine sanctuary is estimated at 7.45 hectares with buffer zone of ___ meters extending seawards from all sides.

9. **<u>Barangay Cantagay</u>** - The marine sanctuary is situated at the southern part of Jagna, and with the following coordinates:

```
1: N 9.63022 ° E 124.35821 °
2: N 9.628.75 ° E 124.35972 °
3: N 9.62825 ° E 124.35512 °
4: N 9.62932 ° E 124.3549 °
```

The total area of the marine sanctuary is estimated at 6.83 hectares with buffer zone of ___ meters extending seawards from all sides.

Permitted and Prohibited Activities

The following activities shall be <u>prohibited</u> in the respective buffer and core zones of the marine sanctuaries:

- All fishing activities shall be prohibited within the core and buffer zones;
- No marker buoys shall be transferred or removed without official authorization from the proper authorities;
- No marker buoys shall be obliterated, destroyed or damaged;
- Passage of boats within the core zone.

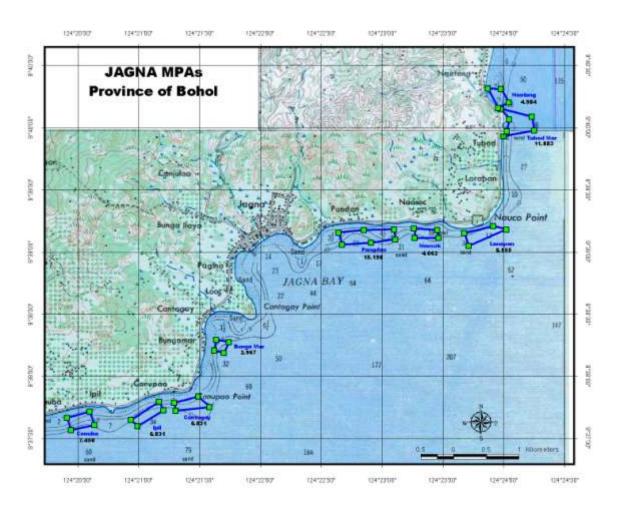


Figure 2. Location map of the marine sanctuaries in the Municipality of Jagna

The following activities shall be <u>allowed</u> in the respective core and buffer zones of marine sanctuaries subject to compliance of requirements:

- Semi-annual biophysical assessment or related researches of the marine protected areas;
- Tourism activities such as SCUBA diving end snorkeling in the buffer zone but subject to regulation and approval of the MPA management body;
- Passage or navigation of boats allowed only in the buffer zone;
- Fishing with the use of hook and line, spear and nets with 3 cm mesh size in the buffer zone;
- Boat anchorage but limited to the port area and buffer zone

No permitted activity within the marine sanctuaries shall be undertaken unless the following requirements are complied with:

1. Specific for the semi-annual biophysical assessment and other researches on species and stock enhancement and regeneration: the research institute, group or individual shall seek endorsement of activity from the MPA

Management Team, recommendation form from the Municipal Agriculture Office and permission from the Mayor. Reports should be furnished after the activities:

- 2. For visiting tourists, notice shall be submitted 2-3 days before the actual visit.
- 3. All permitted activities shall be subject to collection of fees, registration in the MPA logbook, and conducted with the presence of authorized tour guides.

4. LIVELIHOOD PROGRAM

The MPA Management Team will initiate the organization of POs into multipurpose cooperatives and promote capital savings mobilizations among them. The team will assist the cooperative to identify appropriate land based and marine-based livelihood projects/options as incentives to the stakeholders/POs implementing MPA management programs. Likewise, the team will help formulate livelihood policies and guidelines to ensure proper implementation of livelihood programs.

The Livelihood Committee will assess training needs for the cooperatives and livelihood beneficiaries, and conduct skills development and technical trainings. The POs will be the ones to identify priority recipients for the livelihood projects, and develop roll over /repayment schemes to sustain the livelihood programs.

The PO, through its Livelihood Committee, will conduct periodic monitoring and assessment of livelihood projects and facilitate repayment. The target beneficiaries are PO members/ stakeholders who have been actively involved in the implementation of the MPA management programs.

The Livelihood Committee will also develop proposals of income generating projects and initiate marketing to various institutions for possible funding assistance.

5. Sustainable Financing Program

The Financial/Ways and Means Committee will spearhead the implementation of this program. The Committee shall develop a financial management plan and submit annual budgetary requirements to the CRM Board to operationalize the MPA Management Plan. The Committee will also facilitate the allocation and release of funds for particular management activities.

The committee shall adopt a fund sourcing scheme through:

- Conduct of donor's forum with relevant funding institutions
- Develop linkages with NGOs
- Source out from LGU funds
- Resolutions for solicitations

The committee shall identify and develop potential eco-tourism sites for diving and snorkeling. Barangays Tubod Mar, Cantagay and Larapan are among those identified areas/sites ideal for diving and snorkeling. The fees collected from the users can help sustain the project. Ordinances from each barangay will explain the user's fee system. A barangay ordinance must be adopted which will outline the sharing scheme of the user's fees, e.g. the issuance of an official receipt means that the fees collected shall be remitted to the barangay funds. Fund management shall be subjected to COA regulation and procedures.

A Marine Protected Area Fund shall be created as a special account of the municipality, and to be administered by the Municipal Agriculture Office for the implementation of the Jagna Marine Protected Areas. Such fund shall be sourced from the following:

- 1. LGU 20% Development Fund
- 2. Other sources such as:
 - Fines from violations against this Ordinance
 - Income generating projects
 - Support from Congressman/senator's CDF
 - Grants/loans from the Local Government Support Program

The MPA Treasurer shall submit semi-annual financial report to the CRM Board and MAO. The Fund shall be audited yearly in accordance with the rules and regulations prescribed by the Commission on Audit.

The MPA Management Team shall collect the fees that shall go to and form part of the MPA Fund. The following fees shall be collected from the permitted activities indicated in the previous section:

1. Sightseeing/boating - PhP25/person/day (local);

PhP50/person/day (foreign);

2. Snorkeling - PhP50/person/day (local);

PhP100/person/day (foreign);

3. SCUBA Diving - PhP200/person/day (local);

PhP400/person/day (foreign);

With camera - PhP300/person/day (local);

PhP600/person/day (foreign);

4. Research - to be determined by the MPA Body

Sharing Scheme for Collected Fees?

6. MONITORING & EVALUATION/HABITAT ENHANCEMENT PROGRAM

Monitoring of biophysical and socio-economic parameters, as well as project management/ implementation, shall be conducted on a regular basis. The Monitoring Program is as follows:

Parameter	Frequency	Responsible Group										
Coral Reef	Twice a year	M&E Team (certified SCUBA divers and										
		authorized personnel)										
Reef Fish	Twice a year	M&E Team (certified SCUBA divers and										
		authorized personnel)										
Illegal Activities	Daily	Bantay Dagat, Fish Wardens, POs										
Buoy Markers	Twice a month	Bantay Dagat, Fish Wardens, Brgy,										
		Tanods										

Regular feedbacking and reporting of results shall be conducted to promote adaptive management of the marine sanctuaries. The media for these activities shall include:

- Quarterly reports every year
- Public information via Radio Program updates of our MPA (fish, corals, volume of fish catch, etc)
- No. of violators/violations committed every year

Penal Provisions

- 1. Fishing in the buffer and core zones
 - a. 1st offense fine of PhP1,000.00 plus confiscation of gear and catch
 - b. 2nd offense fine of PhP1,500.00 plus confiscation of gear and catch
 - c. 3rd offense fine of PhP1,500.00 plus confiscation of gear and catch and cancellation of fishing license
- 2. Passage of motorized boat over the core zone
 - a. 1st offense fine of PhP 500.00
 - b. 2nd offense fine of PhP1,000.00
 - c. 3rd offense fine of PhP1,500.00
- 3. Removal, transfer, obliteration, damage of marker buoys
 - fine of PhP1,500.00 and payment of cost damages
- 4. All related violations that are not reflected here will be referred to existing ordinances and resolutions enacted by the municipality.

CHAPTER IV. GLOSSARY OF TERMS AND REFERENCES

BFAR - Bureau of Fisheries and Aquatic Resources

COA - Commission on Audit

CRM - Coastal Resource Management

CRMO - Coastal Resource Management Office/Officer
CRM-TWG - Coastal Resource Management Technical

Working Group

DENR - Department of Environment and Natural

Resources

FW - Fish Warden

IEC - Information, Education and Communication

LGU - Local Government Unit

M&E - Monitoring and Evaluation

MAO - Municipal Agriculture Office

MFARMC - Municipal Fisheries and Aquatic Resources

Management Council

MLGU - Municipal Local Government Unit MOA - Memorandum of Agreement

MPA - Marine Protected Area

MPA-MT - Marine Protected Area Management Team

MS - Marine Sanctuary

NGO - Non-government Organization
PNP - Philippine National Police
PCG - Philippine Coast Guard
PO - People's Organization

PTCA - Parent-Teacher Community Association

RA - Republic Act

SB - Sangguniang Bayan

SCUBA - Self-Contained Underwater Breathing Apparatus

USAID - United States Agency for International

Development

REFERENCES

- 7. Municipal Comprehensive Land Use Plan (1997-2006), 64p
- 8. Coastal Resource Assessment Technical Report. BFAR-7, July 2002, 38p
- 9. Jagna Coastal Resource Management Plan (2003-2007)
- 10. Millennium Development Goals/ Poverty Database Monitoring System (2005)

ANNEX I.

ACTION PLANS FOR THE MANAGEMENT PROGRAMS

Table 1. Administrative/Organizational Program

OBJECTIVE: To develop a cohesive and functional management team; To efficiently manage and implement the marine sanctuary management plan

STRATEGIES:, Regular meetings, feedbacking and brainstorming

ACTIVITY	EXPECTED	TIMEFRAME														BUDGET	SOURCE	ORG/						
	OUTPUT		YE/	\R 1			YEAR 2				YEA	NR 3	3	,	YEA	\R 4	ļ	YEAR 5					OF	AGENCY/
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		FUND	INSTITUTION INVOLVED
Formation & creation of MPA Mgmt. team	Executive Order from LCE & org. structure	X																				10,000	MLGU	LGU / BEMO / ECOGOV / MFARMC
Conduct regular meetings	Regular quarterly meetings with minutes & attendance	X	X	X	X	X	X	Х	X	X	Х	X	Х	Х	X	X	X	X	X	X	X	25,000	MLGU	MPA Mgmt. Team
Organize IEC Committee	Formed with rep from 14 coastal brgy	х																				5,000	MLGU	MPA Mgmt. Team, MPDC
Periodic review assessment of activities/ implementa- tion plan	Reports/ Documents				X				X				X				X				X	25,000	MLGU	MPA Mgmt. Team, BEMO, MFARMC
5. Review of existing polices & formulation of new	Policies reviewed & new policies adopted	X				×				X				Х				X				25,000	MLGU	MLGU, MPA Mgmt. Team BEMO

policies related to MPAs														
Organize	2 personnel	Х										60,000	MLGU,	MFARMC,
mun/ brgy	per coastal												PLGU	DA, BEMO,
fish warden	barangay													PO

Table 2. IEC/Advocacy/Capability Building Program

OBJECTIVE: To promote advocacy and awareness on environmental conservation and conduct capability building trainings

STRATEGIES: Conduct continuous IEC programs in all coastal brgys.; promote radio programs & tri-media info campaign

ACTIVITY	EXPECTED											RA							- 1	•		BUDGET	SOURCE	ORG/
	OUTPUT	YE	AR	1		YE	AR	2		YE	AR	3		YE	AR	4		YE	AR	5			OF FUND	AGENCY/
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			INSTITUTION INVOLVED
Formal launching of MPA program	Fluvial parade in all coastal barangays						X															50,000	MLGU, PLGU	MPA-MT, MLGU, MFARMC, PO, BEMO, Ecogov
Capability building & trainors training	Trainor's training conducted once/year			X			X				X				X				X			15,000/ year	MLGU	MPA-MT, BEMO, IEC Committee
Capability building and skills training for POs	Well trained and organized POs			X			X				X				X				X			25,000/ year	MLGU, PLGU	MPA-MT, PO reps, PAO, OPV, BEMO, EcoGov
Distribution of info materials	Leaflets, brochures, materials distributed		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	35,000	MLGU, PLGU	MPA-MT,
Regular radio program	Weekly program	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Х	X	X	X	X	X			MPA-MT,
Construction of billboards	9 billboards in place						Х															30,000	MLGU, PLGU	MPA-MT,
Cross visit to successful MPA outside Bohol	PO leaders and MPA Mgmt. Team						X															150,000	MLGU, PLGU, Congres s-man	MPA-MT, MFARMC, PO Leaders, BEMO, NGO

Table 3. Enforcement Program

OBJECTIVE: To strictly enforce existing fishery laws

STRATEGIES: Conduct trainings and deputation of fish wardens, regular seaborne patrol and guarding, apprehension of violators

ACTIVITY	EXPECTED									TIA	MEF	RA	ME									BUDGET	SOURCE	ORG/
	OUTPUT	YE	AR	1		YE	AR	2		YE	AR	3		Y	AR	4		YE	AR	5			OF	AGENCY/
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		FUND	INSTITUTION INVOLVED
Conduct regular foot patrolling and guarding	Patrolling, & guarding schedule apprehension,		X	X	X	X	X	×	X	X	X	X	X	х	х	×	X	x	×	×	X	10,000	M/BLGU	PO, Fish Wardens
Conduct regular seaborne patrol with coastal enforcers	progress reports, visibility of fish wardens		х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	100,000	MLGU, BLGU	Fish wardens, PO, MFARMC, PNP-PEDO
Maintenance of marker buoys and parapher- nalia	Materials purchased; marker buoys replaced		х				х				X				х				X			60,000	MLGU, PLGU	POs, MFARMC, MPDC, Fish warden
Construction or renovation of guard houses	Guard						х															150,000	MLGU, PLGU	MFARMC, PO, MPDC, Fish Warden

Table 4. Livelihood Program

OBJECTIVES: To provide livelihood alternatives to alleviate income of fisherfolks

STRATEGIES: Barangay consultations, sourcing of funds, livelihood assistance, identification of environment-friendly

livelihood projects, skills training, project proposal making & marketing

ACTIVITY	EXPECTED			-						ΤIΛ	۸EF	RA/	ME									BUDGET	SOURCE	ORG/
	OUTPUT	YE	AR	1		YE	AR	2		YE	AR	3		YE	AR	4		YE	AR	5			OF	AGENCY/
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		FUND	INSTITUTION INVOLVED
Organize multi- purpose cooperative	Additional capital/ income benefits									X												35,000	MLGU, PLGU	CDA, PO, LGU, MPDC, MPA-MT
Identification of appropriate land based and marine based livelihood projects	At least 2 land-based & 2 marine- based livelihood projects identified										X											15,000	MLGU	PO, MPA-MT
Livelihood skills training for POs	PO beneficiaries											X										25,000	MLGU, PLGU (thru PAO)	PO, MLGU, PAO, BEMO, BFAR, Ecogov
Periodic monitoring & assessment of livelihood projects	Progress reports													X		X		X		X		40,000	MLGU, BLGU, PO	PO, MPA-MT B/MLGU
Project proposal preps & marketing	At least 4 proposals submitted to possible funders					×																10,000	MLGU	LGU, PO, Livelihood Committee, MPA-MT

Table 5. Sustainable Financing Program

OBJECTIVE: To access logistics support from LGUs and other funding partners

STRATEGIES: develop project proposals and marketing to access funds form prospect funding partners

ACTIVITY	EXPECTED			_						TIA	ΛEF	RA	ME									BUDGET	SOURCE	ORG/
	OUTPUT	YE	AR	1		YE	AR	2		YE	AR	3		YE	AR	4		YE	AR	5			OF	AGENCY/
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		FUND	INSTITUTION INVOLVED
Develop financial mgt plan	Financial mgt plan adopted; records		Х			Х				Х				Х				Х				25,000	MLGU	PO, MPA-MT
Financial Mgt training	MPA personnel trained; records			X		Х				X				Х				X				Incorpor ated above		PO, MPA- MT, DA, MFARMC
Solicitation & fund raising activities	Additional funds					X				X				Х				X				15,000	PO, Blgu	PO MPA-MT, Fin Mgt Com
Develop potential eco-tourism site for diving and snorkeling	Income generation							X								X						300,000	MLGU, PLGU, DOT, NGOs	PO, MPA- MT, MPDC, MFARMC, BEMO
Monitoring and Assessment	Financial statues and progress report				X				×				X					X				Budget incorpor ated under Admin	MLGU	PO, MPA- MT, MPDC, MFARMC, BEMO
Project Dev't Proposal & Marketing	Project Proposal submitted for funding		Х				Х				Х				Х				Х			15,000/ year	MLGU, NGOs	MPA-MT, MPDC, DA

Table 6. Monitoring and Evaluation Program

OBJECTIVE: To establish effective M&E mechanism

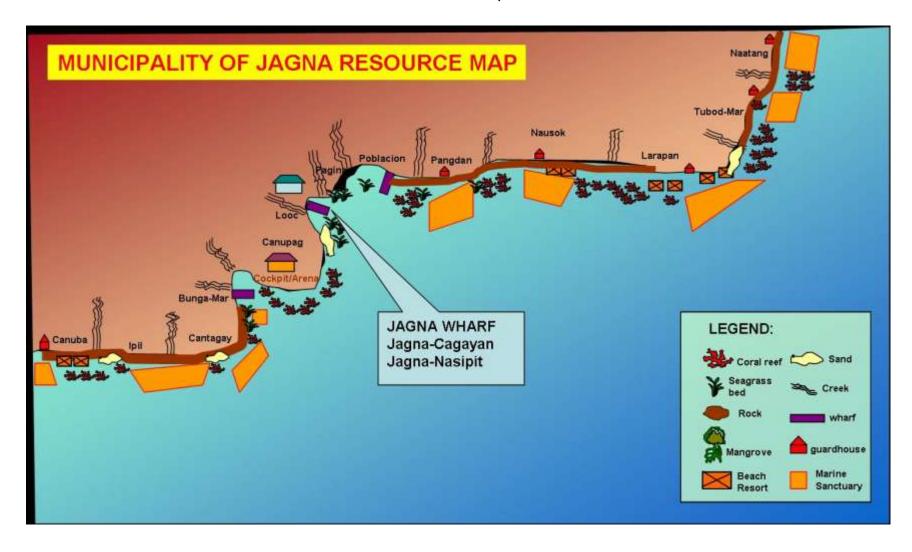
STRATEGIES: P	erioaic asses	<u>sm</u>	ent	an	a te	ed	pa	CKII	ng,	req	uire	e su	maı	nissi	on	ot c	ηυα	rter	iy k	oroç	gres	s reports		
ACTIVITY	EXPECTED									TIA	MEF	RA/	ME									BUDGET	SOURCE	ORG/
	OUTPUT	YE	EAR	1		YE	AR	2		YE	AR	3		YE	AR	4		YE	AR	5			OF	AGENCY/
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		FUND	INSTITUTION INVOLVED
Conduct assessment of MPA mgt. programs	Progress reports				X				Х				X				Х				X	P25,000	MLGU, BLGU	LGU, PO, MPA-MT, BEMO
Conduct coral reef monitoring	Assessment reports						X				X				X				X			P120,000	MLGU, PLGU, BEMO	LGU, PO, MPA-MT, BFAR, BEMO
Monitor day to day activities relative to MPA mgt.	Monitoring reports	X	X	X	X	×	X	X	×	X	X	×	X	X	X	X	X	×	X	X	X	P50,000	MLGU, BLGU	PO, local law enforcers, MPA-MT,
Maintain records/data banking	Record/ documents on file				х				Х				Х				Х				х	P5,000	MLGU	MPDC, DA, MPA-MT, MFARMC

ANNEX II. FIVE-YEAR FINANCIAL PLAN FOR THE IMPLEMENTATION OF THE JAGNA MPA MANAGEMENT PLAN

PROGRAMS/ACTIVITIES			YEAR			TOTAL	SOURCE OF
	1	2	3	4	5	COST	FUND
1. Administrative/Organizational	90,000	15,000	15,000	15,000	15,000	150,000	
 Formation of MPA-MT 	10,000						MLGU, PLGU
 Regular meetings 	5,000	5,000	5,000	5,000	5,000		
 Organize IEC Committee 	5,000						
 Review of implementation 	5,000	5,000	5,000	5,000	5,000		
 Review/formulation of policies 	5,000	5,000	5,000	5,000	5,000		
 Organize municipal fish wardens 	60,000						
2. IEC/Advocacy/Capability Building	47,000	277,000	47,000	47,000	47,000	465,000	
 Formal launching of MPAs 		50,000					MLGU, PLGU,
 Trainor's Trainings 	15,000	15,000	15,000	15,000	15,000		CDF
 Skills trainings for Pos 	25,000	25,000	25,000	25,000	25,000		
 Distribution of IEC materials 	7,000	7,000	7,000	7,000	7,000		
 Construction of billboards 		30,000					
 Cross-visits to other MPAs 		150,000					
3. Enforcement	34,000	184,000	34,000	34,000	34,000	320,000	
 Regular foot patrolling & guarding 	2,000	2,000	2,000	2,000	2,000		M/BLGU, PLGU
 Regular seaborne patrolling 	20,000	20,000	20,000	20,000	20,000		
 Maintenance of marker buoys 	12,000	12,000	12,000	12,000	12,000		
 Construction/renovation of 							
guardhouses		150,000					
4. Livelihood	0	10,000	75,000	20,000	20,000	125,000	
Organize multipurpose							MLGU, PLGU,
cooperative			35,000				BLGU, PO
Identification of livelihood projects			15,000				
Livelihood skills trainings			25,000				
Periodic monitoring & assessment				20,000	20,000		
Development of project proposals		10.000					
& marketing	00.000	10,000	00 750	170 750	00 750	41 5 000	
5. Sustainable Financing	20,000	173,750	23,750	173,750	23,750	415,000	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Develop financial mgt. plan &	5,000	5,000	5,000	5,000	5,000		M/BLGU, PO,
training	1						PLGU, DOT,

Solicitation & fund raising activities		3,750	3,750	3,750	3,750		NGOs
 Develop potential ecotourism sites 		150,000		150,000			
 Development of project proposals 							
& marketing	15,000	15,000	15,000	15,000	15,000		
6. Monitoring and Evaluation	16,000	46,000	46,000	46,000	46,000	200,000	
 Assessment of MPA mgt. programs 	5,000	5,000	5,000	5,000	5,000		M/BLGU,
 Coral reef monitoring 		30,000	30,000	30,000	30,000		PLGU, BEMO
 Day-to-day monitoring of MPA 							
activities	10,000	10,000	10,000	10,000	10,000		
 Record/data banking 	1,000	1,000	1,000	1,000	1,000		
TOTAL	207,000	705,750	240,750	335,750	185,750	1,675,000	

ANNEX III. RESOURCE USE MAP OF THE MUNICIPALITY OF JAGNA, BOHOL



ANNEX III. LIST OF MEMBERS OF THE DRAFTING COMMITTEE OF THE MANAGEMENT PLAN

MPA MANAGEMENT TEAM

CRISTITO JAMISOLA JAMILA CAMILO RIZANO

MPA-TWG

PACHECO LL. RANCES
CAMILO A. RIZANO
GERRY V. ARANETA
RUFINO JAMISOLA
RODERICK VIRTUDAZO
ANDREW G. TADENA
ALBERTO Y. CAFÉ

ANNEX IV. MUNICIPAL ORDINANCE ESTABLISHING THE MARINE SANCTUARIES OF JAGNA

Republic of the Philippines
Province of Bohol
Municipality of Jagna

Resolution No. ____ Series of 2007

Resolution to Adopt the Jagna MPA Management Plan and to Enact an Ordinance for the Establishment and Management of the Marine Sanctuaries of Jagna and Providing Funds thereof

WHEREAS, it is a policy of the State to protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature:

WHEREAS, under the General Welfare Clause of the RA 7160, otherwise known as the Local Government Code of 1991, local government units shall ensure and support, among other things, the right of the people to a balanced ecology;

WHEREAS, Republic Act No. 8550, also known as The Philippine Fisheries Code of 1998, provides for the development, management and conservation of the fisheries and aquatic resources;

WHEREAS, Section 16 of Republic Act No. 8550 provides that the municipal/city government shall have jurisdiction over municipal/city waters as defined therein, and that the municipal/city government may, in consultation with the Fisheries and Aquatic Resources Management Councils (FARMC), enact appropriate ordinances for the said purpose;

WHEREAS, the same section of the Republic Act No. 8550 also provides that the LGU shall enforce all fishery laws, rules and regulations as well as valid fishery ordinances enacted by the municipal/city council;

WHEREAS, Rule 16.3 of the IRR (of R.A. No. 8550) provides that the municipal/city government shall enact, in consultation with the Bureau of Fisheries and Aquatic Resources (BFAR) and the Department of Environment and Natural Resources (DENR), special fishery ordinances, such as but not limited to declaring special demarcated fishery areas, closed season and environmentally critical areas and sanctuaries consistent with the provision of R.A. No. 7586 or the National Integrated Protected Areas System (NIPAS) Act relative to the definition of zones;

WHEREAS, the protection and conservation of wildlife such as marine turtles, whale sharks, dolphins, among others, are mandated under R.A. No. 9147 or the Wildlife Resources Conservation Act.

WHEREAS, in order to fully and effectively exercise the prescribed mandates, the Municipality, through the Philippine Environmental Governance Project (EcoGov), has formulated the Duero Marine Protected Area Management Plan including the budget for its implementation;

WHEREAS, the Duero Marine Protected Area Management Plan prescribes the policies, principles and strategies for the sustainable development, conservation, protection, and management of the Marine Protected Area of the municipality;

WHEREAS, in the development and formulation of the Duero Marine Protected Area Management Plan, the principles of transparency, accountability and participatory decision-making were employed particularly with regard to the stakeholders and decision-makers;

WHEREAS, the Duero Marine Protected Area Management Plan was presented for public hearing and consensus before the various sectors and stakeholders on April 13, 2007;

NOW THEREFORE, BE IT RESOLVED, AS IT IS HEREBY RESOLVED, that the Sangguniang Bayan of the Municipality of Jagna will adopt the MPA Management Plan and enacts an ORDINANCE entitled:

ORDINANCE NO. ____ Series of 2007

An Ordinance for the Establishment and Management of the Marine Sanctuaries of Jagna and Providing Funds thereof

ARTICLE I Title of the Ordinance

Section 1. Short Title. This Ordinance shall be known as "Jagna Marine Sanctuaries Ordinance of 2007."

ARTICLE II DECLARATION OF POLICY

Section 2. *Declaration of Policy*. - It is hereby declared the policy of the Municipality:

- To achieve food and economic security as the overriding consideration in the utilization, management, development and promotion through ecotourism, conservation and protection of the coastal, marine and fishery resources;
- b. To ensure ecological balance and quality of the environment through a rational and sustainable development, management and conservation of the Municipality's coastal, marine and fishery resources appropriately supported by research, technical services and resources; and
- c. To promote active public support (to include community, business, non-government organizations, people's organizations, academe, media, religious, among others) and participation in the integrated coastal, marine and fisheries management including areas with natural aesthetic scenery.

ARTICLE III DEFINITION OF TERMS

Section 3. *Definition of Terms.* As used in this Ordinance, the following terms are defined as follows:

- 1. **Buffer Zones** are delineated areas surrounding and immediately adjacent to the core zone of the MPA intended for its protection;
- 2. Coastal Areas/Zone is a band of dry land and adjacent ocean space (water and submerge land) in which terrestrial processes and uses directly affect oceanic processes and uses and vice versa; its geographic extent may include areas within the land mark limit of one (1) kilometer from the shoreline at high tide to include mangrove swamps, brackish water ponds, nipa swamps, estuarine rivers, sandy beaches and other areas within a seaward limit of 200 meters isobath to include coral reefs, algae flats, seagrass beds and other soft bottom areas. (RA 8550, Philippine Fisheries Code)
- 3. **Coral Reef** refers to the natural aggregation of coral skeleton, with or without living coral polyps, occurring in intertidal and subtidal marine waters. (RA 8550, The Philippine Fisheries Code of 1998)
- 4. **Core Zone** refers to the "no-take-zone" area, where all fishing and/or any related activities are not allowed except for regulated research and

- monitoring. (Philippine Coastal Management Guide Book Series no. 5 page 78)
- 5. **Demarcated Areas** are boundaries defined by markers and assigned exclusively to specific individual or organization for certain specified and limited uses. (RA 8550, The Philippine Fisheries Code of 1998)
- 6. **Fishery (Refuge and) Sanctuary (may also refer to Marine Sanctuary)** is a designated area where fishing or other forms of activities which may damage the ecosystem of the area is prohibited and human access may be restricted (RA 8550, The Philippine Fisheries Code of 1998)
- 7. **Fisheries** refers to all activities relating to the act or business of fishing, culturing, preserving, processing, marketing, developing, conserving and managing aquatic resources and fishery areas, including the privilege to fish or take aquatic resources thereof; (RA 8550, Philippine Fisheries Code)
- 8. **Habitat** refers to the place or environment where a plant or an animal naturally or normally lives and grows. (*Philippine Coastal Management Guide Book Series no. 5*)
- Management shall mean the proper administration of marine protected areas within Davao City to include the protection, conservation, sustainable development and utilization of coastal resources
- 10. **Mangrove** refers to a community of intertidal plants including all species of trees, shrubs, vines and herbs found on a coasts, swamps or border of swamps. (RA 8550, Philippine Fisheries Code)
- 11. **Marine Protected Area** refers to any specific area which has been reserved by law or other effective means and is governed by specific rules or guidelines to manage activities and protect part or the entire enclosed coastal and marine environment (*Philippine Coastal Management Guide Book Series no. 5*)
- 12. **Municipal Waters** shall mean municipal waters as defined under R.A. 8550 which includes not only streams, lakes, inland bodies of water and tidal waters within the municipality/city. These waters are not included within the protected areas as defined under Republic Act No. 7586 (The NIPAS Law);
- 13. **Seagrass beds** are areas of salt tolerant plants that occur in shallow near shore waters, estuaries, lagoon and adjacent to coral reefs. They hold sediments in place, support rich detrital community and provide food and habitat for many important near shore species. (*Philippine Coastal Management Guide Book Series no. 5*)

14. **Sub-Zones** refer to specific zones such as the mangrove protection and rehabilitation zone, species conservation zone and fish sanctuary within the marine protected area.

ARTICLE IV Establishment of Marine Sanctuaries

Section 4. *Purposes* - Marine Sanctuaries shall be established and managed for the following purposes:

- 1. Development and improvement of coastal habitats which are spawning grounds for various marine organisms;
- 2. Rehabilitation and protection of marine resources;
- 3. Sustainable use and enhancement of coastal and fishery resources and other purposes that can enhance ecological sustainability;
- 4. And upliftment of socio-economic conditions of the community through ecotourism development.

Section 5. Functions, Duties and Responsibilities of the Management – The management body shall serve as the lead organization in the implementation of the Jagna Marine Protected Area Management Plan of the Municipality. It shall have the following powers and functions:

- 1. To implement the policies, guidelines and programs of MPA Management plan effectively and sustainably;
- 2. To enforce all laws pertaining to the protection and management of the sanctuary;
- 3. To recommend policies to the municipal and brgy. Council for the management plan;
- 4. To generate financial resources to sustain the activities stated in the management plan;
- 5. To ensure the transparency, accountability, and participatory decision making in the implementation of the MPA management plan;
- 6. To increase awareness of the people on the importance of marine protected areas and their role as community members in the protection of the MPA.

Section 6. *Management Plan* – The activities that shall be implemented in line with the Jagna Marine Protected Area Management Plan are the following:

1. Conduct of series of organizational meetings to formulate the management bodies' internal rules and regulations, membership and delineation of functions and authorities.

- 2. Delineation of boundaries of the sanctuaries and installation of marker buoys.
- 3. Enactment of ordinances to support the implementation of the Jagna Marine Protected Area Management Plan.
- 4. Deputation of fish wardens and formulation of a systematized patrolling schedule.
- 5. Installation of a watch tower and procurement of equipment for enforcement.
- 6. Establishment of a visitor's center for assistance of tourists.
- 7. Conduct of training, and workshops on MPA management, monitoring and evaluation; leadership, auditing and database management, and supplemental skill on participatory resource and coral reef assessment and fish catch monitoring.
- 8. Conduct of daily fish catch monitoring and semi-annual biophysical assessments
- 9. Conduct of regular meetings and capacity building of the management bodies.

The approved Marine Sanctuary Management Plan of Jagna shall be the basis for all activities to be undertaken in the marine sanctuaries. In this regard, all activities relating to the development, use, conservation, protection and management of the marine sanctuaries shall be consistent with and pursuant to the approved Marine Sanctuary Management Plan.

Section 7. *Scope of the Marine Sanctuaries* – There is hereby established marine sanctuaries in the following areas, with description as follows:

a. **<u>Barangay Naatang</u>** - The marine sanctuary is situated at southeast part of Duero, with the following coordinates:

1:	N 9.67244'	E 124.39963'
2:	N 9.67238'	E 124.39963'
3:	N 9.67052	E 124.40087'
4:	N 9.66979'	E 124.39921'

The total area of the marine sanctuary is around 5.8074 hectares with buffer zone of 20 meters at each side.

b. <u>Barangay Tubod Mar</u> - The marine sanctuary is situated at southeast part of Jagna, with the following coordinates:

1:	N 9.66954	E 124.39961
2:	N 9.66859	E 124.40387
3:	N 9.66669	E 124.40417

4: N 9.66589 E 124.40000 5: N 9.66659 E 124.40044 6: N 9.66820 E 124.40073

The total area of the marine sanctuary is around 11.74 hectares with buffer zone of 20 meters at each side.

c. <u>Barangay Larapan</u> - The marine sanctuary is situated at southeast part of Jagna, with the following coordinates:

1:	N 9.65359	E 124.39860
2:	N 9.65312	E 124.40035
3:	N 9.65084	E 124.39520
4:	N 9.65260	E 124.39459

The total area of the marine sanctuary is around 8.576 hectares with buffer zone of 20 meters at each side.

d. **Barangay Nausok** - The marine sanctuary is situated at southeast part of Jagna, with the following coordinates:

1:	N 9.65326	E 124.38773
2:	N 9.65196	E 124.38784
3:	N 9.65193	E 124.39093
4:	N 9.65303	E 124.39093

The total area of the marine sanctuary is around 4.683 hectares with buffer zone of 20 meters at each side.

e. <u>Barangay Pangdan</u> - The marine sanctuary is situated at southeast part of Jagna, with the following coordinates:

1:	N 9.65311	E 124.38501
2:	N 9.65176	E 124.38516
3:	N 9.65129	E 124.38185
4:	N 9.6513	E 124.37788
5:	N 9.65268	E 124.37740
6:	N 9.65305	E 124.38083

The total area of the marine sanctuary is around 15.26 hectares with buffer zone of 20 meters at each side.

f. <u>Barangay Bunga Mar</u> - The marine sanctuary is situated at west part of Jagna, with the following coordinates:

1: N 9.63652 E 124.36036

2: N 9.63618 E 124.36167 3: N 9.63764 E 124.36240 4: N 9.63800 E 124.36062

The total area of the marine sanctuary is around 2.98 hectares with buffer zone of 20 meters at each side.

g. <u>Barangay Cantagay</u> - The marine sanctuary is situated at west part of Jagna, with the following coordinates:

1:	N 9.63022	E 124.35821
2:	N 9.62875	E 124.35902
3:	N 9.62845	E 124.35512
4:	N 9.62932	E 124.3549

The total area of the marine sanctuary is around 3.635 hectares with buffer zone of 20 meters at each side.

h. **Barangay Ipil** - The marine sanctuary is situated at west part of Jagna, with the following coordinates:

1:	N 9.62951	E 124.35279
2:	N 9.62832	E 124.35343
3:	N 9.62611	E 124.34990
4:	N 9.62698	E 124.34898

The total area of the marine sanctuary is around 6.861 hectares with buffer zone of 20 meters at each side.

i. <u>Barangay Canuba</u> - The marine sanctuary is situated at west part of Jagna, with the following coordinates:

1:	N 9.62815	E 14.34332
2:	N 9.62629	E 124.34398
3:	N 9.62557	E 124.34077
4:	N 9.62728	E 124.34020

The total area of the marine sanctuary is around 7.483 hectares with buffer zone of 20 meters at each side.

Section 8. *Prohibited Acts* – The following activities are hereby prohibited in the different zones of the marine sanctuaries:

General Prohibitions

 Construction of fish corral within 200 meters from the marine sanctuaries

Core zone

- All types of fishing activities
- Passing of any type of boat
- Collection or gathering of any item (whether living or non-living) inside the marine sanctuary except for those that may be harmful to other organisms, such as crown-of-thorns-starfish
- Throwing of solid and liquid waste within the confines of the MPAs
- Boat anchorage
- Gathering and destruction of marker buoys
- Recreational activities such as snorkeling and/or SCUBA-diving up to Year 2 of the MPA implementation
- Passage of boat over the core zone

Buffer zone

- All types of fishing activities except hook and line fishing (with 15 hooks maximum), fish traps (bubo) and fishing net (with not more than 200 meters with 3 cm. mesh size)
- Collection or gathering of any item (whether living or non-living) inside the marine sanctuary except for those that may be harmful to other organisms, such as crown-of-thorns-starfish
- Boat anchorage
- Gathering and destruction of marker buoys
- All fishing activities shall be prohibited within the core zones and buffer zones
- No marker buoys shall be transferred or removed without an official authorization from the proper authorities
- No marker buoys shall be obliterated, destroyed or damaged.

Section 9. *Permitted Activities* – Subject to compliance with the requirements provided in the succeeding section, the following activities may be undertaken in the marine sanctuary established herein:

Core zone

- Research activities except collection
- Recreational activities such as snorkeling and/or SCUBA-diving starting Year 3 of the MPA implementation
- Diving and snorkeling permitted activities within core zone but shall be subjected for regulation and in compliance with the plan requirements

Buffer zone

- Hook and line fishing (with 15 hooks maximum), fish traps (bubo) and fishing net (with not more than 200 meters with 3 cm. mesh size)
- Passing of all types of boats (provided in low speed)
- Recreational activities such as swimming, snorkeling and/or SCUBAdiving but limited to 15 persons per day and upon compliance to the requirements
- Research activities except collection
- Establishment of mooring buoys for tourist boats stand by areas
- Semi annual biophysical assessment or related researches of the sanctuary.
- Tourism such as diving and snorkeling but subject to regulation and approval of the MPA body are allowed in the buffer zone.
- Passage or navigation of boats are allowed only in the buffer zone
- Boat anchorage but limited to the port area and buffer zone.

Section 10. Requirements – No permitted activity within the marine sanctuaries shall be undertaken unless the following requirements are complied with:

- Specific for the semi-annual biophysical assessment and other researches on species and stock enhancement and regeneration, the research institute, individual or groups shall seek endorsement of activity from the MPA Management Team, recommendation from the MAO and approved permission from the Mayor. Reports should be furnished after the activities.
- 2. For visiting tourist, 2-3 days notice is required
- All permitted activities shall be subjected to fees collection, registration in the MPA logbook and conducted with the presence of authorized tour guides
- Tourist Related Activities/ Educational Tour/Site Visit
 - At least one week booking from the MPA contact persons
 - Payment of the necessary fees (P150/ head)
 - Registration in the marine sanctuary logbook
 - Secure accredited guides from the barangay/ municipality
- Research (both Private and Government Institution)
 - Submission of a letter of intent/request and clear and concise research proposal to the Marine Sanctuary Management Board at least one week before the actual proposed start of research
 - Payment of corresponding fees after the deliberation of the Management Board (P1000/ research proposal or case to case basis)
 - o Formal registration in the marine sanctuary logbook
 - Presence of authorized guide every research activity

 Furnishing of final progress report to the board immediately prior to phase-out and the final terminal report three (3) months after the research.

ARTICLE VII Management of the Marine Sanctuaries

Section 11. *Creation of Local MPA Bodies* - A local MPA management board shall be created in the municipality to manage the Jagna marine sanctuaries through an Executive Order of the Mayor composed of representatives from the barangay, BFARMC, people's organizations, non-government organizations and other concerned agencies necessary to do the following functions, duties, and responsibilities:

- Coordinates with the CRMO of the Municipal Agriculture Office;
- Formulates local MPA management plans;
- Implements local MPA plans, programs and projects, and policies;
- Sources out, utilizes and/or allocates funds (internal or external);
- Enforces relevant laws:
- Monitors and evaluates MPA plans, programs and projects; and
- Recommends priority programs and projects as well as relevant policies.

Section 12. *Implementing Structure.* In facilitating the functions, duties and responsibilities, the following set of officers shall be installed for the MPA Management Board.

- Chairman
 - Presides board meetings
 - Supervises MPA programs, plans and activities
- Vice-chairman
 - Assist in the management of MPA programs
 - Presides the board meeting in the absence of the Chairman
- Secretary
 - Keeps all records
 - Take all minutes of board meetings
 - Disseminate information to concerned agencies
- Treasurer
 - Take charge of the program management of the MPA funds
 - Take charge of the monitoring of the disbursement of MPA funds
- Auditor
 - Conduct audit activities of MPA funds

Section 13. *Monitoring and Evaluation of MPAs* – The Marine Sanctuaries shall be monitored and evaluated on a regular basis to be jointly facilitated by the

local PO, BLGU and Municipal Agriculture Office. Data generated from monitoring and evaluation activities shall be stored in a databank to be lodged at the CRMO of the MAO for future records and reference. Details of the implementing guidelines for monitoring and evaluation program shall be embodied in the approved Marine Sanctuary Management Plan.

Section 14. *Enforcement Mechanisms* – Enforcement mechanisms shall be defined or embodied in the approved Marine Sanctuary Management Plan and local action plans.

ARTICLE VIII Marine Protected Area Trust Fund

Section 15. *Marine Protected Area Trust Fund* – There is hereby created, as a special account of the municipality, a Marine Protected Area Trust Fund to be administered by the Municipal Agriculture Office. Such fund shall be sourced from the following:

- 1. Local. National and International sources
- 2. User's fees
- 3. Fines and Penalties
- 4. Donations and solicitations
- 5. Grants and Aids
- 6. Other sources

Section 16. Use of the Marine Protected Area Trust Fund – The Marine Protected Area Trust Fund shall be used to finance the operational expenses allocated for the management programs as prescribed in the Marine Sanctuary Management Plan. The disbursement of the Fund shall be subject to existing accounting and auditing rules and regulations. The Fund shall not be used for the creation of positions or the payment of salaries.

Section 17. *Schedule of Fees* – The following fees shall be collected for specific activities permitted to be undertaken inside the marine sanctuaries:

Type of Activity
a. Recreation (Swimming,
Snorkeling and SCUBA
diving)
b. Study and research
P1,000.00/ proposal or case to
case basis as determined by the
MPA Management Board

- Any fees collected shall be issued an official receipt.
- The Municipal Treasurer may deputize the Barangay Treasurer to collect fees and/or fines in relation to this Ordinance. The Barangay Treasurer should be properly bonded for this purpose, and any supplementary premiums on additional bond to be applied for shall be paid by the Municipal Government. The Barangay Treasurer shall follow the same procedures in turning over their collections to the Municipal Treasurer/Cashier concerned as other collected taxes.
- Municipal/Barangay Treasurer shall be the only persons allowed to issue receipts.
- Fees shall be collected on/or before entry into the marine sanctuary while fines shall be collected immediately after apprehension.
- Payment of fines and penalties for the violations of the MPA shall be made at the Municipal Treasurer's Office provided that the proper percentage shares are reflected

Section 18. Collected Fees – All fees collected from recreational activities pursuant to this Ordinance shall be placed in and form part of the Marine Protected Area Trust Fund. The barangay LGU shall be entitled to 20% of the collected fees while the 30% will be entitled to Local POs. The remaining 50% of such collected fees will directly go to the MPA Trust Fund.

All fees collected from fines and penalties from the violations pursuant to this Ordinance shall also be placed in and form part of Marine Protected Area Trust Fund. The apprehending officers will be entitled to 50% of the collected fees while 30% will be entitled for the Municipal Share, 10% to the Local PO and 10% will be deposited to the MPA Trust Fund.

Section 19. *Appropriations* – There is hereby appropriated the amount of One Hundred Thousand (PhP 100,000.00) from the 20% General Fund for the Marine Protected Area Trust Fund on its initial year of implementation. Thereafter, the MAO shall submit its proposed annual budget to the Municipal Planning and

Development Office (MPDO) for inclusion in the Annual Investment Plan of the Municipality. The amount appropriated yearly shall form part of the Marine Protected Area Trust Fund.

Section 20. *Reporting and Auditing* – Financial reports shall be prepared by the Treasurer of the MPA Management Board and submitted to the MAO to be submitted to the Municipal Planning and Development Office. The financial reports, books of accounts and transactions of MPA Management Board shall be subject to the usual auditing rules and regulations.

ARTICLE IX Fines and Penalties

Section 21. *Fines and Penalties* – Violators of the provisions stipulated herein shall be subject to the following fines and penalties:

OFFENSE	1 st OFFENSE	2 nd OFFENSE	3 rd OFFENSE
Fishing inside the marine sanctuary	Fine of P1500 per person and confiscation of caught fish	Fine of P2000 per person and confiscation of caught fish, including gear paraphernalia;	Fine of 2500, confiscation of caught fish, including boat and gear paraphernalia; turned over to the barangay to be used as patrolboat; and imprisonment of up to six months at the discretion of the court.
Collecting, gathering and/or destroying marine organisms and other non-living components of the coastal and marine environment such as sand and rock	Fine of P1500 per person	Fine of P2000 per person	Fine of 2500, confiscation of caught fish
Passage of motorized boats in the marine sanctuary	Warning	Prima facie for fishing in the sanctuary or destroying buoy markers	
Boat anchorage in the marine	Fine of P2500 and		

sanctuary	imprisonment up to 6 months	
Destroying/ illegal taking of marker buoys	Fine of P2500 and imprisonment up to 6 months	
SCUBA diving for recreational purposes in the marine sanctuary	Fine of P2500 and imprisonment up to 6 months	

The MPA Management Body shall collect the fees that shall go to the MPA Fund. The following fees shall be collected for tourists/ visitors in permitted activities within core and buffer zone.:

Sightseeing/boating - P25/head/day (local);

P50/head/day (foreigner)

Snorkeling - P50/head/day (local);

P100/head/day (foreigner)

SCUBA Diving - P200/head/day (local);

P400/head/day

With camera - P300/head/day (local);

P600/head/day

4. Research - to be determined by the MPA Body

If the violator/ offender cannot pay the prescribed amount of fine, s/he shall render community service equivalent to the unpaid amount. The MPA Management Board shall determine the type of community service.

The following fines and/or penalties shall be imposed for violations of this Ordinance:

- 1. Fishing in the buffer and core zone
 - a. First offense fine of P 1, 000.00 plus confiscation of gear and catch
 - b. 2nd offense fine of P 1, 500.00 plus confiscation of gear and catch
 - c. 3rd offense fine of P 1, 500.00 plus confiscation of gear and catch and cancellation of fishing license

- 2. Passage of motorized boat over the core zone
 - a. First offense fine of P500.00
 - b. 2nd offense fine of P 1,000.00
 - c. 3rd offense fine of P 1,500.00 plus cancellation of license
- 3. Removal, transfer, obliteration, damage of marker buoys
 - a. First offense fine of P 1,500.00 and payment of cost of damages
- 4. All related violations of prohibited activities that are not reflected here will be referred to existing ordinances and resolutions enacted by the municipality.

ARTICLE X Miscellaneous Provisions

Section 22. Separability Clause – If any provision of this Ordinance or the application of such provision to any person or circumstances is declared invalid, the remainder of the Ordinance or the application of such provision to other persons or circumstances shall not be affected by such declaration.

Section 23. Repealing Clause – All ordinances, executive orders, rules and regulations or parts thereof which are inconsistent with this Ordinance are hereby repealed or modified accordingly. In particular, this ordinance hereby amends Municipal Ordinance No series of
Section 24. <i>Effectivity</i> – This Ordinance shall take effect immediately upon approval.
APPROVED by the SANGGUNIANG BAYAN of JAGNA, this day of, 2007.

Appendix A. Map of the Marine Sanctuaries of Jagna

