Symposium Proceedings

Ecotourism structure plan of Malabungot protected landscape and seascape: promoting sustainable coastal communities and ecosystems through comprehensive ecotourism development

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Abstract

As a potent tool for coastal resource management and major driver of economic development, ecotourism has to be planned and given full support in its implementation. This paper presented the structure plan of the ecotourism attractions and sites in the MPLS demonstrating the application of ecotourism planning principles. It also discussed recommended key strategies to support the tourism structure achieve sustainable coastal communities and ecosystems in the MPLS area. The planning adopted a participatory approach involving key stakeholders following a 10-stage process and employed the Ecotourism Physical Plan Development Framework modified from the Department of Tourism. Concept plans for developing EDAs were laid within the context of their physico-cultural endowment and in accordance with the principles of developing unique drawing power and providing varied experience to ecotourists. There are a total of four ecotourism clusters in MPLS area developed based on their unique selling qualities, diverse experience for ecotourists. Intermodal transport services will be established in key circuit nodes covered by pump boat services, and public utility vehicles. Staging areas and tourists' service centers will be developed in key EDAs and Clusters. The tourism structure of MPLS emphasized the significance of the comprehensive development of ecotourism products which attracts, satisfies and retains the market through the careful clustering of attractions into thematic destinations, the development of ecotourism centers and staging areas and circuits to stimulate entrepreneurial opportunity. Holistic strategies supportive of the ecotourism structure directions must be implemented.

Key words: ecotourism structure, comprehensive tourism master plan, tourism development areas, social enterprise, protected area

INTRODUCTION

The cause of poverty in coastal communities is exogenous to it the lack of opportunities in remote, rural areas and coastal communities. Small-scale fisheries are usually located in remote, rural areas where there are no attractive alternatives or opportunities. The open access nature of the resource serves as the safety valve of the poor. When "coastal fishery always rhyme with poverty", makes it imperative to put poverty alleviation at the core of tourism planning endeavours. Crafting the MPLS Ecotourism Master Plan must address the challenge of promoting biodiversity conservation and resource management as well as catalyzing economic growth in resource-dependent, rural upland and coastal communities. Sustainable ecotourism provides a very attractive option in these areas where economic alternatives are few, biodiversity investments inadequate, and public funds scarce. It offers the potential for mobilizing resources from the private sector to contribute to local economic development while providing economic incentive for conservation, and financing conservation activities. Marrying coastal resource management and tourism development provides the promise in addressing the vicious cycle of poverty in the coastal villages. Tourism not only addresses the absence of opportunity in remote areas by causing the market (tourists) to come to the product tourism attractions), but also spreads the risks of climate change impact on livelihood through diversification, thereby increasing socioeconomic resiliency. Midway, the economic substitution

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afforded by tourism as a non-extractive livelihood activity apart from fishing or farming, increases household income and decreases the pressure exerted by subsistence fishers or upland farmers on the coastal or forest ecosystems and their resources. As a potent tool for coastal resource management and driver of economic development, ecotourism has to be planned and given full support in its implementation. The 1991 Philippine Tourism Master Plan pushed for the diversification of destinations, attractions, and products to expand the resource base and the market. It prompted the drafting of crucial national policies on air transport, infrastructure, environmental management, land-use. historical and cultural preservation to support the tourism initiative.

The potential of ecotourism as a social enterprise under a protected area context has been the direction of the recent initiative for the sustainable management and conservation of diverse biological resources and ecosystems in the MPLS area by the DENR. The MPLS and the LGU of Garchitorena, which holds the political jurisdiction for managing the coastal communities surrounding the MPLS, have been part of a larger tourism development master planning initiative in Partido District under the Lahuy-Atulayan and Partido environs Tourism Master Plan. However, given the nature of MPLS as a nationally mandated protected seascape and landscape, the development of ecotourism requires comprehensive planning that mainstreams all its tourism assets to promote inclusive growth in the MPLS communities while addressing both the goals of biodiversity conservation and sustainable resource governance.

This paper presents the structure planning of the ecotourism attractions and sites in the MPLS to achieve the goals for sustainable coastal communities and ecosystems in the area by employing ecotourism planning principles.

METHODOLOGY

Ecotourism planning process

The planning process adopted a participatory approach involving key stakeholders following a 10 stage process consisting of key activities as presented in Figure 1.

Stage 1 consisted of the generation of data using various methods as detailed in previous section.

Stage 2 consisted of the analysis of the data generated as detailed also in the previous section.

Stage 3 consisted of the holding of Ecotourism Master Plan (ETMP) writeshop done by the research team using outputs in stages 1 and 2 as inputs.

Stage 4 consisted of the technical consultation, review and draft plan enhancement writeshop attended by key

stakeholders and key officials of Garchitorena LGU.

Stage 5 consisted of the ETMP writeshop for the draft revision and integration of comments.

Stage 6 consisted of the presentation of the revised draft EMP for validation by island communities and mainland Garchitorena LGU, communities, stakeholders and enhancement of the EMP by technical representatives from LGUs.

Stage 7 consisted of writeshop for the second revised EMP document.

Stage 8 consisted of the presentation of the second revised EMP for validation by stakeholders from MPLS communities, Garchitorena LGU and Partido District and national government agencies in Bicol.

Stage 9 consisted of a writeshop by PSU Research Team to integrate enhancements suggested by communities, stakeholders LGU representatives and national government agencies in final EMP.

Stage 10 involves the submission of final EMP document to DENR Region 5.



Fig. 1. Ecotourism Planning Process Stages and Sequencing.

Ecotourism physical plan development framework

The designation of tourist development areas, clusters and circuits from existing and potential tourist sites in MPLS resulted from the application of a planning framework that is based from the preceding planning concepts: The planning concepts used to elaborate and illustrate the vision and structure for the development of the MPLS Ecotourism Master Plan (Figure 2) are:

- Ecotourism Sites (ES)
- Ecotourism Development Areas (EDA)
- Ecotourism Development Clusters (ECs)



Fig. 2. Ecotourism Structure Planning Concept.

- ES- An ecotourism site (ES) is more specific, where tourists come to see and experience and may have:
 - A. Natural and cultural significance
 - B. Attractive landscape
 - C. Where activities take place
 - D. Suitable for Ecotourism development
- EDA An ecotourism development area (EDA) is a cluster of sites that has:
 - A. Geographical proximity
 - B. Common thematic attributes
 - C. Diversity of product offer in a way that can be promoted to different niche markets thereby facilitating product/branding
 - D. Capable of being promoted a stand-alone destination in the market place
 - E. nique selling points
- EDA Considerations and Prioritization Criteria
 - A. Regional/District Ecotourism Significance (have existing ecotourism with tourist drawing power)
 - B. Vital transport infrastructure
 - C. Support facilities such as utilities and amenities
 - D. Human resources
 - E. Private investment
 - F. Environmentally sensitive areas
 - G. Ecotourism service centers
 - H. Linkages

Levels of Priority of EDAs based from the above Considerations and Prioritization Criteria:

I. <u>Primary EDAs</u> have regionally significant TS, or theme with high ecotourism drawing power that

overshadows or influence ecotourism activities in other TSs

II. <u>New EDAs</u> are relatively newer in the sense that they don't have TS that is regionally significant or established but have the potentials to develop such.

III. <u>Medium to Long-Terms EDAs</u> have strong potential for ecotourism but because of their current relative inaccessibility, or underdeveloped state will only be ready in 5 to 10 years

Delineation of EDAs according to Themes.

Themes of EDAs are crafted according to their unique selling points

- EC Ecotourism Clusters (EC) are group of EDAs that have geographical proximity highlighting a unique but complete ecotourism experience and sharing a common ecotourism service center. They serve as anchors of the spatial framework for development to promote equitable distribution of the benefits of ecotourism across EDAs and their communities and the placing of vital infrastructures and services to support their growth.
- Service Centers and gateways are established municipalities or villages that are accessible to intermodal transport, have extensive road systems, possess facilities and such the amenities as accommodations, communications, banking services, restaurants, travel assistance services, restaurants, shopping malls or centers, health and security of the tourists. These specifically refer to Binagasbasan Island or Sumaoy Island and the mainland LGU of Garchitorena.
- To give coherence to the overall planning, management and promotion of the MPLS, a development concept was proposed and illustrated in Figure 3 based on the key fundamentals:
- 1. Designation of Ecotourism Development Areas from group of TS each with at least a premier or stand-alone attraction
- 2. Clustering of EDAs by geographic proximity, offering unique but diverse products under a common service center
- 3. Access through strategically located gateways
- 4. Linkage through intermodal system
- 5. Development of differentiated destination product experience
- 6. Destination and cluster theme and branding



Fig. 3. Physical Structure Development Plan of Ecotourism in MPLS.

RESULTS

Ecotourism structure of MPLS

Based on the criteria on tourism development adopted in this study, a total of seven (7) ecotourism development areas were identified for the MPLS area. Of these, two (2) were classified under Primary Ecotourism Development Area; one (1) under the New Ecotourism Development Area; and two (2) under the Medium- to Long-term Ecotourism Development Area (Figure 4 and 5). These categories of ecotourism development areas represent their different levels of development.

Primary ecotourism development areas

Under the Primary Ecotourism Development Areas category are two ecotourism development areas (EDAs) 1 and 2. The EDA-1 is composed of Sibanban, Piglucaban and Monteverde Islands. While the EDA-2 is composed of Bani and Pighaluban Islands.

The two primary ecotourism development areas have the paramount physical and cultural attractions sites in the MPLS area. They have the potential as the main destinations of the tourists in coming years. Their physical attractions possess the qualities with drawing power despite the lack of initial facilities to accommodate tourists. There are other ES that gravitate also within them which can contribute towards enhancing the attractions in these more accessible EDAs.

Sibanban is an island that is administratively under the jurisdiction of Barangay Denrica. The island is characterized by lush vegetation, white beach and long shoreline. On this island stands a chapel for the use of the few residents in the island community. Caves can be found in the area where bats hang themselves onto.

Piglocaban is a private beach resort. Also, it is administratively under the jurisdiction of Barangay Denrica. The resort is characterized by a long stretch of white-sand beach with pristine waters. Coconut trees that abundantly grow on the island, along with other green specie forest which serves as home to bats, add a picturesque view of the untainted beauty of the resort that is a perfect fit for summer escapade. The island is also home to few residents whose privately owned cottage houses are made ready for vacation rentals of guests during their stay.

Monteverde (formerly known as Cagminonga Island 1 is located around the MPLS but administratively under the jurisdiction of Barangay Denrica. It is highly characterized by its magnificent long stretched white beach with clear blue waters due to its boasting pearly and almost powdery white sand. On this island lies a spectacular cave that is predominantly frequented and inhabited by fruit bats. According to informants, Nara trees abundantly grow on the island with other mixed species forest making the island more vibrantly green. A vestige of a building structure erected in the past with big cemented posts standing can be seen at the façade of the island. It is alleged that the island is privately owned, but no one could tell if it is owned by a certain individual named Monteverde where the island probably has taken its name.

The Bani Islands are characterized by its elongated series of mountain-beach-rock island and pattern formations that stretch along the bay area of MPLS. The island is known for its spectacular lagoons of varied sizes that are suited for kids and adults. A stretch of sea canal that separates the midportion of the entire islands is a key feature in the island. The canal converts to a mini lagoon during low tide and reverts back to its original state during high tide. The super vibrant blue color of the lagoon adds to the coolness of water apart from the supposed idea that there is a source of fresh water deep down that apparently decreases the temperature and the salinity of the sea water when they meet.

The Pighaluban Island (formerly known as Anchor Island) is widely characterized by its pristine fine white sand beach with the beauty of big rocks and naturally formed well. Its name apparently means "a virgin island or newly discovered island", according to locals. The island has provision of basic necessities for guests such as tents and cottages, basketball and volleyball courts. Sea weeds and red crabs in the mud are also prolific in the area. According to stories, a big snake feared by many can be found in the area. The entire island derives its electricity from a solar energy source.

New ecotourism development areas

Under the category of New Ecotourism Development Areas is a single group of ecotourism development area that closely approaches the physical and cultural attractions of ecotourism sites in the primary ecotourism development areas in the MPLS. The EDA-3 is composed of two ecotourism sites, namely, Libanon and Liwan islands. These ecotourism sites also possess the similar potential of key ecotourism destinations in coming years. Their unique physical attractions enable them to stand as a single EDA with distinct drawing power given infrastructural support and appropriate facilities to accommodate ecotourists.

Libanon is a forested island situated two kilometers away from the Binagasbasan Beach. The island is highly characterized by volcanic rock formations partially submerged in the sea. It is a great spot for surfing because of the strong wave current that carries water and splashes on the volcanic rocks.

Liwan Island is characterized by a white beach with larger sand particles. A relatively small island can be found neighboring this island where, during low tide, people can pass through the other side by foot. It is a great spot for sightseeing given the perfect view of a wide variety of living sea creatures including corals, blue crab, fishes, and clams. Engaging activity such as rock climbing can be done with the existence of big rocks. Fishing, surfing, and mountain climbing can be done as well as sightseeing of the pacific sea while on top of the hilly part of the island.

Long-term ecotourism development areas

There are also two primary ecotourism development areas that equally have the paramount physical and cultural attractions, namely EDA-4 and EDA-5. The EDA-4 is mainly composed of Bulalacao Island; while EDA-5 is solely composed of Bakhaw Island. Their remoteness and current absence of initial public investments in amenities and infrastructure would take full development of their potential for ecotourism some years.

The Island of Bulalacao is characterized by the scenic beauty of beach with ordinary volcanic sand and rocks close to the sea. It harbors a medium-sized cave where people can enjoy a perfect sight of bats hanging onto the cave wall. Seaweeds can be found in the island along with other marine resources. It also grows a variety of trees that serve as home for birds, and root crops such as *camote, cassava*, coconut and banana that grow in abundance on the island. Sightings of whale shark from the month of April to May are potential. Allegedly, there had been recorded sightings in the past during summer in this spot.

The island of Bakhaw (formerly known as Bacon Island) is an isolated island. It is a collective mass of volcanic rocks where 'apuga' shells abundantly thrive on the surface, and atop grows a variety of green life. The island is not ideal for swimming as it is a desolated area surrounded by the deep waters with strong current movement that extends from the Pacific. However, a mini pool of bluish green water at the opening of a small underground cave can be a swimming area. Two caves can be found on the island: a small one fronting the mini pool and the big one located on the other side of the island. These caves with traces of stalagmites and with small amount of water that drips from the cave roof serve as a resting place for bats. The island also serves as a breeding ground of migratory birds and a home to sea snakes or 'ambiran' which are characterized by their latitudinal color of black around the gray-colored body. The area is a great spot of sightseeing and scuba diving because of the big corals that can be found in the area

Concept plans for specific EDAs

Concept plans for developing the specific EDA were laid within the context of their physico-cultural endowment (Tomeldan, 2009) and in accordance with the principles of developing unique drawing power and providing varied experience to ecotourists.

EDA1 Sibanban-Piglucaban-Monteverde

Sibanban can develop beach recreational services such as swimming, snorkeling, kayaking, boating, and beach volleyball. However, in order to enhance and lengthen the stay of visitors, this site requires the establishment of cottages. It is recommended that a decent public comfort room be established in accessible area of the island. A trail should be constructed leading to a cave in the island. Interpretations and signage should be developed for this purpose near the sites. To facilitate docking of boats, provision of pontoon bridge to mount approaching and leaving tourists during low tide is a necessity.

Piglocaban can develop beach recreational services such as island trekking, swimming, snorkeling, kayaking, bat watching, and boating. The site will need to set up waterharvesting tanks with purifying accessories to supply water, and a solar powered electric generator to provide electricity. It is recommended that a decent public comfort room, a tourist center along existing private cottages and homestay facilities managed by locals for overnight lodging be established in the island. A kiosk for selling handicraft and native foods from the locals should be built along with the tourist center in the community. Jetty should be provided for passenger boats.

The pristine nature of Monteverde Island scenery should

be preserved with very minimal amenities established in the island. The concept for its development should be that it must be a place for sight-seeing and relaxation and short- stay visits by boat. Thus, only pontoon bridge and jetty ports that will facilitate the boarding and approach of island- hopping tourists should be provided in the site with floating cottages to accommodate brief stop-over of tourists on a sunny day. The vestige of the building structure can be developed fully into a tourist center and comfort room facility with rainwater harvesting tanks. Island trekking, swimming, snorkeling, kayaking, bat watching, and boating are recreational activities that can be developed for this destination.

EDA-2: Bani-Pighaluban

The Bani Islands owing to its proximity and accessibility by sea craft to Sumaoy Village need to be packaged for resort and recreation. Paved pathways should be constructed to facilitate treks exploring its mountain-beach-rock- formation stretching along the bay. Cottages need to be constructed close to the spectacular lagoons with varied sizes suited for kids and adults. Floating huts need to be supplied to compliment activities suited for the stretch of sea canal that separates the mid-portion of the entire islands and converts to a mini lagoon during low tide and reverts back to its original state during high tide. Swimming, beach camping, boating, beach strolling are activities that can be developed for this EDA.

The Pighaluban Island (formerly known as Anchor Island) which is widely characterized by its pristine fine white sand beach with the beauty of naturally formed big rocks can develop beach recreation activities such as basketball and volleyball. These will require the establishment of basketball and volleyball facilities to augment and enhance the existing sports recreational facilities in the area. Its tranquil beaches highlighted with scenic rock formations can be developed for resorts where tents and cottages can be established that would provide shelter for visitors who intend to enjoy the relaxing ambiance of the island. The existing abundance of seaweeds and red crabs resources can be used as natural attractions for the curious minds where interpretations delving on its biology and ecology can be developed and installed in appropriate sites. Similarly, an interpretation on the legendary feared big snake inhabiting the area and feared by locals also need to be established in the appropriate site of the area to elicit more curiosity and interest from visitors. It is recommended that a decent public comfort room, a tourist center and an overnight cottage lodge be established in the island. Jetty should be provided for passenger boats.

EDA-3: Libanon-Liwan

Libanon as a forested island situated two kilometers away from the Binagasbasan beach should be developed for nature, recreation and soft adventure. These include swimming, fishing and kayaking and nature trek. Trails and paved route should be develop towards the forested area. The volcanic rock formations partially submerged in the sea can be used to develop rock climbing activities. The strong wave that splashes on the volcanic rocks can provide the natural assets to develop surfing. To support these potential activities and products, a pontoon and a boat jetty need to be established to provide access to sea crafts. Modest comfort rooms, cottages should also be constructed using local materials that blend with the environment.

The Liwan Island which is characterized by a white beach with larger sand particles should be developed for beach recreation. This will include beach sport activities such as beach volleyball and beach basketball. Floating huts for relaxation and recreational swimming can be established in the relatively small neighboring island where, during low tide, people can pass through the other side by foot. Snorkeling is one activity that will maximize the visit experience from the great spot for sightseeing a wide variety of living sea creatures including corals, blue crab, fishes, and clams. Engaging activity such as rock climbing can be done with the existence of big rocks. Fishing, surfing, and mountain climbing can also be developed including the establishment of view decks on top of the hilly part of the island for sightseeing of the Pacific Ocean.

medium and long-term ecotourism development areas

EDA-4:Bulalacao

Bulalacao can develop adventure activities that will include spelunking and deep scuba diving for appreciating coral reefs and for interaction with visiting whale sharks on summer months. The place also offers a variety of trees for forest trek. Pathways leading to the area need to be established. Bird watching can also be packaged for more adventurous visitors who are curious to see migrating birds from northern territories like Taiwan and Japan. Observation huts for bird watching activities need to be established in the island. Comfort rooms with rain-harvesting tanks and a cottage to accommodate visiting guests are key amenities that need to be provided in the area.

ETDA-5:Bakhaw

Bakhaw (formerly known as Bacon Island) Island is not ideal for swimming for it is a desolated area surrounded by the deep waters with strong current movement that extends from the Pacific. However, it can be developed into extreme adventure ecotourism for select group of able bodied enthusiasts. The mini pool of bluish green water with white sand can be a developed into an extra-ordinary swimming area that is located at the opening of a small underground cave. Spelunking adventure can also make use of the two caves found on the island: a small one fronting the mini pool and the big one located on the other side of the island that serve as a resting place for bats. Because the island also serves as a breeding ground for migratory birds and a home to sea snakes or 'ambiran' which are characterized by their latitudinal color of black around the gray-colored body, extreme adventure bird and snake watching can be developed for the area. Observation huts for bird and snake watching need to be established in the area. Signage and interpretation need to be crafted and erected in the area for these natural ecotourism assets. The area is a great spot of sightseeing and scuba diving because of the big corals that can be found in the area.

Ecotourism clusters

A total of four ecotourism clusters will be developed in MPLS area. These clusters were based on their unique selling qualities which can provide varied experiences for ecotourists visiting MPLS, namely: Cluster 1 (Resorts, Recreation and Culture); Cluster 2 (Beachscapes, Culture and Adventure) and Cluster 3 (Resorts, Adventure and Culture). Cluster 1 with Resorts, Recreation and Culture as selling qualities and theme will be composed of two (2) EDAs namely: EDA-3:Libanon-Liwan and EDA-2: Bani-Pighaluban. These are the ecotourism sites close and within the inhabited Islands of Sumaoy and Binagasbasan. The ecotourism destinations in this cluster are commonly within the periphery of these peaceful fishing island communities.

The stretch of beach lines along the edges of the interlinked islands such as Libanon in Binagasbasan and Liwan in Sumaoy are ideals for resorts owing to the availability of amenities and facilities that supports relaxation and vacation such as electricity, water, communication signals, services and food supplies provided by local folks and existing stores in the island community.

The presence of settlements in the Islands of Binagasbasan and Sumaoy that host the attractions of Liwan and Libanon and the rich culture that have been nurtured by locals in these communities make this cluster ideal for culture tourism that will enhance visit experience of recreational visitors in Bani and Pighaluban islands.

Cluster 1, which will be themed as the Resort, Recreation and Culture Cluster of the MPLS ecotourism will be showcasing the best experience for sand, sea and sun ecotourism enhanced by fishing and islander's way of life. The *visitas* of Binagasbasan and Sumaoy will serve as the Ecotourism Center for Cluster 1. Potential accommodations in this tourism center will range from community lodge and homestays. The area has existing transport services, water and power services. They are linked westward to Cluster 2 composed of beachscapes and reefs ecotourism of EDA-1 and eastward to the adventure ecotourism of EDA-5.

Cluster 2 with Beachscapes, Culture and Adventure as selling qualities will be composed of 3 EDAs namely:EDA-1: Sibanban-Piglucaban-Monteverde; EDA-4: Bulalacao, and EDA-5: Bakhaw. This Cluster is mainly composed of attractions and ecotourism destinations that are a little farther away from the inhabited islands of Binagasbasan and Sumaoy. It features the beachscapes and coral reefs in EDA-1, and the adventures offered by the unique seascapes of EDA-4 and EDA-5.

The lush vegetation that combine with powdery white beaches in the Islands of Sibanban, Piglucaban and Monteverde lend them outstanding features for beachscape tourism, their isolation from populated settlements made them ideal for soft beach adventure ecotourism. Its proximity to the coastal community of Denrica with rich religious traditions can provide cultural attractions that will diversify the experience of visitors. Similarly, the isolation yet proximity of Bulalacao Island to the inhabited island of Sumaoy allows for the integration of cultural tourism as added attraction completing a potential direction of the island for seascape and cultural tourism destination in the cluster.

The location of Bakhaw within the offshore areas close to the open waters of the Pacific are attributes that make them appropriate for extreme adventure seascape tourism.

Cluster 3, which will be distinguished as Resorts, Adventure and Culture cluster, will be mainly composed of EDA-6 ecotourism attractions located in Garchitorena LGU and its mainland coastal communities.

Ecotourism circuits

In order to allow movement of ecotourists among ecotourism development areas, to link less endowed ecotourism sites to those with strong ecotourism drawing power and give them diverse ecotourism experience, the different EDAs were packaged into tourism circuits composed of two (2) key circuits to be developed and designated for the purpose of planning and development namely: Circuit 1: Tamban-Sumaoy-Binagasbasan-Malabungot-Garchitorena; Circuit 2A: Garchitorena-Malababungot-Binagasbasan-Sumaoy-Tamban; and Circuit 2B: Caramoan-Malababungot-Binagasbasan-Sumaoy-Tamban

Circuit 1 will serve as the major Jump-Off Circuit for incoming tourists from northern circuits. This circuit is primarily sea-routes emanating from Tamban port in Tinambac to the MPLS areas.

Circuit 2A to be referred to as Southern Circuit, will

serve as the gateway for incoming tourists departing by land from Caramoan and mainland Partido area. This jump-off circuit for incoming tourists from southern routes will emanate from Garchitorena proper as gateway towards the MPLS area by sea routes.

Circuit 2B will serve as the backdoor gateway to the MPLS ecotourism area by incoming tourists originating from the islands of Hapunan, Lahuy, and Oring of Caramoan by sea route.

Efficient and effective intermodal transport services should be established and their respective operators and personnel shall be organized and trained.

These transport services will cover the following key circuit nodes:

Pump Boat Services

between Tamban -Sumaoy vv

between Tamban-Binagasbasan vv

between Garchitorena-Sumaoy vv

between Garchitorena-Binagasbasan vv

between Caramoan-Binagasbasan vv

between Caramoan-Sumaoy

- between Caramoan-Garchitorena
- Public Utility Vehicles such as bus, van, jeepney between Naga City-Tamban between Naga City-Garchitorena between Caramoan- Garchitorena between Albay-Tigaon





Fig.4. The ecotourism sites comprising the Ecotourism Development Areas (EDAs) of MPLS.



Fig. 5.The different clusters of Ecotourism Development Areas in MPLS categorized by level of development.

Ecotourism structure plan of Malabungot protected landscape and seascape



Fig. 6. The two Primary Staging Areas serving as jump off areas for ecotourism sites of MPLS.

Staging areas

To be able to provide comfortable and leisurely travel to tourists, staging areas and tourists' service centers that would provide package of goods and services that will satisfy the basic needs of tourists in one-stop shop should be developed in key EDAs and Clusters. There will be a primary and a minor staging areas in key EDAs.

In the Primary Ecotourism Development Areas (EDA1and EDA2), except Pighaluban Island, but including Liwan, the major staging area will be assigned to Sumaoy Island owing to its existing power supply system, services and as part of the nuclear communities of Binagasbasan and Sumaoy itself. In the New Ecotourism Development Areas (EDA 3), except Liwan, but including Pighaluban in EDA 2, the major staging area will be assigned to Binagasbasan owing to its facilities and other service attributes similar to Binagasbasan. In Long-term Ecotourism Development Areas, the major staging areas will be equally shared between Sumaoy and Binagasbasan. The major staging area for Bulalacao (EDA4) will be Sumaoy; while for Bakhaw (EDA5) will be Binagasbasan. The geographical proximity to each of the two nuclear island communities in the MPLS are the key basis for their assignments as major staging areas. (Figure 6).

For Primary EDA1, among its three closely dispersed destination island of attractions, Sibanban Island will be developed as minor staging area due to its relatively bigger size, proximity to the mainland coastal community of Denrica while almost a stone throw away to the rest of the ecotourism sites of EDA1. For Primary EDA2, between the two islands close to Binagasbasan, the island of Pighaluban will be assigned as minor staging area because of its existing facilities for visitor accommodation, larger area and relatively superior attraction qualities.

For the New EDA-3, the island of Liwan will be designated as minor staging area owing to its proximity to Binagasbasan and ecotourism attractions unique to the rest of the islands.

For Medium to Long-term Ecotourism Development Areas, Bulalacao Island will itself serve as minor staging area in EDA-4; while Bakhaw will itself serve as minor staging area in EDA-5.

For these staging areas to be able to perform their expected functions to support ecotourism in MPLS, the following utilities, amenities and services need to be established: Docking Port Terminal, Tourist Information Centre, Computer Rooms, Electronic Gadget Charging Booth and an Emergency and Security Assistance Centre.

DISCUSSION

In the words of Briedenhann and Wickens (2004), the evolving tourist trends have, over the last decade, led to a shift from standardized mass tourism to more individualistic patterns, in which greater flexibility and a more meaningful experience have gained prominence.

Rural coastal tourists have varied motivations, which might include ecological uniqueness, special adventure opportunities, cultural attractions, or the peace and quiet of the countryside suggesting that ecotourism must be designed in such a way as to maximize key attributes of each potential ecotourism attraction and site in order to offer a diverse range of activities and experience.

As supplier of coastal rural ecotourism, the

comprehensive development of the MPLS ecotourism structure emphasized the significance of the development of ecotourism products which attract, satisfy and retain the market through the careful clustering of attractions into thematic destinations. It also pursued the development of tourism centers and staging areas and circuits to stimulate entrepreneurial opportunity, and provide the impetus for the development of support infrastructures, amenities and ancillary services to provide a diverse range of products and experiences that act as incentives to individual ecotourist to stay longer and return on repeat visits.

CONCLUSION AND RECOMMENDATIONS

This paper demonstrated that the MPLS ecotourism structure, as a central development concept of the comprehensive ecotourism blueprint in the context of protected area and subsistence fishing communities, is designed not only to achieve the prime objectives of raising awareness of biodiversity conservation, stimulating social, economic and cultural development thus improving the quality of life of local people and promote ecological and biological resource resiliency; but also as a marketing strategy that serve as a catalyst for the stimulation of diverse other attractions and activities relished by ecotourists. Because ecotourists are dispersed along the length of the MPLS ecotourism structure, management of carrying capacity is facilitated, negative environmental impacts reduced, and economic benefits more evenly distributed.

Apart from aggressively pursuing the above directions for comprehensive development and future expansion of the ecotourism in MPLS conforming to the prescribed tourism development framework of the Philippines that puts emphasis on clustering tourism products on the basis of geographical proximity of destinations, capacity to provide diverse experience, each cluster led by tourism site with strong tourism drawing power, and a system for prioritizing ecotourism development, it is recommended that holistic strategies supportive of the ecotourism structure directions must be implemented. The following strategic directions supportive to the ecotourism structure are hereby recommended:

1. Developing Diversified and Integrated Ecotourism Product Offerings

Diversified and integrated ecotourism products should be developed in the EDAs and tourism clusters to provide varied ecotourism experiences for tourists and value for their money. The development of these ecotourism products should build from the strengths of its key tourism assets in the EDAs. Aside from the common 3S- sun, sea and sand experience- the development of special interests, soft adventure, man-made activities and cultural tourism products should be highly considered. Each EDA should choose a tourism theme which could serve as its unique selling point. Integration of these tourism assets in the EDAs should be achieved by designing and establishing tour treks that transcend and link together various physical attractions and themes within and among EDAs. The integration should promote synergism and complementarity in key tourism assets in each EDA.

Literature and artefacts highlighting these tourism products in the form of signage and interpretation should be developed and established in strategic places to enhance and heighten the appreciation of tourists from these varied tourism products.

2. Encouraging Visits to Ecotourism Areas

Visitors to the EDAs should be encouraged through creative and aggressive marketing and promotion. To do this, the tourists market should be properly identified and segmented to determine the key attributes of the tourism products that suit each market segment. The determination of the market segment and product attributes combination should define the market niche that will be highlighted in the marketing strategies.

Effective and strong product positioning statements as defined by these identified market segments and key tourism product attributes should be crafted to guide promotion strategies. The product positioning statement should not only evoke the emotions from these key product attributes and transfer them to potential visitors by means of visual rationales, but also complement the strategies and plans for ecotourism product development and diversification. Appropriate marketing communication mix through various media to reach multiple tourists must be designed to support creative and aggressive marketing and promotion of the tourism products.

3. Developing External and Internal Accessibility

Access to the tourism area should be improved by establishing land and sea main gateway infrastructures, construction and rehabilitation of roads, bridges and local ports, and the improvement of transport services.

4. Establishing land and sea main gateways infrastructure should focus on identifying infrastructure requirements to materialize the key tourism circuits that will connect tourism clusters and EDAs and make the tourism areas externally accessible. This should include the determination of major sea gateways and infrastructures that would facilitate sea travel from Tamban in Tinambac (northern gateway) and Garchitorena (southern gateway) proper towards key TS in Sumaoy, and Binagasbasan Islands and improvement of existing paved roads in the island interiors to enhance its capacity to absorb future increases in water crafts volume and safe travel. This should also include the determination of major seaports that would facilitate sea travel connecting southern and northern circuits of the tourism area, particularly the improvement of main sea gateway infrastructure in Tamban, Tinambac that connects the island communities in MPLS to the Tinambac mainland, and the sea gateway infrastructure in Garchitorena that will link MPLS islands of Sumaoy and Binagasbasan to Garchitorena town proper, the Caramoan and Presentacion tourism areas.

Construction and rehabilitation of local ports should focus on improving transport networks in the primary, and new tourism development areas and the rehabilitation of existing ones as dictated by their development concepts. These should include the construction and rehabilitation of barangay road networks, path walks, and local ports and pontoons in jump-off points to make TS accessible from within.

Complementing the improvement of transport infrastructures, both sea and land transport services should be improved as well to facilitate access. This will include the determination of key transport facilities such as waiting sheds, tricycle and bus terminals, marina and holding areas in ports for sea travel passengers. It shall also include a system on schedules of trip that ensures synchronized and on time travel departure and arrival schedules.

5. Providing Basic Utilities, Amenities and Services

Key utilities and services such as water, electricity and communication should be installed within MPLS islands to encourage more visits. These utilities, amenities, and services should depart and be based on the development concepts identified for the EDAs which should match the development directions dictated by the key attractions and TS of the EDAs.

Water service facilities should be constructed and improved in primary and new EDAs. Improvement will require additional establishment of water wells, or improvement in water holding capacities of water harvesting structures to provide adequate supply of this basic utility for tourists.

The need for power is essential in island EDAs which are not connected to the mainland power grid. The capacity of the existing power generator and lines need to be upgraded and expanded. The establishment of either generators or solar energy panels will be key options to provide for the basic power needs in MPLS areas. The frail ecosystem and physical constraint of geographic isolation in most of these island EDAs require careful consideration between conventional and green technologies.

In closely adjacent island to mainland EDAs such as in Binagasbasan, where availability of power utility could be assured as technically feasible, key communication facility such as cell sites need to be constructed to ensure clearer communication signals. Intra-island communication should be strengthened using back-up conventional hand-held radio systems.

Basic amenities, comfort rooms and public bath, kiosk, briefing room, communication facilities such intercom and sleeping quarters for overnight-staying guests should be in place in modest tourism centers in key EDAs particularly in the staging areas (Binagasbasan, Sumaoy, Tamban and Garchitorena) to respond to the needs of tourists on-site.

Training packages for human resources in the tourism sector should be designed and implemented to ensure quality and competitive tourism services. Such packages should suit the needs of the industry and current capacities of the training provider institutions and the training beneficiaries as well.

6. Promoting Equity and Socio-Ecological Resiliency

Social equity and socioecological resiliency should be promoted to enable marginalized fishing communities in the MPLS access to tourism opportunities, wean from resourcedependency and unsustainable use of ecosystem-based resources through sustainable livelihood, and reduce their vulnerability to impacts of economic and hydro-meteorological shocks.

Capacity and enterprise development should be designed and implemented targeting marginalized communities and key stakeholders. Customized capacity development tracks suited to specific sectors and training needs should be developed to promote relevance in manpower development and equitable access. The tracks should include training variations in key training categories of tourism livelihood and tourism management training.

Holistic rural enterprise development integrating critical elements of sustainable livelihood such as the use of low-tech, low-input and environment friendly technology, and participation of marginalized fishing communities in tourism enterprise development and management, access to credit and marketing support should be established in the EDAs.

Conditional cash transfer initiative or food-for work scheme should be linked with the rehabilitation of degraded habitats such as mangroves, seaweeds and forests to revive the vigor of ecosystem functions of these key ecotourism assets, protect biodiversity and strengthen their resiliency towards further impacts of anthropogenic abuse.

7. Protecting and Sustaining the Environment

The island and mainland coastal environment in the MPLS area should be protected and sustained through rehabilitation, restoration, stock enhancement and resource management in the context of marine and forest protected area management.

Rehabilitation and enhancement of population stocks of key habitats should be done for degraded mangroves, reforestation for declining upland forests and for degraded seagrass beds in the islands of Binagasbasan, Sumaoy, and Malabungot, the coastal areas of Denrica and in mainland Garchitorena shores. It should be upscaled to a larger marine ecosystem covering the MPLS and Sisiran Bay by connecting to networks of MPAs to achieve expanded ecological and social goals. Zoning in highly critical forest ecosystems of the MPLS should be delineated according to their use and no-use zones to protect the endemic species present in the area from wildlife hunting and impacts of illegal logging. A comprehensive ecotourism management system should be developed within each cluster to compliment these conservation initiatives. This should build from outputs generated from the field researches conducted under this MPLS biodiversity research project to come up with objective standards as basis for rationally managing ecotourism activities and sustainable management of ecologically sensitive areas. Aggressive solid waste management project should also be implemented in island barangay and municipal level to ensure cleaner coastal and marine environment.

A system of biodiversity and ecotourism monitoring should be installed by MPLS management council and barangay and municipal LGUs to determine whether standards set and ecotourism management systems to protect ecosystem and biodiversity are being implemented religiously, whether objectives and targets are achieved as planned.

Impact evaluation should be developed and implemented by the MPLS management board to measure changes in environmental health and biodiversity indicators, and the effects of environment protection and sustainability strategies on the ecosystems and ecotourism assets on a larger time scale as inputs for improving resource and ecotourism governance.

8. Mainstreaming Participatory Governance and Establishing Sustainable Financing for CRM and Ecotourism Development

The participation of communities and resource users in ecotourism and resource governance should be mainstreamed and sustainable financing mechanisms for funding coastal resource management and ecotourism development initiatives should be established in the MPLS ecotourism area. The framework for participatory governance should be in place such as the development of community-based protected seascape and ecotourism management councils, MPLS coastal resource management plan crafted and developed through participatory process, the creation of environment law enforcement teams, and the institutionalized allocation of regular fund from LGUs to finance environmental law enforcement, incentivize management council staff and alternative livelihood activities.

Sustainable financing scheme should be established in the MPLS area following the PES scheme to create a sustainable system for generating funds from ecotourism assets to finance biodiversity protection, coastal ecosystem rehabilitation and enhancement; and the budgetary requirements for funding livelihood activities of that will strengthen cooperative behavior towards conservation, and reduce the pressure of extractive livelihood activities to the ecosystems that build the ecotourism assets in MPLS area. The establishment of the PES-anchored user fee scheme should be based on a highly reliable contingent valuation research conducted by expert economist to generate the benchmark mean willingness-topay of ecotourists, estimate of the use value in monetary terms of the key ecotourism assets that are the subject of the user fee scheme, the identification of the user fee collecting entity, the mechanics for keeping the collections and how these can be equitably shared to protect the tourism assets, and provide livelihood to key stakeholders. Other rent-capture mechanisms should also be established to enhance fund generation.

REFERENCES

- Briedenhann, J and E. Wickens. 2004. Tourism routes as a tool for the economic development of rural areas – vibrant hope or impossible dream? Tourism Management, 25 :71-79
- [2] Lahuy-Atulayan and Partido environs Tourism Master Plan. 2015, Partido Development Authority
- [3] The 1991 Philippine Tourism Master Plan
- [4] Tomeldan, MV. 2009. Tourism Structure Plan of Busuanga and Coron, Northern Palawan, MUHON: A Journal of Architecture, Landscape Architecture and the Designed Environment (3) 17-27