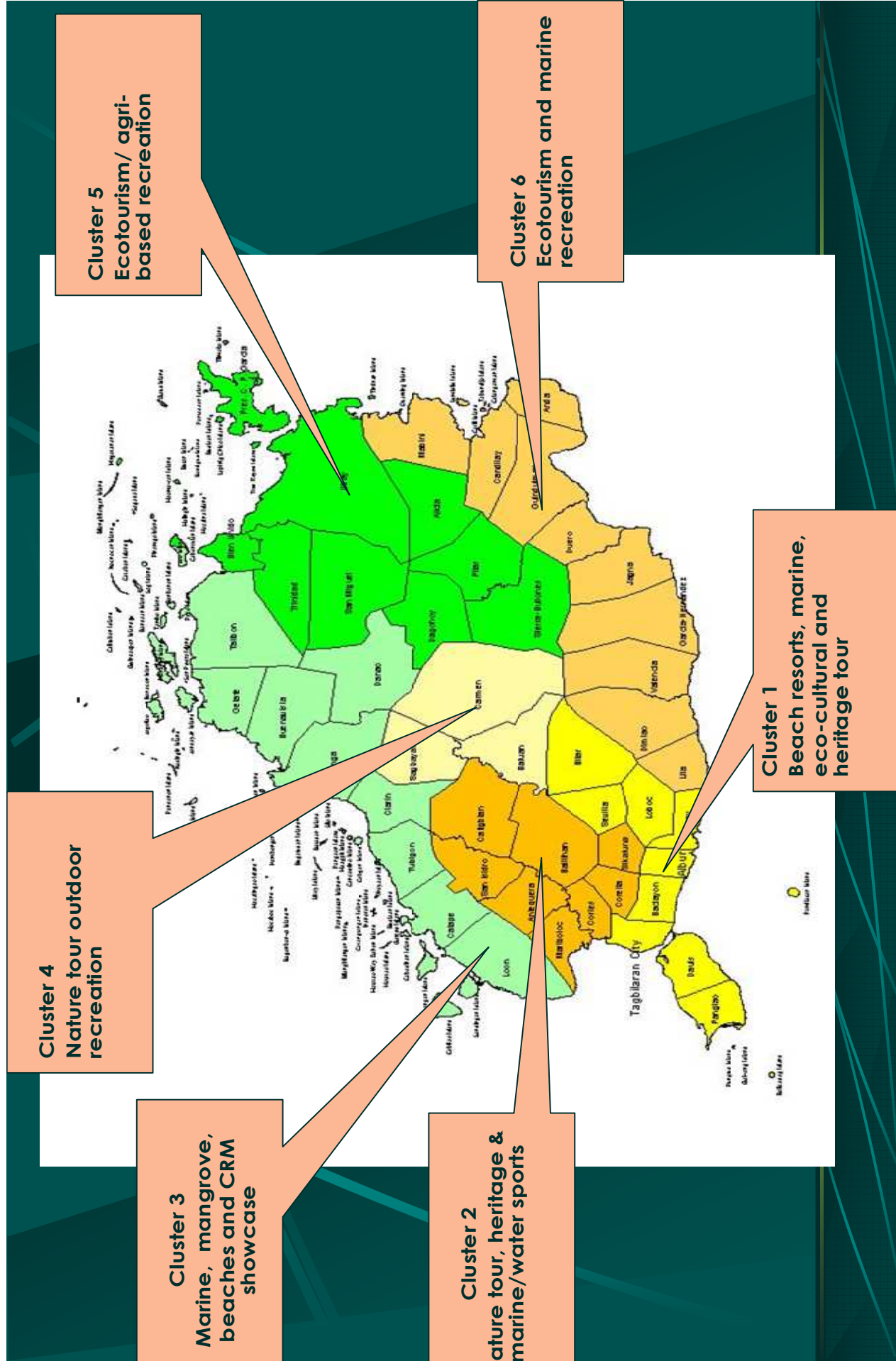


# **Biodiversity Conservation and Ecotourism Framework Plan of Bohol 2006-2015**

*A Joint Undertaking between the Province of Bohol thru PPDO, BEMO, BTO  
and  
German Development Service (DED), InWENT, UNDP-GEF-SGF thru SWCF,  
DENR & DOT*



Biodiversity Conservation and Ecotourism Framework Plan of Bohol

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### ***Acronyms and Abbreviations***

<b>BBRC</b>	<b>Bohol Biodiversity Research Center</b>
<b>BEC</b>	<b>Bohol Environment Code of 1998</b>
<b>BEMO</b>	<b>Bohol Environment Management Office</b>
<b>BET-C</b>	<b>Bohol Eco-tourism Club</b>
<b>CCAD</b>	<b>Center for Culture and Arts Development</b>
<b>CIARS</b>	<b>Cave Impact Assessment Rating System</b>
<b>CRM</b>	<b>Coastal Resource Management</b>
<b>CVSCAFT</b>	<b>Central Visayas State College of Agriculture Fishery and Technology</b>
<b>DepEd</b>	<b>Department of Education</b>
<b>ECC</b>	<b>Environmental Compliance Certificate</b>
<b>EIA</b>	<b>Environmental Impact Assessment</b>

<b>EO</b>	<b>Executive Order</b>
<b>EIS</b>	<b>Environmental Impact Statement</b>
<b>ETWG</b>	<b>Eco-tourism Technical Working Group</b>
<b>FOCAS</b>	<b>Focused Community Assistance Scheme</b>
<b>GA 21</b>	<b>Global Agenda 21</b>
<b>ITA</b>	<b>International Treaties and Agreements</b>
<b>LGUs</b>	<b>Local Government Units</b>
<b>MPA</b>	<b>Marine Protected Areas</b>
<b>MPAMT</b>	<b>Marine Protected Area Management Teams</b>
<b>MTPDP</b>	<b>Medium Term Philippine Development Plan</b>
<b>NEDC</b>	<b>National Eco-tourism Development Committee</b>
<b>NES</b>	<b>National Eco-tourism Strategy</b>
<b>NESC</b>	<b>National Eco-tourism Steering Committee</b>
<b>NGAs</b>	<b>National Government Agencies</b>
<b>NIPAS</b>	<b>National Integrated Protected Area System</b>
<b>PA 21</b>	<b>Philippine Agenda 21</b>
<b>PACAP</b>	<b>Philippines-Australia Community Assistance Program</b>
<b>PCSD-NEDA</b>	<b>Philippine Council for Sustainable Development- National Economic Development Authority</b>
<b>PEBCC</b>	<b>Provincial Eco-tourism and Biodiversity Conservation Committee or Council</b>
<b>POs</b>	<b>People's Organizations</b>
<b>PTC</b>	<b>Provincial Tourism Council</b>
<b>RECs</b>	<b>Regional Eco-tourism Committees</b>
<b>TDAs</b>	<b>Tourism Development Areas</b>
<b>UNCSD</b>	<b>United Nations Commissions on Sustainable Development</b>



## FOREWORD

The formulation of this document is a significant and highly relevant initiative for a province that distinguishes itself as a top tourist destination with its wide array of ecological wonders and richness of flora and fauna both in the terrestrial and underwater environments.

This framework plan is likewise a local landmark response to the National Eco-tourism Strategy (NES) and Program of the Philippine Government as expressed in Executive Order 111 that establishes the guidelines for eco-tourism development in the country. It rests upon the policy of the state to "ensure the sustainable use, development, management, protection, and conservation of the country's environment and natural resources and cultural heritage for the enjoyment of the present and future generations.

It is worthy to note that the Province of Bohol has been privileged to host the First National Eco-tourism Congress in 1999 where eco-tourism and its role in sustainable development of natural and cultural resources were defined. More so, Bohol has been identified as one of the key sites that became the focus of concerted efforts to develop eco-tourism in the country, which were selected based on established criteria under the NES.

To some extent, non-government organizations (NGOs) have initiated the development of community-based eco-tourism destinations in the province that have now started to establish their market niches such as the dolphin and whale-watching tour in Pamilacan Island (Baclayon), the Cambuhad River and Village Tour in Buenavista, the Candijay Mangrove Adventure Tour or the variety of adventure tours in Rajah Sikatuna National Park. More and more projects have come about in other municipalities as the economic and conservation-enabling benefits of eco-tourism enterprises have surfaced to the fore and each area teems with potential and prospects as an attraction. This is in addition to the Boholanos' inherent cultural trait and pride to welcome visitors with warmth and hospitality.

Definitely, municipal local government units and the private sector, most importantly the investor will greatly benefit from this endeavor.

A handwritten signature in black ink, appearing to read "Juanito G. Cambangay", is written over a horizontal line.

**JUANITO G. CAMBANGAY**

Provincial Planning and Development Coordinator



## MESSAGE

Being privileged to stand at the helm of governance for the development of a piece of island paradise called Bohol, it is my distinct honor and pride to present this framework plan to investors, tourism business sector, municipal executives, planners, and NGOs in the province. The Eco-tourism and Biodiversity Conservation Framework Plan embodies the hopes and aspirations of the Boholano people and our partners coming from the government and private sectors on how Bohol should be developed, managed and conserved for the sustainable enjoyment of future generations.

This pioneer initiative document is very significant as our beloved province is poised to achieve its position as the prime eco-cultural tourist destination in the country. I am humbled and excited that our provincial government has been able to produce this document that provides a highly useful guide for eco-tourism development and biodiversity conservation of our distinctive natural and cultural assets that make us a choice destination in the country.

Consistent also with the priority policy thrust of the Provincial Government to reduce Bohol's poverty incidence in the next 10 years, I have seen the development of eco-tourism ventures and enterprises as a strategy towards pro-poor growth. Thus, I am encouraging all concerned sectors to engage in eco-tourism development and the best reference to do this is this very relevant framework plan.

I am therefore most grateful to the national agencies, funding partners, non-government organizations, private sector, and municipal LGUs who extended financial and technical assistance and support in the crafting of this plan.



**ERICO B. AUMENTADO**  
Governor

## **ACKNOWLEDGMENTS**

The development of this framework plan has been initiated through a joint undertaking between the Soil and Water Conservation Foundation (SWCF) and the Bohol Provincial Government represented by the Provincial Planning and Development Office (PPDO), the Bohol Environment Management Office (BEMO), and the Bohol Tourism Office (BTO).

A partnership with the Department of Tourism (DOT) and the Department of Environment and Natural Resources (DENR) together with the Protected Area and Wildlife Bureau (PAWB) helped to complete this document. Technical support was provided by the German Development Service (DED), and SWCF while InWent, an international capacity-building agency, the UNDP-GEF-SGF Program and the Small-Scale Funding Program of the European Union coursed through SWCF, made available funds for the technical trainings and workshops.

A multi-sectoral Ecotourism Technical Working Group (ETWG) was created composed of the regional and provincial government agencies such as DENR-PAWB, PENRO, DOT, PPDO, BEMO and BTO, representatives from NGOs like the SWCF, FCB Foundation, PROCESS ,and the Bohol Marine Triangle Project/PADAYON Bohol Marine Triangle Management Council, and from the private sector, put in their expertise and efforts in the formulation of this plan.



## **Executive Summary**

Eco-tourism has become a buzzword not only in the country for its rich ecological and cultural resources but more particularly so in the Province of Bohol that seeks to be recognized as a prime eco-cultural tourist destination in the Philippines considering its wealth of natural, cultural and historical attractions. However, the word has been subjected to conflicting interpretations when local government units, non-government organizations and even private sector groups initiated the establishment of eco-tourism ventures in pursuit of their varied interests be it for reasons of economic benefit or for environmental conservation.

Meanwhile, a decline in poverty incidence ranks high as a goal of the Bohol Provincial Government as it purposively aims to greatly decrease poverty occurrence in the province over the next 10 years through its Bohol Program Framework on Poverty Reduction. The establishment of eco-tourism enterprises by and for the communities who are taking care of the environmental resources that are utilized as destinations, is therefore seen as an opportunity to put forward the pro-poor development agenda.

Aware of this situation, provincial leadership has anticipated that all these efforts should incorporate sustainability as an underlying program, consistent with the vision of Bohol and the mandates of the Bohol Environment Code. Thus, this framework plan is a balancing mechanism to the kind of development that must be achieved in the province: pro-poor tourism and sustainability of our natural resources and cultural heritage.

This provincial plan therefore spells out the strategic framework on which planners and implementers should abide their eco-tourism or sustainable tourism development initiatives on.

This document sets to define the real meaning of eco-tourism vis-à-vis biodiversity conservation while providing the policy context for these efforts. As a backgrounder, for real eco-tourism to exist, there should be a conservation of nature and/or culture, visitors and the local communities are given education on the natural and cultural sites, the host communities benefit economically from the ventures motivating them to continue conserving and preserving their heritage, and a participatory approach to the development of the ventures should be done whereby all stakeholders are encouraged to become involved in the processes.

All the concomitant principles, regulations, guidelines, standards, best practices and ethics for any eco-tourism activity are laid down to guide the tourism planners and developers in the province. The processes for eco-tourism product development, marketing and promotion, monitoring and evaluation, as well as securing and mobilizing financial and non-financial resources for these endeavors are all provided in the main document.

Annex I gives out details on the Mandates of Eco-tourism Development according to the Bohol Environment Code of 1998 while checklists and questionnaires for eco-tourism development and biodiversity conservation, including an inventory of existing and potential eco-tourism attractions and activities in the province are presented.

Furthermore made available in Annex II are the ethical standards and guidelines for eco-tourism, biodiversity conservation and cultural tourism activities.

## 1 Introduction

The reduction of poverty, in accordance with the *Millennium Development Goals* is regarded as a high-priority goal of the Provincial Government of Bohol. This cannot be achieved in isolation from achieving environmental stability and meeting social development goals. Achieving this goal is within the reach given sufficient political will, adequate resources and an integrated response from government and civil society.

Population growth and economic activities have created pressures on Bohol's environment and natural resources. The rural poor depend on ecological resources for livelihood. In turn, their resource base is affected by destructive practices perpetrated by themselves or other interest groups. Population pressure, as well as the resulting market demand, further drives all interests to use up these resources and threaten the long-term sustainability of the natural environment. Rapid population increase combined with excessive exploitation of ecological resources will negate gains achieved in poverty reduction.

The urban poor, on the other hand, are especially affected by environment-related problems, such as substandard housing, inadequate or polluted water, poor sanitation, inadequate solid waste management system and air pollution. These problems need to be addressed by improving the environment and people's sustainable use of natural resources. Population migration to rapidly urbanizing areas also contributes to ecological degradation and, consequently, to poverty. Demand has increased for physical infrastructure like roads, water systems and power supply, settlement areas and goods and services which are expected to be provided by the government. These are looked upon as major necessities for the province's development but often create environmental disturbances. It is therefore imperative to balance economic growth with an increase in sustainable management of Bohol's environmental and natural resources especially biodiversity for the progress of the island.

Breakthroughs are also needed to overcome this vicious poverty-environment-population cycle. Plans and programs have to address the day-to-day conflict between the short-term economic gains and long-term interest to conserve and protect the ecological resource base to achieve a more sustainable future.

Reducing poverty requires "pro-poor growth". Bohol has adopted the *pro-poor tourism (PPT) strategies*, an approach that aims to unlock economic gain and livelihood benefits for the poor. Strategies focus on economic benefits as well as on non-financial livelihoods such as physical, social or cultural improvement and less tangible benefits of community participation and involvement. They range from enhancing employment and supporting local businesses, developing collective community income, sharing infrastructure services, address competing uses of natural resources and improving social, environmental and cultural impacts to building policy dialogue and engagement in decision-making. Harnessing ecotourism for pro-poor growth means establishing partnerships with business and developing business practices on production and trade that contributes more to the livelihoods of the poor. PPT is aimed at all tourism markets, not just nature tourism or community-based tourism (CBT). With the current thrust of the province to reduce poverty, ecotourism is used as a strategy for the creation of local employment opportunities and generation of municipal revenues, establishing a system of local community entrepreneurship in the operation and management of ecotourism sites<sup>1</sup>. Ecotourism also promotes the conservation, protection and further development of the environment by the rural people themselves, rather than the external entities<sup>2</sup>. Among the

<sup>1</sup> Bohol Environment Code (1998), Article IX, Section 79

<sup>2</sup> Province of Bohol 2002: Poverty Reduction Program Bohol

needs to be addressed are to impose measures to increase the common understanding of the term eco-tourism, to increase appreciation of and interest to preserve its environment and cultural landmarks.

### **1.1 Background/Rationale**

The Province of Bohol is positioning itself as a prime eco-cultural tourism destination in the country as articulated in its vision statement. Rightly so because the island is truly blessed with ecological biodiversity and rich cultural heritage that should be conserved and preserved for the future generations to enjoy.. Each municipality boasts of its own ecological wonders that have the potential to become eco-tourism destinations. Aware of the economic benefits that have come about due to a brisk tourism industry now starting to permeate in many areas of the province, local government units together with the private sector and the non-government organizations, have initiated their own way of tourism development utilizing natural resources, some of which run counter to the real tenets of eco-tourism development principles, doing adverse harm than good to the natural and cultural assets of the area.

The Eco-tourism and Biodiversity Conservation Framework will provide a practical tool for biodiversity conservation planners and tourism professionals to build a bridge and symbiotic relationship with the tourism sector<sup>3</sup>, It should influence decision-makers to consider ecotourism as an alternative to more destructive industries and foster a positive attitude and better understanding towards the importance of biodiversity conservation. Finally, it shall encourage the implementation of a public policy towards the development of sustainable tourism and symbiotic links between biodiversity and tourism as a tool for conservation and sustainable development

### **1.2 Planning Process**

In 2005, a Memorandum of Agreement was signed between the Soil and Water Conservation Foundation and the Provincial Government, through the Provincial Planning and Development Office, the Bohol Environment Management Office(BEMO) and the Bohol Tourism Office(BTO), to prepare an Ecotourism and Biodiversity Conservation Framework Plan of Bohol as mandated under the Bohol Environment Code of 1998. This framework aims to guide the municipalities to adopt major strategies for the conservation and biological preservation of the unique natural and cultural heritage of the Boholanos, to generate local employment opportunities and to increase the revenues in the municipalities with emphasis on ecologically-based, community-driven planning approaches for sustainable development.

The framework was developed in partnership with the Department of Tourism (DOT) and the Department of Environment and Natural Resources (DENR). Technical support was provided by the German Development Service (DED) and Soil and Water Conservation Foundation (SWCF). Financial support was given by InWEnt, an international capacity-building funding organization, the UNDP-GEF-SGF Program and the European Union (EU) both through SWCF.

The Provincial Government of Bohol established a multi-sectoral Ecotourism Technical Working Group composed of regional and provincial government agencies such as the Department of Environment and Natural Resources (DENR), Department of Tourism (DOT), Bohol Environment Management Office (BEMO), Provincial Planning and

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<sup>3</sup> Ceballos-Lascurain (2002): Integrating Biodiversity into the Tourism Sector - Best Practice Guidelines

Development Office (PPDO), Bohol Tourism Office (BTO), Non-Government Organizations, and private sector to provide technical assistance to the province in the preparation of the Bohol Ecotourism and Biodiversity Conservation Framework Plan.

The activity started with a training program by module on “*Capacitating the Stakeholders in the Preparation of Biodiversity and Eco-tourism Framework Plan, Bohol*”, targeting local government units, NGOs involved in ecotourism development, local communities, academe, and private sector. The training modules 1-5 were conducted from March to November 2005, which focused on the orientation on eco-tourism and biodiversity, ecotourism product development, marketing and promotion, monitoring and evaluation, and an educational tour to ecotourism ventures in the provinces of Aklan and Antique. The key results of the workshop modules are integrated in this framework.

After the series of workshops, the Bohol Ecotourism Club (BET-C) was created. This is an inter-sectoral body with representatives from local government, NGOs, local communities and from the tourism industry. This body is a prime mover and watchdog for eco-tourism activities in the province. To be seen as the authority on ecotourism in the province, it shall represent or be part of development groups ensuring that ecotourism principles are applied in the municipalities especially by LGUs. It will be a dynamic evolving forum for ideas, aiming to educate and inform Boholanos on eco-tourism. It is tasked to recommend standards and ethics on what is acceptable ecotourism development based on the Boholanos’ context. The Club shall be looked upon as the communities’ mentor, giving them alternative opportunities to earn income from the observation of nature rather than from land development. It shall likewise influence the schools and the Department of Education (DepEd) to include eco-tourism and biodiversity conservation in their curriculum.

### 1.3 Definition of Terms

For the purpose of this framework plan the following definitions of terms apply:

**Agrotourism** is a form of tourism in agricultural areas such as orchards, agroforestry farms, herbal farms and animal farms, which have been prepared in some way for tourists. Tourists watch or take part in agricultural practices such as working with animals or harvesting crops without disturbing the ecosystem or the productivity of the host areas.

**Bio-diversity** means the variability among living organisms from all sources, including, inter alias, terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are a part. This includes diversity within species, between species and of ecosystems”<sup>4</sup>.

**Community-based tourism** implies that the community has substantial control and involvement in the eco-tourism project and that the majority of benefits remain in the community. Three main types of community-based enterprises have been identified:

- The community owns and manages the enterprise; all community members are employed by the project using a rotation system; profits are allocated to community projects
- Enterprise involves family or group initiatives within communities; based on voluntary participation
- A joint venture between a community/family and an outside business partner<sup>5</sup>.

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<sup>4</sup> 1992 United Nations Earth Summit in Rio de Janeiro); <http://en.wikipedia.org/wiki/Biodiversity>

<sup>5</sup> Eppler Wood (2002): Ecotourism: Principles, Practices and Policies

**Cultural heritage** means: monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, art or science, groups of buildings: groups of separate or connected buildings, which, because of their architecture, their homogeneity or their place in the landscape, sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view<sup>6</sup>.

**Cultural tourism** embraces the full range of experiences that visitors can undertake to learn what makes a destination distinctive - its lifestyle, its heritage, its arts, its people and the business of providing and interpreting that culture to visitors<sup>7</sup>.

**Ecosystem** means a dynamic complex of organisms and their living and non-living environment, interacting as a functional unit.

**Eco-tourism** means a form of sustainable tourism within a natural and cultural heritage area where community participation, protection and management of natural resources, culture and indigenous knowledge and practices, environmental education and ethics, as well as economic benefits are fostered and pursued for the enrichment of host communities and the satisfaction of visitors.<sup>8</sup> Ecotourism is based on the principles of biodiversity conservation, community and stakeholder participation, social and cultural sustainability, local economic benefits and quality of visitor experience<sup>9</sup>. The guiding principles of eco-tourism are<sup>10</sup> the following:

- *Sustainable management of natural/cultural resources*: To pressure and conserve biodiversity particularly endangered species of flora and fauna by ensuring that activities and physical development are low-impact and low-density thus promoting awareness and understanding of an area's natural and cultural systems.
- *Community participation*: To adopt a capability building program for locals through community participation, environmental education, cultural preservation and enterprise development.
- *Social and cultural sustainability* : To preserve social norms and cultures of local and indigenous communities. An effort to work with local people to help build their capacity and maintain and protect the social structures, economies and cultures of the communities.
- *Local economic benefits - livelihood to local people*: To provide income and job generation opportunities to host communities by ensuring that small businesses like lodges, restaurants, food and fruits stands, craft shops and similar tourists-oriented establishment are community-run or locally owned in order to experience the genuine hospitality, customs and traditions of its people.
- *Quality of visitor experience*: To enhance the quality of experience and attract more visitors to eco-destinations by providing low-impact but enjoyable activities

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<sup>6</sup> Australian Natural Heritage Charter for the conservation of places of natural heritage significance 2002; UNESCO 1972: Convention concerning the protection of the cultural and natural heritage

<sup>7</sup> <http://www.nla.gov.au/creative.nation/tourism.html>

<sup>8</sup> Department of Tourism 2002: National Ecotourism Strategy

<sup>9</sup> National Ecotourism Framework Development Workshop Report 1999, p 4

<sup>10</sup> Ecotourism: Principles, Practices & Policies for Sustainability, UNEP

Ethnic/Indigenous Tourism refers to a kind of tourism where ethnic minorities or indigenous people are directly involved either through control and/or by having their culture serve as the essence of the tourist attraction.

**Ecotourism/ Ecological /ventures** are business undertakings that make use of the natural resources of the area operated or managed by the government, community or private entities.

**Ecotourism resources** are natural and cultural assets that attract visitors but not limited to landscapes, endemic or rare flora and fauna, cultural festivals and historical monuments.

**Ecotourism activities** are passive and active forms of events including but not limited to bird watching, nature photography, hiking, diving, kayaking, mountaineering, and caving.

**Ecotourism facilities** are accommodation, lodging facilities, and related amenities which blend with the natural and cultural environment of the area.

**Ecotourism services** are basic services for tourism activities including but not limited to transportation, food, guiding, and interpretation services.

**Ecotourism product** is a combination of ecotourism resources, facilities, activities and services resulting in enhanced commitment to protect the natural and cultural heritage areas.

**Ecotourism strategy** is a coordinated set of planned actions for the development, promotion, and management of ecotourism destinations.

**Heritage** is a broad concept of the natural and the cultural environment. It encompasses landscapes, historic places, sites and built environments, as well as biodiversity, collections, past and continuing cultural practices, knowledge and living experiences. It records and expresses the long processes of historic development, forming the essence of diverse national, regional, indigenous and local identities and is an integral part of modern life. It is a dynamic reference point and positive instrument for growth and change. The particular heritage and collective memory of each locality or community is irreplaceable and an important foundation for development, both now and into the future<sup>11</sup>.

**Natural heritage** are natural features consisting of physical and biological formations or groups of such formations, which demonstrate *natural significance*, both aesthetic or scientific.

- geological and physiographical formations and precisely delineated areas that constitute the habitat of indigenous species of animals and plants from the point of view of science, conservation or natural beauty; and/or
- natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty<sup>12</sup>.

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<sup>11</sup> INTERNATIONAL CULTURAL TOURISM CHARTER (Mexico, October 1999)

<sup>12</sup> UNESCO 1972:Convention concerning the protection of the cultural and natural heritage

**Natural significance** means the importance of ecosystems, biodiversity and geodiversity for their existence value for present or future generation, in terms of their scientific, social, aesthetic and life-support value.

**Pro-poor tourism (PPT)** is tourism that results in increased net benefits for the poor. PPT is not a specific product or niche of tourism, but an overall approach to tourism development and management. It enhances the linkages between tourism businesses and poor people; so that tourism's contribution to poverty reduction is increased and poor people are able to participate more effectively in product development<sup>13</sup>.

The principles of PPT are not only to bring increased benefits to the poor, but also to support infrastructure development of the tourism industry as a whole in order to sustain PPT strategies. PPT is aimed at all tourism markets, not just eco-tourism or community-based tourism (CBT).

**Protected Areas** refer to identified portions of land and water set aside by reason of their unique physical and biological significance, managed to enhance biological diversity and protected against destructive human exploitations (NIPAS Act of 1992).

**Protected Landscape/Seascape** are areas of national significance which are characterized by the harmonious interaction of man while providing opportunities for public enjoyment thru recreation and tourism within the normal lifestyle and economic activity of these areas.

**Rural tourism** is a segment of the tourism industry that makes use of its attractive cultural landscape with small villages, springs, rivers and lakes, combined with traditional hospitality, are able to offer pleasant experiences to the tourists who are looking for relaxation and recreation in a calm setting.

**Sustainable development** is meeting the needs and aspirations of the present generation without compromising the ability of future generations to meet their own.

**Sustainable tourism** is tourism that improves the quality of life of the host community, provides quality experience to visitors and maintains the integrity of the natural and cultural resources.

**Tourism** are activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes except for those activities that will be remunerated within the area visited. The usual environment of a person consists of a certain area around his/her place of residence plus all other places he/she frequently visits.

**Tourism estate** is a large tract of land with well defined boundaries and prescribed carrying capacities of tourism facilities and activities located in priority areas identified in the Philippine Tourism Master Plan, Regional Tourism Master Plans, as well as those proclaimed by the President and/or by Acts of Congress. Such lands shall be suitable for integrated tourism development under a unified and continuous management

**Village-based tourism** is where tourists share activities in village life, and rural villages gain economic and other benefits from tourist activities. Villagers provide accommodation like the home stays in which tourists stay in village houses, often together with a family

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<sup>13</sup> Pro-Poor Tourism 2003

## 2 Situation Analysis

Tourism in Bohol has grown consistently over the last decade and has become an important sector in the province's economy. The tourism industry is viewed as one engine for economic growth of the province centered on poverty alleviation, employment generation and infrastructure strengthening. It is potentially a very important socio-economic sector that generates substantial benefits to its people. Bohol's efforts in developing sustainable tourism cumulated in winning the *Kalakbay Awards* in 2003 as *Destination of the Year* and 2004 for its *Ecotourism Development Program*.

Bohol is being promoted as an *ecological-cultural destination* with ecological tourism as the major strategy for the conservation of biological diversity and preservation of the unique natural and cultural heritage of the Boholanos. This is coherent with the National Ecotourism Strategy, which incorporates sustainable management of natural and cultural resources; environmental education and conservation awareness; empowerment of local communities; and, development of products that will satisfy visitor needs and position the Philippines as a globally competitive ecotourism destination<sup>14</sup>. There is a shift in thinking to conserve biological diversity for its local values as much as its national and global values within the wider landscapes in which protected areas are found.

The National Ecotourism Strategy identified Bohol as one of the ecotourism banner sites in the country. Banner sites are selected to set an image and to position the Philippines in the international and domestic markets. They are as well envisioned to serve as models for developing ecotourism.

### 2.1 Tourism Industry in Bohol

Bohol, the country's 10<sup>th</sup> largest island and blessed with an array of natural and cultural resources, has come a long way in becoming the top tourist destination in the Philippines. Attractions include white beaches, reefs, wetlands, forests, and caves as well as historical and religious landmarks. It has a unique limestone landscape with the *Chocolate Hill* cones as the most famous landmark of the province. Likewise, culture, arts and artistic traditions are evident in Boholano music, painting, dance, literature, theater and sculpture. These natural, cultural and historical assets have made the province more renowned in the country and abroad. Established attractions are listed below:

- Chocolate Hills in Carmen and Sagbayan Peak
- Man-made Forest in Bilar
- Loboc and Loay River Cruise to Busay Falls
- Hinagdanan Cave in Dauis
- Panglao and Anda Beaches
- Dive sites in Balicasag Island and all over Panglao and Cabilao, Loon
- Dolphin Watching in Pamilacan Island
- Tarsier Sanctuary in Corella
- Mag-aso Falls in Antequera
- Abatan River Cruise and Nature Viewing
- Rajah Sikatuna Protected Landscape in Bilar
- Mangrove areas in Panglao, Candijay, Maribojoc, and Banacon Island
- Churches of Baclayon, Dauis, Loon, Loboc, Maribojoc, Albur, and Dimiao

<sup>14</sup> Department of Tourism (DOT) 2002: National Ecotourism Strategy



- Heritage structures: Punta Cruz Watchtower in Maribojoc, Escuelas de los niños y niñas and Clarin House in Loay, Casa Rocha in Sitio Ubos, Tagbilaran City, Panglao belfry and Ermita Ruins in Dimiao.
- Local craft demonstrations such as loom weaving in Tubigon, Inabanga, Albur, and Buenavista; basketweaving in Antequera, pottery-making in Albur and Calape; and calamay manufacturing in Albur and Jagna
- Concerts and presentations of popular cultural groups such as the Loboc Children's Choir, the Dimiao Children's Rondalla, the Bol-anon Theatre Group, the Diwanag Dance Theatre, the Cecilio Putong National High School Dance Troupe, and recently the Tubigon Dance Group.

Bohol's two major festivals are the Sandugo, a re-enactment of Miguel Lopez de Legazpi and Boholano Chieftain Rajah Sikatuna's treaty of friendship and the Bolibongkingking, a spiritual thanksgiving and petition dance in Loboc. Minor events are fluvial parades in Loay, Loboc and Talibon, and the annual town fiestas which play a vital role in the life of the Boholanos.

### **2.1.1 Facilities and Services**

Major points of entry for tourists are the seaports in Tagbilaran and Tubigon. Fast crafts and slow boats are available connecting destinations in the Visayas, Mindanao and Manila. The Tagbilaran City airport caters the Tagbilaran-Manila direct flights daily. Land transport vehicles such as taxis and vans for hire, local buses, jeepneys and tricycles are available in the province. Bohol has a 24-hour power supply on the main island but power cuts are still an ongoing issue while the small islands are served by generators. Water supply is sufficient, but the standard varies from simple to high end shower. Panglao, where the majority of the resorts are located, still continuously experiences limited supply of water; and salty water is another issue. All municipalities within the province are connected by landlines. Different mobile phone services have installed cell sites and cover almost all areas of the island. Internet services are available in most municipalities

Major health facilities in the form of tertiary and regional hospitals are existing in Tagbilaran City with district and private hospitals present in towns outside the capital city.

Several spa and massage services, reflexology, wedding planning services, and travel and tour agencies are increasing their presence in the province, in support of the province's tourism industry.

Tourist information centers are located at the piers in Tagbilaran City and Tubigon. Further information can also be had at the City Information Center along the city's main thoroughfare CPG Avenue, and from the Bohol Tourism Office at the Provincial Capitol.

Bohol has a wide range of accommodation facilities spread all over the province ranging from high-end hotels and resorts to pension houses, inns and simple travelers lodges, with more than 2000 rooms (2006 data) of varying standards. Most of these facilities are located in Tagbilaran City and Panglao Island. Convention centers, dive shops, sports centers, shopping malls, restaurants, and coffee shops cater to visitors' needs. Modern banking facilities are provided by 49 banking units and automated teller machines (ATMs)

Bohol's security is generally characterized as peaceful. Its crime incidence is kept at tolerable levels, insurgency-related encounters are still an issue, but they were never

directed towards tourism. To address this problem, the government continuously undertakes peace talk negotiation initiatives.

### **2.1.2 Market Profile / Product offering**

Bohol is now considered a prime tourist destination in the country. Cebu City and Manila are the main hubs for incoming tourists from other parts of the country and from other Asian countries. The number of tourist arrivals has steadily increased in the past years and reached 415,530 in 2006. The bulk of tourists to Bohol are domestic tourists at 75.19% (314,884), followed by Asians (Koreans, Chinese/Taiwanese and Japanese) 12.54% (52,120), Americans 9.11 % (37,857) and Europeans 3.16% (13,169) <sup>15</sup>.

Bohol offers an array of natural, cultural, historical and man-made tourist attractions that can be developed to cater to a wide range of travel markets. Its terrain, geological history, coastal and terrestrial resources (hills, forests, caves, waterfalls, springs, lakes, pristine white sand beaches, protected landscapes and seascapes, dive sites), among others, are good for simple sightseeing, or low to high-impact tourist activity. Consequently, the province's flora and fauna are as diverse as its land and seascapes, and offer interesting information on wildlife, the environment and their preservation, such as mangroves, marine mammals and the tarsier. Bohol has played its role in the region's history, as evident in its old churches and heritage houses, which are spread all over the province. Other assets not usually associated with tourism are fish farms, rice fields, small orchards and backyard industries of nipa weaving and knife making. These are attractions with an upcoming market for agri-tourism, livelihood and industry orientation tours.

Popular tours offered by travel agencies and combined into beach and R&R packages are: the Chocolate Hills/ Countryside Tour, Bohol Heritage and Pilgrimage Tour, Dolphin Watching Tour in Pamilacan Island, Tarsier Encounter in the Corella Sanctuary, Visita Inglesia Tours, Antequera Handicraft Tour, Tagbilaran City Tour, Ubay Agri Park Tour, Dive Bohol and Swim Bohol Tour. The CRM showcase tours 'Sea to See' featuring best practices in Coastal Resource Management (CRM) Learning Models are organized by the BEMO and the NGOs. Technical and financial support from some NGOs and local governments units' community-based ecological ventures in coastal and upland areas were developed and have started operating. These include the following:

- Pamilacan Marine Life Tour in Baclayon
- Panadtaran Mangrove Adventure Tour in Candijay
- Cambuhat River and Village Tour in Buenavista
- Basdio Coral See and Seascape Tour in Guindulman
- Sierra Bullones Adventure Tour
- Ubay Agri Park Tour

The Banacon Mangrove Tour and the Abatan River Tour at Maribojoc Bay are operating and capability-building trainings for host communities are ongoing. Guided Snorkeling and Sanctuary Tours in marine protected areas (MPAs) in the Bohol Marine Triangle (BMT) islands of Panglao, Balicasag, and Pamilacan in Baclayon are being managed by the MPA community management teams while an Island Hopping and Seaweed Farm Tour in Panglao Bay are currently being promoted by the PADAYON BMT Management Office based in Dauis.

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<sup>15</sup> Statistics of Bohol Tourism Office, January 2007

Upcoming ecotourism tours from the eastern circuit particularly in Anda municipality are being developed by the Bohol Local Development Foundation (BLDF) and the Bohol Alliance of NGOs (BANGON) as part of the PACAP-FOCAS Ecotourism Enterprise Development Projects implemented throughout Bohol by several selected NGOs in collaboration with municipal LGUs in the province. Forthcoming also for offering are adventure activities initiated up by outdoor clubs and adventure enthusiasts.

With a multitude of attractions in Bohol, there is a wide array of other travel programs available in the market. Most of these, however, are either visits to individual points of interest in the province, a mixture of the attractions and activities, or tailor-made to the special/custom requirements and interests of the incoming tourists (See table on existing and potential tourism attractions in the province in Annex 1)

### **2.1.3 Marketing and Promotion Activities and Linkages**

Bohol appropriately presents itself with a logo that captures all the unique features the island offers to its visitors. It symbolizes nature, history, culture, wildlife, and sandy beaches that are found within the province. It gives a distinct image to its markets and against its competitors. The province does not have a tagline to go with the logo.

The Department of Tourism (DOT) produces general information brochures, maps and posters of Bohol on a per-campaign basis. It likewise features the province in other promotional materials such as videos, CD-Roms and the DOT websites with a special website on ecotourism. The Bohol Tourism Office (BTO) produces its own promotional materials, such as brochures and a video presentation which encapsulates the various product offerings of the province; but the promotion of the ecological ventures is not optimized yet. Due to budget constraints, the BTO and the ecotour providers often run out of materials. The private sector members, likewise, produce their own brochures promoting their individual establishments. Information materials prepared by other organizations, e.g. NGOs, aid in market awareness, though not effective as stand-alone sales or promotion collaterals

Through effective marketing campaigns, such as familiarization tours, documentary television programs, IEC program, publications in newspapers and distribution of Bohol sales kits to important media and travel agencies during trade fairs and travel marts, Bohol was able to create a positive image of the province and sell itself as a competitive tourist destination.

### **2.1.4 Constraints**

Despite its natural and historical attractions, Bohol has yet to realize its full potential for eco-cultural tourism development. Potential includes the promise to develop Bohol into a prime eco-cultural tourist destination in the country, ensuring that its tourism activities are both sustainable and community-based. The term ecotourism is often misused in order to label and advertise products that just 'take place' in nature. Visitor facilities do not maintain the integrity of the built and natural environment which are aesthetically pleasing and which incorporate environment-friendly technologies for the provision of water and power and dealing with waste material. Growth in tourism is constrained by difficulties in access, the lack of investment in utilities and facilities, and inadequate proper services in tourism establishments, insufficiency in the promotion of new products to visitors especially community-based tours, and weak policy and institutional mechanisms.

Bohol needs to implement the concept of sustainable tourism and in a stricter sense ecotourism offering activities that are fully compatible with nature and conservation efforts and protection of the environment. Otherwise, it risks to lose credibility and fail the consumer expectations of being an eco-friendly destination. Among the management, cultural and socio-economic and institutional constraints are the following:

- The *culture of ecotourism* has not yet seeped into the consciousness of the Boholanos
- Service in tourism establishments is still generally below and lags behind world-class facilities of neighboring cities.
- Inadequate basic infrastructure tourism support facilities e.g. road networks, water and power supply, etc.
- Insufficient accommodation and other tourism-related facilities especially in popular tourist destinations/sites.
- Limited degree of necessary business skills/know-how, experience and business acumen of local people and meager financial resources
- Carrying capacity of tourist sites/ establishments has not yet been determined.
- Local people in the communities claim that they have not enjoyed/partaken in the benefits of tourism development.
- Difficulty in private sector participation in local community activities/business enterprise especially in marketing and promotion, private sector not in accord with local communities decisions; therefore, linkage with the tourism industry in particular tour operators/marketing agents needs significant strengthening
- Local governments' clamor that they do not generate any incremental revenues from tourism other than those mandated for other industries such as business license, income tax or business permit
- Government feels that it has not recovered its investment in tourism-related infrastructure facilities
- Weakness in law enforcement in regards to illegal activities (e.g. damage to coral reefs, wild life trading, illegal logging)
- Insufficient standards and guidelines, transformed into local ordinances
- Wide gap on the education side on ecotourism
- Absence of comprehensive of flora and fauna inventories in Bohol
- Poor implementation of policies, legislation intended to propel the progress of tourism operations, perceived non-interest of some local government units or conflicting and divergent roles/development direction of LGUs
- Support industries i.e. souvenir production, food production/ processing, cut flowers, raw material production are not established yet
- Municipal LGUs lack the guide on how to develop their ecotourism potentials

## **2.2 Biodiversity Conservation and Natural Resource Management**

The map of Bohol reads as an impressive matrix of protected landscapes, wilderness areas, nature reserves and other protected areas spread over mountains, lowland forests, wetlands, islands, riparian zones, cave systems and coral reefs and 654 km of coastline. A total of 75,766 hectares equivalent to ¼ (one-fourth) of the entire island is

under protection as initial component of RA 7586's Environmentally Constrained and Environmentally Critical Areas. Protection purposes are for the conservation of flora, fauna, biological diversity and natural heritage areas. Locked within these natural pockets is an endemic and indigenous biodiversity that makes Bohol one of the top biodiversity hotspots in the country.

The list of threatened and disappearing fauna includes birds, reptiles, amphibians, mammals and fish species. Among its prominent endangered species are the flying lemur, hanging parakeet, hawksbill, and whale and dolphin species.

In the Bohol Marine Triangle (BMT) alone, which comprises the large island of Panglao and the smaller islands of Balicasag and Pamilacan, five major ecosystem types are present. These are the fringing mangroves (222.39 hectares), seagrass beds (467.56 hectares), sargassum beds dominant species of which are *Hormophysa cuneiformis*, *Sargassum spp.* and *Turbinaria ornate* (242.32 hectares), coral reefs (264.84 hectares), and open water or deep sea. The BMT contains extensive coral reef habitat ranging from good to excellent and ranks among the top 10 sites in the Philippines and Southeast Asia. Coral diversity is high with about 144 species reported including the dominant species as *Acropora spp.* and the massive *Porites spp.* and many less common species. About 34 species of butterfly fish have been recorded, and estimates of fish species richness within 19 families of fish in the area vary from 15 to 46 species per 500 square meters of coral reef with up to 5000 individual fish within the same area. The surrounding deep sea environment ranges from 32 to 57 meters deep and provides migratory route for whales and dolphins as well as a habitat for these species and a variety of marine life. Thirteen of the 22 known species of marine mammals have also been sighted in the area. Three out of the world's eight species of sea turtles (Green, Olive-Ridley, and Hawksbill) classified as endangered and listed under CITES have been sighted by local inhabitants. Rare and endangered species of pelagic fishes like whale sharks, devil manta and stingrays as well as various seashells and giant clams occur in the BMT. Such rare shells include the *Conus gloriamaris*, *Cypraea guttata*, and *Cypraea Valencia*. Several migratory birds passing through the area may include the Chinese Egret, Golden Plover, Little Whimbrel, and the Greenshank.

Bohol's unique coastal biodiversity is, however, under threat due to population growth, tourism, persistent and excessive utilization and sale of different species coupled with conversion of forests into agricultural and urban areas, monoculture farming with exotic species, farming on steep hillsides and mountains, coral reef destruction and over-fishing. In fact, several plant species that were noted to be previously abundant are already extinct on the island while others are becoming rare and endangered.

### 2.3 Terrestrial Ecosystems

Bohol has an estimated remaining forest cover of 9 % of its total land area. Natural forests in the province are still evident. However, flora of the family Dipterocarpaceae, Leguminosae and Verbanaceae are becoming very rare. Ferns are disappearing, especially older species. This is exemplified by the short supply of Bohol's Molave or "tugas". It is alarming that there are young people who have never seen premium hardwood species that were previously abundant.

Biodiversity in Bohol's forests is little understood since there are few scientific surveys to determine what is present. The richness of the forest is indicated by the on-going studies in *Rajah Sikatuna Protected Landscape (RSPL)*, a national biodiversity hotspot with a total area of 12,336 hectares. It is listed as extremely high importance for biodiversity conservation for arthropods, amphibians and reptiles, birds and mammals as well as an inland water area of biological importance. It is also rated as extremely

high priority because of the socio-economic pressures in an area of biological importance and high importance for existing conservation efforts in an area of biological importance.

Floral surveys were conducted in 29 barangays, covering the entire protected area. So far, 462 tree species were identified. For non-tree species, only a cursory survey has been done. Results include identification of 10 shrubs, 173 fern species, 15 palms and 8 vine species<sup>16</sup>.

The urgent need to provide immediate vegetative cover in the vast forestlands, which are now devoid of forest cover has prompted reforestation in these areas. The major plantations are located in the Municipality of Bilar and Loboc. However, the species used in these plantations are exotics and planted at regular spacing. The total area for forest plantations is estimated at 9,601 hectares. The common reforestation species used in the province are gmelina (*Gmelina arborea*), large leaf mahogany (*Swietenia macrophylla*), small-leaf mahogany (*Swietenia microphylla*), teak (*Tectona grandis*), narra (*Pterocarpus indicus*), ipil-ipil (*Leucaena leucocephala*), Auri (*Acacia auriculariformis*) and Eucalyptus (*Eucalyptus spp*)<sup>17</sup>. In the past ten years, the move has been veering away from exotics for restoration work. Instead, native species are now encouraged

Generally, the extremely diverse and dispersed vegetation in open fields could well evolve into forests without human intervention. However, most of these potential lands are within alienable and disposable areas. Some idle lands within timberland areas are covered under the Integrated Social Forestry Program with a Certificate of Stewardship Contract (CSC). Constant cultivation and burning inhibits forest evolution and encourages the proliferation of grasses such as cogon (*Imperata cylindrica*) in association with other shrubs like kanding-kanding (*Lantana camara*). Invasive plant species such as Loob (*Bambusa sp.*) and introduced exotic species e.g. hagonoy, are likely to build up on denuded areas. To develop systems closer to natural forests, agro-forestry is recommended for farming areas, and assisted natural regeneration for forest areas, be established.

(To be checked from DENR data in DOT-Bohol Area Development Plan Draft 2002)

**Data about terrestrial fauna in Bohol are scarce. Among the wildlife species so far identified on Bohol are 120 birds, 33 mammals, 29 reptiles, 8 amphibians and 192 species of butterflies. The province has twenty-two (22) endangered wildlife species. Seven (7) are birds, eight (8) are reptiles, four (4) are amphibians and three (3) are mammals. Among its prominent endangered species is the tarsier, flying lemur, hanging parakeet, marine turtle, whales and dolphins<sup>18</sup>.**

In the studies conducted in RSPL, eight (8) new flying mammal species and 26 bat species (1 endangered) have been identified. Most fauna classes such as reptiles, amphibians and insects have not been studied. Recent bird studies have positively identified 86 bird species. Recorded bird observations in Bohol, mainly in the Bilar area, can be traced back to the mid 1800's. However, there are now birds previously seen inside RSPL that are no longer positively identified. This includes the Philippine Cockatoo last seen in RSPL in 1995, but are still sighted adjacent to the area<sup>19</sup>.

<sup>16</sup> Soil and Water Conservation Foundation (2005): Status-Report on RSPL-Biodiversity

<sup>17</sup> PENRO-DENR Bohol 2002

<sup>18</sup> DENR in: Department of Tourism - Bohol Area Development Plan Draft 2002,

<sup>19</sup> Soil and Water Conservation Foundation (SWCF) – surveys conducted from 2003-2005

The northern coast of Bohol and Cogtong Bay are important staging and wintering areas for migratory shorebirds. Recent bird studies in Cogtong Bay identified more than 70 endemic and migratory species. Rare species such as Philippine Eared Nightjar *Caprimulgus manillensis*, Malayan Night Heron *Garsachius melandophus* and Rufous Night Heron *Nycticorax caledonicus* have been spotted<sup>20</sup>.

**Table 1. Kinds of Animals and Number of Species Found in Bohol**

Kinds of Animals	Number of Species
Vertebrates :	
Birds	116
Mammals	33
Reptiles	29
Amphibians	8
Invertebrates :	
Butterflies,	192
Ants	29
Dragon Flies	20
Flies, Mosquitoes	19
Grasshoppers, crickets	14
Fireflies, Beetles	14
Spiders, Scorpions	12
True Bugs	10
Damselflies	9
Cicadas, Aphids	6

Source: DENR-Bohol

## 2.4 Freshwater Ecosystems

Bohol has twelve major rivers fed by hundreds of tributaries emanating from the upland watersheds. Parts of the three major watersheds have been declared as Protected areas under the National Integrated Protected Area System (NIPAS Act of 1992) covering an area of 75,556 hectares equivalent to 18, 35 % of Bohol's total land area. The first largest watershed forest reserve in Bohol is the *Loboc Watershed* (PP No. 450) with an area of 10,450 hectares, part of which is the *Rajah Sikatuna Protected Landscape*.

The river system is the key interface between the sea and the upland ecosystems. Their estuaries serve as spawning grounds of many species of fish, crustaceans, mollusks and migratory birds. However, the quality of water in the province's catchments and streams is poor and will continue to deteriorate as human development activities increase. Data on surface and groundwater quality are scarce in the province. Floral and fauna surveys of the river ecosystem are not conducted yet.

## 2.5 Marine Habitats and Coastal Resources

Bohol has a total area of 6.245 square kilometers of municipal waters and a shoreline length excluding offshore islands of 654 km. It has 30 coastal municipalities and 72 islets with 304 coastal barangays. The coastal

<sup>20</sup> Baarda, P./Sansonsa, E.: Field surveys conducted from 2002-2005

ecosystems consist of mangroves, beaches, seagrass beds, coral reefs and the deep sea.

In the entire Central Visayas region, Bohol ranks first in having the biggest mangrove area of 14,502 hectares. The province also has the most diverse mangrove ecosystem in the Philippines with 19 major, 14 minor and 6 associated species identified<sup>21</sup>, 5 of them rare. About 120 marine sanctuaries are established in the coastal municipalities; they cover about 3,171 hectare or only .49% of the total municipal waters of 642,700n hectares. However, only 60 % of these marine sanctuaries are properly managed.

Upland activities such as use of chemicals, inorganic fertilizers in farmlands, generation of liquid and solid wastes, large volumes of sediment from poor land use, and deforestation are causing negative impacts to the whole coastal ecosystem and human life.

**Mangrove forests** play a vital role in shaping the ecology and economy of the Boholanos. Ecologically, mangrove forests are among the most productive coastal resources of Bohol. They serve, not only as feeding, breeding and nursery grounds for many aquatic and terrestrial animals, but also as a protective structure against waves and currents along the shoreline. The largest, contiguous mangrove stands are located in Getafe, Talibon, Ubay, President Garcia, Mabini and Candijay. The largest and most diverse mangrove forest is found in Cogtong Bay and covers an area of 2,200 hectares. The most popular man-made mangrove forest is around Banacon Island, Getafe comprising an area of 1,750 hectares. In the BMT area, its mangrove forest comprises 253 hectares which constitute 2% of its total land area. Twenty-four (24) mangrove and six (6) mangrove-associated species belonging tp 18 families occur in the area with the biggest mangrove forest located in Danao, Panglao.

**Coral reefs** commonly known as rainforest of the sea while serving as a buffer against underwater currents constitute one of the provinces most productive and diverse ecosystems. They cover an estimated area of 1,920 hectares that include the Danajon Bank Reef in Getafe, Buenavista, Talibon, Trinidad, Bien Unido, Ubay, President Garcia and Mabini. The Danajon Reef Bank is one of only a few documented double barrier reefs in the world and is a rare geological formation. However, ninety percent of it is in poor condition. At present, the state of the province's reefs are classified as 48% poor condition, 38% fair condition and only 14% in good condition<sup>22</sup>. This means that Bohol has already lost more than three quarters of its known corals. This has a significant effect on the breeding grounds of many marine fauna. Significant human threats to coral reefs include collecting and exporting, blasting, use of cyanide, siltation, boat anchorage (especially diving boats), illegal fishing methods, storms, coral bleaching due to increased temperatures, pier, wharf, breakwater, and other construction activities.

Bohol has extensive **seagrass beds** with many of the Philippines' 14 species being represented. Often undervalued, seagrass beds are gradually giving way to construction and reclamation activities at the expense of fishery production. A total of 2,555 hectares of seagrass beds can be found in BMT being the largest

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<sup>21</sup> YAO, A.: publication in DENR-Canopy International, Volume 27, No 2, 2001  
<http://erdb.denr.gov.ph/canopy>

<sup>22</sup> BFAR, UP-MSI, DENR surveys 1996, Green et al (2002): Bohol – Its Environment Profile



nearshore ecosystem with the most diverse species happening in Bil-isan and Doljo, Panglao.

In the **open water ecosystem** which covers 90% by volume of the provincial coastal waters, 12 species of dolphins and whales plus whale sharks, rays, large pelagics, tunas and Spanish mackerels abound. Data of total numbers of species, families of reef associated fishes and “target” species, caught by local marginal fishers due to its commercial value are lacking; only in a few marine protected areas research and monitoring tools are implemented. Target species include surgeonfishes, fusiliers, jacks, sweetlips, emperors, snappers, goatfishes, groupers and rabbitfishes. Indicator species populations which are associated with the condition of the coral reef habitat include butterfly fishes, angelfishes and the moorish idol. This once rich ecosystem is currently under severe stress and if not rehabilitated, it will become unproductive, unprofitable and useless<sup>23</sup>.

Since the 1980's, detailed studies on the biophysical resources have been conducted in the Bohol Marine Triangle (BMT) which spans over 1,120 square kilometers (112,000 hectares) covering the areas of Panglao and Dauis including the islands of Pamilacan and Balicasag.

Results of large vertebrates sighted in the waters surrounding Pamilacan and Balicasag include a total of 13 species of marine mammals – eight (8) dolphin species, three (3) whale species, whale sharks, manta rays and three (3) turtle species. So far, 411 fish species have been identified for the entire BMT area. The macrofauna is composed of 370 macroinvertebrate species. Among others were 120 species of mollusks, 84 gastropods, 56 bivalves, and 80 echinodermata; cnidaria was well presented. However, the international expedition that surveyed the BMT and looked at mollusks and related species found 6,000 species with many new and rediscovered species.

Seventy-eight bird species were identified belonging to 28 families. Out of the twenty-nine recorded shorebirds two are endemic to Panglao, the Philippine Mallard *Anas luzonica* and the Philippine Banded Crake *Rallina eurizonoides*. 13 species are Philippines endemics; these include the Mangrove Flycatcher *Cyornis rufigastra*, the Philippine Tailorbird *Orthotomus castaneiceps* and the Philippine Coucal *Centropus viridis*<sup>24</sup>.

## 2.6 Protected Areas

Protected Areas by definition, refer to identified portions of land and water set aside by reason of their unique physical and biological significance, managed to enhance biological diversity and protected against destructive human exploitation (NIPAS Act of 1992).

Tourism potentials within protected areas differ from other tourism areas outside protected areas because there is supposedly a management board- the Protected Area Management Board (PAMB). This is a governing body that will decide on matters relating to policy and general administration of the area. They shall, by majority vote, decide allocations for budget, approve proposals for

<sup>23</sup> GREEN, S. et al (2002): Bohol –Its Coastal Environment Profile

<sup>24</sup> Bohol Marine Triangle Project, Biodiversity Assessment and Monitoring - Vol. 1, Siliman University, March 2005)

funding, decide matters related to planning, peripheral protection and general administration of the area in accordance with the general management strategy.

For eco-tourism potentials in protected areas, operations must be community-based, wherein host communities are given the greatest responsibility in the operations and management of the project.

A total of 15 marine protected areas or sanctuaries have been established in the Bohol Marine Triangle municipal waters of Panglao, Dauis and Baclayon by virtue of municipal ordinances developed by the respective municipal LGUs.

## **2.7 Information Management**

Updated and quality information is a critical component in terrestrial and coastal resource management. The Bohol Environment Management Office is presently establishing a database for terrestrial, freshwater and coastal/marine flora and fauna found in Bohol as a standard approach for information and data management. Major contributions to this database are coming from the respective government agencies, especially the DENR and the NGO community.

The *Bohol Biodiversity Research Center* in Bilar was established by the Soil and Water Conservation Foundation in cooperation with the Bohol Environment Management Office, Department of Environment and Natural Resources and CVSCAFT (Central Visayas State College of Agriculture, Fishery and Technology).

In terrestrial areas, the Biodiversity Monitoring System (BMS) was implemented to improve the information and utilization of natural biological resources, and made available for decision-makers. The BMS involves local residents and aims to improve the management of their resources. Methods used are group discussions, transect walks, field diaries and photo documentation. The CIARS (Cave Impact Assessment Rating Systems) method is applied for assessing the physical impacts of recreational cave use.

In the BMT area, a biodiversity monitoring and evaluation (BIOME) is conducted twice a year in the marine protected areas (MPAs) by the community management teams' monitoring committees who have been trained for this purpose. A BIOME is done to determine changes of protected marine resources such as corals, reef fishes, and seagrass. Possible impacts of various activities allowed within and outside the MPAs are noted and status at a given time is fed back to the stakeholders as basis for management initiatives and interventions, and sound, science-based policy recommendations. BIOMEs make use of the Fish Visual Census, Point-Intercept method, Belt-Transect method, and the Transect-quadrant method.

For monitoring and evaluation of Coastal Resources Management (CRM) activities in the province, a CRM Certification System was implemented which establishes benchmarks for effective coastal resource management at the municipal and city levels. It likewise serves as road map for planning future directions and initiatives. Certified areas should be prioritized for investment.

## 2.8 Constraints

The management of natural resources in all its richness and biodiversity, is greatly hampered by the following limitations:

- Minimal knowledge, appreciation or understanding of biodiversity
- Rapid rate of species decline and habitat destruction
- Soil erosion, coastal erosion and sedimentation
- Reef destruction due to dynamite/cyanide fishing
- Overfishing, illegal fishing practices
- No karst landscape management
- Rampant hunting in many areas
- Illegal cutting of trees and timber poaching continues
- Inadequate knowledge from scientific research as to flora and fauna species, population size and location in Bohol
- Pollution and exhaustion of water tables causes destruction of the valuable aquifers
- Replacement of forest and agricultural lands with monocultures of exotic species
- Bio -prospecting and bio-safety
- Illegal collection and selling of wildlife
- Few programs to protect and conserve the flora and fauna of the island province
- Protected area boundaries show little relation to forest boundaries and need to be demarcated
- Non-systematic approach to water resource management
- No comprehensive involvement of all stakeholders in the management process
- Lack of coordination in policy-making development planning and management
- Information management not sustained or absence of website at the Provincial Tourism Office

## 3 STRATEGIC FRAMEWORK

### 3.1 Principles for Ecotourism Development

The development of eco-cultural tourism in Bohol aims to establish links and promote cooperation between local communities, national and international NGOs, and tour agencies in order to fully involve local populations in the employment opportunities and income-generating activities that tourism can bring. The *Ecotourism and Biodiversity Conservation Framework* gives a practical and positive contribution to alleviating poverty by helping local communities to draw the maximum benefit from their region's tourism potential, while protecting the environmental and cultural heritage of the region concerned. Bohol's Tourism role is reflected in its guiding vision:

*Be the country's prime eco-cultural tourist destination where visitors can experience and be inspired by the Boholano Religiosity and Hospitality, enhanced by our rich natural and cultural heritage, maintained by a community committed to moral integrity and environmental soundness resulting in the upliftment of the socio-economic well-being of the Boholanos*

Its primary strategy is to establish Bohol as a major destination for eco-cultural tourism through effective government – private sector collaboration.

The vision is supported by its mission

*To educate, empower and encourage Boholano pride so that its people will conserve biodiversity and manage the sustainable use of natural and cultural resources towards alleviating poverty, generating revenues for the people – particularly the communities, local governments and business and a development of a full potential for sustainable tourism in Bohol<sup>1</sup>.*

and the following goals:.

1. Well-planned quality developed ecotourism destinations and programs that promote, contribute to and educate about biodiversity and environmental protection, rehabilitation enhancement, conservation and wise use of resources.
2. Develop ecotourism destinations that embody Bohol's prime Ecotourism resources based on a destination image that is internationally competitive and attracts key market segments
3. Provide a world class tourist facilities and services, through a well-developed natural attractions, improved infrastructure facilities, efficient tourism assistance, and a well-disciplined citizenry

There are guiding principles for the conservation of biological diversity and preservation of the unique natural and cultural heritage of the Boholanos and for local community entrepreneurship in the operation and management of ecotourism sites.

- Generate local employment and increase the revenues in the municipalities without compromising the natural-based assets of the locality, and thereby harnessing tourism for pro-poor growth while reducing negative impacts to the poor.
- Develop framework strategies that focus on the economic and non-economic benefits and enhance policy and process reform e.g. expansion of tourism business opportunities employment and collective benefits capacity building mitigation of environmental impact improved social and cultural impact and increased participation in local planning, developing formal and informal linkages and partnership with the poor and private investors/ operators and governments.
- Increase awareness among all stakeholders as to the importance of biodiversity conservation
- Ensure that tourism development does not exceed the social and environmental limits of acceptable change as determined by researchers in cooperation with local residents
- Identify and recommend suitable eco-tourism sites and products that would provide greater economic gains in livelihood benefits and engaged the poor people in the community in decision-making.

- Emphasize the need for tourism zoning and visitor management plans for sites that will be developed as eco-destinations
- Use environmental and social base-line data, as well as long-term monitoring programs, to assess and minimize negative impacts
- Promote local styles of architecture and infrastructure that are developed in harmony with the Boholano culture and environment, that use local materials, minimize energy consumption and conserve local plants and wildlife

### **3.1.1 Objectives**

- To put in place mechanisms that are environmentally-sustainable, economically-viable, and socially-equitable in order to bring about development in the province that would redound to the benefit of local communities, especially the poor and marginalized sectors of society.
- To develop world-class tourism products.
- To establish more effective tourism information and assistance services.
- To develop tourism that is sustainable environmentally, and socially and culturally sensitive.
- To develop professional tourism manpower services.
- To Implement ecotourism plans to provide sustainable growth and development of the province
- To involve LGUs and local communities in the identification, planning, development and promotion of priority eco-cultural tourism sites
- To mount an aggressive tourism promotion and marketing campaigns for Bohol as an ecological-cultural tourism destination within and outside the country
- To institutionalize innovative and appropriate monitoring and evaluation systems for ecotourism and biodiversity conservation programs
- To preserve and revitalize cultural heritage and associated sites

### **3.2 Eco-tourism Strategies**

- In consonance with the National Ecotourism Strategy under the National Ecotourism Program, provide an integrated and coordinated mechanism for partnerships among government, the private and business sectors, the local communities and tourists to ensure the industry's viability and competitiveness in the long run.
- Establish networking of key ecotourism sites both in product development and marketing thereby maximizing the economic gains of the host communities.
- Implement a monitoring system to control and address environmental, socio-cultural and economic tourism impacts
- Channel technical assistance to ecotourism projects to assist the management of the ecotourism destinations
- Access financial assistance for local communities by linking them to financial institutions, coordinate with national agencies and other funding organizations
- Develop standards, certification and accreditation schemes for ecotourism products to improve sustainability, performance of accommodation facilities and provide consumers with reliable expectations and advice before booking.

- Integrate ecotourism in overall policies and programs at the local level, particularly in disseminating information, enhancing awareness and education. IEC activities intensified to raise level of awareness of stakeholders.
- Enhance existing and develop strong ecotourism products and create models for sustainable planning and management of ecotourism and other forms of nature-based tourism that will demonstrate ways for local communities to engage in commercially viable though non-exploitative and demonstrate sustainable utilization of natural resources.
- Conduct training and capability building activities and ensure sustained tourism services training programs for the ecotourism industry's manpower
- Enforce control mechanism and monitoring of eco-quality using a participatory approach
- Rally for strict law enforcement (national, provincial laws and local ordinances) to protect Bohol's natural, cultural, and human resources
- Establish guidelines and transform them into obligatory regulations
- Establish tourism visitor centers to assist and inform tourists

### **3.3 Strategies for Biodiversity Conservation**

- To conserve and protect wildlife species and their habitats to promote ecological balance and enhance biological diversity
- To regulate the collection and trading of flora and fauna
- To initiate and support scientific studies to strengthen the conservation of biological diversity
- To enhance the conservation and protection of biodiversity resources through comprehensive IEC programs throughout the province
- To harmonize research with conservation need including comprehensive surveys prior to establishment of ecotourism facilities.
- To institutionalize innovative but appropriate monitoring and evaluation systems for biodiversity conservation
- Establish wildlife corridors to connect forest fragments or similar ecosystems
- To provide provincial, municipal, barangay legislation to support biodiversity conservation, for example enforcement of existing wildlife laws e.g. no hunting through a province-wide ordinance
- To encourage an increase in biodiversity in farming, agro-forestry and forest programs
- To protect habitats through development of specific management plans, e.g. MPA Management Plans.
- To involve LGUs and local communities in biodiversity management
- To include tourism issues in biodiversity strategies and integrate ecotourism plans in protected area management, especially protected areas which do not fall under the NIPAS as they do not have the resource allocation in place for conservation and habitat protection.
- To apply zoning in destinations, strict zoning in protected areas to control ecotourism activities and to allow conventional tourism to take place in different zones
- To preserve island ecosystems and endangered species through proper site management, rehabilitation of original habitats by reintroducing native species and replacement of introduced species

### 3.4 Examples of Development Programs In Bohol

A number of biodiversity conservation and ecotourism development programs are underway to develop and promote sustainable tourism/ecotourism in Bohol.

<b>Program</b>	<b>Program Goals</b>	<b>Location/Coverage area</b>
Product Development and Enhancement Program	<ul style="list-style-type: none"> <li>- Local destination development</li> <li>- Development of eco-cultural and agri-tourism products</li> <li>- Continuous assessment/evaluation of local tour destinations (new and existing)</li> </ul>	Existing: Buenavista, Candijay, Maribojoc, Cortes, Panglao, Dauis and Baclayon (BMT), Ubay, Sierra-Bullones, Batuan, Bilar
Marketing and Promotions Program for existing ecotourism products	<ul style="list-style-type: none"> <li>- Marketing and promotional campaigns</li> <li>- Production of promo collaterals</li> <li>- Bohol Tourism/Ecotourism web site development</li> <li>- Participation in travel marts and fairs</li> <li>- Publications in travel magazines and guide books</li> <li>- Familiarization tours of media and local and foreign travel/tour agencies</li> </ul>	Regional , National and International Same Same Same Province-wide Banacon Island
Sustainable Capability and Attitudinal Enhancing Program for Boholano Tourism Practitioners	<ul style="list-style-type: none"> <li>- Seminars/Skills trainings for tourism service providers (front liners to property users)</li> <li>- Cross visits to competitive tourism destinations</li> </ul>	Province-wide
Bohol Sustainable Tourism Development and Management Program	<ul style="list-style-type: none"> <li>- To develop standards/ guidelines for sustainable operations of ecotourism sites/activities/facilities</li> <li>- To put in and consolidate all existing projects and incorporate ecotourism areas at infancy stage;</li> <li>- To create a system of monitoring these sites and address concerns &amp; needs;</li> <li>- To incorporate the diverging development directions</li> <li>- To provide technical assistance and coordinate with national agencies &amp; other funding organizations in sustainable tourism development</li> </ul>	Province-wide
Bohol Marine Triangle (BMT) Ecotourism Development and Marketing Program	-Establish community-based Ecotourism projects for livelihood and resource stewardship	Panglao, Dauis and Baclayon
Abatan River Community Life Tours	<ul style="list-style-type: none"> <li>-Develop community-based Sustainable tourism Enterprises and livelihoods</li> <li>-Capacitate host community groups with needed skills</li> </ul>	Cortes, Maribojoc, Balilihan, Antequera, Catigbian

PACAP-FOCAS 2	-Reduce poverty and improve standard of poor communities in 7 towns of Central-Eastern Bohol -Establish community-based ecotourism products/destinations	Albur, Loboc, Sevilla, Bilar, Batuan, Anda, Sierra-Bullones
Customer Service Skills Improvement Program for the Tourism Industry	-Institutionalize customer service skills enhancement in the tourism establishments	Province-wide but initially in tourism centers of Tagbilaran City and Panglao

### 3.5 Product Development Areas

With most of the municipalities teeming with potential for ecotourism development, workshops were held to identify and develop product themes and concepts for each area based on the ecological, historical and cultural treasures existing therein. These workshops yielded the following results.

#### Ecotourism Product Themes and Concepts per Municipality

LGU's / District 1	Theme	Area (Brgy)
Albuquerque	Municipal Marine Park	⌚ Santa Felomina
Antequera	Abatan River & Forest Management Zone, Mountain Ecolodge and Riverside, Antequera Nature Trail	
Baclayon	Pamilacan Dolphin and Whale Watching	⌚ Pamilacan Island and Mindanao Sea
Calape	Basihan Mangrove Base Ecotourism	⌚ San Isidro
	Lawis Marine Park	⌚ Lawis
	Talisay Board Walk	⌚ Talisay
	Giant Clam Reserve	⌚ Lomboy
	Calape Group of Sanctuaries	⌚ Poblacion
Catigbian	Dagook Falls, Catigbian Satellite Village Center	
Corella	Tarsier Nature Trail and Nature Center Development/Craft Village Balisawa Hill	⌚ Cancatac ⌚ Tanday
Cortes	Community Life Tours (Mangrove Loops Abatan River)	⌚ Mangrove Areas of Abatan River in Maribojoc Bay
Dauis	MPA Management Hinagdanan Cave	⌚ San Isidro, Dao, Bingag ⌚ Bingag
Loon	Loon Rowers and Wildlife Refuge Loon Time Walk Loon Karst & Island Adventure	⌚ Moalong River ⌚ Poblacion ⌚ Cabilao and Sandingan Islands
Maribojoc	Community Life Tour of Abatan River Estuarine Ecology and Maribojoc Historical Monument	⌚ Upper de la Paz ⌚ Punta Cruz
Panglao	Marine Protected Areas Cat Island	
Sikatuna	Sung-on Underpass Cave Libjo Cave	
Tubigon	Tubigon's Gateway Island Life and Seascape	⌚ Batasan Island ⌚ Panggapasan Island ⌚ Bilang-bilangan Island



Tagbilaran	City Park Mabaw Reef Sitio Ubos – Old Tagbilaran	⌚ Kabawan ⌚ Manga ⌚ Poblacion
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LGU's / District 2	Theme	Area (Brgy)
Clarín	Alimono Peak Fishermen's Tour of 3 islets	⌚ Buangan
Balilihan	Cawasan Falls Camagao Falls Mt. Carmel Hill Balilihan Municipal Park and Plaza Hanopol Mini Hydro Historical Watchtower	Cabad San Isidro
Bien Unido	Danajon Reef Dive Site Beach Resort Development	Bilangbilanagan Is., Puerto San Pedro
Buenavista	Cambuhat River Marine Protected Areas Mt. Kampaningao Cantores Shrine	
Dagohoy	Kawasan Falls Mt. Camagay Lahug Cave	
Danao	Dagohoy Caves, River & Forest Adventure: Thrive Dagohoy history, Explore Danao's Forest Reserve, Cradle of the longest revolt	⌚ Magtangtang
Getafe	Banacon Mangrove Maze & Sea shore Bird Watching Danajon Double Barrier Reef & Sand Bars	⌚ Banacon Island
Inabanga	Inabanga River Cruise and Island Adventure	⌚ Inabanga River, Cuaming Island Panahugan Island, Bugatosan Island
Pres. Garcia	Marine Protected Area in Pong Gamay Islet and Bhutan Islet Batarya Rocks and White Beaches Protected Landscape and Seascape	
San Isidro	Kilab-Kilab Falls	
Sagbayan	Chocolate Hills Bayong Spring Sagbayan Peak and Heaven Hills Naga Falls and Motong Talinis	
San Miguel	Exploring San Miguel Watershed and Water Trail	⌚ Kagawasan ⌚ Tomac
Talibon	Talibon Marine Wildlife Sanctuary and Park	⌚ Cataban Island, Sag Island, Bansan, ⌚ San Roque, San Agustin, Balintawak, San Pedro, San Isidro
Trinidad	Trinidad Adventure with Forest Wildlife and Cascades ⌚ Demo Farm ⌚ Twin Peaks ⌚ Mini Rice Terraces ⌚ Kawasan Falls	⌚ St. Tomas ⌚ San Isidro ⌚ San Isidro
Ubay	Ubay Agri Park Ubay Mini Aqua Park Beaches	San Vicente

LGU's / District 3	Theme	Area (Brgy)
Alicia	La Hacienda, Alicia, Juawangan Cave/Spring & Mountain Resort with Forest Wildlife	⌚ La Hacienda
Anda	Exploration of Anda Seaside Archeological Caves and White Sand Beaches	⌚ Candabong, Virgen, Bacong, Poblacion, Suba, Talisay, Limawan, Badiang
Bilar	Logarita Spring Adventure Butterfly Dome Magsaysay Park Nature Center Biodiversity Complex Center Rajah Sikatuna Protected Landscape Man-made Forest Bilar Peak Bird Sactuary Tinugdan Spring	⌚ Logarita ⌚
Batuan	Makapiko Nature Park/River Trekking Rajah Sikatuna Protected Landscape Chocolate Hills Balay sa Humay Abijilan Spring Kamanayon Mt. Range Bud Tinuli Karst Walk Botanical Garden Cultural Collectives (Rondalla, etc)	⌚ Rizal, Rosariohan, Cambacay, Aloja ⌚ Rizal ⌚ Sta Cruz & Garcia ⌚ Poblacion Sur ⌚ Sta Cruz ⌚ Pob. Norte. Pob. Vieja & Cambacay ⌚ Janlud ⌚ Cabacnitan ⌚ Timberland areas
Candijay	Kawasihan Coastal Environment & Wildlife Appreciation Tour Nasarok Hill Wildlife Exploration & Cultural Heritage Tour Candijay Mangrove Adventure Tour	⌚ Cogtong Bay ⌚ Can-olin ⌚ Panadtaran
Carmen	Chocolate Hills Viewpoint Horseback and Carabao Riding Pottery and Furniture Products Lasang Nature Springs Montesunting Mini-Forest Fatima Holy Rosary	⌚ Buenos Aires ⌚ La Paz ⌚ Lasang Lasangan ⌚ Nueva Vida ⌚ Buenos Aires
Dimiao	Pahangog Twin Falls Cavern Balbalan Beach Badiang Heights Ermita Ruins Mac Arthur's Cap Century's-old Roman Catholic Church	⌚ Guingoyoran ⌚ Nueva Vida ⌚ Buenos Aires
Duero	Primary Limestone Forest with Nature Interpretive Center and Adventure Trail Camp Verde Historical Landmark Eskaya Tribe Anibonagn Massacre Site	⌚ Angilan ⌚ Angilan ⌚ Taytay
Garcia-Hernandez	Garcia Hernandez Roman Catholic Church Roxas Park Seven Heaven Hill Ughuban Spring Cambuyo Rice Terraces Beaches	⌚ Poblacion ⌚ Roxas ⌚ Calma ⌚ Cambuyo ⌚ Cambuyo ⌚ Poblacion, W-Canayaon, Manaba

	Tambuko Cave and Lagoon Our Lady of Nation Shrine River Trekking (Anito Hanging Bridge)	⌚ Cagwang ⌚ West Ulbuja ⌚ Tabuan
Guindulman	Coastal Burial Caves & Reef Exploration Basdio	⌚ Basdio
Jagna	Virgen sa Barangay Shrine Kinahugan Falls Batong Buhay Resort Lonoy Martyr Site Ka Eyang Cave Jagna Rizal Park	⌚ Ilijan Hill, Poblacion ⌚ Cabungaan ⌚ Larapan ⌚ Lonoy ⌚ Odiong ⌚ Poblacion
Loay	Loay Rio Vista Church Heritage Tour	⌚ Sito Ubos ⌚ Calvario
Loboc	Loboc River Cruise Busai Falls Tontonan Falls Kruz Daku Pilgrimage Site Man-Made Forest Sug-ong Mountain Trek	
Lila	Lila Rice Terraces Tinubgan Spring Tiguig Swimming Pool	Tiguig
Mabini	San Vicente Ferrer Pilgrimage Site Merong Hill Lumislis Island Viewing Agro-Tourism Development	
Pilar	Man-made Lake Malinao Dam Philippine Civil Service Commission Centennial Forest Park Wojok-wojok Pamacsalan River Auguis Ancestral Home Virgen del Pilar Shrine Municipal Plaza Fatima Cave Catugpa Cave Sagnap Spring	⌚ Poblacion ⌚ Poblacion  ⌚ San Vicente and Bayong ⌚ Pamacsalan ⌚ Lumbay ⌚ San Vicente ⌚ Poblacion ⌚ Lundag ⌚ Inaghuban ⌚ San Vicente
Sierra Bullones	Dakit Municipal Park Bugsoc Falls Mabugnaw Spring Sierra Bullones Ecotour San Isidro Cave Kaaki Spring	
Valencia	Rajah Sikatuna Protected Landscape Badiang Spring Punta Gorda Trail	
Bohol Marine Triangle	Biodiversity Escapade ⌚ Marine Wildlife & Seascape Watch ⌚ Reef and Islet Exploration ⌚ Dauis Rocky Shore Loop ⌚ Panglao Coastal Landscape and White Beaches Trail	⌚ Pamilacan Is ⌚ Balicasag Is + small islets ⌚ Dauis area ⌚ Panglao area



## Ecotourism and Biodiversity Conservation Framework Plan Product Themes and Concepts in Bohol



Source: Product Development Workshop, June 2005.  
Provincial Planning and Development Office/Tagbilaran  
prepared by S. Cruz/DED

### 3.6 Networking

Networking serves as a mechanism for sharing experiences, exchange techniques and best practices and building professionalism at the provincial and municipal levels. The network can also become a means to spread information and to identify worthy projects for donor agencies support. A means of communication in the contact network could be through email or newsletter. The mobilization of the private sector and the communities is essential; and networking within sub-groups should be encouraged<sup>25</sup>.

Networking activities shall link sites based on similarity and complementary products to be offered to visitors and develop tour circuits or itineraries. It will help to disperse economic benefits from ecotourism and uplift the social conditions of host communities and outside the circuits.

## 4 Policy Context and Advocacy

Government, at all levels, have put in place appropriate policies to ensure protection and management of environmental resources and cultural heritage for sustainability. Non-government organizations and other interest groups have likewise pushed landmark international and national agreements advocating these same sustainable development principles.

Foremost among these policies at the provincial level is the Bohol Environment Code that provides a sectoral focus on eco-tourism development/sustainable tourism development. Executive Order 111 established guidelines for eco-tourism development in the country. Another significant piece of legislation is the NIPAS Act of 1992 which guides LGUs in the establishment and management of the NIPAS areas. It recognizes the role of tourism in the protection, development and management of protected areas. Tourism activities particularly ecotourism are permitted in “recreational zones” to extend benefits to local residents as well as enable visitors to appreciate the beauty of nature.

### ***Provincial (Bohol)***

- Bohol Environment Code of 1998
- Executive Order No. 02 – Banning the extraction of sand and gravel within protected areas and environmentally critical areas.
- Executive Order No. 13 – Enforcing the salvage zone, sanitation laws and demolition of structures along the shorelines
- Bohol Agenda 21 of 1999

### ***National (Philippines)***

- EO 111 – Guidelines for Ecotourism Development in the Philippines
- Republic Act 7586 or the NIPAS Act for Protected Areas
- PD 705 – Revised Forestry Code of the Philippines – 1975
- PD 856 – Code on Sanitation of the Philippines of 1975
- PD 1067 – Water Code of the Philippines - 1976
- Philippine Agenda 21 of 1990 (pp 62-63)
- PD 1152 – Philippine Environment Code – 1977

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<sup>25</sup> Department of Tourism/Department of Environment and Natural Resources (2002): National Ecotourism Strategy

- PD 1586 – Environmental Impact Assessment System of 1978 (pp 67-69)
- 1987 Philippine Constitution (pp. 59-60)
- The Medium Term Philippine Development Plan 1999-2004 (pp. 60-61)
- Sustainable Tourism Development Framework Formulated by the DOT, Phil. Council for Sustainable Development, National Economic Development Authority (PCSD-NEDA) and the Canadian Universities Consortium Asian Institute of Technology Urban Environmental Management Training & Technology Transfer (CUCAIT UEM TTTP) (pp.64-66)
- Tourism Master Plan for 1991-2010 (pp- 69-70)
- Republic Act. 8371 or the Indigenous Peoples Rights Act (IPRA) (p. 73)
- Joint DENR-DOT Memorandum Circular 98-02 –Guidelines for Ecotourism Development. In the Philippines (pp-73-74)
- DENR Memorandum Circular No. 98-17- Guidelines for Ecological Destination Development and Management in the Philippines (p.74)
- Republic Act 7160 - Local Government Code of 1991 (pp 30-32)
- Republic Act 6969 – Toxic and Hazardous Wastes Control Act of 1990
- Republic Act 7076 – Small-Scale Mining Law
- Republic Act 7942 – Philippine Mining Act of 1995
- Executive Order 247 - The Bio-prospecting of Biological and Genetic Resources of 1996
- Republic Act 8550 – Revised Fishery Code of 1998 (p 15)
- Republic Act 8749 – Clean Air Act of 1999
- Republic Act 9003 – Solid Waste Management Act
- Republic Act 9072 – Cave and Cave Resources Management & Protection Act of 2001
- Republic Act 9147 – Wildlife Resources Conservation and Protection Act of 2001
- Republic Act 9275 – Philippine Clean Water Act of 2004

### ***International***

- Global Agenda 21 (pp.18-19)
- Agenda 21 for Travel & Tourism (pp. 19-23)
- United Nations Commission on Sustainable Development. (UNCSD), Berlin Declaration on Biological Diversity and Sustainable Tourism, March 1997 (pp. 24-26)
- Commission on International Treaties and Agreements (CITES, pp. 26-27)

Sources: *National Ecotourism Strategy*

*Sustainable Coastal Tourism Handbook*

## 5. Conceptual Principles

### 5.1 Institutional Mechanisms

In line with the national government's initiative of pursuing the National Ecotourism Strategies (NES) with the implementation of Executive Order 111, the Province of Bohol shall lay down an institutional mechanism for eco-tourism development and biodiversity conservation. There is a need to create an effective relationship between those who manage the natural resources and those who plan tourism development. Partnerships among key stakeholders-the government, business sector, and civil society shall be formalized. This collaborative relationship provides for a strong foundation for sustainable tourism and resource conservation in Bohol.

The implementation of NES in the country has been primarily delegated to the various bodies under EO 111. Foremost, the National Ecotourism Development Council (NEDC) provides the policy direction for ecotourism, thus formulating the guidelines, rules and regulations for its development. The National Ecotourism Steering Committee (NESC), the working committee of the NEDC, reviews progress on ecotourism development in the country and coordinates with concerned agencies and institutions in the implementation of the NES. At the regional level, the Regional Ecotourism Committees (RECs) provide support in preparing plans for ecotourism site development and build up networks for the marketing and promotion of these sites. These multi-sectoral ecotourism bodies, along with their respective Technical Working Groups (TWGs) are mainly composed of representatives of the Department of Tourism (DOT), Department of Environment and Natural Resources (DENR), other National Government Agencies (NGAs), Non-Government Organizations (NGOs), and the private sector.

In Bohol, it is imperative that a **Provincial Ecotourism and Biodiversity Conservation Committee or Council** be organized to strengthen the province's bid of logically developing its ecotourism potentials, localize the implementation of the National Ecotourism Strategies and enhance its environmental conservation program. This Body shall be composed of stakeholders in the environment and tourism sectors including NGOs, the academe, tourism industry players, private sector, provincial and national government agencies and the local communities. In close coordination with the Provincial Tourism Council, the body shall perform the following:

- Formulate and recommend policies, guidelines, and programs relevant to the development and promotion of ecotourism and biodiversity conservation in the province;
- Coordinate ecotourism and environment conservation investments and development activities;
- Devise an accreditation and incentives mechanism for ecotourism projects;
- Establish ecotourism investments, development, and performance standards and criteria;
- Review, evaluate and approve ecotourism projects in the province;
- Supervise and monitor implementation of ecotourism and environmental conservation laws, policies, guidelines and standards in the province;
- Recommend ecotourism and biodiversity conservation related legislative

agenda to the Sangguniang Panlalawigan;

- Provide assistance to communities in the development of ecotourism sites and in the conduct of biodiversity conservation activities;
- Collaborate and coordinate ecotourism initiatives with national, regional, national and local ecotourism bodies
- Perform such other activities necessary to carry out the objectives of the Ecotourism and Biodiversity Framework Plan of Bohol and in support to the National Ecotourism Strategies.

An **Ecotourism Technical Working Group (ETWG)** shall be established to provide secretariat support – both technical and administrative to the Council. The ETWG shall be composed of technical staff necessary to assist the Council in performing its functions.

Funding the operation and management of the Council can be sourced from a special government (National or Local) fund from ecotourism development or from existing available funding sources of national agencies and provincial offices that regard conservation and/or ecotourism development as part of their regular mandates. Resources can also be tapped from international and local funding organizations that pursue these thrusts. Substantial outcomes shall be achieved from these available resources through focused and coordinated efforts of concerned agencies and/or organizations.

The operation of the **Ecotourism and Biodiversity Council/Committee** shall be supported and collaborated with the operations of existing formal bodies, structures, and offices that have to do with tourism development and environment conservation in the province. As provided for in the Bohol Environment Code, the Provincial Tourism Council (PTC) shall, in addition to its existing function in the policy-making body in all tourism-related matters in the province, shall coordinate ecotourism promotion, investment and development in Bohol. It is also mandated to establish ecotourism standards and monitor the level of compliance in the industry. With these functions, both Councils can work together for a more effective management and development of ecotourism in the province.

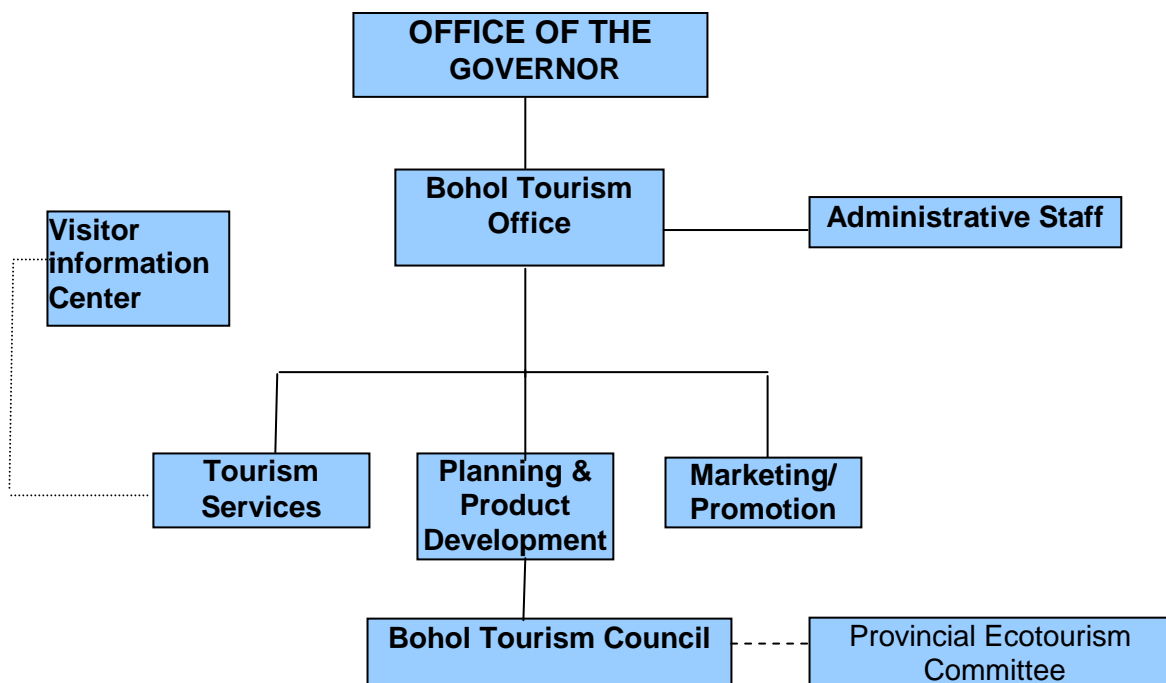
Within the Bohol Provincial Government organization, several offices are regarded essential in pursuing ecotourism development and biodiversity conservation. The **Bohol Tourism Office (BTO)**, a unit under the Office of the Governor, is charged with carrying the provincial program on tourism development. The office is mandated to:

- Formulate integrated development plans, programs, projects and activities for the development and marketing of the local tourism industry in the province;
- Conduct training programs and tourism capability enhancing activities for local communities necessary to improve skills and competence in tourism services to prepare them for employment in the industry;
- Conduct continuous research on and recommend tourism sites and products that can be developed in the province
- Identify and develop markets based on inputs from ecotour products



- Provide statistical data and other pertinent information related to tourism , and to manage the dissemination and delivery of tourism information and services;
- Coordinate with different government (provincial, regional, national) line agencies, private sectors, non-government organizations in promoting sustainable tourism industry of the province, municipal and barangay governments, specifically in developing plans, policies and guidelines of interest with attractions potentials;
- Conduct periodic ocular monitoring of tourism-related programs, projects, activities and recommend areas for improvement;
- To develop standards and regulations as well as the accreditation of tourism sites, accommodation and services

#### Proposed Organizational Management Structure of the Bohol Tourism Office



The **Center for Culture and Arts Development (CCAD)**, on the other hand, was created and organized to develop, pursue and advocate cultural programs in the province. It shall collaborate with the private sector, NGAs, and LGUs and local communities to ensure participation in the cultural development of the province. The following mandates of CCAD are:

- Preservation, protection and revitalization of cultural heritage sites;
- Foster historical awareness
- Creation and development of cultural workers and organizations
- Production of new cultural works
- Enrichment of education through arts and culture
- Professionalization and promotion of new talents
- Advocacy for cultural infrastructure development
- Development of community-based eco-cultural tourism
- Cultural networking and promotion

For the purpose of implementing the provisions of the Bohol Environment Code, the Provincial Government created the **Bohol Environment Management Office (BEMO)** that shall have the jurisdiction and authority over all environment and natural resources in the province subject to the provisions of the Local Government Code. BEMO shall share responsibility with the municipal governments, the **Department of Environment and Natural Resources (DENR)** and other national government agencies for the effective protection, development, management, rehabilitation and conservation of natural resources. Among its specific functions, the office shall.

- Assist municipal governments, barangay councils and environmental organizations, through the provision of technical assistance such as development of environmental management organizational capability and guidance in the formulation and implementation of environmental laws;
- Develop a multi-year environmental management framework plan for the promotion of local government-driven community-based and livelihood-oriented initiatives particularly in tree enterprises, watershed management, ecotourism, coastal resources management, solid waste management, and participatory land use planning;
- Develop and implement environmental programs through the promotion of best-as-of-the-moment methods, processes,, and approaches by establishing showcases within the province for LGUs to adopt in their respective jurisdiction;
- Establish linkages with national and international institutions for purposes of fund sourcing, networking building, research and information/data bank generation; and
- Ensure municipalities to group themselves into clusters to address common concerns, such as law enforcement in municipal waters, protection of river systems, watershed management, and pollution control.

These offices, with the continuous support of the provincial leadership and officials, act as the primary movers for attaining the vision of the province. It is very necessary for these offices to coordinate and collaborate the activities and initiatives to effectively respond to the growing and complex tourism industry needs as well as address immediate and long-term natural resource conservation challenges. Networks and links with national government agencies and all stakeholders in the tourism and environment sectors shall be developed and continually strengthened to maintain the symbiotic connection of both sectors. Participation and cooperation of stakeholders in the performance of functions and activities of the multi-sectoral Eco-tourism and Biodiversity Council is essential to achieve the set goals and objectives collectively.

#### **Essential Points to Consider for an Effective Management of Eco-tourism Development and Biodiversity Conservation**

To ensure effective administration, management and operations of eco-tourism and environmental protection programs, projects and activities, the following shall be regarded as necessary:

- Appropriate legislation, rules and regulations, policies, and agreements that govern the management, implementation, regulation and monitoring of eco-tourism development initiatives and conservation efforts in the province. These legal measures will cover institutional and operational mechanisms that will be established at the provincial, municipal and barangay levels as well as at the eco-tourism site management level.
  - To establish and institutionalize special bodies/ committees, offices/ unit in local government units to manage, control, regulate and assist in eco-tourism development and biodiversity conservation
  - To regulate implementation of eco-tourism initiatives to make it a viable tool for sustainable development (ex. Regulation and control of number and frequency of visitors, on-site pollution control measures, provision of proper visitor services amenities, law enforcement and site protection)
  - To install mechanism for the accreditation of developers and investors
  - To ensure multi-sectoral participation in eco-tourism development
  - Laws and policies should be non-conflicting. They should complement or strengthen other policies in promoting eco-tourism and biodiversity conservation. Linkages between laws and policies should be established
- Appropriate policies and guidelines to operationalize the promotion and enhancement of eco-tourism development
  - For development, management, regulation and protection of identified eco-tourism sites
  - Product enhancement and development
  - Environmental education and information
  - Support programs for community stewardship and livelihood development to contribute to the reduction of poverty in the province
- Integration of eco-tourism strategies in tourism development master plan and other development plans / and operationalized through the work and financial plans of concerned agencies/ offices
- Need for appropriate mechanism and organization to implement, manage and support eco-tourism and biodiversity conservation (ex. Local eco-tourism committee)
  - From the provincial level to municipality, barangay and community level, eco-tourism site management level
  - Need for participation and representation of stakeholders in these organization/ committees/ bodies
- Need for appropriate level of resources in terms of monetary and manpower support, as reflected and incorporated in local and national government budgets, or financial plans of NGOs and other community organization
- Necessity for a well organized manpower structure for eco-tourism development

- Need for proper dissemination and information/ education campaign on the thrust for eco-tourism development and environment conservation within the government organizations, private sector and communities to foster appreciation, acceptance and support of the program
- Presence of networks, linkages and partnerships of functions, commitment and support between stakeholders and private sectors, thereby sharing expertise, knowledge and resources (national government, local governments, DOT, DENR, DOH, local tourism councils, tourism and environment committees of local sanggunians)
- Need for clear coordination and shared responsibility between tourism and environmental offices as well as the communities for the effective management of eco-tourism development. Coordination between local governments is necessary especially in areas where eco-tourism site extends in their areas of coverage.

### **Components of Successful Eco-tourism**

Eco-tourism in Bohol may be considered successful when the following elements are occurring.

1. When all eco-tourism stakeholders contribute to participate in and respect and apply the eco-tourism principles in the promotion of tourism in the province. These include from the eco-tourism industry travel agents inbound and outbound tour operators, dive shop operators of resorts, eco-lodges and dive shops, non-governmental organizations and academe, business sector, regional and national and local governments ,development agencies, research community, and local indigenous communities
2. Continuing professional training and capacity-building for LGUs, communities, NGOs, PO and private sector on product development, packaging and marketing of eco-tourism, enterprise development and cultural preservation
3. Presence of independent monitoring and evaluation mechanism that would objectively determine the actual outcomes and impacts of eco-tourism initiatives with clear feedback channels
4. Need for proper advocacy on the importance of consultative and participatory exercises in the design, packaging, management and operation of eco-tourism sites particularly in social preparation and community involvement.
5. Need for an updated, reliable and cost-efficient mechanism in generating and maintaining tourism/ eco-tourism database/ profile that would facilitate in making sound and timely decision. It must be accessible and comprehensible to stakeholders e.g. communities, local governments and investors, and must include lessons learned and best practices:
  - A mechanism that would ensure social and economic gains of local government and communities for eco-tourism and biodiversity conservation measures through imposition of regulated fees, charges and sanctions as well as incentives (with desired levels of return on investment example 10% of investment cost)

- A mechanism that would regulate the quality of eco-tourism support services to include tour-guiding, transport/ accommodation services
- Presence of appropriate manpower for the enforcement of rules, regulations and guidelines set for eco-tourism and biodiversity conservation
- Presence of technical support from governments/ NGOs to provide assistance to communities in eco-tourism development to ensure proper packaging of proposals, and facilitate access to appropriate funding support from local, national and foreign sources thereby shortening funding channels (to include feasibility studies, financing scheme studies, marketing studies)
- Need for a mechanism to finance eco-tourism development and environment conservation in such a way that it minimizes the dependence of external financial sources in the establishment or operation of eco-tourism sites. Eco-tourism ventures of communities must be self-sufficient and liquidating
- Need for local government units to formulate their eco-tourism plans through participatory process
- Formulation of Eco-tourism strategies should be made through consultation with stakeholders from the environment and tourism sectors, including indigenous and local communities

## **5.2 Stakeholder Participation**

### **5.2.1 Motivations for Involvement – Community Goals and Motivation for Development of Community-Based Tourism**

There are a wide range of individuals and organizations involved in activities associated with planning, developing and marketing eco-tourism. Their involvement in eco-tourism is motivated by different interests ranging from the need to conserve natural resources, develop local communities and alleviate poverty, and to provide an economic rationale for utilizing protected areas and its resources.

The current poverty incidence in the province is 48% based on the 2000 Family Income and Expenditure Survey as cited by the 2000 Philippine Human Development Report. As indicated in scoping studies previously undertaken with AusAid assistance, the highest incidence of poverty is found in the many small islands and coastal areas located mostly around the northern half of Bohol and in the upland and watershed communities in the interior part of the province<sup>26</sup>.

In line with the policy thrust of the Provincial Government of Bohol, a program framework on poverty reduction has been prepared to provide guidelines in formulating poverty-focused policies, plans, programs and projects which seek to reduce from the present 47.3% to 23% the proportion of families considered poor by the end of Year 2015.

The Bohol Poverty Reduction Program will basically reinforce a two-pronged strategy: increasing access to services by disadvantaged families and groups and at the same time, stimulating equitable or pro-poor economic growth in preferred

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<sup>26</sup> Province of Bohol 2002: Bohol Program Framework on Poverty Reduction Vol. 1

investment areas, namely: eco-cultural tourism, agricultural productivity and technology and livelihood development.

Among the proposed activities of the program under Tourism Sector is promoting Bohol as an eco-tourist destination which stimulates economic growth and provides direct cash benefits to the people which can, in turn, be channeled to improve nutrition and food security, housing, health and education thereby increase the standard of living as a whole. In addition, eco-tourism also promotes community participation in conservation, protection and further develops existing resources.

Poverty forces people to exploit natural resources in an unsustainable way due to lack of alternative income opportunities. Reducing poverty requires “pro-poor growth”. Tourism, one of the world’s largest industries is already growing or significant in most poor countries. Harnessing tourism for pro-poor growth means capitalizing pro-poor potentials which can be labor intensive, inclusive of women and the informal sector.

Community-based tourism may be able to achieve two goals: a) provide alternative livelihood and income to the poor, and b) offer more sustainable means of utilizing and conserving natural resources. A pro-poor tourism (PPT) approach unlocks opportunities- for economic gain, other livelihood benefits, or engagement in decision-making - for the poor.

## **5.2.2 Organizations Involved in Eco-tourism**

### **National, Regional, and Local Governments**

At the forefront of eco-tourism developments are government entities at all levels: national, regional and provincial/municipal/barangay who shall take on the following areas of action at their respective end:

- Formulate policies, development strategies consistent with the objectives of sustainable development through a consultative process with those who are likely to become involved/affected by ecotourism activities.
- Define appropriate policies, management plans and interpretation programs for visitors, management of the number of visitors in order to protect vulnerable ecosystems and thus sustain the use of certain sensitive habitats.
- Provide incentives to tour operators and other service providers to adopt sustainable development principles so that their operations be more environment friendly.
- Support the implementation of international principles, guidelines and code of ethics for sustainable tourism.
- Consider the allocation of tenure and the management of public lands for the improvement of social, economic and environmental benefit for the community concerned.
- Promote and develop educational programs for the community to enhance awareness about nature conservation in relation to ecotourism.
- Initiate and advocate the formulation of local ordinances that would provide deterrents for acts detrimental to sustainable tourism.

- Formulate and enact policies on entrance/user fees/conservation fees in environmentally critical and/or protected areas.

#### **Private Sector**

- Conceive, develop and conduct their businesses minimizing their negative effects to the environment that should include the local communities.
- Ensure that the design, development and operation of the ecotourism facilities shall include sustainability principles such as site design and community sense of place.
- Cooperate with government and NGOs by ensuring that ecotourism operations are practiced in accordance with the management plan and other regulations to minimize negative impacts.
- Make increasing use of local materials and products and that they should invest in the training of the local workforce.
- Work actively with local communities to ensure that the cultures and practices are depicted accurately and with respect.
- Avoid overcrowding and to diversify operations to different destinations so as to establish visitor impact management system of ecotourism destination.

#### **Non-Government Organizations & Academe**

- Provide technical, financial, educational, capacity building and other support in order to ensure that policies development and management guidelines and monitoring mechanisms are being applied.
- Monitor and conduct research on impacts of ecotourism activities upon various ecosystems, biodiversity, local cultures as well as socio-economic benefits.
- Cooperate with both public and private sector to ensure that the information generated thru research is to be used to support decision-making process in ecotourism development and management.

#### **Local and Indigenous Communities**

- Strengthen and encourage the community to use traditional skills such as arts and crafts, and agricultural produce.
- Define a strategy for improving collective benefits for the community thru ecotourism development which includes physical, financial and social capital development that will also improve access to technical information.

### **5.2.3 The Importance and Necessity of Cooperating with Involved Parties**

Eco-tourism has been identified as a prime economic opportunity through which alternative sources of income can be provided for local people.

The strategy for community involvement should be community led and community-focused. However, community-based tourism is also an interaction between interest

groups and should not be planned in isolation from other sectors and stakeholders. People with experience and knowledge of tourism, conservation and community/rural development have to be involved in its preparation. All stakeholders should be aware of the activities of the other stakeholders.

The environmental compatibility of tourism is of particular importance especially in some protected areas where rare and fragile species and ecosystem often occur. The extent on which nature-based tourism activities may cause negative environmental impacts basically depends on three factors: a) the characteristics of the site itself, b) the intensity and type of use it receives and c) how management mediates between these two factors.

Like all forms of sustainable tourism, it is a dynamic field, with new techniques and approaches evolving every time. Stakeholders must be involved in its implementation including business, government, non-governmental organizations and local communities.

#### **5.2.4 Levels of Cooperation**

All stakeholders involved in tourism development must be able and willing to undertake the following activities for the sake of eco-tourism and/or sustainable tourism development.

- **Sharing of information, ideas, experiences, and resources**

Stakeholders must be able and willing to exchange information, knowledge, experiences and resources while working together to maximize benefits from eco-tourism and to minimize impacts from tourism activities on the local culture and the environment.

- **Partnerships**

Eco-tourism can be an effective tool for community development and an environmental conservation strategy. Fostering partnerships among the host community members, tourism business sector, NGOs, government agencies and other relevant stakeholders towards eco-tourism development is an important step in the right direction to achieve maximum benefit for everyone.

- **Joint venture**

Similarly, communities and private enterprise should work together but under clearly written terms that determine profit-sharing, investment and based on the maximum number of visitors that can be safely allowed into the community.

#### **5.2.5 Processes of Cooperation**

The processes involved in eco-tourism development span a wide range of roles and responsibilities that are sensitive and therefore must be given due consideration and attention.

- 1. Understand the Community's Role**

Communities should exercise control over their growth and development. They will in many cases need technical assistance to take appropriate decisions and should be given adequate information and training in advance. Allocate time,



funds and experienced personnel to work with communities. Avoid allowing communities to feel they are powerless to influence pattern of development.

**2. Empower Communities**

Participation is a process that is more than just making communities the beneficiaries of an ecotourism project. Jobs are an important benefit, but they do not replace empowerment. Communities must genuinely participate in the decision-making process. This involves more than just consultation. Processes must be initiated to ensure that communities can manage their own growth and resources wisely.

**3. Urge Local Project Participation**

Project managers must identify local leaders, local organizations, and key priorities of the community. The opinions gathered should be disseminated and discussed with the community along with other relevant information such as government market statistics, or regional development plans. Training opportunities must be formulated at this phase to help community members gain planning skills, and also entrepreneurial skills required to run small businesses.

**4. Create Stakeholders**

Participation can be encouraged at two levels for individuals and for local organizations. Investment in project development areas should be encouraged, either in cash, labor or in kind resources. Developing lodging by local entrepreneurs and setting standards for local services by local organizations are two good examples.

**5. Link Benefits to Conservation**

The links between ecotourism benefits and conservation objectives need to be direct and significant. Income, employment and other benefits must promote conservation.

**6. Distribute Benefits**

Ensure that both the community and individuals benefit from project.

**7. Identify Community Leaders**

Identify opinion leaders and involve them in the planning and execution of projects. Identify leaders that represent different constituents to ensure that a cross-section of society is involved (including both men and women). Be sure the project has good information on the local social structure. Strategize on the effects of the project on different social groups and never assume that all parts of society will cooperate or agree. Be strategic and gain appropriate allies early.

**8. Bring About Change**

Use existing organizations already working in the community to improve its social well-being through economic development. Development associations or local cooperatives are good prospects. Groups involved in organizing

recreation can also be good allies. Community participation through institutions is more likely to bring about effective and sustained change.

## **9. Understand Site-Specific Conditions**

Be aware that authority structure varies greatly in each region. Consensus is not always possible, nor is the full participation of all sectors of society (women are often excluded).

## **10. Monitor and Evaluate Progress**

Establish indicators in advance to track tourism's impacts both positive and negative. Goals such as employment and income levels are only one type of indicator. The project should track negative impacts such as evidence of rapidly escalating prices for local goods, inflation in land prices, antagonism towards visitors, frequency of arrests, change in youth activities, and evidence of drug, prostitution and other illicit activities. Ideally, the more the local community is fully involved in ecotourism development, the less the problems should develop. Another important indicator of local involvement is evidence of initiatives within the community to respond to the negative influence of tourism.

## **11. Need for transparency in all aspects of the process**

It is critical that all aspects of a project are transparent. This is especially true of financial transactions. If all participants are not informed on a regular basis, suspicions will begin to form and those with vested interests may begin to take over the project. This will surely serve to destroy the project in the long run.

## **5.3 Eco-tourism Product Development**

Eco-tourism development involves a wide range of activities to be undertaken that include strategic planning, product development, physical development, visitor education and management, market research, enterprise development, tourism stakeholders management, and environmental impact management. It also requires the development of different kinds of products that ensure safety, are enjoyable, comfortable, and well-informed travel that are marketed to tourists. Products and services cover all types of transportation to and from the tourist destinations, food and drinks, accommodations, tours, tour guiding, facilities for interpretation, rest, recreation, and other services and amenities.

An eco-tourism product is created by skillfully combining different kinds of tourism resources such as tourism attractions and activities, tourism workers like guides, boatmen, caterers, tourism products (crafts, food, accommodations) and many other services and facilities to enable tourists to have an active experience with the natural environment, and local culture.

**For eco-tourism to become genuine or environmentally- sustainable, it must adhere to the following basic principles:**

- a) It must sustain local economic growth;
- b) It must actively and directly contribute to the protection and conservation of the environment;
- c) It must generate livelihood and entrepreneurial opportunities from tourism for host communities;

- d) It should be able to educate visitors and local communities;
- e) It must engender local stewardship of natural and cultural resources; and
- f) It should follow participatory development processes.

### **5.3.1 Strategies**

There are two strategies in developing pilot tourism products and community tourism enterprises that are environmentally sustainable

#### **1. Strength and Opportunity-Based Strategy**

This utilizes opportunities and inherent strengths of stakeholders and resources to position tourism initiatives/product ideas that have the potential to become competitive in the market, overcoming initial weaknesses presented by the initial lack of tourism experience and financial resources through constant exploration of marketing opportunities, banking on the product concept's uniqueness, strong quality and ability to cater to the needs of the target markets.

#### **2. Weakness and Threat-Oriented Strategy**

This addresses weaknesses and threats by creating opportunities for stakeholders to overcome their resistance and inertia to address problems by getting them involved to experience success in the cooperative resolution of strategic problems that plague the local industry. To ensure a positive experience for the stakeholders, one must select a case problem that one thinks contain a dormant element that could be stimulated to act as positive catalyst of change. The dormant catalyst is usually a group of host community members or an individual entrepreneur who seek the inspiration and fulfillment of working for a cause or realizing a vision for the common good.

### **5.3.2 Approaches**

The approach to planning and implementing tourism products and community tourism enterprises will be guided by the following:

- Bottom-up, multiple stakeholder consultation and decision-making process to generate broad support and a shared vision for the tourism projects;
- Integration of economic, environmental, socio-cultural and politico-legal considerations and processes to tourism product and community enterprise development process to balance the requirements of tourism product and enterprise quality and feasibility with sustainability of resource use, community development, and institutional strengthening;
- Innovation in the development and differentiation of tourism products based on the unique selling proposition of local resources for competitive market positioning and promotion of the regional destination; and
- Institutionalization of initiatives, cooperation, capacity and learning at the local level and their linkage to regional, national, and international networks of support for sustained management of tourism products and sites.

### 5.3.3 Objectives

The objectives of developing eco-tourism and Environmentally Sustainable Tourism (EST) should exhibit the following:

- Demonstrate EST products and enterprises in outstanding tourism sites within the priority tourism development areas (TDAs) to catalyze EST growth in other tourism sites within the TDAs;
- Demonstrate good management of tourism sites where EST products and enterprises operate;
- Innovate different kinds of partnership arrangements and capacity-building programs among local stakeholders to develop, operate, and sustain the EST products and enterprises and to manage tourism sites; and
- Assist in local policy development to support and sustain the management of the EST products, enterprises and tourism sites, and to institutionalize extension of EST programs in other tourism sites.

### 5.3.4 Eco-tourism Product Development Model

An integrated product development model and process will be implemented to achieve the kind of pilot tourism products, enterprises, and organization that would meet the objectives of a project. The product development model has five (5) key components:

#### 1. Tourism product, site and business component

This component seeks to identify the unique selling proposition of a tourism site, and based on available local resources, create a tourism product that intends to project a well-differentiated and marketable image of the site as a tourism destination. Improvements to the tourism site such as visitor facilities, environmental interpretation programs and guide services will also be implemented. To sustain and generate revenues, the product will be developed as a business that will be run by a local tourism organization/community and linked to local and national marketing channels.

#### 2. Resource management component

Under this component, pilot product sites are evaluated, planned, and zoned for appropriate resource management action by local communities, mandated agencies, and key stakeholders. Tourism zones are assigned and user/activity guidelines formulated for best practices. Guidelines for sustainable siting, design, construction and operation of tourism facilities are also formulated as appropriate installation of equipment and facilities to implement user restrictions and environmental guidelines are also included.

#### 3. Host community component

This component not only seeks the buy-in and cooperation of the host communities. Within the framework of a sustainable environmental

management plan, community tourism products are designed, developed and launched by and with the communities themselves.

#### **4. Policy and institutional**

Policy and institutional recommendations at the local and provincial levels are addressed by this component to assure a conducive environment for the development of sustainable tourism.

#### **5. Stakeholder Component**

Key tourism and resource stakeholders are identified, consulted, mobilized, and if possible, organized to support pilot product development and support activities.

### **5.3.5 Eco-tourism Product and Business Development Process**

Five (5) major stages comprise the product development process that cuts through the five (5) key components.

Stage 1: Resource assessment, stakeholder consultation and identification of project partners.

Stage 2: Development of product concept, resource management strategy, and participation mechanisms.

Stage 3: Product trials/ feasibility analysis, capacity building and policy development.

Stage 4 : Market linkage, business development, and site development.

Stage 5 : Product, business, and site monitoring, evaluation and improvement.

### **5.3.6 Key Components and Stages of Integrated Eco-tourism Product Development Process**

The matrix that follows shows the interface of the five components at each stage of the implementation process.

### Stage 1: Resource Assessment And Stakeholder Consultation

<b>Tourism Product Development Marketing and Business Development</b>	<b>Stakeholder Mobilization and Development</b>	<b>Local Resource Management</b>	<b>Community Participation and Benefit</b>	<b>Government Policy and Institutional Development</b>
<p>Tourism resource, product and market assessment of tourism site</p> <p>Identification of unique selling proposition of tourism site</p>	<p>Multiple stakeholder consultation on local tourism status and strategic directions for tourism development in the municipality</p> <p>Multiple stakeholder consultation on priority tourism sites and potential tourism projects in the municipality</p>	<p>Status appraisal of resources and local resource management requirement of tourism site</p>	<p>Consultation with community organizations and resource users to establish community development goals, plans and organizations for local participation in tourism development</p>	<p>Agreement inked on partnership between municipality and SEMP on product development program, among other things</p>

## Stage 2: Development of Product Concept, Resource Management And Participation Mechanisms

<b>Tourism Product Development , Marketing and Business Development</b>	<b>Stakeholder Mobilization and Development</b>	<b>Local Resource Management</b>	<b>Community Participation and Benefit</b>	<b>Government Policy and Institutional Development</b>
<p>Orientation on product development, tourism resource inventory, identification of tourism development concept, themes and zones, identification of potential and priority tourism products with focal stakeholders in each tourism site</p>	<p>Validation by multiple stakeholders of initial product concepts and plans for each pilot tourism site</p> <p>Identification of roles, commitments by and mobilization of municipal stakeholders to product development process in each tourism site</p>	<p>Formulation of resource management zones, plans, organization, guidelines, user fees linked to pilot tourism product</p>	<p>Selection of product development participants and organizations among focal stakeholders</p>	<p>Formation and mobilization of municipal tourism technical working groups for product development activities, among other tasks</p> <p>Identification of priority tourism sites for joint implementation and roles, resource counterpart by municipality</p>

### Stage 3: Product Trials / Feasibility Analysis, Capacity Building and Policy Enactment

<b>Tourism Product Development , Marketing and Business Development</b>	<b>Stakeholder Mobilization and Development</b>	<b>Local Resource Management</b>	<b>Community Participation and Benefit</b>	<b>Government Policy and Institutional Development</b>
<p>Design and execution of products</p> <p>Product confirmation trials with critiquing by technologists and marketing agents</p> <p>Implementation of product improvements</p> <p>Initial feasibility analysis</p>	<p>Hands-on learning on tourism product design, planning and operation</p> <p>Tourism training and accreditation by DOT</p>	<p>Formulation of environmental guidelines for operation of tourism product</p> <p>Design of environmental management facilities and systems to tourism sites</p>	<p>Hands-on learning on tourism product design, planning and operation</p> <p>Tourism training and accreditation by DOT</p>	<p>Enactment of local legislation on tourism and environmental policies related to pilot products and tourism sites</p> <p>LGU allocation of technical, budget and program support to product devt</p> <p>Facilitation of legal instruments to secure long-term access / use of tourism resources by product operators</p>



## Stage 4: Market Linkage, Business Development and Site Development

<b>Tourism Product Development, Marketing and Business Development</b>	<b>Stakeholder Mobilization and Development</b>	<b>Local Resource Management</b>	<b>Community Participation and Benefit</b>	<b>Government Policy and Institutional Development</b>
<ul style="list-style-type: none"> <li>•Development of business org for product</li> <li>•ID of partner marketing channels &amp; sales / reservation procedures</li> <li>•Product costing, pricing, packaging, sales &amp; reservation procedures with marketing partners</li> <li>•Development of collateral materials for product promotion with marketing partners</li> <li>•Business plan formulation on product</li> <li>•Site analysis up to preparation of detail plan of infrastructure/ landscape requirement</li> <li>•Implementation of infrastructure/ landscape plan</li> <li>•Installation of product equipment &amp; facilities</li> </ul>	<ul style="list-style-type: none"> <li>•Stakeholder support through market development, linkage, product packaging, promotion, human resource training</li> <li>•Development of business organization</li> <li>•Sourcing funds / investments for infrastructure and other capital requirements of products</li> <li>•Training on use and management of buildings and landscapes</li> <li>•Training on use &amp; management of equipment and facilities</li> <li>•Training on product operation and management</li> <li>•Training on operation environmental management facilities / systems to tourism site</li> </ul>	<ul style="list-style-type: none"> <li>•Environmental management facilities / systems to tourism site</li> </ul>	<ul style="list-style-type: none"> <li>•Identification of product and service suppliers from host communities</li> <li>•Costing and pricing of products and services for optimum benefit to communities</li> <li>•Development of business organization</li> <li>•Training on use and management of buildings and landscapes</li> <li>•Training on use and management of equipment and facilities</li> <li>•Training on product operation and management</li> <li>•Training on operation of env'tal mgt facilities / systems to tourism site</li> </ul>	<ul style="list-style-type: none"> <li>•Sourcing funds / investments for infrastructure and other capital requirements of products</li> </ul>

## Stage 5: Product, Business And Site Monitoring, Evaluation And Improvement

Tourism Product Development, Marketing and Business Development	Stakeholder Mobilization and Development	Local Resource Management	Community Participation and Benefit	Government Policy and Institutional Development
Design and installation of product, business and site monitoring and evaluation system	Consultation of multiple stakeholders on indicators for product, business and site monitoring and evaluation	Identification and integration of environmental indicators for monitoring and evaluation of product, business and site	Consultation of communities on socio-cultural indicators for product, business and site monitoring and evaluation	Institutionalization of LGU function to initiate regular multiple stakeholder monitoring and evaluation of tourism product, business and site
Implementation of product, business and site monitoring and evaluation	Identification and training of participants for product, business and site monitoring and evaluation	Planning and implementation of improvements to environmental management of product, business and site	Identification and training of participants for product, business and site monitoring	
Planning and implementation of improvements to product, business and site	Participation in planning and implementation of improvements to product, business and site		Participation in planning and implementation of improvements to product, business and site	

### 5.3.7 Community Tourism Enterprise Development Process

*The process of community-based tourism enterprise development is an **integrated and lengthy one**. Below are the steps that need to be undertaken to ensure success and sustainability of the enterprise.*

Step 1: Survey tourism site and host community.

Step 2: Consult with community regarding status of resources and their relationship to the tourism site, their views on tourism and participation in tourism.

Step 3: Look into legal/jurisdictional status of tourism site, other stakeholder activities and interests in the area.

Proceed to Step 4 if the following factors are present:

- Community interest in tourism involvement
- Compatibility of tourism community way of life
- Unique selling proposition exists for community to get involved in tourism in their area
- Sufficient legal basis (already exists or could be acquired) for community to operate tourism in the identified site
- Community organization and leadership to lead community involvement

Step 4: Community orientation and development goals

- Sustainable tourism concepts, principles, processes, impacts
- Options for community involvement
- Community development vision, goals, objectives, values
- Issues and concerns, what they want to happen and what they do not want to happen to their community, environment, family and self from tourism
- Criteria for selection of participants from host community members

Step 5: Community workshop on product development, product concepts, and plans

- Participatory mapping of community tourism resources
- Discussion and analysis of factors that need to be considered regarding the tourism site; environmental values and impacts to avoid, socio-cultural values and sensitivities to observe, legal-jurisdictional status of resources and institutional mandates, needs of tourists and impacts of tourism
- Delineation, characterization and theme formulation of tourism zones
- Identification of product concepts, activities and services for each zone
- Identification of community training needs for product development

Step 6: Gathering and analysis of marketing information on profile of tourists and site visitation, existing products, prices and operators, tourist needs and preferences to improve experience at the site; and market feedback on product concept.

Step 7: Participatory resource assessment of tourism site by community with key stakeholders to determine appropriate management program, mechanism and local public policy for tourism site.

- Participatory survey and mapping of natural resources and uses by host community and other key stakeholders

- Analysis of resource status, resource uses, stakeholder interests and conflicts, legal and jurisdictional concerns

Step 8: Orientation and formulation of plans on community co-management of natural resources with mandated institutions and other key stakeholders; resource management strategies and plan; management mechanisms and support policy/ legislation.

- Workshop on inputs to resource management tied to tourism development
- Resource management action plan
- Local legislative process: community to barangay to municipal and to other concerned agencies
- Resource management policy formulated
- Resource management body formed
- Resource management fees identified

Step 9: Training of host community members on product development requirements, acquisition of materials, access to equipment, facilities, services needed for product implementation; cost-sharing of expenses.

Step 10: Execution of product with community participants incorporating resource use and user fee guidelines, initial costing and pricing of product.

Step 11: Test runs with various market segments and local marketing channels for initial feedback.

Step 12: Fine-tune product, special training requirements, feasibility study if major investment is required, then proceed to product-market matching development of collateral materials

Step 13: Marketing linkage and arrangements; community business organization development

Step 14: Launch product.

Step 15: Product monitoring and evaluation system

Step 16: Business development planning by host community, marketing partners, organizational and technical support.

Step 17: Fund/investment sourcing; community equity development to implement business plan

Step 18 : Training on business development skills

Step 19: Business plan implementation

Step 20: Enterprise project turn-over to host community and local stakeholders

### **5.3.8 Integrated Enterprise Approach**

Enterprises utilized for conservation need to be designed within a business development framework that integrates 1) community development, 2) resource management, and 3) multiple stakeholder mobilization. At the same time, these enterprise projects and programs should be able to set and implement the three bottom lines of 1) conservation, 2) community benefit, and 3) business viability.

### **5.3.9 Four Areas of Enterprise Development**

To design and implement such an integrated approach, projects and programs for sustainability need to work on the four areas of enterprise development.

#### **1. Market / Economy area**

Considerations under this area of study are the supply of raw materials, market potential, level of competition, constraints to business entry, and level of margins and profitability,

#### **2. Resource Management/ Environment area**

This area looks at the availability of resources (example: seasonality and time needed to find and catch crabs, or the length of time from planting and harvesting seaweeds), regenerative potential and impact of harvesting on the survival of certain species of flora and fauna, and the impact of production on the environment.

#### **3. Social / Institutional area**

This area looks at, among others, direct and indirect benefits of projects and programs to the community, contribution to incomes, the experience of those that will be involved in production with the product or service, the potential for creating employment and the impact on gender relationships.

#### **4. Science/ Technology area**

Considerations under this area of study would include looking at existing human resources, their skills, expertise and number, the status of infrastructure and the appropriateness or match of technology needed in the production of goods and services with the target members of the community.

### **5.3.10 Phases of the Integrated Enterprise Development Process**

The process undergoes three phases with several detailed activities for each phase.

#### **Phase I: Assessment of the existing situation.**

The output of this phase is a short list of a range of possible products and services after going through the following processes :

1. Identification of target group and determination of their financial objectives
2. Listing of existing resources and products
3. Identification of key constraints of the existing market system

**Phase II. Identification of Products, Markets and Means of Marketing.** The output of this phase is a short list of the most promising products and services that will be further developed. The processes include:

1. Analyzing the four areas of enterprise development above based on the local situation
2. Selecting the most promising products
3. Identifying and creating interest groups within the community that would be interested to pursue development of the product and services

**Phase III: Planning and Implementing for Conservation and Community Development.** The output of this phase are pilot projects that are linked to environmental conservation and community benefit. This involves:

1. Examining the business environment of the selected products and services and how they affect conservation of the natural resources in the proposed and surrounding site
2. Defining the enterprise mission, goals and objectives
3. Developing strategies in each of the four areas of enterprise development
4. Formulating action plans to implement strategies
5. Calculating financial projections and obtaining financing
6. Initiating pilot projects and training
7. Monitoring progress and dealing with changes in the business and the natural environment

#### **5.3.11 Types of Eco-tourism Products**

Eco-tourism products vary according to the purposes for which they have been established considering the conditions in a given area.

**Common good tourism products** are those that operate within public domain where environmental conservation is a prime consideration in the development and management of tourism. These tourism products bring “common good values” such as but not limited to the active conservation of natural resources and contributions to local government revenues. They provide excellent opportunities for multi-sectoral collaboration and increased environmental education/interpretation for tourists because of active conservation program on-site that tourists can observe or participate in.

**Community tourism products** are those initiated by and for the primary benefit and participation of host communities. The goals they serve are to conserve the precious environment and natural resources and to offer local communities less-impacting income alternatives such as environmentally sustainable tourism.

**Themed interpretive visitor centers** are built around the organized and pleasurable presentation of knowledge and information to visitors about the places that they could visit in the area. The theme helps to focus the visitor to the most important messages that the places convey.

## **5.4 Guidelines and Standards for Biodiversity Conservation and Ecotourism Development**

Guidelines are conceived for policy makers, decision makers and managers with responsibilities covering tourism and biodiversity conservation in local governments. These guidelines also apply to local communities, non-governmental and other organizations. They provide suggestions on ways of working together with key stakeholders involved in tourism and biodiversity conservation.

Guidelines, standards, regulations, codes and accreditation systems refer to the minimum requirements for preserving and developing the natural and cultural resources in the tourism sites. There may also be requirements for building facilities, providing services and implementing tourism activities. Standards and regulations will ensure the sustainability of ecotourism activities, enhance the quality of visitor experience and provide economic benefits to the communities. Standards will also involve the adoption of best practices for developing facilities, services and activities. In order to be more effective, standards should provide fiscal incentives and promote development of small business. While standard is a level that every one must meet, certification is something destinations must decide for themselves.

### **5.4.1 Institutional Guidelines**

***Institutional guidelines*** provide a system for eco-tourism planning and development for planners, managers and decision makers. These standards are part of a legislative framework for land use in tourism development, physical facilities and management and investment in tourism. They address site inventory and data banking of ecotourism attractions and products, ecotourism site planning based on the assessment of the natural and cultural features of the site (and promotions planning to forecast demand and market sources to attract visitors. This refers to spatial planning, zoning, site planning and eco-design of facilities, determination of carrying capacity and visitor management.

#### **Spatial planning and zoning for tourism**

Land use planning and zoning should be integrated into the strategic and spatial planning at the national and local levels so that planning for environment, agriculture and other planned regional development initiatives takes into consideration the tourism potential on a long-term perspective. The land use plan should include a complete component of tourism land use, carefully zoning the area as regards the type of tourism that should take place: high, little or low intensity. The inclusion of natural areas and provisions for their conservation is a vital element of any zoning plan. Tourism in vulnerable and fragile ecosystems have to follow the principles of ecotourism, considering it a viable option for minimizing negative impacts and promoting positive environmental and socio-economic contributions. Links between natural protected areas and other ecotourism destinations by means of biological corridors will amplify biodiversity conservation to a larger regional level.

#### **Infrastructure design**

An environmentally- friendly site plan minimizes negative impacts on the natural landscape, local biodiversity and any existing cultural features found nearby.

Before the particular site is selected, feasibility analysis for each site option should be carried out. It includes:

- Biophysical features of the site (climate, land, vegetation, wildlife, flora, fauna, geology, among others)
- Socio-cultural features (local communities, traditional villages, archaeological sites, among others)
- Business aspects (comparative analysis of the different possible sites, suitability of location, market niche, profitability, and long-term economic sustainability).
- Travel distances and the natural and cultural features that can be accessed from the site
- Local availability of infrastructure elements (electricity, drinking water, sewage, telephone line, public lighting) and public utilities and services (highways, roads, trail (tracks), airport, docks, etc. postal service, waste collection and disposal, medical services, schools, commercial facilities, etc) needs to be included as well.
- Local means of transport: land motor vehicles (bus, van, taxi, hired vehicles, motorcycles, bicycles); regular commercial flights; motor boats, ferries;

The site plan should prominently consider its major biophysical characteristics, its existing and future vegetation and measures to minimize impacts. It should also include an analysis of the benefit the local people will receive from the development of a tourism facility. Tree preservation and forest restoration are key elements. The quadruple principle of remove, relocate, replace, and restore should always be kept in mind. Landscaping must be carried out using native plant species. Exotic plants are ***always*** out of place in a natural environment.

**In other words it is important to strike a balance between easy accessibility to outstanding natural areas and minimization of negative biophysical and cultural impacts (including visual impacts) of the locality.**

### **Eco-design of Tourism Facilities**

Eco-tourism facilities should harmonize with the surrounding environment, both natural and cultural, and architectural forms should be in harmony with the natural landscape, its vegetation and land forms. Ensure that the facility acts as a tool for biodiversity conservation and enhancement of the natural ecosystem. A tourism facility should always possess a sense of place<sup>27</sup>.

The design should be based on the following principles:

- Use Filipino architecture, local building materials and local hand labor
- Minimize the use of energy and water.
- Use local products and minimize the use of chemicals in daily operation.
- Minimize and manage waste.
- Employ local people and support their community.
- Support conservation of nature and its biodiversity.

***See Annex 1 on details of eco-design principles including waste and energy:***

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<sup>27</sup> Caballos-Lascurain, H. 2001: Integrating Biodiversity into the Tourism Sector / Best Practice Guidelines. Report submitted to UNEP/UNDP/GEF/BPSP. [www.ceballos-lascurain.com](http://www.ceballos-lascurain.com)



## Visitor management

The management of visitors is aimed at reducing or controlling the impacts that threaten the quality of the ecological resources' conditions. It includes the following:

- .Agreement with tour operators over the number and size of groups to bring.
- Code of conduct for visitors
- Application of systematic environmental, social and cultural impact assessment on all proposed development. This should also be concerned with details on what is offered to visitors, such as the choice of products sold to them or the use of inappropriate sources of fuel.
- Zoning both within and outside protected areas. This should cover both the siting of facilities and the degree of access allowed. In some locations, village communities have identified specific zones for ecotourism, both with respect to facility provision and wildlife conservation measures. A common approach is to locate tourist lodges some distance away from community villages.

## Environmental impacts, preconditions and mitigation<sup>28</sup>

Many types of environmental impacts can be generated by tourism development and the tourist' use of the environment. If tourism is well planned, developed and managed, the impacts can be positive. Locally produced materials, foodstuffs and other services have generally lower overall environmental impact. This is strongly in line with the aim of sharing economic benefits locally in a more equitable way.

Appropriate tourism development can:

- Help justify and pay for conservation of important natural areas and wildlife because these are attractions for tourists;
- Help improve the overall environmental quality of areas, since tourists like to visit places that are attractive, clean and not polluted. Improvement of infrastructure for tourism also contributes to better environmental quality; and
- Increase local environmental awareness when residents receive jobs and income from nature tourism and observe tourists' interest in conservation. They come to realise that protecting the environment is important.

Well-aimed pre-conditions and effective mitigation plans can be set when the environmental impacts are assessed. This assessment should take place in an early stage of the planning phase. Social, cultural and economic impacts should also be considered. The environmental assessment should include existing and possible future impacts on water, air and land. It should also consider noise, visual scenery and land use planning. Any sensitive features such as sacred or holy sites, natural protected areas, sacred trees, and habitats of rare species need to be thoroughly identified, preferably on a map. In some cases it may be necessary to record impacts known to have occurred in the past, not only negative or adverse ones but also positive impacts and procedures, so that these can later on be used in the action plan. It may be necessary to observe construction and usage phases separately.

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<sup>28</sup> Based on a presentation by Seppo Karppinen, SUNV Laos

**Regulations** as mandated in existing national and provincial laws control and regulate tourism development to minimize impacts in relation to the environment and biological diversity. A number of laws regarding environmental impacts, water conservation, waste management, forest conservation and other similar regulations exist but they need to be enforced and institutional framework for enforcement of legislation need to be strengthened to improve their effectiveness where necessary. Additional measures which should be considered include.

- Environmental Compliance Certificate (ECC) in environmental critical areas
- Regulations for coastal zone management and the creation of protected areas, both marine and coastal and land-based, and their strict enforcement.
- Standardize legislation and simplify regulations and regulatory structures to improve clarity and remove inconsistencies.
- Establishing institutional and staff capacity for monitoring the overall progress of tourist areas towards sustainable development.
- Monitoring the implementation of environmental protection and biodiversity conservation set out in Environmental Impact Assessments, as well as the effectiveness of such measures, taking into account the effectiveness of any on-going management requirements for the successful operation and maintenance of those measures for protection of areas where tourism takes place.
- Conduct an Environment Impact Assessment (EIA) for larger facilities such as hotels and marina. Environmental assessment (EA) needs to be done in a participatory manner, securing involvement of future key players, i.e. the villagers. This will improve results and increase the level of awareness of environmental matters. Involving the local people enhances the implementation of mitigation plans in the future.

### **Notification Process**

This is a process of determining appropriate courses of action to mitigate impacts of tourism activities in sensitive ecological and cultural environments. This is started off by identifying the area's concerns and issues.

- Decide on which method for minimizing tourism impact you will apply for your specific case: carrying capacity, limits of acceptable change (LAC), visitor impact management (VIM) or a related technique (or an adaptation or combination of several of them).
- Define the different types of tourism experience that you wish to accommodate in your area (a wilderness experience, soft' nature walks, contact with local culture, trekking, biking, etc.).
- Select indicators of resource and social conditions and specify standards for these indicators.
- Identify management actions for the different types of tourism activities, providing alternative actions when unacceptable environmental changes produced by tourism impact are detected.
- Implement actions and establish regular monitoring.

- Use visitor surveys to assess the success of the visitors' experience. There are various tools to achieve a quality experience, e.g. zoning. Understanding of different requirements of different visitors in what they are looking for in an experience. This is all part of niche marketing. Quality experience is often associated with increasing price paid.
- Regardless of the methodology chosen, impose strict regulations as regards tourist numbers in certain critical destinations (such as areas with high biodiversity vulnerability or a high cultural fragility).

**Certification programs** monitor and measure the success of how well the participant meet the standards. Certification involves assessing a tourism business (a lodge, a tour operator, destinations, hotels, guides) or attractions (such as beach/park) to those that meet or exceed a set of baseline standards. Credible tourism certification programs provide tourists with environmentally socially responsible choices; educate businesses, provide technical advice, raise industry standards; protect the resource base for tourism and increase public awareness of responsible business practices. All certification programs within the tourism industry are voluntary and "market driven" and based on a presumed consumer demand.

- Be sure that the objectives of your certification scheme is clearly stated.
- Ensure that your certification scheme will provide tangible benefits to tourism providers and a means for tourists to choose wisely, as well as tangible benefits to local communities and to biodiversity conservation.
- Set minimum standards while encouraging and rewarding best practice. Criteria used should meet and preferably exceed regulatory compliance.
- Clearly define what is being certified: tour operators, destinations, attractions, programs, hotels, guides, etc. Each has an implication for biodiversity conservation.
- Ensure that your certification scheme includes a process to withdraw certification in the event of non-compliance.
- The scheme should establish control of both existing and new seals/logos in terms of appropriate use, an expiration date and, in the event of loss of certification, that it is withdrawn.
- Make sure the certification scheme is subject to a periodic review and includes provision for technical assistance to stakeholders.
- The scheme should be designed such that there is motivation for continual improvement - both of the scheme and of the products/companies/bodies to be certified.
- Ensure that criteria used embody global best practice in environmental, social and economic management.

- Ensure integrity: the certification program should be transparent and involve an appeals process.
- Be sure that the certification body is independent of the parties being certified and of technical assistance and assessment bodies (i.e., administrative structures for technical assistance, assessment and auditing should avoid conflicts of interest). The scheme should require audits by suitably trained auditors.
- Make the certification program recognizable and understandable by tourists. Use clear labeling of hotels and other tourism products and services based on environmental performance.

**Eco-labeling** is a tool for certification of environmental performance which promotes high environmental standards and gives tourist the possibility to choose sustainable recreational activities. A number of eco-labels have been established in three main focus areas facilities, accommodation, services tour operators and recreational interests such as beaches and nature parks. Eco-labels are not specific to any ecosystem.

#### **5.4.2 Ethical Principles and Good Practices for Ecotourism and Biodiversity Conservation**

**Ethics** are visitor rules on the do's and don'ts to be observed in ecotourism sites which will remind visitors and operators of their proper conduct, behavior and activities in the ecotourism sites.

In this framework, ethics are considered as *"motivation based on ideas of right and wrong"*<sup>29</sup>. As applied to Biodiversity Conservation and Eco-cultural tourism, ethical standards are needed to ensure that all stakeholders especially the most vulnerable sectors of society such as women, children, ethnic and indigenous minorities and the poor – benefit from free markets rather than suffer from exploitation.

The section on ethics provides guidelines for all stakeholders who will participate in ecological and cultural tourism activities and associated biodiversity conservation on the island of Bohol and will remind them on their proper conduct, behavior and activities in the tourism sites. These stakeholders include but are not limited to the following: visitors, facility owners, lessees and/or concessionaires, tour operators, travel agencies, local communities, local government units, government agencies and civil society groups and organizations.

There are a number of international and national guidelines for activities related to ethical standards that apply to different components of sustainable tourism and biodiversity conservation. The following ethical values should be used where applicable. It is expected that public and private stakeholders in tourism development should cooperate in the implementation of these principles and monitor their effective application.

**Ethical guidelines** are conceived to protect natural areas and preserve cultural sites.

- ***International Ethical Guidelines for Ecological Tourism and Biodiversity***

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<sup>29</sup> [www.worldnet.com](http://www.worldnet.com)

- Quebec Declaration 2002
- Global Code of Ethics /Philippine Code of Ethics
- Berlin Declaration of Biological Diversity and Sustainable Tourism
- ***Outdoor Ethics for Hiking and Associated Activities***
  - Leave no trace Principles - Do's and Dont's for tourists
- ***Biodiversity Conservation Guidelines: Freshwater/Marine/Terrestrial***
  - Kayaking
  - Rafting, Tubing
  - Snorkeling/Scuba Diving
  - Anchoring / Boat operation
  - Boat maintenance
  - Boat sewage and garbage disposal
  - Seafood consumption and souvenir purchasing
  - Recreational fishing
  - Wildlife Viewing: Cetacean guidelines
  - Bird watching guidelines
  - Caving guidelines
  - Camping
- ***Ethics on Cultural Tourism***
  - Principles on Natural/Cultural heritage
- *Standards for tourism industry and tour operators/hoteliers*
- *Guidelines related to child trafficking and sexual exploitation of children*

#### **5.4.3 International Ethical Guidelines and Standards**

The ecological principles for sustainable tourism development are based on goals and objectives of the ***Convention on Biodiversity*** (1992), the ***World Heritage Convention***, the ***Global Agenda 21*** (1972), the ***Quebec Declaration on Ecotourism*** (2002) and the ***Global Code of Ethics*** (WTO 1999). They will be adapted for the province of Bohol.

The ***Convention on Biodiversity*** stresses the conservation of biological diversity, sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of and appropriate access to genetic resources. Conservation and sustainable use of biological resources should be integrated into relevant sectoral or cross-sectional plans, programs and policies (Art 6(b)). Important recommendations on the conservation and sustainable use of components of biological diversity are

- to promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas (Art 8 (e))
- to respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices;

- to encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices (Art 8 (j));
- to adopt measures relating to the use of biological resources to avoid or minimize adverse impacts on biological diversity(10 b);
- to protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements(10 c);
- to support local populations to develop and implement remedial action in degraded areas where biological diversity has been reduced(10 d)
- to encourage cooperation between its governmental authorities and its private sector in developing methods for sustainable use of biological resources (Art 10(e))

The **World Heritage Convention** establishes a scientific system for the permanent protection of cultural and natural heritage of outstanding universal value.

- "Cultural heritage" refers to architectural monuments and group of buildings archaeological sites and combinations of features, which are of outstanding universal value from the point of view of history, art or science;
- "Natural heritage" is considered as outstanding natural features consisting of physical and biological formations or groups, geological and physiographical formations and precisely delineated areas or natural sites which constitute the habitat of threatened species of animals and plants from the aesthetic or scientific point of view (conservation or natural beauty).

The **Quebec Declaration on Ecotourism** is a result of a multi-stakeholder dialogue, setting of a preliminary agenda and a set of recommendations for the development of ecotourism activities in the context of sustainable development having a potential contribution to poverty alleviation and environmental protection in endangered ecosystems. It was a dialogue under the aegis of the United Nations Program (UNEP) and the World Tourism Organization (WTO) involving representatives from the national, regional and local governments; the private ecotourism businesses and their trade associations, non-governmental organizations, academic institutions, inter-governmental organizations, international financial institutions and development assistance agencies and local and indigenous communities. The declaration also has general recommendations for national, regional and local government, the private sector, non-government and community-based organizations, academic and research institutions, international and inter-government institutions and local and indigenous communities.

*"Affirms that different forms of tourism, especially ecotourism, if managed in a sustainable manner can represent a valuable economic opportunity for local and indigenous populations and their cultures and for the conservation and sustainable use of nature for future generations and can be a leading source of revenues for protected areas"*

*"Emphasizes that at the same time, wherever and whenever tourism in natural and rural areas is not properly planned, developed and managed, it contributes to the deterioration of natural landscapes, threats to wildlife and biodiversity, marine and coastal pollution, poor water quality, poverty, displacement of indigenous and local communities, and the erosion of cultural traditions",*

*"Stresses that to achieve equitable social, economic and environmental benefits from ecotourism and other forms of tourism in natural areas, and to minimize or*

avoid potential negative impacts, participative planning mechanisms are needed that allow local and indigenous communities, in a transparent way, to define and regulate the use of their areas at the local level, including the right to opt out of tourism development”,

*“Recognizes that visitors have a responsibility to the sustainability of the destination and the global environment through their travel choice, behavior and activities and that therefore it is important to communicate to them the qualities and sensitivities of destinations”<sup>30</sup>*

The **Global Code of Ethics** encourages tourism to contribute to mutual understanding and promotion of the ethical values common to humanity and respect the diversity of religious, philosophical and moral beliefs, being the foundation and the consequence of responsible tourism; Tourism should follow the principles of sustainable development, be a beneficial activity for host countries and communities, provide tourists with objective and honest information on their places of destination and on the conditions of travel, hospitality and stays.

It sets out broad principles for responsive and responsible development of tourism.

- As a guiding tool for all stakeholders, direct and indirect, public, private and civil society.
- As a mechanism to encourage strategic policy, legislation and regulatory integration at international, regional, national and local community levels.
- As a vehicle to frame the work of the WTO itself in its relations with the sector and other bodies shaping the global tourism marketplace.

The key articles of the code include

1. Tourism contributing to societal understanding and mutual respect
2. Tourism as a vehicle for individual and collective fulfilment
3. Tourism, a factor of sustainable development
4. Tourism, a user of the cultural heritage of mankind and a contributor to its enhancement
5. Tourism, a beneficial activity for host countries and communities
6. Obligations of stakeholders in tourism development
7. The human right to tourism and travel
8. The liberty of tourist movements
9. The rights of workers and entrepreneurs in the tourism industry

**Philippine Agenda 21** emphasizes area-based and integrated island development and people and nature as core concern of sustainable development. It shall unify economic objectives, ecological limits, cultural sensitivity, political reality, and the equity concerns of the Filipino people. One of the 15 values affirmed is to ensure, that economic activities are ecologically sound.

#### **5.4.4 Biodiversity Conservation Guidelines/Standards**

To protect important natural habitats and to conserve nature and biological diversity as a major resource of tourism activities, all necessary measures should be taken to ensure that the integrity of ecosystems and habitats is always respected. Additional burdens from tourism development should be avoided in areas where nature is already under pressure from tourism activities. Preference should be given to the modernization and renovation of existing tourism facilities.

**Outdoor Ethics** should follow the “*Leave No Trace Principles*”. These principles strive to educate visitors about their recreation impacts as well as techniques to prevent and minimize such impacts and encourage them to plan their trips carefully. The seven principles developed from the Center for Outdoor Ethics Boulder/USA are<sup>31</sup>

- Plan ahead and prepare
- Travel and camp on durable surfaces
- Dispose waste properly
- Leave what you find
- Minimize campfire impacts
- Respect Wildlife
- Be considerate of other visitors

Guidelines for outdoor activities in freshwater apply for kayaking, tubing, rafting. Guidelines for activities in terrestrial ecosystems are relevant for Bird and Bat roost watching, trekking, camping and caving. Guidelines to protect the marine/coastal environment refer to responsible (coral friendly) and respectful diving and snorkeling, low impact boating, anchoring, boat maintenance, seafood consumption and souvenir purchasing, marine wildlife viewing, and beach use. For details of these principles see Annex II

#### 5.4.5 Cultural Tourism Guidelines

The diversities on natural and cultural heritage, and living cultures are major tourism attractions. Tourism should bring benefits to host communities and provide an important means and motivation for them to care for and maintain their heritage and cultural practices. The involvement and co-operation of local and/or indigenous community representatives, conservationists, tourism operators, property owners, policy makers, those preparing national development plans and site managers is necessary to achieve a sustainable tourism industry and enhance the protection of heritage resources for future generations<sup>32</sup>.

A primary objective for managing heritage is to communicate its significance and need for its conservation to its host community and to visitors. Reasonable and well managed physical, intellectual and/or emotive access to heritage and cultural development is both a right and a privilege. It brings with it a duty of respect for the heritage values, interests and equity of the present-day host community, indigenous custodians or owners of historic property and for the landscapes and cultures from which that heritage evolved.

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<sup>31</sup> [www.int.org](http://www.int.org)

<sup>32</sup> [www.icomos.org/tourism/charter](http://www.icomos.org/tourism/charter)



### **Principles of the International Cultural Tourism Charter**

1. SINCE DOMESTIC AND INTERNATIONAL TOURISM IS AMONG THE FOREMOST VEHICLES FOR CULTURAL EXCHANGE, CONSERVATION SHOULD PROVIDE RESPONSIBLE AND WELL MANAGED OPPORTUNITIES FOR MEMBERS OF THE HOST COMMUNITY AND VISITORS TO EXPERIENCE AND UNDERSTAND THAT COMMUNITY'S HERITAGE AND CULTURE AT FIRST HAND.
2. THE RELATIONSHIP BETWEEN HERITAGE PLACES AND TOURISM IS DYNAMIC AND MAY INVOLVE CONFLICTING VALUES. IT SHOULD BE MANAGED IN A SUSTAINABLE WAY FOR PRESENT AND FUTURE GENERATIONS.
3. CONSERVATION AND TOURISM PLANNING FOR HERITAGE PLACES SHOULD ENSURE THAT THE VISITOR EXPERIENCE WILL BE WORTHWHILE, SATISFYING AND ENJOYABLE.
4. HOST COMMUNITIES AND INDIGENOUS PEOPLES SHOULD BE INVOLVED IN PLANNING FOR CONSERVATION AND TOURISM.
5. TOURISM AND CONSERVATION ACTIVITIES SHOULD BENEFIT THE HOST COMMUNITY.
6. TOURISM PROMOTION PROGRAMS SHOULD PROTECT AND ENHANCE NATURAL AND CULTURAL HERITAGE CHARACTERISTICS.

*ICOMOS International Scientific Committee on Cultural Tourism*  
1999

#### **5.4.6 Standards for Tourism Industry and Nature Tour Operators**

The Agenda 21 for the Travel and Tourism Industry is an action plan for the industry to build more mainstream corporate responsibility. The importance of partnerships between government, industry and NGOs is stressed along with the benefits that will be obtained by making the tourism industry more sustainable. Companies are encouraged to set up systems and procedures to incorporate sustainable development issues into core management functions and to identify actions needed to bring sustainable tourism into being. Highlighted is the use of code of conducts and certification. The following standards for Nature Tour Operators and Tourism Industry should be put into practice

- Pre-tour visitor information and education guidelines;
- Guiding principles for guiding tours, prevention of environmental impacts and prevention of cultural impacts;
- Monitoring programs for prevention of accumulated impacts of tourism;
- Management programs for prevention of nature tour company impacts, training, conservation contribution programs, local employment and jobs programs; accommodations checklist

#### **5.4.7 Guidelines related to Trafficking and Sexual Exploitation of Children and Women**

The sex trade and drug tourism is poorly regulated especially where it concerns children. Child prostitution, pornography, child sex tourism and trafficking has gained increasing attention world wide. In recent years the tourism industry has started to try and tackle such problems. The *Code of Conduct for tour operators in relation to child prostitution* developed in 1998 commits the signatories to:

- Working against child exploitation in their policy documents;
- Training staff on how to combat child exploitation;
- Provision of information to customers;
- Putting pressure on suppliers by including a clause against the commercial sexual exploitation of children in the contract, e.g. hotels;
- Provision of information to key local people and organizations by creating a network in destinations to raise awareness amongst local people.

### **5.5 Marketing and Promotion**

#### **5.5.1 Understanding The Ecotourism Market**

The objective in marketing ecotourism, just like any product or service, is simply all about satisfying customer needs. To fully understand customer needs, it helps if one knows who these customers are and likewise understand their motivations and preferences. But in ecotourism, it goes beyond just having customers satisfied but being able to successfully deliver the experience that will meet the customers needs and expectations. Therefore, when developing the ecotourism product, a market-oriented product will increase the business viability of the ecotour enterprise. Take note that ecotourism product development is about creating an experience from out of your attractions be they natural, cultural or historical. It is about weaving together your itinerary, activities, and services under a unifying theme.

#### **5.5.2 The Ecotour Market**

It has been noted that ecotourism is a fast growing market segment in the travel industry with growth forecast reaching 10% to 30%. However, this rate might even expand to a wider range of possible market segments beyond the ecotour market to include the following:

- Ecotourists
- Traditional or mainstream tourists interested in an ecotour
- Nature and culture tourists
- Adventure travelers
- Recreational travelers
- Backpackers
- Scientific/research travelers
- Educational tourists

#### **5.5.3 Profile of the Ecotourist**

Knowing who the ecotourist is will allow ecotourism operators to develop marketing strategies to match visitors' expectations. Better understanding of the market will also lead to better understanding and management of visitors.

Ecotourists seek to establish a deeper understanding , even a communion, with the places and people they visit. The Australian Research group, as cited in the Gulf of Mannar's Ecotourism Framework Plan, segments the ecotourism market into three categories, namely: the *impulse market*, the *active market*, and the *personalized market*.

The *impulse market* is characterized by nature-based day trips and travel in small groups and away from the usual routes and itineraries of regular tourists. These tourists prefer the nature-based type of activities. Their main objectives in traveling are fun, relaxation, and enjoyment. They also prefer to travel in comfort, meaning convenient transport that will bring them to their destinations, a planned itinerary and realistic information in brochures and magazines.

The *active market* are the younger and middle-aged professionals who generally book in advance. But like the impulse market, the active market tourists enjoy nature and find satisfaction in fulfilling their travel as specified in the itinerary. The difference is they feel a greater sense of achievement in longer tour hours. They do not expect a high level of comfort and usually travel to escape the monotonous life and stresses of city living.

The third type which is the *personalized market* include older professionals, usually retired from their work/ professional loads, who expect to be pampered by tour guides or tour operators. Like the impulse market, these ecotourists prefer a well-planned itinerary, convenience in accommodation, quality service, convenient transportation and handling during their trip. They also find passion in deeper interaction with the environment. Their objectives in traveling, aside from enjoyment and relaxation, are to learn more about the environment, local history and experience the things they were not able to encounter in their daily routine.

Accordingly, the ecotourist is aged between 35 to 54 years, 50% male and 50% female. They have relatively high levels of education with about 82% of them being college graduates. Experienced ecotourists prefer water-based activities, wildlife viewing, visiting national parks or protected areas while the general ecotourists go for culture, varied experiences such as rural communities, oceans, hills, mountains, scenic spots, and other strong cultural components.

#### 5.5.4 Data on Visitor Arrivals, Philippines and Bohol Province

**Table 2 : Top Four Visitor Arrivals by Country of Residence  
National Figures, 1997**

USA	468,808
Japan	361,631
Taiwan	185,869
Hongkong	162,718

**Table 3 : Reasons for Visiting the Philippines, 1997**

People's Warmth and friendliness	48.2 %
Friends and relatives	18.1 %
Curiosity	3.6 %
Company's choice	3.0 %

**Table 4 : Information Sources, National Figures , 1997**

Word of Mouth	58.7 %
Travel/guide books	16.8 %
Travel agents	9.7 %
Travel brochures/posters	3.7 %

Source: Conference Workshop on Ecotourism, Conservation and Community Development

**Table 5 : Annual Tourist Arrivals in Bohol , Years 2002-2006**

2002	132,906
2003	247,800
2004	249,735
2005	395,000
2006	415,530

Source: Bohol Investment Promotion Center and Bohol Tourism Office

**Table 6 : Top Tourist Arrivals ,Foreign and Domestic, 2006**

Domestic (75.19%)	314,884
Asians (Koreans, Taiwanese, Chinese) (12.54%)	52,120
Americans (9.11%)	37,857
Europeans (3.16%)	13,169

Source : Bohol Tourism Office

### 5.5.5 Ecotourism Market Profile

The market for ecotourism has expanded to include not just nature enthusiasts and adventure-seekers but also mainstream tourists seeking ecotourism products as part of their travel itinerary.

#### 1.Travel Preference by Age, Gender, and Activities

Older clients, aged 45 and over find polar bear watching, sailing, seal pup watching, and heli-skiing as preferred activities while the younger group, 34 years and below were more interested in ice and rock climbing, trail riding, scuba diving, canoeing, cross country skiing, and rafting. A survey also disclosed the type of activities that male and female ecotourists favored. The following table presents the top activities preferred by gender in percentage form.

**Table 7 : Preferred Top Activities by Gender in Percentage**

Activities	Male	Female
Wilderness settings	2.32	2.62
Physically challenging activities	2.87	3.23
Mountain climbing	3.67	3.97
Rafting/ Canoeing/ kayaking	2.91	3.23
Casual walking	1.68	2.00
Learning about other cultures	1.97	2.45
Education programs	2.69	2.96
Visiting national parks & Protected Areas	Same percentage for both male/female	
Wildlife viewing	Same percentage for both male and female	
Cycling		
Ocean sailing/ kayaking		
Cross- country skiing		

**Source: National Ecotourism Framework Development Workshop Kit**

#### **4. Trip Duration**

It has been found out that ecotourists may be categorized into generalists and specialists or experienced. Accordingly, generalists usually stay for only two(2) days while specialist ecotourists engage in recreational activities and stay for more than seven(7) days. The more popular ecotourism trip duration is between 4 to 7 days or 8 to 14 days.

#### **5. Accommodation Preference**

Ecotourists who are noted to be outgoing, adventurous, and nature lovers prefer an intimate type of accommodation but still require a degree of safety and convenience. In a survey made, 56% of ecotourists favor hotels and motels but would leave for camping trips and other fixed roof options. Most ecotourists from the western countries do not go for luxury. They would rather prefer middle level range of luxury.

In another survey, there was relatively high use of rural and village-level accommodations in nature-oriented tour operations. The study further showed that 40% prefer accommodations in a rural village, 27% camping, 21% luxury hotels, and 33% other hotels. Still in another survey by the Tourism Council among adventure operators, it bared that the most popular forms of accommodation are cabins and cottages (41%) and tents(40%).

##### **5.5.6 Target Market for Bohol's Ecotourism Products**

The existing ecotourism products and potential destinations being developed in the province will be matched with ecotourism markets. This includes the mainstream tourists who are constantly coming at an increasing pace as a result of pro-active promotions and marketing activities initiated by government at the national, regional

and provincial levels and through the efforts and resources of the tourism business sector.

The primary target market will continue to be the domestic market consisting of the students, local government units and non-government organizations who come to Bohol for an educational purpose or “lakbay-aral” to learn from our best practices. Holiday travelers, including balikbayans traveling as couples or as families who want to relax and enjoy the varied ecotourism product offerings as well as the pristineness of our place and the tranquility that city dwellers look for away from their residences and work are another target market. Asians (Koreans, Taiwanese and Chinese), Americans, Japanese and Europeans will be pursued as they continue their influx to Bohol. A recent addition, the Russians, will be reckoned as an emerging market for reasons of their capacity and interest to experience a rich biodiversity, cultural heritage and interesting history that are all in the province of Bohol.

#### **5.5.7 Marketing Image and Positioning**

Bohol will continue to position itself as a prime eco-cultural tourist destination in the country as we prepare and refine our ecotourism products for this image. Our innate and distinct brand of Boholano hospitality and warmth will enhance our province as a choice destination because of our natural, cultural and historical endowments.

#### **5.5.8 Promotions and Marketing Activities**

Promoting Bohol as a choice ecotourism destination not only in the country but to the world as well is one big challenge in a globally competitive industry. A pro-active stance towards promotions and marketing is therefore needed to achieve this objective. Networking with international wholesalers and tour operators who are into ecotourism products is certainly one step to be pursued while making ourselves visible in international travel and trade shows will advance our goal of making a dent in the worldwide ecotourism trend. Joint undertakings with the business sector in promoting and marketing Bohol in outbound sales missions abroad would be a step in the right direction to distribute costs. A well-maintained website with links to ecotourism sites in the province would reinforce our image and make Bohol accessible as an ecotourism destination.

Well-prepared and incentivized familiarization tours for international travel agents, media, airline representatives and tour operators to our ready ecotourism destinations shall be offered to enable these important marketers to promote Bohol appropriately to target markets. Special events that would draw interest to specific type of international and domestic ecotourists may be held to bring the market here for a reasonable purpose. Brochures and other promotion collaterals should be ready and updated on a regular basis. Other promotional activities that must be continued include making our visibility high in travel media such as in travel sections, guidebooks, radio and television travel programs, travel websites, travel marts, in hotels and resorts, and in tourist information centers.

### **5.6 Monitoring and Evaluation**

**Monitoring** refers to the on-going processes of gathering information on critical aspects of the eco-cultural tourism venture and its effects on the biodiversity, geological, and cultural resources of the site.

**Evaluation** is the process of comparing the baseline data to the information gathered through a monitoring program to determine the results or impacts the activities are

having on the environment and community and they help to maintain ecotourism standards for products and services. It must use both, qualitative and quantitative descriptions to ensure that all relevant concerns are covered.

The monitoring and evaluation process indicates if the local communities and eco-cultural sites are effective and what has to be improved or changed. It will guide internal development and provide external accountability. The monitoring process is participatory involving the communities and other stakeholders in evaluating successes and challenges and identifying areas for improvement. It is an ongoing process which can be used to adjust, improve and fine tune the activities.

### **5.6.1 Ecotourism Standards**

Eco-tourism standards refer to the minimum requirements for developing the natural and cultural resource as well as building facilities, providing services and implementing activities.

At the local level, monitoring programs and system must be incorporated to the issuance of business permits. At the national level, the monitoring programs should be incorporated in the DOT-DENR National Ecotourism Certification Program (NECP), a program that provides and establishes a set of standards to operationalize the concept and principles of ecotourism.

An environmental monitoring unit should be created by the provincial government. composed of a tripartite team from the BEMO, Provincial Engineering Office and LGU- Treasurer's Office. Capability-building trainings will be conducted to better equip team members with the knowledge and skills in conducting random and unannounced inspections of ecotourism sites. The team may adopt the following impact monitoring tools:

- Carrying capacity (CS)
- Recreation opportunity spectrum (ROS)
- Limits of acceptable change (LAC)
- Visitor impact management (VIM)
- Identification and management of the bio-physical, social and cultural impact
- Impact on local biodiversity

### **5.6 Bio-monitoring**

The monitoring and evaluation section provides the user with guidelines for establishing and maintaining monitoring and evaluation systems for each eco-cultural tourism site within a specific ecosystem and the corresponding effects natural resources of the area. This shall provide the opportunity to compare activities in similar ecosystems in different locations within Bohol and determine the impacts of the activities on the biodiversity resources. The information will also show if the biodiversity of an area is being maintained in accordance with management objectives.

The use of impact indicators (such as bird biodiversity, local income changes) enables stakeholders to determine measurable changes in socio-environmental conditions. The unit of measure must be specified and the method of data collection and analysis must be clearly described and standardized to enable reliable and repeatable monitoring year after year.

### 5.6.3 Terrestrial Biodiversity Monitoring System (BMS)

The monitoring system for determining the biodiversity status of terrestrial organisms in a certain area may be done by asking the following questions:

- Are habitats and ecosystems being degraded?
- Are populations of threatened species of plants and animals declining?
- Are the management interventions in an area effective in addressing biodiversity conservation?
- Are there increased benefits to local communities from sustainable natural resource use?
- Has restoration of habitats had the intended impact?
- The Biodiversity Monitoring System aims to improve the information available for decision-makers in a given locality through regular collecting of data on natural biological resources and their utilization.
- In addition the BMS is intended to improve the participation of local residents in the management of their communities.

The BMS systems will build on existing systems

- Indigenous Monitoring Activities
- Observing presence or absence of a particular species.
- Observing the distribution, quality, size and other characteristics of harvested natural resources.
- Observing trends in resources and resource extraction activities.
- Frequency of events or availability of certain key resources.

### 5.6.4 Cave Monitoring and Evaluation Systems

The recommended cave monitoring and evaluation system is CIARS which stands for Cave Impact Assessment Rating Systems. This system quantifies the physical effects on heavily used caves such as those for tourism. The effect of cave biodiversity will be monitored and evaluated using a different system that CIARS which is principally geared for human impact on a cave's physical status.

### 5.6.5 Marine/Coastal Biodiversity Monitoring System

The CRM monitoring and evaluation concept<sup>33</sup> processes the implementation of the municipal/city plans, CRM plans and programs and their impacts on coastal resources. In addition it provides a framework for certifying municipal and city plans and programs for CRM to benchmark LGU performance for prioritizing investments of local and national governments and foreign funding institutions. The monitoring and evaluation system for CRM is important for sustaining management measures designed to improve the productivity and integrity of coastal ecosystems and restore benefits derived from coastal resources

Monitoring indicators include process, resource and impact indicators. Process indicators are used to monitor the governance aspects of plan and program implementation. This includes how and when planned activities are progressing, how social progresses are proceeding, and whether there is adequate public participation

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<sup>33</sup> DENR-CMMO (Department of Environment and Natural Resources-Coastal and Marine Management Office).2003. Monitoring and evaluating municipal/city plans and programs for coastal resource management. Coastal Resource Management Project of Department of Environment and Natural Resources, Cebu City, Philippines



by all stakeholders in CRM planning and implementation. Results indicators are used to monitor the outcomes or impacts of these processes on behavior change and socio-environmental conditions. These indicators do not provide any real measure of changes as a result of implementing various coastal management measures. Impact indicators monitor biophysical and socioeconomic changes in coastal areas and enable stakeholders to determine measurable changes in socio-environmental conditions.

**Key monitoring methods used are:**

- Surveys, interviews and consultations to provide data on the level of knowledge and support of CRM and to assess socio-economic conditions such as income derived from fishing or other CRM-related activities. The PCRA method can be used to provide quantitative and qualitative data on socio-economic conditions
- Quantitative biophysical, e.g. underwater surveys, ocular inspections to monitor shore line management
- Regulatory and compliance monitoring, e.g. number of fishing licenses or volume of fish sold in the market

Questions for evaluation include management interventions and issues, coastal resource uses and zoning, institutional and legal framework (ordinances, law enforcement, implementation activities, license system), and timeline.

**5.6.6 Biodiversity Monitoring and Evaluation (BIOME) in Marine Protected Areas (MPAs)**

One of the objectives of conducting a regular BIOME is to determine changes of protected marine resources such as coral communities, reef fishes, macro-invertebrates, algae and seagrass beds. It also serves to know possible impact of various activities allowed within and outside the MPA. The BIOME provides basis for management initiatives and interventions which are sound and science-based. Such status may be fed back to stakeholders involved in the MPA management.

Monitoring methods used in BIOMEs particularly in the BMT area are Fish Visual Census (FVC), Point Intercept Method (PIM), Belt Transect Method (BTM), and Transect Quadrant Method (TQM).

**5.6.7 Freshwater Biodiversity Monitoring System**

A most common and simple methodology in monitoring freshwater biodiversity such as rivers and streams is the practical sampling method using a bag net in the shallow areas. This will indicate macro-invertebrate population and biodiversity species. Water quality will also be determined in terms of its acidity, salinity, coliform content and/or pollution status as well as its biological oxygen demand (BOD). A physical check of the site around the freshwater systems is also handy to show a healthy environment. Other methodologies may be utilized such as the use of a seining net in deeper sections of freshwater systems.

**5.7 Financial and Resource Mobilization**

**5.7.1 Operational Definition**

Financial and resources mobilization may be referred to as funds, relationships, policies, and human resources like skills or expertise that are engaged towards

meeting the goals of eco-tourism development. The goal of engaging in eco-tourism is to increase investments and resources to address the poverty situation in the Province of Bohol while conserving its rich biodiversity resources.

Business ethics should also be looked into in order to achieve a harmony between business goals and conservation goals. Eco-tourism provides a sustainable economic development model that is appropriate to the resource management requirements and economic capacities of most municipalities. Local Government Units should be naturally receptive to propositions for collaboration.

### **5.7.2 Capital for Ecotourism**

Capital for ecotourism is not only limited to funds but should also look and consider the following:

- Relationship building and nurturance with partners.
  - Who are the partners? They may include funding agencies, government , NGOs, business, academe, and suppliers and producers of services required
  - How to deal with partners<sup>34</sup>
  - Nature of arrangements may come in the form of alliance/network building, corporation, association , cooperative ,or quasi government structure .
  - Arrangement schemes for partnerships can be through counterpart – sharing, leveraging of resources, resource matching benefits, sharing of roles<sup>35</sup>, participation in planning and decision making, bridge financing , Build Operate Transfer (BOT) schemes and its variants
- Human Resource Expertise (sector)
  - Senior citizens
  - Trainers' Pool (locals that are trained by NGOs or LGUs)
  - Foreign and Local Volunteers

### **5.7.3 Possible Sources of Financing**

- Government bonds and taxes earmarked for Eco-tourism
- Eco-tourism stamps
- Debt-relief
- Grants and donations
- Bilateral and multilateral donors
- Foundations, NGOs, Private Sector
- Eco-tourism trust funds
- Eco-tourism revenues
- Protected area entry fees
- Revenues from tourism-related Protected Area Agencies
- Resource use fees (e.g.diving and snorkeling)
- Voluntary donations from eco-tourists and operators
- Revenues generated from law enforcement (fines)
- Right of Way fees

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<sup>34</sup> "Partnerships" from Conference Workshop On Ecotourism Conservation & Community Development manual page 148-149

<sup>35</sup> "Tour Operator Responsibilities" from Ecotourism: Principles Practices & Policies for Sustainability by Megan Epler Wood UNEP page 34-38

#### **5.7.4 Strategies for Resource Mobilization**

- Embassy hopping or solicitation of funding thru embassy grant programs
- Proposal development
- Trust Fund development through endowment fund or debt-relief/debt swap mechanisms
- Donors forum
- Loan/ financing
- Promotions and Advertisement: Discounting of services for another service (familiarization tour for tour guides and media) or exchange deals
- Development of community insurance and funds for pre-need of the host communities

#### **5.7.5 Operational Policies in Eco-tourism (Core Business Practice)**

- Avoid operating in a dole-out or charity dimension but on counter parting as it will destroy the culture of the community and it will not make the Ecotourism viable once dole outs run out.
- Consistent with labor laws in benefit sharing
- Ensuring community benefits (short and long term)
- Conduct of resource valuation as basis in imputing resource fees or rent
- Explicit policy on conducting regular protection rehabilitation and conservation activities of the ecotour operator.
- Governance policy on transparency, and consultation
- Developing a Triad framework<sup>36</sup> in designing an eco-tourism enterprise with I ndicators that include business, socio-cultural , and ecological
- Pro-poor tourism by engaging the poor who are also among the resource managers as they balance livelihood with conservation goals;
- Biodiversity conservation and cultural management
- Establishment of ecological accounting as it links with ecotour product pricing.
- Incentive mechanism vis-à-vis revenue generation

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<sup>36</sup> Figure 1-1 Indicators in Evaluating results of an Ecotourism Enterprise from Conference-Workshop on Ecotourism Conservation & Community Development page 27

**Table 8 : Financing Mechanisms and Possible Sources of Revenue**

<b>FINANCING MECHANISMS</b>	<b>SOURCES OF REVENUE</b>
<b>Government Revenue Allocations</b>	
Direct Allocations from Government Budgets	Government budget revenues
Government Bonds and Taxes Earmarked for Conservation	Investors, tax payers
Wildlife Stamps	Postal customers, hunters, Fishers
Debt Relief Donors	Government, NGOs
<b>Grants and Donations</b>	
Bilateral and Multilateral Donors	Donor agencies
Foundations	Individuals, Corporations
Nongovernmental organizations (NGOs)	NGO members and supporters
Private Sector	Investors
Conservation Trust Funds	Multi-source
<b>Tourism Revenues</b>	
Protected Area Entry Fees	Visitors to parks
User Fees (diving)	Divers, boaters
Tourism-Related Operations of Protected Area	Agencies tourism operators, tourists
Airport Passenger Fees and Cruise Ship Fees, Taxes and Fines	Tourists, cruise lines
Hotel Taxes	Hotel clients
Voluntary Contributions by Tourists and Tourism Operators	Tourism operators, tourists
<b>Real Estate and Development Rights</b>	
Purchases or Donations of Land and/or Underwater Property Conservation	Property owners, donors
Easements Real Estate Tax Surcharges For Conservation	Property owners, donors
Tradable Development Rights and Wetland Banking	Property developers
Conservation Concessions	Conservation investors
<b>Fishing Industry Revenues</b>	
Tradable Fishing Quotas	Commercial fishers
Fish Catch and Services Levies	Commercial fishers
Commercial Fishers	Seafood producers, Wholesalers, Retailers and end-use purchasers of ornamental tropical fish
Eco-Labeling and Product Certification	Associations of and/or Individual fishers
Fishing Access Payments Governments, Recreational Fishing License Fees and Excise Taxes	Recreational fishers
Fines for Illegal Fishing	Fishers
<b>Energy and Mining Revenues</b>	
Oil Spill Fines and Funds	Energy companies, Donors
Royalties and Fees from Offshore Mining and oil and gas	Energy and mining companies
Right-of-Way Fees for Oil and Gas Pipelines and Telecommunications Infrastructure	Private companies
Hydroelectric Power Revenues	Power producers
Voluntary contributions by Energy Companies	Energy companies
<b>For-Profit Investments Linked to Conservation</b>	
Private Sector Investments Promoting Biodiversity Conservation	Private investors
Biodiversity Prospecting	Pharmaceutical companies

There are several aspects to consider in formulating proposals for funding eco-tourism enterprises and ventures:

I. Financial	<ul style="list-style-type: none"> <li>• Financial studies</li> <li>• How much money?</li> <li>• How much time</li> <li>• Will the revenue generated be worth in establishing a financial mechanism, e.g. debt swap</li> <li>• Short term or long term?</li> </ul>
II. Social	<ul style="list-style-type: none"> <li>• Community preparation and readiness - who will pay, willingness and capacity to pay</li> <li>• Impacts</li> <li>• Legitimacy</li> <li>• Equity</li> <li>• Political</li> <li>• Government support</li> </ul>
III. Legal	<ul style="list-style-type: none"> <li>• Legal Implications</li> <li>• Ordinances and other legislations</li> </ul>
IV. Administrative	<ul style="list-style-type: none"> <li>• Administration, Collection and enforcement of Fees and fines</li> <li>• Capacity/Capability</li> </ul>
V. Environment	<ul style="list-style-type: none"> <li>• Impacts</li> <li>• Carrying Capacity</li> <li>• Resource Valuation</li> </ul>

## Sources

- Resource rent computed from resource valuation.
- Computation for the carrying capacity of the natural resources used for tourism activity
- Working With the Private Sector on Pro-Poor Tourism *Opinions and Experience from two development practitioners* Caroline Ashley and Dilys Roe
- Conference –Workshop on Ecotourism, Conservation & Community Development
- UNEP [www.unep.org/tourism/home.html](http://www.unep.org/tourism/home.html) and the The International Ecotourism Society [www.ecotourism.org](http://www.ecotourism.org)

## 5.8 Legislation and Control Measures

In order for the local tourism sector of the province to develop according to its vision, it has initiated the crafting of relevant and significant laws and ordinances. One such law is the Bohol Environment Code which came into being with the participation of the different agencies in government and non-government organizations. The outcome of the Code has supported several ordinances from the municipalities and even in the barangays.

To cite, the municipality of Dauis had passed Municipal Ordinance No. 08, CY 1998, “Approving and adopting the rules and regulations governing activities at the Panglao Island Tourism Estate”. This important piece of legislation governs the establishment and operations of all tourism-related activities in the area.

Other legislative measures undertaken to ensure protection and appropriate management of sensitive coastal environments such as marine sanctuaries are the marine protected area (MPA) ordinances in the Bohol Marine Triangle islands of Panglao, Balicasag, and Pamilacan which are biodiversity-rich and globally significant. Such legislation declared portions of the municipal waters as MPAs and provided for its management and supervision, with a declaration of the following policies:

- Conserve coastal and fishery resources and in the process ensure sustainable and equitable utilization of its coastal areas and resources in conformity with RA 8550 or the Philippine Fisheries Code of 1998;
- Ensure the judicious and wise utilization, protection, conservation, and management on a sustainable basis of its coastal and fisheries resources with a sound ecological balance protecting and enhancing the quality of the environment; and
- Promote and adhere to the precautionary principle of conservation, management, and exploitation of living coastal and fishery resources in order to ensure the sustainable development of the coastal environment. The absence of adequate scientific and technical information should not be used as a reason for postponing or failing to take conservation and management measures

Law enforcement in the province is generally handled with professionalism by the local PNP. Insurgency in the province, although being addressed seriously by the government, still remains a priority concern. The government's approach in dealing with this matter is not only arms, but rather through poverty-focused programs initiated in the affected hinterland barangays. Public services are brought to these areas through road construction, waterworks projects and livelihood programs.

#### **5.8.1 Enforcement Sanctions under the Bohol Environment Code**

The following are some of the sanctions on the violation of environmental laws in the province as provided in the Bohol Environment Code of 1999. Mandates on Eco-tourism development is outlined in Annex 1.

**Section 99** – Law Enforcement – The Governor thru the EIA Monitoring Team as provided in Section 96 of this Code and the DENR shall work together to enforce the law, including the closure of the establishments and projects and the prosecution of offenders.

**Section 128** – Violation of any provision of this Code to which no specific penalty is imposed or commission of any of the prohibited acts which do not carry a specific penalty shall be penalized by a fine of not less than five hundred pesos but not more than five thousand pesos at the discretion of the Court.

**Section 129** – the penalty provided in this Code shall be in addition to the penalty that may be provided by any other law or ordinances. Provided however, that the prosecution or law enforcer shall charge the offender or violator with the law providing a heavier penalty in case it appears that a single act is punishable by two or more laws, ordinances and provisions thereof with different penalties or in case filing more than one charges may amount to double jeopardy.

#### **5.9 Program of Action**

A decisive program of actions to pursue this framework plan is outlined as guide for appropriate offices in the Bohol Provincial Government as well as partner-NGAs, the private sector and the local communities to implement collectively.

1. **A Provincial Ecotourism and Biodiversity Conservation Committee or Council** shall be created to carry out the development strategies on ecotourism and biodiversity conservation, and localize the implementation of the National Ecotourism Strategies. The body shall be composed of stakeholders in the environment and tourism sectors including NGOs, the academe, tourism industry players, private sector, provincial and national government agencies and the local communities. In close coordination with the Provincial Tourism Council, the body shall, among other things, formulate and recommend policies, guidelines, and programs relevant to the development and promotion of ecotourism and biodiversity conservation in the province. It shall coordinate ecotourism and environment conservation investments and development activities, and devise an accreditation and incentives mechanism for ecotourism projects. An important undertaking, it shall do is to provide assistance to communities in the development of ecotourism sites and in the conduct of biodiversity conservation activities, collaborate and coordinate ecotourism initiatives with national, regional, national and local ecotourism bodies, and perform such other activities necessary to carry out the objectives of the Ecotourism and Biodiversity Framework Plan of Bohol and in support to the National Ecotourism Strategies.
2. **An Ecotourism Technical Working Group (ETWG)** shall be established to provide secretariat support – both technical and administrative to the Council. The ETWG shall be composed of technical staff necessary to assist the Council in performing its functions.
3. Access funding for the operation and management of the Council from a special government (national or local) fund for ecotourism development or from existing available funding sources of national agencies and provincial offices that regard conservation and/or ecotourism development as part of their regular mandates. Resources can also be tapped from international and local funding organizations that pursue these thrusts. Substantial outcomes shall be achieved from these available resources through focused and coordinated efforts of concerned agencies and/or organizations.
4. A networking among existing formal bodies, structures, and offices that have to do with tourism development and environment conservation in the province shall be organized. As provided for in the Bohol Environment Code, the Provincial Tourism Council (PTC) shall, in addition to its existing function in the policy-making body in all tourism-related matters in the province, shall coordinate ecotourism promotion, investment and development in Bohol. It is also mandated to establish ecotourism standards and monitor the level of compliance in the industry. With these functions, both Councils can work together for a more effective management and development of ecotourism in the province.

## **Part II**

### **Annex I**

### **Annex II**



## **ANNEX 1**

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## **I Mandates on Eco-tourism Development from the Bohol Environment Code**

- The Provincial Government through its appropriate instrumentality shall create a Technical Working Group (TWG) composed of but not limited to, representatives of the DOT, DEBR, and other concerned NGAs, NGOs , and private sector.

The Ecotourism TWG assumes further responsibility for:

1. Developing policy and planning recommendations to submit to government line agencies;
  2. Designing ecotourism management systems for protected areas in the province to be used as models of best practice;
  3. Liaising and working with donor and developmental agencies.
  4. Advising municipal tourism offices on the creation of multi-stakeholder and committees to plan and develop ecotourism activity at the site level.
- The Municipal Ecotourism/Tourism Framework Plan shall be drafted and reviewed by the representatives of the community, private sector, and local government unit.
  - The Ecotourism/tourism siteframework plans shall be consistent with the Municipal Ecotourism/Tourism Framework Plan.
  - The Municipal Ecotourism/Tourism Framework Plan shall indicate:
    1. Areas to be developed, type of development proposed to be undertaken
    2. Schedule of development, support facilities, and services
    3. A clear statement of the nature of local community participation and capability building requirements
    4. Institutional arrangements
    5. Policy requirements
    6. Estimate of potential municipal revenues
    7. Build-up areas, recreational areas, no visitation areas
    8. Types of acceptable activities
    9. Types of infrastructure, and
    10. Acceptable architecture, among others
  - Site framework plans shall require the endorsement of concerned barangay and community organizations before approval and shall include:
    1. Carrying capacity estimates
    2. Nature of local community participation and benefits
    3. Institutional arrangements
    4. Policy requirements, and
    5. Environment management plan
  - The Provincial Governor shall issue the appropriate circulars establishing the environmental standards for ecotourism in accordance with law and regulations.
  - Standards on water and air quality, noise, operating quality and efficiency , and sanitation as established by the DENR, DOH, DOT, and municipal governments.
  - Environmental aspects such as waste management, energy and water conservation, maintenance of air quality and noise minimization, and the use of fossil fuels, polychlorinated biphenyl (PCB), pesticides and herbicides, and hazardous materials.

- Implementation of adequate setbacks to allow for natural coastal processes to occur uninterrupted and ensure physical and visual access to the shoreline.
  - Standard heights of buildings in ecotourism sites should not exceed the normal height of surrounding vegetation (as a rule of thumb).
  - Step buildings to reflect changes in the site's topography.
  - Allocate space for vegetation between buildings (leave as much indigenous vegetation untouched).
  - Implementation of the law on environmental impact system (EIS) which requires the preparation of IEE, EIS or ECC prior to approval and establishment of tourism facilities especially in sensitive areas.
  - The potential significant environmental aspects and impacts must be identified and appropriately addressed through an environmental management plan before any physical development activity including site and infrastructure development may be conducted.
  - Preparation of a construction management plan to minimize environmental and social impacts of tourism facilities.
  - Measures that minimize the use of energy, water, and on site materials. Measures that minimize the generation of wastes, including reduction, reuse, and recycling of resources being used.
  - Sustainable building designs that utilizes renewable energy technologies such as solar, wind, and water, among others.
  - Leave as much of the pre-existing vegetation which provide protection from storms, habitat for birds and animals, shade from the sun and barrier from natural erosion forces.
  - Develop landscape plans based on good knowledge of the local vegetation and physical constraints in the given area.
  - The use of recycled materials such as sawdust, plastics, glasses, and tiles aside from conventional materials shall be encouraged.
1. Eco-tourism facilities shall submit an appropriate plan for disposal of wastewater storm water and sewage. Untreated sewage is one of the major sources of environmental pollution.
  2. Ecotourism site operators should aim to comply with national and international standards for wastewater and sewage discharge treatment.
  3. Promote sustainable solutions for sewage and wastewater problems such as septic systems, soakage pits, anaerobic digester, resin and coconut fiber constructed effluent treatment unit, engineered wetlands, sewage treatment plans.
  4. Ecotourism facilities must be designed to limit changes to natural runoff patterns and to compensate for those disruptions that are unavoidable.
  5. Technologies/design and physical development that minimizes the use of energy, water, and on-site materials in ecotourism sites shall be encouraged.
  6. Solid waste storage and disposal plans must be prepared by project proponents.

The Governor shall issue appropriate directives, circulars, and advisories for the purpose of regulating visitor behavior in environmentally and culturally sensitive area, particularly native forests, caves, dive sites, mangrove areas, ancient churches, ancestral houses and other sites. The Provincial Government shall encourage the local government units to enact appropriate legislations addressing concerns of on-site pollution including but not limited to water, air, and noise pollutions.

- Regulation and /or control of the number and frequency of visitors to areas with fragile ecosystems as well as culturally sensitive areas using the following strategies:
  - > Registration (log-in and log-out system
  - > Stating “open and close ”season” for specific areas and /or activities
- Physical carrying capacity of the ecotourism site which shall be integrated into the Municipal Ecotourism/tourism Framework Plan
- Visitor guidelines shall be formulated in a participatory approach with the concerned community where visitor activities will take place
- The Provincial Tourism Council and the Municipal Tourism Council shall develop and implement a monitoring and evaluation system
- Guidelines in the implementation of activities or projects involving cultural/ heritage structures and sites:
  - 1.Provision of buffer area around identified cultural/heritage structures and sites, which shall cover a minimum are equivalent to the total height of the main heritage structure in each site multiplied by three.
  2. Prohibition of any development activity, restoration, or structural improvement within the buffer zone and on the heritage structures without prior approval from the Provincial Tourism Council or appropriate body as may be created thereafter, provided further, that the activity allowed shall be consistent with the preservation or heritage tourism development of the heritage structure/site involved.

## **II Biodiversity Questionnaire for Ecotourism Sites**

1. In your municipality, have there been any biodiversity surveys, inventories or studies? Describe where data or results are located and who undertook the study.
2. What is the biodiversity status of the area in and around your selected ecotourism site? What current activities in the site adversely affect biodiversity?
3. In the selected site are there any measures including local ordinances to enhance biodiversity or biodiversity conservation?
4. I f there are no measures top protect the biodiversity in and around the selected site, what do you think should be done?
5. What will be the effect of ecotourism projects on local biodiversity (structures, roads, visitors, solid waste, human waste (sewage) or other parameters)?

6. Are there any geological formations, such as caves, sinkholes, “chocolate hills”, underground rivers and pools, cliffs, valleys in the ecotourism site?  
If yes, list: What measures are or have been taken to protect these?
7. Are there existing ecotourism sites in your municipality? If yes, describe, were there any efforts to deal with biodiversity?

### **III Information requirements for proposed tourism development projects**

1. Scale and types of tourism development or activities proposed, including a summary of the proposed project, why and by whom it is proposed, estimated outcomes and possible impacts, and a description of the stages of development and the various structures and stakeholders that may be involved at each stage;
2. Analysis of market for proposed tourism development or activities, based on market conditions and trends;
3. Geographical description including recreation opportunity zones, outlining tourist activities and infrastructure development, and location of the site of tourism development or activities, the identity and any special features of the surrounding environments and biodiversity;
4. Nature and extent of human-resource requirements and plans for their procurement;
5. Identification of various stakeholders involved in or potentially affected by the proposed project - including stakeholders in governmental, non-governmental, and private sectors, and indigenous and local communities - along with details concerning their participation in and/or consultation on the proposed project during its design, planning, construction and operation;
6. The perceived roles of local stakeholders in the proposed development;
7. The various laws and regulations that may be applicable to the specific site, including overviews of existing laws at local, sub-national and national levels, of existing uses and customs, of relevant regional and international conventions or agreements and their status, and cross-boundary agreements or memoranda or understanding and any proposed legislation;
8. The proximity of the site to human settlements and communities, sites used by people from those settlements and communities as part of their livelihoods and traditional activities, and heritage, cultural or sacred sites;
9. Any flora, fauna and ecosystems that could be affected by the tourism development or activities, including keystone, rare, endangered or endemic species;
10. Ecological aspects of the site and its surroundings, including indication of any protected areas; specifications on the ecosystems, habitats, and species; quantitative and qualitative information on the loss of habitats and species (main reasons, trends), and indexing of species;
11. Training and supervision of personnel carrying out the tourism development or activities;
12. Likelihood of impacts beyond the immediate area of the tourism development or activities, including trans-boundary impacts and effects on migratory species;
13. A description of current environmental and socio-economic conditions;
14. Expected changes to environmental and socio-economic conditions as a result of the tourism development or activities;
15. Proposed management measures to avoid or minimize adverse impacts from the tourism development or activities, including verification of their functioning;
16. Proposed measures for mitigation, decommissioning and compensation in the event of problems arising with the tourism development or activities;

17. Proposed measures to maximize the local benefits of the tourism development or activities on surrounding human settlements and communities, biodiversity and ecosystems, which may include, but are not limited to:

- Using local products and skills;
- Employment
- Restoration of biodiversity and ecosystems;

18. Relevant information from any previous tourism development or activities in the region, and information on possible cumulative effects;

#### **IV Pre-conditions for ecotourism development**

Before pursuing community-based ecotourism the suitability of the local area should be checked and fundamental preconditions met.

It is important to avoid spending time pursuing ecotourism and raising expectations in circumstances, which are highly likely to lead to failure. An initial feasibility assessment should be made before instigating a community-based strategy.

Some preconditions relate to the situation at a national level, others to conditions in the local area. The main aspects to check are as follows.

Reasonable conditions for undertaking tourism business are:

- economic and political framework which does not prevent effective trading and security of investment;
- national legislation which does not obstruct tourism income being earned by and retained within local communities;
- a sufficient level of ownership rights within the local community high levels of safety and security for visitors (both in terms of image of the country/region and in reality);
- relatively low health risks and access to basic medical services and a clean water supply; and practicable means of physical access and telecommunication to the area.

Basic preconditions for community-based ecotourism:

- landscapes or flora/fauna which have inherent attractiveness or degree of interest to appeal either to specialists or more general visitors;
- ecosystems that are at least able to absorb a managed level of visitation without damage;
- a local community that is aware of the potential opportunities, risks and changes involved, and is interested in receiving visitors;
- existing or potential structures for effective community decision-making no obvious threats to indigenous culture and traditions; and
- an initial market assessment suggesting a potential demand and effective means of accessing it, and that the area is not over supplied with ecotourism offers

Some preconditions may be more relevant than others, depending on the local circumstances, and these may change over time in that region but action is being taken to enable promising ecotourism initiatives there to resume when the situation stabilizes.

If the preconditions are met, this does not necessarily mean that ecotourism will be successful, only that it is worth proceeding to the next stage of consultation and assessment.

Checking these preconditions will require informed judgment. The concept of preconditions and fast pre-feasibility checks is increasingly applied among donor agencies in the tourism field.

## V. ECOTOURISM CRITERIA CHECKLIST - REVISED

Project Title/Project Site: \_\_\_\_\_

Location: \_\_\_\_\_

### 1. Natural and Traditional Practices and other unique features (35%)

#### 1.1 What unique natural and heritage attractions (features) exist?

- ☐ a. Waterfall(s) - please add number, names: \_\_\_\_\_
- ☐ b. Natural Monument: specify: \_\_\_\_\_
- ☐ c. Rock Formation
- ☐ d. Cave(s) Name: \_\_\_\_\_
- ☐ e. River Drainage System Name: \_\_\_\_\_
- ☐ f. Clean Sand Beach Name: \_\_\_\_\_
- ☐ g. Coral Reef Ecosystem
- ☐ h. Sea Grass Ecosystem
- ☐ i. Rainforest
- ☐ k. Mountains Name: \_\_\_\_\_
- ☐ l. Karst Formation
- ☐ m. Nature Trail(s)
- ☐ o. Wildlife Species: \_\_\_\_\_
- ☐ p. Old Houses and other structures (50 years old and above) \_\_\_\_\_
- ☐ q. Historical, Natural and Cultural Land Marks \_\_\_\_\_
- ☐ r. Fiestas/Festivals Name: \_\_\_\_\_ Date: \_\_\_\_\_
- ☐ s. Others not included; please specify: \_\_\_\_\_

#### 1.2 Physical Characteristics of the Area - please specify

- a. Drainage \_\_\_\_\_
- b. Vegetation \_\_\_\_\_
- c. Topography \_\_\_\_\_
- d. Shape \_\_\_\_\_
- e. Size \_\_\_\_\_
- f. Safety \_\_\_\_\_

#### 1.3 Is the area a nationally proclaimed Protected Area? ☐ yes ☐ no

If not, what other designated protected area? \_\_\_\_\_  
(Municipal tree Park, Barangay Park, Marine Sanctuary, etc...)

If yes, is there an approved general management plan? ☐ yes ☐ no

If no, is there a draft general management plan? ☐ yes ☐ no

**1.4 Are guidelines on the income sharing scheme of municipality, barangay and POs established?** ☐ yes ☐ no

If yes, what scheme? \_\_\_\_\_

**1.5 Which Biodiversity Conservation Practices exist? Please specify:  
What kind of practices? Who is managing the resources?**

Natural assets/ fauna/ flora	Biodiversity conservation practice	Managed by:
<input type="checkbox"/> Rare and endangered Flora and Fauna		
<input type="checkbox"/> Cave (species within)		
<input type="checkbox"/> Migratory and endemic birds		
<input type="checkbox"/> Lake/pond/and other fresh water bodies		
<input type="checkbox"/> Marine ecosystem		
<input type="checkbox"/> Man-made forest		
<input type="checkbox"/> Natural forest		
<input type="checkbox"/> Others not included, pls. specify: _____		

**1.6 What traditional practices/knowledges exist in the area? Pls. specify**

- ☐ Traditional Practices (dances, rituals, etc ) \_\_\_\_\_
- ☐ Sari-sari store(s)
- ☐ Flea Market ( Taboan )
- ☐ Cottage industry (e.g.mat weaving, hablon, amakan, salirap)  
\_\_\_\_\_
- ☐ Native delicacy preparation \_\_\_\_\_
- ☐ Other livelihood \_\_\_\_\_
- ☐ Agricultural practices
  - ☐ Fishing
  - ☐ Farming
  - ☐ Hunting
- ☐ Others, not included; please specify \_\_\_\_\_

**2 Capacity to provide Eco-tourism Products/Availability to implement eco-tourism Products (Accessibility/Transport/Services) (35%)**



## 2.1 Accessibility of site:

- ☐ a. Concrete Roads (condition) \_\_\_\_\_
- ☐ b. All-weather roads (condition) \_\_\_\_\_
- ☐ c. Trail(s)
- ☐ d. Port
- ☐ e. River
- ☐ f. Wharf
- ☐ g. others, please specify \_\_\_\_\_

## 2.2 What Service Facilities are available?

Existing Service Facility		Within site	Outside site	Ownership	
				private	community
a	Hotel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Pension House	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Cottage Facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Home Stay Facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Restaurant/Food service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Food Counters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g	Kiosk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h	Visitors Information Center	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i	Multipurpose Hall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k	Gift/Souvenir Shops of Environmentally friendly products	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l	Communication facilities/infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m	Rest Areas (Comfort rooms )	<input type="checkbox"/>	<input type="checkbox"/>		
n	Solid Waste Disposal	<input type="checkbox"/>	<input type="checkbox"/>		
o	Water Facilities	<input type="checkbox"/>	<input type="checkbox"/>		
p	Energy supply	<input type="checkbox"/>	<input type="checkbox"/>		

If utility services do not exist, how can they be provided? \_\_\_\_\_

## 2.3 What affordable Transportation Facilities are available?:

- ☐ a. PUJ
- ☐ b. Van/V-Hire
- ☐ c. Taxi

- ☐ d. Bus
- ☐ e. Pump boat
- ☐ f. Fast Craft
- ☐ g. Tricycle ( Trisikad )
- ☐ h. Motorcycle ( Habal-habal )
- ☐ i. Bicycle
- ☐ k. Animal Transport/Balsa/Kalesa Carriage
- ☐ l. Others, please specify \_\_\_\_\_

#### 2.4 Status of Promotion and Marketing Program.

- ☐ a. Completed
- ☐ b. On-going
- ☐ c. In planning stage
- ☐ d. Not yet started

#### 2.5 How is the area/attraction marketed to the public?

- ☐ a. Print media, such as brochure, flyer, poster
- ☐ b. Trade fair, blitz sales, video
- ☐ c. Word of mouth
- ☐ d. Tour operator
- ☐ e. Web page

### 3 Level of Social/Political Support (30%)

#### 3.1 How far is Ecotourism Management Developed?

**Note: How is management defined? What is 50%? It needs to be more specific, better to give criteria ....)**

- ☐ a. 100% developed (tour packaged, running, booking facility in place)
- ☐ b. 75% developed (guide training, infra facilities, equipment)
- ☐ c. 50% developed (guide training, infra facilities, equipment)
- ☐ d. 25% developed (tour implementation started: guide training, infrastructure facilities under construction)
- ☐ e. Not yet started – in planning or idea stage

#### 3.2 What agency/organization gives financial/technical support?

\_\_\_\_\_

#### 3.3 Who is actively involved in Ecotourism Management?

- ☐ a. Community/PO      Name: \_\_\_\_\_

- ☐ b. Private Sector/NGO Name: \_\_\_\_\_
- ☐ c. LGU
- ☐ d. PAMB
- ☐ e. Academe
- ☐ f. Church
- ☐ g. National Government's Admin. (NGAs): \_\_\_\_\_
- ☐ e. Others, Please specify \_\_\_\_\_

### 3.4 What IECs are established?

- ☐ a. Environmental Protection and Conservation-Laws,  
Rules and Regulations; please specify: \_\_\_\_\_
- ☐ b. Preservation of Traditions \_\_\_\_\_
- ☐ c. Wholesome Value Formation
- ☐ d. Visitor Education Program
- ☐ e. Monitoring and Evaluation System in place
  - ☐ Socio-cultural Impacts
  - ☐ Economic Impacts
  - ☐ Biodiversity (conservation, maintenance)
- ☐ f. Monitoring and Evaluation System planned

### 3.5 Are Environmental Laws, Rules and Regulations enforced?

- ☐ Yes ☐ No

If yes, which laws, rules and regulations are enforced?

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If no, what are the policy gaps? \_\_\_\_\_

### 3.6 Which auxiliary services and facilities can be provided by Local Community and local Government Units?

- ☐ a. Emergency Center/First Aid Unit
- ☐ b. Visibility of Policemen /Barangay Tanod
- ☐ c. Rescue Units/Ambulance
- ☐ d. Fire fighting Unit
- ☐ e. Disaster Preparedness

### 3.7 How is the Peace and Order Situation?

- ☐ a. Critical
- ☐ b. Stable

### 3.8 Comments/Remarks

## VI. EXISTING & POTENTIAL ECO-CULTURAL TOURISM ATTRACTIONS

### Province of Bohol (As of June 2006)

Municipality	Natural / Agricultural Attraction	Cultural / Historical Attraction	Location	Eco-Cultural Tour Package (existing)	Activities (existing / planned)	Facilities (existing / planned)	Requirements (to become an eco-tourism product)
<b>BMT</b>	Marine and Coastal Landscape		Dauis, Panglao	<b>Biodiversity escapeade:</b>			
				<b>Marine Wildlife &amp; Seascape Watch</b>			
				<b>Reef and Islet Exploration</b>			
				<b>Dauis Rocky Shore Loop</b>			
				<b>Panglao Coastal Landscape and White Beaches Trail</b>			
<b>1 Alburquerque</b>	Sta. Felomina Beach		Sta Felima	Municipal Marine Park	Swimming	Picnic Cottages*	
	Mangroves				snorkeling		
	Marine Protected area				boating		
	Sta. Monica Church & Convent		Poblacion				
	Bahi Cave		Bahi				
<b>2 Alicia</b>	Lourdes Spring		East Pobl.				
	Sambowaun Spring		Dangay		River trekking, caving		
	<b>Progreso-Cabatang</b>				Birdwatching		
	Spring Resort		Cabatang, Alicia		Photography		
	Cagongcagong Wildlife*+cave		Cagongcagong		Swimming		improve accesibility
					Mountaineering		
					Birdwatching		
					Wildlife		
					Photography		
	Inahagan Cave*		La Hacienda	<b>La Hacienda, Alicia, Juawangan Cave/Spring &amp; Mountain Resort with Forest Wildlife</b>	Spelunking, swimming	Picnic shed, restroom*	
	Inahagan Spring		La Hacienda		Birdwatching	Pool, picnic shed, cottages	
	Tonggo Waterfalls				Photography		
	Lahug Cave**		Cabatang				

Municipality	Natural / Agricultural Attraction	Cultural / Historical Attraction	Location	Eco-Cultural Tour Package (existing)	Activities (existing / planned)	Facilities (existing / planned)	Requirements (to become an eco-tourism product)
3 <b>Anda</b>	Anda White Beaches		Candabong, Virgen, Bacong, Poblacion, Suba, Talisay, Limawan, Badianq	Exploration of Anda Seaside Archeological Caves and White Sand Beaches	swimming, Scuba Diving*	Lodging	
	Dapdap Beach				Swimming	Picnic sheds*	
	Kinale Beach		Poblacion				
	Cavistil Falls						
4 <b>Antequera</b>	Mag-aso Falls			Mountain Ecolodge and Riverside, Antequera Nature Trail	Swimming, trekking, Photography	Cottages	
	Inambacan Spring/cave				Swimming	picnic sheds, Restrooms*	
	Phyton Cave*	Sunday Basket Market	Poblacion		Culture		
	Esteban Cave				Spelunking		
	Atobang Cave**				Trekking		
	Camantong Cave**		Tagubaas		trekking		
	Marine: Whales and Dolphins	Pamilacan Watchtower	Pamilacan	Pamilacan Marine Life Tour	Dolphin watching		
5 <b>Baclayon</b>				Pamilacan Dolphin and Whale Watching	Scuba diving		
	Pamilacan Island/beaches				Swimming		
		Immaculate Concepcion Church			Sightseeing		
		Baclayon Museum					
	Cancaramel Cave**						
	Cawasan Falls		Cabad		Swimming, picnic		
6 <b>Balilihan</b>	Camogao Falls*		San Isidro		swimming, picnic		
	Mt. Carmel Hill**	historical site, watchtower			sightseing		
	Balilihan Municipal Park & Plaza**				sightseing		
		Hanopol Mini Hydro Plan Site**					
	Magsija Swimming Pool**				swimming		
7 <b>Batuan</b>	Rajah Sikatuna Protected Landscape		Rizal		Trekking, Birdwatching		
	Makapiko Rizal Rapids		Rizal		Rubber boating, kayaking		
	River + cave						

Municipality	Natural / Agricultural Attraction	Cultural / Historical Attraction	Location	Eco-Cultural Tour Package (existing)	Activities (existing / planned)	Facilities (existing / planned)	Requirements (to become an eco-tourism product)
8 Bilar	Man-made forest				Trekking		
	<b>Rajah Sikatuna Protected Landscape</b>				Birdwatching, trekking, camping, photogr		
	Logarita Spring (Riverside)		Riverside		Swimming	Picnic sheds*	
	Duwangon Spring**				sightseing		
	Bird Sanctuary**						
	Tinugdan Spring**						
	Bilar Peak**						
	Tinugdan spring ;		Campagnao		sightseing		
9 Buenavista	Bird sanctuary				sightseing		
		Loom Weaving			Cult. Demonstr		
	Cambuhat River			Cambuhat River and Village Tour	River cruise, Oysterfarming, Village Tour	reception shed, product display center, boats, picnic sheds*	
	MPAs in Cabulan Is, Asinan Is, Pandao Is				snorkeling, swimming		
	Mt Kampaningao						
		Cantores Shrine	Cantores		sightseing		
	Pangangan Island				Swimming	Treasure Island Beach Resort*	
					Snorkeling	Darak Island Resort*	
11 <b>Candijay</b>					Photography		
	Calabon Cave, Sohoton Cave						
	Mt Candungao View Park						
	Canawa Spring				Swimming		
	Cogtong Bay*				Fishing		
	Lungsudaan River*				Swimming		
	Can-Umantad Falls*				Trekking	View Deck	
	Kawasihian Beach		Cogtong Bay	<b>Kawasihian Coastal Environment &amp; Wildlife Appreciation Tour</b>	swimming		
	Mangrove Forest		Panactaran	Candijay Mangrove Adventure Tour	trekking, boating	shed, lodge, kitchen*	
			Can-olin	Nasarok Hill Wildlife Exploration & Cultural Heritage			

Municipality	Natural / Agricultural Attraction	Cultural / Historical Attraction	Location	Eco-Cultural Tour Package (existing)	Activities (existing / planned)	Facilities (existing / planned)	Requirements (to become an eco-tourism product)
12 <b>Carlos C.P. Garcia</b>	Timobo Is - Caves,Cliff				snorkeling		
	Butuan Is - Rock fomrations, mpa				snorkeling		
	MPA Pong Gamay						
	Montesunting Mini-Forest** (Nueva Vida)						
	Chocolate Hills (Buenos Air.)				Sightseeing		
13 <b>Carmen</b>	Cabase Spring				Trekking		
	Cocok Cave/spring		Montevideo		Birdwatching		
	Fatima Rosary Hill	Pilgrimage side	Buenos aires		Sightseing		
	Lasang Lasangan Nature Spring			Nature Spring	scenicview		
	Tourism Nature Park				<b>Horseback &amp; Carabao Riding</b>		
	Sangat Hill						
	Montesunting Mini-Forest**		Nueva Vida		birdwatching, swimming	swimming pool*	
	Nueva Vida Norte Cave**		Nueva Vida				
	Bansajan Spring **		La Paz		Swimming		
		<b>Pottery and Furniture Products</b>					
13 <b>Catigbian</b>	Sampilangon River				Swimming	For Development	
	Behind the Clouds				Trekking		
	Mag-aso River						
	Sta. Catalina Cave		Jagbuaya		Trekking, caving		
		Rizal Hanging Bridge					
15 <b>Clarín</b>	Candumayao Cave**						
	Mag-aso Falls**						
	Can-opao River**						
	Inambacan Falls**						
	Municipal Park*				Wildlife	Restaurant	
	Tontunan Height				Photography	Lodge	
	Binaliw Spring/Falls		Cantuyog		Trekking, swimming		
	Caluwasan Spring				Sightseing		
	Cocoa Hill- View Pt		Danahao		Sightseing	shed, benches	
	Alimono Heights-View P			<b>Alimono Peak</b> <b>Fishermen's Tour of 3 islets</b>	Sightseing		not accessible

Municipality	Natural / Agricultural Attraction	Cultural / Historical Attraction	Location	Eco-Cultural Tour Package (existing)	Activities (existing / planned)	Facilities (existing / planned)	Requirements (to become an eco-tourism product)
16 <b>Corella</b>	Tarsier Sanctuary		Cancatac	Tarsier Nature Trail and Nature Center Development	tarsier walk in sanctuary	Sari-sari store*, information center**	
	Balisawa Hill		Tanday	Craft Village	Trekking, camping, bird watching, educational tour		
	Candawis Spring, Env't. Garden				Fishing, env't. Tour, tarsier observation		
		Puwang Hill*: Hist Watchtower	Fatima, Cortes		Mountaineering, swimming, sightseeing		
17 <b>Cortes</b>					Photography, sightseeing		
	Mangrove Forest Abatan River			Community Life Tours (Mangrove Loops Abatan River)	Boating, hiking, swimming, sightseeing		
	Bilibili Spring		Malayo Norte		Swimming, picnic, trekking	picnic shed, restaurant*	
	Malingin Falls		Patrocino		Caving, swimming, sightseeing		
	Ojan Spring		Lourdes		Trekking, swimming		
	Sto Niño Church**						
	Kalooy cave		Fatima		Caving, Sights.		
	Larga Vista**, View Pt		Poblacion,		Sightseeing		
	Hinagdanan Cave Spring I**		New Lourdes		trekking, swimming		
	Kawasan Falls						
18 <b>Dagohoy</b>	Mt Camangay		Poblacion		Trekking		
	Lahug cave						



Municipality	Natural / Agricultural Attraction	Cultural / Historical Attraction	Location	Eco-Cultural Tour Package (existing)	Activities (existing / planned)	Facilities (existing / planned)	Requirements (to become an eco-tourism product)
19 <b>Danao</b>	Dagohoy Cave/Sanctuary, River, Forest		Magtandang	<b>Dagohoy Caves, River &amp; Forest Adventure: Thrive Dagohoy History, Danao's /Forest Reserve, Cradle of the Longest Revolt</b>	Caving trekking, swimming	picnic, cottages, camping, lodge, restaurant	
	Tarsier, Bats, Monkeys, historical place	Historical place					
		Francisco Dagohoy Historical Park**					
	Ka Mira, Balijo Cave						
	Wahig River						
		Highland Mountain Resort at Sitio Overland					
	Kantakoy Falls						
20 <b>Davis</b>	Conception +Cabituan Highland				Trekking, Biking, Organic farming		
	St Ana Highland				Trekking		
	Hinagdanan Cave		Bingag	<b>Hinagdanan Cave: Discovering Karst</b>	Swimming	Souvenir Shop*	
	MPA San Isidro				snorkelling		
	Tangnan shore				Repelling		
	MPAs, Badjao Village, Mangrove Forest, Caves as potential identified under BMT				snorkeling, kayaking, culture, caving		
	Pahangog Twin Falls Cavern with pool						
21 <b>Dimiao</b>	Balbalan Beach		Guinguyoran		Trekking, Photography	Campsite, guides*	
	Badiang Heights				Swimming		
		Ermita Ruins					
	Mac Arthur's Cap						
		Centuries-old Roman-Catholic Church**					
						Livelihood Training & Convention Center**	
		Dimiao Childrens Rondalla					
	MPA Taonjan Beach	Agrofarm (Pagasa)			Diving, bird w.		

Municipality	Natural / Agricultural Attraction	Cultural / Historical Attraction	Location	Eco-Cultural Tour Package (existing)	Activities (existing / planned)	Facilities (existing / planned)	Requirements (to become an eco-tourism product)
22 <b>Duero</b>	Campo Verde , cliffs, Stone walls, historical landmark		Angilan		Mountaineering, caving, birdwatching	conference hall, kiosk, picnic huts, restrooms	
	Forest		Bangilan	Primary Limestone Forest with Nature Interpretive Center and Adventure Trail	Cultural contact		
					Wildlife		
					Photo Safari		
		Eskaya Tribe	Taytay		Cultural Tour		
					Trekking		
	Lover's Hill				Sightseeing	picnic huts, restrooms	
	Duero Beach Resort						
	Lord of Pardon Hill						
	Anibongan Massacre Site						
	Municipal Park				Mountaineering	Motor Service	
					Bird watching		
23 <b>Getafe</b>	Mangroves on Banacon Island			Banacon Mangrove Maze & Sea Shore Watching	Scuba diving?, Mangr Walk		
					Swimming		
	Jandayan Island				Nature tour on		
	Criminal Small Island				mangroves		
	Tumakiki Small Island				Birdwatching		
	Danajon Reef				Diving		
	Nasingan Beach						
	Sea Horse Culture						
	Virador Hill						
		Roxas Park	Calma		Mountaineering, swimming	picnic cottages*, pool*, campsite	
	Campsite, Swimming pool				Photography		
	Ugbuhan Spring		Cambuyo		Camping, picnic, trekking		
24 <b>Garcia-Hernandez</b>	Seven Heaven Hill				View Pt		

Municipality	Natural / Agricultural Attraction	Cultural / Historical Attraction	Location	Eco-Cultural Tour Package (existing)	Activities (existing / planned)	Facilities (existing / planned)	Requirements (to become an eco-tourism product)
25 <b>Guindulman</b>	Bugnao si-e Beach				Scuba diving		
	Bitoon Beach				Snorkeling		
	Cabantian Beach				Swimming		
	Caves *		Basdio, Biabas				
	Escaya Tribe	hanging tombs			Diving, swimming		
	Brgy Canhaway/Bulawan					campsite*	
26 <b>Inabanga</b>	MPA Basdio. Cliff with hanging tombs			Basdio coral See and Seascape Tour <b>Coastal Burial Caves &amp; Reef Exploration Basdio</b>			
	Inabanga River, Cuaming Is, Panahuganls, Bugatosan Is			<b>Inabanga River Cruise and Island Adventure</b>	Cruising/ kayaking, birdwatching		
		Loom Weaving Center	Daitur, Fatima, Cawayan, Dagohoy		Handicraft demonstration		
		Cottage Industry Tourism					
	Cuaming Beach, Hamongan Is					Beach Resort Development**	
27 <b>Jagna</b>	Seascape				Sightseeing		
	Boctol Swimming Pool						
	Bunga Mar Beach						
	Can-uba Beach						
	Eva Cave						
		Illihan Hill Shrine					
	Kinahugan Falls (Cabungaan)						
	Mayana (Vegetables & Flower Culture)						
	Luinab Rice Terraces		Boctol		Sightseing		
						Mountain Valley Resort	
28 <b>Lila</b>	Underground pool		Sog-ong, Malbog				
		Jesus Nazareno Shrine			Mountaineering	Guide	
	Rosales Spring		Malinao W		Photography		
	Tinubgan Spring						
	Tiguis Swimming Pool						
	Lila Rice Terraces		Tigues				

Municipality	Natural / Agricultural Attraction	Cultural / Historical Attraction	Location	Eco-Cultural Tour Package (existing)	Activities (existing / planned)	Facilities (existing / planned)	Requirements (to become an eco-tourism product)
29 <b>Loay</b>	Loay River				Wildlife		
	Himontangon Hills				Photography		
		Clarín Ancestral House	Sitio Ubos,	Loay Rio Vista Church Heritage Tour			
		Spanish Buildings	Calvario				
	Clarín Beach**					Palo Beach Resort**	
						Capernaum Beach Resort**	
	Himontangun Green Hill						
		18th Century church of the Holy Trinity**					
		Baluarte Watch Tower					
30 <b>Loboc</b>	Rio Vista Heights						
	Anapog Heights		Calvario, Pobl. Ubas				
	Loboc River Cruise		Loboc River		*River cruise	*Restaurant, Lodge	
	Busai Falls		Jimilian				
	Dream Falls		Quiguitan				
	Tontonan Falls						
	Kruz Daku ) pilgrimage side		Cambance		trekking, sightseeing		
	Man-made Forest		Cadabong				
	Sug-ong Mountain Trek		Mimilian		trekking		
	Cabilao/Sandingan Island: Reefs, lade, bird sanctuary , mat weaving			Loon Karst and Island Adventure	Scuba diving, swimming, handicraft	*Resorts on Cab, *Sandingan Island Beach Resort	
31 <b>Loon</b>	Lintuan Beach						
		Kasilak Parish Church		Loon Time Walk			
		Inang-angan Old Stone Stairways					
	Mualong River, spring, flora, fauna	history		Loon Rowers and Wildlife Refuge	Rowing, caving picnic, nature walk, river cruise, educational tour		

Municipality	Natural / Agricultural Attraction	Cultural / Historical Attraction	Location	Eco-Cultural Tour Package (existing)	Activities (existing / planned)	Facilities (existing / planned)	Requirements (to become an eco-tourism product)
32 <b>Mabini</b>	Popog Cave*		Marcelo				
	Five Island						
	Lumislis Island						
	Merong Hill						
		San Vicente Ferrer Pilgrimage Site**	San Vicente				
	Amahungan Beach						
	Bantayan Hill						
	Naasug Cliff						
	Lumayag Islet						
	Popog Beach						
	Marcelo Beach					*cottage	
	Merong Hill		Pobl. I				
	Bantayan Hill		Cawayanan		trekking		
	Agro-Tourism		Cabidian				
33 <b>Maribojoc</b>		Punta Cruz Historical Watch Tower and Park		Estuarine Ecology and Maribojoc Historical Monuments	Birdwatching, swimming, snorkeling	Snack Center, picnic sheds*	
	MPA Punta Cruz				Scuba Diving		
	Community Life Tour		St Vicente, Lincod	Coastal Villages Tour, Abatan		boardwalk	
	Boloc-boloc Spring		Jandig		Photography		
	Canalong Mt. Peak						
	Padhan Shrine+Cave		Bood		Caving, Trekking		
	Pilgrimage side						
	Calendaria Forest		Pagnitoan		trekking		
	Pagnitoan Cave				caving, trekking		
	Mangr. Plantation		Dipatling, Lincod		birdwatching, marine life		
	Beach Areas marine protected areas				Scuba diving	Resorts, Hotels*	
	MPA Balicasag Island				Swimming, Diving	Restaurant, Resort	
					Photography		
					Picnic		
34 <b>Panglao</b>					Water Sports		
	Malinao Dam (Inagnuban)		(Bayong)				
	Sagnap Spring Mountain						
	Katugpa and Lahug Caves History		Inagnuban				
	Man-made Lake						
35 <b>Pilar</b>	Centennial Forest				Trekking		

Municipality	Natural / Agricultural Attraction	Cultural / Historical Attraction	Location	Eco-Cultural Tour Package (existing)	Activities (existing / planned)	Facilities (existing / planned)	Requirements (to become an eco-tourism product)
36 President Garcia	Seascape				Sightseeing		
	Lawis Beach						
	Tugas Beach						
	Pong Daku Beach						
	Tilimbo Island, beach, cliff, caves				rapelling, swimming, diving		
	MPA Pong Gamay Islet				snorkelig, diving		
	Batarya Rocks						
37 Sagbayan	Pontod						
	MPA Butan Island				diving?		
	Chocolate Hills				Sightseing	Restaurant*	
	Bayong Spring						
	Naga Falls		Katipunan				
	Lindo Falls		Katipunan				
	Motong Talinis						
38 San Isidro	Bungtod						
	Heaven Hills		St Cruz				
	Mt. Candungao		Candungao		Mountaineering		
	Kilabkilab Falls		Caimbang	Kilabkilab Falls	Photography swimming		
	Na-o Cave**		Caimbang				
	Cantijong Cave: bats, snakes, swifts				caving hiking		
					birdwtching		
39 San Miguel					snorkeling		
	Langan Cave		Tomac	Exploring St. Miguel Watershed and Water Trail			
40 Sevilla	Masanao hill		Kagawasan Garcia				
	Simbahan Cave (Licolico)				Spelunking	Guide*	
	Sinak-ag Unang Cave		Cambagui				
	Busay Falls						
	Upper Loboc River						
	Sinak-ag Uwang Cave						
	Calipusan Falls						
	Maglihi Peak						
	Huyop-huyop Cave						
		Bentig Historical Site					
	Cabancalan Hilltop (Lobgob)				Trekking		

Municipality	Natural / Agricultural Attraction	Cultural / Historical Attraction	Location	Eco-Cultural Tour Package (existing)	Activities (existing / planned)	Facilities (existing / planned)	Requirements (to become an eco-tourism product)
41 <b>Sierra Bullones</b>	Dakit Municipal Park:				Mountaineering, Wildlife		
	Spring, Cave				Birdwatching		
	San Isidro Cave**						
	Bugsoc Falls**						
	Mabugnaw Spring** (Bugsoc)						
	Matin-ao Spring**						
	Matin-ao Spring **		Purok 5				
	Ka-aki Spring**		Abachanon				
	Sierra Bullones Ecotours				river trekking, caving, biking, nature walk*		
42 <b>Sikatuna</b>	Sung-on Underpass Cave						
	Libjo Cave						
43 <b>Tagbilaran City</b>	Seascape				Sightseeing		
		Sitio Ubos Heritage Village Poblacion		Sitio Ubos Heritage			
		Sandugo Shrine					
	City Park (flora, fauna, karst)		Kabawan	City Park	trekking		
	Marine Park Mabao			Mabaw Reef	Diving		
44 <b>Talibon</b>	Mangr. Mngt Project : Flora, Fauna, Handicraft		San Agustin, San Pedro, Balintawak, San Roque, San Isidro	<b>Talibon Marine Wildlife Sanctuary and Park</b>	birdwatching, wildlife observation		
	MPAs		Poco Islet, Bungan, Bansa-an, Mahaba Is, Cataban		Island Hopping, swimming,		
					Diving, picnic, Snorkeling		
45 <b>Trinidad</b>	Batungay Cave + Forest (Sto Tomas)			<b>Trinidad Adventure with Forest Wildlife ans Cascades</b>	Trekking, camping	Guide*	
	Kawasan Falls + Forest		San Isidro		Wildlife photo	Campsite, Lodge	
	Lahug Cave				Birdwatching	Picnic huts*	
	Batangag Peaks/Caves				Spelunking, Swimming*		
	Cres Amor Lagoon, Dila-dila Islet						

Municipality	Natural / Agricultural Attraction	Cultural / Historical Attraction	Location	Eco-Cultural Tour Package (existing)	Activities (existing / planned)	Facilities (existing / planned)	Requirements (to become an eco-tourism product)
46 <b>Tubigon</b>	Islandhopping		Batasan + Ubay, Bilang, Panggapasan	Tubigon's Gateway Island Life and Seascape	Swimming*		
		Loom Weaving Industry			Indigenous Handicraft**		
	Inanuran Beach					Mocaboc Beach Resort**	
						Matabao Beach Resort**	
						Tinangnan Beach Resort**	
	Ilijian Hill**						
	Bunacan Underground Caverns**						
	Ubay Agri Park		Lumangog, San Vicente	Ubay Farm Tour	Horseback riding, rodeo, agric. demofarm		
	Sinagdinan Beach					Sinandigan Beach Resort**	
	Cagting Beach					Cagting Beach Resort**	
47 <b>Ubay</b>	Tapon Beach					Tapon Beach Resort**	
	Buintaboan Beach					Guintaboan Beach Resort**	
	Tapal Beach Resort**						
	Ubay Mini Aqua Park**						
	Biabas Area			Flora, Fauna			
	Rajah Sikatuna National Park				Trekking		
	Badiang Spring				Birdwatching	Swimming Pool, Picnic sheds	
	Punta Gorda Trail		Anas		Trekking		
48 <b>Valencia</b>							

SOURCE : Bohol Ecotourism Development Framework 1997

Bohol Tourism Sketch Plan 1998

LGU Questionnaires on Tourism Sites / March 2005

CLUPS of the Municipalities of Bohol

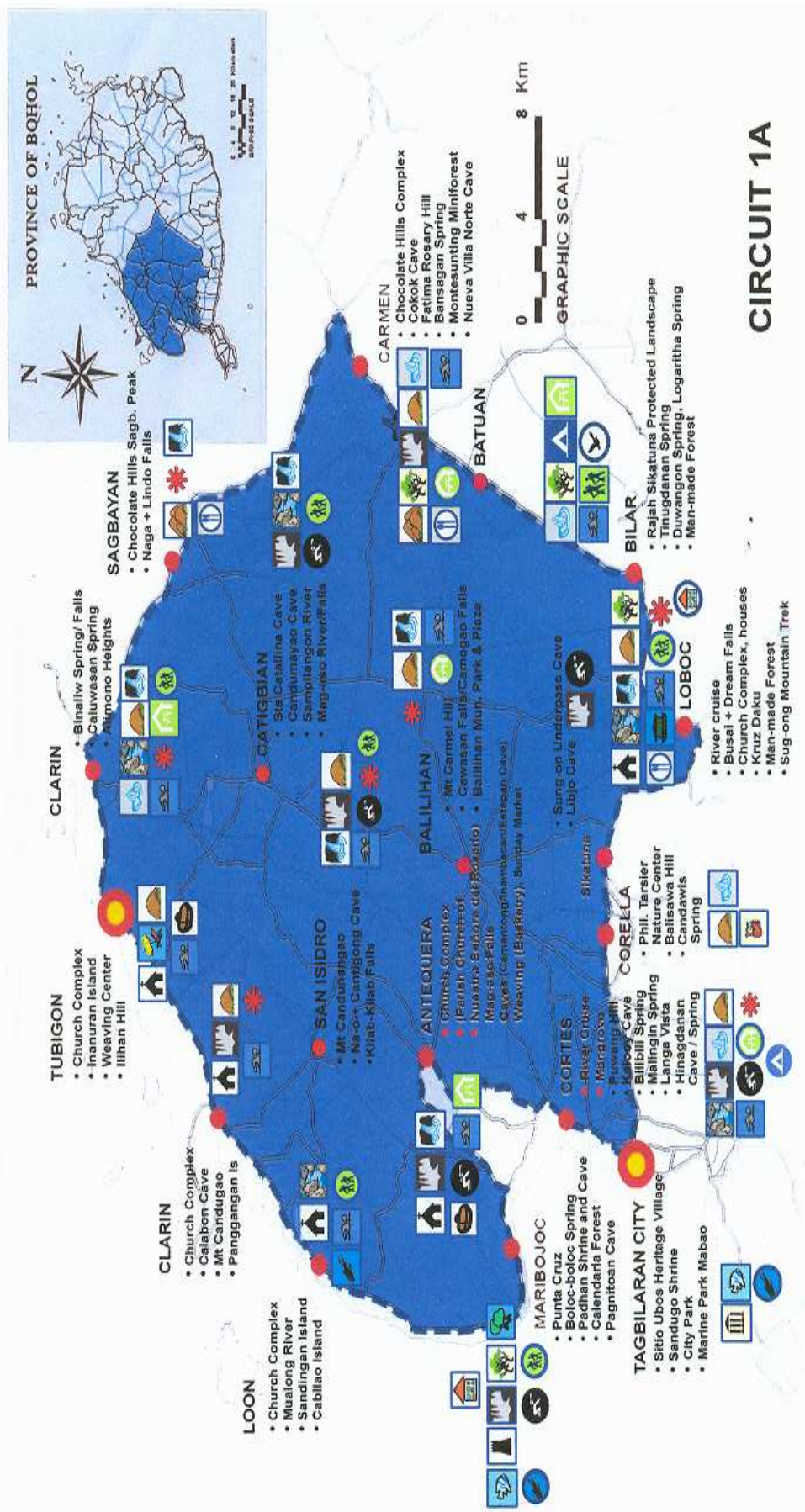
BTO-PPDO Site visits 2005

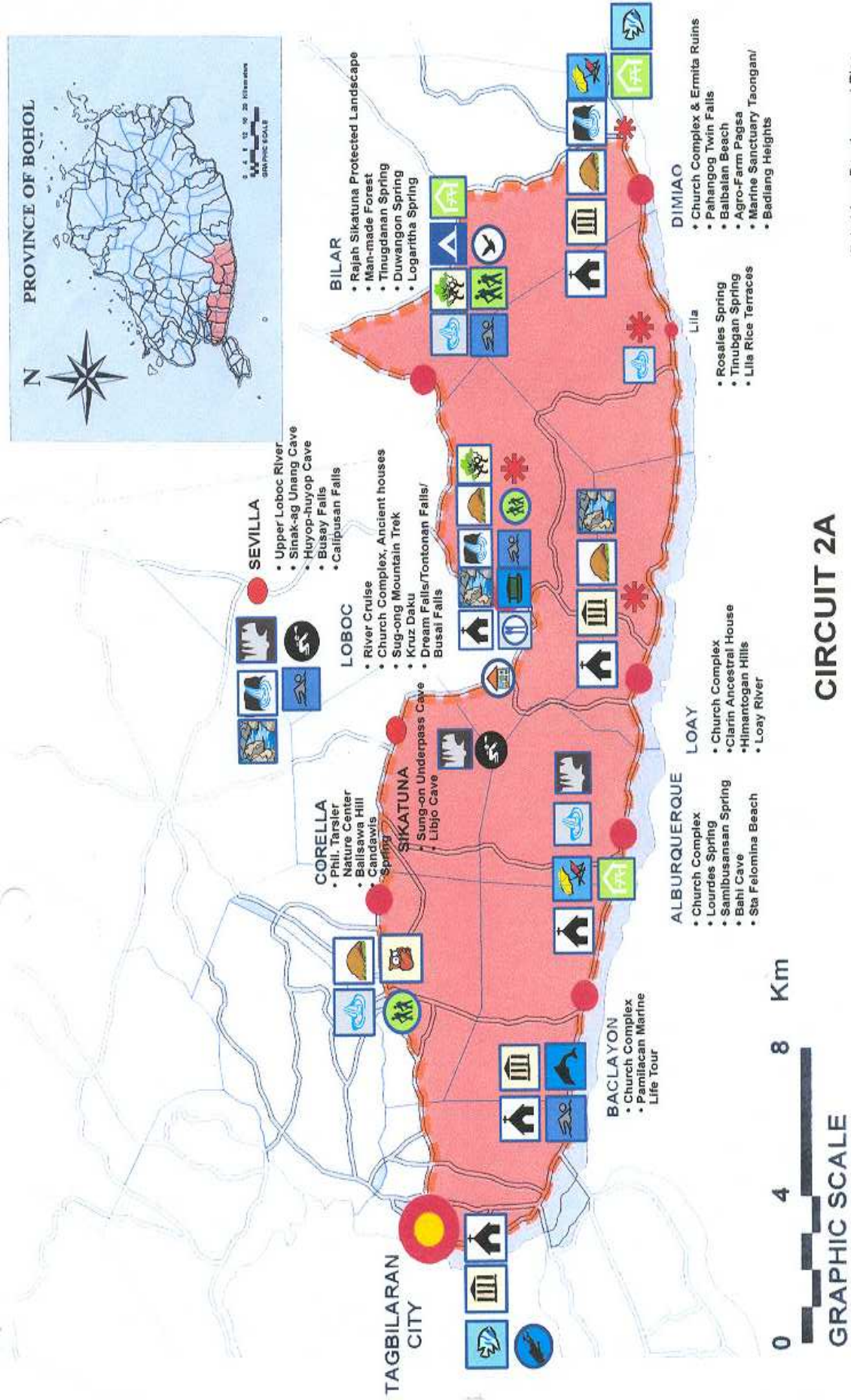
Red highlighted: Ect Product Themes and Concepts identified at Product Development Workshop Aug. 2005

italic: Participant of Ecotourism Product Development Workshop

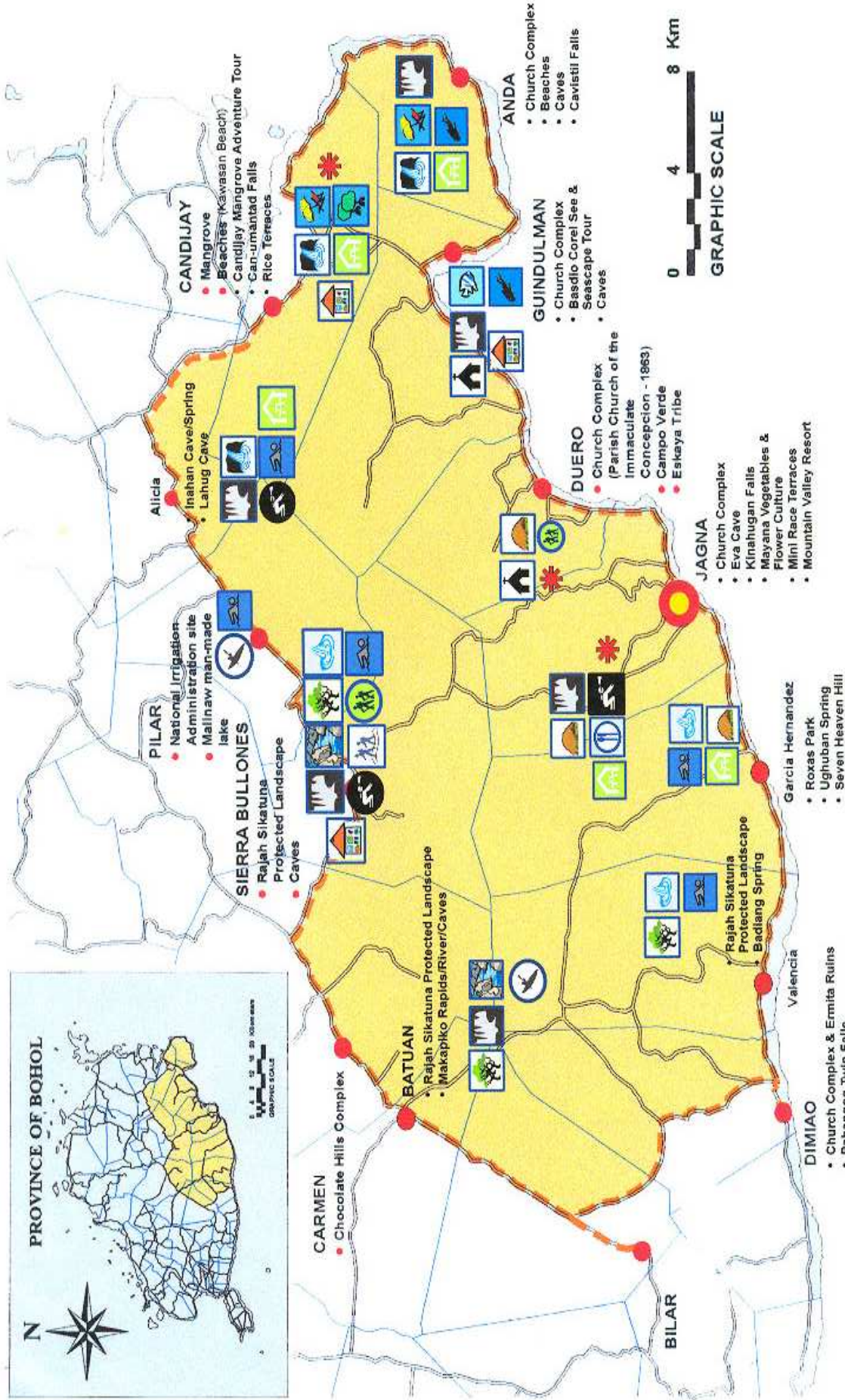


## VII. Maps of Proposed Circuits for Development in Bohol

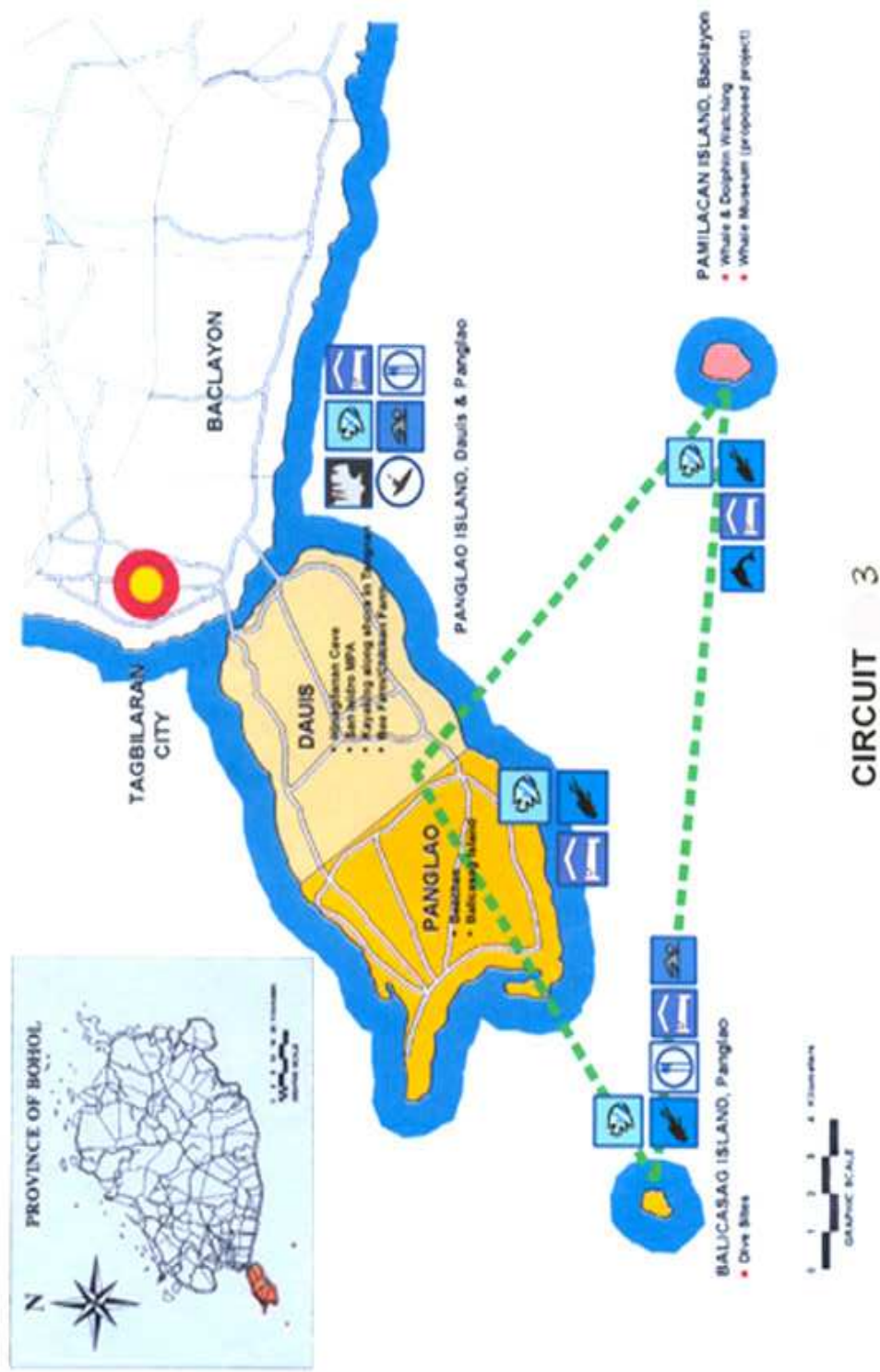







































## CIRCUIT 2B





Existing and Proposed Activities and Facilities for Eco-tourism Product Development

Natural & Cultural Assets		Activities planned/existing		Facilities planned/existing	
	Church Complex, Watchtower		Ecoventure		Camp site
	Historical/Cultural Site		Hiking		Picnic Cottages
	Hill		Tarsier Watching		Restaurant & Recreation Area
	Chocolate Hills		River cruise		Accommodation
	Forest		Dolphin Watching		
	River		Diving		planned
	Waterfall		Kayaking		existing
	Spring		Caving		
	Marine Sanctuary		Swimming/ Snorkeling		
	Beach		River trekking		
	Mangroves		Forest		
	Cave		Farm Tour		
	Scenic View				

## VIII. Eco-design Principles, Waste Management and Energy Conservation and Bio-climatic Design

- Use local building materials and local hand labor.
- If local building materials are not available, bring materials from elsewhere, ensuring ease and economy of transportation and on-site assembly.
- Ensure that your design allows for possible future expansion, modifications and retrofitting.
- Minimize negative environmental impact on site during the construction process. Clean up when you finish building each phase.
- Apply life-cycle assessments of all building materials to ensure that the best environmental and cost options are chosen.

For eco-lodges and other tourism facilities located in natural areas:

- ❖ Create the most appropriate access to your eco-lodge, striking the right balance between ease of approach and minimization of negative impacts on the natural environment. Limit the number of entry points to your site (preferably only one) in order to facilitate surveillance control and management.
- ❖ Remember that paved highways are usually an invitation for all kinds of human settlement and that they stimulate branching effects. If there is no existing access paved highway and the distance from the tourism distribution points is a considerable one, sometimes there is less impact in developing a landing field for light planes than to build a paved highway
- ❖ Keep in mind that construction of highways, roads and other motorways within a natural area or near to it causes negative impacts to the natural resources that one wishes to protect. Consequently, they should be strictly limited and justified only if there are no other viable solutions.
- Avoid building highways or motor roads with a width of more than 5m within a protected area or ecotourism destination. Wider roads become veritable barriers for wildlife mobility and also mar the natural landscape.
- use waterways (fluvial, ocean or lake), ensuring the use of boats with minimum negative impact. Avoid the use of internal combustion motors as much as possible within fragile areas such as mangroves or marshes. Consider the use of electric-powered boats. For short distances and wildlife-watching excursions it is best to use a rowboat, with good stability. These waterways are often crucial to local fishermen and hence the local economy. Thus, their use is a sensitive issue and needs to be negotiated.
- Minimize impermeable surfaces when possible to reduce runoff and maximize groundwater recharge
- Not all protected areas should have built facilities inside their boundaries. Sometimes these facilities are preferably placed in the nearby community or in the buffer zone. Always proceed according to the management plan of the protected area (if it exists).
- Interpretative centers as part of a broader interpretative program are needed in most ecotourism destinations, including protected areas, but each case should be carefully analyzed.

## Waste Management

Always apply the quadruple principle: recycle, reuse, refuse, and reduce;

- Reuse wastewater (both grey and black) as much as possible. Create systems in which water goes through several uses before being disposed of, utilizing it for flushing toilets, and as irrigation or fertilizer for cultivations (whenever possible). Always avoid using potable water for irrigating. In case you re-use both grey and black waters, separate lines and septic systems must be installed.
- In general, use products that minimize waste and are not toxic. Whenever possible, convert biodegradable waste to compost, utilize the biomass or submit the waste to digestive anaerobic systems.
- Whenever possible, use constructed wetlands treatment systems, which are engineered systems that have been designed and constructed to utilize the natural processes involving wetland vegetation, soils, and their associated microbial assemblages to assist in treating wastewater. They are designed to take advantage of many of the same processes that occur in natural wetlands, but do so within a more controlled environment.
- Compost biodegradable wastes and make use of the resulting fertilizer or sell it. In order to save water, use dry toilets (and pit latrines, in cases of extreme isolation and budget restrictions), always designed to minimize negative impacts on the environment.

## Energy Conservation, Bio-climatic Design and Alternative Energy Sources

- Apply simple physical and biological principles: design criteria like the physical setting of your facility, the local climate, including prevailing winds, solar radiation, appropriate local materials, biodegradation, surrounding vegetation, etc., and applying.
- Consider the sun's positioning when choosing the orientation of your tourism facility so as to maximize use of natural light and trap incoming solar radiation to heat interior spaces, taking note that in the northern hemisphere the sun is mainly shining from the south and in the southern hemisphere the situation is reversed. To maximize your "solar window", the slope of the roof (in degrees) should be roughly equal to the latitude of your site.
- Analyze in each case the convenience of applying solar energy for heating water and for generating electricity (photovoltaic systems), as well as other alternative, environmentally-friendly energy sources, such as wind power, biomass, geothermal energy, etc.
- A good option in isolated areas with no access to a conventional power grid is the use of photovoltaic cells (based on the use of silicon) for converting solar energy in electric energy (usually 12 volts DC). Some models offer both options of 12 volts DC and 110 volts AC (using the second alternative, the battery obviously drains down faster). There is presently a choice in photovoltaic cells between four technologies: mono-crystalline, polycrystalline, semi-crystalline, and amorphous silicon. The four technologies are now available commercially (fundamentally Japanese, German, and U.S. producers) and all have different comparative advantages. Typical mono-crystalline silicon cells have an efficiency of about 10-20%, but are quite more expensive than polycrystalline cells (which have an efficiency of 4-5%). Amorphous cells are even cheaper but also less effective. In every case, electric storage is by lead-acid deep-cycle batteries, similar to those used in golf carts.
- Use techniques such as the so-called Trombe wall, which consists of storing solar energy in a sun-facing wall, made of heavy masonry material, such as brick, stone, block, or earth, with a dark-colored surface toward the sun. As the sun's rays shine on the wall, generated heat is stored and circulated passively (especially during the evening) through wall vents into the living areas.
- The architect should pay special attention to water management when planning a tourism facility, especially given the critical water situation in some nations, which at times experience severe droughts. Use water catchment methods whenever possible. At all times, maintaining the drinking quality of this scarce commodity is of paramount importance.
- In the design of your lodge or other tourism facility apply cross-ventilation, which implies placing openings in opposite and parallel walls so as to induce natural air flow from outside and cooling interior spaces. In this way you will be contributing to the elimination of air conditioning systems, which consume enormous amounts of electricity and also cause damages to the ozone layer. As is well known, increasing the air movement helps evaporation from the skin and makes humans feel fresher and more active. Fortunately, in many hot areas there are prevailing winds that can cool facilities by natural ventilation.

Whenever possible apply environmentally-friendly technologies.



**IX. Table 1. List of National and Provincial Laws Relating to Ecotourism**

NATIONAL	PROVINCIAL
<ol style="list-style-type: none"> <li>1. PD 705 - Revised Forestry Code of the Philippines (1975)</li> <li>2. PD 856 - Code of Sanitation in the Philippines (1975)</li> <li>3. PD 1067 - Water code of the Philippines (1976)</li> <li>4. PD 1152 - Philippine Environment Code (1977)</li> <li>5. PD 1586 - EIA System of 1978</li> <li>6. Philippine Agenda 21 (1990)</li> <li>7. RA 6969 - Toxic and Hazardous Waste Control Act of 1990</li> <li>8. RA 7160 - Local Government Code of 1991</li> <li>9. RA 7076 - Small-Scale Mining Law of 1991</li> <li>10. RA 7586 - NIPAS Act of 1992</li> <li>11. Convention on Biodiversity of 1992</li> <li>12. RA 7942 - Philippine Mining Act of 1995</li> <li>13. EO 247 - The Bioprospecting of Biological and Genetic Resources (1996)</li> <li>14. RA 8371 - Indigenous People's Right Act of 1997</li> <li>15. RA 8550 - Revised Fishery Code of 1998</li> <li>16. Joint DENR-DOT MC.98-02 - Guidelines for Ecotourism Dev't. in the Phils.</li> <li>17. EO 111 - Guidelines for Ecotourism Dev't. in the Phils. (1999)</li> <li>18. RA 8749 - Clean Air Act of 1999</li> <li>19. RA 9003 - Solid Waste Management Act of 2000</li> <li>20. RA 9072 - Cave and Cave Resources Mgt. &amp; Protection Act (2001)</li> <li>21. RA 9147 - Wildlife Resources Conservation and Protection Act (2001)</li> <li>22. RA 9275 - Philippines Clean Water Act (2004)</li> </ol>	<ol style="list-style-type: none"> <li>1. Bohol Environment Code of 1998</li> <li>2. EO No. 02 - The banning in the extraction of sand and gravel within protected areas and environmental critical areas.</li> <li>3. EO No. 13 - Enforcing the salvage zone, sanitation laws and demolition of structures along the shorelines.</li> </ol>

X. Table 2. Enforcement Sanctions (Bohol Environment Code)

Forestry Resources	Mineral Resources	Water Resources	Waste Management	Coastal Resources	Air/Noise Pollution Management	Ecotourism	Environmental Impact Assessment
Section 8 - Governing Laws:	Section 20 Governing Laws	Section 28 Governing Laws	Section 42 Governing Laws	Section 50 Governing Laws	Section 68 Governing Laws	Section 78 Governing Laws	Section 92 Governing Laws
RA 7160 (Local Gov't Code)	RA 7160 (Local Gov't Code)	RA 7160 (Local Gov't Code)	RA 6969 (Toxic Substances & Hazardous & Nuclear Waste Control Act of 1990)	RA 7160 (Local Gov't Code)	RA 7160 (Local Gov't Code)	Art. II, Sec. 16 and Art. XII, Sec. 1 of the Constitution	PD 1152 (Phil. Environment Code)
PD 705 (Revised Forestry Code)	RA 7942 (Phil. Mining Act of 1995)	PD 1067 (Water Code of the Phil. of 1976)	RA 9003 (Solid Waste Mgt. Act of 2000)	RA 8550 (Phil. Fisheries Code - 1998)	PD 1181 (Providing for the prevention, control & abatement of air pollution from motor vehicles & for other purpose)	EO 120	RA 7160 (Local Gov't Code)
EO 247 (Bioprospecting)	RA 7076 (Small Scale Mining Law)	RA 6969 (Toxic Substances & Hazardous & Nuclear Waste Control Act of 1990)	RA 7160 (Local Gov't Code)	PD 705 (Revised Forestry Code)	PD 1181 (Providing for the prevention, control & abatement of air pollution from motor vehicles & for other purpose)	EO 247 (Bio-prospecting)	PD 1586 (EIA System)
EO 263 (CBFM Strategy)							
RA 7586 (NIPAS Act)	Section 26 - Prohibited Acts	RA 7160 (Local Gov't Code)	RA 7160 (Local Gov't Code)	PD 601 (Tasking the Phil. Coast Guard in Marine Env'tl Protn)	RA 8749 (Clean Air Act 1999)	RA 9072 (Cave Act)	
Section 18 -						Section 90	
Prohibited Acts		Section 40 - Prohibited Acts	of the Phil. 1975)	Section 66 Prohibited Acts	Section 76 Prohibited Acts	Prohibited Acts	
Section 120 - Penalties		Section 121 Penalties	Section 48- Prohibited Acts	Section 125 Penalties	Section 126 Penalties		

### ***XI. An inventory of Related Tourism Plans and Policies in Bohol***

<i>Medium Term Development Plan CY 2004-2009 (Province of Bohol)</i>	a five-year development plan outlining Bohol's Mission, Vision, Goals and Strategies. It identified eco-cultural tourism as the province's primary development strategy supported by a strong agro-industry
<i>Bohol Integrated Development Plan (DOT 2002)</i>	provides a framework for the sustainable development of tourism in the Province in order to achieve its vision of becoming the country's premier eco-cultural destination
<i>Provincial Tourism Sketch Plan (1998)</i>	provides focus on the future direction of the tourism industry in Bohol and identifies the suitable tourism development and activities in the province
<i>Central Visayas Tourism Master Plan (1997)</i>	a tourism master plan for Region VII prepared by DOT intended to guide both government and the private sector in harnessing and developing tourism in Central Visayas
<i>Bohol Eco-tourism Development Framework (1997)</i>	an inventory of eco-tourism resources and potential eco-tourism activities in Bohol prepared by the Office of Product Research and Development of the DOT
<i>Panglao Island Tourism Development Plan (1995)</i>	a detailed tourism development plan for Panglao Island prepared by Tour Konsult International through DOT and the Commission of the European Union describing the specific plan of the 120-hectare tourism resort area in Panglao
<i>Area Plan for Panglao Island (1991)</i>	as part of the Philippine Tourism Master Plan, a conceptual plan for Panglao Island was prepared featuring a 120-hectare resort estate, 36-hole golf course, 120-hectare retirement village, marina, leisure and recreational facilities, and an international standard airport
<i>Bohol Medium Term Development Plan CY 2004-2009 (Province of Bohol)</i>	a five-year development plan outlining Bohol's Mission, Vision, Goals and Strategies. It identified eco-cultural tourism as the province's primary development strategy supported by a strong agro-industry
<i>National Eco-tourism Strategy (DOT-DENR 2002)</i>	establishes a guidelines for eco-tourism development in the country to ensure sustainable use, development, management of the environment and natural resources and cultural heritage for the enjoyment of the present and future generations
<i>Bohol Integrated Development Plan (DOT 2002)</i>	provides a framework for the sustainable development of tourism in the Province in order to achieve its vision of becoming the country's premier eco-cultural destination
<i>Central Visayas Tourism Master Plan (1997)</i>	a tourism master plan for Region VII prepared by DOT intended to guide both government and the private sector in harnessing and developing tourism in Central Visayas

## ***XII. Summary of Guidelines***

### **Eco-tourism and Biodiversity Conservation Guidelines Summary**

#### **A *Considering* whether eco-tourism is an appropriate option**

1. Considering the potential conservation gain
2. Checking the preconditions for eco-tourism
3. Adopting an integrated approach
4. Finding the best way to involve the community
5. Working together on an agreed strategy
6. Ensuring environmental and cultural integrity
7. Ensuring market realism and effective promotion
8. Putting forward quality products
9. Managing impacts
10. Providing technical support
11. Obtaining the support of visitors and tour operators
12. Monitoring performance and ensuring continuity

#### **B *Planning* eco-tourism with communities and other stakeholders**

#### **C *Developing* viable community-based eco-tourism projects**

#### **D *Strengthening* benefits to the community and the environment**

### **XIII. Useful References**

#### **I. Book and Publications**

1. "*Ecotourism in the Philippines*", Carlos Libosada Jr.(1998)  
Available from Bookmark Inc. stores
2. "*Community Based Sustainable Tourism*"(1998)  
Two publications: a Reader and A Handbook published by ASSET, Inc.
3. "*Community-Based Mountain Tourism: Practices for Linking Conservation With Enterprise*" .Available through Mountain Forum web site
4. "*Ecotourism: A Guide for Planners and Managers*". Vols.1 (1993) and 2 (1998). Available through the Ecotourism Society website
5. "*The Ec lodge Sourcebook for Planners and Developers*" . Available through the Ecotourism Society website.
6. "*Meeting the Global Challenge of Community Participation in Ecotourism: Case Studies and Lessons from Ecuador*". Epler Wood (1998) America Verde Publications. Available through the Ecotourism Society website
7. "*The Young Entrepreneurs Guide to Starting and Running a Business*" Steve Marrioti (1996). Random House Inc. ISBN 0-8129-2627-7  
Practical How to Do Guide, includes preparing business plans, book-keeping, marketing and sales

#### **II. Websites**

[www.ecotourism.org/](http://www.ecotourism.org/)

Ecotourism Explorer Web Site of The Ecotourism Society

[www.ecotour.org](http://www.ecotour.org)

The Ecotravel Center Web Site of Conservation International

[www.egretcommunications.com/](http://www.egretcommunications.com/)

Egret Communications, Useful case studies and guidelines

[www.ecotourism.ph](http://www.ecotourism.ph)

Forum for ecotourism practitioners in the Philippines

[www.philcbstassociation.com](http://www.philcbstassociation.com)

Philippine Community Based Sustainable Tourism Association

[www.tours.ph](http://www.tours.ph)

A Philippine travel web site

[www.philippines.com.ph](http://www.philippines.com.ph)

Travel Nut's Guide to the Philippines

## **ANNEX II**

### ***INTERNATIONAL ETHICAL STANDARDS AND GUIDELINES FOR ECOTOURISM AND BIODIVERSITY CONSERVATION***

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IV.	Terrestrial	10-18
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	• Commercial and Group Bird Watching	
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## **I. CODE OF ETHICS FOR PHILIPPINE ECOTOURISM**

- Assess and evaluate the current and future state of a potential tourist spot and the impact to the environment when planning for any tourism development by ensuring that an EIA be made before proceeding with the development.
- Consider the cultural values of the local people before introducing tourism to prevent culture shock and degradation.
- Conduct consultation with the local population to be affected by tourism development.
- Utilize the local population for employment in the tourism-related establishments and activities.
- Minimize the use of scarce resources like water and fuel and energy; avoid as far as possible waste production.
- Refrain from and discourage poaching activities, collection of wildlife species and purchase of authentic cultural possessions like ceremonial clothes which are used only for special occasions and items made of culturally and historically valuable materials like corals and skin of rare animals.
- Be content with the available resources, facilities and amenities especially in destination where environmental disturbance must be kept to the minimum.
- Help in stopping deforestation and marine resources decimation.
- Stop or minimize the use of environmentally damaging materials and instead practice and encourage the use of local and environmentally friendly materials to protect the natural heritage composed of ecosystems and biodiversity.
- Do not patronize firms or individuals engaged in environmentally destructive practices.

*(Department of Tourism 1998)*



## **II. OUTDOOR ETHICS**

( *Leave No Trace Principles* for Hiking and Associated Activities of Outdoor Ethics found in main document of Framework Plan as adopted from the Center for Outdoor/Boulder, USA [www.int.org](http://www.int.org))

### **CAMPING CODE**

Adopted by the Australian government , modified  
[http://www.epa.qld.gov.au/parks\\_and\\_forests/recreation/in\\_parks/camping/camping\\_code/](http://www.epa.qld.gov.au/parks_and_forests/recreation/in_parks/camping/camping_code/)

Parks, forests and beaches are special places. To make your stay more enjoyable and protect the natural environment, please observe these simple rules:

- Use a fuel stove for cooking. Open fires are often prohibited.
- Where allowed, light fires in built fireplaces only. Put the fire out when you leave your campsite. Do not collect firewood from the reserve.
- Take your rubbish when you leave or use bins where provided.
- Be considerate. People visit parks and forests to enjoy nature not noisy radios.
- Leave generators and compressors at home.
- Leave your campsite as you found it. Do not clear it, dig trenches or cut trees for tent poles.
- Leave domestic animals like cats and dogs at home. Pets foul picnic areas, annoy other visitors, disturb native animals and are not allowed in parks. Dogs on leashes are allowed in some forests. Check first.
- Do not use soap in lakes and streams - it pollutes the water and harms aquatic life.
- If toilets are not provided, bury human wastes (well away from lakes and streams).
- Leave firearms, axes, chainsaws, and sheath knives at home. (You may use small axe to split supplied firewood).
- Camp well away from walking tracks and water bodies.
- Remember, plants and animals are protected. Try not to trample or damage plants when walking or erecting your tent. Do not disturb the local wildlife.

## **III. FRESHWATER**

### **A Guide to Safe Paddling and Kayaking**

<http://www.gopaddle.org/BeforeYouGo.htm>  
<http://www.rei.com/online/store/LearnShareDetail>

We'd like to welcome you to sea kayaking with a word of caution. It can be a safe and rewarding activity if common sense prevails and certain precautions are taken. Before you put in for a day's paddle, check that you have the following:

#### **Always Take:**

- a kayak in good, serviceable condition, with plenty of secure buoyancy,
- a paddle
- a spraycover that fits your boat
- a personal flotation device and whistle
- clothing suitable for the conditions
- a bailer or pump

- an accessible spare paddle, minimum of 1 per group

**In any, but the most benign conditions, also consider:**

- an accessible flare pack
- a flashlight, (even if you are only planning a daytime trip)
- self-rescue aids
- rain gear, and extra clothing in a waterproof bag
- a minimum of 25 feet of tow line
- charts and tide tables, current tables if appropriate
- a compass
- a knife
- matches or a lighter
- first aid kit
- a weather radio

**The most important rule to follow when paddling in a group is to stick together** - You must be responsible for yourself out on the water, but having other paddlers within communication range increases the overall safety of any group.

If a group of paddlers decides to break from the main group, they should do so only after informing everyone else where they are going and where and when they will rendezvous with the group.

### **Individual Jobs**

Whenever possible elect an experienced leader before each day's paddling. The leader should keep an eye on the entire group and make decisions regarding the safety of continuing.

When paddling in a large group, choose a front (point) boat to set a reasonable pace throughout the day. To make sure no one gets discouraged; assign a strong paddling team to bring up the rear as well. This "sweeper" team can encourage stragglers and slow the front boat down when necessary to keep everyone together.

To keep everyone involved, rotate the duties of the point boat, sweepers and group leader (when possible) throughout the trip. Just make sure that the group leader for each day has the experience necessary to make important safety decisions.

### **Communication**

When skies are clear and the water is calm, feel free to spread out a little from other boats, staying within whistle or hand-signal range for safety's sake. But if conditions take a turn for the worse, tighten up and stay within voice contact as much as possible.

Since voice communication can get difficult in high winds (or rough seas), take some time before your trip begins to agree upon a few simple hand or whistle signals that everyone can use to communicate basic messages. If everyone is carrying a whistle, for example, you might decide that one blast means "attention", two blasts means "gather together", and three blasts means "emergency". If hand signals are easier for the group, decide on signals for the same kinds of messages.

Help your fellow paddlers stay safe by keeping them informed. Keep your eyes open for obstacles (like fallen or submerged trees, rocks, rapids), and point them out to the rest of your group as soon as you spot them.

## Group Response

When breakdowns, capsizes or other troubles occur, the two closest boats should respond to the paddler(s) in trouble. Other boats should gather loosely, in case more equipment or assistance is needed. But if you're not involved in the actual rescue, stay at least a few boat lengths away so you don't inadvertently interfere.

After any capsize, hypothermia can be a serious risk. Assess the situation carefully, and head to shore if necessary so that the wet paddler(s) can change into dry clothing and warm up before continuing. Keep in mind that even severely hypothermic people often say they feel fine.

## Safety Skills

Like basic paddling and camping skills, safety skills should be learned and practiced well before any wilderness trip begins.

- Wear your PFD at all times while paddling. Make sure it's zipped up and cinched tight.
- Only paddle in conditions that you and all of your paddling partners can handle safely.
- Know where your safety and rescue equipment is at all times during your trip. Make sure you know how to use that equipment correctly.
- Alcohol can impair your judgment and increase the risk of injury and hypothermia. Don't drink before paddling
- If you have an existing medical condition that requires medication, make sure you have the medication you need before you leave home. Make sure that everyone in your group knows what to do in case of an emergency.
- Hypothermia is a great risk to kayakers. Dress appropriately!
- Thoroughly familiarize yourself with your boat.
- Start gradually in moderate weather, close to shore, with an experienced companion. Experiment with strong winds only when they are blowing toward shore.
- Develop your paddling skills, including turning and bracing.
- Learn and practice a self-rescue method appropriate for you and your boat, including deep-water reentry.
- Practice a group rescue so you can help others.
- Make a habit of carrying safety equipment. It will be easier to carry your safety equipment if you keep it stored in one bag.
- Leave a float plan. Let someone know where you're putting in and when and where you plan to return. Leave a full description of your car.
- Read all you can on the subjects of sea kayaking, weather, oceanography and cold water survival.
- Get a weather forecast each day you are out.
- Avoid paddling alone.
- Be sure you are using a boat for the purpose for which it was designed.
- Like any mariner, you must know the principles of navigation and seamanship.

## Precautionary Notes:

Make sure you are familiar with how to deal with the following situations, which can occur in open water. Consult local experts or available literature for additional information on these important subjects. When bad weather threatens, be extremely cautious about

paddling. Be aware of the next safe landing area along your route, and how long it will take to make it there safely.

<b>Weather</b>	<p>Wind - Avoid paddling when whitecaps are visible until you thoroughly appreciate their effect. Wind can:</p> <p>If lightning occurs nearby, leave the water immediately.</p>	<ul style="list-style-type: none"> <li>○ upset a kayak</li> <li>○ make it difficult to turn</li> <li>○ create unmanageable waves</li> <li>○ prevent you from holding a course</li> <li>○ slow you down or stop you.</li> </ul> <p>If it's not possible to do so (because of water conditions or the shape of the shoreline), protect yourself by positioning your boat within the "umbrella of protection" provided by trees on shore (if you can). This protection zone extends outward from the tops of the trees at roughly a 45-degree angle.</p> <p>Staying slightly offshore (while still within this protection zone) is often safer than paddling directly underneath shore trees.</p>
<b>Current</b>	<p>Fog can result in sudden and total disorientation.</p> <p>You will encounter two principal types of current on the sea:</p> <ol style="list-style-type: none"> <li>1. reversing tidal current</li> <li>2. continuous ocean current</li> </ol> <p>Strong current can aggravate conditions caused by adverse weather, particularly when current and wind are opposing. They can also cause difficult eddy and wave conditions even on utterly still days, from the sheer force of the flow.</p>	<p>You will need a compass, but you may gain some orientation from sounds of beach surf, bells, fog horns, etc., as well as from steady wave and wind direction.</p> <p>Precautions:</p> <ol style="list-style-type: none"> <li>1. Read your chart to help identify danger points.</li> <li>2. Use any available information to estimate slack or favorable current and time your passage or crossing for that period.</li> <li>3. Paddle in current under controlled conditions to familiarize yourself with its effect.</li> </ol> <p>Exercise caution when the current and wind direction oppose each other.</p>
<b>Topography</b>	<p>Topography affects wind and water conditions in shallows, beach surf, headlands, cliffs and river mouths.</p>	<ol style="list-style-type: none"> <li>4. Shallows - Waves steepen and break heavily on shallows. Avoid those areas when waves are large or strong currents are forced to flow over them.</li> <li>5. Surf - Waves steepen and break on beaches and shoals. Generally, try to avoid landing in surf with a loaded kayak. Avoid surf on rocky beaches.</li> <li>6. Headlands - Conditions are frequently more</li> </ol>

difficult off headlands with increased wind (funneling), accelerated current and rebound waves. Seas become chaotic.

7. Cliffs - Cliffs limit landing sites and can cause chaotic rebound wave conditions.
8. River mouths - Difficult wave conditions occur when a river outflow runs against the waves.

### **People Hazards**

Watch for power boats, ships, tugboats with barges and all other water craft. Make yourself visible and never assume you have been seen or have the right of way.

### **Lake Paddling**

With the exception of the tides, large lakes pose most of the difficulties and dangers of the sea. Waves, however, are steeper and more likely to break than on the sea.

### **...Finally**

**The basis of safe sea kayaking is sound judgment, self-responsibility and technical competence. Join a club, take a class, read books and/or consult local experts to learn all you need to know about the sport. Remember that where you paddle, others will follow. Leave your campsite as you would like to find it.**

## **Rafting and Tubing**

[http://www.safeoutside.org/pursuit\\_guidelines/rafting\\_tubing.html](http://www.safeoutside.org/pursuit_guidelines/rafting_tubing.html)

### **Features:**

Tubing and rafting can be appropriate group activities for a range of age groups on rivers of low flow and with no natural or human-made hazards. They have the potential for building group and individual water confidence, although the range of physical skills able to be taught is probably less than through a suitable canoe or kayak program. This activity requires of participants a general swimming ability, the ability to remain afloat whilst awaiting rescue, and sufficient confidence in moving water to reduce the possibility of panic should the craft capsize.

### **Key Dangers:**

- Hypothermia
- Drowning
- Being hit by paddles
- Group split in high risk environment
- Bruising and broken bones
- Conflict with other people
- River changes

### **People Management Guidelines**

- Students must demonstrate appropriate swimming skills prior to program participation.

- The nature of the risks involved in tubing and rafting are disclosed to students and caregivers.
- The goals are identified and the activities are adapted to meet the needs and abilities of the participants. Do not assume students are confident in water
- Additional student health concerns are addressed.
- Staff teach use of equipment in an appropriate manner
- Appropriate safety procedures are followed. This may include: monitoring the water temperature in relation to the clothing skills and abilities of the students to determine whether or not they should enter the program area or not.
- Each participant must wear a life jacket approved by the Standards Association of New Zealand for use in sheltered waters, and a crash helmet.
- Party size will vary, but the preferred minimum for any rafting expedition is for two rafts and four paddlers per raft.
- Leader participant ratios will vary according to the age, experience and ability of the party and the grade, flow and level of the river. An instructor/student ratio is selected that allows for the direct supervision of the students rafting and the management of the rest of the group.
- Safe supervision should be based on a participant/leader ratio and not a leader/boat ratio.
- In an emergency safety is dependent upon the number of people in the water. A large boat with a number of paddlers may cause more problems than two or more smaller craft with fewer paddling. As a guide, one leader per boat is required for rafting and one leader for every two to three tubes for tubing

### **Equipment Management Guidelines**

- Clothing should be adequate to lessen the effect of sudden immersion in cold water of a temperature of 10° or less (cold shock), and sufficient spare warm clothing should be carried. Wetsuits should be considered whenever possible.  
Rafts should be built to meet the requirements of the water they are to be used on as well as meeting industry specifications.
- in hypothermic conditions the raft should have 1.5 truck tubes per person.  
Rafts to be used on rivers where there is a possibility of a 'rock warp' should have at least two main-ring buoyancy chambers. Rafts with rigid frames should be without hard edges to minimize the chances of injury.
- Loading should be within accepted limits. As a guide white water loading should not be more than 2/3rds that of flat water loadings.
- All rafts should be fitted with life-lines and a rescue line must be carried.  
Adequate bailers and spare oars or paddles should be carried.
- Participants are provided with appropriate clothing for the activities and the conditions to be encountered.
- Appropriate inspection of equipment and associated protective gear is conducted prior to student use.
- Staff teaches the use of equipment in an appropriate manner.
- Each student must wear a SANZ approved buoyancy vest or sheltered waters personal flotation device. A helmet must be worn.
- Instructors must carry a pruning saw, throw line, and knife in addition to carrying shelter rehashing method, spare clothing and food as appropriate to the conditions.
- Navigation equipment should be carried to allow easy navigation out of any position on the river

### **Environment Management Guidelines**

- Staff is aware of the appropriate natural and cultural history of the area.  
On rocky rivers do not have the raft super tight.

- The waterway selected is appropriate for the level student skill.
- Care is taken in site selection, especially for basic skills teaching.  
Avoid sites with underwater snags.
- Attention should be paid to the possibility of flooding, season, erosion and environmental isolation
- Rivers must be checked before student use when floods have exceeded 10% average flow.

### **Emergency Preparedness Guidelines**

- Where appropriate, provision needs to be made for party support or retrieval should they be unable to complete the journey planned.
- Staff has the appropriate practical and theoretical training in emergency skills.
- Areas are inspected for potential hazards.
- Appropriate emergency equipment is available where necessary.
- Adequate levels of support are available for rescue operations.
- Participants are properly prepared for emergency procedures, include: swimming evaluations; Swimming tests with life jackets on; drown proofing techniques; practicing rescue techniques.
- Areas are inspected for environmental hazards.
- The program has established boundaries, rendezvous times and emergency notification protocols.
- Students are properly prepared for emergency procedures on the roadway.

## **IV. TERRESTRIAL**

### **Guidelines on Recreational Bird Watching**

*Adopted by Birds Australia Council on 30 May 1999*

All birdwatchers have a responsibility to be informed about their activity, to avoid causing any negative impacts on the birds that they are watching and where possible to contribute to the future wellbeing of birds and the environment.

1. To be fully informed about the birds being watched requires an awareness of the ecology of the species including feeding, roosting and breeding activities and the conservation issues which affect the survival of the species. By making full use of the knowledge available, responsible bird watchers should make every effort to minimize the impact of their activities on the species being observed. For example, use knowledge of nesting locations and the behavior of birds to avoid disturbing nesting birds instead of blundering in for a closer look.
2. Practice minimal impact trekking, camping as outlined by the conservation departments at state and national level. These recommendations should be seen as minimum standards for responsible behavior in the wild. Take these practices with you when traveling overseas but be prepared to adopt more stringent practices when necessary to conform with local regulations and customs.
3. When beach-walking watch for and avoid ground-nesting birds (especially waders and terns) and roosting shorebirds. These species are often vulnerable to disturbance. Their cryptically colored eggs and young may be difficult to see but may be attacked by predators if the parents are disturbed. To minimize disturbance avoid walking or letting dogs run in the zone between high tide and the vegetation where these birds nest and avoid driving on beaches which provide nesting areas for shore birds.
4. Be informed about the location being visited. Do not enter restricted areas such as reference areas which are set aside to monitor the undisturbed environment. Respect

the rights of all landowners and do not enter private land without permission. Remember that traditional lands may be subject to additional regulations and respect the rights of traditional owners to care for their land. Regardless of the location, obey the laws which govern access to the area being visited.

5. Do not draw attention to vulnerable species, particularly when they or any other birds are at the nest. Be aware that species which have value for the illicit cage bird trade may be more vulnerable than their numbers might suggest. Frequent visits to a nesting site can attract the attention of both natural predators and human predators in search of eggs or nestlings.
6. Record observations and contribute them to information repositories such as wildlife atlases or ongoing studies planning and research.
7. The use of tapes of bird calls and of bird callers or other forms of mimicry can distress the species whose call is being played and may disrupt feeding and/or breeding activity. Artificial bird calls should not be used in or within earshot of locations where the land owner or manager has requested that they not be used or where this may interfere with ongoing research projects. Tapes should not be played at individual birds for extended periods of time and should not be played at louder volume than that of the target bird. The use of such devices should be kept to a minimum, particularly in areas of high visitation by birders where play back by other birders may well have occurred in the recent past. Responsible use of tapes can be valuable in locating cryptic birds without causing serious harm; however, it is a skilled activity and should not be taken lightly. If in doubt, avoid the use of tapes.
8. Spot lighting disturbs individual birds and animals which may be sleeping or resting and may interfere with the night sight of nocturnal species. The effects of spot lighting have not been well studied; however it is possible that dazzling by the spotlight may leave the individual bird more susceptible to predation or of damaging itself as a result of temporarily impaired vision. In the absence of evidence to the contrary birders should adopt a precautionary approach and keep the time that a bird is held in the spotlight to a minimum i.e. for seconds rather than minutes. The use of lower intensity spotlights, red filters and directing the light to the side of the subject will help reduce the discomfort to the bird.
9. The provision of artificial water and/or food supplies to birds has the potential to increase populations of some species, perhaps at the expense of others. If food is provided it should not be continuously supplied so that populations become dependant on the food supply. Populations which rely on an artificial food source may be unsustainably high and will consequently be vulnerable to an interruption to the food supply. Artificial feeding may also facilitate the spread of disease resulting from unsanitary feeding conditions and increased contact between individuals due to unnaturally high concentrations of birds. Populations which are dependant on artificial food sources also lose their wariness of humans and become more vulnerable to acts of persecution.
10. Bird photography provides a way of increasing public appreciation and understanding of birds and their habitat as well as providing enjoyment and satisfaction to the photographer but presents some additional problems which are specific to the activity.
11. The wellbeing of the subject must be the main concern and every effort should be made to ensure that the subject is not stressed in any way.
12. Particular care is required when photographing nesting birds which may abandon the nest as a result of disturbance caused by the erecting of hides and other equipment, by too frequent visits to the nest site or by the sounds and flash of the camera.
13. Photographers should not 'garden' the area around the nest by removing branches or other objects which may block a clear view of the nest as this will increase the exposure of the nesting birds to the weather and to predation.
14. There are no circumstances where modification to the nest or its approaches in order to force the bird into a more photogenic position is acceptable.



15. Photographers should keep a close watch on their subject and at the first signs of stress back off and give the bird time to recover.
16. Adopt the Precautionary Principle - If your activity may cause an adverse impact Don't Do It.

### **Commercial and Group Bird Watching**

Commercial and group tour operators have an obligation to promote ethical birding and to educate their clients on the issues pertaining to the conservation of birds.

- The leader of group tours (commercial or club) must promote ethical birding
- The client base for commercial tour operators is predominantly but not exclusively from a comparatively wealthy urban population. Participants are usually well educated and are often middle-aged or older. Most have some knowledge of the subject of the tour but are keen to learn more. This provides a good starting point to promote the principles of ethical birding and to publicize the issues pertaining to the conservation of birds.
- Commercial tour operators/guides should take advantage of their repeated visits to a particular location to contribute information to ornithological databases and ongoing studies. These people are also in an ideal position to see and report problems which affect the survival of birds and their livelihood, e.g. illicit capture of birds, environmental degradation, etc.
- In order to provide a satisfying experience for their clients which does not damage the location being visited, ecotourism operators should:
  - Seek to impart accurate information to their clients in such a way that appreciation and respect for the places visited is enhanced;
  - promote an understanding of the area visited and the issues which affect the management and long-term protection of the area; and
  - Help clients understand the factors which have resulted in rare or endangered species having small and/or limited populations and ranges and what is necessary to ensure the long term survival of the species.
  - When the opportunity arises or when the tour operator can incorporate such activities in the tour, then the tour operator should:
    - Involve their clients in activities which have a positive impact on the location being visited (e.g. voluntary conservation works);
    - Encourage participants to record observations, which may contribute to the overall understanding of the area being visited; and
    - Use local businesses to provide services for the tour group and be seen to support local services and by so doing, give local communities an incentive to conserve their natural environment;

### **Caving Code of Ethics**

#### **1. Introduction**

- 1.1 Recognizing the primary aim of protecting the caves and karst in the Philippines, cavers should actively promote cave conservation and sound management practices through example, education, advice and training.
- 1.2 This code establishes a minimum standard of caving practice.

- 1.3 The 'public image' of cavers and caving is poor and whenever possible every effort should be taken to improve this by good practice and good relationships with landowners and others.

## **2. Surface Considerations**

- 2.1 Landowners, tenants, managers or their representatives should be treated with courtesy and respect.
- 2.2 All caving parties should have specific or unspoken approval from the landowner and/or manager before entering any property, must follow only agreed routes and must not enter restricted areas. There may already be a formal access procedure, which must be adhered to - refer to published details.
- 2.3 The prevailing procedures regarding gates on properties and reserves should be followed, and care taken to cause no disturbance or damage to stock, crops, fences and walls, equipment or landscape features.
- 2.4 All parties should be as self-sufficient as possible and should not presume on the goodwill of landowners and others for water, supplies or assistance.
- 2.5 Where the cave entrance has been locked or otherwise secured it must be re-secured after use.
- 2.6 Gates should be installed at or in a cave where there is justification. This should only be done with the approval of the landowner or his representative, and the statutory conservation agencies if applicable.
- 2.7 Excavations should only be undertaken with the permission of the landowner, and only after an assessment of the environmental effects.
- 2.8 Do not leave uncovered or unfenced any excavations, which are likely to be a hazard to persons or animals.
- 2.9 Do not leave any litter, or cause pollution to the surface or watercourses.

## **3. Underground**

- 3.1 Camping in a cave should only be considered when intending to undertake a specific speleological or conservation objective.
- 3.2 Caving activity must be conducted in a manner responsible to the cave environment, taking particular care to avoid damage to speleothems, sediments, animals and other features. The maximum size of any party should be limited to that which provides the best quality of experience or achieves specific aims.
- 3.3 Modification of cave entrances and passages, including changing water levels in sumps or ducks and diversion of streams, should only be undertaken after all possible effects are assessed and the appropriate permission obtained. Any modifications must be the minimum required. The long-term impact of any work must be considered.

- 3.4 Established marked routes must be used. Single tracks should be followed and care taken to avoid needless deposition of mud. Mud throwing or modeling is unacceptable.
- 3.5 All human introduced wastes, including carbide, foodstuffs and excreta, must be removed from the cave and disposed of properly.
- 3.6 Cavers should not smoke in any cave. The effect is damaging to the environment and unpleasant for others.
- 3.7 Unnecessary marking including 'direction arrows' must not disfigure caves. Survey markers should be small and inconspicuous.
- 3.8 Disturbance must not be caused to any biotic community. No disturbance must be caused to bats.
- 3.9 The technique, agent and justification for air or water flow-tracing experiments should be chosen to minimize environmental impact and must be approved by the relevant authorities.
- 3.10 Collection of specimens, which should be approved by the appropriate authority, should be kept to the minimum required for study purposes only.

#### **4. General**

- 4.1 Recognized codes for minimum impact camping must be observed with particular emphasis on complete removal of rubbish.
- 4.2 Reports on speleological work and caving activities should be honest and accurate bearing in mind the detrimental effects of sensationalism or exaggeration.
- 4.3 Any published work must acknowledge other people's contributions to the work, either as clubs or individuals, published work or personal communication.
- 4.4 Consideration should be given before publishing an article on a cave, as to its intended audience, the wishes of the landowner and the subsequent effect on the cave.
- 4.5 When visiting an area or cave under the protection or management of another club or group, co-operation with that club or group is essential.
- 4.6 A club or group may have a historic interest in a site in which case they should be fully consulted over all matters pertaining to the site and their involvement sought.

### **MINIMUM IMPACT CAVING CODE**

Purely by entering a cave, cavers are one of the major inevitable sources of damage. The purpose of this Code is to make cavers aware of the measures that are necessary to reduce their impact on caves.

This code is divided into two sections. One relating to general cave visits and the other relating to the exploration of a newly discovered cave or section of cave:

## **General Cave Visits**

1. Every caving trip has an impact. It is important to select a site to visit that is appropriate to the group and types of trip being undertaken. Certain caves are less susceptible to damage and more suitable for novices. Advice is available from the regional caving organization or local clubs.
2. The party leader should be familiar with the cave and be aware of sensitive features.
3. Cave at a sensible pace for your party. You will see and enjoy more, and there will be less chance of damage to the cave and to you. This especially applies when you are tired and exiting a cave.
4. If there are novices on a trip, make sure that they are close to an experienced caver, so that the experienced caver can help them when required e.g. in difficult sections.
5. Keep your party to a small size. Specific requirements may apply in certain instances and site specific Cave Conservation Plans may stipulate a minimum and/or a maximum party size. In other cases the recommended party size should be no greater than six.
6. Cave as a team. Help each other through the cave and ensure that party member stay together.
7. Take care yourself and constantly watch where your party members are putting their heads. Warn your party members before they are likely to do any damage.
8. Keep tackles bags and packs as small as possible and transports them carefully.
9. Stay on marked or obvious paths. If no paths are marked or none is obvious take particular care. If in doubt don't proceed.
10. Learn to recognize cave deposits or features that may be damaged by walking or crawling on them.
11. Throughout a cave take care with the placement of hands and feet.
12. Wash you're caving overalls and boots regularly so that the spread of bacteria and fungi is minimized.
13. If any damage or degradation is noticed report this to the appropriate body as soon as possible.
14. Restore any missing or old marker tapes. If not possible, report the problem to the appropriate body as possible. Also report any instances where tapes appear to be ineffective.
15. If it is necessary to walk on flowstone do not proceed. If others have appeared to have walked over it, confirm that this is the route before proceeding and then only proceed with the utmost care having removed boots and other clothing as necessary. Remember that someone may have previously mistaken this as the route and further damage should be avoided.
16. Treat the cave biota with respect, watch out for them, and avoid disturbing them. Also avoid directly illuminating cave biota if possible.

17. If bones or other arch archaeological material are found this should not be moved unless under threat. Collection should only be undertaken with appropriate permission.
18. If you eat food in a cave ensure that small food fragments are not dropped as this may have an impact on the cave biota. One solution is to eat over a plastic bag to catch the food fragments. This can then be folded up and removed from the cave.
19. Ensure that all foreign matter is removed from caves. This includes human waste. If long trips are to be made into a cave, ensure that containers for the removal of liquid and solid waste are included on the trip inventory.
20. When rigging caves with artificial anchors, e.g. tapes, rope etc. ensure that minimal damage occurs to the anchor site. For example protect frequently used anchors such as trees with carpet, bags or cloth. Fixed anchors should only be used where natural anchors are inappropriate.
21. Where a Cave Conservation Plan is in existence abide by the recommendations contained therein for the conservation of the cave.
22. CAVE WITH CARE.

### **New Cave or Extension Explorations**

1. Scientific study must begin as quickly as possible. The existing microbiology of the new cave, both fungi, bacteria, and a world of protozoa, will almost certainly be irreversibly contaminated on the first trip. If cave microbiology has not been investigated, if cave microbiologists are available then includes them on initial explorations so that they may collect uncontaminated samples.
2. Do not enter new cave or passage if you do not have the equipment required undertaking the minimal activities such as surveying, taping and photography.
3. Use the cave survey to ensure that all alternative routes are examined prior to crossing sensitive or fragile areas. It may be necessary not to enter some areas, as they can be by-passed.
4. If a sensitive area must be crossed reduce future damage by defining a distinct, minimum practicable width path.
5. Discuss taping within the party and ensure that all ideas are evaluated before marking is undertaken.
6. Make a full photographic record before any other work is undertaken or visits made likely to result in any damage or deterioration. Copies of the photographs should be placed in a suitable library for safe keeping and submitted to the National Association for record purposes.
7. Instigate the production of a Cave Conservation Plan.
8. CAVE WITH CARE.

## **Cave Management Guidelines**

### **General Cave Policies**

- a. Vandalism is prohibited inside and outside the cave
- b. Urinating inside the cave is not allowed
- c. Spitting is not allowed inside the cave
- d. Throwing of any garbage material in any part of the cave is prohibited
- e. Eating and smoking is not allowed inside the cave
- f. Brining and drinking any alcoholic liquids is banned inside the cave
- g. Children under 10 years of age are not allowed to enter the cave
- h. Taking (removal) of any resources in the cave for souvenir material is prohibited
- i. Using lamps that emit smoke is not advisable in the cave
- j. Malicious acts are not allowed inside the cave.

### **Wild Caving**

- a. Observe proper sanitation when inside the cave especially improper waste disposal of materials that contain chemicals
- b. Children under ten years old are not allowed inside the caves. people with ailments (hear ailments, others) are discouraged from entering the cave
- c. Refrain from using lamps that emit excessive smoke
- d. Vandalism is not allowed inside the caves
- e. The number of visitors should be limited (to what cave can safely handle)

### **Resource Use – Swifts**

- a. Extraction of swift's nests from cave must be controlled. The removal should be scheduled, no more frequently than once every three months or different is the study of the birds requires it.
- b. All caves with swifts must be provided with a gateway/door (to prevent persons from entering the cave)

### **Resource Use – Guano**

- a. Extraction of guano from the caves should be on a yearly basis and the volume limited
- b. Prior to allowing groups/persons to extract guano from the caves, the barangay should secure a permit from the Protected Area Management Board authorizing them to initiate the activity.
- c. Only local residents are allowed to haul guano from the caves. Some visitors may be allowed if the law permits them to do so.

### **Resource Use – Cave Formations**

- a. Vandalism is not allowed on cave formations (such as writing, marking)
- b. Destroying or extraction of cave formations such as stalagmites, stalactites, candlesticks etc. for souvenir materials or other purposes is prohibited.
- c. Using lamps that smoke excessively is not advisable. The visitor should use electric lights (flash lights) or headlamps

### **Resource Use – Water**

- a. Cave visitors should avoid passing through running water if possible as this could be a source of drinking water for local residents.
- b. When inside the cave, people must avoid using substances (shampoo, soap, etc) that contain chemicals as this may contaminate the water.
- c. Caves that supply fresh water/are the main source of water for local residents must be protected with gates.
- d. Throwing of any garbage materials inside/along/near the cave or inside it is prohibited.

### **Scientific Value Caves**

- a. There is a need to conduct research on some rare species observed inside the caves.
- b. Only those with permits are allowed to enter the cave.
- c. Cave visitors/explorers should not be permitted to often enter caves that need further study and observations.
- d. People/groups who want to conduct research on caves must initially secure a permit from the Protected Area Management Board and from the barangay.

## **V. ETHICS ON CULTURAL TOURISM**

### **Principles of the Cultural Tourism Charter**

#### **Principle 1**

Since domestic and international tourism is among the foremost vehicles for cultural exchange, conservation should provide responsible and well managed opportunities for members of the host community and visitors to experience and understand the community's heritage and culture at first hand.

- 1.1 The natural and cultural heritage is a material and spiritual resource, providing a narrative of historical development. It has an important role in modern life and should be made physically, intellectually and/or emotively accessible to the general public. Programs for the protection and conservation of the physical attributes, intangible aspects, contemporary cultural expressions and broad context, should facilitate an understanding and appreciation of the heritage significance by the host community and the visitor, in an equitable and affordable manner.
- 1.2 Individual aspects of natural and cultural heritage have differing levels of significance, some with universal values, others of national, regional or local importance. Interpretation programs should present that significance in a relevant and accessible manner to the host community and the visitor, with appropriate, stimulating and contemporary forms of education, media, technology and personal explanation of historical, environmental and cultural information.
- 1.3 Interpretation and presentation programs should facilitate and encourage the high level of public awareness and support necessary for the long term survival of the natural and cultural heritage.
- 1.4 Interpretation programs should present the significance of heritage places, traditions and cultural practices within the past experience and present diversities of the area and the host community, including that of minority cultural or linguistic groups. The visitor should always be informed of the differing cultural values that may be ascribed to a particular heritage resource.

#### **Principle 2**

The relationship between Heritage Places and Tourism is dynamic and may involve conflicting values. It should be managed in a sustainable way for present and future generations.

- 2.1 Places of heritage significance have an intrinsic value for all people as an important basis for cultural diversity and social development. The long term protection and

conservation of living cultures, heritage places, collections, their physical and ecological integrity and their environmental context, should be an essential component of social, economic, political, legislative, cultural and tourism development policies.

- 2.2 The interaction between heritage resources or values and tourism is dynamic and ever changing, generating opportunities and challenges, as well as potential conflicts. Tourism projects, activities and developments should achieve positive outcomes and minimize adverse impacts on the heritage and lifestyles of the host community, while responding to the needs and aspirations of the visitor.
- 2.3 Conservation, interpretation and tourism development programs should be based on a comprehensive understanding of the specific, but often complex or conflicting aspects of heritage significance of the particular place. Continuing research and consultation are important to furthering the evolving understanding and appreciation of that significance.
- 2.4 The retention of the authenticity of heritage places and collections is important. It is an essential element of their cultural significance, as expressed in the physical material, collected memory and intangible traditions that remain from the past. Programs should present and interpret the authenticity of places and cultural experiences to enhance the appreciation and understanding of that cultural heritage.
- 2.5 Tourism development and infrastructure projects should take account of the aesthetic, social and cultural dimensions, natural and cultural landscapes, bio-diversity characteristics and the broader visual context of heritage places. Preference should be given to using local materials and take account of local architectural styles or vernacular traditions.
- 2.6 Before heritage places are promoted or developed for increased tourism, management plans should assess the natural and cultural values of the resource. They should then establish appropriate limits of acceptable change, particularly in relation to the impact of visitor numbers on the physical characteristics, integrity, ecology and biodiversity of the place, local access and transportation systems and the social, economic and cultural well being of the host community. If the likely level of change is unacceptable the development proposal should be modified.
- 2.7 There should be on-going programs of evaluation to assess the progressive impacts of tourism activities and development on the particular place or community.

### **Principle 3**

Conservation and Tourism Planning for Heritage Places should ensure that the Visitor Experience will be worthwhile, satisfying and enjoyable.

- 3.1 Conservation and tourism programs should present high quality information to optimize the visitor's understanding of the significant heritage characteristics and of the need for their protection, enabling the visitor to enjoy the place in an appropriate manner.
- 3.2 Visitors should be able to experience the heritage place at their own pace, if they so choose. Specific circulation routes may be necessary to minimize impacts on the integrity and physical fabric of a place, its natural and cultural characteristics.



- 3.3 Respect for the sanctity of spiritual places, practices and traditions are an important consideration for site managers, visitors, policy makers, planners and tourism operators. Visitors should be encouraged to behave as welcomed guests, respecting the values and lifestyles of the host community, rejecting possible theft or illicit trade in cultural property and conducting them in a responsible manner which would generate a renewed welcome, should they return.
- 3.4 Planning for tourism activities should provide appropriate facilities for the comfort, safety and well being of the visitor that enhance the enjoyment of the visit but do not adversely impact on the significant features or ecological characteristics.

#### **Principle 4**

Host communities and indigenous peoples should be involved in planning for conservation and tourism.

- 4.1 The rights and interests of the host community, at regional and local levels, property owners and relevant indigenous peoples who may exercise traditional rights or responsibilities over their own land and its significant sites, should be respected. They should be involved in establishing goals, strategies, policies and protocols for the identification, conservation, management, presentation and interpretation of their heritage resources, cultural practices and contemporary cultural expressions, in the tourism context.
- 4.2 While the heritage of any specific place or region may have a universal dimension, the needs and wishes of some communities or indigenous peoples to restrict or manage physical, spiritual or intellectual access to certain cultural practices, knowledge, beliefs, activities, artifacts or sites should be respected.

#### **Principle 5**

Tourism and conservation activities should benefit the host community.

- 5.1 Policy makers should promote measures for the equitable distribution of the benefits of tourism to be shared across countries or regions, improving the levels of socio-economic development and contributing where necessary to poverty alleviation.
- 5.2 Conservation management and tourism activities should provide equitable economic, social and cultural benefits to the men and women of the host or local community, at all levels, through education, training and the creation of full time employment opportunities.
- 5.3 A significant proportion of the revenue specifically derived from tourism programs to heritage places should be allotted to the protection, conservation and presentation of those places, including their natural and cultural contexts. Where possible, visitors should be advised of this revenue allocation.
- 5.4 Tourism programs should encourage the training and employment of guides and site interpreters from the host community to enhance the skills of local people in the presentation and interpretation of their cultural values.
- 5.5 Heritage interpretation and education programs among the people of the host community should encourage the involvement of local site interpreters. The programs

should promote a knowledge and respect for their heritage, encouraging the local people to take a direct interest in its care and conservation.

- 5.6 Conservation management and tourism programs should include education and training opportunities for policy makers, planners, researchers, designers, architects, interpreters, conservators and tourism operators. Participants should be encouraged to understand and help resolve the at times conflicting issues, opportunities and problems encountered by their colleagues.

## **Principle 6**

Tourism promotion programs should protect and enhance Natural and Cultural Heritage characteristics.

- 6.1 Tourism promotion programs should create realistic expectations and responsibly inform potential visitors of the specific heritage characteristics of a place or host community, thereby encouraging them to behave appropriately.
- 6.2 Places and collections of heritage significance should be promoted and managed in ways which protect their authenticity and enhance the visitor experience by minimizing fluctuations in arrivals and avoiding excessive numbers of visitors at any one time.
- 6.3 Tourism promotion programs should provide a wider distribution of benefits and relieve the pressures on more popular places by encouraging visitors to experience the wider cultural and natural heritage characteristics of the region or locality.
- 6.4 The promotion, distribution and sale of local crafts and other products should provide a reasonable social and economic return to the host community, while ensuring that their cultural integrity is not degraded.

*ICOMOS International Scientific Committee on Cultural Tourism.*

## **VI. BIODIVERSITY AND SUSTAINABLE TOURISM**

**Berlin Declaration BIOLOGICAL DIVERSITY AND SUSTAINABLE TOURISM** (March 8th, 1997)

- Recognizing that a healthy environment and beautiful landscapes constitute the basis of long-term viable development of all tourism activities;
- Observing that tourism increasingly turns to areas where nature is in a relatively undisturbed state so that a substantial number of the world's remaining natural areas are being developed for tourism activities;
- Recognizing also that tourism may generate or increase a demand for wild animals, plants or products made thereof for souvenirs, and thus endanger species and affect protection measures;
- Further recognizing that there is a need to value and protect nature and biological diversity as an essential basis for sustainable development;
- Convinced that nature has an intrinsic value which calls for the conservation of species, genetic and eco-system diversity to ensure the maintenance of essential life support systems;

- Furthermore convinced that sustainable forms of tourism have the potential to contribute to the conservation of biological diversity outside and inside protected areas;
- Bearing in mind that vulnerable areas, including small islands, coasts, mountains, wetlands, grasslands and other terrestrial and marine ecosystems and habitats of outstanding beauty and rich biological diversity, deserve special measures of protection;

### **Agree on the following principles:**

#### **1.General**

To conserve nature and biological diversity as a major resource of tourism activities, all necessary measures should be taken to ensure that the integrity of ecosystems and habitats is always respected. Additional burdens from tourism development should be avoided in areas where nature is already under pressure from tourism activities. Preference should be given to the modernization and renovation of existing tourism facilities.

- Measures inspired by the principle of precautionary action should be taken to prevent and minimize damage caused by tourism to biological diversity. Such measures should include monitoring of existing activities and assessment of environmental impacts of proposed new activities, including the monitoring of the negative effects of wildlife viewing.
- Policies and, where appropriate, legislation, environmental economic instruments and incentives should be developed to assure that tourism activities meet the needs of nature and biological diversity conservation, including mobilizing funding from tourism.
- Concepts and criteria of sustainable tourism should be developed and incorporated in education and training programs for tourism professionals. The general public should be informed and educated about the benefits of protecting nature and conserving biodiversity through sustainable forms of tourism. Results of the research and concepts of sustainable tourism should be increasingly disseminated and implemented.

#### **2. Specific**

Tourism activities, including tourism planning, measures to provide tourism infrastructure, and tourism operations, which are likely to have significant impacts on nature and biological diversity should be subject to prior environmental impact assessment that integrated tourism plans are implemented and enforced.

- Tourism should be based on environmentally friendly concepts and modes of transport. Negative impacts of transport on the environment should be reduced, paying particular attention to environmental impacts of road and air traffic, specifically in ecologically sensitive areas.
- Sports and outdoor activities, including recreational hunting and fishing, particularly in ecologically sensitive areas should be managed in a way that they fulfill the requirements of nature and biological diversity conservation and comply with the existing regulations on conservation and sustainable use of species.
- Special care should be taken that living animals and plants and products made thereof for souvenirs are offered for sale only on the basis of a sustainable and environmentally sound use of the natural resources and in conformity with national legislation and international agreements.

- Tourism should be developed in a way so that it benefits the local communities, strengthens the local economy, employs local workforce and wherever ecologically sustainable, uses local materials, local agricultural products and traditional skills. Mechanisms, including policies and legislation should be introduced to ensure the flow of benefits to local communities.  
Tourism activities should respect the ecological characteristics and capacity of the local environment in which they take place. All efforts should be made to respect traditional lifestyles and cultures.
- Tourism should be restricted, and where necessary prevented, in ecologically and culturally sensitive areas. All forms of mass tourism should be avoided in those areas. Where existing tourism activities exceed the carrying capacity, all efforts should be made to reduce negative impacts from tourism activities and to take measures to restore the degraded environment.
- Tourism in protected areas should be managed in order to ensure that the objectives of the protected area regimes are achieved. Wherever tourism activities may contribute to the achievement of conservation objectives in protected areas, such activities should be encouraged and promoted, also as cases to test in a controlled manner the impact of tourism and biodiversity. In highly vulnerable areas, nature reserves and all other protected areas requiring strict protection, tourism activities should be limited to a bearable minimum.
- In coastal areas all necessary measures should be taken to ensure sustainable forms of tourism, taking into account the principles of integrated coastal area management. Particular attention should be paid to the conservation of vulnerable zones, such as small islands, coral reefs, coastal waters, mangroves, coastal wetlands, beaches and dunes.
- Tourism in mountain areas should also be managed in environmentally appropriate ways. Tourism in sensitive mountain regions should be regulated so that the biological diversity of these areas can be preserved.
- In all areas where nature is particularly diverse, vulnerable and attractive, all efforts should be made to meet the requirements of nature protection and biological diversity conservation. Particular attention should be paid to the conservation needs in forest areas, grasslands, fresh water eco-systems, areas of spectacular beauty.

## **VII. MARINE/COASTAL**

### **Responsible and Respectful Diving and Snorkeling**

[www.projectsealink.org](http://www.projectsealink.org)

[www.coral.org](http://www.coral.org)

**Coral reefs are one of the world's most spectacular marine habitats and snorkeling or diving is an excellent way of exploring them. Being a coral friendly snorkeler or diver not only helps to protect these fragile areas directly, it also helps to raise awareness for coral reefs.**

**Follow these simple guidelines to help protect the coral reefs you visit.**

- Practice snorkeling skills and neutral buoyancy and train others to do so; if you feel unsure, wear a snorkel vest

- Be careful where you get into the water to avoid walking on corals
- Do not grasp coral, stand on it, or kick up sediments
- Keep gauges, fins and other accessories from dragging on the bottom
- Take only photos, leave only bubbles – remember look but don't touch, or collect shells or organisms
- Observe animals exhibiting their natural behaviors rather than stimulate them to entertain
- Do not feed wildlife
- Handle wildlife as little as possible, if at all
- Do not harass protected species, give sea turtles at least a 20-foot radius of approach; dolphins at least 50 yard radius of approach; and whales 100 yard radius of approach
- Do not use gloves in coral environments – it will make you much more careful

### **On boats**

- Choose operations whose boats make use of moorings when available – anchors destroy fragile corals when set directly on the reef
- Make sure garbage is well stowed, especially light plastic items such as cups and bags that can easily be blown overboard
- Be sure to take away everything that was brought on board and dispose of garbage safely and responsibly

### **As a responsible snorkeler or diver**

- Support Marine Protected areas and other conservation projects
- Pay user fees in recognized protected areas which are actively supporting coral reef conservation
- Encourage and support the use of boat moorings
- Participate in cleanups
- Take your garbage home with you,
- Refuse to buy souvenirs made from coral, turtles or other marine life – often this is illegal as many endangered species are protected under CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) and by national laws

**Speak up: make sure your snorkeling or diving buddies understand about these simple conservation practices – we need to work together to protect and preserve coral reefs for all time**

## **Anchoring, Boat Operations and Maintenance**

Preventing anchor damage requires minimal investment or operational change, but can return significant benefits in terms of increased revenues from tourists who want to see healthy, intact reefs.

- Anchor only in sand or rubble channels well away from important ecosystems and reefs, never in coral; use mooring pins whenever possible
- Secure and dispose of all trash in proper containers on shore
- Recycle at harbor or other land-based facilities
- Use non-toxic, biodegradable cleansers for clean-up, such anti-bacterial soap

- Educate tourists who rent boats the proper way to anchor, before the renters set out; explain the sensitive nature of the ecosystem and the importance of avoiding shallow areas with motorized vessels
- Obey all speed signs to avoid hitting marine mammals.
- Keep boat engines properly maintained to minimize petroleum product pollution
- Always carrying both a primary and secondary anchor line, so vessels can be securely moored in emergency situations
- When applicable use nontoxic antifouling paint on boat hulls,

### **Seafood Consumption and Souvenir Purchasing**

Tourists are often unaware that a seemingly harmless purchase of a seafood dish or marine ornamental souvenir can have serious negative consequences for the environment. Marine recreation providers have a unique opportunity to influence the choices tourists make by practicing and promoting low-impact, non-consumptive activities. Additionally, operators can provide information to tourists on where they acquire seafood and what types of local species – whether for sale as seafood or souvenirs – are threatened, endangered, or otherwise protected by law and thus should be avoided.

- **EDUCATE CLIENTS TO BE INFORMED CONSUMERS.** Provide information to clients about the sensitive nature of coral reef ecosystems, including which species in a given region should not be consumed as seafood or purchased as souvenirs because they are rare, threatened or endangered.
- **SUPPORT ECOLOGICALLY SUSTAINABLE FISHERIES PRACTICES**  
If you serve seafood cuisine, do not choose fish that are threatened or endangered. Instead, support suppliers that harvest non-threatened or endangered fish and other species in an ecologically sustainable manner. Provide tourists with this information, in order to promote sustainable fisheries.
- **AVOID SELLING OR PURCHASING MARINE ORNAMENTAL SOUVENIRS**  
Inform tourists how they can help prevent the removal of key components of marine ecosystems for short-term gain by avoiding the purchase of marine ornamental souvenirs.
- **OBSERVE THE LAW.** Abide by all regional, national and international laws regarding the harvesting of marine species.

### **Recreational Fishing**

Recreational fishing has long been a popular activity. Spear fishing and pole fishing in coral reef areas have also gained in popularity in recent years, among both tourists and local people.

- **PRACTICE CATCH-AND-RELEASE FISHING** Partial or total catch-and-release programs can be especially effective when dealing with threatened or endangered fish species.
- **AVOID SPEAR FISHING**  
Many critics believe that spear fishing is too effective a method of harvesting marine resources. Additionally, the limited time available to SCUBA divers, as opposed to free divers, often contributes to excessive and rapid harvesting by SCUBA divers.
- **PREVENT MARINE POLLUTION FROM FISHING GEAR**  
Marine debris poses a serious threat to both coral reefs and open ocean species. Because monofilament line, lead weight and associated fishing gear can tangle and kill corals and many other forms of marine life, ensure that no marine debris is left behind from your fishing practices.

- **OBSERVE THE LAW**

laws and regulations that govern fish catch sizes and seasons. are generally established to protect fisheries, and recreational fishers will benefit by following them.

- **USE “ECOLOGICAL COMMON SENSE”**

In addition to observing laws and regulations; maintain awareness to avoid spawning aggregations, reproductive seasons and harvesting of juveniles. Additionally, when a large school of potential game fish is located, contribute toward the sustainability of the ecosystem and the fishing industry by not harvesting the entire school.

### **Marine Wildlife Viewing**

As the importance of coastal tourism has grown in recent years, marine recreation providers have realized that many marine species previously considered “harvestable” now generate much greater economic value through wildlife viewing by tourists. Yet, seemingly harmless viewing of wildlife can have serious impacts if not conducted responsibly.

- **AVOID CHASING MARINE ANIMALS**

Whether in the water or on a boat, always operate at a slow speed and never chase marine animals. If whale watching, it is best to approach animals very slowly from the side, as opposed to head-on or from behind, and keep at a safe distance (i.e. engines should shut off at 100 meters from whales). If animals approach the vessel, slow down or stop and put propellers in neutral. Always let the animal determine its own path and behavior.

- **PRACTICE A NO-CONTACT POLICY**

Always avoid touching and handling marine animals such as turtles, whales, dolphins

- **NEVER FEED WILD ANIMALS.**

Providing artificial food to sharks, reef fish or other marine wildlife can alter their behavior and impair their natural feeding abilities and survival mechanisms.

- **AVOID SURROUNDING ANIMALS**

If several tour boats are engaged in whale watching, for example, a concerted effort should be made to avoid surrounding the animals and causing unnecessary stress. This same concept applies to individuals or small groups that are in the water viewing wildlife.

- **OBSERVE THE LAW**

In recent years, many destinations have passed laws banning or limiting the use of thrill craft or fast boat operations in sensitive marine habitats, in order to protect slow moving or endangered marine animals such as manatees, turtles and whales. Additionally, in many places it is illegal to touch or handle marine wildlife, particularly if the animals are threatened or endangered.

- **BE LITTER CONSCIOUS**

Marine debris is one of the greatest threats to wildlife in the oceans today. If engaged in boating or coastal activities, always make sure that trash goes in its proper place and does not end up in the marine environment.

- **AVOID ILLEGAL IMPORT OF CAPTIVE ANIMALS**

Companies that participate in the purchasing of marine wildlife for entertainment shows should complete all purchases solely through legal channels.

- **ENSURE A HEALTHY ENVIRONMENT FOR CAPTIVE ANIMALS.** Companies should ensure that animals are properly and adequately cared for by professionals and are not used in ways that are cruel or threaten the health of the animal.

## **VIII. GUIDELINES FOR NATURE TOUR OPERATORS AND TOURISM INDUSTRY**

### **Guidelines for Responsible Ecotourism Operators**

*(adopted from The Ecotourism Society [www. ecotourism.org](http://www.ecotourism.org) )*

1. Prepare travelers to minimize their negative impacts while visiting sensitive environments and cultures.
2. Prepare travelers for each encounter with local cultures and with native animals and plants.
3. Minimize visitor impacts on the environment and local cultures by offering literature, briefings, leading by example, and taking corrective action.
4. Minimize group impact on destinations by maintaining small group size and using adequate leadership.
5. Ensure managers, staff and contracted employees participate in all aspects of company policy to prevent impacts on the environment and local cultures.
6. Give managers, staff and contract employees access to programs that will improve their ability to communicate with and manage clients in sensitive natural and cultural settings.
7. Contribute to the conservation of the regions you visit.
8. Provide competitive, local employment in all aspects of business operations.
9. Use site-sensitive accommodations and campsites that are not wasteful of local resources or destructive to the environment and that provide ample opportunity for learning about the environment and sensitive inter-change with local communities.

## **IX. GOOD PRACTICES FOR HOTELIERS**

“Good practice can result in direct cost savings by reducing energy and water bills, and sewage treatment and waste disposal costs. Conservation efforts such as hazardous waste management and water treatment will mean a safer workplace and common spaces, which, in turn, can decrease staff turnover, reduce lost work time due to injury or illness, and lower liability risks.

Good practice can be an effective marketing tool within the growing international market of guests seeking environmentally and socially responsible destinations.

Furthermore, adopting sound environmental and social practices offer an opportunity to maintain the quality of a hotel's surroundings, thereby improving the overall experience for guests and increasing support from government officials and neighboring communities.

To contribute to Biodiversity and Nature Conservation hoteliers could:

- Work with government officials and other local groups to evaluate the local situation and identify the best strategies for benefiting to promote conservation
- Partner with local or nation groups to promote conservation
- Make financial contributions to local conservation efforts
- Sponsor environmental education on surrounding communities
- Provide in-kind support to biodiversity management
- When possible set side land as a private reserve
- Encourage staff to get involved in volunteer projects such as beach clean-up
- Educate guests as to how can they make a positive contribution to local biodiversity conservation efforts