

Community Perceptions of Scuba Dive Tourism Development
in Bien Unido, Bohol Island, Philippines.

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Abstract

The Coastal Conservation and Education Foundation (CCE Foundation), a Philippine environmental organization, in collaboration with Region 7 municipality leaders from Cebu, Leyte, and Bohol, as well as various financial donors, is striving to improve the marine resource management of the Outer Danajon Bank in the Philippines. One of the goals is to develop scuba dive tourism along the Outer Bank, beginning with the municipality of Bien Unido on Bohol Island. Despite previous efforts to attract investors and tourists by the Bien Unido mayor, dive tourism is currently absent from the municipality. During the summer of 2011, the mayor, the CCE Foundation, and a private real estate developer, JCAD Inc., developed an agreement to invest in infrastructure and livelihood training in Bien Unido for the purpose of developing a scuba dive tourism industry.

This study analyzes current community viewpoints on the development of dive tourism in Bien Unido and in four selected dive tourist sites. The study consists of thirty-three qualitative interviews conducted in Bien Unido and four other dive tourist sites as well as 1,117 quantitative surveys conducted with community members throughout the central portion of the Philippines (Region 7). This study complements the Danajon Bank Marine Park Project of the CCE Foundation and makes recommendations to improve the management of the Danajon Bank Double Barrier coral reef with protected areas and alternative livelihood projects linked to tourism development. The interviews served to define tourism and to document the specific needs of each *barangay*, or community, for tourism development.

The qualitative survey revealed generally positive attitudes regarding scuba dive tourism development. Ninety-one percent of respondents believe tourism will help the *barangay* and most would participate in selling food/drink or being a recreational tour guide for tourists. Interview and survey respondents expect that economic benefits will outweigh any social or environmental challenges, primarily alternative livelihoods and increased revenue for the municipality. Overall, Bien Unido and Region 7 community members will likely welcome visitors to their communities due to the

expected benefits regardless of other negative environmental and social externalities such as increases in resource pressures and losses of tradition.

Four additional municipalities were selected as “tourism developed sites” to further explore the negative and positive impacts of dive tourism, as perceived by the *barangay* captains or council, (N= 4) over a range of five to thirty years. These findings revealed challenges that were not mentioned in Bien Unido interviews or in the Region 7 qualitative surveys including changes in the price of living, increases in drug trafficking and sex trade, and private investors taking control of community decisions.

“As long as tourists like to come, then we want them all. If they will come, we will welcome them all.”

Bien Unido interviewee, July 19, 2011

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Introduction

Danajon Bank Double Barrier Reef:

Danajon Bank is located off the northern shores of Bohol Island in the Philippines and is a unique double barrier reef system that covers approximately 272 km² of marine space (FISH 2004) (Figure 1). It is an area of interest for the United States Agency of International Development (USAID) conservation support due to collaborative management efforts, a rich diversity of marine life, and negative impacts on the reef coupled with community reliance on the reef. On Bohol Island, ten municipalities have exclusive rights to the region, making it an ideal area for collaborative management system. The reef has a rich diversity of marine life, including coral and fish species, which attracts fishers from surrounding jurisdictional regions. This system has been negatively impacted by overuse, pollution, destructive fishing methods, and aquaculture (Christie et al. 2006).

The island communities depend on the reef, thus requiring it to be a functioning ecosystem; however, declining ecosystem services have significant negative impacts on socioeconomic systems on Bohol Island in particular. Green et al. (2002) reported that over 60% of Bohol residents live below the poverty line (USD \$120 per month) and have an increasingly lower capacity to use supplemental livelihood alternatives. Ecological impacts from mismanaged natural resources have a direct impact on the poorest sectors of Bohol Island (Armada 2009). The Danajon Bank is considered a critical resource area for fishing, with approximately 28,240 fishers from seventeen municipalities relying on Region 7 marine resources (FISH 2010). Current threats to the reef are overfishing, destructive fishing, and sedimentation and pollution from human disturbances (Huttche et al. 2002). Overfishing is an issue because the poverty stricken residents are unable to relieve the fishing pressure and still survive. Poverty reduces the capacity of Danajon Bank residents to change their behavior and also drives fishers to use efficient and destructive fishing methods to catch increasingly smaller fish (FISH 2010).

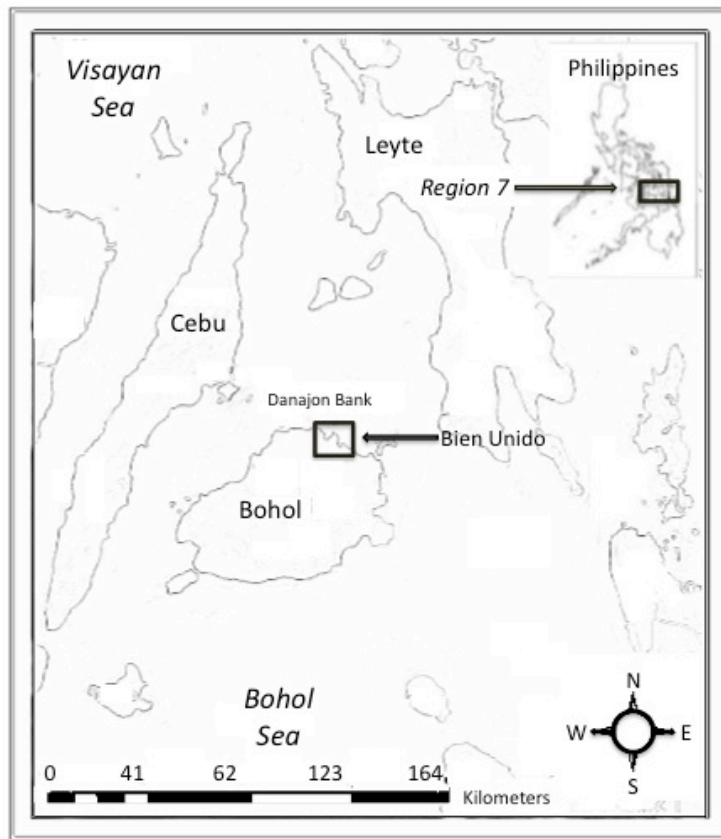


Figure 1. Region 7 and Bien Unido location in the Philippines.

The CCE Foundation

Region 7 (Figure 1) has been identified as an area of interest for conservation efforts, including the efforts of the Coastal Conservation and Education Foundation (CCE Foundation). The CCE Foundation is a non-governmental environmental organization (NGO) incorporated in the Philippines and the leader of a project that works to conserve, manage, and sustain the biodiversity of marine and coastal areas while improving the quality of life for local resource dependent communities.¹ In 2011, the CCE Foundation proposed to expand individual Marine Protected Areas (MPA) into a concurrent network by establishing a 6,000 hectare Danajon Bank Marine Park over the area within two years. All coral reefs are protected in the Philippines (RA 8550) and the Philippines Marine Sanctuary Strategy aims to protect 10% of coral reef habitat area in no-take MPAs by the year 2020. Currently, only 2.7-3.4% of the total coral reef habitat in the Philippines is protected in a no-

¹ <http://www.coast.ph/where-we-are/project/default.aspx?id=ORRNk27Hk85sqrT3quirZp%2BuHxxv6TvPTqURLnIXQRE%3D>

take MPA (Weeks et al. 2009). With financial support from the USAID, the project's goal is to “enhance the quality of life for resource dependent stakeholders in Danajon Bank through effective management of a large scale MPA, improved conditions of habitats and fisheries, and establishment of economic development opportunities” (CCE Foundation 2011).

Danajon Bank Marine Park Project: Tourism Development Goal

One goal of the Danajon Bank project is to secure food sources and tourism opportunities by enhancing livelihood options (CCE Foundation 2011). Achieving this objective is complex and involves several interdependent activities in order to promote tourism at a particular site. Starting in 1996 with the Coastal Resource Management Project (CRMP) (CRMP 2003), and again with the Fisheries Improved for Sustainable Harvest (FISH) Project in 2004 (FISH project 2004), Northern Bohol has been included in programs that encouraged community collaboration, engagement, and training on alternative livelihoods². Due to the history of projects on Northern Bohol (Project Seahorse (Vincent 2007), Coastal Resource Management Project (CRMP 2004b), and Integrated Coastal Resource Management Project (World Vision 2009)) and the willingness to collaborate with the CCE Foundation, the municipality of Bien Unido was selected as a project node for dive tourism development in the USAID Danajon Bank Project in 2011. The solution to increasing the protection of corals in the Philippines is to identify priority locations that are ecologically representative of reef ecosystems that can be protected (Weeks et al. 2009). The Danajon Bank Double Barrier Reef has been identified as such a priority protection location (Ong et al. 2002).

Bien Unido: “Bohol’s Last Frontier”

Bien Unido is located on the northern coast of Bohol Island (Figure 1). The municipal mayor, Señor Niño Reyes, has served as mayor in Bien Unido since 2004. In 2010, the Bien Unido Double Barrier Reef Dive Camp, which was owned by the municipality, went bankrupt from a lack of tourism revenue. On August 8, 2011, a private investment company, JC Armamento Development Inc. (JCAD), hosted a groundbreaking ceremony to signal the official beginning of a new private development initiative. The developers took over ownership and management of the Bien Unido Double Barrier Reef Dive Camp's hotel infrastructure and staff, renaming the site the Bohol Yacht Club. The transition in ownership is a shift that Mayor Reyes and the CCE Foundation hope will help solve the issue of the low demand for dive tourism. Bien Unido is advertised³ as “Bohol’s Last Frontier” and promotes activities such as fish feeding, seaweed farm tours, scuba diving, island

² <http://www.oneocean.org/fish/danajon.html>

hopping, speedboat rides, snorkeling, and mangrove tours³. The municipal officers and investment development planners have not involved community-level organizations, such as *barangay* councils and the individual community members in tourism planning thus far. The CCE Foundation recognizes the importance of involving all stakeholders in the planning and management stages of development. The success of community-based projects appears to depend on the extent to which local communities support the management process (Christie et al. 2003, Sipapu, 1973). This thesis is an analysis of community viewpoints of dive tourism development and describes the perceived social, environmental, and economic changes according to community members in Bien Unido, select tourist destination sites, and throughout Region 7.

Stakeholder Involvement

A stakeholder is any individual or group of people with interest in a particular area, issue, or system from any position in society (Grimble and Wellard 1997). Effective coastal management involves citizens in the decision making process. Human indicators help to measure the support of conservation efforts, place a cultural significance on the marine resources, and allow managers to develop management programs tailored to the local situation (McLeod et al. 2009). Jamal and Stronza (2009) demonstrated that in order to implement a successful management plan, a single stakeholder should not fully control the planning and implementation of marine resource management. It is important to include perspectives that represent all stakeholder groups in the decision-making process regardless of relative power or interest. In tourism planning, this is likely to involve residents, local businesses, employees, government, tourists, and activist groups (Sautter and Leisen 1999). Currently the planning in Bien Unido has involved the municipal mayor, developers from the JCAD, and managers from CCE Foundation (personal communication, Rizaller Amolo, June 26, 2011). This analysis will incorporate community perspectives into the planning process.

A *barangay* is the smallest unit of government below the municipality, which is lead by a *barangay* captain and is supported by *barangay* chancellors, who constitute the *barangay* council. The purpose of the *barangay* council is to represent the wants and needs of its community members. There are fifteen *barangays* in the municipality of Bien Unido. The CCE Foundation recognizes the importance of including the opinions of *barangay* officials in the planning and implementation of the tourism management plan in Bien Unido. This analysis integrates perspectives of key stakeholders in Bien Unido regarding the mayor's plan for development into CCE Foundation's planning and implementation process. The group includes all mainland *barangay* officials, four island *barangay* officials, seaweed farming people's organizations, two women weaver organizations, municipal

³ <http://www.bienunido.com/>

officers, and local residents that had not previously been involved in the dive tourism planning process.

Structure for Bien Unido

Resource Assessment

A case study of a nearby tourism destination on Olango Island (White et al. 2003) defines the stages of tourism development as 1. Assessment, 2. Participatory ecotour product development, 3. Development of linkages, 4. Capability building, and 5. Transfer of business administration to community. This analysis serves as an initial assessment of community support for a dive tourism development project in the municipality of Bien Unido on Bohol Island. According to the White et al (2003) assessment stages, this study used surveys and interviews assess whether the community will take ownership of a tour product, are willing to participate in the development process, are willing to be trained in new skills, and participate in tourism management. This type of assessment has also been labeled Participatory Coastal Resource Assessment (PCRA) (Elman, 1999). The next phase of tourism development, according to these studies, is product development, developing linkages, capacity building, and transferring business administration to the community.

Results Framework

This analysis followed an inductive framework from the interviews with the goal of defining sections of development from needs to benefits to challenges in the future. The first section is “Progress” and identifies steps that informants for this study consider primarily important for Bien Unido to prepare for a dive tourism industry. The second section is “Benefits” and accounts for the primary good concepts and products that Bien Unido perceives as coming from a dive tourism industry. The final section is “Challenges” to account for the issues that the Bien Unido community will need to handle in the future. Most of the challenges are nested under the progress items and are related to the challenges of progress. Additional challenges surfaced from tourism developed sites. They are separate from the primary challenges in the figure because they were not mentioned as primary concerns by Bien Unido community members, but were clear challenges in developed sites.

Methods

Location

Bien Unido on northern Bohol Island was selected as an interview site because the CCE Foundation and municipal mayor are collaboratively implementing a dive tourist site in Danajon Bank. Figure 1 shows Region 7, Bohol Island, and the Danajon Bank in proximity to the rest of the Philippines. Surveys were administered throughout Region 7 to locals with a primarily marine-based

occupation. Interviews were conducted in Bien Unido, and comparison sites were selected near southern Bohol, southern Cebu, and northern Cebu to do interviews to provide context for the Bien Unido case. These other communities have a scuba dive tourism industry already established for varying numbers of years.

Semi-structured interviews

Interviews with eleven mainland *barangay* captains, four island *barangay* captains (Bilangbilangan east and west, and Hingotanan east and west), two municipal office workers, and seventeen mainland community members were conducted between July and August of 2011. All interviews were designed to gather perceptions, expectations, desires, and concerns about tourism development in Bien Unido. Each interview was conducted in English by the principal investigator (Luritta Whiting). See Appendix A for a sample of interview scripts. A native Cebuano assistant was present for most interviews to ensure the integrity of the message and to help clarify ideas if the respondent had difficulty expressing in English. Each interview was recorded and later transcribed in English. If there were meanings lost in the native language, transcriptions were translated into English with the assistance of a CCE Foundation staff. After each interview, field notes were completed in order to capture details regarding setting, gestures, and overall situational analysis in addition to what was digitally recorded. During analysis, themes were pulled from the transcripts regarding the definition of tourism, tourism benefits and challenges specific to each *barangay*, and how increased municipal revenue should be used.

Interviews were also conducted with four *barangay* captains in *barangays* in popular dive tourist destination sites. Interviews were conducted at Cabilao, Panglao, Moalboal, and Malapascua Island to gather perceptions of tourism from *barangay* captains who experience tourism everyday. See Appendix B for a sample of the interview script used. They identified concerns from past developments, desires for the future, and gave realistic perspectives on tourism developments in communities similar to Bien Unido. The comparison sites helped complete an analysis of the potential future of Bien Unido through the study of similar tourist destinations.

Social surveys:

A total of 1,117 structured social surveys were administered face-to-face from July through August in 2011 in the native dialect (Cebuano) by eleven local enumerators working under contract for the CCE Foundation. The number of surveys administered in each municipality was proportional to *barangay* population (NSO 2007). Municipalities are located in Southern Leyte, Bohol, and Cebu City. Each respondent had a marine-based occupation and was selected through convenience sampling by the enumerator. The sample was not random. Each respondent is the head of a household and participates in an occupation reliant on marine ecosystem services such as fishing or seaweed farming.

Respondents answered ten questions about perceptions of tourism as part of an extensive survey developed by Dr. Samonte-Tan and Aloysius Cañete, both contractors for the CCE Foundation to survey Region 7 respondents on the economic values of the reef and social structure of the community. See Appendix C for the tourism questionnaire. One thousand one-hundred and seventeen surveys were encoded into a Microsoft Excel® (2008) datasheet for my analysis. Only surveys that answered the tourism questions were included in an analysis for each question. Multiple responses were used for several questions and therefore do not reflect one answer per respondent.

The transcripts from semi-structured interviews and social surveys were coded and common codes were grouped into themes (Kvale 1996). The datasets were collected and analyzed separately but are presented together in this paper under their common themes. All percentage data originates from the social survey throughout Region 7 while all quotes originate from semi-structured interviews in Bien Unido and the selected dive tourist sites.

Findings and Discussion:

Findings from this analysis show that Bien Unido needs a livelihood development plan that focuses on fishermen, farmers, and seaweed farmers of the region in order to supplement or replace their current income. Livelihood programs will also help to create jobs related to tourism. The community also needs to improve current facilities and develop infrastructure named by each barangay captain (summarized in Appendix D), including roads, community buildings, beach parking, hospital services and emergency transportation. Residents are limited by a lack of education regarding tourism and the environment, as well as training for job opportunities in the tourist industry. Respondents claim that this training should come from the government (in general). Finally, this analysis also shows that Bien Unido believes a comprehensive management plan that controls tourism development and natural resource usage will alleviate other stated challenges. The plan should allocate funding for water treatment planning, investment in public facilities, management of fisheries, education and training, and livelihood development programs for fishers, farmers, and seaweed farmers.

Results from the semi-structured interviews (in Bien Unido and in the select tourist sites) and the social survey show themes of progress, benefits, and challenges associated with dive tourism development. The framework presented in Figure 2 represents results from all interviews as well as the social survey (See Appendix D for detailed answers from each *barangay* captain).

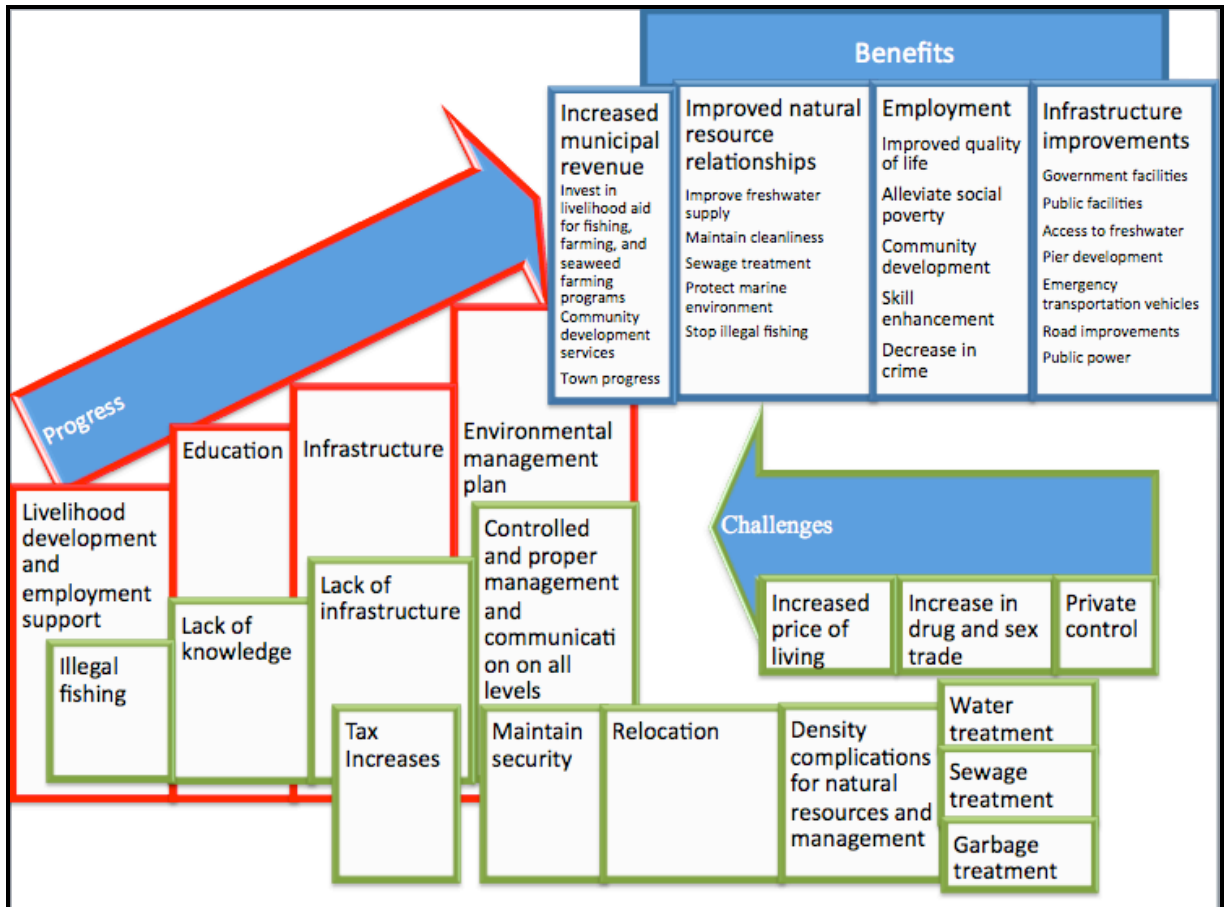


Figure 2: Community perceptions of tourism in Bien Unido and scuba dive tourist-destination sites

Figure 2 shows the framework of the findings of this study. The diagram shows themes that emerged from the interviews and social survey, which are: 1. progressive steps needed to prepare for tourism (outlined in red); 2. benefits of developing Bien Unido for tourists (outlined in blue); and 3. challenges with the planning, implementation, and success of tourism (outlined in green). Under each of these themes are sub-themes that respondents claimed are primary considerations for each heading. The following sections explore each heading (progress, challenges, and benefits) and sub-heading in detail with statistics from the social survey and quotes from the semi-structured interviews where applicable.

1. Progress

In each interview, respondents were asked to describe, in detail, the needs of their barangay in order to be prepared for tourists to visit. Four themes were identified in order to progress the communities toward attracting and hosting

“Many things have to be done to make this island ready for tourism.”
Bien Unido interviewee, July 21, 2011

tourists: livelihood development and employment support, infrastructure, education, and developing an environmental management plan.

a. Livelihood development and employment support

Each *barangay* captain is responsible for representing the wants and needs of his/her *barangay* community members to the municipal government while also managing community affairs. When asked to describe the primary need of their particular *barangay*, each captain cited economic incentives in the form of livelihood development for the poor. The livelihood development program needs center on government investment in employment support for the local people. Commonly cited examples are investments in farm machinery for agriculture and supplying fertilizers, seeds, and pesticides so that farmers can increase harvest volumes. Another example is investment in fishing technologies and assistance to illegal fishers in making the transition to become a legal fisher by investing in legal fishing gear. The third most commonly cited example is investing in seedlings and processing for seaweed farming. Currently, seaweed farmers borrow money from a private investor in order to purchase seedlings and straw for each harvest. They are then charged substantial interest on the funds that they borrowed. Each of these issues requires financial investments that could be supplemented or supplied by municipal taxes levied on foreign investors. One Bien Unido community member claims, “the first priority of ...our mayor is agricultural projects because they are the source of income for our people.” The resident added that developing the necessary projects to assist the people to earn more money and “make life easier, that is my dream” shows the hope behind this investment need.

In addition to supporting livelihood programs, tourism can create multiple types of jobs. Travelers from Bohol, Cebu, Leyte, and locations outside of the Philippines need places to stay, transportation within and out of the municipality, food to eat, and activities during a visit. These travelers would aid in supporting local employment in Bien Unido and the economy will likely benefit. The creation of jobs for housekeepers, utility workers, construction workers, transportation drivers, tour guides, and dive guides are positions that respondents are willing to fill. Foreign investments in sectors such as restaurants, hotels, rental boats, and the general industry was widely cited by the Filipino community as the most important way in which dive tourism will benefit the community.

“Filipinos are poor, so if the tourists will come here, because they are rich, they have the capacity to buy anything they like.”

Bien Unido interviewee, July 23, 2011

b. *Infrastructure*

Closely related to livelihood development is the investment in infrastructure. Several specific needs were named for each *barangay* (Appendix D). Generally, a need to invest in and improve government facilities (mainly *barangay* hall) and public facilities (public restrooms) were needs indicated by public officials. Expansions in these areas may also lead to local jobs that would keep the facilities running. Infrastructure improvements to facilitate more efficient irrigation for agriculture as well as additional agriculture equipment are also necessary. Other examples of infrastructure needs include public facilities and road improvements, the development of a pier for docking boats and investment in emergency transportation vehicles and health services facilities. The island *barangays* in particular have a need for access to health services and quick transportation to the mainland for emergencies. Transportation by a typical fishing pump-boat is relatively expensive for an island community member. It takes an hour in favorable weather to reach the Tubigon hospital. Investing in a speedboat and gasoline for emergency transportation is not financially feasible for the local government; however, this investment seems to be required in order for the community to progress beyond basic health services.

“We need development in this *barangay*. Development of livelihood and development of our *barangay* structures...first of all, we need a building for medical treatment.”

Bien Unido interviewee, July 23, 2011

Visitors also need access to limited resources such as freshwater, power, and sometimes even internet. Although the local community members drink freshwater from private wells, travelers from the region need public access to water while foreign travelers need access to bottled or treated water. These are infrastructure improvements that will help to attract investors and promote dive tourism.

“We have no water. So we only drink rainwater, which is not feasible for tourists.”

Bien Unido interviewee, July 21, 2011

c. *Education*

Education is necessary for progress. In order to support tourism, respondents revealed that they think it is important to be educated about tourism. The respondents also expressed a desire for education on how to properly promote, manage, and control tourism. Many of the respondents seemed unable to state what should be in a management plan to make it successful, but trusted that the government knows how to plan for tourism development. There is a clear, pressing need for education and job training for new opportunities if investors create employment for local community members.

“For a successful project... education is needed first. Education to the people in the area where the project will be established.”

Bien Unido interviewee, July 19, 2011

According to a well-experienced municipal worker, investors want trained workers for the food and beverage industry upon hiring. To improve the current economic conditions of Bien Unido community members, they need training to take advantage of emerging opportunities.

However, trainings are only useful if tourism is successful. Education needs to happen concurrently with the expansion of the tourism industry in order for locals to benefit from tourism. Bien Unido has fronted the bill to train six former illegal fishers into dive guides, but there are currently no dive tourists. Other training needs for locals include language skills, cooking and serving skills, enforcement training, and financial management. In combination with other initiatives, education and job training is required in order for locals to take advantage of emerging tourism opportunities.

There also appears to be a community-wide need for environmental education (Figure 3). According to Bien Unido community members, many beaches and mangrove areas have undergone rapid degradation in quality and quantity, and are filled with garbage. Local mangroves are typically cut for firewood and there is limited garbage collection.

According to a municipal officer, there is currently not enough garbage to invest in a successful recycling program. Additionally, even if such a program were

“Education...not to litter. Garbage everywhere is the biggest problem we have in the Philippines.”

Bien Unido interviewee, August 28, 2011

deemed necessary, local community members do not seem to understand the importance of such programs. Therefore, funding to establish a mangrove conservation or garbage collection programs should not be established without concurrent education campaigns. Education campaigns to keep community members from discarding garbage into the surrounding waters and to explain how trees and mangroves can improve their quality of life. Some community members expressed additional challenges in improving the environmental conditions without improving livelihood conditions first. There is also limited incentive to invest in improvements to environmental conditions without the presence of people that are demanding improvements.

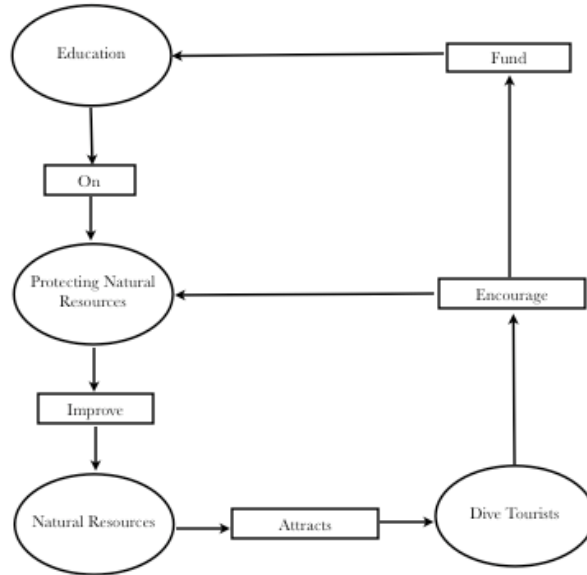


Figure 3. The role of education and protection of natural resources.

d. *Environmental management plan:*

Perceptions show that community members believe that if tourism is started and managed properly, tourism will help benefit the environment. Due to the range of perceptions and support for tourism development, planning is typically difficult for managers (Trousdale 1999 & Butler 1993). Tourism can place strain on the natural limited resources and a proper management plan is required to control it. The respondents who acknowledge the potential strain on natural resources due to an increase in the demand for resources from tourists also claim that there needs to be a proper management plan. Management can reduce the adverse effects of tourism impacts through continuous administration of effective management plans through all levels of government (Trousdale 1999). Challenges of management in Boracay Island (also in the Visayas, Philippines) centered around distrust between the locals and the government, historical mismanagement of the marine resources, and the exclusion of stakeholder groups in the decision-making process. Better governance appears to be the key to addressing these challenges in sustainable tourism (Trousdale 1999).

There are also respondents who did not state an additional strain on resources as a challenge to tourism development for *Bien Unido*. Current ordinances such as the Executive Order for Community-Based Forest Management (1995) and Coastal Resource Management Plan (CRMP 2004a) claim that communities have the right and responsibility to manage forests and municipal waters. Eleven percent of survey respondents claim an increase in conservation efforts would be a benefit of tourism development (Figure 5).

Community members expressed the need for comprehensive wastewater treatment, sewage treatment, and garbage treatment plans. A similar need was expressed in the form of building infrastructure and investment in public facilities; however, the respondents cited an explicit need for a plan for each of the treatment facilities. In addition to a plan, there needs to be support and investment for these plans, as well as enforcement and education to follow them. The pressure on natural resources is likely to increase with an increase of visitors staying in one location, particularly in a small community like Bien Unido. Overcrowding in local beaches, added amounts of garbage, and an increased demand on the local supply of fish could increase the rate of current resource use. A change in supply of each item will change the supply and demand of each connected item in the resource chain. For example, a greater demand of local fish by tourists staying in Bohol Yacht Club may increase the demand local fishers place on the already over-fished local reef. Imported fish will bring garbage in packaging to Bien Unido. Complications such as increases in the demand of natural resources require a management plan that allows for expanding resources. One such way to transfer increasing demands for fish is to invest in pond raised fish such as Tilapia. Appropriate investments and management plans that encourage such investments to manage the demand for fish will help relieve pressure on coral reef habitats from subsistence fishing.

2. Benefits

Overall, when asked if tourism would help, hurt, or have no effect on a community, ninety-one percent of respondents claimed that tourism would help (777 individuals) and less than one percent believed it would hurt (8 individuals), shown in Figure 4. The remainder of respondents perceived that tourism would have a neutral impact on their barangays (8%; 66 individuals).

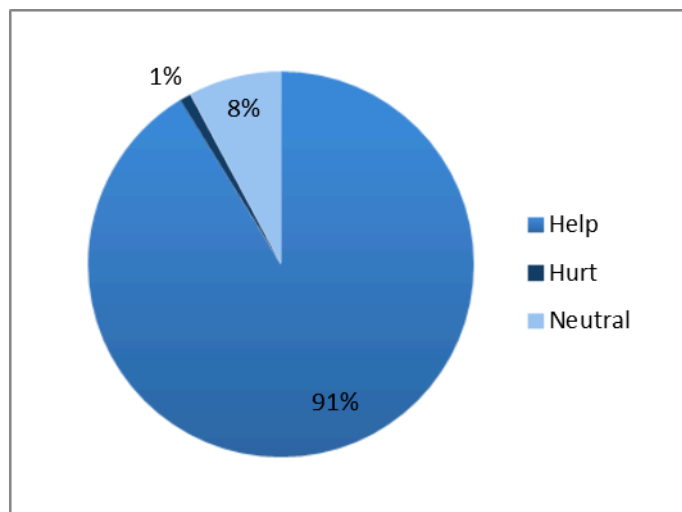


Figure 4: Survey results regarding impacts of tourism development

Respondents throughout Region 7 were then asked to summarize the perceived benefits of developing tourism within their barangay (Figure 5). Thirty-two percent (488 individuals) identified the overall investment in alternative livelihoods as the primary benefit of tourism development. Twenty-eight percent of respondents (426 individuals) claimed that an increase in financial revenue is the largest benefit. The development of infrastructure (9%: 140 respondents) and an increase in conservation efforts (11%: 170 respondents) were also named as noteworthy benefits. These themes were also identified during Bien Unido interviews as important benefits of local dive tourism. Each of these is further explored in the sections below and is represented in the framework diagram above (Figure 2).⁴

Figure 5 also shows that survey respondents identified a social benefit of cultural exchange (6%: 97 respondents) between the local community members and tourists and an increase in community pride (1%: 20 respondents). Additionally, ninety-nine respondents (6%) identified improvements in technology within a barangay as primary benefits while another ninety-three (6%) claimed advances in education were perceived as the most important benefit of tourism development. In Bien Unido, these themes are included as benefits but were also explored as things that need to be done to prepare for tourism (Figure 2).

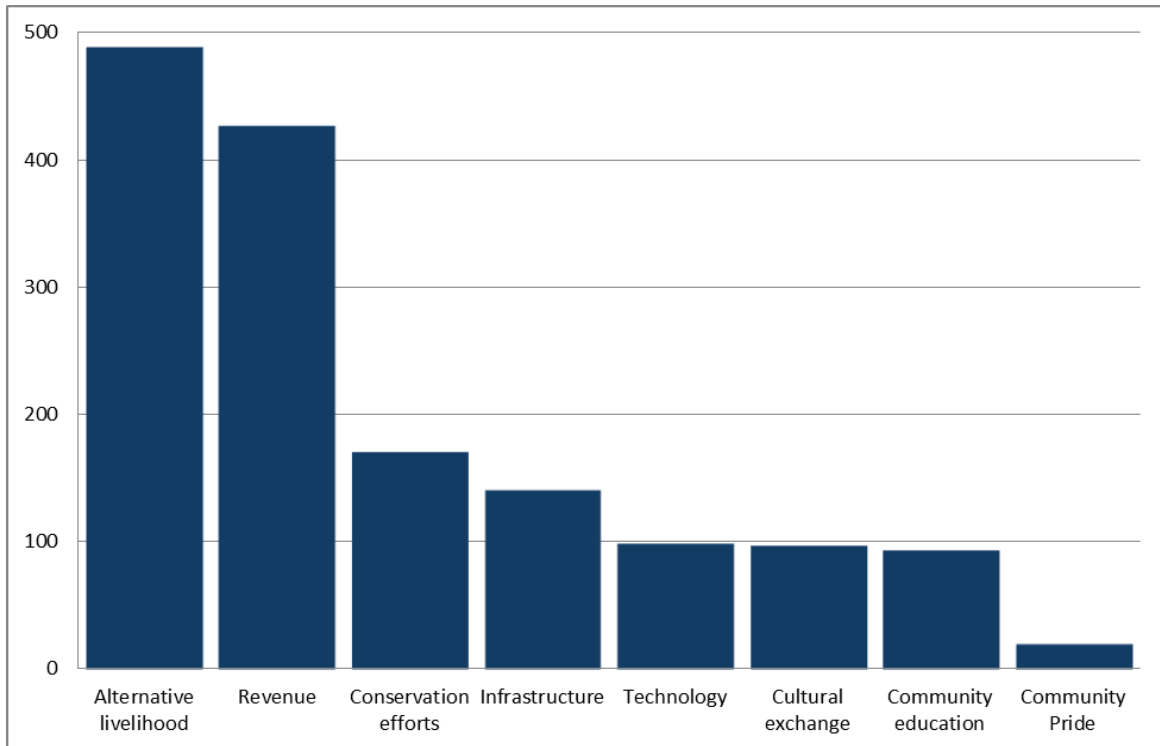


Figure 5: Benefits of tourism development.

⁴ The total number of responses exceeds the total number of survey responses due to multiple answers allowed for this question, and some respondents did not answer the question.

a. Alternative Livelihoods

As discussed above, thirty-two percent of the social survey respondents identified livelihood development as a primary benefit of the development of tourism. This assumes that the government would spend increases in tax revenue on developing jobs for unemployed community members. Trousdale supports these findings with a case study of Boracay, Philippines and reports that the primary motivation to support tourism is economic, including an increase in profits, jobs, income, and government revenue (1999). Tourism has shown to be the primary employment for unskilled labor, migrants, part time and female workers above equal investments in other economic activities because the investment generates a larger and more rapid increase in employment benefits (ILO 2002).

“Trainings and seminars for the people would enhance their abilities to perform well.”
Bien Unido interviewee, July 19, 2011

Respondents throughout Region 7 were asked to identify employment opportunities that they would take advantage of (Figure 6). Thirty-three percent of respondents (347 individuals) claimed that they would participate in selling food or drinks. Survey respondents all participated in some marine based occupation, which explains a large percentage of responses supporting this endeavor. Another twenty-three percent claimed that they owned a boat and would be willing to guide tourist recreation activities (236 respondents). Twenty-five percent of respondents (260 individuals) claim that they would not be involved in any tourism activity if the opportunity were available in their barangay. One hundred and fifty-eight individuals claimed that they would like to sell handcraft goods to visitors in their barangay (15%), and another thirty-seven respondents (4%) would participate by renting a space in their home to visiting tourists.

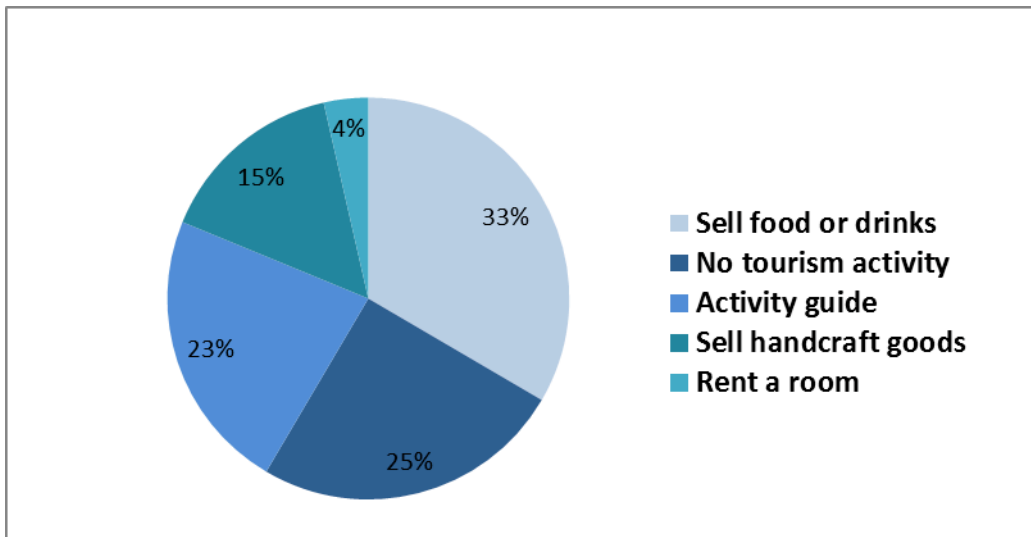


Figure 6. Tourism activities survey respondents would take advantage in their *barangay*.

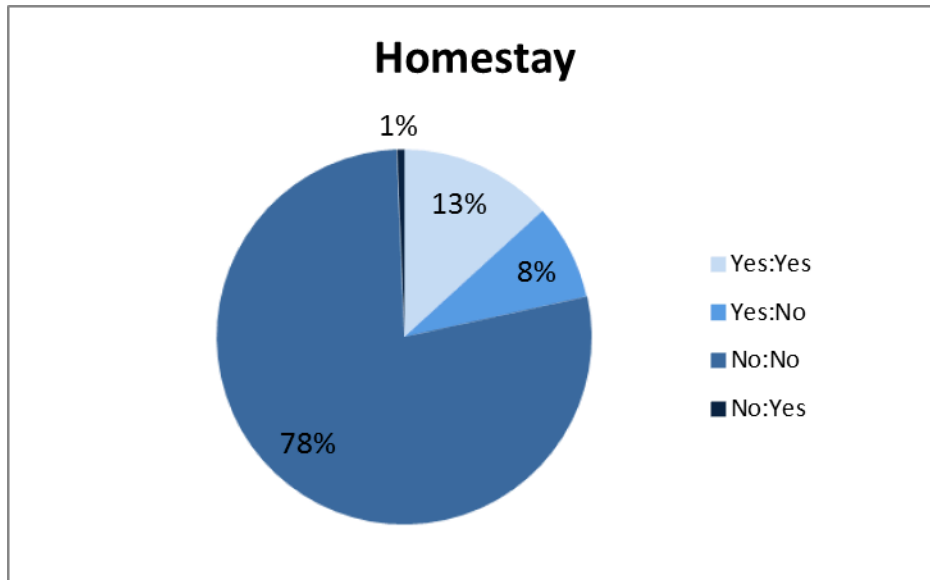


Figure 7. Ability and willingness to house tourists in homes.

Additionally, all respondents were asked if their homes were large enough to accommodate housing guests for a fee (Figure 7). Seventy-eight percent of the respondents (633 individuals) that answered the question (813 total responses) claim that their house is not large enough and they would not host a guest. Thirteen percent⁵ (108 individuals) claim that they would be willing to participate, for a fee. When asked about the fee amount, the prices respondents would charge for two visitors to stay in their home for one week including cooking for guests during that week averages at \$2779 PhP (~\$63 US)(Figure 8). For lodging only, responses average \$2491 PhP (~\$56 US), and food only responses average \$3092 PhP (~\$70 US).

⁵ 108 respondents claimed they would be willing to participate in lodging opportunities for tourists, while only 36 respondents claimed that in the first question. The second question targeted housing and introduced a fee, further exploring acceptable levels of community member participation in tourism opportunities.

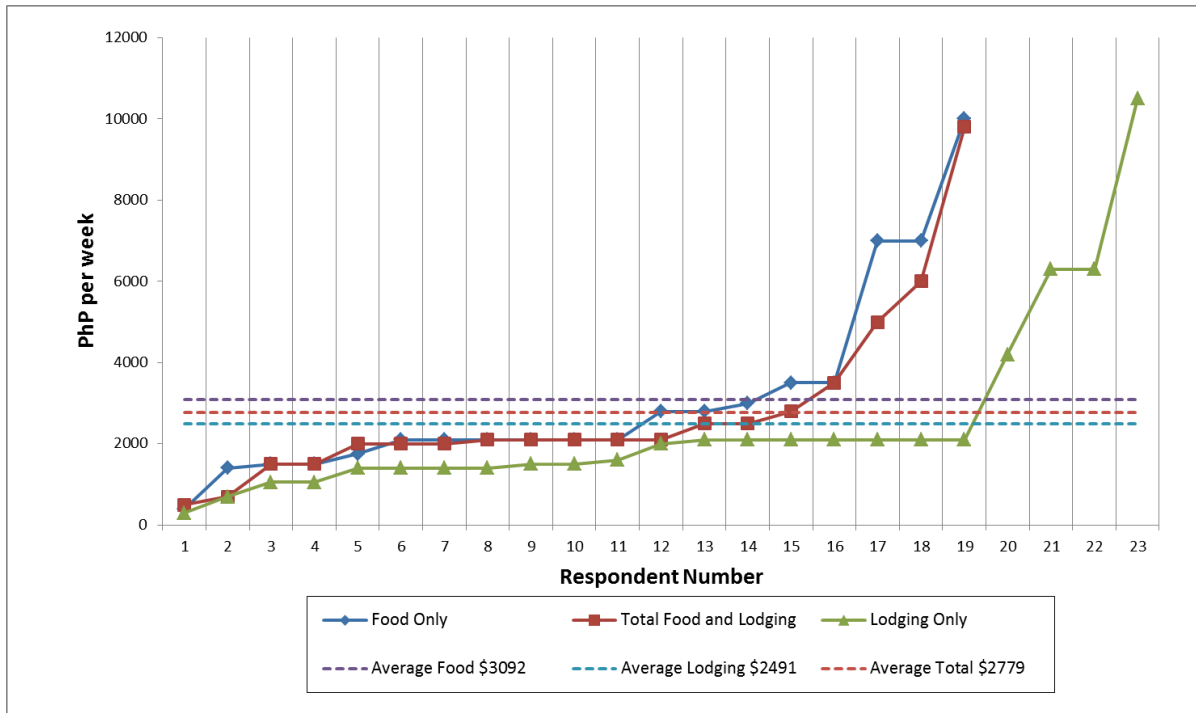


Figure 8. Home-stay pricing. Respondents were asked to name a fair price (in Philippines pesos- PhP) for two visitors to stay in their home for seven days. Some respondents only gave a price for food, some for lodging with food, and some for lodging only⁶.

b. Increased municipal revenue

Twenty-eight percent of the survey respondents throughout Region 7 identified an increase in municipal revenue as a primary benefit of tourism development. Bien Unido community members explained benefits that were identified within the category of “increased municipal revenue.” Figure 2 shows that many interviewees claimed that an investment in livelihood aid for fishing, farming, and seaweed farming programs are important needs that are funded by municipal revenue. Interviewees also expressed ideals for municipal revenue to be used for investments in social services for community development and town progress in general.

“The money will come to our town through taxes. With that, we can start livelihood programs to help our poor people. I think the government would support our agriculture livelihood programs.”
Bien Unido interviewee, July 19, 2011

⁶ Respondents to Figure 8 were fewer than the previous two questions regarding lodging with total responses for “Lodging” from 23 individuals, “Total Food and Lodging” from 19 individuals, and “Food only” from 19 other individuals.

c. *Improved natural resource relationship*

In the benefits question (Figure 5) 11% of the respondents (170 individuals) claimed that an increase in conservation efforts were a perceived benefit of tourism. To Bien Unido community members, this seems to reflect an important theme of improving natural resource relationships as well (Figure 2). Interviewees in Bien Unido claim that the community would benefit from an improved freshwater supply, a sewage treatment plan, and a

“Waste. That is a very big problem here. One of our goals is to stop pollution. I think we need recycling. We have to recycle, but we don’t know how.”
Bien Unido interviewee, July 19, 2011

protected marine environment if tourism were enhanced within their municipality. Scuba dive tourism was specifically cited for helping to protect the marine environmental resources because the municipality will manage the resources for tourist enjoyment. Other research claims that 1 km² of healthy coral reef in the Philippines has a potential (according to location and condition) to generate direct benefits of USD \$31,900-\$113,000 per year (White et al. 2000). A similar study, which estimates the direct financial benefit for Region 7 communities by protecting Danajon Bank would encourage increased investment in coral reef conservation for the area.

An issue related to improving the relationship with natural resources is also the benefit of eliminating illegal fishing methods. Respondents believe that if tourism is successful, illegal fishing will be under the control of the municipality. Also, community members claim that the municipality would need to maintain cleanliness of the streets and environment. Survey and interview results strongly suggest that respondents (6% in the survey) believe an improvement with the natural resource conditions will occur due to tourism development.

d. *Infrastructure improvements:*

Nine percent of survey respondents (141 individuals) claim that improvements in infrastructure are a primary benefit of tourism development. This benefit is closely linked to the benefit of improved infrastructure from tourism development (Figure 5). Bien Unido respondents named improvements in government and public facilities, as well as necessary road improvements. Some respondents cited investments such as pier development, public access to power, and emergency transportation vehicles and equipment as a benefit that also falls into this category. Universal access to freshwater and clean public buildings was identified as an important benefit for the Bien Unido community members. Tourism infrastructure can benefit the livelihood of poor community members

“Right now, our *barangay* hall is very small and when it rains the water floods up to my knees. We will make infrastructure improvements once the *barangay* has more money to invest in construction projects.”
Bien Unido interviewee, July 27, 2011

including transportation, communication, water supply and sanitation improvements, energy availability, improved public security and health services (UNESCO, 2005). Some of these benefits could be required to improve the municipality in order to attract tourists, and all of them are perceived benefits of tourism development.

3. Challenges

Respondents were asked to identify challenges that they believe their *barangay* would face if tourism increased. As mentioned earlier, only one percent of respondents believe that tourism development would hurt their *barangay*. The number of respondents that expressed concerns about tourism development is lower than the total number of respondents that support the benefits, but significant (1061 to 1533 responses⁷). During the planning process, it is important to distinguish between acceptable and unacceptable levels of change (Farrell, 1976).

Twenty-five percent of respondents (256 individuals) identified “resource pressure,” including competition for natural resources, as a potential negative impact of tourism development (Figure 9). Eighteen percent (177 individuals) and sixteen percent (156 individuals) claimed that loss of traditional culture and technology impacts respectively, were concerns worth mentioning. Also, pollution is a primary concern identified by one hundred and forty-six respondents (15%) and coral reef destruction is a challenge claimed by one hundred (10%) respondents. Fifteen percent (129) of respondents had concerns about an increase in the drug, alcohol, and sex trade if tourists started visiting their *barangay*. Lastly, issues of crowding and congestion were shown to be a top concern for forty (4%) respondents throughout Region 7. The United Nations also reported these issues from tourism development in undeveloped communities such as Bien Unido (2005).

⁷ Total responses reflect multiple answers for one question per respondent and therefore do not reflect the total number of surveys administered.

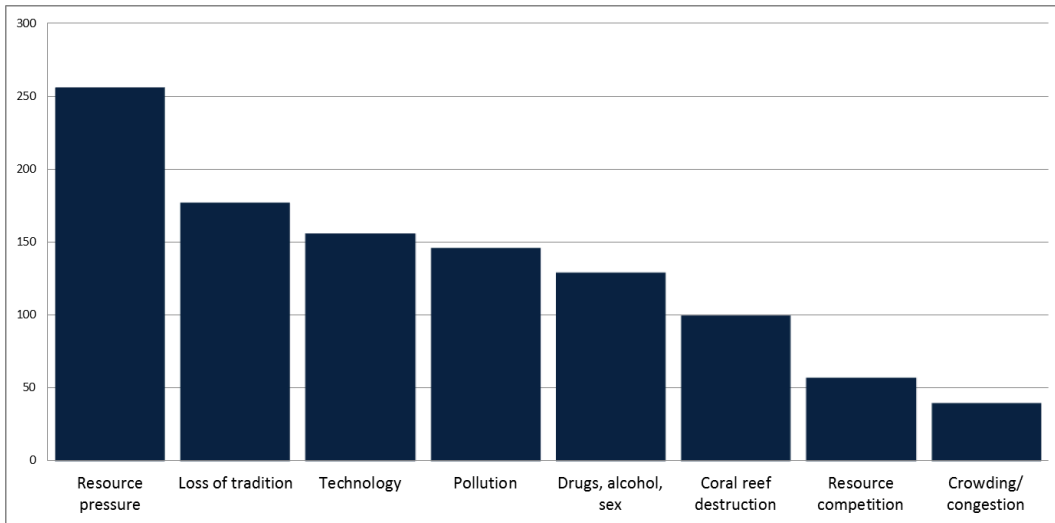


Figure 9: Negative impacts of tourism as identified by marine occupation respondents.

Some of the challenges named during the social survey came out in the semi-structured

“Stopping illegal fishing is good for the environment, is more productive for fish, brings more tourists here to see the big fish, and we will have something valuable to share with the next generation. Also, more fish mean the local people will have their daily food needs met.”

Bien Unido interviewee, July 15, 2011

interviews as well (Figure 2). Many of the challenges that were identified were also mentioned as areas for improvement to prepare for tourists as well as a benefit of tourism. The challenges are outlined in green on Figure 2. A primary challenge is illegal fishing (from a variety of fishers). This has been presented as a need for livelihood development as well as a

benefit for improved natural resource relationships if illegal fishing is alleviated. Additionally, a general lack of knowledge (environmental and tourism planning) was identified as necessary in preparation for tourism. The overall goal of sustainable tourism is to observe environmental changes in the ecosystem and develop an adaptive planning tool according to those changes (Department of Business, Economic Development and Tourism 2002). Social survey respondents and interviewees recognized the complexity of this challenge, particularly in an attempt to reduce illegal fishing to protect the marine resources and attract dive tourists.

“We need more order and more democracy. The laws have not stopped illegal fishing. We need enforcement of the laws because illegal fishermen fight the law. Danajon Bank is hard to protect. We don’t know how to stop illegal fishing there.”

Bien Unido interviewee, July 28, 2011

An overarching challenge is the development and implementation of a tourism management plan. Most interviewees in Bien Unido that recognized a need for a management plan before tourism development also identified that the government faces a challenge in developing the plan. It needs to

be comprehensive and deal with complex issues while identifying and implementing effective solutions. The sub section to the management plan in Figure 2 shows issues that are identified as necessary within the plan in order to maintain security, protect individuals from relocation, and control the natural resource complications through water treatment, sewage treatment, and garbage treatment facilities and plans. Nicholson claims that the key to addressing most of the challenges to planning for and implementing sustainable tourism is better governance (1997). The challenges of increased resource pressure and lacking infrastructure and knowledge are further explored below.

a. *Resource Pressure*

Survey results show that twenty-five percent of respondents (256 individuals) are concerned about an increased pressure on natural resources as a primary challenge in tourism development throughout Region 7. Interviews in Bien Unido highlighted challenges that the municipality may encounter when developing tourism. In order to maintain security and to alleviate pressures on natural resources, community members, barangay captains, and municipal officers in Bien Unido stated that a

“Tourism could really help environmental management of the coral reefs.”
Bien Unido interviewee, July 15, 2011

comprehensive management plan is necessary. The plan should prepare for treating sewage and wastewater as well as garbage, considering land allocation for increases in usage. A plan will allow for better control over development (Trousdale 1999; Zurick 1995). This study found that once a comprehensive management plan is in place, perceived threats of environmental resource pressures, pollution, coral reef destruction, and crowding are considered as minor in comparison to the economic benefits of dive tourism. Tourism is often a major factor that contributes to land conversion, freshwater resource pressure, coral reef destruction, and garbage dumping issues (Gossling 2003). A management plan can allocate financial revenues and establish protocol to address each negative impact and control the development process. The Bien Unido management plan should prepare for pollution control, alternative sources of resources to decrease natural resource pressure, protect coral reefs, control technology expansion, establish regulations for drug and alcohol use, establish rules to protect young women, limit crowding impacts, and maintain important cultural traditions. The management plan should also allocate financial resources to develop alternative livelihood projects throughout each *barangay*, encourage cultural exchange, educate the community, and establish necessary infrastructure.

b. *Lack of knowledge and infrastructure:*

A theme that presented itself in Bien Unido (although it did not emerge in the Region 7 survey) was a lack of knowledge and infrastructure. This result calls for two future

“The people are not aware of how to stop pollution and protect the environment. We need solid waste management program and education on how to properly dispose of garbage.”
Bien Unido interviewee, July 19, 2011

steps; additional ecological education coupled with infrastructure investment. Education and infrastructure improvements were also perceived as a benefit of increased tourism. Respondents throughout Region 7 were asked what they would need in order to take advantage of new opportunities and the results are presented in Figure 6. They also identified the agency or organization that should be held responsible for filling the corresponding need gap (Figure 10).

Forty-one percent of respondents (202) that answered the survey question claim that money is their primary need in order to take advantage of a growing number of opportunities. After money, thirty-three percent (164) of respondents claim that they need knowledge about the tourism industry, and nineteen percent (96 individuals) claim they need access to equipment. Upon further investigation, the respondents identified the government as the responsible party for most of these needs, including money, knowledge, and equipment. Non-governmental organizations (NGOs) are the secondary potential source of financial support (as seen by the survey respondents) for these same needs. Private businesses were mentioned by twenty-eight percent (159 individuals) as a potential source of financial support. Many of these answers assume that private businesses include private lending.

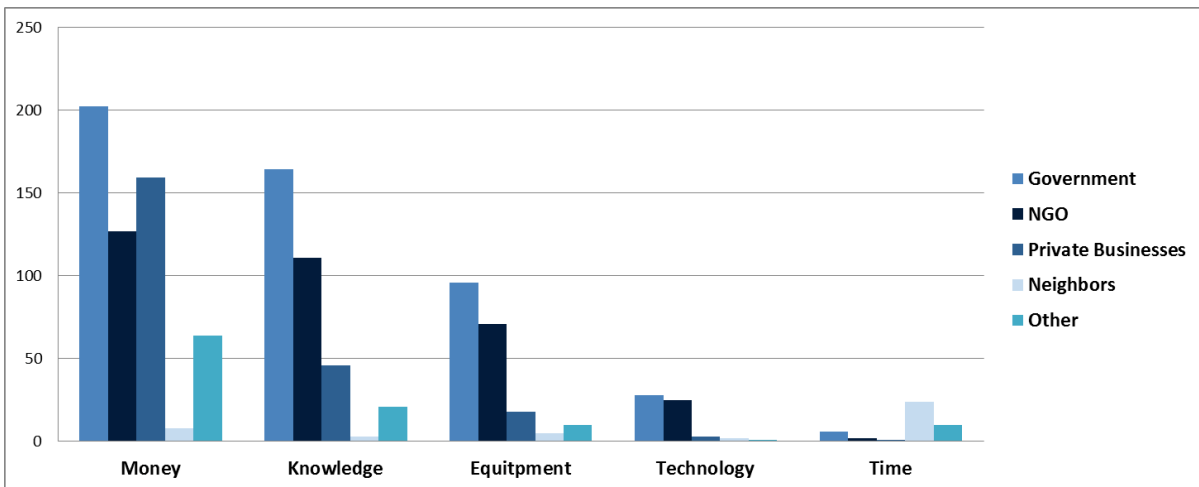


Figure 10: Needs required to participate in evolving tourist-related job opportunities. The columns specify the responsible party for providing those needs as perceived by the respondents.

4. Additional Considerations

The four municipalities that were selected as “tourism developed sites” offered insights into the opportunities and challenges of developing dive tourism. Most of the *barangay* captains believe that the corals and fish densities have improved at the protected diving sites since the beginning of tourism development. Illegal fishing is still present in these places, but the informants claimed that it is less disruptive than ten or twenty years ago. In places where tourism is not present, fishing with illegal gear appears to be a regular regulatory and enforcement challenge.

“We have a small sanctuary for fish...If you want to dive, you can visit the small fish sanctuary.”

Bien Unido interviewee, July 28, 2011

The tourism developed-site interviews highlighted three additional challenges to tourism that were not mentioned or observed in the undeveloped sites (Figure 2). Increased cost of living and a decrease in local control of land, resources, and community values were concerns experienced by the developed site respondents. An increase in the drug and sex trade is further explored here due to concerns mentioned in these interviews. Although it was mentioned as a challenge in the surveys, respondents in Bien Unido did not mention an increase in the drug or sex trade as a concern.

“I think there is cyanide fishing, but not as much as in the past...they cannot do it daily anymore. There is also dynamite fishing, but it is very far from here. It is out on the (Danajon) reef.”

Tourist dive site interviewee, August 15, 2011

a. Increased cost of living

Interviewees in the tourism-developed sites claimed that the price of fish, food, electricity, water, fruit, souvenirs, clothing and other amenities were higher in the tourism-developed sites than other places due to the fact that merchants can get paid more for the products from tourists than typical locals can afford to pay. This appears to be a cycle where merchants get paid more for their products and also have to pay more for their daily needs from other merchants. Some interviewees revealed that more tourists mean higher prices. *Barangay* captains expressed concern that poor *barangay* members could no longer afford to eat fish because the prices are too high for typical seasonal workers wages. At the same time, merchants are also able to earn more and jobs for restaurants, dive shops, massage and pedicure stands are created.

“If a fisherman catches and sells fish to a foreigner, he can sell it for a high price. So that is an advantage for the fisherman, because he can earn more money. But a Filipino living on this island cannot buy the fish anymore. That is a problem here.”

Tourism dive site interviewee, August 15, 2011

b. *Private control*

Residents of Bien Unido are excited by the potential for foreign investors to help with developing their town. This is a promising economic endeavor, but according to the tourism site informants, often become more complicated. The *barangay* captains claimed that they have lost control in several aspects of governing due to private investors. One investor made electricity available to the island but charges a high price, making it too costly for the school, government buildings, or private residences to purchase. Two *barangays* claimed that private investors have stalled improvements to public roads and government buildings. Another claimed that the government is ineffective in regulating private investors in things like sewage treatment or building contracts once the investors are established in a place. Several *barangay* captains claimed that the traditional social identity of the island was lost to the changes and economy driven by tourists. If the visitors ask children for something in German, eventually the children will learn German and adapt to the wants of the foreigners. This was not necessarily viewed as a negative impact, but is a challenge for the community.

“Private individuals, like investors, might be interested in the island. If so, we would be kicked off of the island and lose our rights like other places have.”

Bien Unido interviewee, July 27, 2011

c. *Increase in drug and sex trade*

According to the developed-sites interviewees, during the transition from a fishing *barangay* to a tourism *barangay*, the first changes to take place are social changes such as increases in the trafficking and use of drugs. Most of the *barangay* captains claim that they do not know of such things, but long-time residents will eventually tell of girls that sell themselves for money and crime that occurs because locals use and sell drugs that were unheard of before foreigners visited.

“But of course there are negative aspects of tourism. In our *barangay*, because of tourists we now have...drugs, prostitution, pornography...trafficking, you name it.”

Tourism dive site interviewee, August 31, 2011

5. *Theme Interactions*

Some of these issues are directly linked in a feedback loop. Some fishers in Bien Unido still commonly use illegal fishing gear and fishing methods that continue to destroy the coral reef in municipal waters. Regulation of fishing laws has been somewhat effective in the last few years, but the

challenge to stop illegal fishing continues (Armada et al. 2009). Most respondents expressed a desire to stop illegal fishing and promote dive tourism in the area. Figure 11 shows the feedback loop for illegal fishing, and what would need to be done to stop it. This report has shown that one of the

“Fishing is not so good. There are so many malnourished children because there are not enough fish in the water to catch and eat.”

Bien Unido interviewee, July 22, 2011

perceived benefits of tourism is an improved relationship with natural resources within which stopping illegal fishing was specifically mentioned as the main benefit, particularly in the interviews. The use of illegal fishing methods was also identified as something that needs to be regulated and controlled in

preparation for dive tourists to be attracted to the coral reefs in Bien Unido. The most cited solution to the problem is the development and support of livelihood programs to assist with purchasing new gear and supplementing incomes. Therefore, when respondents from Bien Unido were asked what increased municipal revenues from tourism should be spent on, livelihood programs that support agriculture, seaweed farming infrastructure, and legal fishing nets to support local illegal fishers in an alternative livelihood, was a primary answer. The solutions become complicated in Bien Unido since prospective dive tourists would visit to see a pristine environment, but the environment cannot be effectively rebuilt while illegal fishers are overfishing or destroying the reef. The solution to this feedback loop is unclear and likely starts in more than one box at a time.

“We want transition back to the old ways of fishing...Alternative fishing methods would satisfy the needs of the *barangay* families...But we have not seen the transition yet[...]We think dive tourism will give alternative livelihoods to illegal fishers and help minimize illegal fishing activity.”

Bien Unido interviewee, July 19, 2011

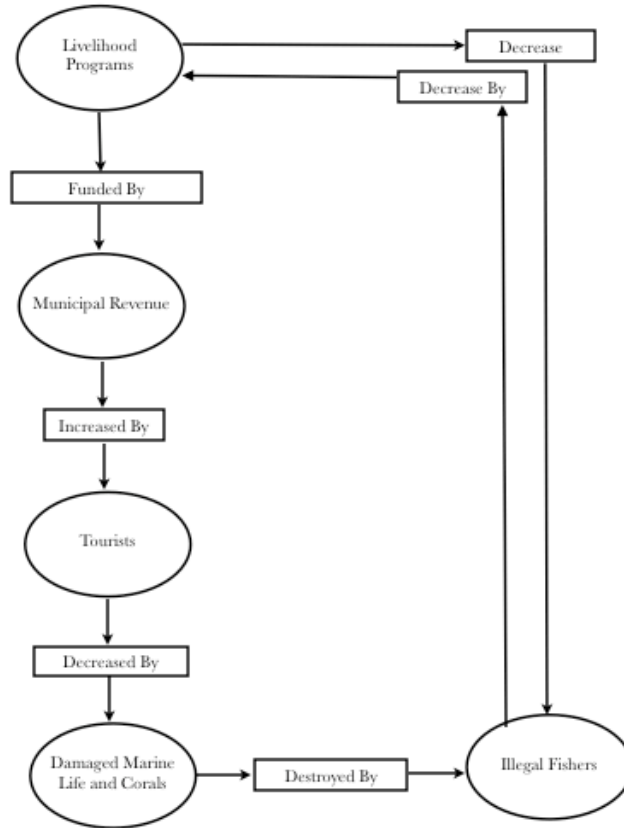


Figure 11: Interpretation of the illegal fishing loop in Bien Unido. The diagram shows reef destruction, potential solutions in livelihood programs, and the need for funding, which is directly related to the conditions of the coral reef according to participants.

Best Practices for Bien Unido from Other Philippines Case Studies

There are many cases in the Philippines of poorly planned and poorly managed tourist sites that tend to create more problems than they solve (White et al. 2003). To assist Bien Unido managers and CCEF staff members in sustainably developing the dive tourist site and surrounding area, applicable recommendations from other tourism development sites that specifically apply to the findings for Bien Unido are explored in this section.

Funding Case Study Challenges

Under the challenges section, sustainable development and management plans require sustainable funding as well as dedicated experts throughout the process (White et al. 2009). There are currently two CCEF staff members working to develop a tourism industry in Bien Unido who are funded by the USAID Danajon Bank Marine Park Project. Once the project ends, it is unclear where funding may come from in the long term. Funding is also required for coastal resource management (White et al. 2009), for building social capacity and livelihood programs (Green et al. 2003), to

develop technologies such as waste technology and solutions specific to each *barangay* (Huttche et al. 2002), and incorporate appropriate incentives for social and environmental protection (McNeeley 1988). The budget for Bien Unido should be based on past studies and the economic valuation of the Danajon Double Barrier Reef. A cost-benefit analysis at the nearby tourist site on Olango Island showed that the economic benefit of the Gilutongan Island Marine Sanctuary is fifteen times the cost (White et al. 2009).

Poverty Alleviation Case Study Benefits

The next issue is community participation to ensure poverty alleviation. My study shows that Bien Unido community members welcome tourism primarily for the economic benefits to each *barangay*. These recommendations help to ensure that community members are involved in the planning process and receive the full financial benefits from tourism ventures. To create a successful outcome, the municipal officers, *barangay* captains, CCEF staff, and JCAD Inc. representatives must carefully and consistently communicate with the community members throughout the planning process. Studies show that presenting information (including short-term and long-term losses during transition periods) for feedback and approval develops support, pride, and ownership of the project (Huttche et al. 2002) creating a welcoming atmosphere for tourists and successful conservation efforts (DOT 1998). Additionally, including the community throughout the process allows for the community to voice concerns and innovation ideas so they can be addressed accordingly in the planning process (Gossling 2003 & McNeeley 1988). Dialogue is the key to achieving sustainable development, especially in addressing conflicts over the dissemination of power, identity, ownership, and limited resources (Gossling 2003). The simple act of hosting community forums during *barangay* meetings helps dissolve resistance to change (Green et al. 2003). To take this advice one step further, in order to alleviate poverty decisions and management objectives should be prioritized according to the impacts of the poor (Green et al. 2003). With decisions in favor of the poor and continuous communication about the development plan, the community also needs to be protected and assisted through legislation, training, and monitoring throughout the tourism development process (Green et al. 2003). Resource-dependent community members are particularly vulnerable to seasonal income changes, but require income all year (Gossling 2003).

Progress through Management Plans Case Study

Bien Unido needs a sustainable coastal resource management plan that integrates social, environmental and economic indicators into the system (Huttche et al. 2002). These measures should ensure that benefits and burdens are equally distributed throughout the community (rather than impacting the community members that rely on natural resources for their livelihood) (Huttche et al. 2002) and develops financial aid, unions, and rights for those members of society (Green et al. 2003).

It is likely that Bien Unido and CCE Foundation have a management plan to develop tourism in Bien Unido, but this report shows that community members assume they will financially benefit from the industry and support the initiative. These recommendations emphasize that the plan develops indicators and protocols for solid waste storage and disposal for each *barangay*, likely including the separation of organic materials and technologies to solve land limitations for island *barangays* (Huttche et al. 2002). Indicators that are continually measured and incentivized for the long-term include monitoring energy use, water consumption, and waste disposal (Huttche et al. 2002). In order to maintain the environmental services sustainably, the municipality must control shoreline management practices (Green et al. 2003) by establishing guidelines for infrastructure and construction, and determining the appropriate scale for planning and development (Huttche et al. 2002). This may include placing septic systems according to water table knowledge, developing and enforcing zoning for infrastructure, and fostering proactive planning regarding environmental quality standards to be monitored and enforced through local government units (Huttche et al. 2002 & Gosslig et al. 2003). For the Bien Unido municipality, CCEF staff, and JCAD Inc. representatives, this may include collaboratively agreeing to apply an existing framework to plan for development such as Ecosystem-Based Management (McLeod and Leslie 2009), or Integrated Coastal Management (Huttche et al. 2002, Dubinsky and Stambler 1996). Using standard methods to collect data such as Participatory Coastal Resource Assessment (Elman 1999) and using Benefit-cost analysis (White et al. 2003) and establishing metrics using Limits of Acceptable Change (Huttche et al. 2002) will all aid the development process. using Benefit-cost analysis.

Conclusion

As indicated by one resident of Bien Unido talking about tourists, “as long as they like to come, then we will welcome them all. We want them to come. All.” The final recommendations are intended to guide the management planning process for Bien Unido and should not be used as a comprehensive list of needs. This analysis clearly shows that Bien Unido community members welcome tourists for the economic benefits and accept various social and environmental changes along with the visitors. Other site studies document the wide variety of changes that have happened (and are still happening) in places very similar to Bien Unido. The intent is to encourage management to incorporate the needs of the resource-dependent residents into the planning process, protect their rights, and share the benefits of tourism. If the benefits are to outweigh the impacts, then the benefits should be distributed throughout the community.

My study shows that community members in Bien Unido and the surrounding region in the Philippines believe that there are many benefits to tourism development including the financial gain

for municipalities, improved natural resource management, increases in employment opportunities, and improvement in infrastructure. In preparation for tourist, Bien Unido respondents acknowledge that there are many things that need to be done to the municipality and it's people including livelihood development (to support fishing and farming livelihoods), education about resource management and tourism in general, investment in infrastructure (like hotels or public utilities), and dedication to a development management plan. Each of these items come with associated challenges to overcome to achieve successful development. The Bien Unido residents claim that the challenges are outweighed by financial gain, and hopefully the resource-dependent community members equally benefit from that gain. Finally, tourist developed site residents voiced concerns about social changes in the community such as increasing the price of living, increases in drug and sex trade due to tourism development, and private investors having more control on development than the municipality. The objective of my study is to create awareness of these perceptions and help CCEF, Bien Unido municipal officers and JCAD Inc. representatives engage in collaboration with the Bien Unido community members, particularly those that rely on the Danajon Bank Double Barrier Reef for their livelihood.

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Appendix A

Interview guide- Bien Unido

Introduction question such as, can you tell me what it is that you do? How long have you lived here?

What is your role in the people's organization?

What does the word tourism mean to you?

Can you tell me about the mayor's plan to get more tourists to Bien Unido?

How do you feel about it?

How might your life change because of that plan?

Do you think your *barangay* is ready for more tourists to visit?

What kinds of things need to be done in order to prepare for tourism?

What types of changes might you expect to see in the community?

In what ways might your *barangay* benefit from tourists?

What do you see as some of the challenges?

How would you feel about those changes?

If tourists bring money to the municipality, what would you want to use it for?

What do you hope the community will be like in five or ten years?

Anything else you would like to add?

Appendix B

Interview guide- Tourism-developed sites

Introduction question such as, can you tell me what it is that you do? How long have you lived here?

What is your role in the community?

What is tourism?

When did tourism start here in _____?

What changes have you seen since then?

Specifically, what are some of the benefits from tourism?

Tell me about some of the challenges, both in the beginning, and now.

Can you tell me, what kinds of things did the *barangay* invest in to promote tourism?

When more money was coming in, how did the *barangay* use it?

What do you want to invest in next?

Would you say that tourism has helped to get rid of poverty? Or illegal fishing?

How does the community feel about tourism?

Overall, how do you feel about tourism?

In five or ten years, what would you like this *barangay* to be like?

Anything else you would like to add?⁸

⁸ All results from qualitative interviews are not presented in this report. Please contact the author for an extensive analysis of interviews.

Appendix C
Survey for perceptions of tourism

3.1 Has your catch declined in the last five years?

- Yes
 No

3.2 If tourism opportunities increase in your area, what types of activities might you engage in related to tourism?

- Recreational activities
 Room in your home for rent
 Sale of handcraft goods
 Sale of food or drinks
 Others (pls. specify): _____

What you would need:

- Money
 Knowledge, skills or training
 Time
 Equipment (boat, etc.)
 Technology
 Nothing (*skip to 3.3*)
 Others (pls. specify): _____

Please check who should assist you in satisfying each of the needs from above:

	Money	Knowledge	Time	Equipment	Technology	Other
Government						
NGO						
Private Businesses						
Neighbors						
Other						

3.3a. Is your house large enough to accommodate guests? (Yes/No)

b. If visitors to the Philippines wanted to stay in your *barangay* for a week at a time, would you volunteer your home to host a guest or two, for a fee? (Yes/No)

If yes, please estimate the cost of each number of guests for accommodations for one week

Number of guests	Compensation for food	Additional costs
1		
2		
3		
4		

3.5 Please rank your preferred mode of hosting tourists

- In your home
 In a small guest house
 In a hotel

Live aboard
Others (pls. specify): _____

3.6a. What are potential benefits of dive tourism to your *barangay*?

Increase or stabilize revenues
 Increase livelihood alternatives opportunities
 Cultural exchange
 Education of communities
 Encourage conservation/preservation efforts
 Increase technology available
 Increased taxes for government
 Facilitates building of infrastructure
 Foster pride among community
Others (pls. specify): _____

b. What are potential negative impacts?

Increased pollution (circle air, water, garbage, toxics)
 Increased pressure on natural resources
 Increase coral reef destruction or beaches
 Increased technology
 Increase in drugs, alcohol, crime, or sex
 Creates crowding and congestion
 Loss of traditional values
 Competition with residents for available resources
Others (pls. specify): _____

c. Overall, would you say that an increase in tourists to your *barangay* would help, hurt, or have no affect on your *barangay*?

Help
 Hurt
 Have no affect

d. Overall, would an increase in tourists help, hurt, or have no affect on your livelihood?

Help
 Hurt
 Have no affect

Appendix D: Table of *barangay* captain responses on tourism development- benefits, challenges, money usage, needs and defining tourism.

<i>Barangay</i>	<i>Benefits</i>	<i>Challenges</i>	<i>Money Used For</i>	<i>Needs for preparation</i>	<i>Tourism is...</i>
A	Municipal revenue Speech Improvement Environment Development Finance from divers fees	None		None. Ready.	New- unable to define.
B	Employment Industrial Plant Industry from investors Municipal revenue Quality of life Eliminate illegal fishing Improve environment Conserve for next generation	Crime management. Pollution. Drainage Communication with locals. Electricity Garbage treatment plan.	Seaweeds processing plant. Guardhouse Road repair	Garbage & sewage treatment plan Garbage education.	The people who go in our place to see the beautiful attraction.
C	Improve economic activity Municipal revenue Management plan	Community education Administration changes. Illegal fishers. Make a plan	Farm inputs Fertilizer, seeds, pesticides, tractors to get large harvest volumes Legal fishing gear to illegal fishers.	Education Security plan Mangrove planting	A place or undertaking where people inside and outside will visit because they feel it is very good to live in or relax. An income generating activity for a natural pleasure or manmade tourism area.
D	Employment Agricultural & fishing livelihood programs. Municipal money lending Development	Security plan	Agricultural projects Fertilizer to make life easier. Buy 2 firetrucks	Hospitable.	People that want to see the beauty of nature in a place that welcomes visitors.
E	Communication improvements Increased income & jobs	Water depletion	Road improvement Job trainings Security plan Infrastructure	Health infrastructure Education Farm inputs machinery and seeds Tourism development	An area is beautiful so visitors to come here.

F	Municipal financial support. Illegal fishers become farmers. Protect reefs and seashore Improve environment Processing plant Municipal income.	Garbage Limited electricity	Health center Birthing station, midwife transportation Pier infrastructure Planting hardwoods. Processing plant. Generator.	Not ready yet. No pier. No tourist facilities Need another generator. Need to clean beaches. Water plan. Recycling plan Garbage plan Seaweed education	Inviting people to come and see different activities of harvesting and planting on our farm.
G	Municipal financial support. Employment. Culture & idea exchange.	Unknown issues. Garbage overload. Limited toilet facilities. Limited freshwater	Livelihood projects. Seaweeds. Medical infrastructure & supplies.	Infrastructure is not ready, but hospitality is assured.	We want it, that is it. It is good & exciting.
H	Income. Alternative livelihoods Illegal fishers. Conservation. Speech improvement.	Limited electricity Scarce food sources. Limited freshwater supply. Garbage overload.	Legal fishing gear. Education. Business investments.	Food availability Solar power Garbage & sewage treatment plans. Develop businesses. Infrastructure & equipment Water treatment. Clean-up beaches.	Inviting foreigners so that we can manage the environment and develop livelihood of the people.
I	Income. Infrastructure. Alternative livelihoods. Illegal fishing Clean-up beaches Implement solid waste plan.	Relocation. Island under investor control.	Livelihood projects Seedlings, straw, & platforms Medical infrastructure & supplies. Education building & teacher.	Promote livelihood. Minimize illegal fishing.	Development of the barangay for others to visit.
J	Lower interest rates. Income Livelihood projects. Investments.	Borrowed money interest problems.	Infrastructure. Barangay hall Beach parking lot. Jobs & livelihood.	Improve beach parking. Not ready, but hospitable.	Foreigners visiting a place to see the beauty behind that place.
K	Cultural exchange. Barangay income. Livelihood income.	Security plan. Increase in waste. Increase in morality issues.	New technologies for fishing & farming Jobs for everyone. Limited crime Barangay improvements.	We are ready, as long as there is money. Need hotels, buildings, or houses for tourists (if dive camp is full)	Showing some beautiful spots in a particular place for the purpose of inviting visitors to come to the place.