

**PARTICIPATORY CONSERVATION IN THE PHILIPPINES:
A CASE STUDY IN SIQUIJOR**

By

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PARTICIPATORY CONSERVATION IN THE PHILIPPINES:

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ABSTRACT

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Participatory environmental conservation integrates the rights and needs of local peoples with conservation objectives and methods. With this relatively new system, there can and should be reciprocal benefits for the local community and the local environment. However, there is much to be learned in the area of participatory conservation.

Based on over two years of field experience and research, I identify successful strategies, possible improvements, and shortcomings of participatory conservation efforts in the Philippines. Given an understanding of local context, I specifically assess a project run by a local fisherfolks' association on the island of Siquijor in the Central Visayas region of the Philippines. What strategies can/should be implemented in local, national, and international conservation and

sustainable development projects? In this thesis, I present my experiences in the field, the research case study conducted on the island of Siquijor, and the implications of this study.

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INTRODUCTION

Traditionally, environmental conservation efforts have disregarded the concerns and interests of local peoples. Not only does this approach often infringe upon basic human rights and needs, it also hinders the effectiveness of conservation programs. Such narrowly focused policies result in an emphasis on policing the area of concern, rather than viewing it as an opportunity to utilize local knowledge, create jobs, and expand conservation endeavors beyond the boundaries of officially designated protected areas. Challenges to the old conservation standards have prompted fundamental changes to conservation policies in various parts of the world. One notable example in the Philippines is the transition from colonial-era strict forestry regulations to community-based resource management. However, because participatory environmental conservation is a relatively new system, there is much to be learned.

As part of the Peace Corps Master's International Program and as an independent researcher, I spent over two years in the Philippines participating in local environmental conservation programs and research. What are the successful strategies, possible improvements, and shortcomings of participatory conservation efforts in the Philippines? What strategies can be recommended that can/should be implemented in local, national, and international conservation and sustainable development projects? In this thesis I present my experiences

from the field, a research case study that I conducted on the island of Siquijor in the Central Visayas region of the Philippines, and the implications of this study.

BACKGROUND

About the Philippines

The Republic of the Philippines is an archipelago of 7,107 islands situated in the western Pacific Ocean, between latitude 4°23'N and 21°25'N and longitude 116°E and 127°E (Figures 1 and 2). The land area of the Philippines is 299,764 square kilometers and includes 17,500 km of coastline (General Information, 2007). Topography ranges from flat lowlands, alluvial plains, and narrow valleys to rolling hills and high mountains (General Information, 2007). Elevations in the Philippines extend from sea level to 2,954 meters at the country's highest point on Mount Apo (World Fact Book, 2007).



Figure 1. Location map for the Philippines.



Figure 2. Map of the Philippines; courtesy of the Official Website of the Republic of the Philippines (<http://www.gov.ph/aboutphil/philmaphil.asp>); retrieved 17 March 2007.

In 1521, the archipelago was “discovered” by Ferdinand Magellan, and Spanish conquistadors established a colonial government in the Philippines in 1565. The Philippines remained under Spanish control until 1898 when the islands were ceded to the United States following the Spanish-American war. The US maintained colonial control until 1935 when the Philippines became a self-governing commonwealth. However, in 1942, the Philippines fell under Japanese occupation for three years during World War II. Finally, on July 4, 1946, the Philippines gained independence from the United States.

Since independence, the Philippine government has been characterized by a series of political uprisings and turmoil. The most notorious leader was Ferdinand Marcos, elected in 1965. In 1972, Marcos proclaimed martial law and remained dictator until 1986 when he was ousted by a “people power” movement. Corazon Aquino was inaugurated as president after Marcos was forced into exile, but her administration was obstructed by several coup attempts. Fidel Ramos’s presidency (1992-1998) was more stable. In 1998, Joseph Estrada became president, but when a second “people power” movement demanded his resignation, Estrada was replaced with his vice-president Gloria Macapagal-Arroyo (GMA). In 2004, GMA was elected to a six-year presidential term.

In July 2006, the population of the Philippines was estimated to be 89,468,677 with an estimated growth rate of 1.8% (World Fact Book, 2007). While the country's two official languages are Filipino (based on Tagalog) and English, there are eight major dialects and over 100 other dialects spoken in the

Box 1. Colonial Mindset

One of the unfortunate consequences of the Philippines's long history of governance by foreign powers is a persistent colonial mindset. Even though the Philippines has been an independent nation for sixty years, there remains a strong attitude of reliance upon outside intervention. When faced with challenges, the tendency is often to look elsewhere for the solution and wait for help rather than to take action. This outlook is evident in both the Philippine government and the general populace. A large segment of the public understandably places blame on previous colonizers for problems that exist now, and certainly this outlook is credible. However, my feeling is that now is a good time to let the past go and take positive actions to resolve the problems. Communities in the Philippines can now look to their own resources and capabilities when they feel change is needed. Empowering ordinary citizens to recognize their own potential is an effective way to combat the apathy of the colonial mindset.

Philippines (General Information, 2007). The national literacy rate (percentage of the population age 15 and over that can read and write) was 92.7% in 2002 (World Fact Book).

The Philippines faces numerous issues common in developing countries. Wealth is unevenly distributed with forty percent of the population estimated to be below the poverty line in 2001 (World Fact Book). Corruption is rampant in many sectors and political instability remains a threat. Current environmental issues include: “uncontrolled deforestation especially in watershed areas; soil erosion; air and water pollution in major urban centers; coral reef degradation; [and] increasing pollution of coastal mangrove swamps that are important fish breeding grounds” (World Fact Book, 2007).

History of Environmental Issues in the Philippines

Environmental degradation has long been a problem in the Philippines. Terrestrial and marine resources and biodiversity have been devastated by destructive harvesting methods, pollution, and land-use changes. Of the 15.88 million hectares of Philippine land area classified as forestlands, as of 1996, only 5.493 million hectares were actually covered in forest (Green Environment, 2002).

The country’s first bureau of forestry was established in 1863 by the Spanish colonial government. With administrative control over vast amounts of land, the bureau’s management “consisted in granting timber concessions and

policing forestry measures which prohibited and penalized illegal incursions into the forest and the unauthorized exploitation of forest resources” (Bagadion, 2000). The bureau was also responsible for reforestation. Further laws prohibited shifting cultivation, enforced through fines and penalties as extreme as incarceration and expulsion from forestland (Bagadion, 2000). This so-called “plant-punish-police” system continued during the American colonial administration and the post-World War II independent Philippine government (Bagadion, 2000).

While the policies were strict, they were unsuccessful in alleviating deforestation. Flaws in the system included lack of resources to enforce the regulations, concessions made to satisfy industrial demands, and the fact that programs ignored the underlying causes of deforestation – including social and economic aspects. Beginning in the 1970s, more enlightened approaches to forest protection slowly shifted legislation and project plans towards incentive-based programs that involved the participation of forest dwellers. This was an unknown world, however, so the Bureau of Forest Development had to learn how to manage and implement programs with participatory strategies. “Transforming from an agency that formerly prosecuted upland farmers as trespassers or squatters, to an agency that would work with the local people as partners was a giant step” (Bagadion, 2000).

National initiatives wrought a new paradigm of participatory conservation in the Philippines. The Department of Environment and Natural Resources (DENR) currently has a number of projects and programs in place that incorporate community involvement in conservation efforts. The Community-Based Forestry Program “aims to improve the socio-economic conditions of the communities through the promotion of social justice, equitable access and sustainable development of forestland resources” (Green Environment, 2002). The Low Income Upland Communities Project (LIUCP) partners the DENR with Local Government Units (LGUs) and Non-Government Organizations (NGOs) to tackle environmental and socio-economic concerns in an integrated fashion (Green Environment, 2002). Foreign assisted programs such as the Peace Corps’ Community-Based Conservation of Important Biodiversity Areas (CCIBA) (Your Assignment, n.d.), and the Philippine-German Community Forestry Project – Quirino (Green Environment, 2002) also recognize the importance of conserving natural resources through community participation and environmental awareness.

It is possible that these participatory conservation programs are partially responsible for the fact that deforestation rates have declined over the past decades. Philippine Forestry Statistics showed that from 1950-1978, 204,000 hectares of forests were lost annually. That rate declined slightly to 199,000

hectares per year during the period from 1978-1988. From 1989-1995, deforestation decreased to 116,321.7 hectares annually (Green Environment, 2002).

Community participation has also been recognized as a necessary strategy for the conservation of coastal and marine resources and habitats. Throughout the history of the Philippines, coastal marine ecosystems have been destroyed by mangrove deforestation and conversion to unsustainable fishponds. Illegal fishing methods such as cyanide fishing and dynamite fishing have decimated coral reefs and fish populations throughout much of the Philippines. It has been estimated that 12% of the fishers in the Philippines are suspected of engaging in dynamite fishing. (Sievert, 1999). Coastal pollution further degrades marine habitats. Meanwhile, the Department of Environment and Natural Resources (DENR) states, “the coastal and marine ecosystem is considered an important source of livelihood for about 70% of the country’s municipalities” (Blue Environment, 2002).

To protect and rehabilitate vital coastal and marine resources, the Philippine government has implemented participatory conservation efforts such as the Coastal Environmental Program. This program “aims to coordinate all activities on resource and environmental management of coastal ecosystems with the involvement of the communities and immediate stakeholders in the

protection and management of coastal zones” (Blue Environment, 2002). As community support grows, so do the results. In 2003, 67 hectares of degraded mangrove areas were rehabilitated, and in 2004, 114 hectares were rehabilitated (DENR, 2005). “In addition, the [DENR] has also continued the implementation of alternative livelihood projects in 90 marine management project sites nationwide benefiting 34,702 marginal fisherfolk and 5,347 households” (DENR, 2005). Through these and other activities, local peoples are finally recognized as important cogs in conservation efforts rather than conflicts of interest.

EXPERIENCES FROM THE FIELD

Timeline of Fieldwork

Typically, Master's International students complete two semesters of graduate study in the United States, and then two to three months of Peace Corps training and two years of Peace Corps service abroad before returning to the U.S. to finish their graduate study. I began this program in January 2003 at Washington State University. In January 2004, I moved to the Philippines to begin my Peace Corps experience. I completed my training in Bohol and served as a volunteer in Palawan for over a year (Figure 3). However, I was prevented from completing my service due to a typographical error on a medical report. As a result, I was medically separated from Peace Corps in June 2005 and forced to return unexpectedly to the United States. After resolving the medical issue and establishing a clean bill of health, I made plans to return to the Philippines independently to complete my fieldwork. From October 2005 to July 2006, I conducted independent fieldwork and volunteer activities on the island of Siquijor in the Philippines (Figure 3).

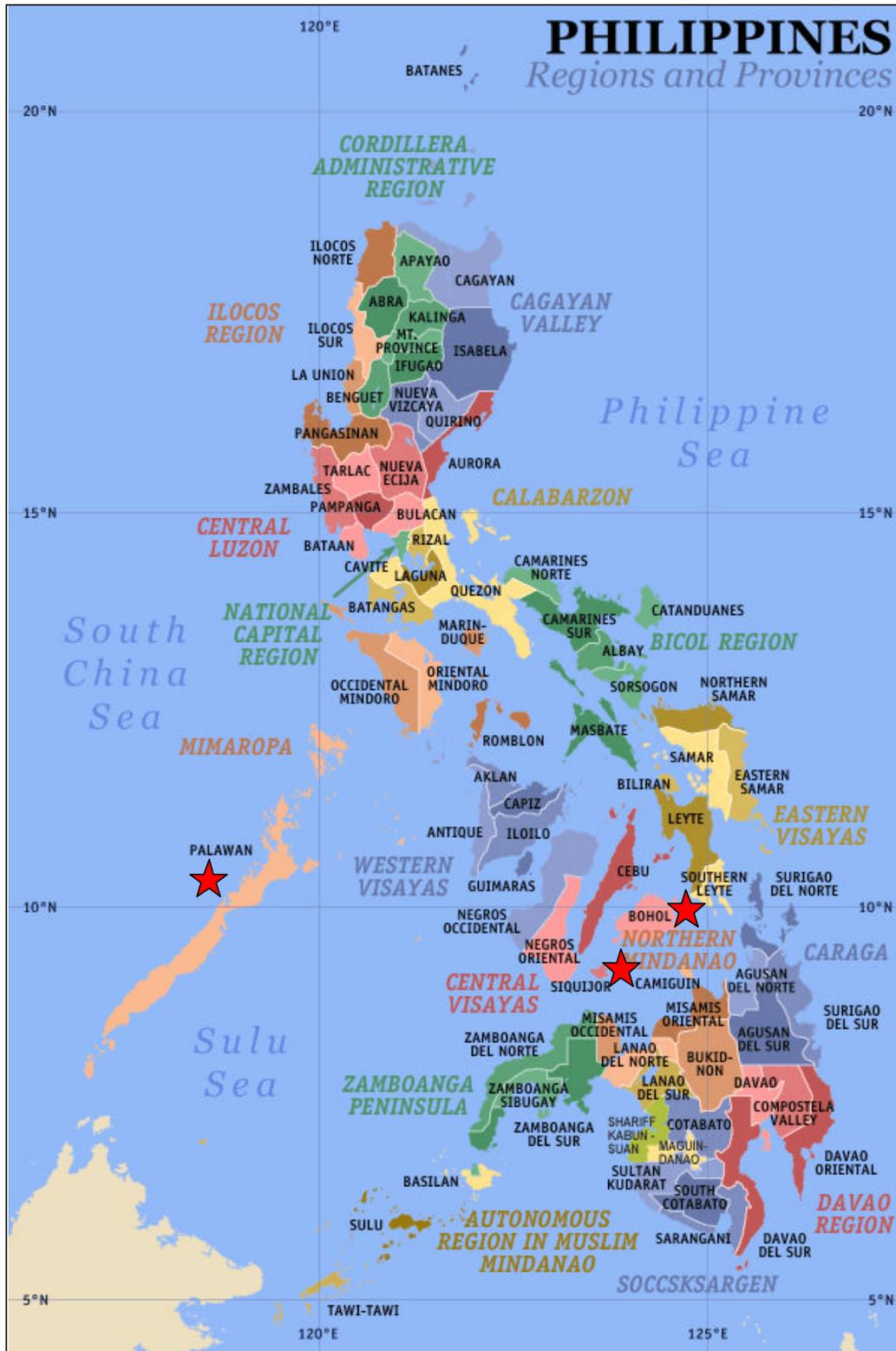


Figure 3. Regional and Provincial map of the Philippines, indicating (★) the locations of Bohol, Palawan, and Siquijor. Adapted from http://en.wikipedia.org/wiki/Regions_of_the_Philippines; retrieved 15 March 2007; released under the GNU Free Documentation License (2002).

The Peace Corps Experience

I served as a Peace Corps Volunteer in the Philippines as a Protected Area Community Educator for the Community-based Conservation of Important Biodiversity Areas (CCIBA) program. I arrived in country in January 2004 and began an intensive ten-week training program. Pre-Service Training was held on the island of Bohol in the Central Visayas region of the Philippines and included: 89 hours of technical sessions in the field of community-based resource management, Philippine ecosystems and biodiversity, community organizing, and development of alternative livelihood programs; 90 hours of language training in Tagalog, the national dialect of the Philippines; as well as 18 hours of cultural training; 22 hours of health training; and 10 hours of training on safety and security.

After successfully completing training, I was sworn in as a Peace Corps Volunteer on 12 April 2004. I was assigned to the environmental non-governmental organization Conservation International during my service in the Philippines and was stationed at their field office location in Española, Palawan. My primary responsibilities to this host agency concerned the creation of a new protected area within the Mantalingahan Range Forest in South Palawan. Project activities included: Environmental Critical Areas Network (ECAN) assessment; Information, Education, and Communication

(IEC) Campaign; Geographic Information System (GIS) technical support; and biodiversity surveys.

I also contributed to the collaborative Conservation International/World Wildlife Fund annual Tubbataha Reef monitoring survey/research expedition. As part of the benthic mollusk research team, I documented biodiversity data and research techniques through digital underwater photography. I was also instrumental to an intertidal zone survey. Additionally, I joined the research divers in assessing damages caused by a tourist vessel that ran aground on an area of corals to determine the fines that would be imposed on the offenders. Furthermore, I assisted in training park rangers in methods of sea turtle tagging and data collection.

In addition to host agency responsibilities, I served as a resource to high schools in Palawan. My efforts included co-designing and facilitating environmental camps for high school students. These camps incorporated information and activities related to basic ecology, habitat requirements, interconnectivity, watershed and land-use management, resource identification, and solid waste management, as well as team-building and leadership activities. To benefit schools, environmental organizations, and other Peace Corps Volunteers, I also designed training modules on integrated watershed resource management issues and developed a low-cost technique and instructions for

building watershed models that demonstrate multiple aspects of conservation, community land-use management, and hydrologic cycle features.

In perhaps my most important role as a Peace Corps Volunteer, I enhanced cross-cultural understanding through community interaction. I participated in Filipino community events such as Pulot National High School's Foundation Day, local festivals, weddings, wakes, and group outings. I strived to promote a better understanding of other cultures by sharing personal accounts, experiences, and observations from my upbringing in the United States as well as my travels and work in other countries throughout the world. Similarly, throughout my service I shared my Peace Corps experiences with a network of Americans to enhance their understanding of the culture in the Philippines. This aspect of being a Peace Corps Volunteer, I continue to perform and enjoy even after completion of my service.

Independent Fieldwork and Cultural/Volunteer Activities

Because my return to the Philippines was not under the auspices of Peace Corps, it allowed me the freedom to choose where I would live. I opted to conduct my fieldwork on the island of Siquijor because I was familiar with a mangrove protected area project there and had the opportunity to live directly within the project. I moved into the residence of another Peace Corps Volunteer (PCV) from my batch and was able to interact on a daily basis with key members

of the Luyang Fisherfolks Association (LUFA) and build a rapport. This living situation aided my research in countless ways. From this vantage point, I was able to observe the local community's routine activities relating to the mangrove protected area. Research methods and observations are discussed in greater detail in the Case Study in Siquijor section beginning on page 34.

In addition to conducting research, I also continued volunteer and cultural activities in the Philippines. I helped other PCVs write grants for their projects and assisted in training a Provincial marine assessment team comprised of local residents of Siquijor (Siquijodnons). I also participated in many local community events such as fiestas, celebrations, get-togethers, and a wake/funeral.

Challenges

Community Integration

During Peace Corps's pre-service training, general aspects of adapting to living in the Philippines were covered. In cultural and language training, we learned basic verbal and non-verbal communications as well as common behaviors and cultural expectations. When I left training and moved to my assigned rural site, I discovered that although these lessons were valuable, nothing could replace actual hands-on experience and patience when it came to adjusting to life in the field.

Culture shock is a commonly discussed facet of visiting or moving to a new country. This concept usually refers to the shock that the foreigner experiences in a new land, but it is equally applicable to the adjustment locals face when growing accustomed to the foreigner's presence. In areas where foreigners have rarely, if ever, visited, an outsider is an anomaly. When I moved to Española, Palawan, the local people were often shy, curious, and even sometimes suspicious of me. When I was accompanied by my host family or host agency counterpart, other locals were more comfortable to address or respond to me directly. After initial greetings, however, I was often excluded from further conversation while my companions were asked questions about me. When I was alone, it was extremely difficult to break the ice.

The most successful tactic I used for community integration was to put in as much face time around the community as I could. Almost every day, I would go for a long walk around town. This did not follow cultural norms – Filipinos usually take some mode of transportation and rarely go anywhere alone. But walking by myself allowed people in the community to get accustomed to seeing me. I tried out greetings I had learned in training – both verbal and non-verbal. Over time, I was able to discern which people were more likely to respond favorably to a “good morning” in the local dialect versus a nod of the head or raise of the eyebrows (a common gesture of acknowledgement in the

Philippines). I learned to adapt a head nod into more of a chin thrust since that was more common in my area. As I continued my walks around town, people who were initially quite wary of me became more comfortable interacting with me. Eventually, I was able to engage in small talk with community members who would not even make eye contact with me when I first arrived.

My greatest community interactions occurred on Sundays either at the market or on the return walks home. I found that a “safety-in-numbers” feeling let community members feel freer to talk to me. I made a point of first wandering around the market a while, then returning to stands in a random manner to let people have a chance to talk about me with each other before they had to talk directly to me. Given this preparation time, community members seemed to become more eager to ask me questions or have me visit their stands. Even though I would visit the market almost every week and usually see the same vendors each time, it was beneficial to continue my method of wandering around before interacting directly with most people. On the return walks from the market, I often passed people who had seen me heading towards the market or shopping there. This also allowed for some preparation time as well as a topic to discuss as I passed by the second time.

I was among many Volunteers who had difficulty getting past rather superficial topics and establishing true friendships in my assigned community. I

was always an outsider, no matter how often I saw people and how much about myself I was willing to share. I had better luck being accepted as a person with the friends I made in areas where foreigners were more common. However, even in touristy areas where outsiders are numerous, it was a challenge to break through stereotypes and be recognized for who one actually is. The more personal interactions someone had had with foreigners, the easier it was to break through the cultural barriers. Remembering that fact helped strengthen my resolve to keep chipping away at the cultural barriers in my remote rural community.

Language

I do not have an aptitude for learning foreign languages, so I was most apprehensive about this aspect of Peace Corps service. During pre-service training, I was pleased when I initially made excellent progress learning Tagalog, the national dialect of the Philippines and the most common dialect spoken at my assigned site in Palawan. However, in the final weeks of training, I reached a plateau that I could not seem to push past. I had a grasp of the basic fundamentals of the language though, so I thought I would make progress again once I was “immersed” in the language. (Pre-service training was held in region of the Philippines where Tagalog was not commonly spoken.)

When I moved to Palawan, I put forth an effort to use as much Tagalog as I could. Simple elements of the language had already become second nature to me, such as saying *sige* for okay, *oo/hindi* for yes/no, and *salamat/walang anuman* for thank you/you're welcome. I could rattle off common greetings and give a full introduction and brief background about myself with relative ease. With a little time and thought, I could piece together basic conversational questions and answers. I could also handle shopping and transportation situations. I thought that with time, practice, and study, I would make substantial progress.

I quickly discovered that I was not living in an area where true language immersion was possible. It was disheartening that almost every time I made an attempt at speaking Tagalog, I was responded to in English. On the rare occasions when people would reply in Tagalog, they usually spoke so quickly that I had to ask them to repeat what they had said. Even though I would make the request in Tagalog, the repetition inevitably came in English.

At first, my host family seemed supportive of teaching me Tagalog. In English conversations, they would use a Tagalog phrase, repeat it, and explain what it meant. I tried incorporating these new phrases into my repertoire, but I still didn't have anyone with whom to really practice. After the novelty of hearing a foreigner try to speak the local dialect wore off, my host family quickly lost patience with the slow pace I used. I would find them trying to finish my

sentences or stories for me. Paradoxically, when I used short quick phrases, they continued to gush over the fact that I was using Tagalog. It quickly became tiresome and embarrassing that saying *salamat* (thank you) still generated a two-minute conversation amongst the family that I was trying to speak Tagalog. I became so self-conscious about it that I stopped using common Tagalog phrases around my host family.

As my ability to speak Tagalog declined from lack of practice, my capacity to understand it actually improved. Even though I couldn't get anyone to engage in a slow-paced conversation with me, just hearing the locals speak the dialect amongst themselves helped me understand it. It also helped to interpret body language and context. At first I could guess what a conversation was about, and eventually, I could follow along with much of what was said (depending on the topic). Over time, I could engage in "Taglish" conversations (combination Tagalog/English).

Ironically, when I returned to the Philippines and moved to Siquijor, a Visayan-speaking island, I felt I had more opportunities to practice my Tagalog. In most Visayan-speaking areas, the locals do not like using Tagalog. Many Visayans are resentful of the fact that Filipino (a thinly-guised name for Tagalog) was declared a national dialect and not Visayan. Also, even though Filipino is supposed to be taught and used in school, in many areas the local dialect is used

instead and students do not become proficient in Filipino. In Siquijor, however, I discovered that the locals didn't mind me trying to communicate in Tagalog with them. Not only did they have patience for listening to my slow, broken Tagalog, they would also reply in Tagalog. Because Tagalog was not their native dialect, they usually spoke it more slowly which made it easier for me to understand. In longer conversations, however, the Siquijodnons would often lapse back into Visayan. Sometimes I was not sure if I should remind them to speak Tagalog or if they were just using a lot Tagalog words that I didn't understand! As I gained a grasp of Visayan, it became easier to distinguish whether the dialect had shifted during the conversation or not.

Privacy

Privacy was definitely an issue in the Philippines. First of all, a *kasama*, or companion, is very important in Filipino culture. So, it was difficult to explain wanting time alone. Also, if I was in the middle of going somewhere or doing something alone, it seemed like I often had people demanding that I explain what I was doing or why I didn't have someone with me. *Saan ka pupunta?* (Where are you going?) and *saan ka galing?* (where are you coming from?) are common greetings in Tagalog. Filipinos are frequently able to respond with a vague "*diyan lang*" (just there), whereas I was usually questioned further until I revealed many more particulars. Not only would people I talked to know a great

many details of my life, but word would spread throughout the community. I was a common topic for local *chika-chika* (small talk) and *tsismis* (gossip). I would meet people for the first time and discover that they knew where I lived and what I had eaten for lunch the day before. I actually became so accustomed to this, that it would surprise me when people didn't know things like where I worked or that I had moved.

When I moved from my host family's house into a *nipa* (palm frond) hut, I went from a cement wall structure surrounded by a fence to one with *sawali* (pounded and woven bamboo) walls and no fence (Figures 4 and 5). *Sawali* has a beautifully rustic appearance and allows for great ventilation. Unfortunately, it also allows curious neighborhood children to peer through the gaps in the weaving and see any portion of the interior of the domicile at any time. Over time, either the novelty wore off or the repeated scoldings from my adult neighbors and me sunk in and these blatantly voyeuristic activities decreased.



Figure 4. Marla's *nipa* hut (exterior), showing *sawali* walls and *nipa* roof.



Figure 5. Marla's *nipa* hut (interior), showing *sawali* walls and bamboo furniture.

Isolation

Feelings of isolation were very strong during my first months at my site. Not only was I separated from my friends and family back home, but I was also separated from the friends I had made during Peace Corps training. To make matters worse, the “field office” to which I was assigned did not actually exist. There was an office, but no host agency staff to interact with or work activities to occupy my time. My host family was gone for most of the day, so I was left with a lot of time on my hands and very little to do. I combated the loneliness by writing letters and staying in contact with other Volunteers. I also spent a lot of time reading books and writing in my journal. These things helped me feel somewhat connected to the world and people that I knew.

Safety and Security

For the most part, I had very few safety concerns while living in the Philippines. There were of course situations that required vigilance and caution, but that is true no matter where one lives or travels. Sometimes the reasons for concern were drastically different from what I would encounter in the United States, but oftentimes the situations were very similar to something that might occur back home.

Just before I was scheduled to visit my assigned site in Española, Palawan for the first time, Peace Corps raised alarm that my site was in a “black area” – a

zone where Peace Corps Volunteers were prohibited from traveling for safety and security reasons. The Associate Peace Corps Director in charge of my site assignment had failed to get clearance to have the area opened up to Peace Corps Volunteers. A scramble to re-assess the site's classification and to locate an alternative site assignment ensued. Ultimately, it was decided that the area would be re-classified and I could move there. When I got to Española, I was very disappointed in Peace Corps's rationale in listing the area as a black zone in the first place. Basically, they were supporting the American and Filipino stereotype that Muslims are dangerous terrorists. Because there is a substantial Muslim population in southern Palawan, they deemed the area unsafe. While it is true that there are radical Muslim organizations in the Philippines, such as Abu Sayyaf, the majority of the Muslim population is comprised of peaceful members of the community. Only areas where the radical groups are present and in practice is it any more dangerous than strictly non-Muslim areas. There was no terrorist threat where I lived. While in the Philippines I spent quite a bit of time explaining that the stereotypes and prejudices against Muslims as a whole were unjust.

Meanwhile, the Peace Corps headquarters in the Philippines is located in Manila, a city where terrorist activities and political uprisings have regularly occurred. Yet, Peace Corps Volunteers were rarely restricted from traveling to

Manila. On two occasions when I was in Manila on Peace Corps business, the Safety and Security Officer contacted me to warn me about unsafe conditions. The first time, there had been a bomb discovered outside of the Japanese embassy, which was adjacent to the Peace Corps office. The second time, there had been a bombing on a bus in the high-class section of the city. Both times, Peace Corps Volunteers were informed to restrict their travel within the city and exhibit extreme caution. These instances were rather nerve wracking, and most likely the most dangerous situations I encountered in the Philippines.

Break-ins are a common plague for Peace Corps Volunteers and other expatriates. Most houses and other structures are not that difficult to break into in the Philippines, and the allure to target expatriates is greater because it is a common assumption that they have more valuables. Just before I moved to Siquijor, my friend's residence where I would be living was broken into. Very little was actually stolen, because very little of value was inside. It was the violation of personal space that was the bigger issue. We hired carpenters to make as many security improvements as possible and enlisted the aid of people in the area to help keep an eye on the place for us.

Other safety and security issues just warranted common sense and alertness. For example, one evening while leaving the ATM at the bank in Palawan's capital, a group of three tricycles were very intent on giving me a ride.

As safety precaution, I never found a ride immediately outside of the bank, so I declined these drivers' offers. However, even after I had walked a block away and crossed the street, these same three tricycles kept circling to give me a ride. Then I noticed that on the backs of two of the motorcycles were the teenage girls that had been in line in front of me at the ATM. The drivers of the tricycles were probably the men who had been with them. I suspected that they were so interested in giving me a ride because they had seen me in line at the bank and assumed that I had a substantial amount of money to steal. I made sure to keep an eye on those vehicles as I continued to walk along the well-lit sidewalk until the group gave up trying to give me a ride. Even then, I chose to walk a while longer until I felt secure. Then I selected a tricycle and rode to the place where I was staying. Being alert for anything out of the ordinary – such as someone too eager to provide a ride – is a simple way to avoid potentially unsafe conditions.

A Tragic Event

One of the volunteer activities I participated in while living in Siquijor was assisting in training a Provincial marine assessment team comprised of local Siquijodnons. Unfortunately, during the weeklong scuba diving training for the Siquijor marine assessment team, one of the trainees suffered a medical fatality while underwater. This tragic incident, and the resulting efforts to revive the victim, gave the scuba instructor and me a unique (albeit unwanted) insight into

local medical practices, legal systems, and death rituals. We were appalled by the lack of basic medical attention available on the island, as proven by the fact that we had to personally continue administering CPR in the ambulance and even after arrival at the hospital. When the doctor arrived to the hospital and declared the patient dead, it was immediately assumed that the cause of death was drowning, because all of us were wet from diving. Only after we insisted that the doctor hear the full account of what happened and the progression of medical signs did he realize that the death was not due to drowning.

The next day, we also had to insist that we have legal witnesses document our testing of all of the scuba equipment that was involved in the dive incident. We wanted to clearly establish that our actions and equipment were not responsible for the man's death. Furthermore, we voluntarily filed a joint affidavit detailing all data possibly relevant to the dive incident.

Following the dive incident, we were highly concerned about the local response and the culturally appropriate way to handle the situation. Initially, we feared for our safety. Despite the well-deserved reputation of Siquijodnons being very friendly, local stories about other accidents advised extreme caution. Legend has it that if someone hits a person with a vehicle in that area, the driver had better make it a hit-and-run because if s/he sticks around, witnesses may drag the driver from the vehicle and extract revenge. For this reason, we were

concerned about retaliation for the fact that we were conducting the dive training and were responsible for the trainees. Fortunately, the locals recognized the extreme efforts we went through to save the incident victim while still assuring the safety of the other trainees in the water. The victim's widow and daughter were extremely upset about the loss of their loved one, but saw it for what it was – a medical incident. When we attended the wake on the evening of the dive incident, we found out from the widow that the deceased had lied in three places on his medical form for the scuba training. He had wanted to learn to scuba dive so badly that he literally put his life on the line.

Since the scuba instructor and another person helping with the training on land were PCVs, Peace Corps insisted that they report to the PC headquarters in Manila immediately for debriefing and trauma counseling. Naturally, I wanted to join them so that we could deal with this situation together. However, we also felt it would be inappropriate to disappear from the community during this time. Because there is a recommended no-fly time after scuba diving, we were able to delay our departure by a day. During that time, we tested the scuba equipment and attended the wake again. During the second day of the wake, we found out just how excited the departed trainee had been about learning to dive. He would take the training book home every night to study, and he told his wife about everything he was learning, as demonstrated by the fact that she showed us the

dive signals that her husband had taught her. While the widow was understandably distraught over the loss of her husband, she also seemed glad that he passed while doing something that he loved and was excited about. That knowledge also gave us some peace.

When it was safe to fly, we took a whirlwind trip to Manila to debrief Peace Corps and meet with counselors. Both the PC staff and the counselors were impressed with the way we handled the situation. After being released from their care, we planned the return trip to incorporate a brief visit with another Peace Corps Volunteer. The main reason for this visit was that we knew the story of the dive incident would be spreading through *chika-chika* and *tsismis*, and we at least wanted someone to know the whole story.

Upon returning to Siquijor, we attended the wake again. This time we met the son of the deceased man who had just arrived from his home abroad. While the rest of the family did not outwardly harbor any resentment against us, this man clearly did. Anger is an understandable response to what happened, but after going several days without anyone expressing hostility towards us, it was rather shocking. We carefully and calmly explained everything that happened and expressed our sympathies. Other family members and friends kept the son calm, and we excused ourselves. We decided it would be best to remain at the wake, but keep our distance from the son. After an appropriate

interval of time, we were given a ride home from friends. A few days later, more than a week after the dive incident, the deceased was laid to rest. We attended the funeral service and burial.

Three months later, we conducted the completion of the dive training. Understandably, several of the original trainees chose not to participate. The majority, however, went on to successfully earn their diving certification. At the conclusion of the training, we all joined together in honoring the dive incident victim. The completion of the training gave purpose to the entire endeavor and helped bring some closure to the trauma.

Farewells

Five-Minute Despedita

When I received the shocking news that I was being medically separated from Peace Corps, I was given only 24 hours to vacate my site. I was in the middle of conducting a youth environmental camp at the local high school. I was determined to see the project through, so instead of canceling the entire second day of the camp, I shortened the itinerary and wrapped things up at noon. Before the camp began that day, I had informed some teachers of my situation and made arrangements to donate a large quantity of my belongings to the school and to surrounding rural areas through the school's "values" club.

At about 5:00 pm, my counterpart and the driver from my host agency arrived and we began loading the rest of my belongings in the vehicle. As we loaded up the truck and emptied my *nipa* hut, my neighbors started gathering in my yard to find out what was going on. I was still inside as I heard my counterpart explaining it to them in Tagalog. It was a relief that I didn't have to try to explain in my "Taglish." I still needed to keep clarifying since they were all stunned. Finally my neighbors came to accept the fact that I was leaving permanently and without any notice, but then they all started clamoring about the fact that I wasn't having a *despidita* (farewell party). This is a key part of the culture in the Philippines. Thinking on my feet, I quickly grabbed the bucket of leftover cookies from the



Figure 6. "Five-minute *despidita*" with friends and neighbors in Palawan.

environmental camp and gave my camera to a friend to take pictures. I started passing the cookies out, saying, "five-minute *despidita*!" My neighbors laughed and posed for pictures (Figure 6). In some small way, this helped fulfill the cultural (and my personal) need for an official farewell. After my five-minute *despidita*, I departed from my site. Unfortunately, I didn't have time to visit my field office one last time to say

goodbye to any of the people there. That was one of the hardest things about the whole medical separation – not being able to say goodbye properly or at all to everyone I knew in country.

Planned Departure

My departure from Siquijor was a drastic contrast to the disappearing act that I was forced to perform in Palawan. I knew weeks ahead of time approximately when I would be leaving. When another Peace Corps Volunteer hosted his *despedita*, it was also informally recognized by many as my *despedita*. Once again, I made arrangements to donate many of my belongings, but this time I was able to organize and coordinate the donations in a more considered manner. As a final treat, I found the time to complete a perimeter hike of Siquijor – something I had wanted to do since I moved to the island. Before I left, I was able to say goodbye to the community members, friends, and island that had been such a big part of my life for nine months.

CASE STUDY IN SIQUIJOR

Site description

The Province of Siquijor

Siquijor is an island steeped in mysticism and folklore. Due to the eerie glow emanating from swarms of fireflies in the molave trees on the island, the Spaniards dubbed Siquijor *Isla del Fuego*, or Island of Fire. Superstitions regarding mythical man-eating ghouls, such as the *aswang* and *wak-wak*, permeate the culture in Siquijor. Sorcerers and “quack doctors” (shamans) are attributed with casting spells and curses and performing healings. In addition to these legends, Siquijor is home to natural attractions such as white sandy beaches, coral reefs, limestone caves, waterfalls, springs, and the forested Mount Bandilaan (557 meters high).

An island province (Figure 7) in the Central Visayas region, Siquijor is the third smallest province in the Philippines both in terms of population and land area. 2000 census data reports a population of 81,598 in Siquijor with 17,351 households and an average annual growth rate of 2.19 percent (Ericta, 2002). The Province of Siquijor is divided into six municipalities: Siquijor (the capital), Larena, Enrique Villanueva, Maria, Lazi and San Juan. Siquijor’s main agricultural products are corn, coconut, cassava, playa, peanuts, banana, mungo,

and legumes (Siquijor Profile, n.d.). The total land area of Siquijor is 343.5 square kilometers (34,350 hectares), with the following categorization:

Agricultural areas: 171.29 sq km (17, 129 ha)

Grassland/Shrubland areas: 153.14 (15, 314 ha)

Woodland/forest areas: 16.42 (1,642 ha)

Wetland areas: 0.7 sq km (70 ha)

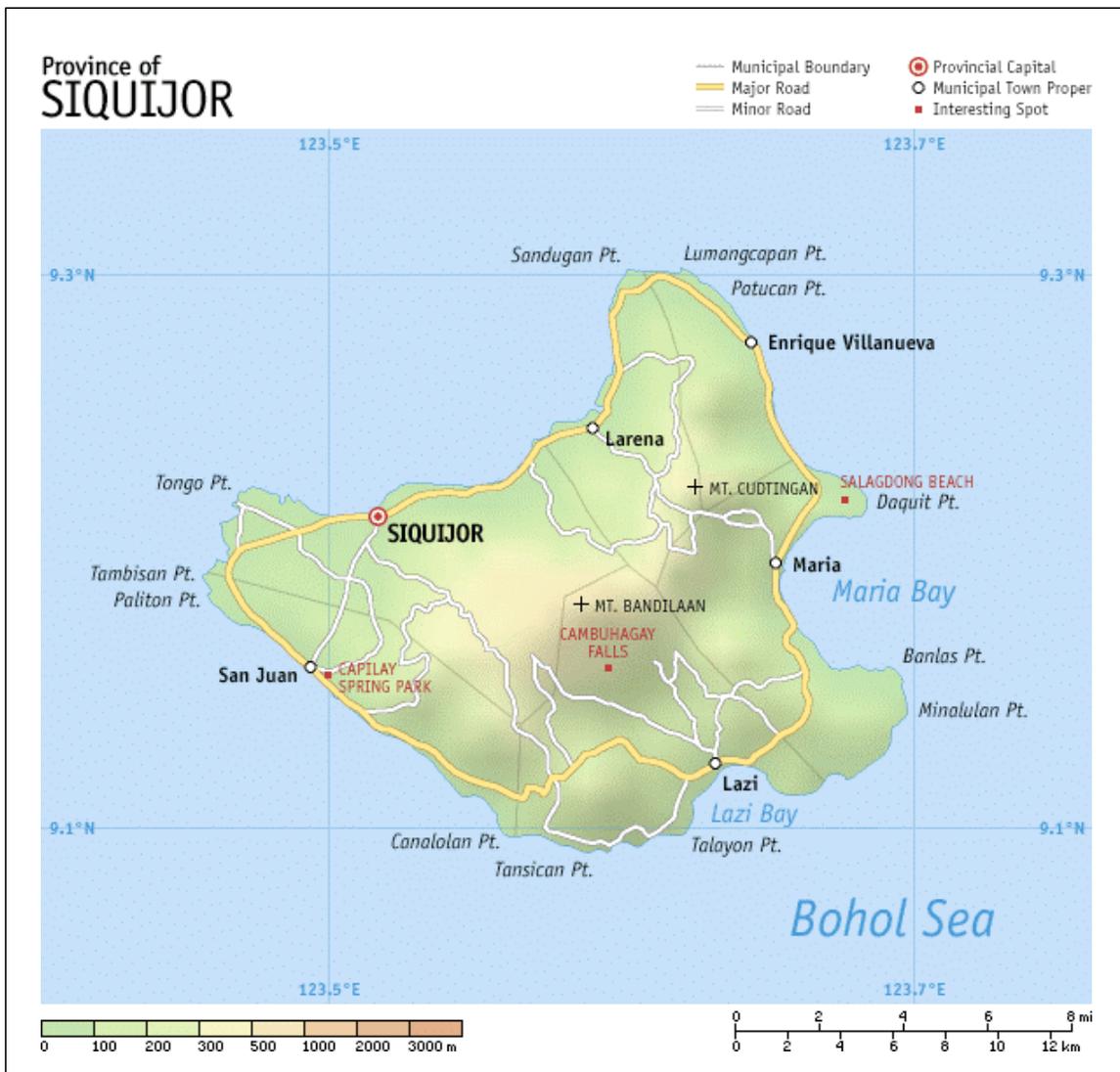


Figure 7. Map of the Province of Siquijor. Created and copyrighted (2003) by seav (<http://en.wikipedia.org/wiki/User:Seav>). Released under the GNU Free Documentation License.

Miscellaneous areas (pastures, settlements, mining and quarrying): 1.95 sq km (195 ha)

(Regional Profile, n.d.)

Siquijor's coastal resources (Figure 8) include white sandy beaches; mangrove, coral reef, and seagrass habitats; and marine protected areas. The coastal zone around the island is 84.46 square kilometers (8,446 hectares). There are 3.825 sq km (382.5 ha) of mangrove area, 15.49 sq km (1,549 ha) of shore area, and 800 sq km (80,000 ha) of coral reefs (Agribusiness Profile, n.d.). Twenty-two marine protected areas (MPAs) have been established in the Province of Siquijor, consisting of ten marine sanctuaries, one marine reserve, and eleven mangrove

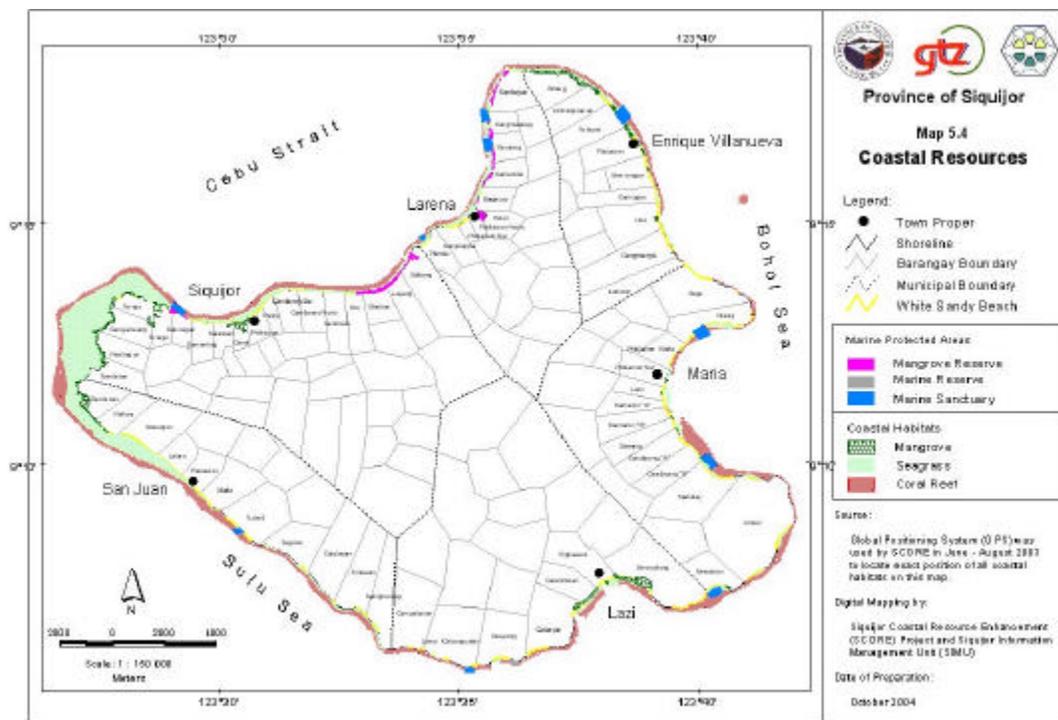


Figure 8. Map of Coastal Resources in the Province of Siquijor; courtesy of the Siquijor Coastal Resource Enhancement (SCORE) Project and Siquijor Information Management Unit (SIMU).

sanctuaries (LGCMP, 2004). “These MPAs serve as a strategy for limiting access to declining resources and have reduced the fishing and sea-life collection pressure in the area” (LGCMP, 2004). Siquijor’s MPAs cover a total of 183.03 hectares: 149.79 hectares of reef and 33.24 hectares of mangrove forest. The mangrove sanctuaries “are more focused on mangrove rehabilitation and reforestation as opposed to eco-tourism and diving in the coral reef protected areas” (LGCMP, 2004).

Barangay Luyang & the Luyang Mangrove Reserve

The capital municipality of the Province of Siquijor is also called Siquijor. Siquijor, Siquijor is comprised of 42 *barangays*, or governmental units, including *Barangay Luyang* (Figure 9). Luyang hosts one of the island’s eleven mangrove reserves. Established in 2003, Luyang Mangrove Reserve has a total area of 5.24 hectares (LGCMP, 2004). By coastal highway, this reserve lies approximately six kilometers from downtown Siquijor and four kilometers from downtown Larena in the municipality to the east. There is no user fee in ordinance for this MPA.

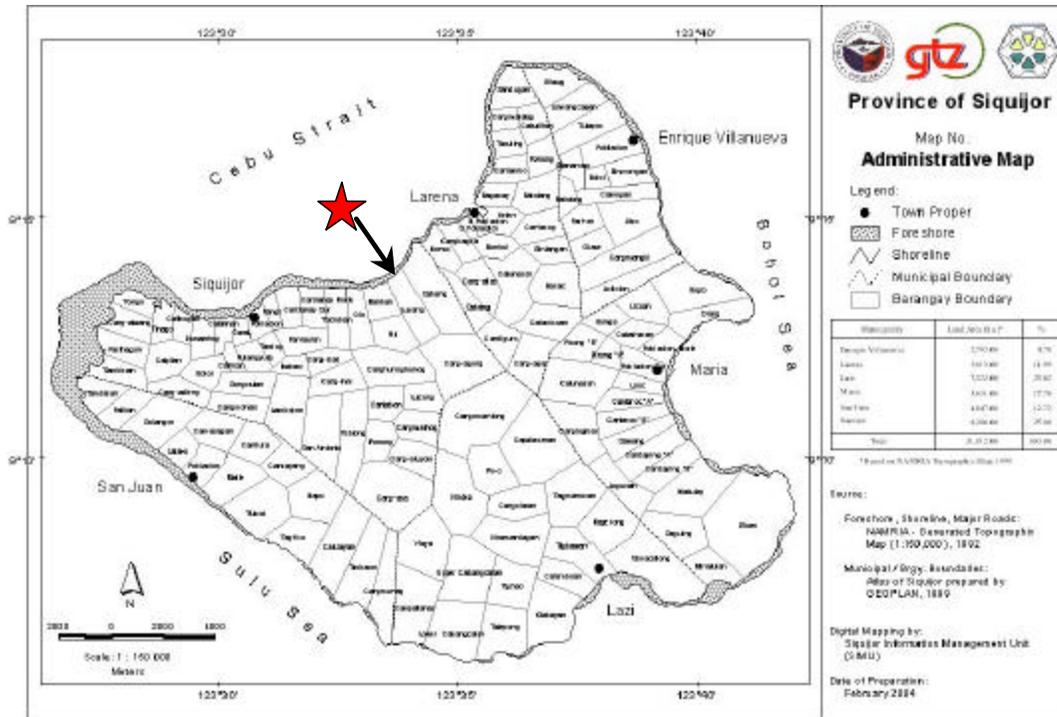


Figure 9. Administrative Map of the Province of Siquijor, indicating (★) the location of *Barangay Luyang* within the municipality of Siquijor. Adapted from original map courtesy of the Siquijor Information Management Unit (SIMU).

Luyang Fisherfolks' Association (LUFA) & Guiwanon Spring Park Resort

In November 2002, a non-governmental organization, Saint Catherine Family Helper Project, Inc. (SCFHPI), expanded its operations to the island of Siquijor. Through the Siquijor Integrated Management of Coastal Resources (SIMCOR) project, SCFHPI began educating and empowering coastal communities in Siquijor to protect their natural resources. Specifically, in Luyang,

[the] community learned the integrated importance of maintaining mangrove habitat for [their] primary subsistence: fishing. They learned in the marine biology workshops that mangrove areas combined with coral reefs

and seagrasses synergistically strengthen the marine food chain, which directly affects all of the fisherfolk communities in the area positively. (LUFA, n.d.)

A local people's organization, the Luyang Fisherfolks' Association (LUFA), began working in collaboration with SIMCOR to create a mangrove sanctuary, known as Guiwanon Spring Park Resort. Located in the Luyang Mangrove Reserve, Guiwanon Spring Park Resort is an eco-tourism center and mangrove nursery. The park consists of a series of treehouses in the mangroves connected by a network of boardwalks made from coconut lumber and bamboo (Figures 10 and 11). Along the walkways, there are educational signs in the local dialect, Visayan, informing visitors about the importance of mangrove habitats.

The treehouses can be rented out for conferences and meetings as well as overnight stays by tourists. There is also a videoke machine that makes Guiwanon a popular destination for many locals.

LUFA has worked in collaboration with numerous



Figure 10. Sign welcoming visitors to Guiwanon Spring Park Resort in Luyang, Siquijor.

organizations to gain the skills and resources necessary to create, manage, and expand Guiwanon Spring Park Resort. In their draft brochure, LUFA provides thanks to the following organizations for their assistance:

- Community Empowerment Resource Network – “the actualizing force of this project”
- Department of Environment and Natural Resources – “approving legislation [to] safeguard the mangroves”
- Local Government of Siquijor – “lending support and skills”
- Saint Catherine Family Helper Project, Inc. – “serving as the catalyst to ‘help people help themselves’”
- United Nation Development Program – “contributing to the creation of SIMCOR”



Figure 11. The treehouse project at Guiwanon Spring Park Resort in Luyang, Siquijor, as viewed from the ocean.

- United States Peace Corps – “facilitating eco-tourism development”
(LUFA, n.d.)

There are two paid receptionists responsible for collecting the entrance and rental fees for the park and managing the sale of snacks and beverages. Entrance to the park costs ten pesos. Meeting rental of the conference treehouse for three hours with electricity is 250 pesos, as is overnight rental of a tourist treehouse. Active LUFA members share the responsibilities of maintaining the facilities. A posted schedule lists teams of members on-duty to work at Guiwanon during assigned times each week. Some members take this responsibility more seriously than others. Plans are underway to add a restaurant and souvenir workshop to Guiwanaon Spring Park Resort.

Field Research Methods

When designing my research methodology, several factors had to be taken into consideration. Time, funding, and resources were all limited. I had only a vague understanding of the local dialect, Visayan, so I was completely reliant on a research assistant/translator. (Due to a severe decline in work quality and reliability, I had to change research assistants part way through the study.) Most importantly, cultural considerations needed to be addressed appropriately.

“Proper Channels”

Philippine society is very hierarchical in nature. Therefore, it was very important to approach my research by going through the proper channels. Approval of community leaders was vital in order to make participants comfortable with cooperating. First I consulted with the *barangay* captain (head of the local community). I explained to her the purpose of my study and that I would like her support in conducting the research in her *barangay*. She was enthusiastic about the project and helped arrange for me to address the Board of the Luyang Fisherfolks Association (LUFA). Through the help of the *barangay* captain (fluent in English) and a Peace Corps Volunteer working with LUFA (fluent in the local dialect), I addressed the Board. I gave a thorough introduction of myself and my proposed research. I then requested their cooperation and participation in the study. I also requested suggestions for other participants.

With the Board’s approval for my research, I attended the next meeting of the LUFA general members. Once again, I introduced myself and the project. By this time I had identified a research assistant and she also introduced herself at the meeting. We made it clear that interviews would be conducted in the local dialect through my research assistant. I also explained that they could choose

whether or not to participate. My research assistant and I encouraged them to ask us any questions about the study at any time.

Door-to-Door Introductions

With the aid of my research assistant, I began individualized introductions of the project to potential participants. Staff working at Guiwanon Spring Park helped identify current, inactive, and former LUFA members and give directions to their homes. My research assistant and I then spent several days going from house to house to make the subjects more familiar with us and what we were doing in the community. Many of the people had been present at the LUFA meeting where I introduced myself. Several others had not been there but had heard about the study. A few people we visited learned about the project for the first time during the door-to-door introductions. In any case, these unstructured interviews were a valuable tool for acquiring background data, building rapport, and familiarizing participants with the research.

Community Resources Map

To gain a better understanding of resources regarded as important in the local community, I asked LUFA members to work on a community resources map. Through the help of my research assistant, I explained the project to the receptionists and the LUFA members on duty at the treehouses. We asked them

to get it started and explained that I would ask several other LUFA members to contribute to the map over the course of the next few weeks (Figure 12).

By watching the map develop over time, it became clear that the main resources valued by the map's creators were the local houses, stores, and community buildings as well as the Guiwanon Spring and the treehouses. Other natural resources were notably absent from the map. Eventually, an area of coconut trees was included on the map. Shortly thereafter, other natural resources and plantations began to appear on the map. After several LUFA members had the opportunity to contribute to the map, I brought it to the next meeting of the general members. Collectively, missing features were pointed out and certain members were very critical of the map. I jumped in to commend the map's creators for all of the hard work they had put into the map. Then I suggested that perhaps other members could create their own version of the



Figure 12. LUFA members working on the Community Resources Map

map. This idea was well received. I gathered the materials and supplied them to the head creator of the second map. He requested to also have the first copy of the map for a while to help him out. I was reluctant to let the map leave

my possession, but did agree. I tried to make it very clear that I wanted the first map returned to me.

When the second map was delivered to me, I was very impressed with the level of planning and detail that had gone into it. However, I was disappointed that the first map was not returned; I was never able to track it down. The second map did seem to include everything that I remembered seeing on the first map as well as many more elements such as pipelines and electric transmission lines. Photographs and descriptions of the Community Resources Map are available in Appendix A.

Living at Guiwanon Spring Park Resort

Living in one of the treehouses at Guiwanon Spring Park Resort was like living directly in a research laboratory. At any given time of the day or night, I could observe local community members utilizing the coastal area (Figure 13). Depending on the tides, there could be fisherfolks out in boats working with nets in teams or solo, people wading through the tidal flats to collect seaweed and mollusks, teenagers night fishing, children splashing and playing in the water, women washing laundry in the spring water, farmers bathing their cattle, or families picnicking. From this vantage point, I was able to witness many activities that I was told no longer occurred in the protected area. I was also able to observe which community members relied strongly on the coastal resources.

Most of the people that I saw out in the ocean on a regular basis were not easy to identify. They were not people I had seen associated with LUFA. Since I would see these fisherfolks at such off hours, there was usually no one else



Figure 13. Local coastal and fishing activities at Guiwanon Spring Park Resort in Luyang, Siquijor.

around to help identify them. I knew that it was inappropriate to just call out to them from my treehouse and try to get them to participate in my study.

However, when I finally saw them on land at a festival, I was able to recognize them and have my research assistant schedule interviews. In this instance, patience and a watchful eye for opportunity paid off.

Interviews

Interviews were designed to be semi-structured, utilizing a general interview guide of questions and topics to be covered. I prepared questions in three categories: socio-economic background, environmental awareness, and the protected area/environmental conservation project (Appendix B). I intentionally incorporated some redundancies in the questions in the hopes that approaching the same subject area in a different way might generate more complete responses. Working with my research assistant, we tailored the questions in a manner that would better translate linguistically and culturally. After the first set of interviews, we re-examined the questions and rephrased and expanded them as deemed necessary. Eventually, we also added sets of questions to incorporate as appropriate for specific stakeholders: LUFA officers, fisherfolks, and young adult interviewees (Appendix C).

As per Washington State University's research protocols, I was required to have subjects sign a consent form (Appendix D) agreeing to be a part of the

study and granting permission to audiotape the interview. Interviews were audiotaped using a microcassette for transcription purposes. Interview necessities such as consent forms and audiotape machines can be intimidating for many laypeople. Even though the consent form was presented in the local dialect (Appendix E), I instructed my research assistants to verbally explain the key contents of the consent form to all subjects before it was given to them to sign. This way subjects with low literacy levels, poor eyesight, or little interest in reading the form could still provide informed consent. To put subjects more at ease, the consent form and microcassette recorder were introduced as benignly as possible after some rapport building had taken place.

To make the interview process flow more smoothly, I prepared my research assistants ahead of time for certain scenarios. I explained how to follow up on questions so that conversation in the local dialect did not have to be interrupted and translated to me during the interview. I also instructed my assistants not to pressure the subjects and to just move on if they seemed uncomfortable with any of the questions. I repeatedly emphasized the importance of not giving examples. Examples are often regarded as the “right” answer and can interfere with subjects providing a genuine answer or opinion. Recognizing that subjects may fear punitive consequences when discussing issues such as poaching, I instructed my assistants to only use vague third party

references if these sensitive subjects were discussed. That way, subjects could keep anonymity if they want to discuss their own actions. I also reminded my assistants to make it clear that subjects could choose not to answer any interview questions or terminate the interview at their discretion.

A total of 41 subjects were interviewed. I selected interviewees in various ways. I first arranged for interviews with active LUFA members, while I tried to track down and include some inactive or former members. I also made sure to interview the LUFA officers. I quickly learned at the start of my research that very few of the Luyang Fisherfolks' Association Members are actually fisherfolks. So I also endeavored to identify and schedule interviews with people who actually fished. I engaged the help of the LUFA president to schedule interviews with fisherfolks outside of LUFA. Unfortunately, many of the people he referred me to were still not fisherfolks. I finally had a breakthrough on a holiday – St. John the Baptist Day. If I had known in advance what day it was, I would not have asked my research assistant to work. Luckily for me, he did work that day though. We had quite a few interviews scheduled for that day, but many of the subjects were unavailable because they were celebrating the holiday by the water's edge, as is the custom. When we visited one of the subject's homes (located on the coast), we discovered several other people there who were active fisherfolks. We were able to conduct interviews with them in

succession. When we thought we were done working for the day, we passed by a large crowd by the shore. I recognized many fisherfolks that I had regularly observed from my treehouse but had been unable to identify. We scheduled interviews with all of them.

Field Notes/Photographs/Transcriptions

Whenever possible, we conducted the interviews at the subjects' homes. During the interviews, I took notes on the surroundings and the subjects' body language. Observations about the quality, condition, and contents of the subjects' homes revealed volumes more about their economic status than answers to questions on the topic. To gain access to more of the house to increase the number of observations I could make, I usually requested to use their CR (comfort room, i.e. restroom) when the interview was over. During the interviews, body language helped me determine the subjects' comfort level and interest in interview subjects and the overall interview process. As much as possible given my limited understanding of Visayan, I tried to associate body language notes with the particular place in the interview.

When the interviews were completed, we asked the subjects' permission to photograph them, their families, and their homes. These photographs served as further evidence of economic status. I used a digital camera to take the photographs, which allowed me to quickly review them in the field on the

camera's display. So, the photographs could also be used to help remind me of who I had already interviewed and their family and community relationships.

In field notes and on transcriptions, codes were used in place of informant names to ensure confidentiality. Rather than simply numbering the data relating to each interviewee sequentially according to the order interviewed, I developed a coding system that included digits designating the following:

- site/project number
- district number
- household number
- household member number
- interview number

The primary intent of the coding system was to make it difficult for anyone else to interpret to whom the data corresponded. However, I also made sure that it revealed information that might be useful to me. The site/project number was used in case I had time to include another protected area in my research. The district number was helpful in understanding community relationships and locating the subject in the event that a follow up interview was necessary. The household number was helpful to keep track of how many subjects I interviewed in each district. (I tried to get an even mix.) The household member number facilitated cross-referencing data in the event that more than one subject was

interviewed in a particular household. Finally, the interview number was the easiest way for me to keep track of the individual to whom the data corresponded. Separate from the field notes and transcriptions, I kept the signed consent forms in chronological order of the interviews and also a running list of subjects' names. That way I could re-connect a name with the code number in case I needed to gather follow up information.

After a day or two of interviews, my research assistants would transcribe the audiotapes. For the socio-economic background section of the interview, I just requested an outline of the data. For the rest of the interview, I requested a detailed translation of the pertinent conversation. Side conversations were noted in the transcriptions, but not translated. As necessary/possible, I asked my assistant to provide comments with his understanding of responses that contained “*kuan*” (a word in Visayan that is commonly used as a space filler or vague reference). I also requested comments to explain things that may not be general knowledge to foreigners. Finally, I specified that specific Visayan terminology/phrases should be written in Visayan followed by the English translation in parenthesis. My second research assistant was so thorough, that I asked him to review and edit the transcriptions provided by first research assistant.

Analysis

Socio-Economic Status (& the Perception of Poverty)

If relying on interview transcriptions alone, one could easily conclude that most of my subjects were of the same, poor, economic status. However, when field notes and photographs are compared with the interview responses, a common incongruity becomes apparent. Despite drastic, observable differences in the quality of domiciles and standards of living, most respondents described their own situation as though they were living dangerously close to or below the poverty line. Residents of cement houses with metal roofs, running water, and indoor, tiled CRs (Figure 14) described the same standard of living as community members inhabiting dilapidated structures with no running water and an unfinished, exterior CR (Figure 15). I find it very difficult to believe that subjects with office jobs, big screen televisions, and abundant carved and/or upholstered furniture endured the same threat of poverty as subjects surviving off of the



Figure 14. Cement house with metal roof, running water, and indoor, tiled CR



Figure 15. Dilapidated shelter.



Figure 16. A local fisherfolk and his home.



Figure 17. The essential components of this fishfolk's life: his home (to the left), his plot of corn (to the right), and the sea (in the background)

land/sea or manual labor whose houses were furnished with rudimentary basics. Often, even houses with dirt floors would contain small televisions and stereos; however, some houses did not have any element of luxury (Figures 16 and 17).

Many interviewees likely underrepresented their economic status due to a colonial mindset (Box 1, page 5). Rather than recognizing and valuing the resources available to them, these interviewees longed for a higher standard of living. With a sense of apathy about their situation, they could not fully appreciate the fact that they had secure shelters, regular and ample food supply, and steady sources of income.

Environmental Awareness

In general, the concept of natural resources was poorly understood. The phrase is difficult to translate to Visayan, and even when translated, it holds little meaning. If any examples of natural resources were given to aid comprehension, then subjects seemed to think that the example was the actual definition of a natural resource. 46.3% of subjects could list one or two resources beyond any example given, while only 7.3% could list three or more natural resources (Table 1). Even though subjects could list few, if any, natural resources found in their community, they could identify ways in which they relied upon mangroves and the sea as sources of products.

Environmental Awareness

Identification of Natural Resources:					
Three or more resources identified beyond any example given	One or two resources identified beyond any example given	Concept poorly understood / example given was reiterated	No response / concept not understood	None / natural resources are lacking	
7.3%	46.3%	24.3%	17.0%	4.9%	

Benefits of mangroves and corals:			
Viewed as beneficial	Additionally, recognized as breeding grounds / shelter / habitat for fish & sea life	Additionally, other benefits articulated	Not asked
85.3%	51.2%	17.1%	14.6%

Sustainability of resource use:					
Optimism that natural resources will be available for future generations ¹	Conditional optimism expressed	Doubts that natural resources will be available for future generations	Uncertain	No response	Not asked
19.5%	48.8%	14.6%	9.8%	2.4%	7.3%

Interconnectedness among different aspects of nature:				
No effects perceived of land use on neighboring land ²	Some effects of land use or complaints of neighbors' practices mentioned	Land use impacts well-understood on a larger scale	No relevant response	Not asked
56.1%	12.2%	0%	12.2%	19.5%

Table 1. Compiled interview results regarding environmental awareness (based on 41 interviews).

¹ Many subjects accredited the protected area as the reason resources would be available

² Research assistant's comment: Usually, individuals do not criticize or unearth the secrets of their neighbors especially if the person being asked has benefited from his/her neighbor's help.

Only 85.3% of subjects were asked if they viewed mangroves and corals as beneficial (Table 1). Of these subjects, 100% stated that the mangroves and/or corals are beneficial. Additionally, 51.2% of all subjects recognized mangroves and/or coral as breeding grounds, shelter, and/or habitat for fish and sea life (Table 1). 17.1% of all subjects named other benefits of mangroves and corals (Table 1). In fact, many community members articulated benefits of mangroves and corals quite well. There have been several educational campaigns and seminars in Siquijor on coastal resources. It is possible that such widespread awareness of the benefits of mangroves and corals can be attributed to the success of these efforts.

Views on the sustainability of resource use were mixed (Table 1). 19.5% of subjects expressed unconditional optimism that natural resources will be available for future generations. Many of these subjects accredited the protected area as the reason resources would be available. 48.8% of subjects articulated conditional optimism that resources would be available in the future. These subjects expressed that the sustainability of resources is contingent upon certain conditions such as the cessation of illegal fishing. 14.6% of subjects expressed doubts that natural resources will be available for future generations.

The interconnectedness among different aspects of nature was poorly understood. Most respondents did not associate that the way one person uses

his land effects other land around him. While 56.1% of all subjects expressed that they were not effected by the way their neighbors use their land (Table 1), it may be important to note that, according to my research assistant, individuals do not usually criticize or unearth the secrets of their neighbors especially if the person being asked has benefited from his/her neighbor's help

Perceptions of the Mangrove Protected Area

Support for the mangrove protected area was virtually universal in Luyang (Table 2). 87.8% of subjects clearly supported or saw the benefits of the mangrove protected area. Only 2.4%, or one subject, expressed negative opinions. It was unclear how the remaining 9.8% felt about the mangrove protected area. 65.9% of all subjects did not express having had any misgivings about the establishment of the protected area when it was first introduced. 14.6% identified some initial misgivings. 17.1% of subjects were not asked about this topic.

I suspect that even if more respondents had had misgivings about the establishment of the protected area, they would not have been likely to admit to that after the project showed signs of success. The concept of the "right" answer is very strong in the Filipino education system and is perpetuated into adulthood. It is usually considered unacceptable to be unsure or incorrect.

Therefore, many Filipinos go along with the status quo and retract previous statements that may prove to be “wrong.”

The majority of subjects (82.9%) were asked if the community had been consulted prior to the establishment of the mangrove protected area (Table 2). 68.3% of all subjects stated that the community had been consulted or informed. In most instances, consultation was considered equivalent to being informed. Only one subject, representing 2.4% of the total, felt that the community had not been adequately consulted, represented, or informed about the establishment of

Perceptions of the Mangrove Protected Area

Support for the mangrove protected area:		
Supported / benefits seen 87.8%	Opposed / negative opinions articulated 2.4%	Unclear 9.8%

Misgivings prior to establishment of protected area:			
No misgivings identified 65.9%	Misgivings identified 14.6%	No response 2.4%	Not asked 17.1%

Community consultation prior to establishment of protected area:				
Individual stated the community had been consulted or informed ¹ 68.3%	Individual felt the community had not been adequately consulted, represented, or informed 2.4%	Uncertain 9.8%	No response 2.4%	Not asked 17.1%

Table 2. Compiled interview results regarding the mangrove protected area (based on 41 interviews).

¹ Comment: In most instances, consultation was described as equivalent to being informed.

the mangrove protected area. 9.8% of all subjects were uncertain about consultation. Because consultation was synonymous with being informed, it is difficult to determine whether true community consultations took place in which stakeholders' concerns and interests were addressed and influenced establishment of the protected area in any way.

Now that the protected area has been established, interviewees cite noticeable improvements in the health of the mangroves. One aspect repeatedly mentioned was that the branches of the mangroves used to be cut way back to feed cattle. Now, the branches have filled in.

I found it interesting (and disturbing) that some of the activities that "ceased" after the mangrove protected area was established, still continue. Some interviewees explained that "formerly" the spring was used for laundering clothes, the ocean area was used for washing cattle, and the mangroves were



Figure 18. Luyang community members washing cattle in the protected area

used for fuel. LUFA's draft brochure even states, "in the recent past, this area was used as a pasture, as a laundromat, [and] as a source of firewood" (LUFA, n.d.). Community members seemed well aware that these

actions are detrimental to the mangroves, but they are also turning a blind eye to the fact that they still continue.

Undoubtedly, the rate of detrimental use has decreased, but nonetheless, I personally witnessed these activities on more than one occasion. Community laundry sessions were not a completely uncommon sight in the spring.

Additionally, when LUFA members washed the laundry and dishes from Guiwanon, they dumped the soapy water off the boardwalk and into the tidal area below. Cattle were still led through the mangroves and under the boardwalks to be washed in the ocean (Figure 18). LUFA members have also peeled sacks of bark off of the mangroves at Guiwanon for their own benefit – either to personally use as fuel, or to sell for this purpose. So, supplementing the data from interviews with observations as a first-hand witness gives a clearer picture of what is happening in the community.

Controversies / Issues

During the course of the interview process, several issues arose beyond the scope of the original interview guide. The most puzzling of these issues is the fact that the vast majority of the Luyang Fisherfolks' Association members are not actually fisherfolks. The few members who do fish, do so recreationally instead of as a source of income or livelihood.

Why are so many non-fisherfolks members of LUFA? It seems that the majority of LUFA members joined the organization either because they were interested in improving the mangroves or because their friends had joined the organization. Core LUFA members participated in the educational seminars and project planning meetings hosted by SCFHPI and other coastal resource programs. The remainder of members joined LUFA as more of a social networking activity.

Why are the primary local fisherfolks not members of LUFA? When asked about this, the local fisherfolks who rely upon the sea for their livelihood responded that they did not have the time or money to be part of LUFA. They must spend their time hard at work to continue to meet their families' needs [rather than on-duty at Guiwanon or at LUFA meetings]. They cannot afford to take time away from fishing or to pay monthly membership dues. Also evident was a social dichotomy. While there certainly are some members of LUFA with much lower socio-economic status than others, the overall impression of the local fisherfolks seems to be that the LUFA members are well-educated office workers with whom they would not be comfortable associating.

The social dichotomy is most likely the genuine cause for lack of fisherfolk membership in LUFA. While it is true that monthly membership dues must be paid, the LUFA members also share the profits of Guiwanon Spring Park Resort,

so the monetary issue cancels itself out. It is also true that fisherfolks must spend a vast amount of time hard at work. However, there is also clearly down time to engage in recreational activities such as drinking circles and cock-fighting. Therefore, if motivated to do so, the local fisherfolks could find the means to participate in an association. The question becomes: why should they join an association that does not represent their interests and needs?

Another controversial issue in Luyang is illegal fishing. While highly destructive illegal methods such as dynamite fishing are not used, there are still methods currently employed that have been banned. Use of these illegal fishing methods is typically recognized, but ignored. LUFA members may on occasion make derogatory remarks about illegal fishing, but they do not report such activities even though they have a perfect vantage point to witness them. On the other hand, the actual fisherfolks dependent upon fishing for their livelihoods are resentful of LUFA members who fish recreationally. The fisherfolks are struggling to eke a living from the sea and feel it is inappropriate for recreational fishers to create greater competition for these resources. The fisherfolks also clearly object to the use of illegal fishing methods by recreational fishers. While they may use illegal methods themselves, the fisherfolks seem to feel somewhat justified in doing so because of the difficulty of this livelihood. At the same time,

recreational fishers who use illegal practices are faulted with unfairly depleting the fishing stock.

One interviewee was particularly upset because, according to him, LUFA officers were engaging in illegal fishing practices. Of particular note, one officer accused of illegal fishing is also a member of the *bantay dagat*. The *bantay dagat* is a “civilian fisheries patrol force made up of volunteers that try to keep a 24 hour watch on Philippine coastal waters up to 15 kilometers from shore” (Bantay Dagat (Sea Patrol) Forces, n.d.) So it would be doubly hypocritical for a LUFA officer and member of the *bantay dagat* to engage in illegal fishing practices. The interviewee discussing this situation used it as a prime example for why he was not interested in joining LUFA.

Toward the end of my stay in Siquijor, seminars and community consultations were being held in Luyang and neighboring *barangays* regarding the possibility of creating an expanded marine protected area. The possibility of expanding the protected area in Luyang further out into the coastal waters cropped up repeatedly during interviews. This local issue was more the subject of speculation than of opposition. One thing was clear, however. Community consultations were targeting participation of key LUFA members and not a more inclusive sampling of other key stakeholders, e.g. the actual fisherfolks of the area.

LESSONS FROM OTHER PROGRAMS

Mangrove Paddleboat Tour – Sabang, Palawan

In central Palawan, Philippines in the barangay of Sabang, there is a protected area known officially as the Puerto Princesa Subterranean River National Park, but that is commonly referred to as “The Underground River.” The predominant feature of this protected area is a river that flows for over 8 kilometers underground through the St. Paul Cave. However, the area is also known for its lush forests, hiking trails, and mangroves.

In 1971, a Philippine Presidential Proclamation established a 3,901 hectare land area in Sabang, central Palawan as the St. Paul Subterranean River National Park. In 1999, the park was renamed the Puerto Princesa Subterranean River National Park and expanded to 22,202 hectares of land, divided into a core zone of 3,901 hectares and a buffer zone of 18,301 hectares (Mangrove Paddle Boat, 2000). [Note: contested numbers, UNEP-WCMC (1998) lists the core zone as 5,753 ha and the buffer zone as 14,449 ha.] That same year, the park was declared a World Heritage Site by UNESCO.

The only residents within the core zone are the staff members (UNEP-WCMC, 1998). The residents within the buffer zone of the park include Tagbanua indigenous peoples. The Tagbanua traditionally use the land in the area for seeking food and supplies such as rattan and resin.

To help bolster conservation efforts and improve the livelihood of the local peoples, several agencies joined together to establish an ecotourism project:

In line with the development of a tourism master plan for the Puerto Princesa Subterranean River National Park (PPSRNP), Conservation International began in 1999 a series of studies to develop a community-based ecotourism project within the park. The study resulted in the design and development of a mangrove paddleboat tour as an alternative destination to the underground river [and] at the same time, a community-operated sustainable tourism project.

The project aims to strengthen community participation in park management and provide additional income to community members. (Mangrove Paddle Boat, 2000)



Figure 19. Mangrove planting area in Sabang, Palawan.



Figure 20. An indigenous guide of the Mangrove Paddleboat Tour in Sabang, Palawan.

This project is a showcase item that demonstrates Conservation International (CI)'s policies of integrating environmental conservation with human welfare. Ecotourists can take the Mangrove Paddleboat Tour, learn important environmental and cultural information from the trained indigenous guides, and plant a mangrove propagule, all with minimal degradation to the habitat (Figures 19 and 20). Meanwhile, the local peoples earn supplemental income by leading these tours, thereby benefiting from the protection of the mangroves.

The largest downside seems to be that once the project was established and CI considered it completed, they failed to officially turn it over in a timely manner to the management of the Tagbanua people that rely upon it. According to several of the guides, this meant that they were not able to seek from other sources the additional funding they felt they needed to improve the project and carry it on to the next level.

Proposed Protected Area – Mount Mantalingahan, Palawan

In Southern Palawan, Conservation International (CI) – Philippines is working with the South Palawan Planning Council (SPPC) and the governments of five municipalities (Sofronio Española, Brooke's Point, Bataraza, Quezon, and Rizal) to establish a protected area. The central focus of this proposed protected area is Mount Mantalingahan, the highest peak in Palawan at 2,085 meters.

Delineation of the proposed protected area is still under evaluation, but it certainly would encompass land in all five of the municipalities (listed above) on the Southern Palawan mainland.

In November 2004, CI – Philippines and South Palawan Planning Staff (SPPS) conducted a pilot survey in three barangays of Sofronio Española that were identified to fall within the proposed Mantalingahan protected area. Among other objectives, the survey was intended “to evaluate the basic environmental and protected area awareness levels of local communities” (Chassels and Chan, 2005) and validate support for the proposed protected area. A previous policy analysis in 2003 indicated that there was widespread public support for a protected area, but I found discrepancies in that data and pushed to have the subject evaluated further.

Results of the survey revealed:

The term “protected area” was highly unfamiliar in the upland communities. Therefore, interviewees had a hard time grasping what benefits or concerns might be derived from establishing a protected area. Despite this, the majority of respondents claimed they would support a protected area near them.

...Even though survey results show widespread support for protected area establishment, the vast majority of community members were only first introduced to the concept of protected areas during the interview process.

People who were given only a brief description of a foreign concept cannot make informed decisions or fully think the matter through in just a few minutes (Chassels and Chan, 2005).

The draft survey report's criticisms of the "community support" for the proposed protected area were met with resistance from the project manager in the CI Palawan office. It is unknown whether criticisms of the validity of the community support were addressed in subsequent project planning and/or if any other attempts to establish support were made.

CI staff seemed content to overlook flaws in the data reporting support for establishing a protected area and to assume community support based on biased data. If I had not raised scrutiny over the issue, CI – Philippines never would have included questions regarding support in the November 2004 Environmental and Protected Area Awareness Survey, and they certainly would have overlooked the disparities in the resulting data. If lack of knowledge about a subject could so easily be manipulated into appearing to be support for that subject, one wonders how well CI is really protecting the best interests of the people affected by conservation projects.

Aside from seeking evidence of support for the proposed protected area and plans to provide education about the protected area, it is unclear how CI

intends to balance the needs of the local human societies with the conservation efforts in southern Palawan.

Participatory Development – Implications for Conservation

In “Participatory Development and Community-Based Conservation: Opportunities Missed for Lessons Learned?” (2003), Campbell and Vainio-Mattila examine connections between the concepts of participatory development and community-based conservation. Community-based conservation is used by Campbell and Vainio-Mattila to refer to “efforts to conserve wildlife or ‘biodiversity,’ resources traditionally protected via parks and protected areas, rather than natural resources like water, soils, or forests” (Campbell and Vainio-Mattila, 2003). (Note that in this thesis, participatory conservation is used as a broader term that encompasses conservation of wildlife and biodiversity as well as natural resources.) Participatory development and community-based conservation are compared “to suggest ways in which community-based conservation might be informed by participatory development” (Campbell and Vainio-Mattila, 2003).

Context is very important when it comes to conservation.

...there can be no universal metatruths about conservation that can be separated from, or implemented in isolation from, the context within which people interact with the species/ecosystem for which conservation strategies are

being designed. The experience of communities with the environment, including access to, and control over the use of, natural resources, is central to the explanations and visions of conservation as well as the choice of appropriate conservation strategies. (Campbell and Vainio-Mattila, 2003)

To improve chances for the long-term changes effected by development interventions to be sustainable, Campbell and Vainio-Mattila support situating knowledge – “a process whereby access to the information, and control over its use shifts from the experts and scientists to the people whose lives are being affected” (Campbell and Vainio-Mattila, 2003).

The implication for community-based conservation is that knowledge that has been produced through long, mutually adaptive processes of human communities interacting with their environment can be valuable to conservation efforts. This knowledge has sometimes been lost for the simple reason that, historically, conservation practitioners have not included processes that would allow for the effective integration of such knowledge into conservation strategies. Such processes have been developed within participatory development and vary from the mechanistic tools of documenting knowledge of people with varied literacy/numeracy skills (community mapping, transecting, sorting and ranking, Venn diagrams, etc.), to methodologies that systematically explore local technical knowledge (Rapid Rural Appraisal, RRA; Participatory

Assessment, Monitoring and Evaluation, PAME; Participatory Learning Approach, PLA; etc.), to the participatory approach predicated upon the integration of the three debates [praxis and theory, knowledge, and external agents] described here. What is noteworthy is that all these tools, methodologies, and the approach itself is highly adaptable to the context of community-based conservation (Campbell and Vainio-Mattila, 2003).

“Community-based conservation arose from pragmatic, philosophical, and environmental justice concerns related to a traditional parks and protected areas approach to conservation. While there is some evidence of all three elements in case studies of community-based conservation, the pragmatic concerns appear to have dominated their implementation” (Campbell and Vainio-Mattila, 2003). Campbell and Vainio-Mattila suggest that community-based conservation has not taken advantage of lessons learned in participatory development. This may be due in part to different emphasis on means versus end objectives in community-based conservation and participatory development (Campbell and Vainio-Mattila, 2003). “Nevertheless, a more explicit and deliberate dialogue between conservationists promoting community-based conservation and development agents promoting participatory development may move the former away from the goal of getting people ‘on-side’ with conservation towards including local people in a meaningful discussion of what

conservation should look like in their particular context” (Campbell and Vainio-Mattila, 2003). Another suggested reason for missing lessons from participatory development may be “partly due to different training and expertise of community-based conservation versus participatory development practitioners” (Campbell and Vainio-Mattila, 2003). To address the latter problem, Campbell and Vainio-Mattila suggest that people with training in participatory development be included in community-based conservation implementation teams.

RECOMMENDATIONS

Luyang

To increase the success of the Luyang Mangrove Reserve, there are a number of things that can be done on a local level. Improvements to Guiwanon Spring Park Resort will attract more visitors thereby increasing the financial profits of protecting the mangroves. LUFA members have a significant opportunity to educate the local public as well as visitors by modifying their own behaviors. Finally, altering either the name or the composition of LUFA will more fairly represent the organization’s interests and give an opportunity for

other stakeholders' concerns to be considered. These measures can have a significant impact on the success of local conservation efforts.

Currently, Guiwanon Spring Park caters mostly to the local populace. There is an underlying assumption that visitors will be able to fend for themselves at the resort. Very little help is offered for issues common to someone new to the island, such as how to navigate transportation to/from Guiwanon, where to find food and other services, and even how to get assistance or fully benefit from the resort itself. The receptionists and key active members of LUFA should be trained in basic customer service skills. When visitors arrive at Guiwanon, it should be clear to them who they should talk to initially and also who they can go to for help. Therefore, they should be greeted clearly by an individual who will immediately offer information about the park/resort. Facilities and basic guidelines should be introduced. The receptionists and on-duty members of LUFA should wear nametags and/or staff tee-shirts to establish who can provide assistance if needed. A tour of the park should be offered/scheduled. Educational tours would require guides trained for public speaking as well as the development of a basic curriculum. Furthermore, all educational signs are currently in the regional dialect, Visayan. Additional signs should be posted in English and possibly Tagalog so a broader range of visitors can benefit from them. The planned addition of a restaurant will also greatly

improve the visitor friendliness of Guiwanon. LUFA should plan to include both local dishes as well as items accommodating the tastes of foreign visitors. These measures would increase customer comfort and satisfaction, repeat or extended visits, and word-of-mouth advertisement. The more successful Guiwanon Spring Park Resort it, the more benefits the community will see from protecting the mangrove reserve upon which it relies.

LUFA members have a great opportunity to teach by example. The local community can observe all aspects of Guiwanon Spring Park Resort on a regular basis, whereas visitors witness just a portion of what happens there. Either way, if LUFA members consistently behave in environmentally-friendly ways, it will be noticeable and will reinforce protection of the mangroves. For example, when I lived at Guiwanon, not only did I have to haul fresh water out to my treehouse for drinking, cooking, laundry, etc, but I also had to haul all wastewater back to the entrance of the park where there was a CR (restroom) with a septic tank. Dumping wastewater directly into the mangrove area would hurt the habitat. However, it was extremely frustrating to haul my wastewater more than 100 meters to properly dispose of it, when I would pass LUFA members dumping soapy water from dishes or laundry off the boardwalk, within 5 meters of the septic tank. This would take place just inside the entrance to the park, so anyone

and everyone could witness this behavior. LUFA members also urinate off the boardwalk at any place in the park, so why should visitors not do the same?

Similarly, if LUFA advocates protecting the mangroves against uses such as fuel collection, why can LUFA members be observed collecting bark for fuel from the trees in the reserve? All collection of fuels from mangroves in the protected area should be ceased, *especially* by LUFA members. Likewise, all illegal fishing activities by LUFA members should be terminated. Commitment to these policies should be a membership requirement if LUFA wants to be taken seriously. If the self-designated protectors of the mangroves exhibit detrimental behavior towards the protected area, why should anyone else in the community behave any differently?

While improving the mangroves will ultimately benefit the local fisheries and therefore the fisherfolks, the Luyang *Fisherfolks'* Association focuses more on the protection and improvement of the mangroves themselves. This misnomer creates the appearance that the fisherfolks have a collective voice in community decisions and consultations. In reality, these stakeholders are still being overlooked in the grand scheme of things. A simple modification of LUFA's name might eliminate this misrepresentation. The current people's organization is, after all, more clearly the Luyang Mangrove Association, and should be so named if it continues to function as such. If the organization continues to dub

itself a *fisherfolks'* association, then they should focus more clearly on the needs and interests of local fisherfolks and solicit strong representation from these stakeholders.

Philippines and Beyond

Successes and shortcomings of every environmental conservation program could be used to improve upon efforts elsewhere. Recommendations can be extrapolated from the case studies in Siquijor and Palawan to improve participatory conservation methods throughout the Philippines and perhaps around the globe.

Notable successes of participatory conservation in Luyang exemplify a symbiotic advance in community development and environmental protection. Community members have a raised awareness about the importance of a critical habitat and a new respect for protecting it. A people's organization (LUFA) has been empowered to aid and benefit from conservation. Visitors are given an ecotourism option to learn about, experience, and enjoy the natural environment as an alternative to less sustainable forms of vacationing. When other areas are considering the benefits of participatory conservation, they can look to examples such as these to justify attempting similar endeavors.

Weaknesses of existing conservation efforts should also be considered so other programs can avoid the same deficiencies. For example, the

recommendations discussed for Luyang may also have more universal applications. Any ecotourism project should continually make improvements to attract, serve, and educate more visitors while adequately protecting the natural habitat.

Teaching by example is a universally key concept. Any program striving to protect the environment should take strides to ensure that the people associated with the project embody the principals of the conservation. This not only diminishes negative impacts on the environment by program participants, but it also demonstrates to others that it is possible to modify one's behavior to live more in harmony with the environment.

It is imperative that participatory conservation programs have the support of the local community. A well-designed project will consider context, local knowledge and skills, and existing resources. Concerns of all stakeholders should be addressed and balanced as much as possible. Therefore, the assumption that people's organizations adequately represent the interests of a designated sector of the population should be avoided. It is possible, if not highly likely, that people's organizations only characterize a portion of the sector they represent. As in the case of LUFA, an organization's name may entirely misrepresent the sector that it addresses. Consequently, community consultations and planning meetings should not only be open to the entire

public, but they should also actively seek out to include every stakeholder and ensure that wide-ranging feedback is integral to the project.

Extreme caution should be taken against introducing a new concept and then immediately assessing the support for it. As in the case of the proposed Mantalingahan protected area in southern Palawan, citizens may express support for a conservation project without fully understanding all of the implications. It is in the overall best interests of participatory conservation for the local community to assess the positive as well as the potentially negative aspects of a conservation project. In that way, measures can be taken to proactively seek out and mitigate anticipated problems.

Careful monitoring and evaluation of every participatory conservation project should continually assess the progress, needs, and successes of the program.

Development outcomes [should] be measured and evaluated not just in terms of quantifiable material goals, but also in terms of spread, equity, and follow-on effects.

Such an approach would require us to listen and learn before we act, and to work with local stakeholders to design interventions that are truly needed, that can be fully supported locally, and that will involve all partners in a mutually reinforcing process of learning and capacity development. (Nolan, 2002)

Finally, participatory conservation programs should seek out and utilize venues to share their experiences. The more a program's successes and failures are publicized, the more it can be used as a resource for improving conservation efforts elsewhere.

CONCLUSION

Significant progress is being made to transition environmental protection in the direction of participatory conservation. If participatory programs are carefully planned, implemented, assessed, and evaluated, then not only will the local people and habitat benefit, but methods implemented elsewhere can improve as well. Assessments are vital to monitoring and improving conservation programs. Internal assessments track and incorporate community member feedback. This is important because the community has the best understanding of a project's local context. However, external assessments are also important because they can provide impartial insights to the situation as well as identify further implications of the project.

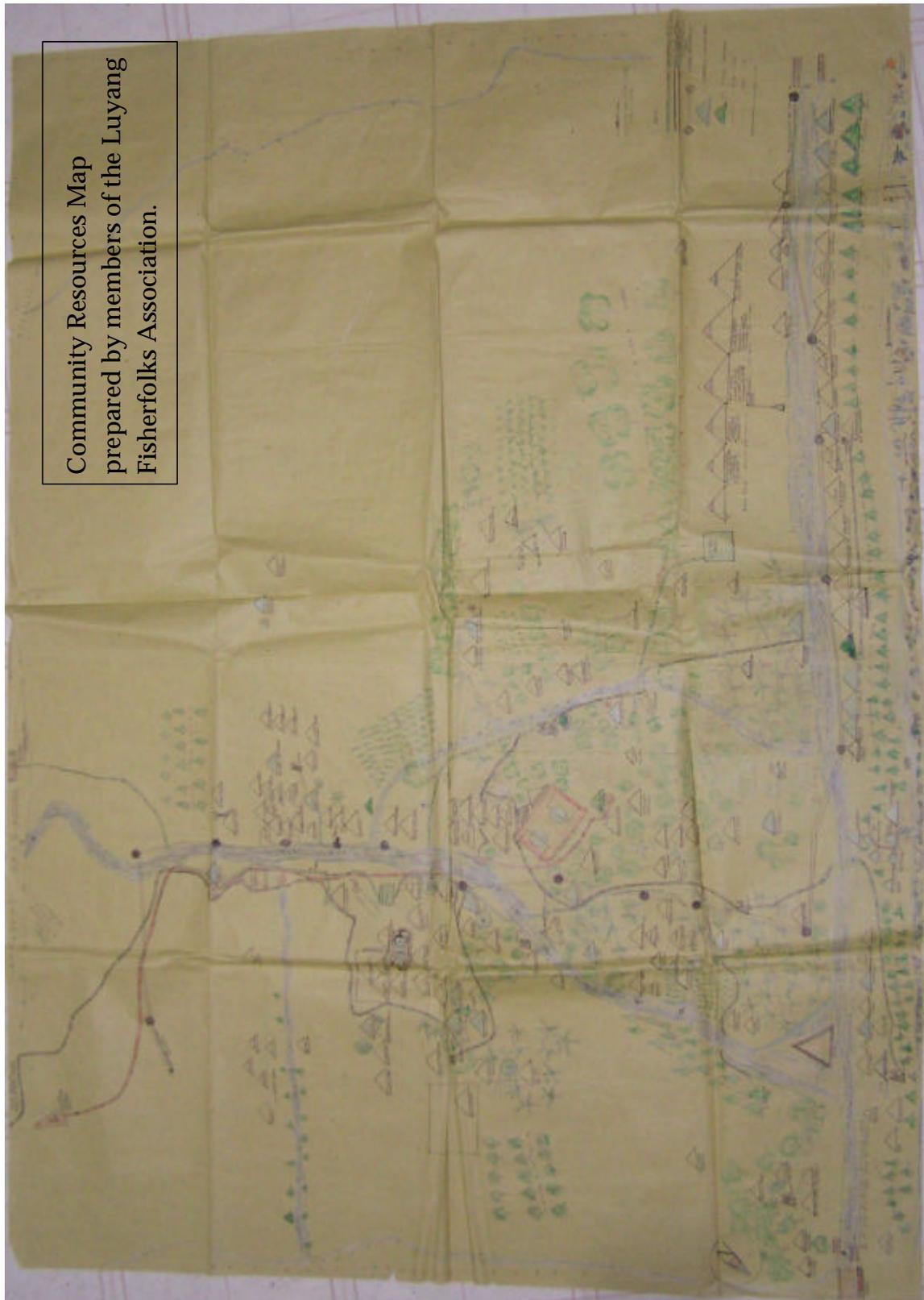
Even with external assessments, local context should be taken into consideration. When I first arrived in the Philippines, I had previous international development and environmental conservation experience. I had

also researched the Philippines and the environmental situation there.

Nonetheless, this did not qualify me to immediately begin evaluating their conservation programs. First I had to experientially learn about the culture and environment. The challenges I faced were an unavoidable aspect of the learning process; however, they gave me the awareness and cognizance to appreciate the local context. Only with this first-hand experience in the field could I comprehend the many facets of the programs and provide comprehensive assessments. With all of these dimensions to my research, I was able to evaluate these endeavors and recommend fundamental improvements to participatory conservation practices.

APPENDIX

A. Community Resources Map

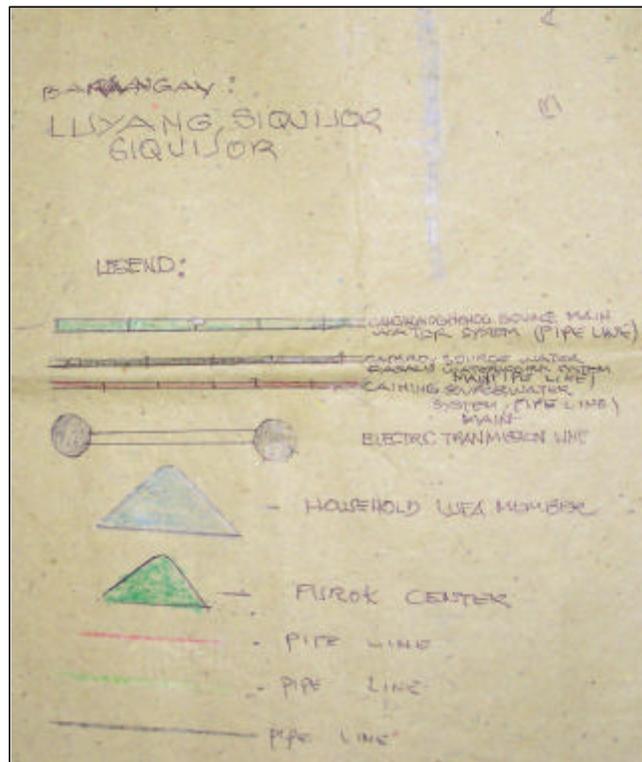




Section of the Luyang Community Resources Map showing residences, community buildings, roadways, pipelines, electric transmission lines, basketball court, trees, agricultural areas, plantations, Guiwanon Spring Park Resort, mangroves, and shoreline.



Above: Section of the Luyang Community Resources Map showing residences, community buildings, roadways, springs and a spring box, pipelines, electric transmission lines, a limestone deposit, agricultural areas, and plantations



To the right: Legend for the Community Resources Map showing symbols for pipelines, electric transmission line, LUFA member households, and community center.

B. Interview Guide

INTERVIEW GUIDE (SEMI-STRUCTURED INTERVIEWS)

GOAL: to identify successful strategies, possible improvements, and shortcomings of participatory conservation efforts in the Philippines in order to recommend strategies that can/should be implemented in local, national, and international conservation and sustainable development projects (as well as pitfalls that should be guarded against).

1. Socio-Economic Background:

1.1 Age

1.2 Gender

1.3 Ethnic Background

1.4 Language(s) Used

1.5 Duration of Settlement

- Current location (in years)

- Former location (in years)

- Where

1.6 Household members (including interviewee)

- # males & ages

- # females & ages

- # employed

- # in school

- 1.7 Educational Attainment
- 1.8 Religion
- 1.9 Occupation
- 1.10 Existing Livelihood/Sources of Income (and details)
- 1.11 Existing sources of food and supplies

2. Environmental Awareness:

- 2.1 What can you tell us about the environment/nature here where you live?
- 2.2 What are the different natural resources found in your community?
- 2.3 In what ways do you rely on the forest/mangroves/sea as a resource?
- 2.4 What products do you rely on the forest/mangroves/sea to provide?
- 2.5 Do you think that forests/mangroves/sea/corals are beneficial? If so, in what ways?
- 2.6 Do you think that your children/grandchildren will have access to enough natural resources when they are adults?
- 2.7 What are the different environmental/social concerns in your community?
- 2.8 How does your neighbor use his land? How does this effect your land?

3. Protected Area/Environmental Conservation Project:

- 3.1 How old is this protected area/environmental conservation project?
- 3.2 *If applicable:* Why did you join LUFA? What did you have to do to become a member?
- 3.3 What was it like before the protected area was established? How did people use the area?
- 3.4 Have people changed the way they use the forest/mangroves/sea?
- 3.5 Was the community consulted before the protected area was established? What were you told/asked?
- 3.6 Before it was established, did you have any doubts or negative thoughts about the protected area being established? Did you think it would affect your livelihood or food sources?
- 3.7 Have any of these concerns come true?
- 3.8 Are there any additional things that have happened that you did not anticipate? Do you think any mistakes have been made?
- 3.9 Before it was established, what benefits did you think the protected area would bring to your community?
- 3.10 Has the community seen any of these benefits?
- 3.11 Are there any additional benefits that have happened that you did not anticipate?

3.12 Poaching: Are there people who still gather protected natural resources?

Why do you think they do this? Do they have alternatives?

3.13 How do the other people in the community react if they see someone misusing the protected area?

3.14 In what ways to you think management of the protected area can be improved?

C. Supplemental Interview Guide

SUPPLEMENTAL INTERVIEW GUIDE (TO BE USED AS APPROPRIATE)

LUFA Officers:

1. How did you become [LUFA officer position]?
2. How long is the term? How many times can you be re-elected?
3. How does LUFA reach out to attract new members to join?
4. Have any fisherfolks decided to join? Have they told you why they have chosen not to join?
5. What do most of the LUFA members do for a living?
6. Why is the organization called LUFA if most of the members are not fisherfolks?
7. What is your vision for Guiwanon?
8. What have you done to make Guiwanon as it is now?
9. Do you think/believe your project will still be going great in two years time? Why or why not?

Fisherfolks:

1. When did you start/learn fishing? At what age?
2. Who taught you to fish?
3. Aside from fishing, what are your other means of income? How often do you fish?
4. Do you have enough catch in a day to sustain your family?
5. Compared to 10-20 years ago, which has a better catch?
6. Can you see a future in fishing say 10-20 years from now?
7. Are you a member of LUFA? Why did/didn't you join?
 - a. If you would be asked to join at this time, would you join?
 - b. If so, why? If not, why not?
8. Do you own a boat to fish with?
 - a. If not, what is the sharing deal with the boat's owner?
9. What are some of the conflicts? (other fishers, LUFA, officers?)
10. Have you taught your children/grandchildren to fish?
11. Why do you fish and not do some other kind of work (like construction for example)?
12. What is your ambition in life for the future or for your children?

Young Adults:

1. Do you share your ideas and concerns with LUFA or the community leaders? Do they regard your ideas as important?
2. Can you see yourself as a leader in LUFA or the community in the future? Why or why not?
3. Is there anything holding you back from being more active in LUFA or other community matters (now or in the future)?

D. Consent Form – English

WASHINGTON STATE UNIVERSITY

CONSENT FORM

PARTICIPATORY CONSERVATION IN THE PHILIPPINES

Researcher: Marla R. Chassels

Graduate Student, Washington State University

Environmental Science and Regional Planning Program

+63-906-217-3564

Researchers' statement

We are asking you to be in a research study. The purpose of this consent form is to give you the information you will need to help you decide whether to be in the study or not. You may ask questions about the purpose of the research and anything else about the research or this form that is not clear. When we have answered all your questions, you can decide if you want to be in the study or not. This process is called 'informed consent.'

PURPOSE AND BENEFITS

This study will investigate the relationship between environmental conservation practices and sustainable livelihoods in the Visaya region of the Philippines. The goal is to identify successful strategies, possible improvements, and shortcomings of participatory conservation efforts. This information will then be used to recommend conservation strategies for implementation in local, national, and international conservation development projects. Local peoples involved with or affected by protected areas (i.e. fisherfolks, farmers, etc.) will be consulted.

PROCEDURES

If you decide to participate in the study, we will schedule an interview. The interview will be conducted in Visayan/Tagalog. With your permission, we will tape record the interview to make it easier to translate it into English. But we will not tape record the interview if you do not want it recorded. During the interview, we will ask you questions about the environment and natural resources here. We will ask you about your livelihood. We will ask about the management and use of the protected area. Also, with your permission only, we may ask to take your photograph.

RISKS, STRESS, OR DISCOMFORT

All of the information you provide will be kept confidential. Any information revealed during the interview is for research purposes only and no authorities will be informed of any poaching or other activities. You may refuse to answer any question during the interview. If you feel uncomfortable at any time, we can stop the interview.

If you agree to be a part of this study, please sign the consent form.

Printed name of researcher

Signature of researcher

Date

Subject's statement

This study has been explained to me. I volunteer to take part in this research. I have had a chance to ask questions. If I have general questions about the research, I can ask one of the researchers listed above. I agree to be audio taped during the interview.

Printed name of subject

Signature of subject

Date

E. Consent Form – Visayan

WASHINGTON STATE UNIVERSITY

CONSENT FORM

PARTICIPATORY CONSERVATION IN THE PHILIPPINES

Researcher: Marla R. Chassels

Graduate Student, Washington State University

Environmental Science and Regional Planning Program

+63-906-217-3564

Researchers' statement

Ako si Marla R. Chassels. Estudyante sa Washington State University. Ako naghimo ug usa ka research study dinhi sa Pilipinas. Ako nagahangyo sa inyong kooperasyon para sa kalampusan niining research. Kong aduna kamoy dugang pangutana, ayaw pagduha-duha pagduol kanako o sa akong research assistant para mahatagan namo og kalinaw ang inyong mga kabalaka. Naa kamoy gahum mubalibad nga dili kamo gusto mu-apil sa among research study.

PURPOSE AND BENEFITS

Kining maong research mahitungod sa sa relasyon sa “protected area” ug sa mga tawo kung diin nahimutang ang maong protected area. Ang mga katuyo-an sa akong pakisusi maong ang:

1. Kon aduna bay mga kaayohan ang maong proyekto?
2. Nakatabang ba kini sa panginabuhi sa mga tawo?
3. Malampuson ba ang gipahigayong proyekto?
4. Naa bay mga problema nga inyong nasaksihan o na-experience sa pagtukod sa maong proyekto?
5. Unsa ang inyong mga ika-sugyot para ma-improbar ang pagdumala sa maong proyeekto?

PROCEDURES

Kung musugot mo nga muapil sa pakigsusi, pagahimuon ang interview sa Cebuano ug kini mapahigayon sa adlaw ug oras nga pinaka-komportable ninyo. Sa inyong pagtugot, among e-record ang interview sa among tape recorder para sayon e-translate sa akong research assistant sa English ang tanang gihisgutan sulod sa interview. Ang among mga pangutana maglibot kabahin sa palibot ug sa kinaiyahan, inyong panginabuhi, ug sa mga tigdumala sa protected area. Sa

lain nga bahin, makuha kami sa inyong mga hulagway kong kamo dili supak niini.

RISKS, STRESS, OR DISCOMFORT

Ang tanang impormasyon nga mong makuha gikan kaninyo, pagahipuson gayud ug kini walay laing makabalo o makabasa kabahin niini gawas sa research assistant, ug ang researcher. Pwedi kamo mupili nga dili mutubag sa ubang mga pangutana ug kon pananglit dili na kamo komportable mupadayon sa intererview, pwedi usab na atong hunungon.

Palihug pirma sa ubos pagpamatu-od nga kining gipahigayon nga interview dili supak sa inyong kabubut-on ug kamo nakasabot sa mga katuyo-an sa maong research.

Printed name of researcher

Signature of researcher

Date

Subject's statement

Kining pagtuon gipasabot na sa akoo. Nagbolontaryo ako pag-apil niining pagduki-duki (research). Naa koy oportunidad sa pagpangutana. Kon naay mga pangutana kabahin sa pagduki-duki, makapangutana ako sa mga nagduki-duki nga gilista sa ibabaw. Mosugot ako nga irecord sa tape ang akong tingog sa panahon sa interview.

Printed name of subject

Signature of subject

Date

F. Glossary

aswang – mythical ghoul/changeling

bantay dagat – sea patrol; “civilian fisheries patrol force made up of volunteers that try to keep a 24 hour watch on Philippine coastal waters up to 15 kilometers from shore” (Bantay Dagat (Sea Patrol) Forces, n.d.)

barangay – smallest governmental unit in the Philippines, roughly equivalent to a neighborhood or village, depending on the area

chika-chika – small talk, chat; often includes gossip

CR – comfort room, i.e. restroom

despedida – farewell party

jeepney – primary form of public transportation in many parts of the Philippines; colorful converted jeeps (originally from WW2 surplus jeeps, now manufactured as is) with passenger entrance in the rear and rows of seats along the windows

kasama – companion

kuan – a word in Visayan that is commonly used as a space filler or vague reference (linguistic equivalent to “ummm” or “whatever”)

LUFA – Luyang Fisherfolks’ Association; a people’s organization in Siquijor

nipa – palm fronds traditionally used for roofing material

nipa hut or *bahay kubo* – native-style hut that is typically on stilts with *sawali* walls and a *nipa* roof; however, structures that have more modernized metal roofs are often still referred to as *nipa* huts

quack doctor – shaman or witch doctor

sawali – strips of pounded/split bamboo woven into large sheets, used as a building material for walls in native houses

SCFHPI – Saint Catherine Family Helper Project, Inc.; a non-governmental organization operating in the Philippines

SIMCOR – Siquijor Integrated Management of Coastal Resources; a project of SCFHPI

Siquijodon – resident of the island of Siquijor in the Central Visayas region of the Philippines

tricycle/trike – small motorcycle with attached "side car" to hold additional passengers and cargo

tsismis (chismis) – gossip

wak-wak – mythical ghouls/changelings

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