Investigation of state-society synergy in the development management of the Apo Island Marine Reserve

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Abstract

Apo, a tiny island nestled at the Sulu sea of the Philippines, is world-renown to have one of the best community-managed marine protected area in the whole world. It is often used as an example by organizations such as Greenpeace to exemplify best practices of marine conservation through bottom-up approaches that enabled socio-economic improvements of the community. As its success grew, especially through tourism, the management of the marine reserve was handed over to the national government under the National Integrated Protected Area Systems (NIPAS) act. An initial study done by Hind, Hiponia and Grey in 2010 showed resentment, loss of agency and sovereignty felt by the local population after this management change. Hence, this inspires a research update, to investigates the reasons for the conflict through the analysis of state-society synergy of this community, given its rich social capital that facilitated the initial development of the marine reserve. The study highlights the ways in which the local community and the provincial government worked together to circumvent the problems created by the national government.
Acknowledgements

It took a village to write this master thesis, and for that I realized that no one can ever live through life without close ties such as family, friends and helpful professional networks. For these wonderful people, I am truly grateful:

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- To the Apo community. Thank you for making me feel safe and for being so chatty and open with me.
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- Lastly, to my partner in everything and my hero. Your patience and your dinners soothe my long days and night writing this. Thank you for reading it a few times to help me proof read it too! Seriously, what would I do without you, Frederik!

- To those I have forgotten to mention. I’m sorry, I haven’t slept in almost 24 hours. But you know I am very thankful!
Declaration

I hereby declare that the thesis:

Investigation of state-society synergy in the development management of the Apo Island Marine Reserve

has not been submitted to any other universities than Universitetet I Agder for any type of academic degree, and confirm that I do not refer to others or in any other way use the work of others without stating. Hence I confirm that all references are given in the bibliography.

Iris Carla Duque De Jesus
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## List of Acronyms

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<tr>
<td>AIPLS</td>
<td>Apo Island Protected Landscape and Seascape</td>
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<tr>
<td>DENR</td>
<td>Department of Environment and Natural Resources</td>
</tr>
<tr>
<td>IUCN</td>
<td>International Union for Conservation of Nature</td>
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<tr>
<td>LGU</td>
<td>Local Government Units</td>
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<tr>
<td>MPA</td>
<td>Marine Protected Area</td>
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<td>MMC</td>
<td>Marine Management Committee</td>
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<tr>
<td>NIPAS</td>
<td>National Integrated Protected Area System</td>
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<td>PA</td>
<td>Protected Area</td>
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<td>PAMB</td>
<td>The Protected Area Management Board</td>
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1. A global perspective on the human-environment conflict in protected areas

1.1 Introduction
In the face of climate change and negative human activities such as massive deforestation and overfishing, wildlife conservation has become an increasingly important practice (White, Aliño & Mensenes, 2006, p.89). One of the ways in which the international community and governments engage in wildlife conservation is through protected areas (PAs). The International Union of Conservation of Nature (IUCN) defines a protected area as “a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve long term conservation of nature with associated ecosystem services and cultural values” (IUCN, 2017). Marine protected areas (MPAs), in particular, serve to protect coral reef ecosystems so that they will be sustained for generations to come, and that the biodiversity of their ecosystems will in turn become an ecosystem service such as tourism and food source from spillovers. MPAs cover nearly 4% of the world’s ocean (IUCN, 2013; World Wildlife Fund, 2016), and an increasing number of MPAs are being established to reach the Convention of Biological Diversity’s (CBD) Aichi goal of protecting at least 10% of the ocean by 2020 (CBD, n.d.). Hence, more MPAs are to be anticipated.

A great misconception by activists and lobbyists is that establishing protected areas (PAs) will inevitably snowball into progressive human development. Adams & Hutton (2007, p.148) argued that these professionals, usually comprising of natural scientists, typically place the importance of politics, ethics, culture and traditions outside the realm of conservation as they find it a constraint on practical action. While the protection of certain areas of biodiversity, environment and wildlife meets a number of sustainable development goals, such activities have caused severe disempowerment, displacement, and impoverishment of communities that are dependent on these gentrified areas (Adams & Hutton, 2007; Noe & Kangalawe, 2015).
PAs have been undergoing contestations and conflicts from the multiple stakeholders that lay claim to the resources found within. It has been argued that the projects of protected areas have not been successful in fully implementing human development for the sake of environmental and wildlife protection. Population injustice such as displacement, resource grabbing, and loss of livelihood and habitat, are features of many protected areas in the developing world (Adams & Hutton, 2007; Colchester, 2004; Dowie, 2005). Within the context of MPAs, there has already been much research done on the human impacts on marine ecosystems, but not so much on the potential social costs of MPAs. Such social costs to both extractive and non-extractive users can be attributed to the lack of proper management, civic engagement and democracy in decision making amongst MPA stakeholders. The International Union of Nature Conservation (IUCN) recommended that the management planning of a protected area should be participatory. This means that it should involve the people that would be affected. A plan is much more likely to be implemented if the affected audiences are involved in a protected area’s development and have a sense of ‘shared ownership’ (Sanchirico, Cochran, & Emerson, 2002, p. 11).

1.2 The problem
The Apo Island Marine Reserve, an island in the Visayas region, is known to have one of the oldest protected marine reserves in the Philippines. It is part of the Apo Island Protected Landscape and Seascape (Middleton & Lee, 2003, p. 15). This site has inspired the establishment of other Marine Protected Areas and reserves that are not only in the Philippines, but also in other countries for its exemplary management and biodiversity. It is important to note that some marine protected areas are called marine reserves. According to Alcala, Bucol and Nillos-Kleiven (2008, p.1), marine reserves are not equivalent to MPAs because some of the MPAs do allow fishing or the removal of certain marine organisms and parts of the environment. Marine reserves, in the Philippines, denote fully protected areas where resource extraction is not allowed. Apo island is one such reserve where harmful modes of fishing are strictly prohibited. However, traditional methods of fishing are allowed beyond the sanctuary’s area, but never the harmful and non-ecological methods like dynamite fishing and other related methods (Hind, Hiponia & Gray, 2010). This sanctuary has been claimed as one of the most important tools for coastal resource management (World Wildlife Fund, 2016; Greenpeace, 2005. Evidence indicates that both small
and large reserves tend to have positive effects on such biological attributes as abundance, biomass and species richness of marine organisms inside reserves. It has been argued that they provide insurance against collapses of fish stocks from overfishing. This reserve and sanctuary approach has provided real benefits to local fishing communities through increased or stable fish yields from coral reefs which are maintained and protected (Alcala, 2004, p.4). In addition, the sanctuary provides protection for the coral reef and fishery surrounding the entire island and strict protection from all extraction or damaging activities. While international organizations such as Greenpeace (2005) asserted that the Apo Island is more than just a paper park - that it is an excellent example of a community-managed reserve that benefits the locals - a study conducted by Hind, Hiponia and Gray (2010) illuminates local discontentment and disempowerment. They stated that the management of the marine sanctuary has changed, from being community-based to a centralized national management in the late 1990s. They view this as taking a wrong turn in terms of development management. Hence, this management change is an important precursor to this research inquiry.

Given the reasons cited above, Apo Island is a suitable research site for the study of the effects of MPAs because of the change in management of the sanctuary within, and its long-term operation since 1986. Hence, there has been ample time for the effects of the presence of the sanctuary to be manifested in the locality. Furthermore, the Apo Island has been the center of scientific research on biodiversity and marine protection, as evidenced in the works of Marten (2005), Hind, Hiponia & Gray (2010), and Alcala (2001). Hence, this is an indication that the marine sanctuary is in full operations and the sanctuary would therefore seem a sensible strategy to help secure the value of coastal environments for future generations. However, little is known about issues with regards to its new management, and its impacts on the local inhabitants in their own perception. Therefore, the study aims to assess how the current management of the marine sanctuary has impacted the lives of the people of Apo Island, the perception of the local people about the marine sanctuary and how much the local inhabitants of the island are involved in the management and maintenance of the sanctuary in Apo Island.
This research will investigate the level of state-society synergy (this will be elaborated in chapter 4) in the natural resource management of a popular and reportedly successful MPA in the Philippines called the Apo Island, which is located in the popular coral triangle. This will be done through a qualitative study of the presence, or lack thereof, of community networks, state-society relations and civic engagement that have resulted from the creation of this MPA, and to identify sources of discontentment, mismanagement, and loss of agency felt by the locals. This is especially due to financial and bureaucratic hegemony of governments that centralizes PA management.

1.3 Purpose and significance of the study
Apo Island is the chosen community and MPA in this study because of its well-known significant results in marine regeneration, tourism revenue, and its initial bottom-up approaches to development management that has now reportedly gone awry. Hence, the results from this study will contribute to the theories and perspectives of social capital and synergy in development management. This study especially gives evidence to how state-society relations can degenerate into conflict. The Apo Island has inspired over 300 MPAs within the Philippines alone (Raymundo, 2002), and thousands of others within the coral triangle. Based on a study done by Alcala et al. (2008) in the Visayas region alone, the number of marine reserves had only been increasing as evident from figure 1 below. In the same paper, they also argued that only 33% of the reserves are functional in the Visayas region. Hence, this

![Figure 1. Cumulative number of marine reserves in the Visayas region from 1975-2008 (Alcala et al., 2008, p.8)](image-url)
research is an important conceptual tool to improve existing MPAs and reserves, and to ensure that the new ones are better managed, where applicable.

1.4 Research questions
Given the problem statement and objectives of this research, here are the following research questions that will guide this study:

1. According to the perception of the local people, to what extent are they involved in the planning and overall management of the Apo Island marine reserve?
2. What are the advantages and disadvantages that the local people have experienced since the establishment of the marine reserve?
3. How are the local people able to voice their concerns regarding the management of the island?
4. How do the stakeholders\(^1\) work together to address public concerns?

1.5 Limitations of the study
This study is limited to the Apo Island and does not represent all the marine protected areas out there. The Apo Island is unique in a way that eco-tourism has become a large source of income for the islanders and this characteristic is not common in marine protected areas. In addition, there are many different types or classifications of marine protected areas. Some have complete no-take zones, while others are more lenient. This means that the benefits that Apo island gives to its inhabitants may not be similar to that of other MPA communities. Similarly, effects of the sanctuary in Apo on its inhabitants may not be the same as elsewhere. IUCN has classified most of the MPAs in the world accordingly in their Protected Planet website\(^2\). In addition, it would have been a good supplement to the analysis if I was able to measure the levels of civic engagement through a quantitative study. Time and resources did not permit it.

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\(^1\) Stakeholders are the locals people, governing bodies of protected areas PAMB and DENR, tourist operators like AISERGA, and the University researchers that study Apo Island.

\(^2\) The Protected Planet website can be found at www.protectedplanet.net
2. Methodology

In this chapter, the research approach will be presented that contains methodological considerations that explains and systematize many of my actions taken to answer the research question(s). This chapter will break down the choice of subject, theoretical framework that is useful to the analysis, and the methodological approaches that systemize the actions taken to answer the research question. It will also highlight the main informants and interviewees during the field work.

2.1 Motivation

The choice of topic was inspired by an organization called Linking Tourism and Conservation (ltandc.org), based in Norway. I was working as an intern there for half a year. The main objective of the organization is to profile best case examples of protected areas and tourism that work in partnership towards sustainable development. A network by the organization is established to help emulate best case examples to other promising protected areas. I profiled Apo Island as one such example during my time there given its initial successes in human development and environmental protection. Tourism and environmental protection have a contentious relationship with one another and tourism is also vehemently known to be environmentally unsustainable. However, with the rise of ecotourism and the idea that it can financially support protection and preservation, I wanted to investigate its efficacy in the Philippines. During my internship, I participated in the Blue Solutions Forum in Zanzibar organized by the German Development Agency (GIZ), as well a workshop at Serengeti National Park with all the stakeholders and local people. This workshop and the forum were about finding the best ways to protect the environment while achieving social and economic development for the locals. My take-away from this experience is that without a bottom-up approach in environmental conservation, nobody wins. In addition, further research and literature review of the Apo island marine sanctuary heightened my interest when a journal by Hind, Hiponia and Gray (2010) wrote about a management change in the island that resulted in discontentment among the local people living there. This resulted in my interest in finding out the reason behind this management change, and local discontentment that may have resulted in social injustice.
2.2 Research strategy

The strategy of this research is to conceptualize the problems associated with protected area management and make recommendations that aim to improve the relationship between protected area managers and the local people living in it. To do this I conducted an initial literature review on managing protected areas, and there are many that highlight problems associated with poor management and governance. Many of these state that protected areas are national parks like African safaris that gain profit from tourism. These journals and accounts associate population injustice, such as geographical displacement and loss of livelihood, to poor management, lack of bottom-up approaches and community-based resource management. The framework for this research is premised upon the state-society synergy perspective of the social capital theory. With it comes three concepts that will be used in the discussion: state-society relations, civic engagement and community networks. The reason for this choice is because the Philippines, like many other developing nations, harbour strong social capital, but with problematic governance from the state. While there are other theories on development and governance that can be used to analyse the data, I believe that the chosen one encompasses the current situation at the Apo Island.

A qualitative research design will be implemented to answer the research questions in this study. The reason for this choice is that qualitative research enables a researcher to exercise a degree of flexibility if data needs to be collected again after analysis (Bryman, 2012, p.470) since the availability of the interviewees are based on contingency, and the weather is this tropical island can be tremulous during field work. Most importantly, the research questions aim to investigate the human experiences within the MPA and how the island is being managed, and that would mean that a qualitative research design can delineate the narratives, emotions, dispositions and personalities from interviews and focus groups. The data collection methods in this research design are semi-structured interviews with open-ended questions, and document reviews. These documents are provided by the Protection Area Management Board (PAMB) in Dumaguete, and they can be found in the appendices. Purposive sampling will be used to select participants in this research because the selected participants need to fulfil these requirements:

1. They have lived on the Apo Island when it was established as a Marine sanctuary;
PAs have been undergoing contestations and conflicts from the multiple stakeholders that lay claim to the resources found within. It has been argued that the projects of protected areas have not been successful in fully implementing human development for the sake of environmental and wildlife protection. Population injustice such as displacement, resource grabbing, and loss of livelihood and habitat, are features of many protected areas in the developing world (Adams & Hutton, 2007; Colchester, 2004; Dowie, 2005). Within the context of MPAs, there has already been much research done on the human impacts on marine ecosystems, but not so much on the potential social costs of MPAs. Such social costs to both extractive and non-extractive users can be attributed to the lack of proper management, civic engagement and democracy in decision making amongst MPA stakeholders. The International Union of Nature Conservation (IUCN) recommended that the management planning of a protected area should be participatory. This means that it should involve the people that would be affected. A plan is much more likely to be implemented if the affected audiences are involved in a protected area’s development and have a sense of ‘shared ownership’ (Sanchirico, Cochran, & Emerson, 2002, p. 11).

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The choice of topic was inspired by an organization called Linking Tourism and Conservation (ltandc.org), based in Norway. I was working as an intern there for half a year. The main objective of the organization is to profile best case examples of protected areas and tourism that work in partnership towards sustainable development. A network by the organization is established to help emulate best case examples to other promising protected areas. I profiled Apo Island as one such example during my time there given its initial successes in human development and environmental protection. Tourism and environmental protection have a contentious relationship with one another and tourism is also vehemently known to be environmentally unsustainable. However, with the rise of ecotourism and the idea that it can financially support protection and preservation, I wanted to investigate its efficacy in the Philippines. During my internship, I participated in the Blue Solutions Forum in Zanzibar organized by the German Development Agency (GIZ), as well a workshop at Serengeti National Park with all the stakeholders and local people. This workshop and the forum were about finding the best ways to protect the environment while achieving social and economic development for the locals. My take-away from this experience is that without a bottom-up approach in environmental conservation, nobody wins. In addition, further research and literature review of the Apo island marine sanctuary heightened my interest when a journal by Hind, Hiponia and Gray (2010) wrote about a management change in the island that resulted in discontentment among the local people living there. This resulted in my interest in finding out the reason behind this management change, and local discontentment that may have resulted in social injustice.
2.2 Research strategy
The strategy of this research is to conceptualize the problems associated with protected area management and make recommendations that aim to improve the relationship between protected area managers and the local people living in it. To do this I conducted an initial literature review on managing protected areas, and there are many that highlight problems associated with poor management and governance. Many of these state that protected areas are national parks like African safaris that gain profit from tourism. These journals and accounts associate population injustice, such as geographical displacement and loss of livelihood, to poor management, lack of bottom-up approaches and community-based resource management. The framework for this research is premised upon the state-society synergy perspective of the social capital theory. With it comes three concepts that will be used in the discussion: state-society relations, civic engagement and community networks. The reason for this choice is because the Philippines, like many other developing nations, harbour strong social capital, but with problematic governance from the state. While there are other theories on development and governance that can be used to analyse the data, I believe that the chosen one encompasses the current situation at the Apo Island.

A qualitative research design will be implemented to answer the research questions in this study. The reason for this choice is that qualitative research enables a researcher to exercise a degree of flexibility if data needs to be collected again after analysis (Bryman, 2012, p.470) since the availability of the interviewees are based on contingency, and the weather is this tropical island can be tremulous during field work. Most importantly, the research questions aim to investigate the human experiences within the MPA and how the island is being managed, and that would mean that a qualitative research design can delineate the narratives, emotions, dispositions and personalities from interviews and focus groups. The data collection methods in this research design are semi-structured interviews with open-ended questions, and document reviews. These documents are provided by the Protection Area Management Board (PAMB) in Dumaguete, and they can be found in the appendices. Purposive sampling will be used to select participants in this research because the selected participants need to fulfil these requirements:
1. They have lived on the Apo Island when it was established as a Marine sanctuary;
2. They have been involved, either directly or indirectly, in the management of the MPA;

3. They are working, or have worked, on the Apo Island when it was declared a marine sanctuary.

The research design for this master thesis will be a case study because it involves an intensive study of a single community as the unit of analysis over a period (Bryman, 2012).

2.3 Data collection methods

2.3.1 Semi-structured interviews
Since the methodology is founded upon a qualitative design, data comes in the form of one-on-one interviews. There was a total of 30 people that participated in these interviews. These 30 people consisted of local members living on the Apo Island that were born and raised there, those who are working for PAMB on the island, fisherman, AISERGA members, a marine biologist that has studied the Apo Island extensively, and PAMB officer from the main office in Dumaguete city.

The reason for this choice of data collection is so that these scientists and public officials are comfortable revealing information in a private environment with the researcher. Also, it would be much more efficient for the researcher to extract information from them than having to organize a focus group discussion that they might not be keen to participate in. Qualitative interviews are significant in enhancing the validity of the research. Their narratives and experiences about the management changes will be mapped onto one another for analysis to validate the situation in Apo Island.

Once I entered the island, I immediately started testing the research questions on anyone I could find and were immediately available. The locals are friendly, easy to approach, and can speak the language I am fluent in. The questions were based on the four research questions. I also included a one that asks for the historical accounts of the management in Apo, to get their perception of the differences in management. Those named interviewees in this thesis are the main informants during my field work and are comfortable with having their name written in this study.
In the beginning, I did not have the knowledge of who to ask permission to enter the field to conduct research. I was communicating with the spouse of the lodge owner on the island, who happened to be the Barangay captain. She was one of the few that I met first. After a few rounds of interviews with some locals, I met with Reno. He is the superintendent of the PAMB office on the island. He told me that I need to gain a prior research approval from the DENR office in Dumaguete city. But after an interview with him, he decided to grant me an official access to the field. Note-taking was a common practice during field work, and a summary is written at the end of the day, followed by transcription and thematic coding. Not all interviews were recorded as not many were willing.

2.3.2 Document reviews
Document reviews are the secondary data sources that will be utilized to supplement all the four questions listed above. These documents and previous research done by other experts will be used to analyse the primary data that will be collected to draw comparisons with the narrative given by the informants regarding their economic benefits. Bryman (2012) states that the state is the source of a great deal of information of potential significance for social researchers. It contains a great deal of statistical information. There is however high issue of validity when it comes to secondary data. Its representativeness can be questionable, especially when the source is bias. The documents that I received came from PAMB. The three official documents are:

1. A part of the general management plan that is still a draft and waiting for approval to be published – Appendix B
2. An official Departmental Administrative Order issued in November 2016 that commands an increase in user and entrance fees in all protected areas under the NIPAS act - Appendix C
3. A financial report of the total number of visitors and total amount of fees collected from 2009 until 2016 – Appendix E
4. The official document on the Turtle sanctuary resolution made in 2015 – Appendix F

These documents are used to supplement the presentation of findings, analysis and discussion of this study. Regarding the draft general management plan, until today it is still a draft. Hence, I recognize the fact that information in the document may
change after it has been published. In addition, the number of years reflected in the financial report does not give a whole picture of an increase and decrease in user fees and number of visitors since the beginning the marine sanctuary. However, it does reflect the years in which the typhoons destroyed the original sanctuary, and the creation of the new turtle sanctuary and the AISERGA association.

2.4 Ethical considerations
This is an overt ethnography. It was ensured that data collection was processed in the most ethical way possible, acquiring information from participants with their full consent. They were also given full information about what the study is about and what are the motives behind it. Full anonymity will be prioritized during this fieldwork. Field notes will be taken and interviews are recorded with respondents’ permission and their full knowledge. Some of the interviews are transcribed in verbatim and can be found in Appendix A.

2.5 Data analysis
The main methods of analysis in this study are both thematic and narrative analysis. According to Bryman (2012, p.579), one general strategy of thematic analysis is provided by a framework. The framework is derived from the initial literature review before commencing field work. Hence, these themed are informed by the theoretical framework. The theoretical framework is informed by the synergy view of Woolcock and Narayan’s (2000) social capital theory and it three concepts called community networks, state-society relations and civic engagement. After data collection, the responses are assigned these themes to aid in data analysis.

The second technique employed is the narrative analysis. According Bryman (2012, p.582), this method is an approach to eh elicitation and analysis of data that is sensitive to the sense of temporal sequence that people, as provider of accounts about themselves or events by which they are affected, detect in their lives and surrounding episodes and inject into their accounts. This technique is used on certain responses in the interviews to make sense of what happened to the respondents, and derive how they feel towards it. This is used to answer the main research questions of this study. The reason for this is that some accounts of the interviewees are very long and identifying themes can be difficult especially when they are overlapping. Given these methods, I am fully aware of my role as a researcher, and my ability to influence the
responses given to me by the respondents. As such this can compromise the validity or accuracy of the data. Being completely objective is difficult for researchers as we, too, have pre-conceived ideas about the world and have lived different realities from our interviewees.

2.6 Limitations and challenges

There are several difficulties that I have faced when conducting the field work:

- Some of the former PAMB employees, and the superintendent of the PAMB office in Apo were careful to answer my questions and tried to give as neutral of an answer as possible so that they do not put PAMB into a bad light
- I was there in January, during a period of light Typhoon. Hence, my schedule was pushed back by a few days as the coast guards did not allow anyone to be out in the sea;
- Given that Apo is a tourist spot, staying there was costly and so I could only stay for 2 weeks. The rest of the 2 weeks were spent on the mainland interviewing other stakeholders;
- If time and money financial capabilities permitted a student like me, I would have gone for a mixed methodological approach on data collection. A quantitative method of data collection, assessing the level of civic engagement would have supplemented the analysis greatly. This would cover more people answering the research questions. But alas, I am only a student with limited resources and budget;
- One of the key persons I wanted to interview was Dr. Alcala. He was the one who initiated the marine sanctuary. He was not available for an interview at the time and so I could not get a direct historical account of the socio-political beginnings of the marine reserve.
3. Apo island Marine Sanctuary Overview

This section touches upon the information of the study area, the Apo Island, including its socio-economic profile, demography, and the changes that the sanctuary have gone through that are pertinent to this study. The information from this section is largely provided by one of my informants, Jeremiah Gepaya from the Siliman University in Dumaguete, the capital city of Negros Oriental. He is a currently a PhD candidate in marine biology and is a member of the Apo Island Protected landscape and Seascapes organization. This document is the Apo Island General Management Plan that has yet to be published this year. The document consists of data taken from years of survey and research done on the island by Siliman University. It is under Appendix B.

3.1 Geographic location

The Apo Island is located in the Sulu Sea of the Central Visayan region in the province of Negros Oriental, and falls under the municipal jurisdiction of Dauin. It is about 7.5 kilometers off the southern coast of the Negros Island. To get there, one can take a motorized wooden boat ride of 45 minutes from the Malatapay port, which is approximately 45 minutes from the capital city of Dumaguete. The whole island is 72 hectares in land area.

Figure 2. Map of the Visayas region and where Apo island is located. This map is taken from Appendix B
3.2 Socio-economic profile
Apo Island consists of one barangay. A barangay is the native Filipino term for a village and is the smallest administrative division in the Philippines. In 2010, the population size was documented to be approximately 760 residents, comprising of 151 households (Hind, Hiponia, & Gray, 2010). Almost all the men on the island before the sanctuary was created were fishermen and they depended heavily on this activity economically. Currently, a survey done by Apo Island in 2015 indicated that the total population of the island is 1,071, comprising of 197 households (See Appendix B). This gives an average of five individuals per household. The increase in population on the island is mainly due to employment opportunities from tourism, and school children staying on the island to study at the high school that was opened in 2006. It only used to have an elementary school (Primaries one to six). There are two main settlement areas on the island: the Barangay proper, which is facing the mainland, and Cogon that is on the other side of the island (See Figure 3). The settlements are comprised of Puroks which are a form of organizing the village by grouping clusters of households together. The island consists of seven Puroks and each of them has a nominated councilor to represent them politically. Six of these Puroks are in the Baybay area and the seventh is located at the other side, in Cogon. The Largahan area is where boats can dock. It is the main entrance of the island and where the largest tourist lodge is located at.
The marine ecosystem that surrounds the island provides the people with their income and employment. Hence, they depend heavily on the sea. According to the draft Apo Island General Management Plan in Appendix B, data from the socio-economic survey in 2015 showed that 23% of the residents receive income both directly and indirectly from fishing (see Figure 5). People falling in the wages category work as employees for the Protected Area Management Board, as dive masters and guides in the dive shop, hired labor such as carpentry and masonry, and employees of the two resorts in the island. Those in PAMB are the ones making sure to collect entrance fees from visitors entering the island. The majority derive their employment from ecotourism, especially after a local initiative of setting up the Apo Island Snorkeling Equipment Guide Association (AISERGA) in 2011\(^3\). The association are the ones who mainly guide tourists around the area and within the sanctuary. It was recently set up is an important part of the discussion and will further be highlighted in the discussion section. It is a publicly registered organization, with currently 160 members that consists of only men.

\(^3\) The facts of this association are given by the founder of AISERGA called Geoffery during my interview with him. See Appendix A.
3.3 The genesis of the marine sanctuary
The entire island’s coral reef was declared a marine reserve and a small portion a fish sanctuary in 1986 (White, Aliño, & Meneses, 2006), under the initiative of Dr. Angel Alcala of Siliman University. In addition, all island families decided to support the sanctuary and make it legally binding through the local municipal. The Marine Management Committee (MMC) was set up by local community (specifically a handful of married couples) to formulate regulations against destructive fishing, and in doing the local “marine guard” (*bantay dagat*) was established by the community. The MMC used to manage the sanctuary without any governmental support nor intervention. There were very few tourists visiting the island when it first started out, and the MMC relied on their visitor’s voluntary donations to manage the sanctuary. Hence, sustainable fishing and tourism activities became an integral part of the island culture (Bryman, 2012). Community-based resource management was therefore successfully established here to promote sustainability in development.

3.4 Legal status
Through Dr. Angel Alcala’s work and belief in protecting the area, it was then proclaimed as the Apo Island Protected Landscape and Seascape (AIPLS) by the former President Fidel V. Ramos, under the Presidential Proclamation No. 438 on August 9, 1994 (See Appendix B). This is to officially protect and conserve the ecological, scientific, educational, economic and recreational values that the island possesses, while pursuing sustainable development. The island was eventually included in the National Integrated Protected Area System (NIPAS) that legally prohibits fishing activities within the sanctuary and officially naming it as a marine reserve. According to this Republic Proclamation called the NIPAS Act, “Protected Areas” refer to identified portions of land and water set aside because of their unique physical and biological significance, managed to enhance biological diversity and protected against destructive human exploitation (Hind et al., 2010). In addition to the marine reserve which covers a small section, the whole island was declared as a protected landscape and seascape. According to the NIPAS act, "Protected

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4 Information on how the MMC operated was given by the interviews done with some key informants on the island. See Appendix A (interview with Francia and Mario).

5 This citation leads to the webpage containing the bylaws of the NIPAS act.
landscapes/seascapes” are areas of national significance which are characterized by the harmonious interaction of man and land while providing opportunities for public enjoyment through the recreation and tourism within the normal lifestyle and economic activity of these areas (The Philippine Government, 2017). Hence, Apo is both recognized as a place where tourism thrives and where people inhabit the island. In addition, the flora and fauna of the island are equally protected. The locals are not allowed to chop down any trees and clear any land for their own purposes without permission.

The marine sanctuary has shown considerable success environmentally, socially and economically in its initial phase. The catch-per-unit-effort tripled by the mid-1990s. This has benefitted local fishermen (Marten, 2005), local schools have been developed in partnership with Siliman University, tourist revenue provided families with income to finance children’s education, and 20% of the income in support of tourism went to Apo residents in terms of boat rentals, food, accommodation and sale of souvenirs (Alcala, 2004, p. 11). The Protected Area Management Board (PAMB) took over the role of the MMC in 1998, and began to systematically collect user fees in December 1999 (See Appendix B). PAMB employees consist of the locals living on the island.

2.7 Current situation of the Apo Island

Despite prior research and literature review of this marine sanctuary, nothing mentions of the destruction that was brought to the sanctuary by two typhoons in two consecutive years. The typhoons of 2011 and 2012 both hit the marine sanctuary and rendered it uninhabitable as all the corals were destroyed. The marine sanctuary is severely damaged till today and is off limits to any visitors. It is now under a coral rehabilitation project. In Figure 4 on page 13, there are two sanctuaries that are marked in the map. The original one that is damaged is marked with a red circle. The other in blue is a turtle sanctuary that has been cordoned off by the locals. The appearance of many turtles in that area of the island is still unexplained and research is underway. The locals benefit from the turtles through ecotourism, allowing visitors to snorkel just outside of the sanctuary. Hiring a local snorkeling guide from the AISERGA is mandatory to all visitors who want to snorkel within the bounds of the
sanctuary. This new sanctuary, the AISERGA association, PAMB, the locals and the DENR all make up important parts of this discussion.

3.4 New regulations

My field work in Apo Island could not be timelier, as a departmental administrative order (DAO) was issued by the previous Secretary of the Department of Environment and Natural Resources that (DENR), Gina Lopez, on September 2016. This order is an immediate implementation of new minimum entrance and user fees in all protected areas that are under the NIPAS act. The issuance of this new administrative order without any public hearing or public approval has created a new wave of discontentment among the locals and business owners in the Apo Island. In turn, this has illuminated the complex relationships between all the stakeholders and how they work together to try and solve this issue. This also be greatly discussed in the findings and analysis section. A copy of this administrative order can be found in Appendix C, and the bylaws of the NIPAS act can be found in Appendix D. In addition, the table below is made to compare the old and new fees implemented by the DENR.

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6The contents of the NIPAs act can be found in this url: http://www.gov.ph/1992/06/01/republic-act-no-7586/
<table>
<thead>
<tr>
<th>Old fees</th>
<th>New fees (Appendix C)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entrance:</strong></td>
<td></td>
</tr>
<tr>
<td>General Admission</td>
<td>P100</td>
</tr>
<tr>
<td>Adult within the Province</td>
<td>P25</td>
</tr>
<tr>
<td>Student within the Province</td>
<td>P10</td>
</tr>
<tr>
<td>Daun Senior Citizen</td>
<td>P5</td>
</tr>
<tr>
<td>Daun Resident</td>
<td>P10</td>
</tr>
<tr>
<td>Minors</td>
<td>P10</td>
</tr>
<tr>
<td><strong>Mooring - Docking Fees</strong></td>
<td></td>
</tr>
<tr>
<td>Motorized Pumpboat Apo Resident</td>
<td>P50</td>
</tr>
<tr>
<td>Other Motorized Pumpboat</td>
<td>P250</td>
</tr>
<tr>
<td>Speed Boat</td>
<td>P350</td>
</tr>
<tr>
<td>Yacht / Boat</td>
<td>P500</td>
</tr>
<tr>
<td><strong>Leisure / Recreation</strong></td>
<td></td>
</tr>
<tr>
<td>Scuba Diving within the Apo Island Marine Sanctuary</td>
<td>P300 / person / Dive</td>
</tr>
<tr>
<td>Scuba Diving outside the Sanctuary</td>
<td>P200 / person / Dive</td>
</tr>
<tr>
<td>Snorkeling within the Sanctuary</td>
<td>P50</td>
</tr>
<tr>
<td>Snorkeling within the Sanctuary from this province</td>
<td>P30</td>
</tr>
<tr>
<td>Snorkeling within the Sanctuary Daun Residents</td>
<td>P20</td>
</tr>
<tr>
<td>Water-based activities (beaches, lakes) such as swimming, snorkeling</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Hiking and biking within designated area</td>
<td></td>
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<tr>
<td></td>
<td></td>
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<tr>
<td>Picnic tables</td>
<td></td>
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<tr>
<td>Cottages</td>
<td></td>
</tr>
<tr>
<td>Swimming pool</td>
<td></td>
</tr>
<tr>
<td>Basketball courts and other facilities</td>
<td></td>
</tr>
<tr>
<td><strong>Video Filming / Promotion Materials</strong></td>
<td></td>
</tr>
<tr>
<td>Video within the Apo Island Marine Sanctuary</td>
<td>P5000 / day</td>
</tr>
<tr>
<td>Video Outside the Sanctuary</td>
<td>P3000 / day</td>
</tr>
<tr>
<td>Video Around the Landscape</td>
<td>P2000</td>
</tr>
<tr>
<td><strong>Camping</strong></td>
<td></td>
</tr>
<tr>
<td>General Fee</td>
<td>P50 / day</td>
</tr>
<tr>
<td>Locals from this Province with Cedula</td>
<td>P20</td>
</tr>
<tr>
<td>Students from this Province with ID</td>
<td>P10</td>
</tr>
<tr>
<td>Daun Residents</td>
<td>P5</td>
</tr>
</tbody>
</table>

Table 1. Comparison of user fees implemented by the DENR
4. Literature review

Protected areas are important in environmental conservation and protection. There has been a steady increase in the number of protected areas over the last years. The IUCN (2014) reported that in 2014, protected areas cover 15.4% of the world’s terrestrial areas and 8.4% of marine areas under national jurisdiction (Russ, Alcala, & Maypa, 2003). These percentages represent some 209,000 protected areas. As mentioned in the first chapter, more of it is expected to be built and more people will become affected by it. However, only 29% of these nationally designated PAs have been assessed for Protected Area Management Effectiveness (Marten, 2005). While there is good evidence that effectively managed PAs conserve biodiversity and habitats on land and sea, many are not managed effectively and equitably.

Marine protected areas (MPAs), are relatively new compared to land-based protected areas, and the science underlying effective MPA development and management is poorly understood (Mascia, 2001, as cited in Jones, 2001, p.200). Hence, the potential of MPA management tool has yet to be realized. Jones (2001) further goes to argue that the general approach to the management of MPAs is one of non-intervention in comparison to the active management approach to land conservation. This is due to our lack of understanding of the structure and function of marine ecosystems and the logistical problems of observing and studying the marine environment by human beings who are essentially predominantly terrestrial beings (Jones, 2001). Hind, Hiponia and Grey’s (2010) study was the last publication that updated the socio-political situation of the local population at the Apo Island. The theoretical framework that informed their research in MPA governance theory is by Jones (2001), who distinguishes between a top-down and bottom-up approaches. He argues that these two approaches should be combined in a system of co-management (Hind et al., 2010, p.57). This strategy adopts a collaborative management approach that provide for stakeholders and relevant government agencies to jointly manage MPAs. Jones’ (2001) argues that the focus on MPA management is ultimately on the protection of the marine environment, which is a noble and important cause. However, his recommendations to a successful management are founded upon appeasing internal conflicts within affected

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7 This will be discussed in the theoretical framework section
stakeholders such as local communities, instead of going for a two-pronged approach on both ecological and human development. The primary focus of creating MPAs are mostly solely for marine regeneration and protection of its ecosystem (Jones, 2001). However, the more MPAs are built, more communities who rely on it will be affected, and will potentially bear significant socio-economic costs after barricading areas of the sea from communities. In addition, there’s a need for existing MPAs to be managed equitably.

This begets the question of how to properly manage a protected area effectively and equitably? I argue that it boils down to a democratic relationship between the stakeholders that allow for better decisions and actions. In order to achieve that, three core components of social capital need to be practiced, and meet not only the ecological, but also the human development objectives of an MPA: They are community networks, strong state-society relations and civic engagement. The synergy of these three concepts form the cornerstone of a strong social capital in development theory. Hence, they will be used as a conceptual source to analyse the data collected in this research.

The synergy view of the social capital theory emphasizes the importance of civic engagement and empowerment for development, bridging both the revisionist and social capital theories. This framework encourages development managers such as the state to utilize existing social capital, that is rich in developing countries, to form partnerships with communities for development. Specifically, studies by Woolcock and Narayan (2000), Ostrom (1996), and Evans (1996a, 1996b) will be the main theoretical backbone of the synergy and social capital perspectives that will be delineated in this research. In addition, examples of other protected areas that have hindered development will be discussed below to illustrate the importance of these theoretical concepts. These case studies serve to strengthen the argument that the theoretical framework this research is based upon serves as an important backbone to development and protected area management. An account of the effects of management change in Apo Island in the recent years will be provided to give light into how the lack of such concepts have already been felt by the locals living there. This account will be used to supplement the current situation in the Apo Island that I have gathered during my field work. Here, I argue that this theoretical framework pushes development managers to think about their relationships with all major stakeholders within a protected area and their overall governance, making this framework an important tool in human and environmental development. Before discussing the main theoretical framework, the other state-society
development theories will first be presented to explain why they are not chosen as this research’s framework of analysis.

4.1 Revisionist and Social Capital theories

Early conceptualizations regarding development in third world countries were centered on the participation in the free market. This entailed a laissez-faire approach to domestic economic management and the application of the structural adjustment policies (SAP) administered by the Bretton Woods Institutions such as the World Bank (McMichael, 2000). Its failures have been well documented. The damages it made were done through policy restructuring, and privatization of many public infrastructures and resources, while giving rein to the free market (McMichael, 2000, p.141). Too often development theory has operated on the premise that the only institutions that mattered were those directly facilitating market transactions. Narrowly focused theories fail to incorporate the importance of informal norms and networks that make people collectively productive. Due to these failures, new schools of thought began to emerge in the 1990s that argue for the importance of the role of the state and civil society in development agendas, and for their partnership. Social capital and revisionist theories are the two of such proponents that go against the traditional and narrow view that institutions that serve market transactions will facilitate development. These two theories became the bedrock for what is now called the synergy framework for development in developing countries as this framework seeks to bridge, or synergize, these two theories together.

4.1.1 Revisionist theory

The revisionist theory emphasizes the role of the state as an important development agent. Revisionists such as Woolcock and Narayan (2000), Wade (1990) and Terry (2000) utilize the East Asian economic revolution, often dubbed as a “miracle” after the famous World Bank’s report to exemplify how state-directed development is important to build domestic economies. The World Bank report argues that it is the free market, and not state intervention that made the East Asian economies successful. However, Terry (2000, p.80) argues that it is false to attribute the success of East Asia to the lack of state intervention and direction. She lamented that The World Bank took pains to state that the industrial policy of Japan did not work most of the time and was a poor policy for developing nations to follow (Terry, 2000, p.80) argues that it is false to attribute the success of East Asia to the lack of state intervention and direction. She lamented that The World Bank took pains to state that the industrial policy of Japan did not work most of the time and was a poor policy for developing nations to follow (Terry, 2000, p.80).

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8 The report by the World Bank is called “The East Asian Miracle” (The World Bank, 1993)
p. 80). On the contrary, Terry (2000) claimed this to be a false account made by them to support their advocacy for the participation in the free market. Wade (1990) has also documented that extensive employment of tariffs, quantitative restrictions, fiscal incentives and selective credit policies by the Taiwanese government during the various stages of its development (Tsai, 1999, p. 71). Given the accounts by Wade (1990) and Terry (2000), Lange and Rueschemeyer (2005) compliments these East Asian examples by arguing that states are important in economic growth because in addition to them guaranteeing efficient institutions and enabling individuals and firms to engage in economic activities that bring economic growth, states are able to regulate the impacts of rational economic pursuit that is highly capable of destroying social structures (Lange & Rueschemeyer, 2005, p. 3). They do this through social policies and market regulations. More importantly, states shape human and social capital and thereby create conditions that are ultimately favorable to economic growth. Such a statement also reveals the importance of social capital in development, which will be discussed next.

4.1.2 Social capital theory and perspectives

The social capital theory, on the other hand, emphasizes the importance of civic engagement and empowerment for development, especially in third world countries, where states can be adverse. The importance of social capital is very much highlighted in development discourses, especially increasingly so in the World Bank’s more recent reports. It’s been lamented that the World Bank, national governments, and civil societies are divided on the issue of whether and how to promote the consolidation of poor people's social capital (Fox & Gershman, 2000, p. 175). According to Woolcock and Narayan (2000), social capital is one’s family and friends, and associates constitute an important asset, one that can be called upon in a crisis, enjoyed for its own sake, and leveraged for material gain. They further asserted that communities endowed with a diverse stock of social networks and civic associations will be in a stronger position to confront poverty and vulnerability, resolve disputes, and take advantage of opportunities (Woolcock and Narayan, 2000, p. 3). Hence, social capital refers to the norms and networks that enable people to act collectively, to pursue development. It is an antithesis to older development narratives that view traditional social ties and structures as impediments to development.

Woolcock and Narayan (2000, p. 6) have highlighted the various perspectives on social capital and economic development through four different views that encapsulate the
evolution of its literature. They are the communitarian, networks, institutional and synergy views. Out of these four views, synergy is arguably the one perspective that is most applicable as a development framework for this study, as exemplified by Evans (1996a) and Ostrom (1996). The three others will be briefly discussed below.

The first one is the *communitarian view* that equates social capital with local level organizations such as clubs and civic groups and those belonging to the same community. It is viewed as a horizontal type of social connection that can have a positive effect on community welfare. However, Woolcock and Narayan (2000) argue that this social capital perspective has a downside in terms of its efficacy for development. For instance, they asserted that Latin American countries indigenous groups are often characterized by high levels of social solidarity, but they nonetheless experience poverty because of the lack of resources and access to power to shift the rules of the game in their favor (Woolcock and Narayan, 2000, p.7).

The following is the *networks view*, which also has both positives and negatives. Unlike the communitarian view, this one stresses the importance of vertical, as well as horizontal associations between people, and relations within and among other organizational entities such as community groups and firms. It stresses the importance of inter-community ties (Granovetter, 1973) that cut across race, religion, class and socio-economic status. However, just like the communitarian view, the networks view provides challenges to social capital theory, research, and most importantly, policy making. It does not explicitly incorporate macro-level institutions such as the state (Woolcock and Narayan, 2000, p.10).

The third is the *institutional view*. This view generally deems important the formal institutions under which social groups and ties reside. It stresses the performances, credibility, internal coherence, competence and the external accountability of states to their civil society. This is very much like the revisionist theory explained on page 21. Brazil, especially in its sewerage system, is often cited as exemplary in decentralizing state control and performing effective governance in development work (Ostrom, 1996; Woolcock & Narayan, 2000). Woolcock and Narayan (2000, p.12) argued that the strength of the institutional view to social capital lies in its ability to address macro policy concerns, and the state’s willingness to cooperation with international development institutions. Unfortunately, in contrast to the first two views, this one fails to address the micro component that is central to the communitarian and networks view.
The three views explained above are summarized into Figure 6. The negative similarity that they share is that according to Woolcock and Narayan (2000), these three are not ample enough in concept to be able to provide a framework for development policies in developing countries. Both communitarian and network views do not consider the importance of macro-level structures such as the state, while the institutional view ignores micro-level social ties that are equally important in development. However, one should not belittle the importance of these three views. Horizontal and cross-sectional social capital are the basic building blocks for grassroots action (Fox & Gershman, 2000, p.176). Where this is absent, pro-poor development projects will be even more difficult to spearhead. Similarly, an ineffective and corrupt government can also jeopardize grassroots efforts to alleviate poverty.

On a positive note, the last social capital perspective that Woolcock and Narayan (2000) highlights both community network and state-society relationship. It is argued that this one stood out as having the strongest empirical support and can propose a realistic set of policy recommendations to poverty reduction and development. Hence, this view serves as the main theoretical framework in this qualitative research.
4.2 Theoretical Framework

Both Ostrom (1996) and Evans (1996b) alluded that there exists a great divide between the government and civil society, and that this is a result from a conceptual trap arising from overly rigid disciplinary walls surrounding the study of human institutions (Ostrom, 1996, p.1073). Evans (1996b, p.1034) argues that informal ties are important to human development, especially in developing nations. It does not necessarily promote wealth accumulation, but if people cannot trust each other or work together, then improving material conditions of people will be very difficult. In addition, civic engagement strengthens state institutions and effective state institutions create an environment in which civic engagement is more likely to thrive. Apart from state-society relations and community networks, the synergy view emphasizes the importance of civic engagement and empowerment for development, bridging both the revisionist and social capital theories mentioned above.

This framework encourages development managers such as the state to utilize existing social capital that is rich in developing countries, to form partnerships with communities for development. Essentially, public trust and state sovereignty need to be fostered for a social contract to be properly established. In addition, it is important for the state to provide enough public services, and agency to civic society to build their local political institutions and unions. In addition, development managers should be in need for state-civil society synergy because engaged citizens are a source of discipline and information for public agencies as well on-the-ground assistance in the implementation of public projects. Hence, the synergy perspective is an attractive unifying theme for the prevailing divided efforts to build a broad institutional approach to development (Evans, 1996b, p.1034)

4.3 Case studies

To put the synergy perspective of social capital theory into perspective, I draw examples of protected areas that had come under fire in the academic and development arena. Three empirical examples of development pitfalls will be provided. These are the CAMPFIRE program in Zimbabwe, the displacement of indigenous populations from the National Parks in Ethiopia, and one from the Apo Island itself which is the empirical case study in this thesis. These case studies have
resulted in social injustice such as habitat displacement, loss of livelihood, and inequitable and efficient management of natural resources found within the protected area. Most importantly, they provide evidence as to how state-civil society synergy and social capital are important to make protected areas work in harmony with its local inhabitants.

**CAMPFIRE Program in Zimbabwe**

The Community Area Management Programme for Indigenous Resources (CAMPFIRE) is a community based natural resources management programme developed by the Government of Zimbabwe in the late 1980s (Campfire, 2009). It is one of the new programmes that were designed to implement environment management at the grassroots level. CAMPFIRE was to encompass four major natural resources – wildlife, woodlands, water and grazing – all to be managed by natural resource cooperatives (Bond & Frost, 2008, p. 776) The important elements of the CAMPFIRE programme are poverty alleviation, local empowerment (Logan & Moseley, 2002, p.1). It was also aimed at biodiversity conservation and to enable people to participate in political decisions (Bond & Frost, 2005, p.9).

CAMPFIRE is supposed to give rural communities the right to manage their own wildlife resources, as it is perceived to be economically and ecologically sustainable. While the idea behind the program sounds ideal, empirical research has shown that the government of Zimbabwe and donor agencies to the program have been unable to implement significant land redistribution policies, and fully implement the program’s objectives. According to Logan & Moseley (2002), the racially based, colonial resource ownership structure remains largely in place. Most CAMPFIRE communities are in the marginal zones of production, and land reform continues to be a contentious issue within CAMPFIRE and in the larger economy (Logan & Moseley, 2002). Property rights are not clearly defined; both individual and community tenure are insecure. The overlapping rights of arable lands with neighboring communities create uncertainty, competing interests, and can result in opportunistic use of resources (Bond & Frost, 2005, p.785).

As the aim of the CAMPFIRE program is to bestow rights to resources to local communities, this would mean that the coordinators of the program would need to
carry out the devolution of centralized governance on the reserves for very heterogeneous local beneficiaries. Hence, community empowerment is conceived by the Zimbabwean government as a process of decentralization. They perceived as undermining their influence (Murombedzi, 1992). This, of course, is a very difficult task as the distribution of control and power to local heterogeneous communities over the land will certainly create conflicts between them. Hence, the absence of local control over resources and a lack of local oversight of the revenues from resource exploitation, collude together to reduce the program's poverty alleviation impacts. Corruption is evident in participating communities, where producer communities are being manipulated by elites through nepotism, unethical employment practices, gender inequality, and certain ethnic groups being marginalized from the land resources (Sithole & Frost, 2002). Rural District Councils (RDCs), rather than the cooperatives, became the appropriate authorities for wildlife (Frost & Bond, 2008, p. 777). In return, the RDCs agreed to pass on to producer communities only a fixed percentage of the revenues earned. Due to political reasons, the implementation of CAMPFIRE has departed somewhat from the original plan (Bond & Frost, 2008, p.777), while the practices became increasingly unethical. Hence, the overall objective of the program has completely changed due to Zimbabwe’s volatile market economy, individual ambitions, diverse interests and shifts in influence and authority over the participating lands in the program. All the above reasons are why CAMPFIRE is not a word associated with development, but with dispossession (Alexander & McGregor, 2000, p.625)

**Forced eviction for conservation in Ethiopia**

One short, but equally important example that will be discussed, is the forced evictions of indigenous populations in Ethiopia for conservation activities. According to Pearce (2005), 500 people were removed from the Nechasar National park in southern Ethiopia and resettled outside its borders in 2004 (Adams & Hutton, 2007). In addition, NGOs like the African Parks Foundation (APF) signed an agreement with the government to manage this park. It consequently burned down 463 houses of the Guji indigenous population by the Ethiopian park officials, while the local police forced them to leave. The APF has also taken over the Omo National Park in Southern Ethiopia that was inhabited by approximately 50,000 people from various

These examples of protected areas that have failed to ethically include the local inhabitants into the development program have breached human rights. It is highly evident that these case studies lack the state-society synergy needed to make them work. The management style is clearly not from the bottom-up, resulting in corruption, and the social and economic costs local inhabitants have paid for something that was imposed upon them by external forces.

4.4 Initial report on the Apo Island

The entire island’s coral reef was declared a marine reserve and a small portion of it a fish sanctuary in 1986, under the initiative of Dr. Angel Alcala of Silliman University. According to Alcala (2004), of all the islands that he has attempted to create a marine reserve with, Apo was much easier to work in because all the residents lived in a closely-knit community, facilitating communication. Here, we see evidence of existing social capital, and an enduring set of social relations. Furthermore, the establishment of the fish sanctuary was covered with an agreement between the municipality of Dauin, to which Apo Island belongs politically, and Silliman University. The marine sanctuary has shown considerable success environmentally, socially and economically in its initial phase. The catch-per-unit-effort tripled by mid-1990s, which has benefitted local fishermen (Bond & Frost, 2005), local schools have been developed in partnership with Silliman University, tourist revenue provided families with income to finance children’s education, and 20% of the income in support of tourism went to Apo residents in terms of boat rentals, food, accommodation and sale of souvenirs (Lange & Rueschemeyer, 2005, p. 3). In addition, in 1985, all island families decided to support the sanctuary and make it legally binding through the local municipality Dauin. The Marine Management Committee (MMC) was set up by fishermen and their families to formulate regulations against destructive fishing, and that was when the local “marine guard” (bantay dagat) was established by the community. Hence, sustainable fishing and tourism activities became an integral part of the island culture (Lange & Rueschemeyer, 2005, p. 248). Community-based resource management is therefore successfully established here to promote sustainability in development.
The initial phase of this development and conservation project is a great example of what Evans (1996a) calls the mutually supportive relations of the complementarity and embeddedness concepts of synergy, in which there is a degree of permeability within the public-private divide. Complementarity supports day-to-day interaction between public officials and communities, which is in turn essential to organizing complementarity (Fox & Gershman, 2000, p. 175). Hence complementarity here shows how the Dauin municipality has created a conducive environment for local organizations to be created to support the conservation initiative through the ways it allows the community to govern the sanctuary and the economic activities in it. There is also evidence of a great quality of embeddedness between the Dauin municipality, the tight-knit Apo islanders, and the local scientists. The embeddedness concept signifies how the Dauin public officials are a part of the community, and show vested interest in their development. Hence, this justifies the point of how complementarity and embeddedness are mutually supportive and important to create a developmentally effective social capital (Woolcock & Narayan, 2000, p. 3). Therefore, this case study embodies the conditions needed to create synergy, as explained by Evans (1996a, p.1124). Such conditions he asserted are endowments of social capital, with existing supportive micro-level social ties and scaled-up partnerships; decentralized governmental organizations that do not micro-manage development projects in the locality, and allow local management autonomy; incentives for coproduction (Woolcock & Narayan, 2000, p. 3) between the state and civil society. The third condition is largely shaped by evidence of high spillover rates of fishes for subsistent consumption from the nearby Sumilon Island, and the potential of high tourism revenues from conservation sites in the coral triangle.

4.5 A turning point in management in the Apo Island
This site has inspired the establishment of other Marine Protected Areas (MPA) that are not only in the Philippines, but also in other countries for its exemplary management and biodiversity. It is because this sanctuary has been claimed as one of the most important tools for coastal resource management. While international organizations such as Greenpeace (2005) asserted that the Apo Island is more than just a paper park - that it is an excellent example of a community-managed reserve that benefits the locals – a very recent study conducted by Hind, Hiponia and Gray
(2010) illuminates local discontentment. This is because the management of the marine sanctuary has changed, from being community-based to an overly centralized national management by the Protected Area Management Board (PAMB) in the mid-1990s, as shown in Figure 7 below. This is due to the fact that tourism in these sanctuaries was booming, hence encouraging centralization of management. The ethnography and qualitative interviews conducted by Hind, Hiponia and Gray (2010) illuminate the following effects of the centralization:

- The locals felt a lack of financial transparency by the government with the tourism fees they collected from the marine sanctuary
- Major stakeholders, including the local municipality and the locals, were alienated from decision-making
- Tourism in the fishing grounds were not properly regulated to the detriment of the marine environment
- Locals claimed that tourism activities did not raise their socio-economic standing.
- Severe top-down management, implementing overly strict prohibitions by the PAMB, strips away personal freedom from the locals.

Figure 7 Timeline showing key management and legislative changes at Apo Island (Evans, 1996b, p. 1034)
At the onset of this turning point, it is evident how state-society relations can also degenerate into conflict (Ostrom, 1996; Woolcock & Narayan, 2000), and how existing synergy can conversely be destroyed.

This initial report has inspired this research to further investigate how this marine reserve is being run, and the perception of the local people towards its management. Fox and Gershman (2000, p. 176) asserted that the benefits of MPAs to both extractive and non-extractive users are spillover effects in the sea for fishermen, and tourism revenues. All four research questions aim to illuminate whether these are true, and if so, some of state-society synergy should be evident on that island. This is a hypothesis that will be confirmed after data collection.
5. Presentation of findings

The interviews in this study were developed to understand the socio-economic and political situation in the Apo Island that would answer the research questions. They are valuable first-hand information from the main stakeholders\(^9\) that are affected from decisions made by the government regarding the island. As mentioned in chapter 2, the primary objective of these interviews is to reach out to the main stakeholders of the marine reserve and gather their viewpoints and opinion on how the island is being managed, and how they are affected from this. I have also asked questions about the differences in the governance of the sanctuary between then and now to highlight any changes that have occurred. In addition, I asked for the advantages and disadvantages that have been brought about by the presence of the reserve so that it can highlight not only the negative, but also the positive aspects of it in their lives. This would give a holistic view of their experiences in the sanctuary. Lastly, my questions were also very focused on relationships between the locals and the other stakeholders such as the governmental bodies PAMB and DENR, the local tourism organization on the island called AISERGA, the Barangay Captain and the University researchers in Siliman. Some of the interviewees have been present before the sanctuary was handed over to the Department of Environment and Natural Resources (DENR) in the mid-1990’s, when it was just the Marine Management Committee guarding the reserve. A big part of the interviews with my informants and other stakeholders were about the new turtle sanctuary and the AISERGA association. These two are new developments on the island and are not covered in the study by Hind, Hiponia and Gray (2010). In addition, just after I arrived in the field the new Departmental Administrative Order (Appendix C) became an issue. This became a natural part of the discussion as there was a certain amount of resentment towards it. This new development highlights the way decisions are being made, how it affects all stakeholders involved, and the ways in which they are trying to address the concerns.

To recap, here are the main research questions:

\(^9\) Stakeholders are the local people at the Apo Island, the governing bodies of protected areas (DENR and PAMB), tourist operators such as the AISERGA, and the Siliman University researchers that study the Apo Island regularly.
1. According to the perception of the local people, to what extent are they involved in the planning and overall management of the Apo Island marine reserve?

2. What are the advantages and disadvantages that the local people have experienced since the establishment of the marine reserve?

3. How are the local people able to voice their concerns regarding the management of the island?

4. How do the stakeholders work together to address public concerns?

5.1 Responses to involvement in planning and overall management on the island

The aim of question one is to elicit accounts of the beginnings of the marine reserve, and how much the local population in Apo is involved in the planning and management of the island. It is also to illuminate any forms of civic engagement. Most of the responses I gathered espouse that after the DENR took over the management of the island through PAMB, remembering that PAMB is a subsidiary of the DENR, most of the decision making did not go through the people. For instance, in a focus group discussion I had with five people from Purok 6, the captain of that Purok, when asked about how the island came to be under the DENR, lamented:

“... the initial idea was for people to decide what projects and programs they wanted. But there was a lack of paperwork for that agreement and so we could not account for it. It is now hard to rectify the decision to be under PAMB... the projects” (Purok 6 captain, former president of the Bantay Dagat)

When I asked about the management of the island, 100% of my respondents complained about how the management fees collected from the visitors upon entering the island were not transparent enough. The only way for them to know what is being spent on and the total amount collected was from the yearly meetings organized by PAMB. When I asked how transparent they are with their records, these were some of the responses I received:

“No, they have no publication. The people here don’t know. They are just the ones, the meetings of PAMB. Sometimes they put there what projects they have. Like view deck, the concrete, and natural pool, buoys, etc. Add it all up, it won’t add up to 1 million. Where are the rest? They are the ones that mentioned 11 million. Not me. During the meeting four days ago. Their income is 11 million from Apo alone!” (Interview with Mario Pascobello).
"The one at PAMB? Just the money for the village. They show us that. The donations people give and who they are. Like how much money does the village have and what it is spent on. They show it on the blackboard. But the money from PAMB, we don’t know anything about that.”
(Interview with Francia Candido)

However, Analie Candido stated that not everyone attends these annual meetings organized by the PAMB.

“There are meetings. But most of the people here, those that complain don’t attend these meetings, they do not ask what the real matter is”
(Interview with Analie Candido)

The way that the fees were divided between what goes to the national government and what goes back to the island were highly discussed. Overall, there is a sense of resentment amongst those I interviewed regarding this issue. According to the agreement with the DENR, 75% of the fees collected goes back to the island and 25% goes directly to the DENR headquarters in Manila. This 25% finances the DENR’s other projects. The 75% is kept to remunerate the employees their salary, and finance the development projects planned for Apo. The locals find it problematic that the 75% did not fully materialize for them. One of the main reasons why they felt this way was because the employees of PAMB who were local inhabitants did not receive their salary for months in a row. Here are some their responses regarding that:

“The 75% that is supposed to go back to the island, not all are coming back immediately. It will be deposited in the bank and then it will take about 1 or 2 years for the 75% to come back here. So, yeah, some people don’t understand the process of why it can’t be released immediately. There is paperwork needed to be done. The project needs to be assessed and that takes time. So those working here are having a hard time as their salary takes a while to get to them.” (Interview with Analie Candido)

“Regarding PAMB, what I know is that they entered here and had that 75%-25%. It didn’t really work out. The 75% went away, it seems like everything went to National.” (Interview with Geoffery, founder of AISERGA)

Reno, the office-in-charge of the PAMB office in Apo Island and who was also born there, argued that he waited for one year to get his salary from DENR. This was through my non-recorded conversation with him at the office. Apart from the salary not being received on time, all the respondents living on the island expressed resentments and disappointment regarding the 75% that they did not see materializing through projects on the island.
With regards to the beginnings of the sanctuary, those of my informants that were present during that process in the early 80’s confirmed that there was a great deal of work made by Dr. Angel Alcala of the Siliman University to convince the people of Apo to support the sanctuary. Dr. Alcala wanted the process to be a bottom-up approach to make management as fair and effective as it could be, and so a great deal of trust was needed to be built for this to happen. Here is an account made by a marine biologist called Dr. Rene Abesamis. He is a colleague of Dr. Alcala:

“One of the things that Alcala learnt there was that you need a local community, who is also involved in fishing, to invest in that idea. They should be the ones to start protection. So he tried that in Apo, with the help of the Social scientists here. They talked about that for almost a year. The MMC was established made up of locals. Liberty was still a teenager then... so in 82’, they agreed to start it. And they have not stopped since then even though Typhoons strike. So that model of bringing the idea giving the local people for them to decide started in Apo for the Philippines. So, what they did first, besides establishing a sanctuary, what they also did was to establish a Marine Management Committee. In the MMC, they made sure that no unsustainable fishing methods will be used and simple stuff like no stepping on corals. That had a broader effect. So you are stopping fishing inside the sanctuary, but you can fish outside but not using unsustainable fishing gear. So that brought back some... Imagine back then before they had the MMC, they were doing Muro Ami and dynamite. I’m sure Mario or Liberty (current barangay captain) would have told you. So that was a collective idea. So the MMC made up of locals, together with some members of the Marine Lab who were helping them, that was really pivotal in terms of the overall conservation of the island. Tourism came in later.” (Interview with Dr. Rene Abesamis)

Francia Candido, a local and a former member of the MMC also highlighted that a great deal of time was taken and work done to convince the people to start the sanctuary, and that this was not a top-down initiation:

“Before, the people here do not understand the sanctuary. It started long ago. In the beginning, the volunteer here was from Siliman. And then, the people did not allow them to have a sanctuary here because they catch fish. The volunteer said that if that area became a sanctuary, people were not allowed to fish. So, they do not allow that. It was just a few of us who allowed it, maybe around 8 pairs of us couples. It is really hard for the sanctuary to be set up. So many people were against it. After, they saw how good the sanctuary was, when they saw that it was working. You can really see that there are so many fishes. When the sanctuary started, the people here woke up. Here before, maybe only one family was able to send kids to school. No one could. Kids would only finish elementary school, or grade 6 and that was enough.” (Interview with Francia Candidio)
The next problem that these islanders are currently facing is the new Departmental Administrative Order that was recently issued by the secretary of the DENR. This has created a hiatus amongst all the stakeholders in the province. Therefore, this to-down order heightened the negative perception of the locals towards the DENR:

“But then came DENR, it became messy. Just recently there was a hiatus. The secretary of DENR passed a DAO – Departmental Administrative Order, increasing 800 times of the price. The stakeholders that are paying happily, they are very angry. They boycotted. Also, the people here. Before, the boats catering to the tourists pay 50 pesos per day. They increased it to 50 pesos per hour! Means they will park there for 8 hours, they will pay 800 pesos. Those AISERGA group, they need to pay also according to the new DAO. They will guard there every night, the members. Now, no more. They said, ‘we are guarding this place but in the end, we have to pay! How is it like that?’ See? The mind of this government! If there are programs that are good, they should just let it be. Just support technically, whatever, just let this people because it is effective. If it is rocky, then try to correct. But if it is running well, why should you intervene? Just to destroy whatever they are doing well? So that the benefits that they get will turn to you? So now, I don’t know. There are many problems.” (Interview with Mario Pascobello)

When asked whether it is usual for the DENR to pass laws without consultation, here are the responses from the Geoffery (AISERGA founder), and Efren Rumbaoa (DENR Dumaguete office-in-charge):

“Yes, if there’s something the people do not agree with, it won’t happen. But now I heard that there is a law that came from the DENR, that all these boats and that one, they need to pay for it. Pay to them. Venue the basketball court, users need to pay for them. They need to pay per hour. It was decided on November 15, but it only came to use now. So, if they see our livelihood here, they will be tighter with us. It might likely be the turtles here will be gone. There are turtles because people take care of it. If people are stripped off their work, they will eat the turtles.” (Interview with Geoffrey).

“That is also our question to them. It is under the NIPAS act that the guidelines governing the protected areas states that changes made to the payments we receive from the stakeholders should have a public hearing. This is so that we can get the willingness of people. If they are willing to pay that much, or what’s their limit to pay for the services provided by the protected area. Now, if the fees are agreed upon, the PAMB will make the resolution. After that, it will be forwarded to the central office to be approved by the secretary. This is so that the basis for the changes in fees is legal. That is how it was supposed to happen.” (Interview with Efren Rumbaoa)

Overall, the management of the user fees collected upon entrance at the Apo Island is viewed as not transparent and unfair to the local population. The locals used to be very engaged with the management of the tourism activities in the island when the Marine
Management Committee was still in place. After the DENR take-over, the overall conclusion is that the locals relegated to take on a backseat passenger role in the planning and management of the activities and projects that happen on the island.

5.2 Accounts of advantages and disadvantages experienced by the locals
This section provides the responses given by the interviewees to question 2. The disadvantages experienced by those living in the sanctuary have mostly been accounted for in the first section above. They are mostly the lack of transparency by the DENR and PAMB, failing to consult the locals with new developments, and the late disbursement of salaries to the PAMB employees working on the island. In addition to these there is one more disadvantage voiced by the locals. Since Apo Island is a protected landscape and seascape, the flora and fauna in the island are also under protection. This means that the locals cannot cut down trees or clear land as and when they please. Francia Candido describes this issue:

“For me, we agreed to be managed by PAMB before. Yes sometimes they do good things for us. But sometimes, what I understand is that they just dictate what the people should do here. Sometimes, for example, we are not free to do whatever we want. They dictate the people... For example, the wood. If you want to cut down the tree because it may pose a threat to your safety, it might fall on your house. We can’t just cut it down. We have to ask permission from PAMB by going to the city. But, anyway I know that is just for the good of the people. But, even if the wood (tree) is of no use, they are still preventing it. It’s not like before you are free to do what you want and no one stops you. Even if you are the one who planted it, you can’t do what you want.” (Interview with Francia Candido)

Despite the grievances that the people have expressed to me, there were advantages that came about after Apo Island became a protected area. Firstly, Apo is geographically placed where beautiful corals thrive. This is confirmed by Dr. Rene Abesamis when asked about the rate of recovery of the old sanctuary that was destroyed by two typhoons:

“What does coral like? Corals like number one, hard substratum. Second, you need supply of larvae from somewhere, right? Third, they don’t like silt areas. They can’t settle on silt. So, if you are way out there away from the mainland, from where all the silt is, and you are out there in strong currents, I’d say there’s a good chance of recovery. The island has a hard substratum. Rocks. So, if this is normal, this is probably normal fast. Even if it is taking a long time, this is as fast as you can get.” (Dr. Rene Abesamis)

Hence, the Apo Island is a prime spot for dive tourism. From the interview responses, dive and snorkelling tourism has improved the economic situation of the islanders
greatly as the number of tourism had been increasing despite the damaged sanctuary. This is also evident in the official report of the amount of fees collected since 2009. This was provided to me by the statistics officer Sarah Faye Grefalde from the DENR office in Dumaguete. It can be found in Appendix E. The table below is the summary of the total number of visitors and the total the amount collected from 2009 until 2016, and the numbers are derived from that report.

Because of tourism, the locals could send their children to school and pay their way through high school and college. High school students need not travel to the mainland weekly, even during storms, to attend classes as there is a newly built high school on the Island.

“Yes, because we used to rely on fishing, but tourism has grown. Most of the people here are guides, and hardly anyone goes out to fish. It takes long hours to fish but guiding a visitor can take maybe 2 hours and you can earn 300 pesos. Sometimes in fishing, there is no catch. So, the sanctuary is a blessing. Houses have changed. They used to be small. The guides protect the turtles. There is definitely money here now. It used to be so hard to send kids to college. Now, it is okay now. We have many college students. We even have a high school now. Before, their parents can’t provide. We used to go to high school in Dauin (mainland). We had to rent a house. Before, we had no coastguard and when it used to be monsoon, we still would go out.” (Interview with Analie Candido)

10 The data for the number of visitors on December 2016 was missing in the report given to me. Hence, the number should be higher than what is reflected in the table below.
“In AISERGA, if there are tourists and if you have the gear to rent out, you will earn money. Sometimes in a day, they will earn 800 pesos. Now that we have no students in our house, life is easier now unlike before. Before, we would go around the island to fish with the kids. My second son and the two others go with us. When they were in high school, I am the one going out with my husband. But now, since no one goes with him, he doesn’t go out as much. He is earning there (in AISERGA) anyway. So, in a month, he would be working 4 times as there are 4 groups that go on rotation.” (Interview with Francia Candido)

The Apo Island Snorkelling Equipment Rental Guide Association (AISERGA) was one of the main advantages that the interviewees spoke about during the interview. This organization is a bottom-up, local initiative to organize themselves as tour guides for tourists. They are a legally registered group, supported by PAMB. The group, made up entirely of men, rent out their snorkelling gear, masks and fins, and work as guides in the water for tourists. They have their separate fees and work independently from PAMB. Some of the AISERGA members are also employees of PAMB. From the interviews, the responses allude that this organization is well organized. Divided into four groups they follow a roster for when each group should work as guides. This would mean that they do not need to fight amongst themselves for the opportunity to
guide tourists and earn cash. Every member gets a chance to earn some money from it, as confirmed by the founder during the interview. Here are some of the responses from the interviews regarding AISERGA and its benefits:

“During the time when there was no association, it was messy. To each his own. They get into fights. During that time, I was also working as a (tourist) guide. I saw that it’s not good to guide without any association. If there was a visitor who got hurt, we cannot answer for it. So, I thought that we should build an association. So those who do not want mess, they joined. Those without an association who are weak, they can’t earn money from the visitors (due to competition). So when I built it, we had 44 members. Until they saw how good it is run, they joined. Some of those who can’t find work in Manila, they came back here to work in the association. With this association, we are able to protect the ocean. So, for us fishermen, we set up this association, not only for our livelihood, but also for the protection of the sea, besides helping my countrymen. Even though we have PAMB here, they cannot hire everyone in the island. We came from Manila from fishing activities on a boat. It didn’t do so well so we came back home here... Yes, you really need to register it. If it’s not registered, it won’t be legal. We are accredited in Dauin. That’s our livelihood. The 160, I divided it into 40 groups, A, B, C, D. 40 each. It’s group B today, and tomorrow it’s group C. They can’t all operate at the same time. But if there are too many visitors like today, the rest of the groups can guide. So when the visitors arrive, they will pay the entrance fees at the PAMB office and then they will be directed to us to guide them. We will then take care of them, teaching them how to swim. But, there are other guide companies who come here and bring their own equipment. That is a loss in our income. We want to fix that and have power over that” (Interview with Efren Rumbaoa)

Figure 10 A picture of the current rental fees by AISERGA. Photo by Iris Carla De Jesus. Taken in January 12, 2017
“AISERGA is an association here. Some members of the AISERGA are also members of the PAMB. And, if there are projects of PAMB, AISERGA is one of those they call for to help in the field, like in the turtle area. AISERGA are the frontliners. They are active in protecting and guarding the turtle sanctuary. So that’s their connection.” (Interview with Analie Candido).

5.3 Accounts of ways public concerns are being addressed

The aim of question 3 is to highlight ways that public concerns are being addressed and if these public concerns have any form of leadership representation that allow them to be heard. The current Departmental Administrative Order that was issued illuminated the ways the stakeholders reacted towards it. The DAO (Appendix C) was officially issued in September 16, 2016, while the barangay captain Liberty Rhodes only received it via email on January 2017. The DAO document can only be retrieved from the Philippine government website. In addition, a stakeholder’s meeting was called only on the week of January 8 to address the new DAO that orders the immediate implementation of the new rules. Unfortunately, only some of the people from Apo attended the Stakeholder’s meeting, including the Barangay Captain. Some of those who went are tour agents and resort owners that will be affected by the price hike. Unfortunately, none of the locals, even any AISERGA members were invited to attend the Stakeholder’s meeting. One of the ways in which the concerns of the locals are heard is through the annual meetings PAMB organize at the island. One of the interviewees responded:

“There are meetings. But most of the people here, those that complain don’t attend these meetings, they do not ask what the real matter is.”  
(Analie Candido)

Another way that the locals’ concerns can be sent to the government units is through their Barangay Captain Liberty Rhodes, whom unfortunately was not around for an interview. When asked about the role of the Barangay captain in being the bearer of the concerns of the people, one of her employee at the lodge responded:

“Actually, that’s her target in the next meeting, the liquidation of funds. What are the things that are paid for, in Apo. Even she herself, as a Barangay captain, does not believe the amount being used here in Apo. The increase of the fees is also a big question mark to all the stakeholders. There is no public consultation. It just came out, just like that! I was there at the stakeholder’s meeting. Someone asked, “why are the fees collected in Apo not enough?” We do not see much development from Apo from those fees. So, all of the resentments came out in that meeting asking why
the situation is like that. Apo before until now, there’s not much
difference. The director is there too, of the DENR. He said that he will
hear all of our concerns and send it to the secretary Gina Lopez.”
(Interview with Berdan, 30).

In addition, the barangay captain was scheduled to leave for Manila with Efren
Rumbaoa (DENR provincial office in charge at Dumaguete) to formally file a
complaint regarding this issue. Unfortunately, she had to make a detour to Cebu for a
health checkup. This was confirmed by Efren:

“...so we went to Manila\textsuperscript{11}. We brought the comments of the Stakeholders
to them. Now, about that, because we went there, the Biodiversity
Management Bureau issued a technical bulletin. The DAO will be posted
at the Protected areas for the local government unit concern, for their
information. It’s a kind of information dissemination for all to know. And,
if they are not agreeable to it and if they have comments, they can
comment so that we can bring it to the central office in Manila. This is so
that the reactions of the people will be used as a basis to revise, or see
what they can do... she got sick. Poor thing. She went to Cebu for a
check-up. Instead of going there. We invited her but she got sick. But
anyway, she wrote a letter to the secretary. We brought it there.”
(Interview with Efren Rumbaoa).

The excerpt of the interview above suggests that the DENR’s official office-in-charge
of Apo Island are open to public opinion and feedback regarding new changes in the
rules governing protected areas.

5.4 Ways stakeholders work together to address public concern

Regarding the transparency in expenditure of the collected user fees and the
newly issued user fees

From the interview excerpts written in the previous sections, it is clear that the
stakeholders in Negros Oriental share similar sentiments regarding the new DAO.
This issue has shown that the provincial government is equally concerned for the
difficulties that the Apo Islanders will face if the new rules will be implemented.
Hence, the leaders of both the DENR provincial office and the Barangay Captain
worked together in order to send the people’s concerns up to the national government.

Regarding the original sanctuary that was damaged by the typhoons

\textsuperscript{11} Manila is the capital city of the Philippines and where the National Government bodies such as the
Department of Environment and Natural Resources are located.
The damage done by two consecutive typhoons are indeed terrible for the whole community. Yet, the locals rose above the ashes and decided to organize themselves to form AISERGA. They were supported by the whole community, the provincial government, and PAMB. The founder of AISERGA, Geoffrey, used his networks to help him complete the paperwork for it to be legally registered. In addition, the new turtle sanctuary was also quickly legalized to protect the turtles that were spotted in a small area by the beach, and to support the tourism activities of the island. This document can be found in Appendix F, and was provided by Sarah Faye Grefalde of PAMB.

Development as of May 31, 2017, one day before thesis submission:
Sarah from PAMB just sent an email stating that there has been a special order not to implement that Departmental Administrative Order that would increase user fees. No explanation nor documents had been given to me about it, but I suspect that it may have something to do with the appointment of the new secretary of DENR, Roy Cimatu. Gina Lopez, the one who issued the DAO, had her appointment reject by the Commission on Appointments on April 2017 (INQUIRER.NET, 2017).
6. Analysis and discussion

According to Alcala (2004), of all the islands that he has attempted to create a marine reserve with, Apo was much easier to work in because all the residents lived in a closely-knit community that facilitates communication. Furthermore, the establishment of the sanctuary was covered with an agreement between the municipality of Dauin to which Apo Island belongs to geopolitically, and Silliman University (Cadiz & Calumpong, 2000). This was the initial beginnings of the marine sanctuary before it was officially claimed by the NIPAS act in 1992. The situation now is clearly different. The sanctuary has gone from a community-managed protected area, to a centralized management by the DENR and its appointed officers in PAMB. The study by Hind, Hiponia and Gray (2010, p.55) explained that the Philippine government introduced the NIPAS act to replace community-based management because of the fear that the community might choose to turn back on its conservation objectives, despite the well-known ability of community-based management in development. This previous study highlighted the discontentment and demise of the community of Apo. It has been seven years since and recent developments have emerged from this community, such as the destruction of the marine sanctuary by typhoon Sendong and Pablo in 2011 and 2012 respectively. This thesis is partly inspired by Hind, Hiponia and Grey’s (2010) report and so updates are due. Therefore, this research done in January 2017 illuminates the ways in which the community adapts to challenges, both old and new, and the ways they circumvent these challenges ever since the centralization of management. To analyze the findings, the theoretical framework of state-society synergy and its concepts of community networks, state-society relations, and civic engagement will be used in this chapter.

4.1 Community Networks

Social networks within a community have great value in influencing productivity of groups and individuals (Putnam, 2000, as cited in Malik and Waglé, 2002). It facilitates collective action. From my empirical observations and the interviews, the presence of community networks are evident in Apo Island. As mentioned by Alcala (2004), it is a tight-knit community. Community networks are imperative to create a strong social capital that would facilitate development. Community networks can be
exhibited as both vertical and horizontal. Vertical would mean relationships between neighbours, and other members in the community. A vertical community network denotes relationships with people who are decision makers. Such people are business leaders in the community, the village captain, academic or NGOs. My field work at the Apo Island showed that the stakeholders exhibit strong community networks, as evident from the way the community worked together to solve the DAO issue. Firstly, The Barangay Captain is also the owner of the biggest and main dive lodge on the island called the Liberty Lodge. She is both dominant economically, socially and politically. She essentially represents the community in political events like the Stakeholder’s meeting that was held regarding the new DAO. Her attempt to raise the collective concerns of the Apo community regarding the DAO shows that she uses her networks and connections with PAMB to represent the Apo community. Her connection with the PAMB officers represent what Woolcock and Narayan (2000, p.8) describe as an extra-community network that serves as a bridge to enhance social capital.

The AISERGA community is also a good example and representation of a strong intra-community network present in Apo. The way a group of people came together to organize and legitimize the association shows collective participation and support in a local bottom-up initiative to circumvent the problem of inequity in the business of eco-tourism on the island. From my interviews, PAMB fully supports the association and work together to ensure that the environment is kept clean and laws protecting the sanctuaries are in place. The PAMB office-in-charge in Dumaguete confirms that AISERGA is a big help with their voluntary stewardship and of responsibility of cleaning the beaches and that their support of the organization will also meet environmental goals of conservation:

“The AISERGA is a people’s organization. PAMB allowed them to rent out snorkels and flippers. That’s their livelihood and so that they don’t go out to fish. They are a big help with cleaning the beach. They help out with the whole area. Now that they have income, they don’t need to go out fish. The pressure on fishing is then lifted off. In the beginning, their source of income is purely from fishing”

Some of the AISERGA member are also employees of PAMB and this shows that the members of the community show embeddedness between the stakeholders. Under the
synergy view, the term *embeddedness* refers to the nature and extent of the ties connecting citizens and public officials (Woolcock and Narayan, 2000, p.13). In addition, *complementarity* is also evident whereby there’s a mutually supportive relation between public and private actors (Woolcock and Narayan, 2000, p.13).

### 4.2 State-society relations

The next concept of the synergy perspective in social capital theory that will be discussed is the state-society relations. According to Woolcock and Narayan (2000, p.13), a strong relationship between the state and society would mean that social groups are able to influence public policy and that their concerns and things that are important to them are recognized and valued. In societies or communities with good governance and high levels of bridging social capital, there is complementarity between state and society and that economic prosperity and social order are likely (Woolcock and Narayan, 2000). Bridging social capital means ties that are formed with distant associates and colleagues who have dissimilar demographic characteristics (Abad, 2005, p.5). From the data collected during the field work, the state, in this case refers to both the DENR and PAMB. Analyzing the relations between DENR and Apo Community, the resentments people have regarding the fees collected and the restrictions they face from the rules prohibiting land clearing, show that management is top-down and that this mismanagement of funds created mistrust between the local community and the DENR. The employees of PAMB are not getting their salaries on time, not just for a month, but sometimes it took up to a year as confirmed by those who were interviewed. This issue had also been one of the main problems largely discussed in Hind, Hiponia and Grey’s (2010) study on the management of Apo Island. The DAO that was issued during that time illuminated the attitude the DENR have towards the views held by affected communities. Both PAMB and all the stakeholders in the province were equally surprised by the absence of public hearing or consultation that the NIPAS act demanded before implementing new changes.

The data shows that the relationship between PAMB and the Apo community is largely harmonious. My respondents have commented that there are utilities and development projects that PAMB has implemented to improve the quality of their lives on the island. For instance, one of my interviewees alluded that the community
is given public utilities such as solar lights for the pathways and its maintenance. This is the PAMB office-in-charge’s comment on PAMB’s relationship with the Apo community:

“Actually before, the local government unit (LGU) wanted to manage it (Apo Island) on their own because the income can go straight to the local government unit. Unfortunately, there’s no policy to support that. We do want to give the management to them directly. The problem is there’s no policy to support that move. So PAMB manages it. LGU sees that the management is fine. The income of PAMB does not go out of the area. It is all spent there. 99% of the people PAMB hired are from there. Not from outside. PAMB subsidizes the expenses there like the electricity at night, PAMB buys the fuel. And, the barangay is given a budget if 200,000 either every semester or every year. So, the relationship between the LGU and PAMB is okay. The barangay is also okay with it. The people also now understand that PAMB is based on policy. They have to follow it because it is policy. In the beginning, it was hard. But now they understand it so it’s ok. They see now that the income of PAMB does not all go to the DENR. The things is before, 100% is remitted to Manila. In order to get the 75%, it needs to be requested. That is why they don’t get their salaries immediately. Now, it is not like that anymore. We have a local fund. The 75% is deposited now here at our local bank, in Landbank. Now, a working financial plan is made, to be approved by PAMB. After that, the money can be disbursed through proper auditing and accounting. It is more efficient now. The salary and the projects are not delayed anymore because the money is here now. So, there’s no problem, unlike before. Now the LGU sees that it is okay. So, their negative view on us is gone. But it is good to just ask the people there, so that you do not only hear our side. You must hear their side, if their lives have improved. So now their kids can go to school. Many kids have graduated college because of that sanctuary.”

The informants have also confirmed that the management of the fees is now better as the money does not get sent to the National government anymore. Instead, it is directly deposited into an account in the province. This is the result of years of complaints given by the Apo community and PAMB officers in the province who are not getting their salaries on time. The only issue that needs to be addressed is the public record of the financial report of the fees collected. I was just fortunate enough to be able to meet an officer in PAMB, Sarah Faye Grefalde, who was willing to provide me the information that I needed.

Overall, there is a large room of improvement between the state actors and the local communities, especially in following through public policies properly when changes are made, and being transparent with public funds.
4.3 Civic engagement

Civic engagement is a very important indicator of social capital. According to Malik and Waglé (2002, p. 3), even though the domain of social capital is confusing and can embody many definitions, civic engagement is a key subset. They further assert that civic engagement contributes to social capital and to development efforts through the channels of voice, representation and accountability (Malik and Waglé, 2002). In the theoretical framework, civic engagement should not be an end in itself, but rather a means to co-production and co-influence in public policy and decision-making.

In the earlier days before Apo was officially recognized as a protected area, an initiative from a marine biologist from the nearby University inspired a bottom-up approach in creating a protected area. Dr. Alcala took lengths to build the trust of the people by bringing them to the nearby Sumilon island that was once a protected area to show them that setting aside an area as a sanctuary would encourage spillovers and thereby increasing fish catch. The sanctuary was officially created, with an agreement between the local community, the University and the municipality of Dauin. The Marine Management Committee was then formed consisting of the locals and were tasked to protect the sanctuary from fisherman and divers. The locals practiced great stewardship and ownership of their role as the protectors of the sanctuary. Here are some of their accounts during that time:

“So in 1991, I became the president of MMC. That’s when it (sanctuary) was expanded. We put in place buoys. I was the first one who put up the buoys there because during that time I saw divers entering. I started diving in 1987 and it changed my mind a little bit. I was a fisherman before so my objective was to catch fish, right? Doesn’t matter what was happening in the reef as long as you can catch fish. But as a diver, it changed me. I want to keep the fish instead... During my time when I was the president, we collected donation. The teacher’s quarter there, it’s form our collection from the sanctuary there, from tourism. The people built it, but the materials are from the MMC. Every month we buy medicine from the drug centre, every year we gave out give-aways to the household here. Our programs were nice! The money was not much but the people were happy because they saw the money. Now it is big so they should give it out to people, but sadly no. Who is happy? Them (DENR)!”

“The MMC was established made up of locals... so in 82’, they agreed to start it. And they have not stopped since then even though Typhoons strike. So that model of bringing the idea giving the local people for them to decide started in Apo for the Philippines. So, what they did first, besides establishing a sanctuary, what they also did was to establish a Marine Management Committee. In the MMC, they made sure that no
unsustainable fishing methods will be used and simple stuff like no stepping on corals.”

In the opinion of the locals on the island, the earlier forms of governance through the MMC gave them much more control in decision-making for the sanctuary and the island. Now that the DENR took over, they felt the loss of their sovereignty over their own island. In addition, some of my respondents who were members of the MMC felt short-changed in the agreement they made with the DENR when they passed the management over to them. This is evident from my interview with the president of Purok 6:

“... the initial idea was for people to decide what projects and programs they wanted. But there was a lack of paperwork for that agreement and so we could not account for it. It is now hard to rectify the decision to be under PAMB... the projects” (Purok 6 captain, former president of the Bantay Dagat)

Here, it is evident that the community lacked legal help drafting the agreement with DENR, unbeknownst to them that it would strip away their sovereignty through a faux agreement that did not officially got recorded. Hence, these narratives from the interviewees have proven that their right to civic engagement has been taken away from them.

However, as many researchers have come to study the uniqueness of the island as a sanctuary and a famous dive spot, these negative issues have come to light, especially though Hind et al.’s (2010) study. The local people saw this as an opportunity to voice their unheard opinion and grievances through the kindness and curiosity of strangers like myself. Thankfully, albeit slowly, attempts at providing avenues for civic engagement are made through stakeholder’s meeting. This is especially for the DAO, and the yearly meeting conducted by PAMB. Unfortunately, not everyone in the Apo community attend these meetings. Hind et al. (2010, p.58)’s study gave a reason for this lack of attendance and one of their respondents argues that nothing is done about the things the people have decided collectively. One of my respondent also claimed that “…people are scared to complain and give feedback. They need empowerment…” Therefore, this highly discourages civic engagement when there is little to no effect created by their presence and participation.
4.4 Discussion

This discussion section touches upon three main inquiries after the presentation and analysis of the field work’s findings:

1. Is there a need for this management change in the first place if bottom-up approaches are evidently better?
2. In terms of the level of state-society synergy in Apo Island, is that common in the Philippines?
3. Overall, how well is Apo meeting its marine conservation and human development goals?

The first question is important because it shows the reasoning behind the decision to hand over the management to the national government through the NIPAS Act. It would have been better if I had the chance to speak with Dr. Alcala himself, but narratives from other stakeholders are also equally legitimate in giving answers to this question. Firstly, Hind et al. (2010) alluded that the government claimed that it wanted to replace the previous MMC to prevent the danger that the community might choose to turn back on conservation objectives and exploit the MPA for economic benefit. This is a valid statement because this has happened to other protected areas in the Philippines, like Sumilon. Oslob, in Cebu, and its unsustainable whale shark tourism activities is argued as highly damaging to their migration patterns and natural way of life. Dr. Rene Abesamis also has a valid point made to answer this question. He argued that Dr. Alcala (who was also a former secretary of the DENR) found the need to make sure that the good thing that has started in Apo has a way to continue itself by putting it in the NIPAS Act. Hence, this is in line with Jones (2001) argument that the management of the MPAs should be a combination of top-down and bottom-up approached to ensure effectiveness in meeting the MPA objectives while ensure democracy and equity.

Regarding the second question, one can derive answers from Ricardo G. Abad’s (2005) study on social capital in the Philippines through results from a national survey. He concludes his extensive study by stating that Filipinos build strong binding
social capital with family members and depend upon them for material, psychic, and symbolic needs throughout the life cycle (Abad, 2005, p. 44). Networks of family and friends are extremely important. In addition, Abad (2005) alludes that the Filipino society generally lacks bridging social capital, or ties to a wider network such as membership in association or civil society groups. Filipinos are more likely to participate in organization that relate to the private realm of religion and sports, than in groups than in economic or political groups (Abad, 2005, p. 45)

The creation of the marine reserve in Apo Island is known to have stopped destructive fishing practices such as Muro Ami and Dynamite fishing. It resulted in a legislation of law to make this illegal. In addition, the original sanctuary has changed the community’s perception of marine resources. They now believe in more conservation and less extraction to make fishing sustainable. Hence, their response to the turtle phenomenon was to protect them and create boundaries to keep them safe, rather than eat or hunt them like they used to. They benefitted from this economically through eco-tourism by working as guides and renting snorkeling gears. We were not allowed to touch the turtles or go within the boundaries of the turtle sanctuary. Tourists are only allowed to look at them. However, given the increasing number of tourists the island is receiving because of the turtle sanctuary, this poses a problem of environmental sustainability. Many argue that the number of tourists are exceeding the limit that the island should permit. Hence, with regards to the third question, the marine reserve has facilitated tourism to thrive and so increasing the socio-economic situation of the islanders. However, the island meeting the MPA marine conservation goals is questionable due to the number of tourists visiting the island, and whether the turtle sanctuary is advisable as turtles are a highly migratory species.
**Conclusion**

The Apo Island is undoubtedly one of the most beautiful islands in the world, with unbeatable diving spots and thriving marine ecosystems. The creation of the marine reserve and the socio-economic benefits it has provided the community have encouraged the change in the people’s attitude and perception that were once prone to destructive fishing. The Apo community strives to protect the surrounding water that provides them with livelihood through fishing and tourism. However, a state-centric top down management has created resentments and mistrust amongst the locals after dissolving the community-based approach of management through the MMC. This investigation of a state-society synergy of the Island has illuminated ways in which the community has circumvented both the old and new challenges they are facing through their community networks and good provincial state-society relations. Civic engagement is still problematic in the management of the island. The DENR must realize that if they do not solve the issues of financial transparency and hegemony in decision-making, their efforts of meeting the goals of environmental protection will eventually go in a downward spiral. The government must realize that the people's voluntary stewardship and richness in social capital should be encouraged and harnessed through more civic engagement, and building trust between public and private actors that will improve state-society relationship.
**References**


Appendix A

Interview transcripts
All of the interviews were conducted in Tagalog (Filipino). The transcripts are translated to English.

Interviewee 1
Name: Analie Candido
Occupation: Former PAMB officer, now High School Teacher

Interviewer: What is the role of PAMB here in the sanctuary?
Analie: Before it was the Marine Management Committee. The DENR (Department of Environment and natural Resources) saw, and after the declaration of NIPAS Act, this area became a protected area in 2004. The Apo Island landscape and seascape was established. PAMB was then established in 2009 after deliberation and meetings. They collect user fees. So, from that user fees, it finances the protected areas, Bantay Dagat, honorariums, staff who collects fees. In terms of the money collected, there is the 75%-25% division, where 25% goes to the National (government), and 75% goes to the projects that are planned for island, as well as the salary for the staff under PAMB in the island. The management of PAMB composes of the regional director of the DENR, and the provincial representative or superintendent. Their office is in Dumaguete. The Superintendent’s assistant is always here. He is in charge of putting up Buoys (to demarcate no-take zones). They have annual research here for the corals and fishes, and tourism. Hence PAMB is the one that supervises the protected area management here.

Interviewer: So is PAMB under the DENR?
Analie: Yes it is under the DENR. There are also NGOs, and Dr. Calumpong from the University. They all the roles that make up PAMB.

Interviewer: So does PAMB the other protected areas here in the Philippines?
Analie: There’s PAMB here, and in other places. There are different boards. There are different kinds of protected areas, and so there are different kinds of boards. I think the only common things they have is the regional director.

Interviewer: So with regards to the 75%-25%, what are the issues regarding that?
Analie: The 75% that is supposed to go back to the island, not all are coming back immediately. It will be deposited in the bank and then it will take about 1 or 2 years for the 75% to come back here. So, yeah, some people don’t understand the process of why it can’t be released immediately. There is paperwork needed to be done. The project needs to be assessed and that takes time. So those working here are having a hard time as their salary takes a while to get to them.

Interviewer: So the 75% includes the salary of people?
Analie: Yes, but only those working for PAMB. The other benefits to the islanders are the projects like cemented paths and the like. The water tanks to collect rain. Cash doesn’t go to the people here. Not everyone can be supported by that money. People just don’t understand. They think that all of that money should be shared amongst the families. That was the misconception in the past. They don’t understand the process.

Interviewer: What are the ways in which PAMB tries to explain it to the people here?
Analie: There are meetings. But most of the people here, those that complain don’t attend these meetings, they do not ask what the real matter is.
Interviewer: Is the meeting compulsory?
A: No, it’s not.

Interviewer: With regards to the funds, is it a public record?
A: I haven’t tried, but there is a record. You might need permission at the DENR office if you want to find out, especially when you are interviewing. It’s the politics here. You can access it from the office if you have a permit.

Interviewer: In terms of the old sanctuary that was wiped out by the typhoon, who manages it now?
A: It’s the research team of the marine lab (University). PAMB tapped them for coral rehabilitation. There are other researchers too for plants planting. It’s not as sheltered as it used to be. The waves are high already and very exposed. When winds are strong, it is not sheltered anymore. Time will tell its recovery.

Interviewer: Could you tell me about the plans to increase the entrance fees here?
A: This is about the letter the islanders have received from the government.

Interviewer: Who usually receives such letters from the government?
A: DENR receives it from the government and it will be forwarded to the PAMB office here, with a copy to the barangay captain. She is a member of the PAMB as well. If there were a meeting to be attended with regards to the letter, it would be a PAMB meeting in the mainland. For me, I think the increase is okay. I am not updated much about this price hike issue. I live quite far from the office but I can ask around.

Interviewer: Who sets this entrance fee price?
A: The PAMB. They are the ones who decide the reasons to increase the fees and to justify it.

Interviewer: Have the people’s lives changed here because of the sanctuary?
A: Yes, because we used to rely on fishing, but tourism has grown. Most of the people here are guides, and hardly anyone goes out to fish. It takes long hours to fish but guiding a visitor can take maybe 2 hours and you can earn 300 pesos. Sometimes in fishing, there is no catch. So, the sanctuary is a blessing. Houses have changed. They used to be small. The guides protect the turtles. There is definitely money here now. It used to be so hard to send kids to college. Now, it is okay now. We have many college students. We even have a high school now. Before, their parents can’t provide. We used to go to high school in Dauin (mainland). We had to rent a house. Before, we had no coastguard and when it used to be monsoon, we still would go out.

Interviewer: When was the high school set up and how many students does it have?
A: 2006. We have 95 students, including senior high. Grade 11. And in the science class, they have integrated marine science. That’s another benefit. We as teachers would incorporate more on the environment. I wasn’t to teach them the value of the marine environment and our environment. These kids, they grew up in this protected area but sometimes, they forget how to care. It is important for them to have a deeper understanding on how to take care of the environment. Sometimes they do not take it into their hearts to love their environment. My mother taught me how to cherish this environment here because if it weren’t for the tourism here, I wouldn’t have had the chance to study. They need to know that our marine resources have high value.

Interviewer: Is there a relationship between PAMB and AISERGA here?
A: AISERGA is an association here. Some members of the AISERGA are also
members of the PAMB. And, if there are projects of PAMB, AISERGA is one of those they call for to help in the field, like in the turtle area. AISERGA are the frontline. They are active in protecting and guarding the turtle sanctuary. So that’s their connection.

Interviewer: **Do they operate separately?**
A: Yes the fees are separate. There is the rental of the snorkelling equipment. That’s from the association.

Interviewer: **Do you think it would be better if they cooperated more?**
A: Yes. But they cannot really be merged. The programme of PAMB should definitely involve the association as a way of respect and to give value to the association. Because if we all care and protect our sanctuary, then we all benefit. And it is easy for a project if all cooperates. They have just one goal so it is good to involve all of them.

Interviewer: **Do you have any improvements that you wish to see in the management of the sanctuary here?**
A: For me, the centre of it all should be conservation and not just about money. Because its all would just be superficial, the protection and the roles of people here. Then one wouldn’t really do their duty properly. The number of tourists and even the population here increased. Sometimes I see sacks of rubbish in boats and it is thrown out into the sea. They have no gratitude that they can afford to live because of the environment and marine life. They should cherish it. Is it all just for the money? They don’t understand, or they don’t want to understand. The trash, it all comes back to land if you throw it into the sea because of the current. And if the fishes die because of the trash, then you won’t have anything to eat. They don’t understand that their trash is affecting them too. Turtles will die because of the trash, then there would be no sanctuary.

Interviewer: **Is there a waste management program?**
A: Yeah there is segregation but they don’t do it for a long time. Just at the beginning and then they go back to old habits. There are small huts in different Puroks to gather the trash and a PAMB boat will deliver it to the mainland.

Interviewer: **What are the opinion or perception of the people here of PAMB, in general?**
A: In general, they are the ones who manage. But they misinterpret PAMB for only being concerned about the money and not their welfare.

Interviewer: **Do you think that is the case**
A: No not really, but in some aspects, you might see that. But like I said, I wished they focused more on conservation and that they emphasize the value of the roles and obligation of their employees, like the bantay dagats. They should tell tourists what not to do. But some of them can’t even speak English. But I wish they focused more on the environmental aspect. It’s a domino effect. If the environment is destroyed, then it will affect their livelihood.

End of Interview.
**Interviewee 2**
Name: Geoffrey
Occupation: Founder of the Apo Island Snorkelling Equipment Guide Association (AISERGA)

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**Interviewer**
**What is your name?**
Geoffrey

**Interviewer**
**How old are you?**
G 57

**Interviewer**
**When did the AISERGA start?**
G 2011, that was when I started it.

**Interviewer**
**How many members does it have?**
G 160 now.

**Interviewer**
**Are there only males, or are there females too?**
G No, just males.

**Interviewer**
**Before 2011, what were the livelihoods of these members?**
G Fishermen.

**Interviewer**
**Are some of them still fishing? Or are they not doing that anymore?**
G Some of them still go fishing. But there are other men who are not yet members. They still do not understand. Some who understand, they became members.

**Interviewer**
**What are the things that they do not understand?**
G In the beginning, they do not know how to speak English. They are scared of the visitors because most of us here are old and not very educated. So, that’s what they fear. But now, they see that those (members) who do not English have learnt to speak it, so they decided to join.

**Interviewer**
**Is there training for the members? If so, how is it like?**
G Yes there is. There are those, like diving instructors who teach us to, for example, save visitors in case of emergencies like drowning or cramps.

**Interviewer**
**What made you decide to set up this association?**
G During the time when there was no association, it was messy. To each his own. They get into fights. During that time, I was also working as a (tourist) guide. I saw that it’s not good to guide without any association. If there was a visitor who got hurt, we cannot answer for it. So, I thought that we should build an association. So those who do not want mess, they joined. Those without an association who are weak, they can’t earn money from the visitors (due to competition). So when I built it, we had 44 members. Until they saw how good it is run, they joined. Some of those who can’t find work in Manila, they came back here to work in the association. With this association, we are able to protect the ocean. So for us fishermen, we set up this association, not only for our livelihood, but also for the protection of the sea, besides helping my countrymen. Even though we have PAMB here, they cannot hire everyone in the island. We came from Manila from fishing activities on a boat. It didn’t do so well so we came back home here.

**Interviewer**
**What are the processes to set up this association?**
G My nephew helped me. He finished studying and he is a teacher. Also, there is this guy here, his name is Rino Patusa. He is one of those I approached for help. I planned it, and they helped to process it. By God’s grace it happened.

**Interviewer**
**Does it need the government’s approval to set it up?**
G Yes you really need to register it. If it’s not registered, it won’t be legal. We are accredited in Daun. That’s our livelihood. The 160, I divided it into 40 groups, A, B, C, D. 40 each. It’s group B today, and tomorrow it’s group C. They can’t all operate at the same time. But if there are too many visitors like today, the rest of the groups can guide. So when the visitors arrive, they will pay the entrance fees at the PAMB office and then they will be directed to us to guide them. We will then take care of them, teaching them how to
swim. But, there are other guide companies who come here and bring their own equipment. That a loss in our income. We want to fix that and have power over that.

Interviewer **How would this problem be fixed then with the other companies?**

G For me, if they have guests, they should recommend us, as a form of help to the people here in Apo. They already have the guests anyway so we can just do the guide. If the guide is not from here, and if they touch things underwater that they are not supposed to, like the turtles, we won’t be able to stop them. They don’t care, They are not from here anyway and we are the ones who will get hurt. A solution needs to be found that a local guide is compulsory. We protect the environment here more than them. We put it up because the turtles can’t relax without any disturbance, they will go in the yellow line. Visitors can’t go inside the yellow buoys. IF they want to take pictures, they can do it our side the yellow boundary.

Interviewer **Is there anyone informing them that they should hire the local guides here instead, or rules to enforce that?**

G They have made some rules, just recently. Within the orange area here, it is compulsory to have a guide. Outside of it, we cannot enforce it. Just within the orange buoys.

Interviewer **What are your opinions of PAMB their management of the island?**

G Regarding PAMB, what I know is that they entered here and had that 75%-25%. It didn’t really work out. The 75% went away, it seems like everything went to National. I’m not too sure I was in manila at the time. I only found out when the person from Siliman (University) who suggested to create the association told me that they got the paperwork that states what the agreement is regarding that. That’s all I know. So, in my mind, the income is with the national. Because if they have a proposed project for Apo, they will finance it. Those boats there, they are from PAMB. Here in our association, PAMB is supportive. But, yeah that only things that all snorkelers here in Apo should go through the association so that we can control it. We should be the ones benefiting because we are the one protecting it.

Interviewer **Could you tell me about the original sanctuary at the other side of the Island?**

G I was in Manila then but I can tell you what I heard. This sanctuary is created for fishes to breed. The process is very long because the people here are not agreeable. Until they convinced the people here, then the sanctuary was approved. It was beautiful. There were so many fishes. They weren’t fished or touched. They were in the sanctuary. When they started to do diving activities there, the fishes started to disappear. Snorkelling is one of them too. There’s really snorkelling there. I guess mother nature didn’t like it so look what happened. The corals were damaged (by the typhoon). Huge stones like this was washed aside by typhoon Sindong. Everything was destroyed. The visitor guiding started there. We didn’t have life vests then. We only had masks. Someone died because there was no guide. He was a good swimmer. But even though you are a good swimmer, you still need a guide. I think he had a medical condition as well. So no one can help him. The waves were big. So that’s why visitors need a guide. So apart from bringing you to the nice spots, someone can also watch out for you. It is 4:1. But when the waves are big, it is 2 visitors to a guide. Even when waves are big, visitors insist on looking at the turtles.

Interviewer **Do you have plans to enlarge the turtle sanctuary (orange barricade) here?**

G Yes, if we have a bigger area, but the truth is this are here is not really an official sanctuary. We are the ones who created it. It is possible to enlarge it of course.

Interviewer **Are there scientists who come here to fix the sanctuary?**
Yes there are. They put in artificial corals for them to grow. But for me, that place is nothing anymore. It's all just sand. Corals may take 40 years to grow. But it is growing now. In my observation here, corals grow easily. Our stones are alive. Look at that, that stone is alive, while the other is dead.

When the DENR has a law that they want to pass, do they consult the people here in the Apo island first? Is there a voting system?

Yes, if there’s something the people do not agree with, it won’t happen. But now I heard that there is a law that came from the DENR, that all these boats and that one, they need to pay for it. Pay to them. Venue the basketball court, users need to pay for them. They need to pay per hour. It was decided on November 15, but it only came to use now. So if they see our livelihood here, they will be tighter with us. It might likely be the turtles here will be gone. There are turtles because people take care of it. If people are stripped off of their work, they will eat the turtles.

End of interview.
**Interviewee 3**
Name: Mario Pascobello, 51 years old  
Occupation: Previous Barangay Captain and owner of the current Mario Scuba diving and homestay

**Interviewer**  As the previous Barangay captain, could tell me about how the sanctuary was managed before.

Mario  The island was a fishing village before. So before the sanctuary, there was a lot of destructive fishing, since I was 8 years old. Like dynamite fishing. The condition during that time was very bad. We go fishing there because there were no more fishes here. Dr. Alcala from Siliman, he had a project in Sumilon Island. That was the first marine sanctuary in Sumilon. But what happened there was a failure because when the fishes increased there – that was how it was in a marine sanctuary, the fishes increase – so when it increased, and when the mayor administration changed, the new mayor was against the sanctuary program in Sumilon. The history of the sanctuary started there. What happened was, when the mayor who was against it was running, he told the fishermen that they could go fish there at the sanctuary. So he won because the fishermen supported him. Because that was his promise, to allow the fishermen to fish there. He, himself had a commercial fishing business. So when he was mayor, he was the first one to go fish there in the Sumilon marine reserve. So the people started too. So it was a failure, and there was a case between the mayor and the Siliman Marine lab of Dr. Alcala. So, Dr. Alcala moved the program here.

**Interviewer**  Is Sumilon still a sanctuary?

Mario  Yes they made it into a sanctuary again. It is not open to public for many years. So when he moved the sanctuary program here, he changed the approach. Instead of talking to the mayor, he spoke to the people instead. He educated them about the program and sanctuary. How it is a breeding space for fish. So the people thought that if you cut the portion of the fishing ground, it will also reduce the fish catch. That was the perception of the people. So that’s why it took time to educate and get the majority of the people. The other reason is people fear the island being taken from them if Siliman enters the island. They might throw out the seamen. So they had a hard time to start. Siliman has records from here since the 60’s. So they know everything that happened in the sea – fish catch and coral reef condition. So in 1982, they set up the sanctuary here but only temporary. The people had nothing to do anyway, there’s no fish to catch. So we said, sure, let’s just see. If the performance is good, we can continue it. The agreement was 3 years. So if nothing happens, we can go fishing.

**Interviewer**  Is the contract between the University and the people?

Mario  Yes. Between the University, the council of Dauin, and the council of Apo. Me, I was part of the council at that time because I was the Barangay chairman. The sanctuary needed a legal document, an ordinance to prohibit illegal activities, penalties. After 3 years the sanctuary was running well, I was sleeping there every night at the sanctuary at the beach. Sometimes it is 2 of us with the social worker. I was 17 years old. We extended the agreement to another 3 years. Before the third agreement ended, on the 5th year, we passed a resolution requesting the municipal council to finalize the ordinance. The barangay has no say on the sea. We cannot pass ordinance on the sea, only on land. Only the municipal has the right to pass that ordinance. In 1986, the municipal
ordinance was approved, establishing a portion of that side as a marine sanctuary that it will be run by the community.

Interviewer: Was that when the MMC (Marine Management Committee) was established?
M: Yes they set that up, a body of people's organization responsible to look after the place. But it is under the barangay council.

Interviewer: When the sanctuary was set up, were there tourists visiting the place already?
M: Yes, sometimes. Just a few. 1 or 2. Just Alan White. Do you know him? During the time Alan White was still the Peace Corp volunteer. But now he is a doctor on marine biology. He wrote a lot of books on the seas, conservation. In the Philippines especially, Tubbataha reef, Apo Island and the seas around. Alan White wrote a lot of books. Alan White was the only one I saw here. He is an American who taught himself how to speak our dialect, Filipino, so that he can communicate with the fishermen. So just Alan. So 1991, I became the president of MMC. That's when it (sanctuary) was expanded. We put in place buoys. I was the first one who put up the buoys there because during that time I saw divers entering. I started diving in 1987 and it changed my mind a little bit. I was a fisherman before so my objective was to catch fish, right? Doesn't matter what was happening in the reef as long as you can catch fish. But as a diver, it changed me. I want to keep the fish instead. That's why I have this kids program for 6 years.

Interviewer: What program is that?
M: Future Apo Kids Program. In this house. I do it every April. It's a 16-days program, more on environmental awareness actually. But during that time before that when I was the Barangay Captain, I represented the council, sitting as a board member in PAMB.

Interviewer: How long were you a Barangay captain for?
M: 1997 to 2007. I was sitting as a board member in PAMB. I pushed to have a teacher in school to teach coastal resource management. Our teacher would sit down in a class teaching the kids about coastal resource management and segregation of garbage, and so on and so forth. But the problem is, their head teacher said that it is difficult because it is not in their curriculum that they are following. Right? They said that I have to ask permission from the Superintendent. I went there four times just to get the approval for a teacher to teach coastal resource management.

Interviewer: So even if you were the barangay captain, it was still hard for you to implement the program here?
M: Yeah well you can't say that you want your own program there in school. I just wanted to put this little important thing to the mind of children about the environment. Luckily, when it was adopted by the superintendent, once a week the Grade 1's had 20 minutes, grade 2 30 minutes, up to grade 6. So meaning, the grade 1's had 20 minutes about coastal resource management. But when I wasn't the Barangay captain, this went away. No support.

Interviewer: So does that mean there's no more of that now?
M: Now they put it back, but it's the teachers' initiative there. They just squeezed it in. Now, what I did, like it or not you become old and can't do anything. It's such a waste if the program you created has no takeover. So, now I thought that I would just create my own. Since 2001, I started the Future Apo Kids Program. Each student at the beginning. The main objective of the program is environmental awareness for the kids. But because environmental awareness is a broad word, it's about the land, forest, fish, food.

Interviewer: Do you have the support of the Barangay Captain here or PAMB?
M: First, I do not need their support. I can handle it on my own. Second, I don't think they will support me. They do not having anything also to help. I need only little thing, which I can handle. A few friends like the Danish couple that
helped me with the t-shirt. The expenses going to the town, I have my truck. I drive my truck with the children behind with all the gear. So, I can do that. But, in fact one of my students left yesterday. He said I better you take some donation from other people. Maybe, yes from other places. It’s not bad to take some donation. But at the moment, why I ask, if I can do it? Right? I don’t need. Maybe for, like manual help, like these group of French that come to help me. I am happy about that. But money? No. I don’t need.

**Interviewer** *What is your opinion on how the island is being managed now compared to before?*

**M** It’s in the limit. I can see. Really the limit. The number of people, the number of boats, and the number of users is in the maximum limit. If it cannot be corrected, next year, finished! The turtle there, when I started diving in 1987 until the 90’s, in the 100 dives of mine, I saw maximum 2. Why? People kill, collect eggs, no rules. So in 1997, 1998 when I was captain, I made it illegal to kill the turtles, the ants. My rules include not throwing trash into the sea or on the beach. They can’t poop on the beach. People here treated it like a toilet. Before there, rubbish, shit from one end to the other. There was no toilet here before. So 1998, I passed around 4 laws. 2 in 1997, 2 in 1998. There, discipline. My aunt cut some wood, so there was a case. Filed a case against my aunty. I jailed my brother. Have to be strict to discipline you. Nothing will happen. Of course all of us are related here.

**Interviewer** *How do you feel about the sanctuary now and how it is run?*

**M** That’s wrong

**Interviewer** *Why do you say so?*

**M** See, the turtle, they will travel thousand miles away. Thousand miles! They will return back to the place they were born. That’s their instinct. What does that mean, turtle sanctuary in that area? Do you know what a sanctuary means? Sanctuary is a holy place. That’s why it’s a sanctuary. Holy place means you have to respect the place. If possible, don’t cross the line. Because of you cross it, it’s not a sanctuary. No! A turtle will swim to different places. Because okay in a sanctuary you keep a turtle there, how about outside? I will kick them out. The whole island is a turtle sanctuary. Means we will respect there. Yeah okay they protect inside. How about outside did you watch? Why did they put that there? Just to earn money! Just for money. So that they can collect. They have a perimeter for them to collect money once you go in there.

**Interviewer** *So if it were up to you the whole island should be a sanctuary?*

**M** Yes the whole island. Bird sanctuary, for example when I started protecting the bird there. What did the DENR want? There’s a beach there they wanted to create a bird sanctuary. Why? The bird is just there! Sanctuary means you keep the animal not dead, like a fish sanctuary. Fish sanctuary, you cannot fish. Outside, you can harvest. So you mean that bird sanctuary there you cannot touch, but outside you can kill? The whole island is a bird sanctuary!

**Interviewer** *So what you’re trying to say is that they are small areas of sanctuary just for tourism?*

**M** I think that is their purpose and this time, you know, tourist means money. That is their goal! For money. It’s actually not for protection. It’s contrary to my principles. Money will come later on. First, you protect the resources. It’s important. Especially fishermen, we are dependent on the sea. We have to look after the sea. Money will follow even without tourists there. We will survive if we have many fishes around as long as we protect the place. So, as I said we are in the limit. When I was the barangay captain, I really push as a board member, to regulate the number of boats. I managed to regulate the number of people that can dive in the sanctuary. 15 divers only allowed in one day. I put that as a law. Before I left, a year before, I pushed to regulate the number of boats, divers and visitors that can come. So, they understand what I am saying. What happened is that they brought researchers to collect the baseline of how much
is the carrying capacity.

**Interviewer**  
*What was the result?*

**M**  
It was good. I am very happy on that. And they are studying and studying. A year after I was no longer the Barangay captain. The program was done. The plan to regulate was done. Nothing. Since 2007, now 10 years after, nothing, nothing! 10 years is a big number of years, big increase! And I knew that 12 years before that it can happen today. Now, it happened! And it will really happen in the next 5 years. If they will not do anything about it, and whether you like it or not, the resources have a certain limit of human activities. There’s always a limit. If the leaders, board members or DENR doesn’t have it in their minds about that, they will wait until it will happen. And you know, the environment gets destroyed within seconds, or a day, or hours. But to put that back in, years and years. So, I didn’t want that to happen. But I know that will happen.

**Interviewer**  
*I read that it used to be community managed with the MMC, and now it is top-down. Did that really happen?*

**M**  
Yes. That destroyed the essence of community-based. Community-based, to me, is the most effective program. It doesn’t matter whether it’s on land, or in the sea, or wherever, but once it applies to the community, let the program run by community. Educate them first and let them run. They are the best managers of the resources. Why? Because if there’s law made by them, they are the ones that will destroy. But if they understand that it will destroy their future, of course they will respect that. They are the person that will drive the place. So let them understand first and let them run the place. Look at Apo now, there was the community. But then came DENR, it became messy. Just recently there was a hiatus. The secretary of DENR passed a DAO – Departmental Administrative Order, increasing 800 times of the price. The stakeholders that are paying happily, they are very angry. They boycotted. Also the people here. Before, the boats catering to the tourists pay 50 pesos per day. They increased it to 50 pesos per hour! Means they will park there for 8 hours, they will pay 800 pesos. Those AISERGA group, they need to pay also according to the new DAO. They will guard there every night, the members. Now, no more. They said, “we are guarding this place but in the end we have to pay! How is it like that?” See? The mind of this government! If there are programs that are good, they should just let it be. Just support technically, whatever, just let this people because it is effective. If it is rocky, then try to correct. But if it is running well, why should you intervene? Just to destroy whatever they are doing well? So that the benefits that they get will turn to you? So now, I don’t know. There are many problems. Maybe I am the only one seeing it. During the meeting (stakeholders meeting) four days ago, here is their introduction: the secretary did this because there are protected areas that are stagnant. Those without any fee collection. Ok! Those protected areas that didn’t do anything, those that do not collect the fees. But here, imagine 11 million pesos a year. Okay they said 75%. 8 million a year they said it would come here. That is a lot of money to upkeep this place. Give me 3 million a year, I will upkeep this place!

**Interviewer**  
*Does that 75% come back, in your opinion?*

**M**  
That’s just all talk. But there is, within the 8 million, there might be 2.5 million that comes back. Those wardens. Wardens, maybe maximum 1.7 million a year. Ok, make it 2 million. What else? The buoys. That’s 100 or say, 200 pesos each. Okay so 50,000 altogether. Ok, rope, how many are those. Let’s say another 100,000 pesos. So, let’s say, the whole mooring buoys. 3 million for everything. Where’s the 5 million? It’s the DENR. They are the ones that got rich. The office of DENR before the collection of Apo, is just a house without curtains. There is an electric fan but it is broken. Everything’s broken. When the collection here happened a year after, it is air conditioned already! They are the ones that used the money from here. They said that they are the ones that paid for the
containers. What? Where is the money we pay every month? I know how many they bought, only 5 containers. 100l per month. The generator, it eats 30 containers. That is 1000 litres per month. They only gave 100 litres. Who paid for the 900? The people! They talk as if they bought the diesel for the generator. It is just talk. In actual, that is one big problem until now! The next mayor in Dauin, he is good. He is the vice mayor now. We are in good terms. We will find ways to de-establish the protected area. We will fight. De-establish the protected area so that the community can run it back. Locally managed, local collection. But we will try to fight that later on.

Interviewer: *Are the fees a public record? How much they collect?*

M: No they have no publication. The people here don’t know. They are just the ones, the meetings of PAMB. Sometimes they put there what projects they have. Like view deck, the concrete, and natural pool, buoys, etc. Add it all up, it won’t add up to 1 million. Where are the rest? They are the ones that mentioned 11 million. Not me. During the meeting four days ago. Their income is 11 million from Apo alone!

Interviewer: *So they don’t have this information online for people, like researchers, perhaps?*

M: No they won’t show it because if they do, it will show that the expenses went back into their offices. The people will get mad for sure! The keep the report to themselves. Of course, it is so easy to manoeuvre, the expenses.

Interviewer: *During the time of MMC, are there entrance fees?*

M: No we don’t. Just donation. The concrete road there, that’s from the collection of MMC.

Interviewer: *Oh I thought it was from PAMB.*

M: No! During my time when I was the president, we collected donation. The teacher’s quarter there, it’s from our collection from the sanctuary there, from tourism. The people built it, but the materials are from the MMC. Every month we buy medicine from the drug centre, every year we gave out give-aways to the household here. Our programs were nice! The money was not much but the people were happy because they saw the money. Now it is big so they should give it out to people, but sadly no. Who is happy? Them (DENR)!

Interviewer: *The two schools here, is it from the MMC or from PAMB?*

M: The school already existed before the sanctuary but there was no teachers’ quarters. MMC built it. The high school there was my project when I was the barangay captain.

Interviewer: *What year was it set up?*

M: I built it in 2005. Officially it started in 2006. Someone donated one building there. The provincial government donated the other building. The half million, well the department of education would not establish high school if the barangay does not have a counterpart. Luckily my friend from Germany gave half a million. He is the one who gave the counterpart in order to set up the high school. So the building was set up, deposited to the account of the Barangay and turned over to the department of education, the half a million. Of course there are additional buildings and teachers later on. That was my project. The generators were my project too, in 2003.

Interviewer: *In your opinion, what were the completed projects of PAMB here?*

M: What I see is the wharf, a building there is now gone, that public toilet is from them. The police station there, I heard it is form them. They also have a office at the other side. If you see, there’s nothing really directly to the people. The toilet, fine. But the houses have their own toilets. Basketball court, but if they have to pay, is it theirs? The government owns it. So nothing really. No project or program. Maybe the new generator is theirs. The old one was ours form the Barangay. But we are talking about 11 million a year.

Interviewer: *I heard that they are giving the rest of the money to other protected areas that are lagging behind.*
M That's the 25%. The remaining 75% shall be retained for the protected area. The office there in Dumaguete is a protected area? So that is an additional problem now here. Before it was just the collection of donations. How did we manage that? Now it is 11 million and it got messy!

End of interview.
Interviewee 4
Name: Efren Rumbaoa
Occupation: Office-in-Charge, Community Environment and Natural Resources Officer for the DENR, Dumaguete City

**Interviewer** How is DENR related to the management of Apo Island?

**E** Actually, that Apo Island is declared as a Protected Area, based on a Presidential proclamation. We are planning now to have that protected area be declared through a republic act. However, we have not yet done that, we have not yet completed the requirements for proclamation through the republic act, through congress.

**Interviewer** What are the requirements?

**E** So, requirements are the requests for the congressmen involved, for us the jurisdiction to pass a bill. So that the protected area will be proclaimed through the republic act. However, anyway, it will not be pushed through or when it will be enacted, no matter, because this protected area is proclaimed as one through presidential proclamation. Actually, other protected areas are declared as a republic act, like Kanlaon National Park. The policy governing that is the republic act.

**Interviewer** Could you describe to me the contents of the republic act?

**E** The republic act is coming from the congress, then it will be passed to the senate, and it will be approved by the president. That is a republic act. While the difference between the republic act and the proclamation is that a proclamation is coming from the president only. It does not pass through the congress and the senate. That is the difference. So now, if the republic act cannot be superseded without passing through the congress and the senate. However, that proclamation, because it does not pass through the senate and the congress, it can be amended by any president. That's the difference between the republic act and the proclamation.

**Interviewer** Could you tell me more about the new rules implemented at the Apo Island?

**E** Oh the Departmental Administrative Order? Don't you have a copy of that? You can download it from the DENR website. Denr.gov.ph, under news and policies. The one that prescribed new rates of payment. It's the departmental administrative order 2016-24. So it's the series of 2016. That DAO is signed by the secretary Gina Lopez and that prescribed new rates throughout the Philippines, covering all protected areas. So, now, the problems that we see is that not all protected areas provide the same services. So, now, we should like to implement this but there are many who will complain. Reactions that say that it shouldn't be implemented and there should have been a public hearing before implementing it. So we went to Manila. We brought the comments of the Stakeholders to them. Now, about that, because we went there, the Biodiversity Management Bureau issued a technical bulletin. The DAO will be posted at the Protected areas for the local government unit concern, for their information. It's a kind of information dissemination for all to know. And, if they are not agreeable to it and if they have comments, they can comment so that we can bring it to the central office in Manila. This is so that the reactions of the people will be used as a basis to revise, or see what they can do.

**Interviewer** What are the reasons why they (DENR) increased the fees?

**E** That is also our question to them. It is under the NIPAS act that the guidelines governing the protected areas states that changes made to the payments we receive from the stakeholders should have a public hearing. This is so that we can get the willingness of people. If they are willing to pay that much, or what's their limit to pay for the services provided by the protected area. Now, if the fees are agreed upon, the PAMB will make the resolution. After that, it will be
forwarded to the central office to be approved by the secretary. This is so that the basis for the changes in fees is legal. That is how it was supposed to happen. But I don’t know what happened. That DAO came out without any public hearing in our area. So, the people’s reactions are negative. They thought that PAMB recommended it because that’s the policy anyway. PAMB is supposed to recommend the changes before the secretary’s approval. They do not believe that PAMB doesn’t know anything about that DAO. The truth is PAMB doesn’t know anything. The PAMB of Apo Island themselves are wondering why there is a department administrative order. Like that. So, we were forced to go there (to Manila), bringing their petitions so that they know that there are complaints. We wouldn’t really know if no one complains. So like that, that’s the reason why they created a technical bulletin. Unfortunately that technical bulletin is not approved. I have a copy as a draft. It’s not an official copy. I called them earlier to ask for the official approved copy so that we can inform the public. That’s what happened.

Interviewer: Do you think that they (the central office in manila) will address these concerns?
E: If they won’t listen to us government employees, they should hopefully listen to the public because it is the public that uses them, not those from DENR. The community uses them (protected area services), the stakeholders. Not us.

Interviewer: This DAO, is this just for the Apo Island, or is it for the whole of the Philippines?
E: Whole Philippines! That’s why the technical bulletin I was talking about should be approved. The provision is that the DAO should be posted in the area concerned so that people can comment. These comments can then be sent to them so that they can analyse what they should do about the DAO. But unfortunately the technical bulletin is not signed to mandate us to post it. I have no legal basis to post because the DAO states that the rate should be implemented immediately. I said that if it is effective immediately, and if we don’t do it, they might hold a case against us. They will file a case of insubordination against us. Because we are government employees. If we are mandated to collect, we have to collect. So, now we are caught in between the department and the people. The people they are not willing to pay. So now, we are mandated to collect. That’s a problem. So that is why we are forced to go there to tell them what happened.

Interviewer: What is the outcome of that meeting?
E: So the outcome would hopefully be that approval of the technical bulletin. It’s not signed yet and we can’t really influence them to sign.

Interviewer: Is it Gina Lopez who will sign this?
E: It is Mondita Lim, the director of the Biodiversity Management Bureau the one who will sign it. I hope it will be fixed that’s why I was following it up. I may follow it up later again

Interviewer: Regarding the raising of fees, is this because they want more finds to protect other areas?
E: Maybe. For me, that’s okay if that’s the issue. But, the problem is, it should be for other protected areas that are applicable. For example, like the Tubbataha reef. The area is far, it takes 1 week or 5 days. It is more expansive there. Entrance and diving. The scenario is different in the Apo Island. The tourists going there won’t stay there long. They will dive for 2 hours and then they will go somewhere else, like siquijor or Bohol. It’s a package. They won’t stay there long and won’t even sleep there. So, it is not worth staying there long. So it is not worth 1800 pesos per dive. It is not like Tubbataha reef. There’s no island there. You can only dive, look at the corals. You will be on a boat for 5 days. 3000 pesos is worth it. The prices should not be the same for the whole country because the services are different given by the protected areas. The fees should hopefully depend on the services given.
Can PAMB rectify this DAO and recommend their own fees?

I am not sure if the policy allows this. But the single policy we based it on is the republic act called NIPAS Act. That’s the single policy we need to based on when implementing rules and regulations. Maybe, I don’t know. Procedure needs to go through public hearing. We need to get the stakeholder’s opinion and willingness to be ok with the changes. What happens when this is forced is that people won’t go there. It’s only the people and their livelihoods that will be affected. Those who are not from there or who do not used the area’s resources don’t know these. So now, the people there, their livelihoods will be affected if tourists won’t go there. This chain of reaction will happen if you don’t uphold people’s rights. That’s the primary concern here. The rights and needs of stakeholders.

Overall, disregarding the new DAO, how is the relationship between PAMB and the Apo Island people?

It is okay, we do not have any problem with the people there, the stakeholders. Actually PAMB has no problems with the people. They really just misinterpreted that PAMB was the one who asked to raise the fees. But, DENR was at fault. We admitted that it is not from us. It is from Manila, directed to us. So they understand, that’s why we went to Manila and told them the reaction.

Was the Barangay Captain with you?

No, she got sick. Poor thing. She went to Cebu for a check-up. Instead of going there. We invited her but she got sick. But anyway, she wrote a letter to the secretary. We brought it there.

Could you tell me more about the fees now being collected the 25%-75% division?

Yes, the 25% is remitted to the National Treasury. The 75% is deposited in our local funds here for the PAMB activities.

What are the projects the are completed in the Apo Island with this 75%?

There’s quite a lot. We have a glass bottom boat, the maintenance of the office, the protection of the coral reefs. Rehabilitation and such. There’s many. The salary of the bantay dagats.

How is the sanctuary that’s damaged now?

That sanctuary is not open for diving because it is under rehabilitation. It takes a long time for the hard corals to recover. There is some soft corals but the hard corals take a long time. But anyway, there is regrowth but rehabilitation takes a long time.

Are there scientists aiding in the rehabilitation?

Yes, there are. Actually one of them is a PAMB member. Aylin Maypa is a PhD on Marine Biology, in Siliman. They are helping us out. We have programs and activities, and Siliman is helping out. Dr. Alcala is helping us out too in monitoring the marine sanctuary. They have yearly assessments. But we are fortunate that those turtles came. I don’t know what they ate that they stayed there. That’s the main tourist attractions there. It is only now that they became so many. There are some before but just 1 or 2. We do not feed them and we tell people not to. Tourists are not allowed to touch or go very near the turtles.

How is the relationship between PAMB and AISERGA?

The AISERGA is a people’s organization. PAMB allowed them to rent out snorkels and flippers. That’s their livelihood and so that they don’t go out to fish. They are a big help with cleaning the beach. They help out with the whole area. Now that they have income, they don’t need to go out fish. The pressure on fishing is then lifted off. In the beginning, their source of income is purely from fishing.

The locals mentioned to me that there are no more fishes. Is that true?

Definitely not! They did not go away. Ask Dr. Maypa. She doesn’t believe that because she is the only one assessing the fishes. She knows everything about the fishes. The fishes are just there. Actually, the fishes are increasing within the
sanctuary. But they do not know because people are not allowed to go in yet. So that’s how Apo is. Not many go out to fish now, so they thought there’s no fish!

Interviewer: **What are the misconceptions do people have about DENR?**

E: Actually before, the local government unit wanted to manage it (Apo Island) on their own because the income can go straight to the local government unit. Unfortunately, there’s no policy to support that. We do want to give the management to them directly. The problem is there’s no policy to support that move. So PAMB manages it. LGU sees that the management is fine. The income of PAMB does not go out of the area. It is all spent there. 99% of the people PAMB hired are from there. Not from outside. PAMB subsidizes the expenses there like the electricity at night, PAMB buys the fuel. And, the barangay is given a budget if 200,000 either every semester or every year. So, the relationship between the LGU and PAMB is okay. The barangay is also okay with it. The people also now understands that PAMB is based on policy. They have to follow it because it is policy. In the beginning, it was hard. But now they understand it so it’s ok. They see now that the income of PAMB does not all go to the DENR. The things is before, 100% is remitted to Manila. In order to get the 75%, it needs to be requested. That is why they don’t get their salaries immediately. Now, it is not like that anymore. We have a local fund. The 75% is deposited now here at our local bank, in Landbank. Now, a working financial plan is made, to be approved by PAMB. After that, the money can be disbursed through proper auditing and accounting. It is more efficient now. The salary and the projects are not delayed anymore because the money is here now. So, there’s no problem, unlike before. Now the LGU sees that it is okay. So, their negative view on us is gone. But it is good to just ask the people there, so that you do not only hear our side. You must hear their side, if their lives have improved. So now their kids can go to school. Many kids have graduated college because of that sanctuary.
Interviewee 5
Name: Francia Candido, 65
Occupation: Sari sari store (local small shop owner), wife of a former fisherman.

Interviewer
Are you and your husband still going out to fish?
F No we do not do that nowadays. Only maybe when my husband is around. Before, when I was younger, I go with him. The kids, when they are able to out to sea, they go with my husband. This is until they started going to school in the mainland, when I continued going out to the sea with him instead because I am still able to.

Interviewer
Do you go out there alone?
F No I am just on the boat and husband is the one who does the diving. He is the one preparing the nets (naglalambat) and catching the fish and I would be the one pulling it. At night, he would spear the fish and I would be on the boat. On the weekends, sometimes from Saturday to Sunday night, my husband would go out spearing and my sons would go with him. I would be at home then.

Interviewer
What about now?
F No, I won’t go out anymore my back would hurt if I pull the nets.

Interviewer
Are there people still going out to fish?
F No not anymore. It used to be just the men going out to fish. But now, they are earning from the turtles. From AISERGA. Before, some of them do go out when the moon is bright at night. The fishes that they catch are huge. Sometimes a fish would be around 15 kilograms. Sometimes, it will reach around 19 kilograms. Now that there is AISERGA, there is easy money there. They don’t go out to sea anymore. Sometimes it’s just my husband if he has someone to go with because he still sees many fishes if he dives. There are many fishes near!

Interviewer
If your husband had a choice, would your husband still choose to fish?
F Yes, that’s what we have been doing since young. That was our livelihood, nothing else.

Interviewer
Would you join AISERGA, or any other tourism-related activities here?
F No, my husband just became a part of AISERGA. Just last year. He saw that money is easy there, unlike fishing. It’s not even sure if you will have a catch there. In AISERGA, if there are tourists and if you have the gear to rent out, you will earn money. Sometimes in a day, they will earn 800 pesos. Now that we have no students in our house, life is easier now unlike before. Before, we would go around the island to fish with the kids. My second son and the two other go with us. When they were in high school, I am the one going out with my husband. But now, since no one goes with him, he doesn’t go out as much. He is earning there (in AISERGA) anyway. So in a month, he would be working 4 times as there are 4 groups that go on rotation.

Interviewer
How does one join AISERGA here?
F Just go become a member. The main chairman picks which group you will be in. The head decides that. That’s how I understand their group. They also elect their chairman.

Interviewer
Do you know if AISERGA is connected to PAMB?
F In my opinion no. PAMB sees that AISERGA is making money so they are meddling, giving advice on what to do. But before, no they do not meddle. But now that they earn money, they are entering into AISERGA.

Interviewer
Is AISERGA paying taxes of fees?
F No they do not. Only the visitors pay the entrance fees. This group is registered in Dauin. They have to pay the permit yearly.

Interviewer **What do you feel about how the Island is being managed by PAMB?**

F For me, we agreed to be managed by PAMB before. Yes sometimes they do good things for us. But sometimes, what I understand is that they just dictate what the people should do here. Sometimes, for example, we are not free to do whatever we want. They dictate the people.

Interviewer **Could you give me examples?**

F For example, the wood. If you want to cut down the tree because it may pose a threat to your safety, it might fall on your house. We can’t just cut it down. We have to ask permission from PAMB by going to the city. But, anyway I know that is just for the good of the people. But, even if the wood (tree) is of no use, they are still preventing it. It’s not like before you are free to do what you want and no one stops you. Even if you are the one who planted it, you can’t do what you want. You can ask around. When did you arrive here?

Interviewer **Last week Tuesday. I have been here for a week.**

F Do you live with Liberty?

Interviewer **Yes I am. May I know what your opinions are and your feelings toward the sanctuary, and could you tell me the process of setting that up as I know that you were around at that time.**

F Before, the people here do not understand the sanctuary. It started long ago. In the beginning, the volunteer here was from Siliman. And then, the people did not allow them to have a sanctuary here because they catch fish. The volunteer said that if that area became a sanctuary, people were not allowed to fish. So they do not allow that. It was just a few of us who allowed it, maybe around 8 pairs of us couples. It is really hard for the sanctuary to be set up. So many people were against it. After, they saw how good the sanctuary was, when they saw that it was working. You can really see that there are so many fishes. When the sanctuary started, the people here woke up. Here before, maybe only one family was able to send kids to school. No one could. Kids would only finish elementary school, or grade 6 and that was enough. The people here, if you call them for a meeting they won’t go. Volunteers used to go house to house to call people to the meeting. They do not want. When the sanctuary started, the store there in front of the school started at the same time. That is the store where the volunteers started a co-operative.

Interviewer **Are the PAMB employees here from Apo as well?**

F Yes

Interviewer **Do they help the people here and the development of the households here?**

F What do you mean households?

Interviewer **If they help in terms of development, like for instance, building something for the people.**

F No. not really. Before when we started the sanctuary, we around were 16 people. That was supposed to happen before. When people saw the good of the sanctuary, slowly they started to change their minds. Even our barangay captain here before didn’t want it.

Interviewer **Was that Mario?**

F No, it was the one before him. He didn’t want. It wasn’t PAMB before. It was DENR. So he said that if we accepted DENR, they will dictate what we do here. So the captain doesn’t want it. But we see that it is good for the future of the kids, we allowed the sanctuary to be here.
They also built a multi-purpose hall beside the sea there. When our husbands go out to sea at night, it is us women who would watch the sanctuary so that no one goes into it to catch fish. If the men do not go out to sea, they are the ones watching out for it. When the moon is bright, they go out to sea, and we women bring our little kids there with us at night. After a few years when people saw the good in the sanctuary, the whole Apo was on board. The captain really doesn’t like the DENR because it really happened that the DENR did not let us do what we wanted. He was right. There was this American (foreigner) here who helped with the paperwork when we started to have the DENR and PAMB. He is the one who convinced us to agree to have PAMB because he said that PAMB is good for the people here.

Interviewer **A foreigner? Was it Dr. Alcala who brought him here?**
F His name is Geoffrey. I don’t know his surname. He built a house here and lived here for a few years. 5 years I think. I don’t know where in America but he is a small American.

Interviewer **Did he ask permission from all of you to handle the paperwork?**
F Yes he did ask us permission. We had meetings with him. He even taught us how to speak English because the people really didn’t even desire to study because they had no money. My eyes were opened. He is the one who sent his kids to school. Our parents didn’t see the need to send us to school. When Geoffrey came, he asked us to adapt to PAMB because it was good for us. When he sees visitors swimming at our sanctuary, he asked us to decide how much to charge the swimmers. Before, it was just donations. People could decide how much they wanted to pay to swim in the sanctuary. He said so many things that PAMB is protecting us here. So our captain agreed. Before, our captain, Suan was his surname, said that if we agreed to have PAMB, we will be restricted. He was right. They dictated us. Some people got jobs from PAMB, like the bantay dagat, the people working in the office and those who clean our main road there. But we actually hoped that those who are struggling more should be prioritized for these jobs. But no. But thank God we all came through.

Interviewer **Was it the Marine Management Committee before that managed the sanctuary?**
F Yes. That was us I was part of it.

Interviewer **So when donations were collected before, how were these funds managed?**
F Before I became the president for women. The MMC was full of men. For the wives, it was the Apo Island Women’s Association. We used to make straw mats. I was the president. Chairwoman. With regards with the donation collecting, it was 2 of us collecting it. When we collected a few thousand, we do not know where the money went. When someone borrows the money, they do not pay it back.

Interviewer **Since you were the one collecting the donation, were there plans on how to manage or use these donations?**
F We do receive visitors here who stay overnight at the multi-purpose hall. Our plan with the donations was for the multi-purpose hall or whatever items we need. It was thousands and that was a lot for us. It just got spent. We were not followed. The treasurers were the ones who managed it. They were the only ones who knew where the money got spent. Every month, when we audit the money, only a little was left.

Interviewer **Was there someone taking the money?**
For example, when someone borrow it, they do not return the money. If we buy a chair, we do. But we do not know how much was spent. For us women making straws, we were sent to Dumaguete for a course on how to make handbags, mats, etc. And it was the agreement that the products we make would be given to the group to be sold, and the profit comes back to us. No, it was not followed. That was stopped. The money went away. The multi-purpose there has a huge tank. There's water there collected from rain. The income from that water was also gone. It was probably spent. The tank leaked and could not collect water anymore. The multi-purpose was not fixed as well.

Interviewer **If you were to choose how to manage the island, what would you choose? The MMC or how it is managed now?**

F The MMC was made up of just a few of us. Unlike PAMB who collects fees, we were just collecting donations from whoever was swimming here. We do not collect as much as they do.

Interviewer **Which one do you think is better for the community here?**

F The one before was good. Now someone else holds the money and not the barangay.

Interviewer **Are there many people attending the barangay meeting?**

F Most of us attend the meeting.

Interviewer **What are the topics that are being discussed there?**

F The problems we have here, the projects that will be done here.

Interviewer **Do they show how much money they have collected in the meetings?**

F The one at PAMB? Just the money for the village. They show us that. The donations people give and who they are. Like how much money does the village have and what it is spent on. They show it on the blackboard. But the money from PAMB, we don’t know anything about that.

Interviewer **Where does the money for the village come from?**

F For example, fiestas and parties like dances, money is collected from that. It can go up to 20,000 to 15,000 pesos. But that is spent on the sound system from the mainland. Also when someone creates a project for the island and there is money left. But the one from PAMB, we don’t know anything!

Interviewer **How do you find life here now?**

F From God’s grace yes it is alright. But we are not free to do what we want with our own land and sea. Also, PAMB continuously becomes too strict.
Interviewee 6  
Name: Dr. Rene Abesamis  
Occupation: Marine Biology Professor at the Siliman University Marine Lab.

**Interviewer**  
How has Apo been an influence on other protected areas?

R  
I am not sure if you are aware but Apo has the longest monitoring activity since protection. So, its very known in the literature. A lot of the things we know about what happened about protection is from that place.

**Interviewer**  
Yes I have read some journals from Dr. Calumpong and Dr. Alcala.

R  
Alcala is the pioneer for that. He is 88 years old.

**Interviewer**  
I actually emailed him to ask for an interview but it's too bad that he had to go to Manila.

R  
Yes, he just left today this morning. But it would have been really great if you have met him. But you can just read his stuff about Apo. So you know what happened since 83? Monitoring by Alcala and Russ. So for the past 30 years, it is going up. But this 'going up' wasn't happening on the other side.

**Interviewer**  
The other side of?

R  
You know where the village is, on the left side where no one lives. So that's the control site that they were also monitoring just to compare what happens when you protect. There's no protection on that side. So we know what protection can do to an area. It didn't happen on that side.

**Interviewer**  
Are people allowed to go fish on that side?

R  
So, most of the diving happens there now. The South west side. So, for almost 30 years, comparing those two sides, the one that in the reserve recovered. No one was touching the corals. The build-up only happened in the protected area. It did not happen on the other side where there's no protection. So for 29 years, almost 30 years we were comparing those two sites, the one in the reserve is recovering. But where fishing continued, the coral is... because people on the island realized that corals should be preserved. So they weren't touching the corals. So the corals came back on that side. But the fish remained low on that side as what you would expect because they fish there. After 29 years, it got affected by the typhoon. And then all of the corals on the reserve side, from about 60% covered, that's all gone. That's what happens with natural disturbances. So whether it is related to climate change is debatable. But no one can really say for sure. But no one can contest the fact that that hasn't happened in anyone's lifetime. Even Alcala was surprised to see that because typhoons that's cross as far south as the Visayas is not very usual. So a typhoon crossing that.. even twice... almost in a day.. it got hit twice so after the first hit it was gone.

**Interviewer**  
So is this typhoon trajectory a new phenomenon?

R  
Yes, data from the last 100 years suggests that typhoons have past north. So, yeah. I would say, it may be a recent phenomenon. But if you look at a long history, or time frame, that happens from time to time. So it is just bad luck. So that was 2011, 2012. Since then, it is showing, I would say the early signs of recovery. So, I did the service for 2016 for Gary and Alcala. Usually it is Gary Russ who does it. He has been doing this for 30 years. We had been overlapping and comparing it from the time it got hit by the typhoons, It is showing signs of recovery, there are soft corals now. But it is still low around 5% or less. After the typhoon, there was hardly anything. Even Liberty knows this. We were just talking last month. I wouldn't be surprised in the next 5 years you will
see 10% hard coral, maybe even more if nothing happens.

**Interviewer**  
Is that the usual rate of recovery in that area?

**R**  
There is currently no normal rate. It really depends on the site. But Apo is way out there. What does coral like? Corals like number one, hard substratum. Second, you need supply of larvae from somewhere, right? Third, they don't like silt areas. They can't settle on silt. So, if you are way out there away from the mainland, from where all the silt is, and you are out there in strong currents, I'd say there's a good chance of recovery. The island has a hard substratum. Rocks. So, if this is normal, this is probably normal fast. Even if it is taking a long time, this is as fast as you can get.

**Interviewer**  
How would you explain the sudden collection of turtles that they have at the other side?

**R**  
It is not sudden.

**Interviewer**  
That's the perception of the locals there, that it is a sudden thing.

**R**  
But this is off the record as it is quite controversial.

**Interviewer**  
Ok

**R**  
No one has made a formal connection between what the turtles eat and the turtles. Right now, I think the numbers say that they are more than 160 individuals. Somebody has the numbers on it. It is in two groups. One is located at where what they call now a sanctuary, and one closer to the rocks at the south. So, I think that number has grown steadily since 2007. So before they are not that much. It seems sudden but it had been increasing. No one has made a connection. Turtles go there to feed in that particular spot right now. If you look at where that spot is.. They feed on algae. If you look at where that spot is, it is where the effluent of the village ends up. The canal there. So, seaweed loves that nutritious water. That's what turtles eat. So that has become an important feeding stock for turtles.

**Interviewer**  
So you think its gradual?

**R**  
Yes it think it is. I am familiar with the place. I have been there since 2001. Even the locals, some of my friends, they were telling me that there wasn't as much algae before. So that what the turtles eat.

**Interviewer**  
Is it sewage water? So is it due to the population increase?

**R**  
Yes it is sewage. It is a factor but I wouldn't say it is the only factor. Other factors are that the area has to be along the migration path and that turtles are not harassed. So people in Apo do not harass turtles. Tourists do harass turtles, but, at least they don't kill them. Negros, because it has been more of the environmentally conscious provinces, people have stopped harassing turtles. Nation-wide there has been a campaign against that. There even has a legislation against killing them. So these are the factors that contributed to why you have turtles there in the first place. So they are good things. So for a highly migratory animal, if they are not killed somewhere and they chance upon a place like Apo that is full of what they like to eat, and they are not harassed, then its all good. So balance that with what we see as a bad thing, the effluent into the water, how different is that from all the other island in the Philippines? Or in Dumaguete city that doesn't treat its waste as well. I know that they (Apo) are trying to limit the number of people. Effluent is really the least of their worries.

**Interviewer**  
I know that many of them came back home from Manila

**R**  
Yes life is hard outside of Apo for many of them. There are more work opportunities in the island now than before. There are some resentments also towards people who marry those from the outside and bring them back home. This is because they feel that there's just too
many people right now. What can they do? Job opportunities are harder
to get outside at least for some.

Interviewer Could you explain to me more about the management of the
island?

R Apo is the poster child for marine protected area management in the
world. Too bad you weren’t able to meet Alcala. But, it is a pretty
straight forward, but also a bit complex story. So imagine before 1982,
when Apo sanctuary got started, the ideas of management were pretty
much top-down. National control, before the sanctuary started. The
idea was national government was good enough to manage our marine
resources. The bureau of fisheries. But obviously, that wasn’t effective
because the national government is too ineffective in a place like the
Philippines where you have with lots of coastline, lots of islands, lots of
regions, and etc. So nothing was really happening the population as
growing. So, fish catch was dwindling. So, the early experiments of
trying to do something at the grass roots level, the village level, was
started by Alcala. The first experiment was simply Alcala, as a professor,
convincing the Univeristy to allow him to study Sumilon island.
Convincing people to who fish at Sumilon island. Sumilon is under the
jurisdiction of Cebu. So, a small town. Convincing them that if they set
aside 25% of the coast, of the reef of Sumilon, and monitor fish catch,
his prediction was that fish catch will increase or at least stabilise. The
idea before was simply adult spillover. They will increase inside and
sometimes they will swim out enough to sustain the local fishery.

Interviewer Until now?

R There is a resort there now but no village. They did that from 74’ till
about 83’. And Alcala’s data showed that the fish catch stabilised. But in
1983/84, there was an upheaval. What happened was that they mayor
candidate from Oslob said that if you vote for me, I will open the entire
island for fishing, including the area that has been closed for 10 years.
So of course, the fisherman were satisfied. They will get that 25%. The
one where is not for access for 10%. So data showed that the fish catch
decreased. Through that, it proved the point that protecting it can
sustain the fish catch. One of the things that Alcala learnt there was that
you need a local community, whose also involved in fishing, to invest in
that idea. They should be the ones to start protection. So he tried that in
Apo, with the help of the Social scientists here. They talked about that
for almost a year. The MMC was established made up of locals. Liberty
was still a teenager then... so in 82’, they agreed to start it. And they
have not stopped since then even though Typhoons strike. So that
model of bringing the idea giving the local people for them to decide
started in Apo for the Philippines. So, what they did first, besides
establishing a sanctuary, what they also did was to establish a Marine
Management Committee. In the MMC, they made sure that no
unsustainable fishing methods will be used and simple stuff like no
stepping on corals. That had a broader effect. So youa re stopping
fishing inside the sanctuary, but you can fish outside but not using
unsustainable fishing gear. So that brought back some... Imagine back
then before they had the MMC, they were doing Muro Ami and
dynamite. I’m sure Mairo or Liberty would have told you. So that was a
collective idea. So the MMC made up of locals, together with some
members of the Marine Lab who were helping them, that was really
pivotal in terms of the overall conservation of the island. Tourism came
in later. So, tourism came with, I would say the height of it was when
diving became more accessible to a bigger chunk of the normal
population. So, when there came dive tourism, that's when it started to really… yeah. And that only happened I would say, in the 90s. The dive tourism. The only guys who could go to Apo were the most adventurous ones, the macho ones who could shoot fish back then. That's the roots of diving. So it was a macho sport. So by the time it became more friendly, it was the early 90's. So, they needed the MMC to set up the right situation that, you know, it's not just the sanctuary but also outside of it that became dive spots that are safe. When diving could be accessible to more people, money could be made out of it. So, Liberty came in from there, and then Apo Island resort which is owned by an Australia Mike Butler. And he is doing the same for Siquijor. He made his money from diving. So there.. And then of course the dive resorts increased in Negros along the coast. So many of them. I would say that it is the first few baby steps in Apo that made it possible for Negros Oriental to have a healthy dive tourism. Because Apo is the main stay dive site But also along the coasts, those tiny protected areas, the sanctuaries... Actually the whole Visayas is dotted by sanctuaries.

Interviewer: Where can I find a map of this of MPAs?
R: It's a directory by Alcala, I will give it to you. The 2008 directory. All of those are because of Apo. There's 1500 in the whole country and there's probably around 600-700 in the Visayas.

Interviewer: Is that the current number today?
R: The number is about 1500. For the entire country. So there... On the Negros coast alone, in the town of Dauin, that can be traced as a direct influenced of Apo. Apo is part of Dauin. Former mayor of Dauin took it upon himself to promote that. That's why you have so many resorts there going to Apo. So that's a really interesting background for your thesis would be that effect. It can be traced to people being convinced to do this in 81, and then there...

Interviewer: So right now it is managed by PAMB.
R: Yes that’s why it becomes complex. So, it is part of the NIPAS system. It became part of it in 1994. The NIPAS system is an unusually part of the system because it is small. The site is really small. It is called the protected landscape and seascape in the NIPAS system. Its roots are in the local people saying they want to do this in the island. Right?

Interviewer: Did the NIPAS system start because of Dr. Alcala and Apo?
R: No I don’t not think there’s a direct relation. He became the DENR secretary, right? What I get is that it is one of the inspiration for the NIPAS system, but there was also a real need to integrate the protected areas in the system. There was a real need to recognize the protected areas that are a big here in the Philippines. To do something about it in terms of generating money to support the protection of these places. Apo became part of it even though it is really small but it is equal in that act (NIPAS) comparing it to the other MPAs that are huge. So it is an unusual case. So he included it there.. I think. Because it has to be recognized as a successful model on how to protect the natural places. The problem is that it is so small, and second, that has created some resentment from some politicians. Can you imagine, if the Nipas act tells you that 25% of what you make will be given to the National. 75% goes back to you but you have to apply for it. That's what the law says. So it is a way to sustain whatever good thing you are doing for the place. So, pound for pound, Apo is punching above its weight because it is so small.

Interviewer: It has generated 11 million pesos last year.
R: Yes, so a tiny place, pound for pound it is punching above its weight because of the tourism and diving. It is not only the fees that we pay.
You can just imagine all the employment it generates, right? And all of the... uhmm... not very good at quantifying... but have you seen the number of resorts in the mainland?

Interviewer: **In Dauin? Yes I have seen some of them and in the daytime there are many boats the come just outside the turtle sanctuary.**

R: A friend of mine who is studying mock diving for photography, just for the coast of Dauin, we are looking at, in diving, a big part of the business is photography. In Dauin we have places like sandy slopes where there are little marine animals. Critters. So people from all over the world shoot macro shots of these things. The dive package that you get is from the resorts in Dauin. So, what percentage of the time they spend in Apo? So I would say, at least 10%.

Interviewer: **What do you think was Dr. Alcala’s motivation for including Apo in the NIPAs act. It was MMC before and now some people are upset?**

R: Yes for sure, and rightly so. Because once you have a board, the voices of local people get smaller. And, historically, the DENR were part of the board. It is not 100% clean. There is corruption and money is involved. So that’s one. It became a political issue at some point. The former mayor of Dauin who is known for starting the sanctuary is a Malacañang awardee, right? Turned that into a political issue. Before they were so happy that Apo is generating revenue when they realized that so much money was being made by the island, they presented it at the national conference. They wanted to change the set up. And the mayor who won was even blaming Alcala for that. Remember that NIPAS is law. Secretary of Environment can only recommend, but it is approved by the Congress. If you want to change anything, it has to be changed by the congress. If you want something changed, you should be talking to the congressman, and not the secretary. If you think that 25% is not fair, or if they are not getting the 75% on time. But there had been some adjustments there. Instead of the money going to national, it is only deposited into an account here in Dauin. All I am saying is, you have to see what Alcala did during his time. Which is probably the right thing to do at that time. We need to make sure that this good thing that has started in Apo has a way to continue itself by putting it in the NIPAS. Can you imagine, if the current batch of MMC people in the island, if they are eventually exchanged by people who didn’t know what to do...

Interviewer: So is it basically systemizing the management through politics?

R: If we are talking about a few hundred thousand pesos it is no problem. But if you are talking about 11 million pesos and upwards, politicians will have some issues for sure. It creates resentment amongst the locals. Why is the 75% coming late and why does the DENR have a say, etc. I wouldn’t blame the old man. It is pretty unfair. If it weren’t for Alcala supporting in it from day one because of what they learnt in Sumilon, and establish the MMC by the people, why would the politicians in 2016 blame him for something he supported in 81, and when he was DENR secretary in the early 90s. I think it is unfair. And personally, seeing it unfold, it is so irritating because those politicians were the ones supporting him before.

Interviewer: **Have you heard about the new DAO?**
Yes I just heard snippets about it. At first I thought it was a way to prop up the income because Negros is now its own region. As you know it is new. Budgeting-wise, it was part of central Visayas. When Aquino stepped down, one of his final acts was to create the Negros region. So all of the national agencies are reflected in that region. The problem is, Duterte hasn’t budgeted for that yet. At the start of his term, Duterte wanted to scrap it because there was no budget for it to support the new region. But I think they are having second thoughts about it. At first, it wasn’t a national admin order. I thought it was just a way for the regional office to do anything to generate income. I thought it was just that. So if it is a national order, it was probably Gina Lopez realizing that they need to improve the management of the NIPAS. All of it. It is coming from DENR. They probably have not consulted anyone about it. Personally I wouldn’t agree with it. It is too much of a jump and it is probably gonna hurt business. But someone has to make this a bigger issue, rather than just an Apo issue. It has to be brought up at the national level. If it is a national administrative order, it has to be taken up to the secretary. The secretary is a reflection of the President’s personality. So it is marching orders from the top to generate income. So, it is. I don’t know I wasn’t part of the meeting but it is just gonna create a lot of shit. I don’t know what’s going on. Do you know the latest developments?

Me explaining the whole situation and how the Apo PAMB has not yet implemented the new rules and fees as an act of protest.

I am with them on that. Personally, it is too much. It is so ill-conceived.
Appendix B - draft general Management Plan

GEOGRAPHIC LOCATION AND ACCESSIBILITY

Apo Island is situated in Sulu Sea, about 7.5 kilometers off the southeastern coast of Negros Island, and is under the jurisdiction of the municipality of Dauin, Negros Oriental. It is about 25 kilometers south-southwest of Dumaguete City and is bounded by geographic coordinates 123° 15' 45.25" longitude and 9° 5' 14" latitude to 123° 16' 25" longitude and 9° 3' 58" latitude (Fig. 1). There are two (2) options on how to reach the island from Dumaguete City. The first option is via a direct route through a motorized banca that would leave from any jump-off point in Dumaguete and cruise for about two (2) hours towards the island in a south-southwesterly direction (Fig. 2). The second option is to travel both via land and sea; a 29 km distance, approximately a 30 min drive, has to be covered over land travel from Dumaguete City to Malatapay, Zamboanguita, Negros Oriental, followed by a 45 min motorized banca ride to reach the island (Fig. 2). Owing to its location, the preferred time to travel to the island is early morning, when the sea is relatively calm.

The absence of regular trips from the mainland to the island makes the motorized banca fare expensive. This concern is identified as a management concern, especially since the ecotourism potential of the island is being produced.

Biogeographic Setting

The Philippines is subdivided into fifteen (15) biogeographic zones that are distinct in the way they are affected by climatic, geologic, edaphic, and overall biotic affinities; Apo Island belongs to the western biogeographic zone of the country.
Coral reefs are endowed with the highest biodiversity among the rest of the ecosystems on earth and having high species diversity can be seen as having a wide range of resources for potential use by people. This biodiversity is often valued in terms of their contribution of 10-13% to the total animal protein consumed by Filipinos and their employment of some 3% of the labor force. Other unquantifiable benefits derived from coral reefs are: their value in attracting tourists; their significance in lessening economic losses and damages to properties by the increasing impacts of sea surges; their contribution in preventing coastal erosion by buffering the effects of waves and currents; their incidental role as a de facto repository of coastal run-offs from the rivers, coastal sewage, and pollutants from agriculture and industrial establishment (Uychiaoco et. al., 1999). Recently, coral reefs have become the immediate indicator of the phenomenon called “global warming” and serve as the laboratory to measure its effects worldwide.

Coral Reef of Apo Island

The national and international significance of the coral reef of Apo Island Protected Landscape and Seascape, among many others, are as follows:

- An actual laboratory and showcase of an effective community-based marine resource management that is subject of numerous studies and is being used as a model by other local government units in the country. In fact, the Coastal Resource Management Program (CRM) of the Municipality of Dauin on Apo Island has garnered the municipality the prestigious 2005 Gawad Galing Pook Most Outstanding Program in the country.
- Apo Island also won the Best Managed Reef Award in the country in 1997 a competition conducted by the Coral Reef Network in the Philippines.
- Selected by Shedd Museum of Chicago, Illinois as its central display for tropical marine biodiversity.
- Due to its high marine diversity, Apo Island is considered as one of the premier diving spots in the country, if not the world.
- Apo Island won the Sustainable and Innovative Financing Award from the DENR in 2013. This category hails managers who have been able to sustain operations despite limited financial support from government, whether through outside sourcing or income generation.
DESCRIPTION

Background and Legal Status

Apo Island, situated in Dauin, Negros Oriental, was proclaimed as Apo Island Protected Landscape and Seascape (AIPLS) by former President Fidel V. Ramos by virtue of Presidential Proclamation No. 438 on August 9, 1994. The protected area covers approximately 691 hectares of which 72 hectares are terrestrial and 619 marine.

Initial environmental conservation programs in the island were started in 1979 by Silliman University as part of their extension services. The University introduced to the populace the importance of marine conservation and in the year 1985, a 500 meter stretch of coral reef located on the southeast side of the island was declared by Sangunian Bayan of Dauin, Negros Oriental as a marine sanctuary pursuant to Resolution No. XIV and Municipal Ordinance No. X dated Nov. 3, 1986 entitled “An Ordinance Protecting the Reserve Fish Sanctuary of Apo Island, Dauin, Negros Oriental.” When the DENR-Ro7 noticed the biodiversity significance of the island’s marine resources to education and recreation (ecotourism), it recommended to the Secretary its inclusion in the National Integrated Protected Area System (NIPAS). On August 9, 1994, the island and its immediate marine environment were proclaimed as Apo Island Protected Landscape and Seascape (AIPLS) to protect and conserve the ecological, scientific, educational, economic and recreational values of the island. It also aims to pursue sustainable development of the area to address the social and economic needs of the local community without causing adverse impacts on the environment. The Protected Area Management Board (PAMB) started to function in 1998 and the systematic collection of Protected Area User’s Fee was implemented in December 1999.

For many years since its establishment, the 15-hectare fringing reef Marine Sanctuary located in the southeastern side of the island has been the main asset of the Apo Island Protected Landscape and Seascape. It was, and still is, subject to numerous studies and replications by other Local Government Units in the country who are adopting the Apo Island experience in Coastal Marine Resource Management. The marine sanctuary is classified as Marine Sanctuary Zone and existing rules and regulations applicable to such a zone has been enforced and is off-limits from fishing activities. The success of the marine sanctuary management of the island has gained popularity locally and internationally. In fact, the island won the Best Managed Reef Award in the country in 1998 a competition conducted by the Coral Reef Network in the Philippines (PhilReefs). Due to typhoons in 2011 and 2012 that severely damage the marine sanctuary, the area has been off limits to the public since 2013 and a coral rehabilitation project has been started in the same year as well.

Physical Profile

Topography

The volcanic origin of the island provided two (2) major topographic features: the hilly promontories comprising the
The island coastline is about 4.5 kilometers long, consisting of steep rocky cliffs and seven (7) beaches. Of these beaches, four (4) are classified as major beaches and the remaining 3 are minor beaches. The four (4) major beaches are the beach at the Barangay Proper (southwest), the beach fronting the marine sanctuary, the beach at Sitio Cogon, and the beach at the turtle sanctuary, located in the southwestern section of the island.

Additional topographic features of the island are its two (2) small shallow, mangrove lagoons, which have now been converted to fishponds.

Geology and Soils

The island is part of the Philippine Plate uplifted during the Quaternary period by tectonic stresses along the Sulu Trench and forming into a rocky outcropping, jutting out of the Sulu Sea. Through the years after the upliftment, the island-rock attracted corals along its shoreline, resulting to a fringing-reef coral formation. Weathering and erosion of exposed volcanic rocks provide the sediments to lowlands, forming a moderately thick soil layer along the beaches. Rock types in the island are of Quaternary volcanic type, namely andesite, pyroclastics, and lavaflows; soil type of the island is sandy loam with a pH of 6.4.

Climate

Apo Island falls under Type III of the Corona Weather Classification; Type III generally has no highly pronounced maximum rain period, with a short dry season lasting only 1-3
months. Areas of this climate type are partly shielded from the northeast monsoon, exposed to the southwest monsoon, and are also benefited and affected by tropical cyclones.

In Apo Island, there are two (2) distinct seasons prevailing in the area: the relatively dry season from December to April, and the provisional wet season from May to November. Southwest monsoon (Habagat) occurs in the months of May to September. During the southwest monsoon season, there are fewer disturbances in the sea and the wind speed averages at less than a kilometer per hour, making these months more favorable for fishing. The northwest monsoon (Amihan) occurs from November to April, and fishing during these months is in an auspicious condition and is only concentrated in the southwest reef area of the island.

Rainfall

Data from the nearest PAGASA station, located at the Dumaguete Airport, collected from 1997 to 2007 showed that the annual average rainfall is 1,141.3 mm, with June and October being the hottest months while April is the driest; from 2007 to 2016, records showed that the annual average rainfall is 124.98 mm, with the wettest months being June, July, November, and December, while the driest months are March, April, and May.

Wind Direction

The prevailing wind direction in Dumaguete and its vicinity is northeast, northwest, and southwest. The northeast wind direction occurs in January to May, while the northwest prevails during November and December. The southwest wind direction occurs intermittently during the months of June to October.

Relative Humidity

Based on data collected from 1996 to 2007, the most humid month in Dumaguete was usually July and the least is April; however, based on data collected from 2007 to 2016, the most humid month is January, the least is August (Table 1).

Temperature

From 1996 to 2007, the average annual temperature was 25.78°C, with the hottest month being April and May (28.43°C) and the coolest month being December (23.65°C). From 2007 to 2016, the average annual temperature in Dumaguete was 31.25°C. The hottest month recorded was August of the years 2012 and 2016, and the coolest was January of 2009 and 2014 (Table 1).

<table>
<thead>
<tr>
<th>YEAR</th>
<th>RF</th>
<th>WIND DIR</th>
<th>RH</th>
<th>TEMP.</th>
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</thead>
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<td>122.58</td>
<td>NE</td>
<td>81.08</td>
<td>30.83</td>
</tr>
<tr>
<td>2008</td>
<td>160.66</td>
<td>NE</td>
<td>81.83</td>
<td>30.69</td>
</tr>
<tr>
<td>2009</td>
<td>131.16</td>
<td>NE</td>
<td>81.17</td>
<td>30.88</td>
</tr>
<tr>
<td>2010</td>
<td>126.28</td>
<td>NE</td>
<td>80.58</td>
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<td>2011</td>
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<td>NE</td>
<td>82.92</td>
<td>31.02</td>
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<td>115.92</td>
<td>NE</td>
<td>82.5</td>
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<td>2013</td>
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<td>E</td>
<td>81.42</td>
<td>31.58</td>
</tr>
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<td>2014</td>
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<td>2016</td>
<td>67.88</td>
<td>NE</td>
<td>79.38</td>
<td>31.83</td>
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</table>

Table 1. Annual rainfall in millimeters (RF), wind direction (WD), relative humidity in percentage (RH), and temperature (in °C) in Dumaguete City.
Hydrology

Fresh water in Apo Island is a scarce resource. The limited size of the island, its geology, and its topography provided an environment where water directly runs-off into the sea, leaving no creeks or springs. Although there exist several artesian and deep wells in the island’s lowland area, where soil is relatively thick, water obtained from these wells are not potable. The community only utilizes the water from the wells for domestic activities, like washing the dishes, their clothes, and for bathing.

To this day, the islanders still get their drinking water from their individual household rain traps, which are hugely dependent on the amount of rainfall, or fetch water from the mainland, which is a 45-minute pump boat ride away, on a daily basis.

The most prominent inland body of water of the island is its two (2) mangrove lagoons located in the eastern side of the island. However, these lagoons have been converted and utilized for fishpond purposes since the Fishpond Lease Agreement (FLA) were issued prior to the proclamation of the island into a protected area.

Sea Currents

The current of the surrounding waters of Apo Island is predominantly wind-driven. It is strong, non-reversing, and consistently flowing from the north and northeast, passing along both the east and west sides of the island in a southwesterly direction during both the ebb and flood tides. Ebb currents are slightly stronger (0.38 – 0.62 m/s) than flood currents (0.29 – 0.54 m/s) (Calumpong, 1997). Water visibility is excellent, usually reaching up to more than 100 feet (Reboton, 2002).
Almost 30% of island is a mix of grassland, brushland, mangroves and scrub forests. The little remaining forest thrives only in steep gullies, rocky portions and on the two (2) lagoons. Other land uses are residential (24.38%), agricultural (1.55%) and fishponds (4.8%). The preferred agricultural crops planted by the islander are coconut, corn and root crops and cultivation is conducted only in moderately flat areas and gently sloping arable hill sides (refer to Fig. 4 and Table 2).

<table>
<thead>
<tr>
<th>LAND USE CATEGORY</th>
<th>AREA (has)</th>
<th>% FROM TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural</td>
<td>13.5</td>
<td>18.7</td>
</tr>
<tr>
<td>Barren/Rocks</td>
<td>5.6</td>
<td>7.7</td>
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<tr>
<td>Brushland</td>
<td>7.5</td>
<td>10.3</td>
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<td>Coconut Plantation</td>
<td>6.9</td>
<td>9.5</td>
</tr>
<tr>
<td>Community</td>
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<td>14.8</td>
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<tr>
<td>Grassland</td>
<td>0.9</td>
<td>1.3</td>
</tr>
<tr>
<td>Lagoon</td>
<td>1.9</td>
<td>2.6</td>
</tr>
<tr>
<td>Mangrove</td>
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<td>4.1</td>
</tr>
<tr>
<td>Secondary Forest</td>
<td>18.6</td>
<td>25.6</td>
</tr>
<tr>
<td>White Sand</td>
<td>3.9</td>
<td>5.4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>72.5</strong></td>
<td><strong>100</strong></td>
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</tbody>
</table>

Table 2: Land use distribution in Apo Island

Taking the coral cover of the surrounding waters of the island into consideration for its vegetative cover, an on-going coral survey study by a team from Silliman University Institute of Environmental and Marine Sciences indicates that at present, the most extensive coral cover can be found in the western-southwestern waters of the island. The latest data from the study was obtained in 2015. Having 5 survey sites around Apo Island (Fig. 5), recorded the highest live hard coral cover (LHC) in Baybay Reef with >60% (Fig. 5, yellow circle), followed
by Largahan Marine Sanctuary with 47.7±7.4% (Fig. 5, violet circle), Katipanan Reef in 3rd with 46.3±7.4% (Fig. 5, green circle), followed by Kan-uran Reef with 9.3±2.3% (Fig. 5, blue circle), and lastly, the Marine Sanctuary has the lowest LHC with just 3.1±1.5% (Fig. 5, red circle) (Reboton, 2016). The low LHC of the Marine Sanctuary is due to the strong typhoons Sendong and Pablo which struck in 2011 and 2012, respectively, and destroyed the corals of the sanctuary.

One major concern identified as a potential threat to the Protected Area that has to be addressed immediately is the land use issue. The number of households present in the island started with 151 in the year 2002, increased to 171 in 2006, and to 197 households in 2015. This is alarming since the ideal total area for human habitation is only 10.8 ha. Moreover, if this trend continues, the available space along the beach and in relatively flat areas would be solely utilized for residential use in the future. Direct evidence of this increase in land area being used for residential purposes is the presence of new and permanently occupied houses in the plateau where, in the past few years, was used only for agricultural purposes.

Figure 5. Coral cover survey sites in Apo Island (Map modified from: Maypa et. al., 2015).
SOCIO-ECONOMIC PROFILE

Apo Island Protected Landscape and Seascape is covered only by one barangay, Barangay Apo Island. Results from a 2015 survey by the AIPLS staff indicated that the total population of Apo Island is 1,071 comprising 197 households, giving us an average of approximately 5 individuals per household.

There are two (2) major settlements areas in the island. These are the barangay proper and Sitio Cogon and are situated on the western and eastern sections of the island, respectively. The majority of the residents are living in the barangay proper, while the rest are living at Sitio Cogon. Recently, several families opted to permanently occupy their supposedly temporary houses located along the arable lands in the plateau up in Parola.

DEMOGRAPHY

Population Growth

Socio-economic data obtained from the survey conducted by SUML last 1982 showed that there were 600 inhabitants consisting of 90 households in the island (Calumpong, Cadiz, 199_). Based on the census conducted by the National Statistics Office (NSO) in CY 2002, the island’s population was 684 individuals representing 129 households. Comparison of the data obtained in 2006 survey, which showed that the population of the island was at 760 individuals comprising 151 households, reveals that for a period of 25 years only 160 persons or 27% was added to the 1982 population and 76 persons or 11% increase compared to the 2002 data. Average growth rate of the island taken from the 1990 – 2000 census was 1.7%. This unusually low growth rate could be attributed to several factors such as the absent of basic social services such as schools, dutiful implementation of family planning program, and migration to other areas to seek better opportunities.

Comparing the 2015 population with that of 1982 gives us a population growth rate of 78.5%, or an annual growth rate of 2.38%; comparing it with the 2006 data, however, gives us 40.92% population growth rate, or an annual growth rate of 4.55%. This increase in growth rate might be related to the increase of livelihood and/or income sources in the island, with its improving ecotourism enterprise.

Population Density

The total land area of Apo Island is 72 hectares, or 72,000 square meters (sq. m.) and the population of the island is 1,071 (as of 2015). Based on this, the population density of Barangay Apo Island would be at 15 individuals per hectare. Although this could be construed as a relatively small population density, the people of Apo Island are concentrated only in areas demarcated as Residential Areas which have a total land area of 17.02 hectares, giving us a population density of 63 individuals per hectare.
Crude Death and Birth Rate

Due to lack of data, estimated crude death per year is three (3) mostly adults and the crude birth rate is 8 children per year.

Educational Attainment

Ninety-two percent of the residents of Apo Island have completed elementary education or higher. Most of the islanders’ highest level of educational attainment is elementary, comprising 54% of the total population, followed by high school graduates comprising 28%. Only 10% of the islanders have completed college and 8% did not have any educational attainment at all. Although the level of their educational attainment is lower than the average Filipino, this can be considered normal due their isolation being an island. Hence, the absence of basic educational infrastructure in the island hinders the desire of the people to pursue higher educational attainment. The high school was only opened last 2006 which brought a resurgent in educational interest to the islanders, particularly the younger people.

LIVELIHOOD AND INCOME SOURCES

The major resource of Apo Island is the marine ecosystem that surrounds it. Data from the socio-economic survey revealed that fishing is the primary income source where 54% of the residents derived their income directly and indirectly from fishing. This is followed by wages comprising 27% of the total income source which is derived from employment in the two (2) resorts operating on the island, from the salaries for being employees/staff of the Protected Area, income for being dive instructor/guide and hired labor (carpentry, masonry). This is followed by income derived from businesses at 15% such as mat weaving, souvenirs making, sari-sari store, buy and sell of fishery products and other commercial ventures such as home-stay ventures and pumpboat rentals. Remittances from relatives working outside the island makes-up 4% of the total income source (Fig. 17).

Figure 17. Distribution of income sources of AIPLS residents as of 2015.
Farming, on the other hand, is just a secondary source of income since only a few are involved and considered as a consequential activity after fishing or other major economic activity was accomplished for the day. The farming system on the island is "rain-fed-farming." Root crops and corn are the most widely grown seasonal crop, followed by cereals and vegetables.

**Fishing as a Traditional Income Generator**

Special emphasis is provided for fishing since this economic activity provides the main source of income to the islanders and the sea around them is their major resource. To depict the importance of fishing and fishery to the Apo Island community, a survey conducted by SUML in 2002 showed there were 132 fishers from 101 households and 149 boats operating from three (3) landings site. These fishers uses eight (8) types of fishing gears: drift gill net, fish trap, gill net, single hook and line, squid jigger, multiple hook and line, pamo gill net and spear gun. The most commonly utilized gear is the single hook and line (Calumpong and Cadiz, 200_).

The study further showed that in terms of CPUE (Catch per Unit Effort) and IPUE (Income per Unit Effort), the pamo gill net obtained the highest CPUE (79.2±63.9 kg/trip or 15.6±26 kg/manhour) and IPUE (PhP3,142/trip or PhP693/manhour). The gears that has lowest value for CPUE and IPUE is the squid jigger (3.3 kg/trip) and fish traps (0.3kg/manhour). To provide significance to CPUE and IPUE results, a comparison was made and showed that there was an increasing trend from 0.13-0.15 in 1981, to 1.89±0.87 in 1986 to 2.1±0.5 in 1998(Calumpong and Cadiz, 200_). The figures indicate that the fishers are catching more fish at relatively lower efforts compared to the previous years. The resulting more fish catch with less effort could be attributed to the successful management of the Apo Island marine resources. Reef and reef-associated catches have been stable from the 1980s to the 2000s in the order of 15-30t/km2/yr while non-reef catches declined from 6.21t/km2/yr to 1.2t/km2/yr (Maypa et. al., 2000).

Most of the fish catch are dominated by the reef dwellers comprising almost 50% (6,135 kg) of the total fish catch surveyed. This is followed by the member of family Carangidae comprising 30% or 4,100 kg. Family Carangidae are pelagic but reef associated species and are considered high value fish and are caught mainly by single hook and line (Calumpong and Cadiz, 200_). This indicated that fishers are relying their fishery yields from the nearby coral reefs and have become increasingly dependent on the reefs for fish. Likewise, it indicates that fishers no longer spend as much effort or fuel since their fishing grounds are just within paddling distance from the community (Maypa et. al., 2002).

**Household Income**

The estimated monthly income per family in Apo Island (as of 2015) was PhP4,000 to PhP5,000, approximately half of the national poverty threshold of PhP9,064 per month. Although this indicates that the residents of the island are living below the poverty line, the simplicity of their lifestyle and the absence of modern affluence prevailed over this deficiency making the
living condition more tolerable compared to those in the mainland.

Tenurial Arrangements/Land Ownership

The socio-economic survey indicated that 90% of the land ownership in Apo Island is by Tax Declaration issued to individual claimants previously by the Municipality of Dauin, Negros Oriental for purposes of taxation. The remaining 7% and 3% is acquired by inheritance and purchase of lots from previous claimants, respectively.

RELIGION, ETHNICITY AND LOCAL CULTURE

Majority of residents, or 90%, of Apo Island residents are Roman Catholics. The other 10% comprises other religious dominations like the Born-Again Christians (4 groups), Iglesia ni Kristo, and United Church of Christ in the Philippines.

The entire population is Cebuano and speaks the Cebuano dialect. Tagalog and English are also widely spoken by the residents.

Being a Catholic-dominated island, the most special event is the Feast of San Vicente Ferrer, the Patron Saint of Fishermen and celebrated every 4th and 5th day of April. The event is so special to the islanders that preparation takes several months before the celebration day and culminates in a colorful fluvial parade around the island, with an island-wide feast and party in the evening.

HEALTH AND EDUCATION

Health Facility and Personnel

There is 1 health center in Apo Island, located near the barangay hall in the southern part of the island. It is presently being run by 7 health personnel including 1 midwife, all of them receiving salary from the Integrated Protected Area Fund (IPAF). Allotment from the barangay Internal Revenue Allotment (IRA) provides most of the funding for the operationalization of the health center while IPAF also provides medicines and medical services to those islanders having slight illnesses. In addition, the Municipal Health Office (MHO) doctors and nurses conduct a yearly medical mission in the island.

Leading Causes of Morbidity

Leading causes of morbidity in the island are common diseases such as viral fever, bronchitis, common cough and colds, etc.

Leading Causes of Mortality

The most common causes of mortality of Apo Island residents is hypertension, cardio-vascular arrest, accidents, old age and tuberculosis.

The three (3) deaths recorded for 2006 alone were caused by hypertension leading to cardio-vascular arrest.

Schools

There are 2 schools on the island, Apo Elementary School near the barangay hall, and Apo Island High School in the
south-eastern area of the island. In Apo Elementary School, kindergarten to grade 6 is available with 140 students and 8 teachers, including 1 CRM teacher. Of the 8 teachers, 2 are from the mainland and the rest are Apo Island locals. In Apo Island High School, there are students from grade 7 to grade 11 with a total of 95 students and 8 teachers; 6 teachers are from the mainland. A senior high campus, for grades 11 and 12, is currently being constructed in the southern portion of the island.

Islanders who can afford their way to college study in the colleges/universities in Dumaguete City.

Although the student population of both schools fluctuates every school year, there is little to no out-of-school youth on the island.

LOCAL INFRASTRUCTURE, DEVELOPMENT SERVICES, AND GOVERNMENT SERVICES

Power Supply

While most structures on the island still rely on the community-operated diesel-powered generator set, the Protected Area Office is already powered by solar panels that energize the building 24 hours a day. The generator set only delivers power to the connected structures 3 hours a day, from 6:00 to 9:00 in the evening. Moreover, there are now solar-powered streetlights put up along the paths in the island, and more units are still currently being installed. The generator set and electrical cables were purchased via the funds of Barangay Apo Sanguniang Kabataan and the Protected Area Management Board and donated to the community. On the other hand, the solar panels were purchased using the revenue of the island from the IPAF fees.

Water Supply

Water is a scarce resource, especially in Apo Island. Shallow artesian wells all over the island have water but are brackish and not potable. To address this situation, the Municipality of Dauin, through the intercession of the community is currently drilling the island’s aquifer. So far the result is positive, they have hit an aquifer and are in the process of studying if the well has enough water to sufficiently supply the needs of the entire Apo community in a whole-year round basis.

Transportation and Docking Services

The only available mode of transport in coming and going to and from the island is through a motorized banca (pumpboats). A study conducted by SUML in 2000 indicated that the boat ratio in Apo Island is 1:1 or there is one (1) boat available for every household and 60% of these are motorized. These motorized banca are utilized by local residents to ferry islanders, fishery products, goods and freshwater from the island to Barangay Malatapay, Zamboanguita, Negros Oriental and vice versa.

For non-residents or tourists, regular trips are not available and the only means to get into and get out of the island is to rent pumpboats either in Dumaguete City or at
Barangay Malatapay with rates that are quite high. However, for tourists/visitors booked at the chain of resorts dotting the coastline of Negros, they can avail of the boat service provided by these resorts.

To get into the island, pumpboats are only allowed to dock at traditional docking stations. There are two (2) established docking stations in the island and are strategically sited to protect boats and passengers from the wave surge created by the prevailing monsoons winds that hits the island the whole year round. These docking sites are located at Sitio Cogon and at Chapel (Fig. 18). Moreover, a floating wharf is positioned by the beach near Chapel when weather conditions are favorable. Also, a new helix mooring pin has also been installed offshore from Community for pumpboats on standby, so as not to crowd the docking stations. Furthermore, dive boats conducting daily diving trips are allowed to moor only on designated mooring buoys around the island to avoid coral damage that is caused by anchoring.

No land transportation is available in the island. The only way to get from one point to another is by hiking/walking along the ecotrail and the pathways around Apo Island.

Communication Facilities

Almost every household in Apo Island nowadays has at least 1 mobile phone, so communication with people around the island and even those in the mainland is not a big problem.

Mail and courier services are not available in the island. The islanders rely on the private and government courier services usually in Dumaguete City or the nearest town to send mails, parcels, and packages.

Other means of communications in the island are television and radio. Ten percent (10%) of households have television and receives strong signals from three (3) local television networks (GMA, ABS-CBN, PTV). Radio on the other hand, is very common since they can be operated using batteries.

Visitors and Accommodation Services

There are two (2) resorts on the island, namely: Liberty’s Lodge and Dive Resort and Coco Nest Resort. Both are situated in the western section of the island and cater to both local and foreign tourist at dollar rates. There are a total of 30 room accommodations available in these two resorts. Also available are three (3) “homestay” houses
where visitors can rent rooms or the entire house at very affordable rates.

Last 2006, the PAMB came up with a resolution allowing local investors to construct nine (9) native cottages along the beach fronting the marine sanctuary in a Build-Operate-Transfer (BOT) scheme. The effort aims to fill the gap during visitor peak season where all room accommodations of the island are fully booked.

Restaurant services are available at the two (2) resorts but none in the community. However, there are two (2) small eateries in the community where one can order food at very reasonable prices.

GOVERNANCE AND GOVERNMENT SERVICES

Upon the proclamation of Apo Island into Apo Island Protected Landscape and Seascapes (AIPLS) on August 9, 1994, an atmosphere of animosity was created due to the undefined roles of local political leaders (Punong Barangay) and the Protected Area Superintendent (PASu) in a unique island-barangay such as Apo Island. Although each has specific functions and roles in running and managing the affairs of the island, there are times when their actions and/or decisions contradict one another’s, undermining the collective efforts to serve the common good.

The succeeding discussions attempt to outline the governance of Apo Island as a political entity under the Local Government Code of 1992 and as a National Integrated Protected Area System (NIPAS) area. This serves as a guide to present and future managers/leaders of the island in carrying out harmoniously their mandated task now and in the future without prejudicing each specific mandate.

Governance in Barangay Apo

Governance is a function of the Local Government Unit as embodied in the Local Government Code of 1992. Politically, Apo Island is officially known as Barangay Apo Island. Being a barangay, Section 384 of the Local Government Code defines a barangay as "the basic political unit and serves as the primary planning and implementing unit of government policies, plans, programs, projects, and in activities in the community, and as a forum where the collective views of the people may be expressed, crystallized and considered, and where disputes may be amicably settled.“ Barangay Apo Island is one of the twenty (20) barangays comprising the Municipality of Dauin. The Punong Barangay along with eight (8) Sanguniang Barangay members, and members of the Lupong Tagapamayapa are deemed as persons in authority in the barangay and hold sessions and conduct governance functions at the Barangay Hall located at the center of the Apo Island community. Section 389 of the Code provided that the Punong Barangay shall serve as the chief executive officer of the Barangay government; he/she shall exercise such powers and perform such duties and functions for efficient, effective and economical governance, the purpose of which is the general welfare of the Barangay as follows:

(a) Enforce all laws and ordinances which is applicable within the Barangay;
occupants shall be granted the long-term opportunity to manage, develop, utilize, conserve, and protect the resources in the allowable zone through an appropriate tenurial arrangement. The utilization of the Protected Area Community Base Resource Management Agreement (PACBRMA) as a tenurial instrument for the recognition of tenured migrants per Sec. 50 of DAO 25, Series of 1992, shall be promoted provided that:

1. Application of tenurial instruments should always be considered a management option in the Protected Area.
2. Right of tenure shall be based on individual and group rights and claims but access and use of Protected Area resources shall be subject to tenurial arrangements.
3. Only those with proven claims of occupancy five years prior to the enactment of R.A. 7586 shall have right of tenure.
4. Appropriate areas allocated for housing and residential purposes for a tenured migrant shall be approved by PAMB after the comprehensive residential and farm lots survey.
5. Tenured migrants shall be encouraged to become active members of organizations and groups with tenurial arrangements (PACBRMA).
6. Except those defined by R.A. 7586, household growth and family expansion is not a ground for additional claim of tenurial rights over another area not previously granted.
7. Voluntary "buy-out" of land claims by tenured migrants/claimants shall be a management option. Migrants/claimants shall be fairly compensated for the voluntary surrender of their claims.

RESOURCE USE MANAGEMENT

This section provides the management strategy and prescription of all allowable uses of resources in AIPLS, either for subsistence, recreational, extractive, or commercial purposes. In order to attain its sustainability and maintain the carrying capacity of the Protected Area, the following should be enforced in all areas of Apo Island Protected Landscape and Seascape where there is resource utilization:

1. Upon recommendation of experts, the Protected Area Superintendent and staff can initiate culling of the population of species that threatens the ecological balance of the ecosystem (e.g. triggerfish and crown of thorns) or donating the identified species to other institutions or Protected Areas.
2. Utilization of allowable tree species for cutting shall be based on the cutting cycle by the PAMB.
3. Cutting of planted species in the Multiple Use Zones should be approved by the PAMB and subject to existing DENR rules and regulations.
4. To determine the present state of the floral and faunal species in the Protected Area, a regular assessment shall be conducted with experts and with the assistance of the PAMB and the local community. Stock-inventory and periodic assessment of resources should be a regular activity of Protected Area Staff and PAMB.
5. Permits for resource use shall be issued consistent with the Carrying Capacity of the resource.
ADMINISTRATIVE ORDER
No. 2016-24

SEP 16 2016

SUBJECT: REVISED RATES OF FEES FOR ENTRANCE AND USE OF FACILITIES AND RESOURCES IN PROTECTED AREAS, AMENDING DAO 1993-47

Pursuant to the National Integrated Protected Areas System NIPAS Act (R.A. No. 7586), the Revised Implementing Rules and Regulations of NIPAS Act (DAO 2008-28), the Guidelines and Principles in Determining Fees for Access to and Sustainable Use of Resources in Protected Areas (DAO 2000-51), and the urgent need for sustainable financing mechanisms in protected areas, the fees and charges for entrance and use of facilities and resources in protected areas are hereby revised as follows:

Section 1. Basic Policy – The DENR Secretary shall prescribe reasonable fees to be collected from any person or entity, including government agencies, deriving benefits from access to and use of facilities and resources in protected areas. Sustainability shall be the overriding consideration in determining the limits of access and resource use. Reasonable fees for entry to and use of facilities and resources in protected areas may be based on willingness to pay, cost-recovery, opportunity cost and profit-sharing, or a combination thereof, as applicable.

Section 2. Objective – The primary objective of this Order is to set minimum rates for fees for entry to and use of facilities and resources in protected areas under the NIPAS, based on common guiding principles. However, the Protected Area Management Board (PAMB) of a specific protected area may recommend higher rates and include other activities, as it may deem appropriate, subject to the consultation and approval procedures set in the special law for the protected area or in the NIPAS Act.

Section 3. Scope and Coverage – This Order shall apply to all protected areas under the NIPAS except where the special law of the protected area may require a different process of setting fees, and where the PAMB is allowed to set different rates.

Indigenous peoples and tenured migrants living in the protected area shall be exempted from paying fees for access to and traditional use of resources in protected area, i.e. not primarily for trade. Furthermore, use of resources in protected area shall not cover use of threatened species as indicated in Republic Act 9147 or the Wildlife Resources Conservation and Protection Act.

Section 4. Protected Area Entrance Fees. For protected area entrance fees, collected revenues shall cover, as much as possible, a proportionate amount of all costs incurred in protecting, maintaining and enhancing the natural attractions of the protected area.

The following minimum entrance fees shall be collected within protected areas:

<table>
<thead>
<tr>
<th>Type of PA Visitors</th>
<th>PA Entrance Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Filipino citizens</td>
<td>Php 30.00 per person</td>
</tr>
<tr>
<td>For Adults</td>
<td>Php 15.00 per person</td>
</tr>
<tr>
<td>For Students</td>
<td>Php 100.00 per person</td>
</tr>
<tr>
<td>For Filipino persons with disability, senior citizens and children below seven years old</td>
<td>No entrance fee required</td>
</tr>
</tbody>
</table>

Let’s Go Green !!!
The above fees shall cover sight-seeing in designated visitor areas, amateur video and photography, and use of the common facilities, i.e. comfort room, visitor center, view deck, etc where available. For protected areas with entrance fees higher than the prescribed amount, current entrance fees being collected shall prevail.

Section 5. Fee for Use of PA Facilities - For use of protected area facilities in designated visitor areas, the collection of fees shall cover, as much as possible, a proportionate amount of all costs incurred in building and maintaining the man-made facilities in the protected area.

The minimum rates for the daily use of the following facilities are as follows:

<table>
<thead>
<tr>
<th>PA Facility</th>
<th>Facility Use Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picnic tables</td>
<td>Php 25.00 per hour</td>
</tr>
<tr>
<td>Cottages</td>
<td>Php 500.00 per day; Php1,000.00 per night</td>
</tr>
<tr>
<td>Camping site</td>
<td>Php 200.00 per designated spot</td>
</tr>
<tr>
<td>Swimming pool</td>
<td>Php 50.00 per head</td>
</tr>
<tr>
<td>Basketball court and other sports facilities</td>
<td>Php 100.00 per hour (daytime); Php200.00 per hour (with lights)</td>
</tr>
<tr>
<td>Docking area (anchorage/berthing facilities for small boats)</td>
<td>Php 50.00 per boat per hour</td>
</tr>
<tr>
<td>Special docking area for yacht</td>
<td>Php 5,000.00 per day</td>
</tr>
<tr>
<td>Parking area (for the first two hours and succeeding hours)</td>
<td></td>
</tr>
<tr>
<td>• Tricycle/motorcycle</td>
<td>Php 20.00 for first two hours, Php5.00 for each succeeding hour or a fraction thereof</td>
</tr>
<tr>
<td>• Cars/SUV (up to 10 person capacity)</td>
<td>Php 45.00 for first two hours, Php10.00 for each succeeding hour or a fraction thereof</td>
</tr>
<tr>
<td>• Passenger jeep/coaster (11-20 person capacity)</td>
<td>Php 60.00 for first two hours, Php20.00 for each succeeding hour or a fraction thereof</td>
</tr>
<tr>
<td>• Mini-bus and tour bus (more than 20 person capacity)</td>
<td>Php 150.00 for first two hours, Php30.00 for each succeeding hour or a fraction thereof</td>
</tr>
</tbody>
</table>

Section 6. Fees for Recreational Activities within Designated Visitor Areas. The minimum rates for the conduct of certain recreational activities shall be as follows:

<table>
<thead>
<tr>
<th>Recreational Activity</th>
<th>User Fee</th>
</tr>
</thead>
</table>
| Water-based activities (beaches, lakes) such as swimming, snorkeling | Php 60.00 for Filipinos  
Php 100.00 for foreigner |
| Hiking and biking within designated areas     | Php 60.00 for Filipinos  
Php 100.00 for foreigners |

Section 7. Fees for Commercial Documentation and Photography. This applies to video and photography for commercial use or using professional equipment (other than phones, point-and-shoot cameras, digital SLRs with basic lenses and attachments, handy cameras) in designated visitor areas, the minimum fee of which shall be Php5,000.00, exclusive of entrance fees. In case professional filming and photography to be done outside of the designated visitor areas, the crew shall also pay the appropriate fees under Sections 8, 9 and 10 or those referring to fees for the following: trekking, biking, mountain climbing, caving and similar activities; SCUBA diving, whitewater rafting, non-motorized watersports and similar activities; and lease of land or facilities for short-term small-scale commercial purposes.
Section 8. Fees for Trekking, Biking, Mountain Climbing, Caving and Similar Activities. These are activities outside of the designated visitor areas that would require additional protected area management services such as trail signs, emergency rescue, comfort room, outdoor cooking areas, camp sites, first aid stations, orienteering sites, view decks/towers, rest areas, maps and booklets.

Visitors can only be allowed to undertake the above activities when they are accompanied by accredited guides and with appropriate gears.

The following minimum fees shall be charged:

<table>
<thead>
<tr>
<th>Visitor Type</th>
<th>User Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filipinos</td>
<td>Php 250.00 per person per visit</td>
</tr>
<tr>
<td>Foreigners</td>
<td>Php 500.00 per person per visit</td>
</tr>
</tbody>
</table>

This rate shall not apply to protected areas already collecting higher fees.

Fees for the following: professional filming and photography; trekking, biking, mountain climbing, caving and similar activities; and scuba diving, whitewater rafting, non-motorized watersports and similar activities shall already include the entrance fee.

Section 9. Fees for SCUBA diving, Whitewater Rafting, Non-Motorized Watersports and Similar Activities. The minimum fee per visit for this type of activity shall be charged as follows:

<table>
<thead>
<tr>
<th>Visitor Type</th>
<th>User Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filipinos</td>
<td>Php 800.00 per person</td>
</tr>
<tr>
<td>Foreigners</td>
<td>Php 1,800.00 per person</td>
</tr>
</tbody>
</table>

The above rates shall not apply to protected areas already collecting higher fees.

Section 10. Lease of land or facilities for short-term small-scale commercial purposes. The establishment of temporary facilities for food stalls, exhibits, souvenir shops and the like, during seasonal festivals, celebrations and other gatherings, as may be allowed by the PAMB, shall be subject to a fee of ten pesos (Php10) per square-meter per day, if the user builds the structures. In cases where the protected area management or LGU builds the structures, an additional amount shall be charged to cover the cost of construction of the temporary structures that shall accrue to the Protected Area - Integrated protected Area Fund or LGU, as applicable.

Provided that, the building of permanent structures for commercial use, and for large-scale development shall be in accordance with DAO 2009-09 (Standards Design and Specification of Signs, Buildings, Facilities and Other Infrastructure that may be installed and/or Constructed within Protected Areas) and would require special use agreement based on the existing guidelines.

Section 11. Roles and Responsibilities of the PAMB

11.1. These fees are immediately applicable and collectible by the Protected Area Superintendent (PASu) or authorized Special Collecting Officer (SCO) of the PAMB without need for further action by the PAMB;

11.2. The PAMB may, through resolution, increase the rates up to 10% per annum. In cases where the PAMB deems it necessary to impose higher rates or include other activities, it may do so through the issuance of PAMB resolution submitted to the Secretary for approval. The resolution shall be deemed affirmed or approved if not disapproved within 30 days from receipt of the Office of the Secretary;
11.3. The PAMB shall designate the visitor area (or areas) wherein the basic entrance and recreational activities fee will be charged. In the absence of such delineation, the entrance and recreational fees shall apply within 1-km radius from the entrance to the protected area, where basic services for visitors are concentrated and visitor impact can be easily mitigated.

Section 12. Transitory Provision – The rates and fees shall be posted at the entrance of the protected area, and in designated areas for notices in DENR and LGU offices.

Section 13. Collection, and Deposit to the IPAFl account. The protected area Superintendent shall be responsible for the collection of the fees, subject to the procedures set for collection of protected area fees and charges. The proceeds shall be held and used consistent with laws and regulations governing the Integrated Protected Area Fund, including R.A. No. 10629.

Section 14. Repealing Clause. This Order amends existing orders, circulars and memoranda inconsistent herewith.

Section 15. Effectivity. This Order takes effect fifteen (15) days after its publication in a newspaper of general circulation and filing in the Office of the National Administrative Register (ONAR).

REGINA PAZ L. LOPEZ
Secretary

PUBLICATION : MALAYA BUSINESS INSIGHT
NOV. 15, 2016

ACKNOWLEDGEMENT: UP LAW CENTER
NOVEMBER 17, 2016
Republic Act No. 7586
June 1, 1992 (http://www.officialgazette.gov.ph/1992/06/01/republic-act-no-7586/)

AN ACT PROVIDING FOR THE ESTABLISHMENT AND MANAGEMENT OF NATIONAL INTEGRATED PROTECTED AREAS SYSTEM, DEFINING ITS SCOPE AND COVERAGE, AND FOR OTHER PURPOSES

Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled:

SECTION 1. Title – This Act shall be known and referred to as the “National Integrated Protected Areas System Act of 1992”.

SECTION 2. Declaration of Policy – Cognizant of the profound impact of man’s activities on all components of the natural environment particularly the effect of increasing population, resource exploitation and industrial advancement and recognizing the critical importance of protecting and maintaining the natural biological and physical diversities of the environment notably on areas with biologically unique features to sustain human life and development, as well as plant and animal life, it is hereby declared the policy of the State to secure for the Filipino people of present and future generations the perpetual existence of all native plants and animals through the establishment of a comprehensive system of integrated protected areas within the classification of national park as provided for in the Constitution.

It is hereby recognized that these areas, although distinct in features, posses common ecological values that may be incorporated into a holistic plan representative of our natural heritage; that effective administration of this area is possible only through cooperation among national government,
local government and concerned private organizations; that the use and enjoyment of these protected areas must be consistent with the principles of biological diversity and sustainable development.

To this end, there is hereby established a National Integrated Protected Areas System (NIPAS), which shall encompass outstandingly remarkable areas and biologically important public lands that are habitats of rare and endangered species of plants and animals, biogeographic zones and related ecosystems, whether terrestrial, wetland or marine, all of which shall be designated as "protected areas".

SECTION 3. Categories – The following categories of protected areas are hereby established:

a. Strict nature reserve;

b. Natural park;

c. Natural monument;

d. Wildlife sanctuary;

e. Protected landscapes and seascapes;

f. Resource reserve;

g. Natural biotic areas; and

h. Other categories established by law, conventions or international agreements which the Philippine Government is a signatory.

SECTION 4. Definition of Terms – For purposes of this Act, the following terms shall be defined as follows:

1. "National Integrated Protected Areas System (NIPAS)" is the classification and administration of all designated protected areas to maintain essential ecological processes and life-support systems, to preserve genetic diversity, to ensure sustainable use of resources found therein, and to maintain their natural conditions to the greatest extent possible;

2. "Protected Area" refers to identified portions of land and water set aside by reason of their unique physical and biological significance, managed to enhance biological diversity and protected against destructive human exploitation;
3. “Buffer zones” are identified areas outside the boundaries of and immediately adjacent to designated protected areas pursuant to Section 8 that need special development control in order to avoid or minimize harm to the protected area;

4. “Indigenous cultural community” refers to a group of people sharing common bonds of language, customs, traditions and other distinctive cultural traits and who have since time immemorial, occupied, possessed and utilized a territory;

5. “National park” refers to a forest reservation essentially of natural wilderness character which has been withdrawn from settlement, occupancy or any form of exploitation except in conformity with approved management plan and set aside as such exclusively to conserve the area or preserve the scenery, the natural and historic objects, wild animals and plants therein and to provide enjoyment of these features in such areas;

6. “Natural monuments” is a relatively small area focused on protection of small features to protect or preserve nationally significant natural features on account of their special interest or unique characteristics;

7. “Natural biotic area” is an area set aside to allow the way of life of societies living in harmony with the environment to adapt to modern technology at their pace;

8. “Natural park” is a relatively large area not materially altered by human activity where extractive resource uses are not allowed and maintained to protect outstanding natural and scenic areas of national or international significance for scientific, educational and recreational use;

9. “Protected landscapes/seascape” are areas of national significance which are characterized by the harmonious interaction of man and land while providing opportunities for public enjoyment through the recreation and tourism within the normal lifestyle and economic activity of these areas;

10. “Resource reserve” is an extensive and relatively isolated and uninhabited area normally with difficult access designated as such to protect natural resources of the area for future use and prevent or contain development activities that could affect the resource pending the establishment of objectives which are based upon appropriate knowledge and planning;

11. “Strict nature reserve” is an area possessing some outstanding ecosystem, features and/or species of flora and fauna of national scientific importance maintained to protect nature and maintain processes in an undisturbed state in order to have ecologically representative examples of the natural environment available for scientific study, environmental monitoring, education, and for the maintenance of genetic resources in a dynamic and evolutionary state;
12. “Tenured migrant communities” are communities within protected areas which have actually and continuously occupied such areas for five (5) years before the designation of the same as protected areas in accordance with this Act and are solely dependent therein for subsistence; and

13. “Wildlife sanctuary” comprises an area which assures the natural conditions necessary to protect nationally significant species, groups of species, biotic communities or physical features of the environment where these may require specific human manipulations for their perpetuation.

SECTION 5. Establishment and Extent of the System – The establishment and operationalization of the System shall involve the following:

1. All areas or islands in the Philippines proclaimed, designated or set aside, pursuant to a law, presidential decree, presidential proclamation or executive order as national park, game refuge, bird and wildlife sanctuary, wilderness area, strict nature reserve, watershed, mangrove reserve, fish sanctuary, natural and historical landmark, protected and managed landscape/seascape as well as identified virgin forests before the effectivity of this Act are hereby designated as initial components of the System. The initial components of the System shall be governed by existing laws, rules and regulations, not inconsistent with this Act;

2. Within one (1) year from the effectivity of this Act, the DENR shall submit to the Senate and the House of Representatives a map and legal descriptions or natural boundaries of each protected area initially comprising the System. Such maps and legal description shall, by virtue of this Act, constitute the official documentary representation of the entire System, subject to such changes as Congress deems necessary;

3. All DENR records pertaining to said protected areas, including maps and legal descriptions or natural boundaries, copies of rules and regulations governing them, copies of public notices of, and reports submitted to Congress regarding pending additions, eliminations, or modifications shall be made available to the public. These legal documents pertaining to protected areas shall also be available to the public in the respective DENR Regional Offices, Provincial Environment and Natural Resources Offices (PENROs) and Community Environment and Natural Resources Offices (CENROs) where NIPAS areas are located;

4. Within three (3) years from the effectivity of this Act, the DENR shall study and review each area tentatively composing the System as to its suitability or non-suitability for preservation as protected area and inclusion in the System according to the categories established in Section 3 hereof and report its findings to the President as soon as each study is completed. The study must include in each area:

1. A forest occupants survey;
2. An ethnographic study;

3. A protected area resource profile;

4. Land use plans done in coordination with the respective Regional Development Councils; and

5. Such other background studies as will be sufficient bases for selection.

The DENR shall:

1. Notify the public of proposed action through publication in a newspaper of general circulation, and such other means as the System deems necessary in the area or areas in the vicinity of the affected land thirty (30) days prior to the public hearing;

   i. Conduct public hearings at the locations nearest to the area affected;

   ii. At least thirty (30) days prior to the date of hearing, advise all Local Government Units (LGUs) in the affected areas, national agencies concerned, people's organizations and non-government organizations and invite such officials to submit their views on the proposed action at the hearing not later than thirty (30) days following the date of hearing; and

   iii. Give due consideration to the recommendations at the public hearing; and provide sufficient explanation for his recommendations contrary to the general sentiments expressed in the public hearing;

2. Upon receipt of the recommendations of the DENR, the President shall issue a presidential proclamation designating the recommended areas as protected areas and providing for measures for their protection until such time when Congress shall have enacted a law finally declaring such recommended areas as part of the integrated protected area systems; and

3. Thereafter, the President shall send to the Senate and the House of Representatives his recommendations with respect to the designations as protected areas or reclassification of each area on which review has been completed, together with maps and legal description of boundaries. The President, in his recommendation, may propose the alteration of existing boundaries of any or all proclaimed protected areas, addition of any contiguous area of public land of predominant physical and biological value. Nothing contained herein shall limit the President to propose, as part of his recommendation to Congress, additional areas which have not been designated, proclaimed or set aside by law, presidential decree, proclamation or executive orders as protected area/s.
SECTION 6. Additional Areas to be Integrated to the System. – Notwithstanding the establishment of the initial component of the additional areas with outstanding physical features, anthropological significance and biological diversity in accordance with the provisions of Section 5d.

SECTION 7. Disestablishment as Protected Area. – When in the opinion of the DENR a certain protected area should be withdrawn or disestablished, or its boundaries modified as warranted by a study and sanctioned by the majority of the members of the respective boards for the protected area as herein established in Section 11, it shall, in turn, advice Congress. Disestablishment of a protected area under the System or modification of its boundary shall take effect pursuant to an act of Congress. Thereafter, said area shall revert to the category of public forests unless otherwise classified by Congress: Provided however, that after disestablishment by Congress, the Secretary may recommend the transfer of such disestablished area to other government agencies to serve other priority programs of national interest.

SECTION 8. Buffer Zones. – For each protected area, there shall be established peripheral buffer zones when necessary, in the same manner as Congress establishes the protected area, to protect the same from activities that will directly and indirectly harm it. Such buffer zones shall be included in the individual protected area management plan that shall prepared for each protected area. The DENR shall exercise its authority over protected areas as provided in this Act on such area and designated as buffer zones.

SECTION 9. Management Plans. – There shall be a general management planning strategy to serve as guide in formulating individual plans for each protected area. The management planning strategy shall, at the minimum, promote the adoption and implementation of innovative management techniques including if necessary, the concept of zoning, buffer zone management for multiple use and protection, habitat conservation and rehabilitation, diversity management, community organizing, socioeconomic and scientific researches, site-specific policy development, pest management, and fire control. The management planning strategy shall also provide guidelines for the protection of indigenous cultural communities, other tenured migrant communities and sites for close coordination between and among local agencies of the Government as well as the private sector.

Each component area of the System shall be planned and administered to further protect and enhance the permanent preservation of its natural conditions. A management manual shall be formulated and developed which must contain the following: an individual management plan prepared by three (3) experts, basic background information, field inventory of the resources within the area, an assessment of assets and limitations, regional interrelationships, particular objectives for managing the area, appropriate division of the area into management zones, a review of the boundaries of the area, and a design of the management programs.
SECTION 10. Administration and Management of the System. – The National Integrated Protected Areas System is hereby placed under the control and administration of the Department of Environment and Natural Resources. For this purpose, there is hereby created a division in the regional offices of the Department to be called the Protected Areas and Wildlife Division in regions where protected areas have been established, which shall be under the supervision of a Regional Technical Director, and shall include subordinate officers, clerks, and employees as may be proposed by the Secretary, duly approved by the Department of Budget and Management, and appropriated by the Congress. The Service thus established shall manage protected areas and promote the permanent preservation, to the greatest extent possible of their natural conditions.

To carry out the mandate of this Act, the Secretary of the DENR is empowered to perform any and all of the following acts:

a. To conduct studies on various characteristic features and conditions of the different protected areas, using commonalities in their characteristics, classify and define them into categories and prescribe permissible or prohibited human activities in each category in the System;

b. To adopt and enforce a land use scheme and zoning plan in adjoining areas for the preservation and control of activities that may threaten the ecological balance in the protected areas;

c. To cause the preparation of and exercise the power to review all plans and proposals for the management of protected areas;

d. To promulgate rules and regulations necessary to carry out the provisions of this Act;

e. To deputize field officers and delegate any of his powers under this Act and other laws to expedite its implementation and enforcement;

f. To fix and prescribe reasonable NIPAS fees to be collected from government agencies or any person, firm or corporation deriving benefits from the protected areas;

g. To exact administrative fees and fines as authorized in Section 21 for violation of guidelines, rules and regulations of this Act as would endanger the viability of protected areas;

h. To enter into contracts and/or agreements with private entities or public agencies as may be necessary to carry out the purposes of this Act;

i. To accept in the name of the Philippine Government and in behalf of NIPAS funds, gifts or bequests of money for immediate disbursements or other property in the interest of the NIPAS, its activities or its services;
j. To call on any agency or instrumentality of the Government as well as academic institutions, non-government organizations and the private sector as may be necessary to accomplish the objectives and activities of the System;

k. To submit an annual report to the President of the Philippines and to Congress on the status of protected areas in the country;

l. To establish a uniform marker of the System, including an appropriate and distinctive symbol for each category in the System, in consultation with appropriate government agencies and public and private organizations;

m. To determine the specification of the class, type and style of buildings and other structures to be constructed in protected areas and the materials to be used;

n. Control the construction, operation and maintenance of roads, trails, waterworks, sewerage, fire protection, and sanitation systems and other public utilities within the protected area;

o. Control occupancy of suitable portions of the protected area and resettle outside of said area forest occupants therein, with the exception of the members of indigenous communities area; and

p. To perform such other functions as may be directed by the President of the Philippines, and to do such acts as may be necessary or incidental to the accomplishment of the purpose and objectives of the System.

SECTION 11. Protected Area Management Board. – A Protected Area Management Board for each of the established protected area shall be created and shall be composed of the following: The Regional Executive Director under whose jurisdiction the protected area is located; one (1) representative from the autonomous regional government, if applicable; the Provincial Development Officer; one (1) representative from the municipal government; one (1) representative from each barangay covering the protected area; one (1) representative from each tribal community, if applicable; and, at least three (3) representatives from non-government organizations/local community organizations, and if necessary, one (1) representative from other departments or national government agencies involved in protected area management.

The Board shall, by a majority vote, decide the allocations for budget, approve proposals for funding, decide matters relating to planning, peripheral protection and general administration of the area in accordance with the general management strategy. The members of the Board shall serve for a term of five (5) years without compensation, except for actual and necessary traveling and subsistence expenses incurred in the performance of their duties. They shall be appointed by the Secretary of the DENR as follows:
a. A member who shall be appointed to represent each local government down to barangay level whose territory or portion is included in the protected area. Each appointee shall be the person designated by the head of such LGU, except for the Provincial Development Officer who shall serve ex officio;

b. A member from non-government organizations who shall be endorsed by heads of organizations which are preferably based in the area or which have established and recognized interest in protected areas;

c. The RED/s in the region/s where such protected area lies shall sit as ex officio member of the Board and shall serve as adviser/s in matters related to the technical aspect of management of the area; and

d. The RED shall act as chairman of the Board. When there are two (2) or more REDs in the Board, the Secretary shall designate one (1) of them to be the Chairman. Vacancies shall be filled in the same manner as the original appointment.

SECTION 12. Environmental Impact Assessment. – Proposals for activities which are outside the scope of the management plan for protected areas shall be subject to an environmental impact assessment as required by law before they are adopted, and the results thereof shall be taken into consideration in the decision-making process.

No actual implementation of such activities shall be allowed without the required Environmental Compliance Certificate (ECC) under the Philippine Environmental Impact Assessment (EIA) system. In instances where such activities are allowed to be undertaken, the proponent shall plan and carry them out in such manner as will minimize any adverse effects and take preventive and remedial action when appropriate. The proponent shall be liable for any damage due to lack of caution or indiscretion.

SECTION 13. Ancestral Lands and Rights Over Them. – Ancestral lands and customary rights and interest arising shall be accorded due recognition. The DENR shall prescribe rules and regulations to govern ancestral lands within protected areas: Provided, that the DENR shall have so power to evict indigenous communities from their present occupancy nor resettle them to another area without their consent: Provided, however, That all rules and regulations, whether adversely affecting said communities or not, shall be subjected to notice and hearing to be participated in by members of concerned indigenous community.

SECTION 14. Survey for Energy Resources. – Consistent with the policies declared in Section 2 hereof, protected areas, except strict nature reserves and natural parks, may be subjected to exploration only for the purpose of gathering information on energy resources and only if such activity is carried out with the least damage to surrounding areas. Surveys shall be conducted only in
accordance with a program approved by the DENR, and the result of such surveys shall be made available to the public and submitted to the President for recommendation to Congress. Any exploitation and utilization of energy resources found within NIPAS areas shall be allowed only through a law passed by Congress.

SECTION 15. Areas Under the Management of Other Departments and Government Instrumentalities. – Should there be protected areas, or portions thereof, under the jurisdiction of government instrumentalities other than the DENR, such jurisdiction shall, prior to the passage of this Act, remain in the said department or government instrumentality; Provided, That the department or government instrumentality exercising administrative jurisdiction over said protected area or a portion thereof shall coordinate with the DENR in the preparation of its management plans, upon the effectivity of this Act.

SECTION 16. Integrated Protected Areas Fund. – There is hereby established a trust fund to be known as Integrated Protected Areas (IPAS) Fund for purposes of financing projects of the System. The IPAS may solicit and receive donations, endowments, and grants in the form of contributions, and such endowment shall be exempted from income or gift taxes and all other taxes, charges or fees imposed by the Government or any political subdivision or instrumentality thereof.

All incomes generated from the operation of the System or management of wild flora and fauna shall accrue to the Fund and may be utilized directly by the DENR for the above purpose. These incomes shall be derived from:

a. Taxes from the permitted sale and export of flora and fauna and other resources from protected areas;

b. Proceeds from lease of multiple use areas;

c. Contributions from industries and facilities directly benefiting from the protected area; and

d. Such other fees and incomes derived from the operation of the protected area. Disbursements from the Funds shall be made solely for the protection, maintenance, administration, and management of the System, and duly approved projects endorsed by the PAMBs, in the amounts authorized by the DENR.

SECTION 17. Annual Report to Congress. – At the opening of each session of Congress, the DENR shall report to the President, for transmission to Congress, on the status of the System, regulation in force and other pertinent information, together with recommendations.
SECTION 18. Field Officers. – All officials, technical personnel and forest guards employed in the integrated protected area service or all persons deputized by the DENR, upon recommendation of the Management Board shall be considered as field officers and shall have the authority to investigate and search premises and buildings and make arrests in accordance with the rules on criminal procedure for the violation of laws and regulations relating to the protected areas. Persons arrested shall be brought to the nearest police precinct for investigation.

Nothing herein mentioned shall be construed as preventing regular law enforcers and police officers from arresting any person in the act of violating said laws and regulations.

SECTION 19. Special Prosecutors. – The Department of Justice shall designate special prosecutors to prosecute violations of laws, rules and regulations in protected areas.

SECTION 20. Prohibited Acts. – Except as may be allowed by the nature of their categories and pursuant to rules and regulations governing the same, the following acts are prohibited within protected areas:

a. Hunting, destroying, disturbing, or mere possession of any plants or animals or products derived therefrom without a permit from the Management Board;

b. Dumping of any waste products detrimental to the protected area, or to the plants and animals or inhabitants therein;

c. Use of any motorized equipment without a permit from the Management Board;

d. Mutilating, defacing or destroying objects of natural beauty, or objects of interest to cultural communities (of scenic value);

e. Damaging and leaving roads and trails in a damaged condition;

f. Squatting, mineral locating, or otherwise occupying any land;

g. Constructing or maintaining any kind of structure, fence or enclosures, conducting any business enterprise without a permit;

h. Leaving in exposed or unsanitary conditions refuse or debris, or depositing in ground or in bodies of water; and

i. Altering, removing destroying or defacing boundary marks or signs.
SECTION 21. Penalties. – Whoever violates this Act or any rules and regulations issued by the Department pursuant to this Act or whoever is found guilty by a competent court of justice of any of the offenses in the preceding section shall be fined in the amount of not less than Five thousand pesos (P5,000) nor more than Five hundred thousand pesos (P500,000), exclusive of the value of the thing damaged or imprisonment for not less than one (1) year but not more than six (6) years, or both, as determined by the court: Provided, that, if the area requires rehabilitation or restoration as determined by the court, the offender shall be required to restore or compensate for the restoration to the damages: Provided, further, that court shall order the eviction of the offender from the land and the forfeiture in favor of the Government of all minerals, timber or any species collected or removed including all equipment, devices and firearms used in connection therewith, and any construction or improvement made thereon by the offender. If the offender is an association or corporation, the president or manager shall be directly responsible for the act of his employees and laborers: Provided, finally, that the DENR may impose administrative fines and penalties consistent with this Act.

SECTION 22. Separability Clause. – If any part or section of this Act is declared unconstitutional, such declaration shall not affect the other parts or sections of this Act.

SECTION 23. Repealing Clause. – All laws, presidential decrees, executive orders, rules and regulations inconsistent with any provisions of this Act shall be deemed repealed or modified accordingly.

SECTION 24. Effectivity Clause. – This Act shall take effect fifteen (15) days after its complete publication in two (2) newspapers of general circulation.

Approved;

(SGD.) NEPTALI A. GONZALES  (SGD.) RAMON V. MITRA
President of the Senate Speaker of the House of Representative

This Act which is a consolidation of House Bill No. 34696 and Senate Bill No. 1914 was finally passed by the House of Representatives and the Senate on February 6, 1992.

(SGD.) ANACLETO D. BADOY, JR.  (SGD.) CAMILO L. SABIO
Secretary of the Senate Secretary General
House of Representatives

Approved: June 01 1992
## Appendix E - Financial report of the total number of visitors and total amount collected from 2009 - 2016


<table>
<thead>
<tr>
<th>Month</th>
<th>Total Revenue</th>
<th>Local Visitors</th>
<th>Foreign Visitors</th>
<th>Total Visitors</th>
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</table>

| Total     | 3,967,822.50  | 3,752           | 7,714            | 11,466         |

### Local vs. Foreign Visitors

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| Total     | 3,752 | 7,714 | 11,466 |

### Grand Total

- Total Revenue: 3,967,822.50
- Local Visitors: 3,752
- Foreign Visitors: 7,714
- Total Visitors: 11,466

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Republic of the Philippines
Department of Environment and Natural Resources
APO ISLAND PROTECTED LANDSCAPE/SEASCAPES
Apo Island, Dauin, Negros Oriental
**REPORT OF ACCOMPLISHMENT ON REVENUE COLLECTION AND VISITOR STATISTICS FROM JANUARY - DECEMBER 2010**

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<th>401(P)</th>
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Prepared by: VIERNOV D. GREFALDE
Concurred by: OSCAR M. MAGALLONES

PASu-AIPLS PENRO
# REPORT OF ACCOMPLISHMENT ON REVENUE COLLECTION AND VISITOR STATISTIC FOR CY 2011.

## REVENUE COLLECTION

<table>
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## VISITOR STATISTIC

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<td>MAY</td>
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<td>1175</td>
</tr>
<tr>
<td>JUNE</td>
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<td>422</td>
<td>838</td>
</tr>
<tr>
<td>JULY</td>
<td>159</td>
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<td>291</td>
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<tr>
<td>AUGUST</td>
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<td>305</td>
<td>735</td>
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<tr>
<td>SEPTEMBER</td>
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<td>OCTOBER</td>
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<td>264</td>
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<tr>
<td>DECEMBER</td>
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<td>152</td>
<td>359</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td><strong>3,785</strong></td>
<td><strong>3,234</strong></td>
<td><strong>6,957</strong></td>
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</tbody>
</table>

**Total Number of Visitors:**

- **January:** 1,339
- **February:** 2,078
- **March:** 1,687
- **April:** 2,776
- **May:** 1,395
- **June:** 1,223
- **July:** 1,680
- **August:** 1,040
- **September:** 1,615
- **October:** 2,017
- **November:** 1,647
- **December:** 2,017
- **Grand Total:** 20,601

Prepared by: SABINA A. SILVA
Concurred by: OSCAR M. MAGALLONES

Republic of the Philippines
Department of Environment and Natural Resources
APO ISLAND PROTECTED LANDSCAPE/SEASCAPE
Apo Island, Dauin, Negros Oriental
## REPORT OF ACCOMPLISHMENT ON REVENUE COLLECTION AND VISITOR STATISTIC for CY 2012

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<td>691</td>
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**Prepared by:**

SABINA A. SILVA  
Deputy PASu-AIPLS

**Concurred by:**

OSCAR M. MAGALLONES  
PENRO
# Report of Accomplishment on Revenue Collection and Visitor Statistic for CY 2013

## Revenue Collection

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<tr>
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## Visitor Statistic

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<td>245</td>
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## Total Number of Visitors

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<td>October</td>
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</tr>
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Prepared by:  
**Efren A. Rumbaoa**  
OIC-CENRO 2/ PASu-AIPLS  
Concurred by:  
**Charlie E. Fabre**  
OIC-PENRO, Negros Oriental
# Republic of the Philippines
Department of Environment and Natural Resources
APO ISLAND PROTECTED LANDSCAPE/SEASCAPE
Apo Island, Dauin, Negros Oriental

<table>
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<th>401-61 (P)</th>
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<th>Total Collections</th>
<th>LOCAL</th>
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<th>FOREIGN</th>
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<th>Total visitors</th>
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<td>Female</td>
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<td>10,526</td>
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**Prepared by:**

**Concurred by:**

EFREN A. RUMBANO
OIC-CENRO 2/ PASu-AIPLS

CHARLIE E. FABRE
OIC-PENRO, Negros Oriental
<table>
<thead>
<tr>
<th>Month</th>
<th>401-61 (P)</th>
<th>401(P)</th>
<th>Total Collections</th>
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### Total Collections
**Local**
- **Male**: 4,573
- **Female**: 4,384
- **Total**: 8,957

**Foreign**
- **Male**: 4,418
- **Female**: 4,082
- **Total**: 8,500

**Total Number of Visitors**: 17,457

---

Prepared by: EFREN A. RUMBAOA  
Concurred by: E CHARLIE E. FABRE Ph.D  
OIC-CENRO 2/ PASu-AIPLS  
PENRO, Negros Oriental
### REPORT OF ACCOMPLISHMENT ON REVENUE COLLECTION AND VISITOR STATISTIC

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<tr>
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<th>REVENUE COLLECTION</th>
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<th>Total Collections</th>
<th>LOCAL Male</th>
<th>LOCAL Female</th>
<th>LOCAL Total</th>
<th>FOREIGN Male</th>
<th>FOREIGN Female</th>
<th>FOREIGN Total</th>
<th>Number of Visitors</th>
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3,429,142.50

Prepared by: EFREN A. RUMBAOA
Concurred by: E. CHARLIE E. FABRE Ph.D

OIC-CENRO 2/ PASu-AIPLS

PENRO, Negros Oriental
Resolution No. 2015 - 001

"DEMARCATION OF MARINE TURTLE AREA OF APO ISLAND PROTECTED LANDSCAPE/SEASCAPE."

"WHEREAS, Apo Island and its surrounding water was proclaimed as protected area in August 9, 1994, covering an area of 691 hectares of which 619 hectares terrestrial and 72 hectares marine area with Presidential Proclamation No. 438 which is now known as Apo Island Protected Landscape/Seascape.

"WHEREAS, Apo Island is bestowed abundantly of marine turtles which makes it unique and different from other protected area wherein tourist keep on increasing to visit the site.

"WHEREAS, there’s a high rate of ecotourism activity due to marine turtles in which tourists and visitors enjoy snorkeling and swimming with the presence of the marine turtles.

"WHEREAS, it is very high risk to both snorkelers and the marine turtles to have boats traversing and docking/anchoring in the specified area.
"WHEREAS, to provide safety to marine turtles and any marine organism, snorkelers and the local community the demarcation of boundaries of marine turtle area is decidedly recommended to be installed as well as the implementation of allocated time for no traversing and docking/anchoring of the boats in the said area.

"WHEREAS, it was suggested and approved by the local community that the allocated time for no traversing and docking/anchoring is at 8:00 o'clock in the morning until 4:00 o'clock in the afternoon in the marine turtle area having 5,000 square meters located at Sitio Baybay, Barangay Apo Island, Dauin, Negros Oriental.

"WHEREFORE, premises considered after due deliberation and upon motion of Honorable Liberty P. Rhodes and unanimously seconded by the body.

"RESOLVED AS IT IS HEREBY RESOLVED, the AIPLS-PAMB adapting the demarcation of marine turtle area with an area of 5,000 square meters as well as the implementation of the no traversing and docking/anchoring policy in the said area in exception of the religious activities such as the Fiesta Celebration of St. Vincent de Ferrer on April 4-5 and St. John de Baptist on June 24.

"UNANIMOUSLY ADOPTED".

Certified True and Correct this 25th day of February, 2015

Prepared by:  

EFREN A. RUMBAO  
PASA-AIPLS/CENRO

Noted by:  

CHARLIE E. FABRE  
OIC, PENR Officer, Neg. Or..

Concurred by:  

NEIL E. CREDO  
Mayor Dauin, Negros Oriental/Presiding Officer

Affirmed by:  

ISABELO R. MONTEJO D.M., CESO IV  
OIC, Regional Director  
Chairman, AIPLS-PAMB