

Towards integrating conservation in development: a discussion of the role of the community of Apo Island in influencing development with reference to tourism in their local environment.

By Suzanne Olivier

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Supervisor: Dr. S P Treurnicht

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Summary

Many developing countries, rich with natural resources, have turned to tourism as a source of national growth and subsequently an increasing amount of local communities are being "developed". Despite its importance to developing countries, tourism has been covered scarcely in the literature on development studies.

Local communities that find themselves in a situation having to deal with tourism related development, face many challenges. Contrary to previous work on development which considered poor local communities a threat to the natural environment, current views emphasise the role of the community in bringing about participation,

conservation and consequently Sustainable Development. Therefore, if tourism can be seen as a possible path to Sustainable Development, the role of the local community in its development is of vital importance.

This research investigates the role of the local community in integrating conservation in tourism related development by means of a case study on Apo Island.

Key terms:

Sustainable Tourism Development Conservation Local Community Local Institutions Local Community Organisations Community roles Participation Participant Rural Appraisal PRA mapping Tourism Income opportunities

Dedication:

I dedicate this work to the children of Apo Island who stole my heart and were always ready with a smile during times when I felt lonely on Apo Island.

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Table of contents

SUMMARY	iii
KEY TERMS	iii
DEDICATION	iv
ACKNOWLEDGMENTS	iv
LIST OF TABLES AND FIGURES	6
ACRONYMNS	7
CHAPTER 1: INTRODUCTION	9
 1.1 INTRODUCTION 1.2 MY PERSONAL MOTIVATION FOR THE STUDY 1.3 THE GRADUAL DEVELOPMENT OF THE THESIS IDEA	
 2.1 INTRODUCTION 2.2 THE EVOLVING DEFINITION AND MEANING OF SUSTAINABLE DEVELOPMENT 2.3 AN EXPOSITION OF SOME OF THE MOST IMPORTANT VIEWS ON SUSTAINABLE 	
 2.3 AN EAROSITION OF SOME OF THE MOST IMPORTANT VIEWS ON SUSTAINABLE DEVELOPMENT	34 35 36 38 39 40 42
CONSERVATION CLOSER TOGETHER	44

2.5.1 Strengthening local communities and their decision making in the world	. 48
economy	• • •
2.5.3 The importance of local NRM for sustainable development	
2.5.4 The importance of technology for sustainable development	
2.5.5 The role of trade in sustainable development	
2.6 Conclusion	. 57
CHAPTER 3: THE ROLE OF LOCAL COMMUNITIES IN TOURISM, SUSTAINABLE DEVELOPMENT AND NATURAL RESOURCE	
MANAGEMENT	. 60
3.1 INTRODUCTION	. 60
3.2. BACKGROUND AND STATISTICS ABOUT THE INTERNATIONAL TOURISM SECTOR	
3.3 THE INTERNATIONAL DEBATE: ARE THE EFFECTS OF TOURISM MAINLY POSITIVE OF	2
NEGATIVE?	. 63
3.3.1 The positive effects of tourism and travel on sustainable development	
3.3.2 The negative effects of tourism and travel on sustainable development	
3.4 THE IMPACT OF TOURISM ON SENSITIVE COASTAL ECOSYSTEMS	
3.5 A DESCRIPTION OF THE DIFFERENT FORMS OF SUSTAINABLE TOURISM	. 75
3.6 WHY THE LOCAL MANAGEMENT OF TOURISM IS NECESSARY	. 77
3.6.1 Empowerment of the local community	. 78
3.6.2 Conservation of the environment and biodiversity	
3.6.3 Limiting the economic leakage of the earned tourist money from local communities	. 81
3.6.4 The failure of the market-mechanism to determine the correct price of touri	
activities	
3.7 NATURAL RESOURCE MANAGEMENT AS THE RESPONSIBILITY OF THE COMMUNITY	85
3.8 AN EXPLANATION OF COMMUNITY-BASED COASTAL RESOURCE MANAGEMENT	. 88
3.9 Conclusion	. 91
CHAPTER 4: BACKGROUND INFORMATION OF THE SELECTED	
COMMUNITY: APO ISLAND, THE PHILIPPINES	. 93
4.1 Introduction	
4.2 BACKGROUND INFORMATION ON THE PHILIPPINES	
4.2.1 Population details of the Philippines	
4.2.2 The state of the Philippines Economy	
4.2.3 Income distribution in the Philippines	
4.3 DESCRIPTION OF THE TOURISM INDUSTRY IN THE PHILIPPINES	
4.4 DETAILS ABOUT THE COASTAL COMMUNITIES OF THE PHILIPPINES	. 97
4.5 DETAILS ABOUT THE BIOLOGICAL IMPORTANCE, FUNCTION, CONDITION OF AND	
THREATS TO THE PHILIPPINES CORAL REEFS	
4.5.1 A description of the biological importance of marine resources	. 98
4.5.2. Details on the biological structure and functions of the coral reef of	
Philippines	
4.5.3 Threats to and general condition of the Philippine coral reefs	
4.6 DEMOGRAPHIC DETAILS: APO ISLAND	
4.7 THE LIVELIHOOD ACTIVITIES PRESENT ON APO ISLAND	104

4.8 T	HE HISTORY OF THE APO ISLAND MARINE RESERVE	105
4.9 T	HE REGULATIONS OF THE APO ISLAND MARINE RESERVE AND FISH SANCTUARY	IN
ORDE	R TO CREATE SUSTAINABILITY OF THE CORAL REEF	108
4.10	INSTITUTIONAL RECOGNITION AND PROTECTION OF APO MARINE RESERVE RULE	ES
AND I	REGULATIONS	111
4.11	COMMUNITY-BASED ORGANISATIONS OF APO ISLAND	113
4.12	UNRESOLVED ISSUES ON APO ISLAND	113
4.1	2.1 Problems relating to garbage on Apo Island	114
4.1	2.2 Population growth/health care/education situation on Apo Island	115
4.1	2.3 The increasing number of non-resident fishermen	116
4.1	2.4 The availability of fresh water and the disposal of sewage on Apo Island	116
4.1	2.5 The impacts of increasing tourism on the environment and community of A	Apo
Isl	and	117
4.1	2.6 Tension between fishermen and divers	118
4.13	MOTIVATING FACTORS FOR TOURISTS TO VISIT APO ISLAND	119
	ANNUAL REVENUE FROM TOURISM AND HOW IT IS DISTRIBUTED IN THE COMMUN	
		120
	4.1 Annual tourist income on Apo Island	
	4.2 The distribution of tourism income on Apo Island	
4.15	THE CLASH BETWEEN CONSERVATION AND DEVELOPMENT ON APO ISLAND	124
4.16	Conclusion	126
CHAP	FER 5: RESEARCH DESIGN AND METHODOLOGY	127
	JTRODUCTION	
	EVELOPMENTS WITHIN QUALITATIVE RESEARCH HE REASONS BEHIND CHOOSING THE SPECIFIC DATA COLLECTION METHODS	
	ARTICIPATORY RURAL APPRAISAL: DESCRIPTIONS AND RELEVANCE	
	4.1 A description of and a brief overview of PRA	
	2.2 The Relevance of PRA in development studies	
	RITIQUES ON THE PRA METHODOLOGY	
	5.1 Viewing communities as homogenous	
	5.2 The outsider/insider problem	
	5.3 Critiques on Participation	
	DATA COLLECTION TECHNIQUES USED IN THIS RESEARCH	
	5.1 PRA methods used in this research	
	5.2. A description of participant interviews used in this research	
	5.3 Triangulation	
	PECIFICS ABOUT THE DATA COLLECTION PROCESS	
	7.1 Interview schedules and observation schedules of data collection	-
	7.2 Dates and settings of data collection	
	TEPS TAKEN TO GAIN ACCESS TO THE RESEARCH FIELD	
	STABLISHING RAPPORT AND GETTING TO KNOW THE LOCAL CULTURE	
	THE SELECTION OF THE PARTICIPANTS OF THIS RESEARCH	
	DATA CAPTURING METHODS AND FIELDWORK PRACTICES	
	DATA ANALYSIS, INTERPRETATION AND DATA EDITING	
	MEASURES TAKEN TO MINIMISE ERROR AND TO IMPROVE THE QUALITY OF THE	
	ARCH	163

5.14 SHORTCOMINGS AND SOURCES OF ERROR OF THE RESEARCH FINDINGS	164
5.15 Conclusion	165
CHAPTER 6: PRESENTATION AND DISCUSSION OF DATA COLLECT	FED 166
6. 1 Introduction	166
6.2 TOURISM THROUGH THE EYES OF LOCAL RESIDENTS ON APO ISLAND	
6.2.1 Problems with development identified by the local community	167
6.2.1.1 The conflict between fishermen and tourists	168
6.2.1.2 Development increases the problem of garbage on Apo Island	175
6.2.1.3 Development contributes to the gradual destruction of the coral re	
6.2.1.4 Tourism disturbs the tranquillity on Apo Island	180
6.2.1.5 Effects of development on the local culture of Apo Island	181
6.2.2 Reflections on the positive effects of (tourism related) development on	Apo
Island	182
6.2.3 Opportunities for development as identified by the Apo local communi	ty 185
6.2.3.1 The preservation of the Apo Island coral reef as main priority of the	ne
community	
6.2.3.2 The experience and history of Apo Island in NRM, as an example	to other
coastal communities	
6.2.3.3 Dreams about the possibility of responsible tourism on Apo	
6.2.3.4 The potential of creating more income opportunities from tourism	187
6.3 THE ROLE OF APO COMMUNITY IN CREATING A SPACE FOR CONSERVATION IN	
TOURISM RELATED DEVELOPMENT	
6.3.1 Institutional measures taken to reduce tourism numbers on Apo Island	
6.3.2 Institutional measures taken on Apo Island to reduce dive sites	
6.3.3 Restricting the maximum number of divers in the Apo Marine sanctual	•
6.3.4 Reward incentives for conservational purposes on Apo Island	
6.3.5 Protecting the coral reef through local employment: an example of a	
sustainable tourism solution	
6.4 THE ROLE OF APO COMMUNITY IN INCREASING THE ECONOMIC BENEFITS FRO	
TOURISM	
6.4.1 The role of the local community in maximising economic benefits from	
on Apo Island	
6.4.2 The role of the local community in recognising incorrect pricing of go	
services in tourism and natural resources	
6.5 FACTORS WEAKENING THE ROLE OF THE APO ISLAND COMMUNITY IN CONTROL	
CONFLICTING INTERESTS BETWEEN TOURISM DEVELOPMENT AND CONSERVATION	
6.5.1 The positioning of the local community versus the private sector on Ap	
6.5.2 The positioning of the local community versus the academic partners i	
integration of conservation and development	208
6.5.3 Conflicting interests within the community of Apo Island	
6.6 CONCLUSION	
CHAPTER 7: SUMMARY AND CONCLUSIONS	213
7.1 Introduction	213
7.2 Research summary	213

7.3 GENERAL CONCLUSIONS OF THE RESEARCH DONE ON APO ISLAND, THE	E PHILIPPINES
7.4 INTERPRETATION OF RESULTS AND LITERATURE REVIEWED	
7.5 THE ROLE OF LOCAL COMMUNITIES IN THE ENHANCEMENT OF THE SUST	TAINABLE
DEVELOPMENT PROCESS	
7.5.1 The importance of the emphasis of strong (empowered) local con	•
sustainable development	223
7.5.2 The importance of local resource management on Apo Island	224
7.5.3 Strengthening local communities and their decision making in the	
economy	
7.5.4 Using technology to work towards sustainable development; the	Apo Island
case	
7.6 CONCLUSION	
CHAPTER 8: RECOMMENDATIONS	
CHAPTER 8: RECOMMENDATIONS A STRONGER ROLE OF THE LOCAL COMMUNITY IN INTEGR.	ATING
CHAPTER 8: RECOMMENDATIONS	ATING
CHAPTER 8: RECOMMENDATIONS A STRONGER ROLE OF THE LOCAL COMMUNITY IN INTEGR.	ATING 228
CHAPTER 8: RECOMMENDATIONS A STRONGER ROLE OF THE LOCAL COMMUNITY IN INTEGR CONSERVATION IN DEVELOPMENT ON APO ISLAND	ATING
CHAPTER 8: RECOMMENDATIONS A STRONGER ROLE OF THE LOCAL COMMUNITY IN INTEGR. CONSERVATION IN DEVELOPMENT ON APO ISLAND 8.1 INTRODUCTION	ATING 228 228 229
CHAPTER 8: RECOMMENDATIONS A STRONGER ROLE OF THE LOCAL COMMUNITY IN INTEGR. CONSERVATION IN DEVELOPMENT ON APO ISLAND 8.1 INTRODUCTION 8.2 ENHANCING THE ROLE OF THE LOCAL COMMUNITY OF APO ISLAND	ATING 228 228 229 229 229
CHAPTER 8: RECOMMENDATIONS A STRONGER ROLE OF THE LOCAL COMMUNITY IN INTEGR. CONSERVATION IN DEVELOPMENT ON APO ISLAND 8.1 INTRODUCTION 8.2 ENHANCING THE ROLE OF THE LOCAL COMMUNITY OF APO ISLAND 8.2.1 Strengthening the influence of the Apo Island community	ATING 228 228 229 229 229 233
CHAPTER 8: RECOMMENDATIONS A STRONGER ROLE OF THE LOCAL COMMUNITY IN INTEGR. CONSERVATION IN DEVELOPMENT ON APO ISLAND 8.1 INTRODUCTION 8.2 ENHANCING THE ROLE OF THE LOCAL COMMUNITY OF APO ISLAND 8.2.1 Strengthening the influence of the Apo Island community 8.2.2 The preservation of the local culture of Apo Island	ATING 228 228 229 229 229 233 sues in
CHAPTER 8: RECOMMENDATIONS A STRONGER ROLE OF THE LOCAL COMMUNITY IN INTEGR. CONSERVATION IN DEVELOPMENT ON APO ISLAND 8.1 INTRODUCTION 8.2 ENHANCING THE ROLE OF THE LOCAL COMMUNITY OF APO ISLAND 8.2.1 Strengthening the influence of the Apo Island community 8.2.2 The preservation of the local culture of Apo Island 8.2.3 The role of the Apo community in strengthening conservation iss	ATING 228 229 229 229 233 sues in 233
CHAPTER 8: RECOMMENDATIONS A STRONGER ROLE OF THE LOCAL COMMUNITY IN INTEGR CONSERVATION IN DEVELOPMENT ON APO ISLAND 8.1 INTRODUCTION 8.2 ENHANCING THE ROLE OF THE LOCAL COMMUNITY OF APO ISLAND 8.2.1 Strengthening the influence of the Apo Island community 8.2.2 The preservation of the local culture of Apo Island 8.2.3 The role of the Apo community in strengthening conservation iss development	ATING 228 229 229 229 229 233 sues in 233 oreneurial
CHAPTER 8: RECOMMENDATIONS A STRONGER ROLE OF THE LOCAL COMMUNITY IN INTEGR. CONSERVATION IN DEVELOPMENT ON APO ISLAND 8.1 INTRODUCTION 8.2 ENHANCING THE ROLE OF THE LOCAL COMMUNITY OF APO ISLAND 8.2.1 Strengthening the influence of the Apo Island community 8.2.2 The preservation of the local culture of Apo Island 8.2.3 The role of the Apo community in strengthening conservation iss development 8.2.4 Creating an environment that encourages tourism related entrep	ATING 228 229 229 229 233 sues in 233 sues in 233 preneurial 236
CHAPTER 8: RECOMMENDATIONS A STRONGER ROLE OF THE LOCAL COMMUNITY IN INTEGR. CONSERVATION IN DEVELOPMENT ON APO ISLAND 8.1 INTRODUCTION 8.2 ENHANCING THE ROLE OF THE LOCAL COMMUNITY OF APO ISLAND 8.2.1 Strengthening the influence of the Apo Island community 8.2.2 The preservation of the local culture of Apo Island 8.2.3 The role of the Apo community in strengthening conservation iss development 8.2.4 Creating an environment that encourages tourism related entrep opportunities	ATING 228 229 229 229 233 sues in 233 sues in 233 preneurial 236 ND CASE
 CHAPTER 8: RECOMMENDATIONS A STRONGER ROLE OF THE LOCAL COMMUNITY IN INTEGR. CONSERVATION IN DEVELOPMENT ON APO ISLAND. 8.1 INTRODUCTION	ATING 228 229 229 229 233 sues in 233 preneurial 236 ND CASE 237
 CHAPTER 8: RECOMMENDATIONS. A STRONGER ROLE OF THE LOCAL COMMUNITY IN INTEGR. CONSERVATION IN DEVELOPMENT ON APO ISLAND. 8.1 INTRODUCTION. 8.2 ENHANCING THE ROLE OF THE LOCAL COMMUNITY OF APO ISLAND	ATING 228 229 229 233 sues in 233 sues in 233 preneurial 236 ND CASE 237 239

ANNEXES

List of tables and figures

Figure1. The researcher swimming with a school of trevallies on Apo Island	10
Figure 2: Increase in international tourism arrivals in 2004, number in millions	62
Figure 3: Map of Apo Island, Dauin, Negros Oriental .	104
Figure 4: The three pillars of PRA	133
Figure 5: Problems related to tourism on Apo Island as mapped by participants from the local community	168
Figure 6: PRA exercises indicating that the destruction of fishtraps by divers are perceived as a problem by the community	172
Figure 7: PRA mapping: Too many divers disturb the marine life and fishermen on Apo Island	178
Table 1: An overview of the problems and opportunities related to tourism and groups assigned to activities	189
Table 2: Tourism numbers and income on Apo Island , 2003-2005	191
Figure 8. Participant observation	198

ACRONYMS:

APCODA	Apo Island Community Development Association
CBE	Community-based Ecotourism
CRM	Coastal Resource Management
CB-CRM	Community-based -Coastal Resource Management
CB-NRM	Community-based -Natural Resource Management
DENR	Department of Environmental and Natural Resources
ICDP's	Integrated Conservation and Development Projects
IDS	Institute for Development Studies
IPAF	Integrated Protected Areas Fund
MDG's	Millennium Development Goals
NGO	Non-Governmental Organisation
NRM	Natural Resource Management
PADI	Professional Association of Diving Instructors
PAMB	Protected Area Management Board

PRA	Participatory Rural Appraisal
PAR	Participatory Action Research
REAP	Rural Ecotourism Assessment Programme
RRA	Rapid Rural Appraisal
SEA	Social Environmental Assessment
SME	Small and Medium Enterprise
SSI	Semi-Structured Interview
UN	United Nations
WTO	World Trade Organisation

Chapter 1: Introduction

1.1 Introduction

This chapter is an introductory chapter to this research product, the goal of which is to introduce the reader briefly to the topic of this research and the methods followed in order to create it.

Apart from being a general introduction to this work, the further aim of this chapter is to describe the process of preliminary research done in order to identify the research problem, question and objectives dealt with in my research on Apo Island, the Philippines.

The specific aims of this introductory chapter will be reached by a discussion of the following points:

- my personal motivation for this study;
- the gradual development of the thesis idea ;
- how the research topic was derived from preliminary reading;
- how the research topic was further refined on location;
- the identification of the research problem and the research question;
- the research objectives;
- the importance and relevance of this research topic;
- a short introduction to the research design and methodology followed;
- a summary of the chapters comprising this report.

1.2 My personal motivation for the study



Figure1. The researcher swimming with a school of trevallies on Apo Island Photo: Big Mark, Apo Island

"The heart can think of no devotion Greater than being shore to the ocean...." (Frost 2006:1).

The ocean has always held a strange, fascinating power over me. This is the reason why I learned to dive. The beauty of the underwater has constantly created a longing in me that we as a human race should conserve this resource for future generations. I wanted my children and their children to be able to experience this miracle. At the same time during my pre- and postgraduate studies the issue of the conflict between conservation, development and livelihood of local communities fascinated me. The combination of these two passions formed the seed of the research done on Apo Island. I wanted to know what the impact is of divers, like myself, visiting the coral reef of a community whose livelihood is dependent upon its existence. I wanted to investigate how these local

communities perceive tourism and their activities and whether a win-win situation, often promoted in international tourism conferences and discussions, is indeed possible.

In order to identify the research topic, subject and question, a thorough preliminary research was first carried out. This is described in the following sections.

1.3 The gradual development of the thesis idea

Faced with the problems stemming from declining terms of trade for agricultural products and high levels of protection against manufacture, many developing countries have turned to tourism as a possible alternative source of growth (Sinclair 1997:1). Despite its increasing importance in development, tourism has attracted relatively little attention in the literature on economic development and development studies. More and more local rural communities in developing countries, with a comparative advantage for supplying natural resources such as wildlife or coral reefs, are turning to tourism for income (Sinclair 1997:1). However, more often than not this form of development is not managed in a sustainable way. The numbers of tourists that are consistent with the maintenance of a constant stock of natural resources, such as wildlife, plants, game, coral or fish, are frequently exceeded (Bell 1991, Hawkins and Roberts 1994) and leave the community in a situation where their means of livelihood are threatened.

Whilst brainstorming about a suitable theme for research, I made the basic assumption that if tourism is ever to be sustainable, the local community has to play a prominent role in managing tourism development in their local environment and community. Therefore, my interest focused on the *exact role* of a local community in controlling tourism activities as a form of development. Furthermore, I wanted to discover how socioeconomic benefits could be maximised for the community, whilst at the same time ensuring conservation of local natural resources. The idea of writing a thesis about this specific topic, based on a case study in a local community, grew gradually. It grew from my literature study, combining several factors to form the finalised research title. Looking for a suitable case study, I remembered the Apo Island community in the Philippines that I had visited in 2000. During this short visit, I was impressed by the community's conservational involvement and efforts for Natural Resource Management (NRM). I decided to obtain more information about the community-run Coastal Resource Management (CRM) effort of the community of Apo Island in the Philippines. Apo Island has been studied by several academics through the years tackling different subjects and producing various academic literature. Subsequently, it proved relatively easy to get access to literature on the Internet and through the local Silliman University.

After initial studies of this material, I became sceptical as to whether these materials reflected the current situation of community-life on the island. I decided to make contact with people living on Apo to verify the situation. Contact was established with a local tourist resort and via this contact, with the Barangay captain (village leader). Preliminary interviews were made via e-mail correspondence concerning the condition of the natural resource (the coral reef), the efforts to create sustainable resource-use and the pressing socio-economic problems and issues threatening the balance on Apo Island. Even at this early stage, one of the pressing issues that could be identified during preliminary research was the increasing pressure on the coral reef and the local community as a result of tourism.

My interest regarding the issues on Apo Island began to grow and regular correspondence took place with the contacts on Apo. In April 2003, I was offered a volunteer opportunity to work on Apo in a programme, which encourages environmental awareness and the development of skills amongst the local youth. This opportunity was one that would allow gaining experience in the field while at the same time giving me the chance to conduct an intensive qualitative case study or Participatory Rural Appraisal (PRA) research about a topical subject.

The discovery that the delicate balance between the fishing community and its coral reef was being threatened by growing tourism, gave birth to the idea of basing the research problem on this topic. It would combine development in specific relation to tourism,

Natural Resource Management (NRM), Sustainable development and empowerment of the local community. However, the research first had to be refined through preliminary readings. An overview of how the research topic was formed will be presented.

1.4 Deriving the research topic from preliminary reading

Initial literature that was studied included material on CRM with the focus on sustainable resource use. It comprised specific examples and case studies where local communities managed these resources. Throughout the year 2003 I continued reading widely around this theme. The readings refined my initial ideas and led me gradually to understand the exact research problem.

Feedback received directly from Apo (all within the framework of sustainable development theory), resulted in many issues competing for attention in this research. Stated differently, on Apo there were and still are many factors that were threatening to break up the current sustainability of the coral reef. These include population growth, lack of education, lack of alternative livelihood, the issue of development interests versus conservation interests, the possibility of fluctuating political leadership, corruption, poverty - to name just a few. These in some way or other, are all related to the field of development study and literature scans that will not be mentioned here, were done on most of these subjects. Finally, what turned my attention towards the integration of conservation in tourism - related development, was a gap in research surrounding this theme (this will be described in detail in chapter 3). Moreover, information on the global deterioration of coral reefs under the pressures of tourism and the role of the community in managing the tourism and its effects on the local natural resource appeared to be very scarce. More specifically, there was also a call for research concerning tourism pressures on Apo Island.

I have often wondered what influence my travels as a tourist and avid diver have had on local economies and natural environments. All over the world there are (coastal) communities existing in natural environments with a unique biological diversity, natural beauty or cultural richness, all factors that attract tourism. For such areas there are no

guidelines on how to combine tourism, conservation and sustainable development, nor what specifically the role of the local community should be. Many of these rural communities are living in poverty and because of misdirected tourism pressures, are struggling to find new ways of using their resources in a sustainable way.

Literature studies during preliminary research confirmed that an alternative form of tourism, "ecotourism" has become increasingly popular over the last decade. Ecotourism was created by conservation and development organisations looking for a means of generating an income from protected areas combined with tourists from richer countries looking for new experiences. According to Langoya and Long (1998:1), ecotourism can most significantly be seen as an opportunity for local people living in touristic destinations to gain positive benefits from the development of tourism together with the conservation of natural resources in these areas. However, as entrepreneurial opportunities related to tourism, such as accommodation or a restaurant service, are mostly capital intensive the majority of the benefits in development project in Las Bahias de Huatulco, Mexico, shows how many local residents failed to share the income and employment gains from tourism and moreover how they were adversely affected by rising inflation and the confiscation of their property for construction.

Megan Epler Wood (2003:3) argues that communities that have not developed a means to oversee or regulate tourism development, often feel they have lost the ability to do so; thus bringing with it negative environmental and cultural impacts. In such a case, the community loses its ability to determine the fate of their own people, which leads to a growing set of cultural impacts, socio-economic inequities and environmental problems. In this sense, there is a lack of integration between development and conservational activities. Norgaard (1994) emphasises the importance of the role that communities play in the future of sustainable development.

Examining this, I came to realise that it is of utmost importance that communities manage the benefits and activities related to tourism. Comparing the information I received from

the village head on Apo, it became clear to me that the community of Apo has, to some extent, lost control over the effects of tourism on their local coral reef. This indicated a possible need for new and effective research into this matter.

This is when the idea crystallised regarding a research product that would, through PRA exercises, create an indication of the future role for the inhabitants of Apo to manage tourism in their community. Related to this, I found that Gail Lash and Alison Austin (2003) designed the Rural Ecotourism Assessment Programme (REAP) in October 2003. REAP was developed as a tool for communities to assess their own attitudes, awareness, sensitivities and constraints and to develop a clear market assessment in regards to ecotourism. The aim was to help local communities to develop their own plan of action for sustainable ecotourism development within the framework of a viable market plan. REAP was designed as a method or model to assist rural communities in assessing their collective strong points and needs, to identify priority areas for economic development and to align these developments with the regional, national and international tourism marketplace. REAP was to be applied before a project of ecotourism is attempted, in order to see whether or not ecotourism is a feasible option for such a community. REAP does not however inform the local community of a clear role they should adopt in terms of how to manage and use ecotourism towards sustainable community development. Another drawback of the REAP toll is that it depends heavily on outsider skills for data collection. In addition, Apo was different to the case studies in REAP, to the extent that tourism was already present in the community. The challenge facing the Apo community was how to transform existing tourism and combine it successfully with conservation efforts as part of an integrated plan of action for sustainable development.

This proposal of looking into the appropriate role for the community to use tourism for community benefits and ensuring conservation simultaneously runs parallel to the development methodology of Participatory Rural Appraisal (PRA), designed by Robert Chambers. PRA increases the participation of local people by including them in determining the methods, questions, analysis, and use of the data, whereby they, not outsiders, are owners of the process and information. This will ensure that ecotourism

will be used, controlled, managed and evaluated by the community. It all becomes part of a process of empowerment in the local community. (Chambers 1994).

Other literature that was reviewed concerned the importance of coastal zones in natural eco-systems, the relevance of integrated management schemes and the fundamentals of building development solutions on indigenous knowledge. These will all be referred to later in chapter 2 and 4, but in the preliminary reading did not have a direct effect on the clarification of the research problem.

When I arrived on Apo Island my ideas regarding this research had developed in the way described above. It was my aim to use a qualitative research methodology for this research, allowing me to formulate and refine the research questions on location and not necessarily before entering the community. In this way I also ensured that the research would concentrate on a topical issue in the community and that it would address a theme that is relevant to the community of Apo Island. Hence, the refinement of the research problem further developed whilst I spent time in the community; this being a common characteristic of qualitative research.

1.5 The formulation of the research topic on location

The clarification of the actual research problem took quite a long time, as identifying an opportunity for research or a local problem within the field of Development studies is merely a foundation to producing an end result that has an actual added value for the local community.

Whilst tourism is often promoted as the "saviour" for poor rural communities rich with natural resources to reach a sustainable form of development (Sinclair 1997:1), many communities are not equipped to manage this tourism effectively. This was also the case on Apo Island. Finally, after spending two months on Apo Island and seeing the different socio-economical and conservation issues from a local perspective, it confirmed to me that the challenge of managing tourism as a form of " development" and integrating this

with existent conservational efforts was indeed a very pressing issue. Moreover, many locals found tourism increasingly disturbing.

Research scope:

It could be said that most of the socio-economic problems on Apo could be linked to tourism, either directly or indirectly. In a certain way we could say that these problems are all interrelated. Yet, to look at all of the problems related to development and poverty alleviation on Apo Island in a single research, would be too broad and subsequently ineffective. Therefore one specific research theme had to be chosen. The choice of the research question fell on the delicate balance between tourism related development and conservation and the specific role of the community in combining these two. The reason for this is threefold.

- After I spent some time in the local community doing informal interviews, this theme emerged as an issue that needed to be addressed as soon as possible.
- Triangulation sources written by other academics and students indicated this to be a gap in the research on Apo Island.
- Personal interest and considerations: as an enthusiastic diver and tourist myself I was curious about the effects of my interaction on local communities and the natural environment that these activities are based on.

Naturally, there was much talk about the topic on Apo. In summation, it could be said that the community on Apo was indirectly already occupied with the process of looking for a solution to the challenges posed by local tourism. At this point the final topic matured. The aim was to follow this process that was taking place within the community of Apo Island. The process would be followed by observation, talking to and interviewing locals. Additionally PRA exercises were required to clarify the future role of the community in the minds of the people themselves. Afterwards the results would be represented in a dissertation.

Whilst looking deeper into the links between sustainable development and conservation, and the effects of tourism and the involvement of the community herein, my curiosity

moved towards the question of the responsibility in a poor rural community to regulate and manage tourism in the correct way. It was my aim to make the research product reflect life as seen through the eyes of the local community of Apo and therefore the research question had to focus on the role of the community in regulating this process described above.

1.6 The statement of the research problem and research questions

The main problem that this research addresses is ever-increasing tourism and its pressures on both the people and the natural resources of Apo Island. As will become clear in this research product, the community of Apo Island has taken several steps to prevent further damage through tourism to the coral reef: mostly without success. The problem analysis is that tourism (as a form of development) is threatening conservational activities taken by the community to preserve the coral reef. Moreover, the tourism related socioeconomic benefits as a means to eradicate poverty for the people of Apo Island, are still minimal. In short, the tourism situation on Apo Island is unsustainable.

Subsequently, the question of the assignment of responsibility arises: who is responsible for changing this situation in reality? Is it the national, regional or local government, the private sector or is it mainly the local community themselves that should be held accountable? My interest mainly was to determine the existing situation in regards to tourism and what the role of the Apo community in influencing and changing it.

In line with this research problem, the research was conducted, analysed and interpreted within the framework of the following research question:

Given the current situation of tourism on Apo Island, what is the role of the local community of Apo Island in influencing the direction of tourism related development and conservation in their local environment?

Derived form this question the following research objectives can be identified:

1.7 A description of the research objectives

The aims and goals of this research can be summarised as follows:

- to describe the scenario of tourism and development as perceived by the local community of Apo Island and its implications for conservation;
- to discuss the linkages between sustainable development and tourism. To identify the role and responsibilities of a local community in managing tourism, through an in-depth case study on Apo Island;
- to identify some important weaknesses in the specific role of the community of Apo Island in the management of tourism;
- to suggest an appropriate, possible role for the community of Apo Island in the planning, management of tourism related development for the future (through recommendations).

It is important to know what relevance a specific study has globally and locally, both on an academic and practical level. Stated differently, what is the use of this research, why have I spent so much time and effort on it? Alternatively it is also important that a researcher has a passion for the research that he/she is doing in order to have the determination to successfully complete the whole research cycle. My personal motivation for this research has been dealt with in section 1.2, whilst the important questions related to the relevance of this research will be answered in the following section.

1.8 Why this research is important

A fragile ecosystem: marine resources

The current state of the global marine environment is alarming. Worldwide destruction of coral reefs and other marine ecological systems are a result of over-fishing of international waters combined with illegal methods such as dynamite and cyanide fishing (Beger, Harborne and Raines 1998: 1). Certain countries such as Thailand, Hong Kong and Japan hunt some species, like sharks, because they are seen as delicacies. As a result of a combination of the above factors, biodiversity is irreparably unbalanced, in turn driving some marine species to extinction. Science magazine (2006:721) reported that at current rates of diversity loss, an analysis indicates that there will be no more viable fish

or invertebrate species available to fisheries by 2050. However, the results also show that the trends in loss of species are still reversible.

Coral reefs, seen as the nurseries of juvenile fish, are also endangered through destructive fishing methods. This can be seen as a direct threat to the food security of people who are dependent on marine resources for their daily food-intake in the developing world. At the same time tourism in countries with coral reefs can also lead to the destruction of the marine environment. This is the result of a series of different factors: construction near shorelines resulting in silt building up, waste generation or unregulated tourist activities such as snorkelling, diving and jet-skies.

The relevance of this research to other communities worldwide

If an appropriate role for the local community of Apo can be formulated in this research, other coastal communities in the area and even in other developing countries might use the outcome. This case study can serve as an example to other communities in order to suggest ways and means to plan, manage or change tourism in such a way that they will achieve the maximum economic and social benefits from tourism. These dissemination possibilities will, however, not be in the scope of this research project.

This research's aim was to create a clear overview of the specific role of balancing tourism development activities and conservation for a specific local situation. It was the intention of this research that the outcome would help the community of Apo to remember that their natural resource should be used in a long-term and sustainable way. This would imply that not only would the coral reef be preserved as the main source of livelihood for future generations, but also that most of the revenue generated from tourism would flow back to the local community and thereby limit pressures of fishing activities on the coral reef. In summation, this research is specifically relevant to the community of Apo Island and was purposely designed to stimulate and facilitate the process of finding a solution to tourism related problems and the appropriate role for the community of Apo in this process.

The academic relevance of this research product

The importance of conservation within the discussion of development studies and more specifically related to the development of tourism is one that this research addresses.

1.9 Research design and methodology followed

Unit of analysis: the object of the study

The unit of analysis refers to what entity, object, phenomenon, process or event is being investigated (Mouton 1996:51). The unit of analysis for this research is the role of the community of Apo Island in combining conservation and (tourism) development. In order to be able to study the unit of analysis as effectively and intensively as possible it asks for a research design that fits the unit of analysis, the research question and the local specific situation properly. Then, methods can be designed, actions and timeframes planned accordingly.

The research design that has been developed and used during this qualitative research is a flexible one. This was done with theoretical reference to an adaptive approach: it could be changed as new events, data discovered, and opportunities or problems arose. The full details of the research design concerning new science methodology, stages and time frames will be discussed in chapter 3, but in this introduction it is appropriate to present a rough indication of how the research design was planned and the methodology followed in the field.

The research was to be a qualitative, descriptive study where through PRA-methods the goal was to create a real-life case study following a research question. This meant that an extremely important stage in the research was to establishment rapport. Sufficient time was allowed for this in the design and with hindsight this was definitely the most important stage. In short, this established rapport could be seen as the cement that holds the whole research together.

Target groups were identified whilst doing preliminary reading, but were later adjusted. In the design, the plan was to work with as many participants as possible, in order to get an overview of the whole community. The research design was flexible. I planned to spend a period of 10 months on Apo Island and had sufficient time to gather knowledge on the situation locally and then adjust the design accordingly. The following research techniques for data collection were chosen: unstructured and Semi Structured Interviews (SSI's), the mapping and matrix exercises related to PRA-techniques, participant observation and triangulation. These will be described in detail in chapter 5. After data was collected it would be analysed on a superficial level on location, in order to allow for changes in research techniques when new patterns or information arose. After returning from location, further in-depth data analysis was to take place. This is along the data analysis guidelines of Rubin and Rubin (1995).

A literature study was done before going on location in order to write the research proposal for this thesis. I knew that the research problem would evolve and clarify whilst time passed on Apo and therefore that a more in-depth literature study should subsequently take place. On Apo this was impossible, because there is no access to libraries or the Internet. On the mainland of Negros, however, there was a local university that I hoped could provide some literature. For this reason it was planned in the design to do an additional literature study when I returned from Apo Island in January 2005 in order to provide for the new directions my research followed whilst on location. Data interpretation and the final research thesis would follow. The writing and completion of this work took longer than I initially planned, due to factors beyond my control, concerning academic guidance.

A timeframe was constructed to plan the separate stages of the research; this will be looked at in detail in chapter 5. This chapter will now be concluded by a brief discussion of the definition of key concepts used in this study.

1.10 A definition of key concepts of the study

For a thorough understanding of the research question stated above it is important at this moment that the concepts of local community and sustainable tourism are clear to the reader. Other important concepts that required definition will be defined where they appear in the text for the first time.

Local community

Agrawal and Gibson (1999: 633) argues that many supporting the importance of the "local community" in conservation and development, views the community as a unified, organic whole, ignoring differences, viewing them as homogenous with common interests and common views, and indicates the weaknesses of these approaches. Therefore, when talking about a "community" in this thesis there must be understood that it is defined as the collective of multiple interests and actors within the community, together with internal and external institutions and community organisations that shape the decision-making process of the given community. Therefore, when this term is used, it steers away from the concept of the "mythic community" or soft term community and includes institutions, which, leads to a substantially different focus for locally oriented conservation policies (Agrawal and Gibson 1999:638).

Sustainable tourism

Tourism which is developed and maintained in an area (community, environment) in such a manner and at such a scale that it remains viable over an indefinite period and does not degrade or alter the environment (human and physical) in which it exists to such a degree that it prohibits the successful development and well-being of other activities and processes (Butler 1993:29).

Sustainable development¹

1.11 A forward glance at this thesis

This thesis will be continued with a presentation and discussion of literature. Chapter 2 will deal with the theme of the integration of development and conservation with specific reference to sustainable development. The second theoretical chapter, chapter 3, will discuss NRM related to tourism related development. In chapter 4, a detailed exposition

¹ For a definition of sustainable development please refer to section 2.2 for a detailed discussion.

of the history and current situation of Apo Island will be given. This chapter will focus on an overview of the Apo community, problems and issues in the community and the long road towards conservation and development. It is the aim of this chapter to familiarise the reader with the Apo community. Following this, chapter 5 will focus on the clarification and in-depth discussion of the research design and methodology followed. Chapter 6 presents the results of data collection and a discussion and interpretation thereof. In chapter 7 conclusions will be made and in chapter 8 recommendations provided.

This thesis is a description of the process of the Apo community searching for a balance between increasing development and conservational interests. It looks critically at the role of the community as a central point of this research. The research does not aim to create a solution, but was recorded to reflect events as they took place. This inevitably means that data will be presented in mostly a qualitative way, rich in narrative. When possible, quantitative data has also been included. The aim of this research product was to present the data in such a way that it reflects the daily issues and problems on Apo as seen through the eyes of locals living in the community.

Chapter 2: Towards integrating conservation in development: a discussion of sustainable development

"Only after the last tree has been cut down. Only after the last river has been poisoned. Only after the last fish has been caught. Only then will you find that money cannot be eaten."

- Cree Indian Prophecy (Wikipedia 2007:1)

2.1 Introduction

40 years ago when looking at the above quote, one might have thought that the situation sketched is unthinkable. Today, with the environment nearing a state of collapse, the reality of such a possible situation has become much more topical. The state that the environment is in today and the magnitude of the problems related to human society including the wide-reaching suffering from poverty and diseases such as HIV/AIDS, call for much needed attention. "The world is sinking deeper into poverty and ecological decline, notwithstanding the increase of wealth in some specific places. As though nothing had happened, the world continues to head for small and large disasters" (Sachs 2002:11).

The awareness and discussions of this environmental and humanitarian crisis are mainly concentrated around the popular term, "sustainable development". As the title of this chapter suggests, this chapter will focus on the importance of the integration of conservation in development and what it means for sustainable development and development studies in general. Therefore, this chapter will start with giving a *brief* discussion of the understanding of the concept of sustainable development, which has proven to be notoriously hard to define. The reason for this is that there are various contrasting definitions, some of which will be presented in this chapter. Furthermore, this chapter will look at new movements in different viewpoints on sustainable development and identify what this means for the future. As the definition of sustainable development

and description of the different viewpoints is not the main goal of this chapter, the discussion is not an in-depth one and only the most important issues of relevance will be highlighted.

The focus of this chapter will be to argue that the developments in the recent past concerning sustainable development have been *narrowing the gap between development and conservation*, but that this situation is still far from ideal. The goal is to create awareness of the main outstanding "focus points" for bringing development and conservation closer together. One of the issues that will become clear is the importance of the central role of local communities in fortifying sustainable development in practice, hence linking the discussion directly to the research question of this study.

Therefore, this theoretical chapter consists of the following sub-sections:

- the evolving definition and meaning of sustainable development;
- a description of some of the most significant viewpoints on sustainable development (distinguishing between the developmental and ecological views with their different sub-views);
- how to make sustainable development work and bringing development and conservation closer together;
- conclusion.

The first section of this chapter is to discuss the meaning of sustainable development as a background to this thesis. This will be done in the next section.

2.2 The evolving definition and meaning of sustainable development

Sustainable development means something different to me than it means to you. Everybody's definition of sustainable development that he finds acceptable depends on his history, his socio-economical position in daily life, or his theoretical outlook on world-issues. Others, such as the poor living in rural areas, who are often the "objects" of discussion in sustainable development debates, have never even heard of this terminology. Although it has become a popular term only in the recent past, sustainable development is not a new idea. Since the publication of the report, *Our Common Future* (World Commission on Environment and Development 1987), "sustainable development" has become an umbrella discussion term as well as a goal in both the fields of development and conservation.

This does not mean that the discussion on the durable use of natural resources is something from the recent past. Many cultures over the course of human history have recognised the need for harmony between the environment and human beings. The Indians in North America have long emphasised the importance for humans to live in balance with the environment. As illustration, the following is a famous quote of Chief Seattle (1786-1866).

"Will you teach your children what we have taught our children? That the earth is our mother? What befalls the earth befalls all the sons of the earth? This we know: the earth does not belong to man, man belongs to the earth. All things are connected like the blood that unites us all. Man did not weave the web of life; he is merely a strand in it. Whatever he does to the web, he does to himself" Chief Seattle (Barefootsworld 2007:1).

Yet, in the world that we live in today, the topicality of sustainability has become bigger; examples of environmental decay, destruction and increasing industrialisation define our current environment. What is new about sustainable development is the expression of these ideas of harmony and balance in the context of national and global societies and economies (Sustainable Development Gateway 2006:1).

In reality, the concept of sustainable development has proven difficult to define. Of course, no consensus on one single definition or the actual meaning of the term in theory or practice can be reached. The definitions and viewpoints are multiple and reflect the widespread difference in the schools of thought behind these views. Moreover, during certain periods, the accepted general mainstream definition leans more towards either development or conservation, causing the concept to evolve with time, as we will discover below.

In 1972 "*The limits to Growth*" was published by the Group of Rome, an international group of scientists and businessmen, who out of concern about the state of the world during that time advocated the ideas of the limits to economic and population growth. This report pleaded for an international equilibrium, a rational and sustainable state between population and "capital" (Club van Rome 1972:202). Building on this development, a publication that was released in The Ecologist, named *Blueprint for Survival* is also worth mentioning. The document commences with the following critique: "The principle defect of the industrial way of life with its ethos of expansion is that it is not sustainable" (Goldsmith, Allan, Allaby, Davoll and Lawrence 1972:15). The solution indicated in the *Blueprint* consisted of " decentralised, self-sufficient communities in which people work near their homes, have the responsibility of governing themselves … and consisting out of real communities" This means that as early as 1972 the role of the local community has been stressed for a durable future.

However, in the most frequently quoted definition of sustainable development in the report, *Our Common Future*, (also known as the Brundtland Report) the importance of communities or any emphasis on the inherent rights of the natural environment, has been eliminated. The definition reads as follows:

"Sustainable development is development that meets the present without compromising the ability of future generations to meet their own needs" (WCED 1987: 43).

Does this mean that this narrow, people centred definition of sustainable development is generally accepted in the field of development studies? In the Brundtland report, the WCED also defines sustainable development as a constant process of change. However, the harmony between humans and the inherent rights of the natural environment are hardly mentioned in its definitions, for example:

"Sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations" (WCED 1987:49).

An improved and more integrated definition can be found in *Caring for the Earth; a strategy for sustainable development* (IUCN, UNEP and WWF 1991) was published. In this report there is not only dialogue about sustainable development, but also about the meaning and importance of a sustainable society and moreover a sustainable economy. For the first time the idea of a non-developmental view is introduced. It is also noticeable that specific attention is given to the restructuring of human society and the importance of the community and cultural diversity, a theme that is central in this thesis of which the contextual relevance will become clear to the reader at a later stage. The following two quotes from the document illustrates this clearly:

"Every human being is part of the community of life, made up of all living creatures. This community links all human societies, present and future generations, and humanity and the rest of nature. It embraces both cultural and natural diversity. Every life form warrants respect independently of its worth to people. Human development should not threaten the integrity of nature or the survival of other species. People should treat all creatures decently, and protect them from cruelty, avoidable suffering, and unnecessary killing. The protection of human rights and those of the rest of nature is a worldwide responsibility that transcends all cultural, ideological and geographical boundaries. The responsibility is both individual and collective. (IUCN et al 1991:14)".

"The guiding rules are that people must share with each other and care for the Earth. Humanity must take no more from nature than nature can replenish. This in turn means adopting lifestyles and development paths that respect and work within nature's limits. It can be done without rejecting the many benefits that modern technology has brought, provided that technology also works within those limits" (IUCN et al 1991:8).

I support these definitions of sustainable development in *Caring for the Earth*. In my opinion it is important to shape the human way of living to the limitations that the environment has; moreover we have been exceeding these limitations for quite some time.

We have to make use of current technologies in support of this shaping our livelihoods to the natural environment.

In 2002, at the Earth Summit on sustainable development held in Johannesburg, *The Plan of Implementation* was the most important document negotiated and signed by countries attending it. If one looks at those parts concerning biodiversity, for instance, governments agreed to cut significantly by 2010 the rate at which rare animals and plants are becoming extinct. Yet, the plan does not set specific targets and the wording does not inhibit countries from pursuing development projects that contradict these conservation goals (BBC News 2006:1). Concrete procedures for this, structures and targets are still left wanting, making it very unlikely that the goal will be reached. This is, in general, an important learning point; very often goals are set without looking at the practical, concrete steps that have to be taken in reality.

Therefore, it is important for a working definition of sustainable development to incorporate realistic conservational and developmental issues in its definition and give guidelines of how this should be reached. An example of this is this definition provided by Mintzer:

"Sustainable development implies economic growth together with the protection of environmental quality, each reinforcing the other. The essence of this form of development is a stable relationship between human activities and the natural world, which does not diminish the prospects for future generations to enjoy a quality of life at least as good as our own. Many observers believe that participatory democracy, undominated by vested interests, is a prerequisite for achieving sustainable development" (Mintzer, 1992:1).

The most effective definitions of sustainable development in my view are those that inevitably link sustainable development to a more responsible society. In the words of Kamal Hossain (1995:20):

"A sustainable society implicitly connotes one that is based on a long-term vision in that it must foresee the consequences of its diverse activities to ensure that they do not break the cycles of renewal; it has to be a society of conservation and generational concern. It must avoid the adoption of mutually irreconcilable objectives. Equally, it must be a society of social justice because great disparities of wealth or privilege will breed destructive disharmony". This definition indicates the importance of not only focusing on conservation, but that it is equally important that development works towards poverty alleviation.

Finally, a very complete and integrated definition of sustainable development in my view was given by Goodland and Ledoc (1987:20) as:

"Sustainable development is defined as a pattern of social and structured economic transformations (i.e. development) which optimises the economic and societal benefits available in the present, without jeopardising the likely potential for similar benefits in the future. A primary goal of sustainable development is to achieve a reasonable (however defined) and equitably distributed level of economic well-being that can be perpetuated continually for many human generations."

Sustainable development implies using renewable natural resources in a manner, which does not eliminate or degrade them, or otherwise diminish their usefulness for future generations... Sustainable development further implies using non-renewable (exhaustible) mineral resources in a manner, which does not unnecessarily preclude easy access to them by future generations... Sustainable development also implies depleting non-renewable energy resources at a slow enough rate so as to ensure the high probability of an orderly society transition to renewable energy sources``(Goodland and Ledoc 1987:20).

Even though this definition could be said to be utopian, the issue of moving to renewable energy resources is very topical today. New technology for the provision of renewable energy involves extraction from sources such as wind, water, solar and biomass and is developing daily (Science Daily 2006:1). In the above discussion of the developments and different definitions of sustainable development, a broad spectrum was created. This also indicated that there is some truth in what Norgaard (1994:20) argues, namely that the possibility of defining sustainable development operationally should be dismissed and that the focus should rather be on a "sophisticated exploration of the difficulties of organising for sustainable development". This means there should be a general focus within the debate towards how we as a human race should organise ourselves, our society and our institutions to move towards a sustainable future.

Sustainability, when seen in the way as described by Norgaard, can be seen as a call for hope. It proposes a design of a future society where deterioration of the environment and social inequity will be avoided in a sustainable way. It asks for a feeling of responsibility and actions that intend to improve the social, ecological and economical crisis that many are having to endure today (Harding 1999:5). It is important also to remember that sustainable development is a process and not a constant state, and it does not imply that the population or economic level of operation becomes static (WCED 1987:200). This is a view that I fully support.

We have seen in this section that the meaning of sustainable development has not been static over the years; it has been evolving. This we can see when looking at the above definitions that were roughly organised in chronological order. Sometimes the mainstream reflects the focus on development and the welfare of human beings, whilst at other times the ecological conservationists view has been stronger. Besides these mainstream views accepted on the international political agenda, one can find multiple definitions and viewpoints reflecting the widespread difference in the schools of thought behind these views.

If one looks at the debate, it is clear that there has been a general acceptance that regardless of one's outlook, new physical and social evidence forces one to agree with the very concept of sustainable development. An overview of some different views will be presented in section 2.3 where interpretations of sustainable development relevant to this thesis will be outlined. It is my view that regardless of these many points of view it is fundamental for the practicality of sustainable development to reach some sort of consensus on a set of basic principles and values that can guide the actions of people and institutions towards sustainable development practices. This will be discussed in section 2.6. The next section will turn the reader's attention to the different interpretations of sustainable development by a selection of the wide variety of schools of thought in development studies.

2.3 An exposition of some of the most important views on sustainable development

In this section an exposition of some of the views on sustainable development will be given. The literature is structured in a way that the researcher found logical, not according to any pre-defined division that can be found in existing literature studies. The reason why this was done is that it is important for a Masters student to be able to challenge orthodox theory and suggest new approaches (Cornwell, de Beer, Stewart, Swanepoel and Treurnicht 2005:6).

It was my choice to group the views on sustainable development by adhering to a specific guideline, whereby the division was made according to the answer to the following question:

What is the solution to the problem analysis of the existing crisis in nature?

All views look to either development or conservation as the main solution to the environmental crisis. Some, as will be seen below, do recognise that the accent is a disturbance between humans and nature, thus combining both, yet the main solutions will still fall under either development or conservation. In this section the views on sustainable development will be classified as falling under either of the next two streams.

The development stream (development as solution to the problem analysis).
 The ecological stream (conservation as solution to the problem analysis).

These two main groups can, in turn, be subdivided into different viewpoints.

2.3.1 The development stream

Central to the development stream is the starting point that there is a difference between human and non-human nature and the value thereof. Human beings are seen as the only resource with inherent value, in the sense that every non-human thing is given a value according to its role in the satisfaction of human desires. These human desires are not only material desires, but can also be aesthetical, spiritual or scientific values (Achterberg 1994:12). An example of this is that, for instance, coral reefs should be preserved for the pleasure of future generations to enjoy whilst diving or for its medicinal value in preventing cancer. Dozens of promising products from marine organisms are being advanced, including a cancer therapy made from algae and a painkiller taken from the venom in cone snails (Bruckner 2006:1). An example of such an argument will be as presented by Bruckner (2006:1) that this potential importance of coral reefs as a source of life-saving and life-enhancing products, is a "powerful reason for bolstering efforts to protect reefs from degradation and overexploitation and for managing them in sustainable ways". Therefore, in order for a coral reef to be preserved it means that in the development viewpoint, there must be a use for it by human beings for it to "deserve" being protected and not exploited.

These development views do not necessarily imply that human beings are allowed a free hand and can morally do to nature randomly as they wish. It must be remembered that they still are viewpoints on sustainable development and are recognised as such. The different viewpoints range in how this issue of morality is approached. However, in the development view, nature does function as an object of resource, which still means that we are dependent on it, and as a result of this have different indirect or direct values about our responsibilities towards the resources (Achterberg 1994:12). These responsibilities that humans have will differ for each of the different sub-categories within the development stream.

34

What follows in this section is a discussion of the different views in this development stream that I would like to bring to the attention of the reader.

- The techno-centric viewpoint.
- The alternative development viewpoint.
- The co-evolutionary viewpoint.

According to Treurnicht (2004:145) the above-mentioned viewpoints are mostly based on development interests although some linkages from the ecological viewpoints to sustainable development can be identified.

2.3.1.1 Techno-centric viewpoint

In this approach sustainable development focuses on mankind and development. At the heart of the solution of the environmental problem lies the central role of economies operating at its most efficient (at optimum levels), whilst the environment will follow with indirect benefits and adjust to it accordingly.

The Brundtland report from 1987 was written from a techno-centric point of view. Andrew Steer, the team leader of the group that prepared The World Development Report also corroborates this view in the article "*The Environment for Development*" in Finance & Development:

"The belief that greater economic activity inevitably hurts the environment is based on static assumptions about technology, tastes and environmental assumptions. In reality, however, the relationships between inputs and outputs and the overall effects of economic activity and the environment are continually changing" (Steer 1992:18).

Munasinghe (1993a:16) describes the goal of sustainable development according to the techno-centric viewpoint as the maximisation of the net welfare of economic activities, while maintaining or increasing the stock of economic, ecological and socio-cultural assets over time and at the same time providing a safety net to meet basic needs and protect the poor. "Environmental economics contribute to this search by helping to incorporate environmental and social concerns into economic decision making" (Munasinghe 1993a:16).

The central role that the maximisation of economic growth plays in this viewpoint can be easily identified. Solutions and answers are looked for not in limiting the economic growth of today, but rather in the new possibilities that modern technology can offer².

Professor Bjorn Lomborg, with his controversial book, *The sceptical environmentalist* (Lomborg 2001), is leading the more radical techno-centric debate today. Lomborg's view reflects the notion that out of science and human ingenuity will raise the solution to our environmental problems through economic pressure. In short, the theory is that nations should focus on building a strong economy first, disregarding the environment and only when they have the luxury of thinking about environmental issues, they should address them. Humans are seen as the superior species that have all the rights to make use of all other species in nature to their best benefit.

In my opinion the techno-centric view on sustainable development lacks overall integration of the environment in its model for sustainability. The focus is so much on economic development, the general role of modern technology and the right of human beings that it does not acknowledge the fundamental role that human beings have to play in restructuring the current situation in order to prevent a total collapse of nature and thus, human beings themselves. The viewpoint described in the next section, does take this into account.

2.3.1.2 The alternative development viewpoint

The alternative development view or populist model for sustainability rejects the strong emphasis on economic growth and the important role that technology has to play in finding solutions to the current environmental problems.

New solutions such as changing the present consumption levels and patterns that are unsustainable (Wackernagel and Rees 1996), altering the quality of values and life

² Please refer to section 2.6.4 for more information of how technology can be used to enhance Sustainable Development.

(Trainer 1990) and the important role of small-scale entrepreneurs in local economic development (Stronza 2001) are presented as the answer to our problem analysis.

Others viewpoints grouped under this section include:

- those that highlight the importance of moving away from the blueprint approaches to development projects to the realisation of the importance of indigenous knowledge and
- popular participation.

For instance, Korten (1984) maps out that development projects nearly always operate with limited knowledge, in environments that are constantly changing. Therefore it is futile to adopt a blueprint model which forces one to behave as if one had perfect knowledge in a perfectly stable setting. The realisation that indigenous practices and systems have evolved through generations of informal experimentation is widely recognised. These practices often are better adapted to the limitations and potentialities of fragile environments and are therefore important to understand (Gibbon, Lake and Stocking 1995:52).

The realisation has slowly dawned on professionals in the development field that the real experts in people's own situations are the residents themselves with their unique local knowledge (Turner 1996:343). In his book, *Whose reality counts? Putting the first last* (1997) Chambers describes how the most important lesson to work in the development field and facilitate learning about indigenous knowledge practices is that learning to listen is one of the most valuable lessons to be valued.

In the following list the characteristics of the alternative development are summarised.

- Sustainable development cannot be obtained through striving towards macroeconomic growth, but rather through the empowerment of local groups at grassroots level (Korten, 1984).
- Local knowledge systems are used in order to empower local groups to combine development and the conservation of nature (Chambers, 1993: 1997).

- The role of small-scale entrepreneurs in stronger local economic developments in order to redistribute wealth more fairly and equally (Stronza 2001, Treurnicht 2004:155 and Wackernagel and Rees 1996).
- A strong focus on the importance of social and cultural systems (Treurnicht 2004:155). This is related to the work of Chambers (1993, 1997) described above. It becomes important for development projects to "listen" to the realities of the people living in local communities.

2.3.1.3 A description of the Co-evolution view to sustainable development

The co-evolutionary view to sustainable development is relatively unique as it places emphasis on a co-evolutionary perspective where different ecological systems evolve together. (Norgaard 1994, 1992, 1988). Norgaard explains (1994:36,46) that the coevolutionary view indicates that many aspects of environmental systems are the result of human interventions and interactions over millennia. Nature can be seen as social by incorporating how people have put selective pressure on the biosphere. "Similarly, it emphasises how societies are natural".

In his book, *Development betrayed: the end of progress and a co-evolutionary revisioning of the future*, Norgaard (1994) introduces the concept of co-evolution and describes those aspects of human society and human attitudes that will need to be changed if we are to move towards a sustainable future. "The modern explanation of history links development to control over nature and to environmental interventions which necessarily reduce the naturalness of the environment. ...the division between natural and unnatural is embedded in our modern understanding of nature and development rather than in reality" (Norgaard 1994:36).

Norgaard's critique on the modern society can be summarised as follows:

- Irresponsibility: "Firstly, ... during the nineteenth century .. Western and westernised peoples lost much of their sense of responsibility for the earth and for future generations" (1994: 50).
- Moral emptiness: "Secondly, ... our image of the future has little if any moral vision. Progress has become vacuous" (1994:50).

• Cultural homogeneity: "And thirdly, the Western image of the future has been culturally homogeneous....In the modern view of progress, cultural diversity has been seen not only as a temporal phenomenon but as evidence that sufficient progress has not yet occurred" (1994:50).

Norgaard further explains that accelerating progress through planned development has been the recent project of modernity. "Modernism betrayed progress by leading us into, preventing us from seeing and keeping us from addressing interwoven environmental, organisational and cultural problems" (Norgaard 1994:2). He (Norgaard 1994:15) also explains that environmental problems are problems of social organisation and that sustainability can only be reached if we reorganise our society and communities. He endorses the importance of real communities (1994:164) and proposes a co-evolving patchwork quilt of different cultures. We should strive to live constructively within different cultures, not competing for the same resources and assaulting the environment with the "same, best technologies". Rather we should aim for a mosaic of cultures dependent on different resources through the use of diverse technologies and social organisation in order to produce products for consumers that need different things (Norgaard 1994:175). Alternatively, the interwoven nature of this view sees our human systems as operating within the larger eco-system and being crucial for achieving a sustainable relationship with the environment, and assuring our own species' continued survival on the planet. This view is one that I support and moreover it also emphasises the changed role of local communities in order to reach sustainability.

As apposed to these above mentioned development views, the ecological stream considers conservation as the principle way to obtain sustainability.

2.4 The Ecological stream to sustainable development

The eco-centric views primarily all start with the vision that natural entities have the freedom and right to develop themselves and function independently without the interference of human beings (Achterberg 1994:13).

There are several viewpoints to sustainable development with ecology as a starting point that can be divided in the following categories. Treurnicht (2004: 79-105) identifies the following categories in the ecological stream:

- the Deep Ecology view;
- the eco-feministic view;
- social ecology;
- the shallow ecological view;
- the Gaia view.

Here, a selection has been made that will be discussed: the Deep Ecology movement (as founded by Arne Naess) and the Gaia movement as described by Fritjof Capra as a subcategory of the overall umbrella of Deep Ecology.

2.4. 1 A description of the Deep Ecology viewpoint

The father of the movement of Deep Ecology, Arne Naess introduced the concept of Deep Ecology as early as 1973. Arne Naess (1989) explained that the flourishing of human and non-human life on earth has intrinsic value and that the value of non-human life forms is independent of the usefulness these may have for narrow human purposes. Richness and diversity of life forms are values in themselves and contribute to the flourishing of human and non-human life on earth (Naess 1973; 1975).

This view serves as an antithesis for the development views and particularly technocentrism. The philosophical studies in the West have often ignored the natural world and ethics have focused on human values. An approach, which emphasises eco-centric values, can be seen as a response to this, being the foundation of the Deep Ecology movement (Drengson 1999:1).

The Platform Principles of the Deep Ecology movement are listed below.

 The well-being and flourishing of human and non-human Life on Earth have value in themselves. These values are independent of the usefulness of the nonhuman world for human purposes.

- Richness and diversity of life forms contribute to the realisations of these values & are also values in themselves.
- Humans have no right to reduce this richness and diversity except to satisfy vital human needs.
- The flourishing of human life and cultures is compatible with a substantial decrease of human population. The flourishing of non-human life requires such a decrease.
- Present human interference with the non-human world is excessive, and the situation is rapidly worsening.
- 6) Policies must therefore be changed. These policies affect basic economic, technological, and ideological structures. The resulting state of affairs will be deeply different from the present.
- 7) The ideological change is mainly that of appreciating life quality rather than adhering to an increasingly higher standard of living "(Devall and Sessions 1985: 70).

The Deep Ecology movement provides critique on the industrial society as a monoculture whose current development models handle the earth as raw material to be used to satisfy consumption and production to meet not only vital needs, but excessive desires whose satisfaction requires evermore increasing consumption. Its monocultures destroy cultural and biological diversity, both of which are critical to our survival (Drengson 1999:2).

The Deep Ecology movement gives priority to the respect for nature, the improvement of the quality of life and through this a decrease in human population. The over- arching theory of this view is that a total reorganisation of our society and culture is required if our environment is to become sustainable in the long-term. Such a culture will increase our knowledge and solidarity with nature and will alter the way that we interact with nature (Achterberg 1994:11). This proposed reorganisation would involve forming smaller scale communities with no economic growth and a complete redistribution of global wealth.

I do agree with most of the assumptions made by the Deep Ecology movement, such as human overpopulation, the need for policy changes, and the fact that humans have no right to reduce the biological richness and diversity except to satisfy vital human needs. I do not believe, however, that this viewpoint can create the basis for sustainable development in the world. It gives no priority and does not integrate poverty alleviation and socio-economic development to uplift the poor in its principles and as argued previously, I firmly believe that these issues are interrelated.

Related to the Deep Ecology movement is the Gaia view to sustainable development, which offers a more integrated approach to sustainable development.

2.4.2 The Gaia view to sustainable development

"The more we study the major problems of our time, the more we come to realise that they cannot be viewed in isolation. They are systemic problems, which mean that they are interconnected and interdependent." (Capra 1997:3)

The Gaia view can be seen as a holistic³ view to sustainability within the ecological conceptual framework.

Kotzé and Kotzé (1993:25) describe the problem as follows: "The local manifestations of the global environmental problem are recursively linked to its wider manifestation. Addressing the problem in a thousand localities may be necessary, but not sufficient unless the wider problem is also addressed. "This can only be achieved if we understand the underlying processes and relationships. Unsustainable development reflects practices, processes and relationships amongst classes, groups, communities and families that are interconnected at all levels. Ideas and beliefs at the international level are reflected at a local level, and vice versa" (Kotzé and Kotzé 1993:26).

In *The turning of the tide* (1983:21), Capra refers to the old Chinese philosophy where reality can be seen as a process of continual flow and change, which show cyclical

³ The term holistic from the Greek Holos(whole) refers to an understanding of reality in terms of intergarted wholes whose properties cannot be reduced to those of smaller units.

patterns. The two poles that set the limits in the cycles of change are named yin and yang (this will be discussed in more detail in section 2.5). Capra (1997:104) describes the integrated nature of the biosphere as reflected in the Gaia view as the tight interlocking between the earth's living parts - micro-organisms and animals and its non-living parts - rocks, oceans and the atmosphere. Furthermore, the earth must be seen as a living and ultimately sensitive whole with the internal ability to adapt to the current situation and preserve life on earth. This necessitates policies that are based on this reality and that incorporate ecological principles into the rules of life (Capra 1997:104-106). One of the most important principles is the interdependence of living systems.

In his book, *The web of life* (1997), Capra also calls for a paradigm shift that would mould the current developmental view of humanity into a more realistic one. He proposes that this new paradigm should be based upon the theories of Deep Ecology and the Gaia approach. Capra defines Deep Ecology as a "holistic worldview" that emphasises humanity's connection to the rest of the universe. The current incarnation of ecology is quite shallow, is based on a human perspective and emphasises the 'use-value of nature''. Within the Gaia movement there can be distinguished between Hard and Soft Gaia, which will not be discussed here. Deep Ecology goes beyond the respect and understanding of natural processes, and fosters a deep spiritual connection with the universe. As Capra puts it, Deep Ecology "views humans as just one particular strand in the web of life" (Capra 1997).

In this section a clear distinction has been made between those approaches of sustainable development that are people centred (the development approaches) and those with the ecology as start-off point (conservationist). Wackernagel and Rees (1996:133) describe this as the two sustainability poles: on the one hand human quality of life and on the other, ecological stability. In the next section I will look at how the different views that have been described in this section have some similarities in what I call focus points to achieve future sustainability.

2.5 How to make sustainable development work: bringing development and conservation closer together

The two sustainability poles of human quality of life and ecological stability (Wackernagel and Rees 1996:133) have resulted in a precedent approach, where conservation of nature and the welfare of humans were approached as separate entities in the debate around sustainable development.

As early as the 1980's, however, the World Conservation Strategy was formulated with the broad aim to launch a new message that conservation is not the opposite of development; that humanity is part of, and relies upon nature, natural resources and ecological processes and that conservation cannot be achieved without development to alleviate the poverty and misery of people. Today, however, this general dispute of conservation and development still results in many different opinions about the correct "recipe" for sustainability.

In recent years, the international discussion of sustainability and the field practice around it has narrowed the gap between development and conservation. Both sides of the debate realise that the one cannot exist without the other. In the past, development policies tended to be viewed as those that promoted growth in human activity, while environmental policies were seen as those that tried to restrict it. Andrew Steer (1992:18) attests that the idea of "environment as constraint" has given way to an acceptance of the, "environment as partner" with international policy makers.

This narrowing of the division between conservation and development can also be identified when looking closely at the above views on sustainability of Co-evolutionary, Deep Ecology and Gaia views. Additionally, we have seen that other views such as the alternative development view have given rise to the emphasis on indigenous knowledge systems and new qualitative participative research methodologies. Here sustainable development becomes a process where local people and communities with their different indigenous knowledge systems, play important roles in decision-making processes. Yet, how can this be done? Norgaard (1992:16) explains that many different conventional explanations of the nature of the challenge of sustainable development, stress an approach of reorganisation whilst not giving clear indications of how it should be achieved. The importance of revisioning progress is highlighted, transforming the image of progress that we have now into a form that realises diversity and different kind of knowledge systems and cultures. He also notes that the combination of drawing upon recent advances in Western science as well as upon the values and indigenous practices that have withstood the test of time, is important. The emphasis should be on participation in and sustaining co-evolutionary unfolding rather than the individual glory of power and material accumulation (Norgaard 1992: 1981-1990).

At the same time Capra's theory reflects a mixture of Deep Ecology and Gaia thinking, in his new book, *The web of life* (1997). He explains that life is based on a horizontal network of relationships and cycles, while the current structure of humanity is mostly linear. Humanity does not recycle most of the things we depend on for modern life: oil, minerals, land. "The power of abstract thinking has led us to treat the natural environment – the web of life – as if it consisted of separate parts, to be exploited by different interest groups. Moreover, we have extended this fragmented view to our human society, dividing it into different nations, races, religious and political groups. The belief that all these fragments – in ourselves, in our environment, and in our society – are really separate has alienated us from nature and from our fellow human beings and thus has diminished us".

These influences of new ways to think about sustainable development imply that it is proposed that we must not only learn how to live together within the means of nature (ecological sustainability), but also socio-economic sustainability, addressing factors such as consumer lifestyles and economic disparity between rich and poor. To address social conflict and to make progress towards sustainability, we must better understand what improving quality of life means to humanity (Wackernagel and Rees1996:135).

Bernard Lietaer indicates (Lietaer 2001:347) that the patriarchical system is controlling all aspects of life- politics, science, decisions on the environment and our daily lives. He also refers to the Yin-Yang philosophy and the importance of the fact that everything is attached to each other; all the parts are making the whole possible.

Lietaer argues that the Yang or the patriarchical or technocentric view to sustainable development is not necessarily bad or wrong in itself, but becomes so when it is allowed to dominate and operate without the softer Ying opposite (Lietaer 2006). This dominates our world today; where the majority of decisions seem to be made in order to maximise economic benefit and increase consumption levels. Lietaer promotes the idea of, "duurzame voldoening" or sustainable satisfaction. He defines it as those characteristics of a society that satisfy their basic needs without compromising the ability of future generations to do the same (Lietaer 2001:342). This has to be done by sensible growth, which focuses on the community and local economic small-scale activities that make use of the local resources in a sustainable way (Lietaer 2006).

These new scientific views on sustainable development from both sides of the spectrum (people-centred or ecological) can be seen as a starting point for the integration of the two approaches, an important prerequisite for the success of sustainable development in the long run. These views are moving towards each other by focusing on small-scale economic development, the new role of communities, technology etc. In these views, the environment is not something out there. The concept of the environment as a separate entity and detached from people has been dismissed. More academics and political leaders are realising that the reality of the existence of only a single entity, the biosphere, and that humanity has always been a part of it. As Capra states: "We can never speak about nature without, at the same time, speaking about ourselves" (Capra 1983:77).

The above described integration of development and conservation in theory, but is this also happening in the development field, in practice? In the field practice related to development studies, coherent linkages between conservation objectives and their investment in local development are very often still missing (Hughes and Flintan 2001:8).

Several methods and practice theories endeavour to remove these missing connections and to ensure the continued integration of conservation in development.

These are:

1) The concept of Integrated Conservation and Development Projects (ICDPs). ICDP reflects "...an approach that aims to meet social development priorities and conservation goals1" (Hughes and Flintan 2001:2). A characteristic of ICDP projects is that they seek to address biodiversity conservation objectives through the use of socio-economic investment tools.

2) Social Environmental Assessment (SEA) refers to a range of "analytical and participatory approaches that aim to integrate environmental considerations into policies, plans and programmes and evaluate the inter-linkages with economic and social considerations" (OECD 2006:17). These include, integrating and building on traditional social impact assessment⁴ and environmental impact⁵ assessment. "SEA allows the integration of environmental considerations – alongside social and economic aspects – into strategic decision making at all stages and projects of development co-operation. SEA is not a substitute for traditional project impact assessment tools, but a complement to them" (OECD 2006:17).

3) Moreover, current international efforts to reduce global poverty focus on the Millennium Development Goals (MDGs), endorsed by the UN General Assembly in 2000. A number of the MDGs provide stimulation for a strategic approach to environmental sustainability. In particular, MDG 7 on environmental sustainability recognises the need to "... integrate the principles of sustainable development into

⁴ **Social impact assessment (SIA):** A methodology to analyse, predict and quantify the impacts on human populations resulting from planned interventions.

⁵ Environmental Impact Assessment: A process, applied mainly at project level, to improve decision making and to ensure that development options under consideration are environmental and socially sound and sustainable. EIA identifies, predicts and evaluates

foreseeable impacts, both beneficial and adverse, of public and private development activities, alternatives and mitigating measures, and aims to eliminate or minimize negative impacts and optimise positive impacts. (OECD 2006:146)

country policies and programmes and reverse the loss of environmental resources" (OECD 2006: 24).

Stemming from the new discussions around these integrated approaches and practice theories it becomes apparent that there are several key attention points for achieving sustainable development, which will be discussed below.

2.5.1 Strengthening local communities and their decision making in the world economy

Historically the development of the industrialised world focused on material production. Not surprisingly, most industrialised and developing nations have pursued the economic goal of increasing output and growth during the twentieth century (Wackernagel and Rees 1996:133-143). Economic progress is often evaluated in terms of welfare. Thus, many economic policies typically seek to enhance income, and induce more efficient production and consumption of goods and services on a national and international level (Munasinghe 2004:1-10). The stability of prices and employment are among other important objectives. For policy makers in developing countries conventional economic growth still overshadows all other objectives, following the example of the industrialised countries that only began to tackle environmental problems after achieving major economic objectives (Munasinghe 1991; 1993a; 1993b). Reducing poverty and the suffering of human beings affected by it, is naturally high on the decision makers' agendas. Yet, development policymakers increasingly recognise that failing to take the costs of environmental damage into account will prove to be inefficient and often ineffectual in raising incomes and well-being (Steer 1992:180) needed for long term socio-economic stability.

Economic sustainability seeks to maximise the flow of income that could be generated while at least maintaining the stock of assets (or capital), which yield these beneficial outputs (Munasinghe 2004:1-10). In order to guide decisions today, a new method "sustainomics" is used.

"The precise definition and implementation of sustainable development remains an ideal, elusive (and perhaps unreachable) goal. Sustainomics proposes a less ambitious, but more focused and feasible strategy that merely seeks to 'make development more sustainable'. Such an incremental method is more practical, because many unsustainable activities are easier to recognise and eliminate. This approach seeks continuing improvements in the present quality of life at a lower intensity of resource use, thus leaving behind for future generations an undiminished stock of productive assets (i.e., manufactured, natural and social capital) that will improve their quality of life" (Munasinghe 2004:3-4).

Whilst some believe in economic growth and the mere elimination and avoidance of unsustainable practices as the answer to sustainable development, others such as Norgaard (1994:158-171) proposes a restructuring of economies with less focus on economic growth. Capra (1983) and Lietaer (2001) both plead for a holistic system of slower economic growth and small-scale initiatives as seen according to Chinese wisdom (Capra 1983:18-32). In the current economic system none of the values of the different ways of economic development is intrinsically bad, but when the polar opposites are isolated and the focus on the Yang and the investment with moral virtue and political power becomes too dominant, then it becomes problematic (Capra 1983:22).

As the Yang polar has taken over the world economy and other systems nowadays, the world economy has become much more globalised and unstable since the early 1970's and an increasing number of people and places have been excluded from full participation in it, favouring the rich over the poor. Unfortunately, even if politicians would agree with this, there would be very little that they could do to correct this today (Douthwaite 1996:13 -31). If the politicians cannot rectify this situation, who in the views of the academics quoted above is responsible for a motion towards more sustainable satisfaction, development and growth?

According to Douthwaite (1996:59), a sustainable world will not be one dominated by large companies that run according to the conditions necessary for maintaining international competitiveness and increasing economic growth.

Similar to the Co-evolutionary, Deep Ecology and Gaia viewpoints, Douthwaite believes that a sustainable world will be one of small communities that run their own affairs and meet or make most of their requirements from their local resources. "For it is only if communities develop cultures that enable them to live indefinitely within the limits of their own places that humankind as a whole will be able to live sustainable within the limits of the natural world" (Douthwaite 1996:59).

Moreover, society needs to get signals from the marketplace what the impact of a certain consumer product is on the biosphere processes. Especially in the cities it is hard for consumers to realise what the impact of them buying a specific product is on the environment. There is most definitely room for more responsible decision-making whilst people are engaging in consumerism. These ideas propose a rather different view of the economy that we are used to in the industrial and globalised city life; so how is it possible for this to be implemented in practice, something almost unthinkable in our global society dominated by consumerism?

Achieving the ideal will require establishing a balance between local and external control over regional resources and strengthening local management's hand over production and distribution. Sustainability requires that we reclaim the economy in service of the people and their communities and counter globalisation. The purpose of economic activity should be to enable material security rather than to promote mindless consumption, to focus our lives on the quality of life, maximising fulfilment rather than income (Wackernagel and Rees 1996: 133-143).

Looking at the differences between economic sustainability as used by policy makers and the above described views of limited economic growth, is it possible for national and international economic policies and the strengthening of local economies as described in the view of Douthwaite's and Lietaer's, to mutually enforce each other?

This constitutes a careful combination between a focus on strengthening local communities and economic efficiency on a national and international level. Methods used

in, for example, sustainomics must be complemented by acknowledging the importance of the local community in the decision making processes. A combination of Yin/Yang is relevant, where the world is not dominated by Yang economics, but where the softer side (Yin) is encouraged by the promotion of stronger local economics worldwide. The importance of local Small and Medium Enterprises (SME's) and informal sector activities (Stronza 2001) for sustainable development should be highlighted. In this, a balance between global and local for every specific local economy will differ. This balance is something that Norgaard (1992:164) also underwrites; that there should be increasing emphasis on both the local and the global levels of participation of communities.

Fortunately, many policies that are good for economic development and efficiency may also be good for the environment and local resource management. We need to focus on looking for the win-win policies, enhancing the positive links and breaking the negative links. Careful analysis can help clarify what steps have to be taken in regards to creating sustainable solutions on international, national and local scales.

It is noticeable that when talking about a reform of the economy for a sustainable future the role of the changing concept of community and the culture is often mentioned.

2.5.2 The importance of communities for sustainable development

The search of sustainability can be linked to the process of rediscovering that sustainable development has more to do with the community, self-reliance and personal growth than it does with increased economic capacity (Rees 1990:22). This means a return to community values, local control over resources, community-based development; all elements that were looked at during the fieldwork of the case study of Apo Island, to be discussed in later chapters. Learning to understand the importance of communities and understanding how both local and global communities can help us accomplish our goals in various ways is of importance. Furthermore it is important to realise that when we think about communities we think about structures, but we should be thinking about

processes. Some processes strengthen a community; others should be avoided for they weaken the community. "Communities as structures cannot be maintained when inappropriate processes are in place" (Norgaard 1992:164). In this sense, according to Turner (1996:340), a society can only be called a community when:

- there is extensive participation by its members in the decisions by which its life is governed;
- the society as a whole takes responsibility for the members;

• the responsibility includes respect for the diverse individuality of these members. Turner (1996:340) argues that building community is the key criterion for sustainable development.

Development remains all about people as part of the whole. The focus in recent developments of new methodological participatory techniques (this will be discussed in the chapter about methodology) reflect the notion of making development more participatory, involving local people especially where judgements are made of how local people value their environment. Andrew Steer indicated in 1992 (Steer 1992:21) that development projects that have not been built upon the strengths of existing practices, or indigenous knowledge in communities, often fail. PRA attempts to address a shift in power relations to the local community in development by focusing on the insiders' view (Chambers 1994:97-105).

The celebration of community is a move in the right direction, yet it should be emphasised that we should also not forget that communities are not homogenous entities and that there are several interest groups in even the smallest of communities with very different priorities and opinions (see chapter 4 for this information regarding Apo Island). It is important to remember that the word community should also represent the divergent interests of multiple actors within communities, the interactions or politics through which these interests emerge and different actors interacting with each other, together with the institutions that influence the outcomes of political processes (Agrawal and Gibson 1999: 629-649). Perhaps the most critical social condition that is asked from those living in these times and who is committed to sustainability, is a shared commitment to community cohesion (both globally and locally) and a sense of collective responsibility for the future (Rees 1996:137). We are, as Annette Baeir explains: "members of a cross-generational community, a community of beings who look before and after, who interpret the past in the light of the present, who see the future as growing out of the past, who see themselves as members of enduring families, nations, cultures, traditions …every obligation is owed by, to and toward persons as participants in a continuing process of the generation and regeneration of shared values" (Achterberg 1994:203).

In this thesis close attention will be paid to the local community of Apo Island. The goal was to learn what the role of the community of Apo Island is in the sustainable management of the coral reef in order to survive tourism pressures by using a participative process and observation.

2.5.3 The importance of local NRM for sustainable development

Local communities have gained widespread attention in recent years in regards to NRM and sustainable development. This, as a response to the poor track record of top-down, centralised, bureaucratic management and regulation of natural resources by states and governments. It can be said that local resource management of natural resources is fundamental for successful sustainable development practices. In the second theoretical chapter of this thesis in section 3.7 NRM as (joint) responsibility of the community will be discussed in depth and will not be discussed here.

2.5.4 The importance of technology for sustainable development

Works such as "Beyond the Limits" (Meadows, Meadows and Randers 1992) have indicated that not only the value systems of communities, but also technological shifts are needed to reach sustainability in our time.

Andrew Steer (1992:18) believes that those who assume that economic growth inevitably hurts the environment do so on static assumptions about technology, tastes, and

environmental investments. The environment is constantly changing and according to Steer the key question is how to direct the positive forces of substitution, technological innovation, and structural change in such a way that they compensate for any negative consequences as a result of economic growth. The research of the Global Research Network showed (Lietaer 2001:355) that the potential of technological innovations only gives more time – deterioration is still happening, prolonging the collapse. Only if technological innovation is accompanied by both radical changes in our attitude and behaviour then sustainable development can be possible (Lietaer 2001:355). Norgaard argues that correcting unsustainability of development is not simply a matter of choosing different technologies for intervening in the environment. The mechanisms of perceiving, choosing, and using technologies are embedded in social structures, which are themselves, products of modern technologies (Norgaard 1996: 29).

Achterberg (1994:130) quotes the following passage about technological redirection needed for sustainable development:

"The redirection of technology will be no easy task. Contemporary technology is so tightly tied to industry, government and the structures of economic power that changes in a sustainable direction will be difficult to achieve. As the critics of technology recognise, the person who tries to work for change within the existing order may be absorbed in the establishment. But the welfare of humankind requires a creative technology that is ecologically sound, socially just, and personally fulfilling. The challenge of our generation is to use technology in the service of these environmental and human values".

In development studies the focus has generally moved towards appropriate technology, where appropriate technology can be defined as technology that is made at an affordable price by ordinary people using local materials to do useful work in ways that do the least possible harm to both human society and the environment. Appropriate technology is taking into consideration what we are doing and having awareness of the consequences that it holds for the future. It works from the bottom up; it is a genuine grassroots solution to economic needs and can only be done if the local community fully supports it. Appropriate technology can be said to be technology that fits. It is linked with

54

indigenous knowledge systems where these practices and systems, for example, in agriculture have evolved through generations of informal experimentation. These practices are often adapted to the limitations and potentialities of fragile environments. When defining the term technology it should also include the low-external input technologies where the focus is on the increased reliance on local self-sufficiency, in terms of not only physical inputs, but also people's labour activity and indigenous knowledge (Gibbon et al 1995).

In order to enhance sustainable development, modern technology and simple appropriate technology can be combined to form the correct balance in steering technology in supporting and not undermining sustainable development.

2.5.5 The role of trade in sustainable development

In order to create global sustainability, equity between developed and developing countries needs to be given attention. Trade and terms of trade have the potential to play a big role in this. At the current moment, the terms of trade favour the developed countries, whilst undermining the fundamental social glue that community identity offers. Wealthy nations imports from poor regions, at great unaccounted costs to the latter, encouraging developing nations to grow, for example, cash crops for export on their best lands at the expense of local staples production (Rees 1990:22). This leads to over-exploitation of marginal agricultural and forestlands as impoverished local people struggle to survive. Economical leakage or money flowing away from developing to developed countries is encouraged by the current terms of trade. These developed countries boast with a positive trade and current account balance only measured in monetary terms. When calculations are made it shows that these countries are running large unaccounted ecological deficits with the rest of the planet (Wackernagel et al 1996:96-99).

Halle (2006:1-23) explains that whilst free trade is an interesting concept, it does not exist and never will. The job of organisations such as the World Trade Organisation

(WTO) may well be in large part, to lower or remove unwanted barriers to trade, but it is also to give sanction to trade restrictions that are desirable. Meaning that WTO rules allow countries to restrict trade in products. Halle suggests that rules-based trade can be an important part of constructing the world we want. If the trading system is so contested today, it is because trade tends to be seen as an end in itself, instead of a means to an agreed end. If it is accepted as a tool, a vehicle for doing something we wish to do, such as reaching a more equitable and sustainable situation between nations, then it can be placed at the service of almost any future scenario (Halle 2006:21). If trade is to be open and rules-based, we will want the rules to be transparent and non-discriminatory, and we will prefer peaceful settlement of disputes to conflict.

Depending on which goals are chosen for such a new trade system, "the pattern of economic signals will be different, the incentives will favour different types of action from the ones currently favoured, and will reward different behaviour, for example, social and environmental responsibility, or human rights; the market will seek out and offer recompense to a different kind of framework than the one existing now. The extent to which the framework is closed or open, constraining or liberating, directive or loose, will depend on the option chosen" (Halle 2006:22).

In order to reach sustainability it is clear that unqualified expansionist models that encourage expanded trade will promote even more access of industrialised countries to the world's resources and bring the rich and the poor in further competition (Wackernagel et al 1996:100). The fact that trade has not played as strong a role as it might have in bringing about a more equitable, more sustainable world, is a source of deep disappointment. In order to reverse this failure, the trading system needs to return to a simpler, more diverse and more local basis for social organisation. Trading opportunities on global level, but also on local level should be given attention. When tourists visit a local community and bargain for the lowest price at the expense of the local profit this form of "trade" is also skew. This will be looked at in chapter 4 in the discussion about the trading opportunities of the local community of Apo Island.

2.6 Conclusion

This chapter started by looking at sustainable development and the quest to define and refine the concept critically. A glance was taken at the fluctuations of the meaning of sustainable development during a time span of approximately 40 years. It could be seen that the popular meaning or mainstream understanding of sustainable development are mostly determined by conferences and the papers produced around them. The concept of sustainable development has been evolving and maturing. Yet no one, single definition or understanding has yet been reached, neither is it realistic to think that this will ever happen. In my opinion more time should not be wasted in the everlasting search for a theoretical definition for sustainable development. Rather, we should look at what is needed to turn hope of sustainable development into a reality in the nearby future, in an operational sense. Therefore, this chapter looked at some of the divergent viewpoints on sustainable development and how different viewpoints have been producing academic works that have been bringing the discord between conservation and development closer to each other. In the works of Norgaard, Capra, Lietaer, Douthwaite and others quoted above, a golden thread was looked for in their views, on what needs to be done for a sustainable future. These can be called attention points for making sustainable development more tangible. Out of these the following important issues were raised and discussed and the subsequent conclusions can be drawn:

Firstly, on the path leading to sustainable development local communities have a central role to play. Not only in reshaping the members of society into participation, but reforming structures, rules and responsibility around their everyday lives. Communities also have to enhance their decision-making influence in the world economy. This can only become feasible when local economies are strengthened, ecological footprints are limited parallel to a more controlled global economic system encouraging responsible decisions. Local resource management together with the appropriate management skills and indigenous knowledge systems will have to be promoted on community level. There can be concluded that in all of these attention points the community plays a fundamental,

central role. Or in the words of Turner (1996:340): "building community is the key criterion for sustainable development".

Secondly, it is clear that in order for humankind to aim for a sustainable future many of the processes and structures that we are so familiar with will have to be altered in such a way that is maybe unthinkable. Yet, we can use certain tools that we use today, but change the goals and objectives of these tools and the rules that regulate these tools. These tools, namely technology and trade, must be used in such a way that it becomes appropriate for the situation, working towards the future goal of sustainable development. Technology, for one, should not undermine indigenous knowledge systems; rather these different methods should be encouraged to mutually enforce one another. At the same time, if trade (in the broadest definition of the word, meaning all opportunities or business of buying and selling commodities) rules were to be changed and if it would go hand in hand with strong local economies, then it can be used to favour and reward social and environmental behaviour. In reforming these tools, the community again has an important role to play.

Thirdly, there can be concluded that whilst sustainable development is not solely about the development of humankind or the community, the proper functioning of communities is a prerequisite if we are to reach sustainability. A combination of development and conservation leads us to a more responsible society structure, which directly and indirectly impacts on the environmental and social conditions.

Lastly, the central role of the local community in sustainable development will be investigated in this thesis. The role of the local community of Apo Island in the management of tourism and their natural resource (the coral reef) will be closely considered. Is it really true that the key to sustainable development is building a community? And if there is a strong community present, is the situation automatically sustainable?

In order to look at the local reality and context on Apo Island it is important to understand the international tourism sector and the impacts of it on the environment. This will be done in the second theoretical chapter of this thesis, chapter 3. The details about the natural resource and socio-economical situation on Apo Island, is also of much relevance and will be discussed in chapter 4.

<u>Chapter 3: The role of local communities in tourism,</u> <u>sustainable development and Natural Resource Management</u>

A definition of sustainable development in the context of tourism:

"... tourism which is developed and maintained in an area (community, environment) in such a manner and at such a scale that it remains viable over an indefinite period and does not degrade or alter the environment (human and physical) in which it exists to such a degree that it prohibits the successful development and well-being of other activities and processes" (Butler 1993:29).

3.1 Introduction

The purpose of this chapter is to provide an overview of the most important literature covered, whilst identifying a gap in development research concerning the tension between the utilisation of coastal resources by local communities as a source of livelihood, the pressures of tourism as a form of development and conservation. Central to this theme and related to the research question is what the responsibility or role of the rural local community is in finding a balance between these different interests. Different literature will be presented and discussed in order to obtain the following goals:

- to discuss the benefits and drawbacks of tourism as a form of development for developing countries;
- to indicate the fragility of coastal zones against negative tourism impacts;
- look at different forms of sustainable tourism: Ecotourism, Community-Based Tourism, Pro- poor tourism as alternatives for mass- tourism;
- highlight the importance of local communities in NRM, especially in sensitive coastal areas;

• explain how a gap in literature and research concerning the role of local communities in the management of (sustainable) tourism related development was discovered.

Sustainable development has brought forth a global focus on how we can adapt economically and socially in order to ensure that environmental and cultural damage will be minimised without compromising basic human needs. This has an impact on all economic sectors, and should have an impact on our consumption of goods and services, including tourism. In this thesis the focus will be on the tourism and travel industry as a form of development for poor local communities. Contextually it is therefore important to become aware of the impacts that this sector has globally, on both issues of socioeconomical development and the preservation of natural resources. These will be discussed in the next section.

3.2. Background and statistics about the international tourism sector

Description and definition

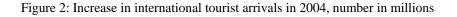
Tourism is a service-based industry consisting of a number of tangible and intangible components. The tangible elements include accommodation, transport, foods and beverages and tours. The intangible elements involve learning, culture, adventure or simply escape and relaxation. The WTO defines tourism as follows: "Tourism comprises the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited" (WTO 2005a:3).

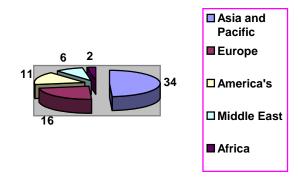
Tourism is different from travel. In order to be considered a tourist in a given place, there must be a displacement, using transportation to meet the destination. Whether tourism is local, national or international, it involves visiting a destination away from the area in which one lives and using the services available at that destination. Therefore, tourists require travel services to reach their destinations and once there, services such as shelter, water, food, sanitation and entertainment.

The impact of tourism on the global economy

Travel and tourism is the world's largest industry and creator of jobs across national and regional economies. Research shows, according to a study conducted in 2000 from the World Travel and Tourism Organisation that travel and tourism generated, directly and indirectly 11.7% of Gross Domestic Product (GDP) and nearly 200 million jobs in the worldwide economy. These figures are forecasted to total 255 million in 2010 (World Travel and Tourism Organisation and International Hotel and Restaurant Association 1999:1).

According to the tourism Barometer of the WTO in 2004 (WTO 2003:2), international tourism is firmly on its way to convincingly bounce back after three subdued years with an accumulated growth of less than 1%. According to the estimates of the WTO (2005a:2) based on monthly data of the full-year result of 2004, international arrivals reached an all time high level of 760 million globally, equivalent to an increase of 10%. After three years of stagnation international tourism experienced a spectacular rebound. The proportional increase in the number of new arrivals per region can be seen below in Figure 2.





Source of data: World Tourism Organization (WTO:2005a)

Interpretation of Figure 2: these numbers show that the biggest increase of tourism in 2004 took place in the Asia and the Pacific areas. When looking at the numbers available for 2000, 698 million people travelled to a foreign country during that year, spending more than US\$ 478 billion. International tourism receipts combined with passenger transport currently total more than US\$ 575 billion - making tourism the world's number one export earner, ahead of automotive products, chemicals, petroleum and food.

The Philippines fall under the Asian-Pacific region. The latest complete research into this region dates back to 2002. Here, the earnings of the numbers of tourism in the Asia-Pacific amounted to an income of €50 695 million from a total amount of visitors was 131 294 000 (WTO 2003:1).

3.3 The international debate: are the effects of tourism mainly positive or negative?

In chapter 2 it was concluded that a strong local economy and more impact of the local community in the global economy is essential for successful sustainable development. Many institutions have argued that tourism can contribute to the strengthening of local economic activities and their role in the global economy. However, experience has shown that tourism often has more negative effects than positive, if not properly controlled. Therefore, it is important to examine what the effect of tourism is on sustainability and on every local specific situation. Possible positive effects will be looked at in sub-section 3.3.1 and some of the common negative effects will be discussed in section 3.3.2.

3.3.1 The positive effects of tourism and travel on sustainable development

The United Nations (UN) identified tourism to be one of the most effective drivers for the development of regional economies (UNCSD NGO Steering Committee 1999:1). These patterns apply to both developed and emerging economies. The reason for this is that jobs generated by travel and tourism, are spread across the economy - in retail, construction, manufacturing and telecommunications, as well as directly in travel and tourism companies. These jobs employ a large proportion of women, minorities and young people; are predominantly in small and medium sized companies. They also offer good training and transferability (UNCSD NGO Steering Committee 1999:1).

Empirical studies have confirmed that the level of employment in tourist activities is high, for instance, accounting for around 5 million jobs in India (ESCAP 1991). Through this employment, tourism can help alleviate poverty and curb the out-migration (urbanization) of youth and other marginally employed community members. Tourism plays an important and certainly positive role in the socio-economic and political development in destination countries through, for example, offering these new employment opportunities (UNESCO 2005:4). It can also, in certain instances, contribute to a broader cultural understanding by creating awareness, respecting the diversity of cultures and ways of life (UNESCO 2005:4).

On the other hand, as a tool to create jobs, tourism has not fulfilled its expectations. At the same time, complaints from tourist destinations concerning massive negative impacts upon environment, culture and residents' ways of life have given rise to a demand for a more sustainable development of tourism (UNESCO 2005:4).

Despite this, when managed properly tourism still has the potential to create beneficial effects on the environment by contributing to environmental protection and conservation. It is a way to raise awareness of environmental values and it can serve as a tool to finance protection of natural areas and increase their economic importance (UNCSD NGO Steering Committee 1999:1) For example, by bringing revenue to sites, tourism has the potential to enhance and safeguard heritage.

As a result of the above mentioned, possible, positive effects, the 1992 United Nations Conference on Environment and Development (UNCED), or better known as the Rio Earth Summit, identified travel and tourism as one of the key sectors of the economy which could make a positive contribution to achieving sustainable development. The Earth Summit led to the adoption of Agenda 21, a comprehensive program of action to provide a global blueprint for achieving sustainable development. Agenda 21 was adopted by 182 governments at the UNCED, the Earth Summit, on 3-14 June 1992 (UN 1992). It identifies the environment and development issues, which threaten to bring about economic and ecological catastrophe and present a strategy for transition to more sustainable development practices.

As a reaction to these attention points, travel and tourism is the first industry sector to have launched an industry-specific action plan based on Agenda 21. In 1996 the WTTC, the WTO and the Earth Council, joined together to launch an action plan entitled, "Agenda 21 for the travel and tourism industry: towards environmentally sustainable development" - a sectional sustainable development program based on the results of the Rio Earth Summit in 1992. Later this resulted in a tourist industry sector report in collaboration with the United Nations Environmental Programme (UNEPTIE) as a reaction on the World Summit on sustainable development (UN 2002:2).

The sector plan (UN 1999) states that the travel and tourism industry has a vested interest in protecting natural and cultural resources, which are the core of its business. It also has the means to do so. As the world's largest industry, it has the potential to bring about sustainable development of the communities and countries in which it operates. The sector plan proposes that travel and tourism will contribute to development which is economically, ecologically and socially sustainable, because:

- it has less impact on natural resources and the environment than most other industries;
- is based on enjoyment and appreciation of local culture, built heritage, and natural environment, in such a way that the industry has a direct and powerful motivation to protect these assets;
- can play a positive part in increasing consumer commitment to sustainable development
- it dissipates incomes through its unparalleled consumer distribution channels
- it provides an economic incentive to conserve natural environments and habitats, which might otherwise be allocated to more environmentally damaging land uses, thereby, helping to maintain bio-diversity (UN 1999:1).

These potential, positive effects of tourism have to be compared with potential negative effects that tourism may have on local communities, cultures and natural resources. It should also be kept in mind that these positive and negative effects will have to be examined for each individual situation, because the specific environment will differ by region, country, biological environment and community.

3.3.2 The negative effects of tourism and travel on sustainable development

It can be said that the quality of the environment (both natural, social and cultural) is essential to tourism. However, tourism's relationship with its surrounding environment is complex. It involves many activities that can have adverse environmental, social, cultural and economic effects. The negative impacts the development of tourism can gradually destroy the environmental resources on which it depends. For example, many of these impacts are linked with the construction of general infrastructure such as roads and airports, and facilities for tourists, including resorts, hotels, restaurants, shops, golf courses and marinas.

Brohman (1996:51) explains that some of the shortcomings commonly associated with the Third World tourist industry include high rates of foreign ownership contributing to a loss of control over local resources. "This may adversely affect the social, economic, and ecological well-being of the host communities. Local people commonly find themselves trapped in a globally integrated system of resource use, over which they cannot exercise control. Decisions governing their lives, even those that address local matters, are normally made elsewhere by outsiders according to the interests of those that control the tourism industry. This has led many authors to assert that the struggle for control over local resources is an element of tourism that generally has not been properly recognized by local governments" (Brohman 1996:56). For example, in February 1999, the Thailand Tourism Society, threatened to launch a campaign to seek support from its members to delay a progressive liberalisation programme for the hotel, restaurant and travel agency sectors, because tourism:

- has substantial overseas leakage of tourism earnings to outsiders-foreigners (see section 3.6.3 for a discussion of economic leakage;
- creates reinforcement of patterns of socio/economic inequality and spatial unevenness;
- has widely fluctuating earnings due to factors such as global recessions and the seasonality of tourism in some places;
- causes environmental destruction, often involving the irretrievable loss of nonrenewable resources and foundation assets;
- causes rising alienation among the local population because of problems such as increasing crime, overcrowding and overloaded infrastructures, pollution and other environmental degradation (Brohman 1996:51).

Moreover, in the UN document on tourism and sustainable development (1999:9) it is specified that there are ample examples where the impact of travel and tourism has been damaging to the local environment and people. From these the following factors that contribute to negative effects of tourism can be constituted:

- a lack of awareness on the part of decisions-makers about tourism development of the social, economic and environmental balance to be pursued in achieving sustainable development;
- a lack of commitment by tourism operators and travellers to contribute to the maintenance of the local environment and culture of the host destination;
- a weak institutional framework with inadequate controls can lead to development of tourism that is both inappropriate and intrusive;
- unfairly traded tourism, whereby local communities are unable to share in its benefits;
- large flows of visitors in remote or sensitive locations can place considerable strains on local resources;
- expectations of travellers of available goods and services can lead to these items or services, being imported from outside or local supply chains, being distorted to meet demands (this will be discussed later under "leakage", see section 4.6.3);

- tourism can change a destination's cultural make-up and, if poorly developed, can increase crime, prostitution and other social problems;
- the prevailing issues facing infrastructure are becoming more acute with the continuing increase in passenger travel (UNEPTIE 2002a: 22).

In the sector plan for travel and tourism (UNEPTIE 2002a) there is a warning that the travel and tourism industry has to start recognising the need for protecting culture, heritage and the environment. This responsibility must be shared by all stakeholders. Travel and tourism has the potential to bring social and environmental, as well as economic benefits, but currently the impacts of tourism on the environment and culture is detrimental with an increasing regularity.

In order to regulate and prevent these detrimental effects, "tourism development must be coupled with sufficient training in management skills and education for local people. The human resources issue will be of much concern in the next few years because, without substantial and skilled human capital, the tourism industry cannot be productive in the future"(UNEPTIE 2002a:22). This thesis will investigate the extent to which communities have an impact on the local tourism situation and whether local communities will have the means to act when tourism is not developing according to their expectation.

If travel and tourism is managed badly, it can have a detrimental effect on local situations it can damage fragile environments and destroy local cultures. The challenge is to manage the future growth of the industry in such a way as to minimise its negative impacts on the environment and host-communities whilst maximising the benefits it brings in terms of jobs, wealth and support for local culture and industry, and protection of the built and natural environment.

Adequate planning and development are important factors in order for fragile ecosystems and scarce natural resources to be utilised effectively and protected for future generations. Tourism is one of many activities with a special focus on coastal areas. The two most popular locations for holidaymakers are the mountains and the coast (UNCSD 1999). For instance, increased passenger travel increases pressure on sensitive ecosystems such as fragile coastlines. This is also apparent in the case study of Apo Island, specifically the degradation of the coral reef, as will be seen later in this thesis. The next section highlights the impact of tourism on sensitive coastal zones in general.

3.4 The impact of tourism on sensitive coastal ecosystems

According to the World Summit Report (UN 2002: point 44) biodiversity, plays a critical role in overall sustainable development and poverty eradication. It is essential to our planet, human well-being and to the livelihood and cultural integrity of people. However, biodiversity is currently being lost at unprecedented rates due to human activities; this trend can only be reversed if the local people benefit from the conservation and sustainable use of biological diversity.

In the chapter dealing with the protection and management of natural resources in the World Summit Report (UN 2002:22) it is explained that oceans, seas, islands and coastal areas form an integrated and essential component of the earth's ecosystem. They are critical for global food security, for sustaining economic prosperity and the well being of many national economies, particularly in developing countries. Ensuring the sustainable development of the oceans requires effective coordination and cooperation, at both global and regional levels between relevant bodies and is of vital importance.

Economic development activities in any sensitive natural area pose a particular challenge for sustainable development. More specifically, coastal areas host the most productive marine ecosystems and serve as spawning grounds for the oceans. The degradation of such coastal areas in many countries, with the resulting impacts upon coastal settlements and fisheries, justifies strict local controls on further coastal development (International Council on Local Environmental Initiatives 1999:12).

The world's oceans are linked in a complex global ecosystem. Damage to one part of this system can have consequences in another part thousands of miles away. Buckley (2002a) explains that the whole marine ecosystem is based on the ability of simple organisms to

tap energy through the use of sunlight and turn nutrients into the form of plant life known as phytoplankton. The richest fishing grounds tend to be found in areas where plankton is plentiful. This in turn depends on the availability of nutrients. Such nutrients are most abundant in coastal areas, and naturally this is where most fish can be found. This is also where we as humans cause most damage to the marine ecosystem through over-fishing, waste and, of course, through tourist activities (irresponsible diving behaviour or anchoring of boats etc). Coastal zones contain many of the Earth's most complex, diverse and productive ecological systems; productive in both a biological and economic sense (Buckley 2002a). Reefs, mangroves, wetlands and tidelands are:

- the nursery and feeding areas for many marine species;
- important areas for the recycling of nutrients, and
- buffer areas for storm protection and erosion control (Buckley 2002a).

Coastal eco-zones are very complex systems that foster a dynamic balance between terrestrial and marine environments. Sustainable development strategies for the management of these ecosystems should be orientated towards a strong evaluation of the functional characteristics of the system (i.e. carrying capacity) to preserve this delicate balance and to maximize the benefits to the stakeholders (Buckley 2002b). Basic knowledge of the ecological characteristics of coastal eco-zones should include the study of the ecological processes, the analysis of the flow of resources that coastal systems generate, as well as the potential use of these resources for social and economic (tourism can be seen as one of these) development purposes. It is important to note that a lot of this knowledge concerning the management of a natural resource and its responsible use is often already present in local indigenous knowledge systems, as local communities have been applying this practice and living in harmony with nature for years.

Since coastal areas are the most highly populated regions on earth, their protection requires, according to the International Council on Local Environmental Initiatives (1999), unique attention and consequently creates a need for effective management of numerous competing interests. In many coastal areas, the development of tourism is destroying or marginalising habitats for marine animals and spawning fish, as well as the

livelihoods of traditional fishing families and villages (ICLEI 1999:13). Unregulated water sport activities are causing damage to underwater natural resources whilst the lack of effective wastewater treatment for tourist facilities is making a significant contribution to coastal water pollution. Additionally, excessive private tourist development is denying equitable human access to beaches and coastal waters, cutting off local populations from their coastal heritage. Inappropriate development in high-risk storm areas is costing families, local economies and governments billions of dollars annually (ICLEI 1999:13).

In contrast with this sometimes macabre reality, the UN document on tourism and sustainable development (UN 1999:9) highlights the fact that tourism does provide an essential lifeline for many coastal communities. Faced with the prospect of increasing financial problems, more and more coastal communities have turned to tourism as a means of generating (extra) income and survival. If one looks at the UN document on tourism and sustainable development (UN 1999:9), however, the impact on the coastal zones has been largely positive. On the contrary it has been argued before that many impacts of tourism are negative. Globally, for example, impacts from the construction of infrastructure and from recreation do arise (UN 1999:9). Today, coastal communities are now faced with tourism on a considerable scale, and the host to guest ratio can be very high in such areas. With coastal regions being primary tourist destinations, sensitive marine and coastal environments can suffer dramatically. An example of this is of the island Phuket in Thailand where as the largest source of income on the island, tourism has a considerable impact on the livelihood of the local community. On an annual basis, foreign tourists already outnumber Phuket residents twelve to one (Raksakulthai 2003:7).

In fact, the traditional fishermen on Phuket Island were previously able to move freely around the island as the best locations for fishing moved. With large beachfront resorts, they are restricted from certain areas and the fishing potential is limited. Another concern for the local community is that a traditional way of life is being eroded. Moreover after the influx of tourists with foreign habits, new displays of wealth have been cited as factors in growing materialism among locals (Raksakulthai 2003:9) Additionally, the poor environmental quality—due to pollution, inadequate waste management, and ecosystem degradation—means the island is losing its appeal, as one tourist writes to the Bangkok Post of 17 May 2003, p 9:

"After being in Thailand for two months, my wife and I will not be extending our visas for a further month as planned. The reason is that we have been worn down by the ambivalence of people who rely on tourism and the destruction of the environment, particularly beaches and coral. Both these issues could be tightly controlled with an effective tourism regulation and policing of tour companies, guesthouses and local transport operators." (Intarakomalyasut 2003:1)

As can be seen from the examples provided above, there will always be this possibility that after mass tourism has arrived at a certain place and the natural resources, which this tourism is based on has been damaged that tourism moves elsewhere. Elsewhere, to where the natural and cultural resources are still unspoiled and intact. If tourist activities have come to overrule the traditional way of life and ways of making a living this means that with the departure of tourism, the locals will have no way to earn a living. The natural resource will have been destroyed and indigenous knowledge most probably lost. Consequently the local communities are left without anything.

To prevent such scenarios and to encourage a sustainable use of the ocean and its coastal areas requires effective coordination and cooperation, at global and regional levels, between relevant bodies with actions at all levels to promote the implementation of chapter 17 of Agenda 21. This chapter provides a programme of the following actions for achieving the sustainable use of oceans, coastal areas and seas.

- Integrated management and sustainable development of coastal areas.
- Marine environmental protection.
- Sustainable use and conservation of marine living resources.
- Addressing critical uncertainties for the management of the marine environment and climate change.
- Strengthening international (including regional) cooperation and coordination.
- Sustainable development of small islands (UN 1992).

At the World Summit of 1999 it was proposed that (UN 1999:33) sustainable tourism development are promoted in coastal and other areas, including non-consumptive tourism and ecotourism which go hand in hand with capacity-building in order to contribute to the strengthening of rural and local communities.

The following list includes actions for responsible tourism.

- "Enhance international cooperation, foreign direct investment and partnerships with both private and public sectors, at all levels.
- Develop programmes, including education and training programmes, that encourage people to participate in ecotourism, enable indigenous and local communities to develop and benefit from ecotourism and enhance stakeholder cooperation in tourism development and heritage preservation, in order to improve the protection of the environment, natural resources and cultural heritage.
- Provide technical assistance to developing countries and countries with economies in transition to support sustainable tourism business development and investment and tourism awareness programmes, to improve domestic tourism, and to stimulate entrepreneurial development.
- Assist host communities in managing visits to their tourist attractions for their maximum benefit, while ensuring the least negative impacts on and risks for their traditions, culture and environment, with the support of the WTO and other relevant organisations.
- Promote the diversification of economic activities, through the facilitation of access to markets and commercial information.
- and participation of emerging local enterprises, especially SME's" (UN 1999:33).

From the above it is clear to see that in order for sustainable tourism to succeed in fragile coastal environments, local communities will often need a form of outside help, be it the transferral of knowledge about management of natural resources or language training in order to communicate with international tourists. This research also looked at the reality of this promise in the local context of Apo Island. Is it realistic to expect that poor local

communities in developing countries will receive help from international organisations and bodies in order to manage tourism benefits and drawbacks? Whilst the above action points are certainly relevant for the development of responsible tourism in local communities, it cannot be seen as realistic that international organisations and institutions will have the manpower to assist all those communities in need of advice. At the same time, access to outside markets and the development of local entrepreneurship that accompanies this, needs the involvement of local organisations and businesses for assistance, and requires skills that cannot be provided on a global scale. This could, however, happen between local organisations and businesses. During my research on Apo Island, I looked at the amount of support that the local community actually received from national and international institutions.

In order to promote tourism as a form of sustainable development, a new equilibrium has to be found between tourism and local communities. Sustainable tourism has to go hand in hand with the appropriate use of a natural resource by local communities and the protection of their resource. This means that the carrying capacity of the natural resource has to be considered and determined and that one activity will have to make room for another. For example, when a community decides to promote tourism based on the use of a natural resource like a coral reef, it must realise that it will have to lessen the communities' other activities (such as fishing) that have an impact on the coral reef. In order to make such assessments, communities will also need outside help, for they do not always possess the skills to make these judgements. It also becomes important for local groups to posses management skills when a community invites tourism as an economic activity into its midst.

On the other hand, forms of tourism with the goal of promoting sustainability itself require a specific meaning and cannot only be managed at local community level, but those tourists partaking in this specific form of tourism should know what their responsibilities are in regards to the environment and the local communities. In other words the tourists themselves have a responsibility towards the sustainability of the resources they use. This will be described in the following section.

3.5 A description of the different forms of sustainable tourism

Tourism associated with natural and protected areas, has been and continues to be a growing sector in the global tourism industry. Of the estimated \$55 billion in tourist receipts received in the Third World, a significant portion of this (in the early 1990s) was the result of nature tourism activities (The Mountain Institute 2000:2).

At the World Summit in Johannesburg in 2002 it was agreed that sustainable tourism development, including non-consumptive and ecotourism should be promoted (Segschneider 2002:58). In the previous section it was argued that sustainable tourism is an important economic possibility for coastal communities. Tourism with a focus on environmental awareness has proven to have so many possible advantages that the UN announced 2002 to be the International Year of Ecotourism.

A description of ecotourism

In 1993 Lindberg and Hawkins (1993:8) defined ecotourism as responsible travel to natural areas, which conserves the environment and improves the welfare of local people. ecotourism can be seen as an alternative to intensive mass-market tourism. The link between ecotourism and sustainability is essentially what sets Ecotourism apart from its more mainstream counterparts and yet at the same time also creates a dilemma for this market sector. As with sustainable development, ecotourism has become a much misused and misunderstood concept that has proven notoriously difficult to define, let alone implement (Barkin 1996:1). As the ecotourism market has matured it has also become subject to a wide variety of interpretations. True 'ecotourism', however, requires a proactive approach that seeks to mitigate the negative and enhance the positive impacts of nature tourism. The International Ecotourism Society defines ecotourism as responsible travel to natural areas that conserves the environment and sustains the wellbeing of local people (WWF 2001:2).

Community-Based Ecotourism (CBE) takes this social dimension a stage further. This is a form of ecotourism where the local community has substantial control over, and involvement in, its development and management, and a major proportion of the benefits remain within the community (Lash and Austin 2003:12). It implies that the local community has substantial control and involvement in the planning of tourist activities, and that the majority of benefits remain in the community.

Another form is Pro-Poor Tourism (PPT) defined in very general terms as tourism that generates net benefits to the poor (Deloitte & Touche, IIED and ODI 1999). Economic benefits are only one (though a very important) component of this, as social, environmental and cultural costs and benefits also need to be taken into account.

The IIED (Deloitte & Touche et al 1999:6) further explains that strategies for PPT focus specifically on unlocking opportunities for the poor within tourism, rather than growth of the overall size of the sector. They can be applied within any segment of tourism. They are distinguished from – but usually need to be combined with – general tourism development strategies, which aim to develop the sector as a whole.

In the Sustainable tourism and poverty elimination study (Deloitte & Touche et al 1999:6), the IIED quote the following text from the Commission on Sustainable Development, Economic and Social Council, UN:

"Although tourism does provide economic benefits to a country at large, for example, foreign exchange earnings, government revenues, the dislocative effects of tourism – the over-crowding, pressure on resources, challenges to established culture and the related demands which tourism makes on communities are borne locally. Unless some if not all of the economic and financial benefits from local tourism activity remains in the community, the costs of hosting tourists may be disproportionate to the benefits received".

Successful case studies should serve as an example to future sustainable tourism development. An example of an internationally –supported tourism and wildlife programme which has a high level of local community participation is Zimbabwe's CAMPFIRE (Communal Area Management Programme for Indigenous Resources)

programme (Barbier 1992:1) where the local community has earned a very large percentage of the revenue earned by tourism activities.

It is important to remember that all the different types of responsible tourism should not be seen as a panacea or quick fix for poverty or environmental problems. The opportunities and benefits it can bring should not be exaggerated. Careful planning and improved knowledge is needed (WWF 2001:3). Sustainable tourism should be part of wider sustainable development strategies, whether at a community or an international level.

It is evident that in order for responsible tourism to maximise benefits whilst minimising negativities as a contribution to the overall process of sustainable development, careful planning is needed. However the question remains, who has to do this planning and if this is done together with several partners, whose responsibility is it to take the initiative or the final decisions? These are the questions this research explores. It is important to examine existing literature on how and why Community-Based Management (CBM) of tourism is necessary and what this implies for future NRM. This will be considered in the following section.

3.6 Why the local management of tourism is necessary

Increasing specialisation in tourism, would, at first sight, appear to be beneficial to developing countries, which are well endowed with natural resources. However, natural resources are frequently un-priced public goods which are subject to degradation through over-use, as in the case of the loss of flora and fauna due to climbing and off-road use of vehicles in game reserves (Sinclair 1997:35).

The root cause of tourism development, which is unsustainable in terms of the stock of resources, is to be found in market failure. According to Sinclair (1997: 36) it is clear that tourism destinations in many developing countries are characterised by non-existing property rights and government regulations that are ill-defined or not enforced.

In many developing countries, a more appropriately planned tourism development process is needed which would spread the costs and benefits more equitably and also be more sensitive to its social and cultural impacts. This would not only reduce the need for local residents to trade off quality of life and social costs for economic growth, but would also contribute to a more broadly based positive attitude toward tourism (Mansfield 1992).

It would appear that the struggle for control over resources between internal and external interests is a continuing aspect of tourist development. It is a struggle which local governments in general have been slow to recognise, but one they can ill afford to ignore (Brohman 1996:55). The need for local governments to adopt political economic policies which effect a control between local and external resources as well as between tourism and other sectors of the local economy, becomes increasingly crucial as more and more regions are developed for mass tourism (Brohman 1996:55).

There are four reasons why tourism can be best managed by the locals.

- It leads to empowerment of the local community.
- It encourages conservation of the environment and biodiversity.
- It limits economic leakage from the local community.
- It prevents incorrect pricing by the market mechanism (Brohman 1996:59-61).

These are described below and will also be used as a guideline in the recommendations made in chapter 8, to assess the local specific situation on Apo Island.

3.6.1 Empowerment of the local community

Communities that have not developed a means to oversee or regulate tourism development, often feel that they have lost the ability to regulate and oversee tourism development. This has several environmental and cultural impacts. Megan Epler Wood (2003:2) argues that in such a case, the community loses its ability to determine the fate of their own people, neighbourhoods and towns, which leads to a growing set of cultural impacts, socio-economic inequities and environmental problems. Examining this, we can see that it is of the utmost importance that communities have power over the tourism benefits and activities occurring in their community. Robert Chambers (1994) also found that when a community is involved in the planning, management and evaluation of development, it becomes part of a process of empowerment in the local community. Planning the future of their own community can be seen as an important feeling of empowerment within communities. They then have the feeling that they have matters in their own hands.

Brohman (1996:61) writes that a two-way planning processes is needed that empower people to design policies in their own interests and build on their own resources to overcome the problems that they will inevitably confront.

The implementation process of Agenda 21 has put considerable emphasis on developing the community. In spite of a number of successful cases the overall Tourism trend points to economic, political and social de-empowerment or even misappropriation of the community (Segschneider 2002: 58). An example provided by Segschneider (2002: 58) is that at a regional conference in Thailand on ecotourism in March 2002 to prepare for the Ecotourism summit in Quebec in May of that year, only a limited number of community representatives attended. The largest number of participants represented was those with economic interests in the development of ecotourism. "Problems discussed during that conference focused on economic prospects provided by ecotourism for regional and national development. Pressing issues of social community development, community rights and equal and fair community participation, which would be an important framework for cooperation between the target communities and the ecotourism business sector, were not equally addressed." (Segschneider 2002: 58).

Brohman (1996), Segschneider (2002: 58), and Epler Wood (2003:2) all agree that without returning responsibility for community decision-making to the community itself and empowering local communities to take independent and valid decisions respected by authority, the aspects of sustainable (tourism) development have clear limitations.

3.6.2 Conservation of the environment and biodiversity

"Having ruined their own environment, having either used up or destroyed all that is natural, people from the advanced consumer societies are compelled to look for natural wildlife, cleaner air, lush greenery and golden beaches elsewhere. In other words, they look for other environments to consume. Thus armed with their bags, tourists proceed to consume the environment in countries of the Third World - the last "unspoiled corner of earth" - (Hong 1985: 12).

Brohman (1996:58) explains that tourism has also often been linked with environmental destruction, a declining quality of life, and rising feelings of loss of control and cultural alienation among the local population of developing countries. In some cases, the natural "foundation assets" (e.g., sandy beaches, tropical forests, coral reefs, clear seas) upon which tourism is based are being irreparably damaged by overuse and unsound environmental practices. Examples in coastal areas are anchoring damage, pollution, insufficient waste disposal, construction etc. Conversely, one of the main goals of more ecologically sustainable forms of tourism would be to avoid such cumulative, negative effects.

The very presence and actions of visitors can present serious problems for biodiversity conservation. Therefore, tourism has to be managed with care and the costs and benefits of tourism in protected areas have to be balanced. This means it cannot be assumed necessarily that tourism is largely positive for a given situation, both for the environment and for the local people living there. The danger arises that once tourism development takes place that these interests will always take priority over conserving the environment and biodiversity.

Research (Barkin 1996:3) shows that when given the access to suitable resources, the poor are more likely than other groups to engage in direct actions to protect and improve the environment. From this perspective there arises a need for an investigation to discover new ways to encourage local communities in developing countries to take control of the

management of ecotourism as an integrated part of their future sustainable development (Barkin 1996). Such an investigation was done together with the community of Apo Island during this research.

In order to be successful, CBE must promote sustainable development by establishing a durable productive base that allows local inhabitants to better their living conditions as a result of it. As a tool in the development field, an ecotourism project must incorporate the social dimensions of productive organisation and environmental conservation. Based on the experience of the over-wintering reserves of the Monarch Butterfly in west-central Mexico, David Barkin (1990:1) suggest that unless ecotourism actively incorporates the local society into service planning and provision, and includes programmes to meet the fundamental needs for income and employment for all people in a community, the special qualities of the site and its flora and fauna may be irreparably damaged.

3.6.3 Limiting the economic leakage of the earned tourist money from local communities

It has been explained that CBE and PPT both put an emphasis on the importance of the economic opportunities and advantages for the poor in a given tourism area. The amount of income that is generated by the tourism activities should stay within the community and whilst circulating there, create opportunities of employment and activate unused production capacities stimulating the local economy. In order for tourism to generate the biggest possible effect on the community, it should bring more money into circulation (generate capital), increase the purchasing power within a community and lead to small entrepreneurs setting up informal or formal businesses related to the sector.

Steck (1999:20) in her document about PPT indicates rightly that sometimes most of the added revenues from tourism expenditures undergo leakage. Leakage refers to the process through which tourism money leaves the destination's economy, thus not staying locally. It means that most of the tourist earnings leave the local community, leaving the given community no better off than before the tourism activities. Leakage was identified

by the UN as an inadequacy of the current tourism sector to meet the needs of the poor (International Council on Local Environmental Initiatives 1999:9). These revenues may leak out of the local economy in the form of payment for imports or money saved (without reinvestment) or through earnings going to foreign owned resort and travel operators outside the local economy. According to Steck (1999:20), other important payments can take several forms, such as repatriation of profits to foreign corporations and salaries to non-local managers, as well as payment for imported goods and for promotion and advertising by companies based outside the destination.

In the research, "Sustainable tourism as a development option", conducted together with the Federal Ministry for Economic Co-operation and Development in Germany named, Steck (1999:20) explains the following concerning the impact of tourism:

"Limited direct effects and high leakage rates can be expected for peripheral and undeveloped areas, as investments come from outside and a high percentage of goods and services must be imported. Nonetheless, even lower earnings from tourism will have outstanding significance if hardly any other opportunity for cash income exists. A central task of local regulation for sustainable tourism development is to promote the entrepreneurial initiatives of local communities and to increase sustainable use of local resources" Steck (1999:20).

Foreign domination of the tourism industry often also contributes to the overseas leakage of a substantial portion of the earnings. In many tourism sectors, especially of the enclave variety, foreign capitals construct and own the major part of hotel accommodations, restaurants, and other services, as well as the principal transportation links and travel agencies (Brohman 1996:55). Profit repatriations and payments for imported goods and services widen the leakage of foreign exchange earnings from tourism and frequently put a heavy burden on the host country's balance of payments.

A study of tourism leakage in Thailand estimated that 70% of all money spent by tourists ended up leaving Thailand (via foreign-owned tour operators, airlines, hotels, imported drinks and food, etc.). Estimates for other Third World countries range from 80% in the Caribbean to 40% in India (UNEPTIE 2005:2). Moreover, of each US\$ 100 spent on a vacation tour by a tourist from a developed country, only around US\$ 5 actually stays in a developing-country destination's economy. According to Barkin (1996:1), CBE development strategies may contribute to promoting a new form of dualism: a dual structure that allows people to rebuild their rural societies and produce local goods whilst services with local production capacities will ensure that less money will leak away. Communities have to learn how to use creativity to control tourism, whilst taking the opportunity to ensure that tourism money stays local and expanding the environmental stewardship services they have always provided. This does indeed need careful planning and control by communities themselves. The danger still exists that tourism might get out of control and have mainly detrimental effects on both the environment and the community members themselves.

We will also see later in chapter 6 that sustainable tourism is easier to theorise about than to practically implemement, even if the local community is empowered. The local situation is often very complex with several forces determining that the money earned by tourism leaks away from those that should benefit from it.

3.6.4 The failure of the market-mechanism to determine the correct price of tourism activities

A primary barrier to sustainable development through tourism is an over reliance on market mechanisms to guide tourism development and consumption decisions (International Council on Local Environmental Initiatives 1999:9). The market, which treats cultural and environmental wealth as free, public goods and which responds to degradation of this wealth as a free ride -provides instruments to guide development, but is insensitive to many requirements of sustainable tourism. This means that it does not take the environment and biodiversity in account when the pricing of a good is done. This results in services and goods of tourism to be cheaper than it should be if these resources were also taken into account in the "production process" of the service of tourism. Some correcting needs to be done, especially if it is the case (and this is mostly so when tourism is initiated) that the local population is still dependent on the resource that the tourism is based on. Findings from White, Ross and Flores (2000:226) give rise to the argument that in order to ensure the sustainability of ecotourism, regular monitoring by the pertinent community is a requirement and that through this it becomes possible to alter and update pricing of the tourist activities when the pressure on the resource, for instance, increases. The problem is to find the correct mixture of market orientation and state intervention, given divergent development conditions in individual countries, and then to devise a set of institutional and organisational arrangements to follow.

In short, it has been argued in this section that tourism should be incorporated as part of a Community-Based -Natural Resource Management (CB-NRM) scheme, in order to be planned for and minimise the negative effects on the environment and community whilst maximising economic and development benefits. It is important that the local community is involved and not excluded from the decision making process. Literature shows that it is important for the community to have the feeling of control over the impacts of tourism in their local environment. This leads to the process of empowerment, which makes the community stronger for future decision-makings and in other processes. These decisions include conserving the environment and biodiversity for their offspring and not letting tourism destroy the natural resource that the community depends on for future survival. This can be done by ensuring that tourism has the correct price in the local community, thus taking the free public goods into account and taking steps to minimise leakage in the community and maximise benefits in a responsible way. Ways to do this will be to promote entrepreneurial initiatives of local communities whilst promoting sustainable use of local resources.

We have also seen that not only is the community role in the management and conservation of natural resources is important, but that the community also has a role to play in the enlarging economic benefits from tourism. In reality, however, this is always a joint effort between different actors. This inherently means that there will be different interests (besides the multiple interests within a community) from the outside. The

84

following section will discuss literature concerning what the exact role should be of communities or local groups within the NRM and what this implies for power relations between such different interest groups.

3.7 Natural Resource Management as the responsibility of the community

The International Development Research Centre (IDRC) (2005:1) defines CB-NRM as follows: "it is an umbrella term under which the following related terms in the natural resource management literature are placed: co-management, collaborative management and community management".

While these terms do represent different ideas and approaches to natural resource management, they all tend to emphasise a strong role for communities in the control and management of productive natural resources. This emphasis on the local community has gained widespread attention in recent years primarily in response to the poor track record of top-down, centralised, bureaucratic management and regulation of natural resources by states and governments (IDRC 2005:1). Representative and accountable community-based institutions are seen to be potentially more dynamic and responsive to rapidly changing local realities, implying a more adaptive process of resource management. The IDRC (2005:1) argues that the CB-NRM approach is recognised as a more effective way to maintain, adapt and build upon key elements of traditional resource management systems that have evolved under unique ecological circumstances and with distinctive forms of social organisation. These can provide useful information upon which to develop and adapt sustainable resource management systems for the future.

Uphoff (1998:3) writes that CB-NRM as a strategy reflects the "parallel nestedness" of organisms, species, associations and ecosystems in the natural universe. Biological systems, because they do not exist in isolation, need to be maintained within conceptions that comprehend the connectedness between micro and macro levels." This reflects the holistic thinking that is so important for the future of sustainable development. In this reasoning, larger systems are obviously made up of smaller ones and disappear without them; yet at the same time, smaller systems depend on larger ones for their survival. This means that different levels need each other" (Uphoff 1998:3). The

85

same could be said for natural resource management, the community broadly conceived is where most of the decisions and actions that directly affect natural resources are made. Simultaneously, it highlights a need to remain aware of higher levels of social organisation and ecosystem analysis and to relate these clearly to lower levels" (Uphoff 1998:3). For the local community, this explanation by Uphoff means that it will have to make decisions and activities themselves at local level, but bear in mind that they cannot survive without taking into account the relations with higher levels such as government and other social structures.

The potential for communities and community-based institutions or their relative advantages in relation to these higher levels like central government or the external private sector is summarised by the IDRC (2005:1) as the following:

- communities are better positioned both to respond and adapt to locally specific social and ecological conditions and to represent local interests and preferences;
- they are more knowledgeable about the minutiae of local ecological processes and management practices (built into indigenous knowledge systems);
- they are better able to mobilise local resources, both human and material, through locally adapted or traditional forms of access and management;
- they are more accountable for their natural resource management decisions and actions given the relative importance of the natural resource to their livelihoods and their proximity to the people they represent.

However, the IDRC (2005:2) warned that, despite this potential, the community-based approach carries with it a number of risks and constraints.

- Communities are rarely homogenous entities and often have competing and conflicting interests. This is true for even the smallest of societies and is also true for the situation on Apo Island.
- Community power structures may not be representative or accountable and can serve to marginalise the neediest. Sometimes it is the case that one family dominates the decision making power.
- Collective community interest may be fragmented by the broader economic (market forces) and political structures in which they are embedded.

• External political interests and bureaucratic regulations may erode communal authority.

This means that while an emphasis on community-based institutions and traditional resource management systems can be seen as fundamental to CB-NRM, the approach will almost always have to involve a sharing of authority and responsibility for managing a resource among a variety of institutional and individual actors within and outside a given community.

Little (1994:348) expresses that CB-NRM starts with communities as a focus and foundation for assessing natural resource uses, potentials, problems, trends and opportunities, and for taking action to deal with adverse practices and dynamics. He explains that this is not done in isolation but rather with cooperation and support from other actors, both from other communities (horizontal linkages) and from higher-level or external entities (vertical linkages) in order to bring forth capacity building⁶. These higher-level actors can be: local or district governments, regional bodies, government agencies, non-governmental organisations (NGO's), universities, or any other institutions that have an interest in resource conservation and management.Little (1994) underlines the fact that one of the major challenges for the CB-NRM approach is to identify and establish the fitting balance of responsibilities among these various actors based on the exact social, ecological, political, and economic conditions that exist. This for any given situation will be unique. This research concentrates on the role that the local community of Apo Island has in determining this fragile balance.

⁶ Capacity building means the process through which individuals, groups, organisations, institutes and society increase their capacity to:

[•] carry out their main tasks, solve their own problems, and define (and achieve) their particular goals;

[•] understand what their development needs are, in a wider context, and to cope with this in a sustainable fashion.

I would like to summarise CB-NRM in the words of Normann Uphoff, at the International Workshop on CB-NRM organised by the World Bank in 1998. "A community-based approach recognises and reinforces the stakeholder role of people living in, on and around vulnerable natural resources, both for these people's sake and for that of future generations, for people living in the immediate area but also in the rest of the country and the rest of the world" (Uphoff 1998:5).

The research of this thesis was done on a community that is dependent on coastal marine resources. We have seen that the most sensitive areas are coastal areas and more specifically coral reefs. When CB-NRM takes place in coastal zones it can be called Community-based - Coastal Resource Management (CB-CRM) and will be explored in the next section.

3.8 An explanation of Community-based Coastal Resource Management

"There is an urgent need for proper management of marine resources. At present, there are few areas of the world's seas where this has been done successfully" - Buckley 2002b

As the pressure for tourism growth in coastal areas gathers strength, the need to promote CBE development through community participation becomes a very important element in the process of planning future tourism in a sustainable way (Read 2003:3).

CB-CRM can be defined as the management approach where local communities and local government units play a fundamental role in the conservation and sustainable use of marine resources (Alcala 2001:85). It recognises the integrated importance of food security, equity in access and control of marine resources, gender fairness, indigenous knowledge and multi-sectoral partnerships (Ira 1997:35). It comprises those activities that achieve sustainable use of economically and ecologically valuable resources in coastal areas, which consider interaction among and within resource systems as well as those of humans and their environment. (CRMP 2001: S2-2c)

The Australian Institute of Marine Science (Bunce, Townsley and Polnock 2000) published a document called the "Socio-economic manual for coral reef management". It explains that coral reef management has focused traditionally on the biophysical aspects of coral reefs. Today, reefs are coming under increasing pressures from human activities such as tourism. Therefore, according to this report, the human dimension of reef management must play an important role in reef management programmes that now emphasise stakeholder involvement, community participation, and cooperative management. This is especially important in countries where people depend on reefs for subsistence and commercial fisheries, shoreline protection, and tourism attractions and yet their behaviour often adversely affects the health of the reef ecosystems.

The management of coral reefs has to balance sustainable use and reef conservation; therefore the relations between human behaviour and reef ecosystems are critical (Bunce et al 2000:3). Reef health is affected by human activities, but also the livelihoods and prosperity of people living in coastal tropical areas depend on the condition of the marine resources. Therefore, coral reef uses, reef management and reef ecology cannot be considered in isolation.

It is clear that CRM should incorporate social and economical (local food security and livelihoods) dimensions and that local specific situations can be best assessed by the local community themselves, especially because they are dependent on these resources for their livelihoods.

In order to complete this literature study it was important to look for case studies related to CRM. In my study, I was looking for academic works that investigated CRM and tourism together as an integrated management strategy. More specifically for communities that already have tourism activities and are not in the start-up phase, but rather where the community has a successful CB-CRM scheme, but are realising the pressures that tourism are exerting on it. Some interesting developments were taking place in the Philippines at the time of the beginning of my literature study, which will be noted in the next sub-section.

89

The experience of the Philippines in Coastal Resource Management

In 2004, I discovered that the Department of Environmental and Natural Resources (DENR) of the Philippines initiated a CRM Programme where the mission was to catalyse Coastal Resource Management to a threshold that expands nationwide. According to the DENR (2001:13), tourism activities in the Philippines were on the increase - bringing economic developments that support these activities such as shoreline resorts and restaurants, roads, boating and diving, to expand. The lack of planning in the tourism sector was identified as a major issue, which is causing many concerns and problems. Even though it is in the interest of tourism developers to maintain environmental quality, it was found by the DENR that the opposite is happening in many cases (DENR 2001:13). Subsequently researchers were called to look into opportunities for research that could shed some light on what is happening in local communities with connections with tourism developments.

Ulugan Bay: a successful tourism development project

A case study of particular relevance and interest is the Ulugan Bay project in the Philippines. The project was realised by UNESCO. This project employed a multi-sector and inter-disciplinary approach with the aim of alleviating poverty through the development of sustainable livelihoods in areas such as ecotourism and sustainable coastal fish farming. The project became operational in January 1999. From this case study described by Felstead (2002:3) it is implied for ecotourism development initiatives to be successful it is important that it is:

- founded in local communities;
- based on sustainable resource management principles;
- economically viable within the wider tourism market;
- empowering to local communities;
- capable of integrating the needs of development with those of conservation.

A call for research on Apo Island, the Philippines

Literature that provided an answer to what extend the local community is responsible for managing tourism themselves, could not be obtained. My search continued for an example where a community that was experienced in CB-NRM, but was experiencing some difficulties. Examples were needed of local communities where tourism was slowly becoming a problem and the relevant communities were looking for solutions. Further investigations into CRM literature in the Philippines resulted in the discovery of an article in the Silliman Journal: "Constructing ecotourism: the application of the tourism system in the Philippines context" (Oracion 2001a). Here, I encountered the case of Apo Island again. The case of Apo Island was mentioned and there was a call for research on the issue of responsible tourism and NRM. The article explained that, "the present condition of the island is critically threatened by tourism abuse and unless mitigating actions were to be taken, irreversible damage would be inevitable" (Oracion 2001a:123). In this paper, Oracion also explained that it is time for all those involved in the environmental, tourism and development programmes on Apo Island to come together again and finally draw up a framework defining how the tourism system and the marine ecosystem should behave and interact (Oracion 2001a:126).

At this point further literature could not be found that addressed this issue. Studies of other students and articles of colleagues in development cooperation could not give more clarification and therefore it is at this point where my research commenced to explore into unfamiliar territory.

3.9 Conclusion

Tourism has impacts on the environment and on those living in the communities visited by tourists. Some of the impacts are mainly positive (such as employment and strengthening of local capacities and the local economies) whilst in the majority of cases the hidden negative impacts (environmental degradation and social and cultural problems) may only show after some time. When these negative factors become apparent, it might be too late to restore the damage done already.

91

In order to minimise the damages and maximise the positive effects of tourism for both the environment (in the form of financial means for conservation) and the local community (socio-economic and cultural advantages), it is important that tourism is managed correctly. It has been indicated that tourism has large negative effects on fragile coastal zones where tourism activities are very often concentrated. Thus, it is of great importance that tourism is incorporated in the process of CRM.

A further point discussed in this chapter is the role of the different players in resource management. CB-CRM is always a process where different players are involved, all with their separate agenda of interests. Here it is true that the community has a large role to play in the protection of their resource against intruders (including tourists). For this they will need their indigenous knowledge skills complemented by the new skills needed to manage the resource in a sustainable way, for the equilibrium has changed between natural resource and humans. Some of these skills will inevitably have to be gained from outsiders; making external contacts a significant aspect of this whole process.

In the literature study it was indicated that there was a call for research regarding the role of the community or local groups in changing excessive tourism activities. More specifically, there was also a call for research related to this subject on Apo Island. What can the Apo Island community do to manage tourism and what are the tools that they will need in order to do this effectively? Does the community in reality have the power to alter existent tourism activities or is it something that can only be prevented from the very start? These are some of the questions that will be looked at in the representation of the data captured during the case study of Apo Island.

In order to understand the specific local context of the research problem and questions examined here, it is important to provide an overview of the local situation on Apo Island. The following chapter will discuss the natural, social, historical and cultural environment in which the local residents of Apo Island are living their daily lives.

Chapter 4: Background information of the selected community: Apo Island, the Philippines

"The goal of the people of Apo Island is to find a balance between ensuring reef protection and the improvement of economic and social development. This we do so that many generations to come can still live and be happy on this beautiful island." - Barangay Captain Apo Island, Mario Pascobello (2004e).

4.1 Introduction

The purpose of this chapter is to give the reader a general view of Apo Island, the Philippines. It describes its natural resources and the people that live there. The following list reflect the objectives of this chapter.

- Create an overview of the economic and social situation in the Philippines.
- Describe the tourism industry in the Philippines.
- Provide details about the coastal communities of the Philippines.
- Provide details about the biological importance, function, condition of and threats to the Philippines coral reefs.
- Provide the demographic details and the livelihood activities present on Apo Island.
- Give an overview of the history of the Apo Island Marine reserve.
- Provide a summary of the regulations of the Apo Island Marine Reserve and the institutional recognition thereof.
- Give a summary of the unresolved issues on Apo Island.
- Look into the motivating factors for tourists to visit Apo Island.
- Provide more details concerning local tourism development on Apo Island.
- Look into conflicting issues of development and conservation on Apo Island.

4.2 Background information on the Philippines

This section will provide details on the population, economy and income distribution of the Philippines.

4.2.1 Population details of the Philippines

The Philippines is the thirteenth most populous country in the world. In 2000, the Philippines registered a population of 75.33 million and an annual growth rate of 2.02 percent (Philippines National Statistics Office 2005). Whilst the average growth rates have been declining (2.75 % in 1980, 2.35 % in 1990 and 2.32 % in 1995), the population demands appropriate response and intervention. According to the Commission on Population (POPCOM), the continued momentum of rapid population growth will translate to a population increase in absolute numbers for the next two decades, declines in population growth rates notwithstanding (FAO:2004).

4.2.2 The state of the Philippines Economy

According to information retrieved from the Asian Development Bank (ADB) (ADB 2004:31), the Philippine economy performed better than expected in 2004: Gross Domestic Product (GDP) grew by 6.1%, surpassing the government projection. A beneficial international economic situation, favourable weather, and growth in all regions of the country were important determinants. Growth in personal consumption expenditure, accounting for about two thirds of aggregate demand, which increased to 5.9% from 5.3%, higher farm output, stronger remittances from overseas workers, and booming demand for telecommunications services were the largest contributors (ADB 2004:31).

According to the Philippines National Statistics Office (PNSO), total exports increased by 14.0%. Total import growth declined to 6.3% from 10.2%, reflecting decelerating growth in several categories, including transport equipment and manufactured metals (ADB 2004:3).

Agriculture, which contributes a fifth of the country's economic output and employs slightly above one third of its workforce, grew by 4.9%, thanks to favourable weather.

The fisheries sector accounts for 4% of the country's GNP with a percentage of between 40 and 60 percent coming from coastal waters (CRMP 2001:S2-1d). Industrial growth rose to 5.3%, due to better outturns by manufacturing and construction. Manufacturing, the biggest contributor to the growth of the domestic economy, continued to pick up pace, expanding by 5.0% in 2004. This is a particularly positive development, because manufacturing generates benefits to other sectors of the economy. Services continued to improve, by 7.3%, with the top contributors being trade, transportation, communications and storage, and finance. Tourism receipts accounting for about 3% of GDP in 2003 make a relatively small contribution to total income (ADB 2004:32).

High unemployment remains the country's single clearest indicator of a weak economy, averaging 11.8% of the labour force, up from 11.4% in 2003 (PNSO 2005). According to the latest survey from the National Statistics Office of 2003 (PNSO 2005) there is a steady increase in the number of employed persons in the hotel and restaurants sector. From 668,000 in 2001, employment in the sector increased by 3.7 percent in 2002 (693,000) and by 8 percent in 2003 (749,000). Its share to total employment is likewise increasing—from 2.3 percent in 2001 to 2.5 percent in 2003. Vendors, home-workers, self-employed agricultural, rural, and other informal sector workers were estimated to comprise about 49 percent of employment (Department of Labour and Employment 2005). Additionally, the fisheries sector employs over a million Filipinos, more than half of whom are engaged in small-scale fishing (CRMP 2001: S2-1d) and is dependent on a continued healthy coral reef ecosystem.

4.2.3 Income distribution in the Philippines

The Philippines has been long known for its high level of inequality in income and wealth distribution (Balisacan and Fuwa 2004:1). Balicasan argues that a widely held view on the inequality in the Philippines is that development policy has favoured the island of Luzon and discriminated against peripheral islands (provinces) of Visayas and (especially) Mindanao.

During my research this is friction that I observed in relationships between the "North" and the "South" of the Philippines. For instance, way people from Luzon speak about those that live in the provinces as being, lay people. This creates tension between people from the two areas. People from disadvantaged regions mostly prefer to speak English to people from Luzon even though they can speak Tagolog⁷ much better. Another example of this is that the first national language, besides English, is seen as Tagalog, even though a bigger percentage of people speak Visayan.

It is noticeable that the poor performance of the Philippine economy over the last three decades has been attributed partly to the relatively large variation in access to infrastructure and social services between the major urban centres and rural areas.

4.3 Description of the tourism industry in the Philippines

It was noted in chapter 3 that Asia and the Pacific areas showed the biggest increase of tourism arrivals in 2004. A recent assessment of the Filipino tourism industry by the WTO in 2004 (WTO: 2005b) led to reveal that to date the Philippines is yet to fulfil its considerable potential and establish itself as a premier tourist destination in Asia. The country still has to take advantage of the increasing development of the Asia Pacific region into one of the world's fastest growing tourist regions. Consequently, it has fallen behind with many of its neighbours, who have achieved substantial rates of tourism growth and development even in the most difficult of circumstances (SARS, chicken flue, etc.). Despite many political, economic and nature based factors having a significantly negative impact on Asian tourism in recent years, countries such as Thailand and China have managed to overcome these obstacles and strengthen or at least maintain their market position (WTO: 2005b).

The Philippine Government set targets for the development policy in tourism to continue to contribute substantially towards expanding SME businesses in the medium to long

⁷ Tagalog is spoken on the island of Luzon. It is spoken by the Tagalog people, the second-largest Filipino ethnic group.

term. There is a general focus to increase foreign exchange earnings, investment, interindustry linkages and the generation of employment from tourism (WTO 2005b).

Tourism activities are generally concentrated in coastal areas in the Philippines. This tourism has a large and unmeasured impact on these coastal communities. The next section will look at the livelihood, economic and social standpoint of these coastal communities in the Philippines as a whole.

4.4 Details about the coastal communities of the Philippines

According to the FAO (2004:3) the total of coastal communities comprise about 54 percent of all municipalities in the Philippines. The social relevance of the municipal fisheries sector is highlighted, because fishing communities are often poor, geographically isolated and have little access to basic social services. They have also been characterised as high fertility groups.

There is no accurate account of the actual number of people dependent on and involved in the fisheries industry in the Philippines. The FAO estimates that more than one million persons are engaged directly and indirectly in fishery-related activities in the Philippines. A study conducted by Baylon (FAO 2004:1-4) on the population trends of municipal fisherfolk reports that the total municipal fisherfolk population increased from 399 942 in 1970 to 904 004 in 1980 - an increase of 126 percent. This large increase suggests that fishing still attracted labour from other sectors and was providing a good source of income. Between 1980 and 1990, total municipal fisherfolk population registered a slight increase of only 6 percent, indicating a decreasing attractiveness of the fisheries sector (FAO 2004:1-4). Over exploitation and depletion of the resource were cited as possible factors for the decline during that time.

In the Report of the World Summit on sustainable development, article 30, (UN 2002: 28) there is stated that, "Oceans, seas, islands and coastal areas form an integrated and essential component of the Earth's ecosystem and are critical for global food security and

for sustaining economic prosperity and the well-being of many national economies, particularly in developing countries".

The importance of the implementation of chapter 17 of Agenda 21, which provides the programme of action for achieving the sustainable development of oceans, coastal areas and seas are described by the UN as follows:

"Marine environmental protection; sustainable use and conservation of marine living resources; addressing critical uncertainties for the management of the marine environment and climate change; strengthening international, including regional, cooperation and coordination; and sustainable development of small islands" (UN 2002:29) are seen as of vital importance.

At the base of all marine life in the Philippines, is the tropical coral reef. Before looking at the current condition of the Philippines coral reefs it is important to give an ecological description of coral reefs and its animals and fish that thrive in it. Therefore the next section will look at the importance of the ocean in general.

4.5 Details about the biological importance, function, condition of and threats to the Philippines coral reefs

This section will offer details about the biological importance, function, condition of and threats to the Philippines coral reefs.

4.5.1 A description of the biological importance of marine resources

Isaac Asimov wrote in 1970: "Ocean life is far more important in the total scheme of things than land is.... If all life should disappear, life in the ocean might be handicapped in some minor ways, but it will continue. If all ocean life were to disappear, however, animal life on land could continue only in greatly reduced quantity -if at all" (CRMP 2001:S21a).

Planet Earth is a unique planet as it has more water than any other planet in our solar system. The oceans cover 71% of the earth's surface. The four main oceans, the Pacific, Atlantic, Indian and Artic Oceans, are actually one great interconnected system, thus

oceanographers often speak of one world ocean The ocean is the key regulator of the global climate. The huge mass of ocean water moderates local temperature by absorbing heat in the summer and releasing it in the winter (CRMP 2001:S1-20).

Additionally, the ocean is a source of food. Most of the world's marine catch comes from seas that are closest to the land. Two-thirds of the commercially valuable fish begin their lives in coastal waters, estuaries and wetlands. Yet, as Buckley argues (2002:1) it is in coastal areas where the greatest degradation of the marine environment is taking place and it is in this fragile ecosystem where most coral reefs are situated.

The following section will attempt to give an overview of the coral reefs of the Philippines. It will describe the structure and functions of the ecosystem.

4.5.2. Details on the biological structure and functions of the coral reef of **Philippines**

Coral reefs are amongst the most biological diverse ecosystems on earth. They have been called "marine rainforests" since they are highly productive, bio-diverse and immensely threatened by human activities (Coral Cay Conservation 1998:1). Reefs are an important asset to both local and international communities as a source of food, materials for new medicines, income from tourism and as a natural defence mechanism against shoreline erosion (CCC 1998:1).

Coral polyps, because of their unique ability to grow in nutrient-poor water, are responsible for vast communities of fish and other marine life in waters that would otherwise have been barren (Centre for Marine Conservation 2004 :3) Although coral reefs are found only in the tropics, coral themselves are very widespread organisms. Coral is found in many shapes and sizes; it is basically composed of tiny individual animals, called polyps. A polyp is a small animal that looks very much like a jellyfish. In soft corals spikes of calcium carbonate (CaCO3) helps connect polyps together, whilst in hard coral polyps sits inside CaCO3 structures and are cemented into a coral colony.

Reefs are formed when hundreds of hard coral colonies grow next to and on top of each other (Centre for Marine Conservation 2004:3).

Coral polyps catch plankton, but this is only part of their diet. What makes coral polyps so unique is that each polyp lives in symbiosis with special algae, called zooxanthellae. These one-celled plants utilise sunlight, CO2 and other raw materials needed via photosynthesis. This supplies the polyp of the much needed oxygen and other nutrients, whilst in return the algae received protection and a constant supply of carbon dioxide etc. needed for the process of photosynthesis (Centre for Marine Conservation 2004 :3). Coral reefs can be found in over 100 countries of the tropical seas. For thousands of years coastal communities have relied on these reefs for hosts of products for protein and medicinal sources. Now they are threatened by human activities. Over-fishing, over-exploitation and pollution, which are all common results of modern human development, are all putting tremendous strain on the ocean resources. These factors lead to the general degradation of coral reefs worldwide. This is also true for the Philippines. The next section will study the threats to and the general condition of the Philippine coral reefs.

4.5.3 Threats to and general condition of the Philippine coral reefs

The Philippines has a coastal ecosystem that stretches for almost 33,900km.A very large percentage of the residents of the 7107 islands depends on the ocean and its resources for daily food and income. It is interesting to note that 100% of the population of the Philippines live within 100km of the coast. There is an estimate of 27,000 sq km of coral reefs scattered through the Philippine archipelago and amounting waters to 266 000 sq km (CRMP2001:S2-1d). Coral reefs contribute significantly to the economy through fish catch and tourism. Aside from economic benefits, coral reefs perform important ecological functions such as shoreline protection, biodiversity, medicinal and aesthetical appeal (DENR, 2002:1).

The coral reefs of the Philippines host more than 2000 species of fish, 5000 species of clams, snails and other molluscs, 488 species of corals, 981 of bottom-living algae, and thousand of other marine organisms can be found in the Philippine ocean ecosystem

(CRMP 2004). The once abundant Philippine coral reefs are under enormous pressure from human activities. These include destructive methods of fishing such as dynamite, cyanide and other illegal fishing, but also legal activities such as tourism. Shoreline activities such as commercial development, tourism development or logging contribute to the degradation of this natural resource through salutation and pollution. Presently only 5% of reef cover is considered to be in excellent condition (DENR 2002:1). As the biggest part of the population of the Philippines is dependent on ocean resources in order to make a living, the fact that the resources are depleting is very alarming for survival of the Filipino people.

As a response to these human threats, marine protected areas have been important interventions in coral reef management, to ensure sustainable coral reefs in the Philippines. Out of the 851 Marine or Littoral⁸ Protected Areas in Asia (excluding the Middle East) in 1999, 159 could be found in the Philippines (Earth Trend 2003:2). The increasing awareness of the endangered state of the coastal environment has resulted in a shift of focus from fisheries development to CRM. This means the decentralisation and devolution of fisheries management to local government units and the active participation of the affected communities. As a result, Community-Based Coastal Resource Management (CB-CRM) programmes and projects have been promoted and are being implemented in various stages and modalities within the country.

As an approach to sustainable development, CB-CRM aims at the protection, rehabilitation and regeneration of degraded coastal areas to benefit coastal communities. According to the FAO (2004:4) CB-CRM uses an integrated approach that considers the interrelationships and interdependencies of the biological, physical, socio-cultural, economic, demographic, legal and institutional factors obtaining in the coastal area (a

⁸ IUCN defines a 'marine protected area' as: "any area of intertidal or subtidal terrain, together with its overlying water and associated flora and fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment." "Marine" is defined as any site which is known to incorporate at least some subtidal area permanently submerged under the ocean. "Littoral" is defined as any site which is known to incorporate at least some protected areas have a large terrestrial component.

more thorough description was provided in section 3.7). Studies and experience have shown that the key to success of any CRM initiative is the active involvement and participation of the community.

Apo Island in Negros Oriental, the Philippines, is internationally recognised as being the first successful CB-CRM project in the world (DENR: 2002:5). A few years ago, Apo Island became famous for its healthy and spectacular coral reef and the mere abundance of marine biodiversity. Gradually the condition of the reef is deteriorating as a result of human pressures. Notwithstanding, Apo Island has been an example to many other islands in the Philippines on how to implement successful CRM of their ecosystems in their communities. Many Barangay captains⁹ and other local leaders and students from all over the country come to visit in order to see and learn from the success of Apo Island. Leaders from all over the Philippines visit Apo today to learn from what has been done here, in order to initiate and set up similar marine sanctuaries in their communities. Although Apo is an example for others, there are still some challenges that have to be faced. Before these challenges will be explained, the demographics of Apo Island, the history of the marine reserve and its regulations will be discussed.

4.6 Demographic details: Apo Island

Location : Negros Oriental, Visayas, the Philippines

: 72 hectares Area

Population : 750 (half of which is children)

Classification: One Barangay¹⁰ divided in 7 Puroks¹¹

The research was carried out on Apo Island; a 72-hectare island surrounded by 106 hectares of coral reef, situated in the Mindanao Sea. It is a steep volcanic island that rises 200 meters above sea level with a reef up to 500 meters from shore. There are no freshwater inputs on the island and seasonal storms occur (Oracion 2001b: 114). It has

⁹ Community elected village leader, see also footnote 4

¹⁰ Barangay definition =As of 2002, there are 79 provinces in the country. Provinces are further subdivided into cities and municipalities, which are in turn, composed of barangays. The barangay is the smallest local government unit. ¹¹ A Purok can be defined as a neighbourhood within a given community

steep rocky cliffs interspersed with five sandy white beaches and two mangrove lagoons. The island is surrounded by a fringing reef with very extensive and diverse coral cover. Volcanic rock boulders provide much of the substrate for corals and algae. It is exposed to the monsoon winds: from November through March or April to the northeast monsoon and from May to September to the southwest monsoon. Water visibility is excellent reaching 20m.

Apo Island is part of the Dauin municipality situated on a bigger island, Negros, which is situated in the Central Visayas¹². The Dauin municipality is part of the province Negros Oriental situated in the South-West of Negros. Apo Island is situated about 9 kilometres from the Negros mainland and is approximately 30 to 45 minutes away by motorized banca (small boat) from the nearest point on Negros, depending on sea conditions.

On Apo Island itself, there are 2 small villages along the periphery of the island with together 750 residents (according to locally executed informal Water Census 2004). Half of the population are children. The official numbers on Apo, however, from the census in 2000, the population is 700 (DENR: 2004). Visayan is the local language spoken and the religion is Catholic.

¹² The Visayas is a group of islands in the central Philippines. These include the islands Negros, Cebu, Bohol, Leyte, Masbate. See map of the Philippines in Annex 1



Figure 3: Map of Apo Island, Dauin, Negros Oriental. Source: Liberty's Community Lodge 2007

4.7 The livelihood activities present on Apo Island

The average monthly income per family on Apo Island is an approximate PHP 4000 (APLS Visitor Centre 2004). This is quite low, when compared to the rest of the Philippines where the average national monthly income is PHP 12384, according to the 2003 census Family Income and expenditure survey (PNSO 2005). Livelihood activities include fishing, farming, gleaning and sari-sari- stores (small shops). There are two small businesses on the island, one trading fish on the mainland and one karaoke bar with pool table for locals. Activities for income from tourism include vending souvenirs (mostly T-shirts and sometimes hats, bags or necklaces) or paid work in one of the two local resorts as carpenters, cooks, waitresses or dive guides. Two families have established overnight accommodation for visitors, only one providing cooking for guests. These services are not marketed on the island or on the mainland. In guidebooks such as the Lonely Planet these home stay alternatives are unfortunately not mentioned, and most tourists are

unaware that these options are present. Very little agriculture exists due to the lack of water and arable land, as the island has very limited topsoil, which is continually being eroded.

Fishing activities are still the major source of livelihood on Apo Island. The majority of families still rely on fishing as major source of income. A survey done by Calumpong and Cadiz (2001) on Apo Island recorded 132 fishers from 101 households and 149 boats from the three landing sites on the island. About 60 (45%) were full-time fishers, each owning at least one boat ¹³(average fisher to boat ratio was 1:1), 59.7% of which are non-motorized boats. These fishers use eight types of gear: drift gill net (13 units), fish trap (3), gill net (21), single hook & line (268), squid jigger (kati) (21), multiple hook & line (63), drift (pamo) gill net (4) and spear gun (50 units).

Single hook & line was the most numerous gear (270 units). The majority of the fishers in the part Ubos (eastern part of the island-please see map) used hook & line (117 units) whereas those in Bay-bay (western part of the island, on the map marked as Buluarte) used nets. Bay-bay also had the most diverse gear types (8 kinds). Among the gears, hook & line harvested the highest number of species (50) while kati or squid jigger, the least (1) since it is species-specific type of gear (Calumpong and Cadiz 2001:1).

Most households, when asked, still indicate that their main income source is from fishing. This dependence on the coral reef and its fish designates the immense importance for the local community of Apo to control the tourism on the island in order not to keep pressure on the reef minimal.

4.8 The History of the Apo Island Marine reserve

In the late 1970's dynamite and other destructive methods of fishing were being used on Apo Island and threatened the reefs and coastal resources. For more than 30 years, the fishing method muro-ami was omnipresent in the Philippines. This technique involved sending a line of divers to depths of 30-90 feet with metal weights to beat on corals to

¹³ These boats are very small, only one man and maybe a small child can sit in it comfortably

drive fish out, into waiting nets. In 1986, muro-ami was banned throughout the Philippines, because of the use of children to go to dangerous depths without the suitable equipment, and the damage it caused to reefs (Erdmann and Pet-Soede 1998:32). During that time muro-ami was also being practiced widely on Apo Island. Today members of the community who are enthusiastic about the preservation of the natural resource told me in interviews: "I can still remember going with the whole family at Bi-bi and banging on the corals for the fish to come out, later there were almost no corals left "(Pascobello-Rhodes 2004). "Yes, we used to use dynamite fishing, one person in Cogun lost his hand, and then everybody was scared. We also caught loads of manta rays and sold them to the mainland. Today there are no manta rays on Apo Island" (Mendez, R 2004a). These practices caused extreme damages to the coral reef to the extent that fishermen had to go to other surrounding islands to fish.

In 1979 dr. A.C. Alcala and mr. T.F. Luchavez from the Silliman University in Dumaguete conducted a survey of the fishery resources on Apo Island. They planned to establish a Marine Reserve and a no-take marine reserve (Alcala 2001: 73-74). Further on, the no-take marine reserve will be referred to as "fish sanctuary" in this thesis. Alcala (2001:74) wrote that the initial reaction from the community to the establishment of the sanctuary was one of mixed reactions: some favourable and others opposed. He argues that this opposition is the usual response of fishers who think that their catch would decrease with the reduction of their fished area when a fish sanctuary is implemented.

Contrary to the text of Alcala in his publications the following picture became clear, in an interview with ms. Pascobello-Rhodes (2004). In 1979 Liberty Pascobello was the elected Barangay Captain when the sanctuary was proposed. She was in fact the only person on the island that supported the idea of the marine reserve with a fish sanctuary. In the interview ms. Pascobello -Rhodes told me of the struggle of convincing her mother (the previous Barangay captain), family and friends that this is the correct decision. Apparently the villagers were scared that they would be thrown off their island as was, according to rumours, done when another island in the vicinity that became a marine

reserve. People on the island were struggling to make ends meet and were not aware or concerned about the long-term profitability of a healthy coral reef environment.

After a long and hard time of persuasion, convincing and lobbying within the community, it was decided in 1981 by a majority of the Apo community to set aside a 0.45km long section of the island at the southwest side containing 10% of the area around the island as the fish sanctuary. Here no fishing was allowed. According to Pascobello-Rhodes (2004) she could convince the villagers, because of the fact that she suggested an area at the southeast of the island where there where few corals and fish. Therefore not a lot of fish were caught there anyway. In that area there were not a lot of corals, mostly sandy areas and dead corals as a result of the destructive fishing methods. During this time (Pablo 2004a and 2004b) Apo fishermen had to go to Negros, Mindanao or to the nearby Sepeloc Island for periods of 1 to two months in order to support their families. This was a result of the diminishing fish catch due to the destruction of the corals. Men had to leave the families and sometimes also the women, splitting up the family life. Children often had to leave school in order to help their families. In the end, there were enough reasons for the villagers to decide to give this new sanctuary a try as they began to realise that their catch was getting noticeably less (Pascobello 2004a). The women of Apo played a big role in the initial acceptance and implementation of the programme (Oracion 2001a:10).

Even though the protection of the marine reserve began in 1982, the legal basis for protection, a municipal ordinance of the town of Dauin, was not passed until November 3rd, 1986. This local legislation now falls under the provisions of the Local Government code of 1991 and the Philippine Fisheries Code of 1998, giving local governments the right to manage their coastal resources within the distance of 15 km of shoreline (Alcala 2001:76). The community set up a management plan and it was approved in 1985 by the town council of Dauin. The length of the marine sanctuary was 0.45 km and 500m in width towards the open seas. During this time it was determined that the Fish sanctuary was sufficient in order to create a healthy overflow of fish on the long-term at that current level of utilisation of the coral reef. It should be remembered that at that moment in time

107

there was no or very limited tourism activities present on Apo Island. Later there will be argued that the inclusion of tourism in this balance asks for a revision of the size of the no-go area.

Nevertheless, ordinance No. 8-88 declared the entire coral reef around Apo a marine reserve with provisions for a user's fee system. In 1994 the whole of Apo Island was declared a Protected Landscape and Seascape. In 2001 the Apo Island visitors' fee was introduced (Pascobello, Mario 2004b).

The following section will discuss the regulations of the Marine reserve and Fish sanctuary and what they mean in practice.

4.9 The regulations of the Apo Island Marine Reserve and Fish sanctuary in order to create sustainability of the coral reef

By declaring the entire Island and its surrounding reef a Marine Reserve, meant that the whole marine habitat around the island, from the high tide mark to a distance of 500 meters offshore has the following rules and regulations:

a. General rules of the marine reserve of Apo Island

The following illegal fishing methods have been banned:

- dynamite fishing;
- fishing related to using weighted lines or poles;
- spear fishing using scuba equipment;
- fishing with cyanide or any other poisons like tubli-root (natural poisonous roots);
- very small mesh gill nets (Municipality of Dauin 2000).

Other activities banned are listed here.

• Anchoring around the island except for the places provided on Bi-Bi¹⁴ and Kanuran. Mooring buoys are provided in the entire Reserve for all dive operators.

¹⁴ Bi-bi can be seen as the main beach(opposite Buluarte). Please see the enclosed map for details

- The reserve is managed by the Protected Area Management Board (PAMB) and guarded by the Bantay Dagat (locals working as volunteers to enforce the regulations of the Reserve).
- Divers are not allowed to wear gloves in the reserve.
- No divers allowed at Olo-point since the end of 2003. This is the main fishing area for fishermen.

Declaring this area a national marine reserve ensures that it prevents not only local fisherman, but also outsiders from using illegal and destructive fishing methods in this area. It also has stipulated some regulations for dive boat operators and tourists visiting Apo. In which way these rules and regulations are adhered to in reality will be discussed in chapter 6 as this information was only gained and became clear whilst I was on location.

b. The Rules and regulations concerning the Fish sanctuary

A fish sanctuary was needed to allow coral reef fish to breed and grow to maturity without being disturbed and caught by fishermen. The area on the southeast of the island that was chosen as the sanctuary has a topographically diverse drop-off with rich coral habitat, providing a good breeding ground. This allowed reproduction rates to boost as a result of an increasing number of larvae and juveniles after the sanctuary was established. Mature fish circulated around the islands into areas where the local community was using traditional fishing methods only. This increased the potential fish that could be caught by local fisherman (Municipality of Dauin 2000:2).

The fish sanctuary also attracts tourists for scuba diving and snorkelling activities. Tourists diving in the fish sanctuary are to pay a compulsory fee. This money goes to the further development of the local community.

The following rules apply:

- no extractive activities or anchoring in the sanctuary;
- no more than 15 divers a day allowed in the sanctuary.

Again, in which way these rules and regulations are adhered to will be presented in chapter 6.

c. The Rules and regulations regarding traditional fishing methods

The marine habitat outside the fish sanctuary, but within the marine reserve, is called a traditional fishing area where all destructive fishing methods are prohibited and where only the following traditional fishing methods are permitted:

- hook and line;
- bamboo traps;
- gill nets;
- spear fishing without scuba equipment;
- other types of netting;
- traditional gleaning (Olivier 2003:2).

Apo's coastal resources have been successfully managed for approximately 30 years, with strong involvement and participation of the local community (Oracion 2001a: 73-74, Pascobello, Mario 2004b). Fishing regulations resulted in a healthy reef with an abundance of reef fish a while after all the above-mentioned illegal forms of fishing were halted in the reserve. In 2004, the fishermen had an average of 8 kilogram/day fish catch (DENR 2002:2) and the efforts to catch the fish are getting smaller. Both values are much higher than those obtained in Bais Bay and Bantayan (other points on Negros). The higher values obtained for Apo clearly points to the effect of the presence of a marine reserve in the area and preservation activities.

The coral reef of the fish sanctuary has grown back from only a sandy bottom to an area where there are several different species of corals and many fish. This I saw for myself whilst diving at this dive site. The fish sanctuary is seen as a nursery where juveniles can grow up without human intervention, in order to provide plenty of fish for future use. Locals from the community not only deter from using illegal fishing methods, but also are also actively patrolling the water around Apo for others not to fish in the sanctuary or throw anchor where they are not supposed to. These volunteers are called the Bantay Dagat.

In the past 30 years such regulations ensured the sustainable use and the protection of the Apo Island reef, allowing it to grow and develop into an abundant, healthy reef. Today, however, the pressures of tourism on the Apo Island Landscape and Seascape (APLS) are on the increase, resulting in several problems, which, at the time of starting this research, were left relatively unmanaged. These issues will be discussed in section 4.11.

This section provided an overview of the rules and regulations of the APLS. However, in order for regulations to have any real impact, there has to be institutional recognition. In the case of Apo Island this institution is called the Protected Area Management Board (PAMB).

4.10 Institutional recognition and protection of Apo Marine reserve rules and regulations

In community-based conservation efforts, institutions and people organisations based in the communities are important. Communities are not static, they constantly change. Hence, according to Berkes (2004:623) it is vital to see institutions as humanly devised establishments that structure human interaction, made up of formal and informal constraints and representing communities through their actions.

Such an institution manages Apo Island Landscape and Seascape. An eight-member PAMB was established in 1996. This board is responsible for drafting policies and regulations and monitoring development activities in the island, including tourism development. PAMB consists of the following persons:

- a regional Director of the DENR as chairman;
- the Barangay Captain of Apo Island;
- the Provincial Environment and Natural Resources Officer;
- the Provincial Planning and Development Officer;
- the Municipal Mayor of Dauin;

- a representative of the youth sector (Sangguniang Kabataan);
- a representative of people's organisations Development for Active Women Network;
- a representative of people's organisations Apo Island Community Development Association and
- one academic (Silliman University) (Pascobello, Mila 2004a).

Therefore, one might assume that the institution represent the interests of the community of Apo, local government and central government. In chapter 3 we have seen that the answer for successful community-based management lies in the community working together with different partners and interest groups. The fact that the DENR is represented in the board facilitates legal action for prosecution against violators. The hard work of community leaders and members of PAMB, together with the regulations implemented, the institutional recognition and formal protection have resulted in protection of the island's resources. Apo has become an example of local leaders, community participants, local government and scientists working together in order to ensure a sustainable future.

However, there have also been some critiques from community members on PAMB as an institution. Some distrustful comments towards the PAMB institution (related to the issue of insiders versus outsiders:

"I have never seen a PAMB meeting on Apo Island. Some of the men are scared to come to Apo, because they are afraid of the sea. They never come to sit with the people. The meetings are always in hotels with fancy dinners. I think they waste money. I know that there is also representation of our people, but how can these important people decide what should happen to our island if they have do not speak to the people regularly and see the reality of Apo with their own eyes? "(Aldeon 2004a).

Moreover, when one looks at the composition of the PAMB, one can say that it allows for participation of community members: 4 of the members are Apo residents. Subsequently one may ask whether there is also participation from different local groups. Even though

the local women and youth groups are represented, some residents from the opposing political party of the ruling party have indicated that they do not feel that they are represented. In addition to this, the process of tourism money returning to PAMB from the national government is a slow and inefficient process causing alarm and insecurity among community members and increases suspicions of government bureaucracy. For PAMB to become a strong institution that can also impact on growing tourism developments and ensure conservation in the future, it is clear that organisational strengthening is needed.

4.11 Community-based organisations of Apo Island

The community of Apo Island knows two community organisations: Apo Island Community Development Association (APCODA), the women association of Apo, involved in several development initiatives on Apo. The second organisation is the youth organisation, doing projects with the local youth.

Apart from the relatively weakness of PAMB as an institution and the implications that this hold for the future of sustainability and conservation of the coral reef of Apo, there are many other unresolved socio-economical issues and new challenges that the Apo community is struggling with daily. The next section will explore the issues that were known to me before starting research on Apo Island.

4.12 Unresolved issues on Apo Island

The following issues presented here were the concerns that I became aware of during preliminary research, before going to Apo Island. Some of the sources and descriptions presented below were of course gained during the research on Apo through triangulation sources etc. and will be described in this section as collected in the field. These elaborations, however, will not be further explained in the thesis, except, of course, the tourism issue that is a central theme to this thesis. Additional issues that were identified in data collection and analysis will be discussed later in chapter 6. The listed issues below were identified in preliminary readings and interviews through e-mail contact before

going to Apo. Of course, when a researcher goes on location he/she discovers many more issues. This then will also be discussed later.

This section is included, however, in order reflect the reality of the local context at the moment the research started. It gives an overview of what has been known or documented by other students. It also gives an overview of knowledge gained through preliminary research conducted through interviews by telephone and email.

4.12.1 Problems relating to garbage on Apo Island

An adversary to the coral reef is plastic, in the form of bags, sacks etc. Plastic can reach the Apo Island coral reef in several ways. Either by waste generation on Apo Island villages, garbage left by visitors on one of the beaches and plastic carried to Apo's reef by the sea currents. Plastic suffocate the polyps and the symbiotic algae that lives on the corals. The algae are deprived of sunlight, leading the algae to die, breaking down the symbiotic relationship with the coral host, resulting in the coral dying.

Some private sector actors, together with the locals, have been looking for solutions to the garbage problem. Paul's community-based diving school, the dive operator on the island is actively involved in reef cleaning. Liberty's community-based resort started to recycle their waste generated at the resort into biodegradable and non-biodegradable a couple of years ago. It has, however, taken years for the staff to get used to this idea of separating garbage (Rhodes 2004a). It has to go hand in hand with a change of mindset, and such things go slowly in the Philippines. Traditionally plastics, for instance, have been burnt on Apo or simply dumped somewhere out of direct site. There is a lot of "hidden" garbage on Apo Island.

Whist being on the island, one of my projects was organising a "Basura"¹⁵ workshop. It was made compulsorily by the local government that one member from each family attended. At this workshop the basics of recycling was explained and practised and the facilities that are needed for successful recycling in a community was discussed. Now it is up to the local government to implement such facilities and for the people to execute

¹⁵ Basura means garbage in Visayan. The date of this workshop was 16th of April-2004

this in their homes. Already the "garbage" service does not accept any biodegradable products in the waste and in the school children are taught about littering and recycling. The children are also making toys, gifts and Christmas decorations out of garbage.

4.12.2 Population growth/health care/education situation on Apo Island

The population growth in the Philippines, as was described earlier, is in the case of most coastal communities, a big source of concern. On Apo, an ever-increasing population is something that at some point in combination with other pressures on the reef might put too much strain on the reef, causing it to become depleted.

According to the PNSO census of May 2000 (PNSO: 2005) the population of Apo was 684 with 129 households with an annual growth rate of 7,17 percent since 1970 (Oracion 2001b:115). One factor contributing to the increasing population is that youngsters that have been working in Manila return to the island, because the living conditions are improving thanks to the development of tourism and the increasing fish catch rates. Other factors are increasing births and a better healthcare in the Philippines.

Since the last official census in 2000, a family planning programme with information about birth control was introduced on Apo Island. This in itself is always difficult in an area where the population is Catholic. According to Mario Pascobello (2004c), the Barangay captain, the programme has been quite effective causing the population growth to decrease slowly. I have found in talking with young married couples on the island (in a personal interview with Marilou and Marisell 2004) that especially the women now believe that 1 or 2 children is ample and that birth control is not sinful as traditionally believed by most Catholics. Comparing this with the big families ranging from 4 to 8 children at the moment, this implies a significant change in the belief (under the younger generation) that more children is the most effective way of risk control for the future.

Other socio-economic issues related to the population growth are education and the lack of direct health care. On the island there is only a primary school, the secondary school is on the mainland and only a few fortunate children on the island can afford to be sent to school during the week as boarding, food etc has to be paid for. Moreover, there is no doctor on the island and whilst I was there the midwife was on constant leave. She was on Apo maybe 5 % of the time, leaving the community without any access to healthcare in an emergency.

4.12.3 The increasing number of non-resident fishermen

In Negros Oriental (the island group that Apo Island is part of) the history of conservation is not a long one. With the growing population, also here, the fishery resources have been almost exhausted. This is, in turn, leading to fishermen from Negros crossing the 9 kilometres to visit Apo for fishing in their bancas¹⁶. The Barangay captain of Apo Island is preparing to pass an ordinance to specify that only residents from Apo be allowed to fish around the island (Pascobello, 2004c).

4.12.4 The availability of fresh water and the disposal of sewage on Apo Island

There are no fresh water sources on Apo Island. Locals have to buy water from the mainland for drinking: 10 litres for P20. The jerry cans have to be bought from the mainland at the port of Malatapay and then transported by boat and carried to the homes. There is no running water on Apo and a lot of time and energy are being wasted in the current solution.

There is a possibility that more rainwater can be collected from roofs etc. At the moment there are rainwater collectors for the community next to the church and at the school. For washing and household water mostly the women and children collect water from the 3 wells in the villages.

There are 10 families in Obus close to the sanctuary that do not have access to toilet facilities, leading to sewage going into the natural lagoon. This leads to unhygienic situation and a destruction of an important part of the ecosystem on Apo Island.

¹⁶ Bancas are small fisherboats made out of wood.

<u>4.12.5 The impacts of increasing tourism on the environment and community of</u> <u>Apo Island</u>

Tourists started trickling into Apo Island in the early '90s. With increasing tourism, today concerns are now focused on the carrying capacity of the protected area. An environment's carrying capacity is its maximum persistently supportable load (Rees 1990:2).

Today, Apo is facing today several problems related to tourism. A pressing problem at the moment is the destruction of the Apo reef by dive-boat operators and divers as a result of irresponsible behaviour. An estimated amount of 9000 visitors come to Apo Island every year (APLS Visitor Centre 2004).

At the time of writing there is only one active dive operator, Paul's community dive school based on Apo Island. This dive school provide employment opportunities for several locals. There are, however, dozens of other external dive operators that visit the underwater world of Apo every day. This is because the coral reefs of the surrounding islands in the Visayas have not been protected, resulting in wide scale destruction of their coral reefs. These boats are poorly regulated and are having a largely unqualified impact on the reef ecosystem (Raymundo, 2002:8). Fin damage from divers to coral colonies was estimated at 10, 7% over a 10-month period. As a response to tourist-related damage to the reef, regulations have been installed to regulate the number of daily divers and snorkellers, yet only in the Fish Sanctuary. For example, only experienced divers with more than 10 logged dives are allowed to dive within the sanctuary. (Raymundo 2002:7). To minimise direct contact with the reef the use of gloves have been prohibited in the entire APLS. These regulations are however all poorly regulated.

Some days there are as many as 100 divers around the islands (APLS Visitor Centre 2004). Many of these boats dive at the same spots of Chapel and Kan-Uran (see Map of Apo Island, Figure 3) as some of the other dive sites can have notoriously dangerous currents that are not well known to outsiders of Apo. This leads to many boats diving at

the same spot simultaneously, not spreading the damage, but rather concentrating it in a few areas.

Concerns about the impact to fishing and reef structures must be addressed, as pressure of tourism has been increasing for a considering amount of time. Although tourism revenue has most certainly improved the living standards on Apo, it is not known how much of this revenue end up with the community itself. Diving fees collected from visitors diving or snorkelling around Apo is spent through development projects and it is unknown how many families benefit from this money (Alcala 2001:80).

4.12.6 Tension between fishermen and divers

Local fishermen claim that tourist divers drive away the fish in their fishing grounds. In 2003, the community decided to mark off prime fishing areas with buoys to prohibit divers from the areas, such as at Olo Point (Raymundo 2002:7).

The use of anchors is prohibited on Apo. The dive operator on the island has placed dive buoys. However, it seems that dive operators from other islands, thus outsiders or actors external to the community of Apo, do not treat the coral reef with respect, often leading to the destruction of the Apo reef. This causes an increase of pressures or damage to the local natural resource as a result of diving and snorkelling activities. How can the community of Apo prevent others from abusing or misusing the reef that they are dependent on?

From all the above problematic issues influencing the lives of the residents of Apo Island and her reef, I have chosen the problems around tourism as the problem statement in this thesis. Many of the above problems are however integrated in the tourism problem; for instance, the garbage problem is partly increased by tourists visiting the island. The next section will give attention to the following questions: why do tourists visit Apo Island, what is it that attracts them to Apo? What type of tourists visit and how many tourists arrive on the island every year?

4.13 Motivating factors for tourists to visit Apo Island

Diving and snorkelling are the main attraction for tourist on Apo¹⁷. Study tours for local students are another less frequent reason for people to visit Apo. According to *Diving*, a guide to the best dive sites in Southeast Asia (Nichols, Muller, Mitchell and Williams 1999:109-113) the diving on Apo Island is described as "THE best site" to dive in the Philippines. Visitors relax on the beaches, soaking up the island life making between 1-4 dives per day, others snorkel. Many of these tourists are unaware of the hostility that is created with the local fishermen by their enjoyment of the underwater world of Apo.

Other tourism activities is soaking up the sun on the beaches or mingling with the locals in the village, having a drink or going for a walk to the other side of the island. In general there is not such a lot to do, but relax. As a result of this, the island stays relatively quiet with a small number of visitors staying overnight. Large amounts of divers are shipped in by outside operators from larger islands during the day. These visitors pay the island fees and buy articles from the Apo vendors. Thus, the bulk of the tourists are these day visitors visiting the island with other boat operators from nearby islands. Current tourism activity on Apo at the time of research started can be summarised as follows:

- 2 lodges: Apo Island Beach Resort and Liberty's Community Lodge;
- 1 dive-resort, Paul's Diving School and anther one was to be reopened on the island after being closed for several years;
- 30 local employees in lodges;
- 8 local staff in the dive shop;
- 6-8 locals who supply fish/ laundry services;
- all locals with boats can earn money through transporting tourists (certain rules apply, to be discussed in chapter 6);

¹⁷ See Annex 2 for the list of the Dive Sites.

- 2 carpenters;
- construction workers when building activities or renovations are made to the resorts.
- no real community involvement in planning and control of tourism;
- the coral reef is under pressure, close to carrying capacity, because of a too many dive operators from other islands visiting and destroying the Apo reef.

4.14 Annual revenue from tourism and how it is distributed in the community

This section will describe the annual revenue from tourism on Apo Island and how it is distributed amongst the community.

4.14.1 Annual tourist income on Apo Island

Reports show that Apo Island has earned an amount of approximately US\$ 126 000 in users fees annually up until the end of 2003 (DENR 2002:2). 75% of this income created by tourists diving in the marine reserve should be channelled back to the community through development projects. The community selects these projects to improve their quality of life, with 25% going to national treasury. This arrangement was meant to ensure that the maximum numbers of community members would benefit from tourist income. For example, in 2004, after volunteers were given their compensations etc. the community democratically chose in to open a bakery on the island from the remainder of the money received from tourists' entrance fees. This bakery will not only provide daily fresh bread and improve the nutrition for people on the island, but also save the shopowners money, as they do not have to go to the mainland to purchase breads. This will also reduce leakage away from the local economy. It will also create employment for 4 people on the island.

However, there is a feeling of insecurity on the part of the community about their income, for the funds are deposited in Integrated Protected Areas Fund (IPAF) of the National Government. The disbursement of these funds is also the responsibility of IPAF. The money, however, takes more than 1 year to return to the community. The bureaucratic process is hampering the process of the CRM by leaving the community without

available funds for effective management (Raymundo 2002:6). This is an enormous limitation of the current system and a cause of much concern. The process is slow and inefficient, causing alarm and insecurity amongst community members, due to a long-standing mistrust of government bureaucracy. For instance, in April 2004 the salaries of the staff and the compensations for the volunteers for 2003 were not yet paid. April is a very important social and cultural time on Apo Island. It is Fiesta time and locals enjoy treating their families from all over the country to roasted pig and other specialities. This means that money is much needed during this time. The community members are irritated by the fact that the funds are never given on time, causing this to be a big source of distrust.

4.14.2 The distribution of tourism income on Apo Island

If one looks at the income of tourism of Apo Island one can rightfully ask oneself whether the money is spent in an optimal way between the different actors, but also between development and conservation. In order to support this statement the following statistics about how the income was distributed between the different actors on Apo Island should be considered.

Hilconida collected these statistics in a 2001 Case Study of the Costs and Benefits of maintaining Apo Island Protected Landscape and Seascape. Calumpong and Cadiz from the Silliman University Marine Laboratory. These statistics are presented here as a means of illustration of how the tourism incomes are earned and distributed on Apo Island.

Yearly visitors numbered were counted to be 10,470 in 1999, increased to 12,744 in 2000, and drastically dropped to 7192 in 2001 and continued to drop to 6729 in 2002 as a result of Muslim fundamentalist kidnappings around the Philippines¹⁸. Since 2001 the numbers have been on a steady increase again.

The visitors were dominated by Filipinos (53% in 1999, 57% in 2000, 51% in 2001), except for 2002 wherein they only comprised 45% (38%). In a detailed study in 1999-2000, Japanese comprised the bulk of the foreign tourists (30%), followed by Germans

¹⁸ Abu Sayyaf is the smaller of the Islamist groups fighting to establish an Iranian-style Islamic state in Mindanao, an island in the southern Philippines.

(12%) and Americans (4%). The remaining foreign visitors of various nationalities comprised 16% (Calumpong and Cadiz 2001:1).

In that same detailed study, the highest number of visitors was recorded in April (2,301), coinciding with the Philippine "summer" and the end of the northeast monsoon to which the island is exposed. This is also the Philippine summer break from school. The least number of visitors was recorded in September (737). The average range of visitors daily was 26 (September) to 54 (April). Forty-five per cent of theses visitors were divers or snorkellers.

Revenues generated were categorised into donations from visitor's fees, income from boat operations, diving operations, accommodation and food of visitors and sales from souvenirs. From December 1999 to March 2000 when PAMB was fully implemented, income generated from user fees was PhP 509, 573 (US \$ 12,739). This revenue was generated from the different fees. 75 % of the total revenue (PhP 382,179) was retained on Apo for the development and maintenance of the APLS subject to disbursement guidelines set by PAMB. The remaining 25% (PhP 127,393) was remitted to the national treasury (Calumpong and Cadiz 2001:3).

Disbursement of this revenue on Apo Island itself followed certain guidelines formulated by PAMB. For example, in the budget for 1999-2000, 41 % of the revenues went to protection and maintenance of the Marine reserve and sanctuary, 44 % to administration and management and 15% to livelihood projects. The total fees that were directly generated from users of APLS that went back toward maintenance, protection and development of the protected area was only 3.56 %.

Boat income from 2,238 boat trips for the same period was PhP 4,106,600 (US\$ 102,665). Twenty-five per cent of the boats were from Apo, which generated an income to Apo residents of PhP 368,550 (US\$ 9,214) equivalent to about 9% of the total boat income. The rest of the boat operators were from the neighbouring islands of Negros, Cebu, Bohol, Siquijor and northern Mindanao. Income from diving operations (tanks and gear rentals) totalled PhP 5,755,000 (US\$ 143,871). This represents the greatest revenues. About 76% of this went to the diving operations operated outside Apo. 45% of all the visitors were divers.

Revenues from accommodation and food of visitors who stayed for more than a day total PhP 642,750 (US\$ 16,069). There are two resorts in Apo; all owned by foreigners, a community centre (very neglected and unkept) operated by PAMB and two local houses that cater to visitors. The remaining revenues were computed from sales of souvenir items peddled by the women in Apo. These include T- shirts, sarongs, dresses, hats and others.

All in all, total gross revenues amounted to PhP 11,565,021 (US \$ 289,125). Much of the revenues went directly as payment of services in support of tourism. About 20 % went to Apo residents.

In short, tourism activities provided additional income to Apo Island residents as well as to those operating outside of Apo. Greatest revenues were from diving operations and most of the operators were not from Apo, leading to large amounts of money leaking out of the community. Only about 3% went to the actual protection, maintenance and development of the APLS, which is quite small considering that the visitor's fees were installed in order to promote conservation.

These numbers show that the biggest profits and benefits from tourism are going to foreign owned diving operators. The amount of money spent for active conservation and preservation of the natural resource is relatively small and the socio-economic benefits that the population of Apo Island is deriving from tourism at this moment cannot be seen as optimal. In short, foreigners are profiting the most from activities of tourists on and around Apo Island.

4.15 The clash between conservation and development on Apo Island

The narrowing gap between conservation and development was discussed previously. In the case of Apo Island, tourism can be seen as a form of a rather unintentional development. This is derived from the fact that conservation and preservation activities and rules were put in place in order to save the coral reef for use of the community. The tourism and consequently development, stemmed from this afterwards. Yet, as we saw from the above figures it seems that very little of the tourism income is actually being spent on the conservation of the coral reef, whilst tourism is already impacting on the coral reef as a result of an influx of divers.

Tourism on Apo Island is indeed increasing. However, this is not leading to further direct property development on Apo. New resorts or more dive shops on the island itself have been forbidden, for PAMB has passed some regulations regarding this issue. Nevertheless, the coral reef is under pressure from the large amount of visitors from other islands. Every day more outside dive operators come to dive and increase the unwanted pressures on the coral reef. In a way Apo Island is developed through the fees that tourists pay for visiting. These are then used to initiate development projects on Apo, for instance the construction of a school or a bakery. We have also seen in the previous section that a smaller amount actually goes to conservation as was originally intended.

The people-centred development view on sustainable development believes that the socio-economical conditions should be improved for local communities. However, Kellert, Mehta, Ebbin and Lichtenfeld (2000:705-715) used social and environmental indicators to study cases of CRM and found that projects rarely resulted in a more equitable distribution of power and economic benefits. Often local elites tend to capture the benefits from development interventions. On Apo it is still unknown how much the families actually benefits from tourism (Alcala 2001:84) although the opinion of the villagers is a positive one. However, it can also be argued that through conservation, communities in the developing world rarely equate benefits with simple monetary rewards. Various types of social and political benefits apply like fairness in the

distribution of benefits, access to resources which are almost always extremely important and when accompanied by active participation of local groups, the process of empowerment (Berkes 2004:627). This empowerment is defined by Robert Chambers (1983:11) as the process through which people, and especially poor people, are enabled to take more control over their own lives, and secure a better livelihood with ownership of productive assets as one key element. To which extent this process of empowerment has contributed to the local community of Apo Island being able to influence decision making in regards to development and conservation will be seen later in this thesis.

Much has been debated over many years about the frictions between development, which can result in poverty alleviation, and conservation. Local support for conservation remains weak in many countries, because conservation is viewed as a concern of the elites who are insensitive to those living in need in rural areas. Also on Apo Island there are different interest groups. The opposition of the Barangay captain believe, for instance, that the Fish sanctuary should be opened again for fishing activities and that it should be allowed to collect shells for selling souvenirs. This group is not interested in conserving the coral reef, but rather look at short- term advantages.

Besides this threat from within the community, the balance between humans and the reef are being disturbed, at the moment not so radically as in the example of Koh Samet in Thailand (chapter 2) and the other islands in the Philippines, but increasingly more. Yet, on Apo there is a definite tension between the local community and tourists. These tensions will be described in chapter 6 in detail.

The questions to be answered in this research is whether the community of Apo through its strong history of CRM or community-based conservation, have built up enough resources, knowledge and institutional capacity in order to address this problem to regain the balance between humans and nature. How do they look at tourism as a form of development? What problems and opportunities can they identify that are related to tourism? How can they ensure that the money that is earned from their resource stays locally and does not "leak" away via outside operators or the private sector to foreigners

125

owning the tourist resorts? In short, what is the role of the community in regulating tourism activities and finding alternative solutions for the current situation?

4.16 Conclusion

In this chapter the local context of first the Philippines and then, Apo Island were discussed. Now the reader can identify with Apo, he/she knows where it is, the demographic details, language, religion, population, issues, income etc. The history and institutional status of the fish sanctuary, marine reserve and Apo Island Landscape and Seascape has been described. The discussion around conservation and development has been highlighted with specific relevance to Apo.

It has been explained that it is unknown how much families are benefiting directly from the tourism income. Statistics have shown that 15% of the annual income goes indirectly to the community through development projects, and that these are not used optimally. Only 3% for of the funds goes to conservation. It is my goal to, through the presentation of my findings and data, sketch a more accurate image of problems and opportunities faced. This will be done in such a way that it reflects the reality of the life lived by the local community on Apo Island.

The next chapter will discuss the methodology that was used in order to collect and present the data as accurately as possible.

Chapter 5: Research design and methodology

5.1 Introduction

The general purpose of this chapter is to reflect on the research methodology used in this research. This involves the role of qualitative research and the PRA methodology within this research paradigm. In this chapter issues will be discussed on a general level, relevant to most development situations.

The specific objectives of this chapter are as follows:

- to present an general overview and discuss the particular relevance of PRA in development studies within as a part of recent developments in qualitative research;
- to present and explain the data collection techniques used in this research;
- to explore the measures taken to minimise error and to improve the quality of the research;
- to clarify the shortcomings and sources of error in this research.

It will become clear in this chapter that the research process and design were chosen in order to answer the research question as accurately as possible. The research question demanded a holistic view of the situation, problems, issues, community members, the local resource and visitors of Apo Island. In order to do this, the research asked for a qualitative case study based on a high level of participation.

5.2 Developments within qualitative research

For this case study of Apo Island, I have chosen a qualitative research method, because it allows for a certain amount of flexibility in its approach to field research. Qualitative research can be seen as an attempt to capture life as it is lived. Participants are studied in their natural settings by researchers who become part of the process being studied. The aim of the qualitative researcher is to understand people in terms of their own definition of the world. According to Wainwright (1997), one of the advantages and inherent characteristics of qualitative research is to study several variables together in order to do an overall study of the environment.

Moreover, qualitative information can be valuable in that it helps to grasp the full social density of cultures, social bonds, and the complex strategies of subjects and groups within societies where, for nearly two centuries, people's main concern has been to manage their lives (Girard & Roussel 1982). The qualitative approach is a sensitive form of knowledge. It penetrates the intimacy of the social actor's experience of living, and "listens" to words and to the ways of being of those who are speaking these words. Because this approach allows feelings, intentions, and values to be expressed, it produces a less simplistic picture of social reality than the predefined categories often used in quantitative analyses. Moreover, the social sciences do not "explain," but instead propose interpretations. Qualitative materials contribute much to interpretation of different realities (Cribier 2005:2).

Qualitative research gives the researcher a chance to do research from the perspective of a non-experimenter/ facilitator. This has been of utmost importance in giving this research its specific contextual nature. Methods that were used employed qualitative methods of enquiry and PRA. Furthermore, this research has a descriptive, explanatory format. The reason for this is that there was nothing to proved true or false, or judged as right or wrong, on Apo Island. This research enquires into a centrally placed research question that this research product has to answer.

Cribier (2005:2-4) also notes that collecting data that is really qualitative, and comprehensive, is difficult. Few interviewers possess the skills and knowledge necessary for good interviewing. Some of those interviewed invent a character or "resist", because the interviewer was unable to establish the "two-way" relationship needed to elicit a life story or a first-hand account of a delicate subject. The main reasons for this resistance are that many of those interviewed, feel threatened by the inquiry, and that other men and women feel that they cannot dare utter the real truth in these interviews.

In response to this particular problem, a form of research that falls under qualitative research (Chambers 1994) and can be classified as new-science, called PRA, was

developed by Robert Chambers. PRA forms part of the umbrella term, "new science" for scientific methods that takes into account the interdependence of life (Capra 1983:285). Scientific research over the last several decades has demonstrated unambiguously that most aspects of the structure and functioning of earth's ecosystems cannot be understood without accounting for the strong, often dominant influence of humanity (Vitousek, Mooney, Lubchenco, and Melillo 1997: 494). This means that the way people operate in a specific social, economic and cultural situation is taken into account in the research process.

In PRA, specifically, the focus is on involving local communities in the research process. The aim is that in the end the process leads to empowerment and ownership of the outcome and the process taking place. Locals do not to feel threatened by such a research process. Local people are regarded and valued as professionals on their specific local context, for they have coevolved with their social and ecological systems (Norgaard 1994). PRA was chosen as a methodology and a philosophy in this research, the reasons why will be explained later in this chapter 5.4.1. Before looking at the particular relevance that PRA has today in development studies and the meaning of and techniques used in it, I will explain the reasons behind choosing this particular methodology.

5.3 The reasons behind choosing the specific data collection methods

The reasons why I have chosen the specific methodologies used in this research are important to clarify. Choosing the correct research methodology suitable for addressing the research problem is a rather large challenge for every researcher, especially the novice researcher. During the process of operationalisation, a measuring instrument such as a questionnaire, scale or interviewing schedule is developed. More specifically, this is the design of an instrument that, in the specific research context, will provide accurate data about the research problem (Mouton 1996: 125). The difficulty lies in choosing firstly the correct overall general methodological research frame (in this case qualitative research) and then choosing relative methods tailoring them to the specific location of fieldwork. A qualitative and participatory research approach was chosen, because they are in great part concerned with interpersonal relationships, personal values, meanings,

beliefs, thoughts and feelings while quantitative research is more concerned with impersonal experiments (Mason 2002:2).

In this research the choice was made to combine semi - structured interviews and unstructured interviews based on a specific topic, group discussions, participant observation and PRA exercises. These were primary sources of data collection whilst triangulation and literature reviews were used to verify data and serve as secondary sources for data collection. This is called methodological triangulation (Mouton 1996:38), meaning that two or more methods of data collection procedures are used in a single study.

The PRA methodology and philosophy for this research was chosen, because of the local ownership of research. It is a methodology that I personally believe to be the most suitable for the field of development studies, when impacting on people's lives. The PRA methods in particular are practical, fun and easy to use as a way to gather information. Both the community and the researcher can use the methods. Secondly, I truly believe in the concept of sharing and learning together. This occurred in all the steps of this qualitative research using PRA techniques. Outsiders learnt from insiders and visa versa. The concept of handing over the stick, particularly during the mapping and matrixing exercises, was of fundamental importance. Community members were doing exercises themselves, naming problems and issues relevant to tourism, analysing the data by listing important factors together in problems versus opportunities and interpreting it. Lastly, they took control of the process by actively planning for the future and assigning relevant people or groups to specific tasks. I think that during these discussions participants sometimes even forgot that I was there. This reflected an important aspect of PRA research: outsiders stay on the background whilst locals take ownership of the research process. Locals learn in the process of using the PRA exercises to plan future actions whilst also providing research information and allowing the researcher to use this for an academic purpose. This is where sharing and learning together emerge.

130

PRA methods were also chosen, because of the mind frame change it requires from the researcher, as an outsider. A detailed description of this change of attitude and behaviour can be found in section 5.4.1. In short, it means that the researcher tries to shed all biases and learn together with the community involved in the research. This, I identified as a particular point for myself that I could grow into. It was a test for myself and an opportunity to be able to grow also as a development worker. I also wanted to test this aspect myself in order to see to what extent it was possible to shed all biases. I did notice that the local community did react very differently to me than to other academics that would visit. Locals often would act in an inferior manner (this will be discussed later in chapter 6) to them. I do think that this has very much to do with the fact that I also worked in the community and were friends with several community members. I never talked about my academic background. I always said that I am still only a student and am there to learn from them, which in this particular case was true. Despite the high level of acceptance and my integration in the community, in the end my conclusion is that I very much doubt that it is possible for anyone in whichever situation (even also for the villagers, not only for me) to shed absolutely all of their preconceived biases or ideas about the world. This is just something that is intricately part of the human being.

I chose participants interviews and observation with the focus on unstructured and informal interviews, supplemented with some SSI's. I felt that this was the most suitable way to gain insight into the lives and issues of the local community. It was better to talk about general daily activities and then slowly start focusing on particular issues on the island. In this way it was not me (as a foreigner) trying to turn the local community against the current form of tourism on Apo. It was a process that came from within the community, shaping even the research question in the end. The result of these interviews and observations pushed this research towards presenting the role of the community of Apo is in regulating tourism activities. This process was described in detail in chapter 1.

Many practitioners apply the PRA methodology in the field and conduct research whilst ignoring the philosophy underlying the process. However, this underlying philosophy is of vital importance if PRA is to have the effect that it is meant to have in development practice and research. The next section will elaborate on the philosophy and elements of PRA in qualitative research.

5.4 Participatory Rural Appraisal: descriptions and relevance

There are many conventional and action research methodologies, while new methodologies continue to be developed constantly. Some examples are PRA or Participatory Learning for Action (PLA), Rapid Appraisal of Agricultural Knowledge Systems (RAAKS), Action planning etc.

Action research methodologies have emerged in recent years as a methodology for intervention, development and change within communities and groups. It is now promoted and implemented by many international development agencies and university programmes, as well as countless local community organisations around the world. This section will give a description and overview of PRA. In section 5.5 critiques on PRA will be discussed in depth.

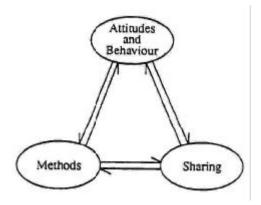
5.4.1 A description of and a brief overview of PRA

PRA can be defined as an approach to development research that enable local people to share, enhance and analyse their knowledge of life and conditions, to plan and to act on future development (Chambers 1997:7). The focus is on participation that strives towards empowering a local community and on further enhancing and building on existing knowledge systems. It is my opinion that it is fundamental that the research problem originate in the local community itself, in order for PRA to be used in such a way that it collects data that will build on real solutions to genuine problems. The research problem as stated in this thesis was clarified only after a lot of discussions have been done with locals, as was elucidated in chapter 1 of this thesis. This is also reflected in the following definition from Reason (1994:48):

"Participatory research has a double objective. One aim is to produce knowledge and action directly useful to a community, the second is to empower people through the process of constructing and using their own knowledge". PRA was developed due to dissatisfaction with the traditional methods of development projects and data collection for research done in rural communities. These methods were found to be top-down and disempowering. They were applied by outsiders to the communities, resulting in the alienation of these communities (Collins 1999:102). In these methodologies it was assumed that indigenous people were willing to work with outsiders, according to the already finished project and research designs that these outsiders would bring with them. Furthermore, with pre-planned data-gathering structures, the unique knowledge possessed by indigenous people, as well as the local context of it in the local community, were mostly overlooked and lost (Collins 1999:102).

Attitudes and behaviour, methods and sharing have been considered to be the three pillars of PRA (see Figure 4). The three pillars will be discussed below:

Figure 4: The three pillars of PRA



Source: Kumar 2001:70

A change in attitudes and behaviour of outsiders

According to Kumar (2001:70) there is growing realisation that attitudes and behaviour are the foundation of true participation. Acknowledging attitudes and behaviour in PRA is both a major challenge and opportunity.

"Worldwide, PRA practitioners and trainers have been finding that personal behaviour and attitudes are fundamental for true participation. Behaviour and attitudes matter more than methods, powerful though PRA methods have proved. At the personal level, practitioners and trainers have found that the major problem in development is not "them" - local people, the poor and marginalised, but "us" - the outsider professionals. Again and again, we have rushed and dominated, imposing our reality, and denying that of the weak and vulnerable. For the poor to be empowered requires us to change, to interact in new ways, to become not controllers, teachers and transferors of technology, but convenors, facilitators and supporters, enabling those who are weak and marginalized to express and analyse their realities, to plan and to act. For this we have to behave differently; it is our attitudes that have to change"(Chambers 1996:1).

This behaviour change connotes that local people or insiders are seen as professionals or the experts in their local context and not the outsiders as used to be the case in rural development tourism (Chambers 1983:10). Naturally, this means that there is a shift in power relations within the development context: local poor communities are having, sometimes for the first time in history, a say over their own development. There is also a change in the behaviour and attitude of development professionals and outside researchers where sharing and learning together with local community are emphasised (Chambers 1997:212).

Almost the most important change that PRA has brought upon Development studies is this changed role of the outsider in the development process (Chambers 1994:1256). This role has changed from the "project manager" who plans and implements everything, to facilitator, consultant and mediator. Someone to introduce the local community to the participatory methods and motivate them to start discussing and looking for solutions themselves. PRA aims to break down the barriers between outsiders and insiders in such a way that when outsiders leave the community after finishing their research, that the local community owns the gained knowledge as part of an empowerment process.

With the change in the role of the outsider it is fundamental that old attitudes and behaviour towards "villagers" are changed. Locals have to be treated and respected as equals and their indigenous knowledge and ways of living with the environment respected. But how does attitudes and behaviour of field practitioners change in reality? In a South-South Workshop on PRA attitudes and behaviour in Bangalore and Madurai in July 1996, 26 experienced PRA practitioners and trainers from 12 countries, shared their experiences (Kumar 2001:70). The factors that have led to attitude and behaviour change in the participants of this workshop are summarised below.

- Realising that local people can do much better that we can, and have the capacity to analyse their situations and suggest more appropriate solutions.
- Realising that much development (or conservation) is imposed on people.
- Realising that our attitude and behaviour has been offensive to people.
- Recognising that training in concepts and methodologies are best validated by actual experience.
- Understanding that the virtue of listening is one of the basic foundations of changing attitude and behaviour.
- Understanding that internal change in attitude and behaviour requires constant self-critical analysis and self-evaluation.
- Recognising the need to make good attitudes and behaviour an integral part of our lives.
- Understanding the need for space to allow others to reflect and improve/change their attitude and behaviour.
- Learning to regard one's work in participatory learning and action as a way of life, not a livelihood.
- Knowing that attitudinal and behavioural changes begin from within ourselves.
- Realising that knowing oneself, and being open for improvement is the basic prelude to change.
- Accepting the value of meaningful exchanges and interactions (Kumar 2001: 71).

With the change in role, attitude and behaviour a tendency has developed with researchers to stay in villages in rural areas in order to fully take part in all village activities and taking time for their personal responsibility. The researcher needs to be self-critical and correcting all the time and should not interfere with the process within the community. PRA's focus is on listening and watching and not to interrupt. It is important that this happens in a relaxed, non-rushed atmosphere in order for locals to feel

that outsiders are really taking the time to listen to them. In this research, the fact that I stayed on Apo Island for almost a year was a big advantage for the successful outcome of this research. I noticed that suspicion changed to acceptation and trust after I have spent 6 months living inside the community. Additionally, I noticed that my preconceived ideas gradually made way for new understandings about how and why things are happening as it did on Apo Island. When the researcher has reached this level of understanding and openness for a particular situation, it leads to local people opening up to the researcher and discussing problems and issues more easily.

Sharing between insiders and outsiders

Secondly, PRA comprises a set of techniques aimed at shared learning between local people and outsiders. If we look at the term "participation" in the simplest of its meanings - taking part, sharing, acting together- people's participation is nothing less than the basic texture of social life (Barton, Borrini-Feyerabend, de Sherbinin and Warren 1997: 3.1). Through sharing, the community can be empowered by participating in a research project. New knowledge gained whilst participating in a research process, becomes part of the adapted local knowledge system. Chambers described the role of the facilitator/ researcher in sharing as having to " unlearn and put our ideas and knowledge in the second place (Chambers 2002:2). In PRA the facilitator's role is to share and enable local groups to use techniques of appraisal, analysis, planning and action and to own the outcome in order to share their own knowledge with outsiders. Facilitators should not be seen as teachers, but sharing without boundaries between insiders and outsiders should be the goal.

The methods used in PRA

The third leg that PRA stand on is the emphasis on innovative techniques called action research. This means that research is combined with subsequent actions in order to bring forth development within a community, or better the situation of the community. Looking at the training materials of the Institute of Development Studies (IDS 1996a & 1996b), the focus is on creative ways to involve local groups not in a boring lengthy research process, but into gaining the relevant information in a relatively quick, fun way that are

designed to include the poor. These include diagramming and visualisation techniques such as mapping, Venn diagrams, ranking and scoring methods. Various techniques can of course be used to compliment each other and these methods should not be viewed as all exclusive or stagnant. The techniques themselves are in constant evolution. It is important for researchers to adapt techniques and tools to meets the particular and context specific situation. This has been the situation in this particular research. Participants changed the PRA tools that were introduced to them during the PRA workshop, by redesigning them so that it was more suitable for the information gathered. This reflects the ownership of the exercises that were taking place. The group changed the exercises that I explained to them. Naturally when this happened I was impressed with the learning ability of this particular community.

A fundamental method or technique used in PRA is "Handing over the stick". This term one finds in most of the books and articles authored by Robert Chambers about PRA. Chambers (1997:155) describes this as a technique where the outsiders facilitate investigation, analyses, presentation and learning by local people themselves. This was the aim of the "PRA workshop" in this research and goes hand in hand with the changed behaviour, attitude and role of the outsider.

Methods used in PRA can be divided into old methods that are borrowed, because of their success in past research approaches, from for example Rapid Rural Appraisal (RRA) that preceded PRA, and new methods unique to PRA.

RRA's strength was in optimising tradeoffs (Chambers 1994:1254). This means that before information is looked for and gathered, a thorough investigation is made whether the information really is useful. Tradeoffs were made between quality, relevance, accuracy and timeliness. This include optimal ignorance, which means knowing what is not worth knowing and then also making no effort to gather this useless information (Chambers 1994:1254).

According to Chambers (1997:154) there has been a reversal in approach to learning when the RRA approach was developed. This means that the focus is on outsiders learning directly from locals by spending more time with local communities in the field. The aim is to gain insight into local knowledge systems, which hold economical, social and ecological survival strategies.

Tools used in traditional research approaches were often not readily understood by respondents. This happened especially in the case when questionnaires and structured interviews were used to gather data. These methods assumed familiarity with the language of the tool or even with pen and paper. This led to the exclusion of the illiterate in local communities, very often those that may be the most important source of valuable information. The participation tools used by PRA have shifted away from these verbal methods towards visual methods. Examples of these methods are visual mapping, flow diagrams, transect walks, inventories of resources, time lines, seasonal calendars, dial time analysis, matrix scoring etc. (Collins 2003:104).

PRA methods are largely visual- based using diagrams, matrixes or maps. Local people are given plenty of scope to draw visuals up, comment, crosscheck and correct. The advantage of this is that it encourages group participation and encompasses different sources of knowledge as various locals take part in the process. Visual methods can also empower the weak and the disadvantaged as visual literacy is independent of alphabetical literacy and even appears to be nearly universal (Chambers 1994:1263). According to Chambers (1994:1263) visual diagramming can be seen as an equaliser, changing relationships especially when it is done using the ground, which is a familiar medium to everyone in the rural community. In this way the outsider can facilitate the community to recall, build on and extend its indigenous knowledge about a specific subject in a summarised whole. The map or diagram is a physical entity that is present and that everyone can see and change or direct to.

Semi-structured interviewing (described later in this chapter) is the main type of interviewing in the PRA methodology (IDSb 1996:49). Here the focus is on interviewing

138

that focus on listening and learning, asking open-ended questions and verifying sources through triangulation.

The triangle of attitude change and behaviour of development practitioners, the concept of sharing and the powerful methods to facilitate learning described above makes it a more than relevant methodology to use in the field of development studies.

5.4.2 The Relevance of PRA in development studies

PRA is relevant to poor communities and to researchers in social studies, because of the way methods, behaviours and sharing have come together to reinforce each other (Chambers 1997:206) in order to make good practices conquer in the practice of development research.

Through the use of PRA and its participatory techniques and processes, the poor can influence the formulation and implementation of development research that affect their lives. This control over their own lives is critical for the poor to be able to escape from the trap of poverty and to improve their lives. Therefore PRA can be said to be especially pertinent to the poor, because its principles and techniques focus on empowering disadvantaged, local communities. De Beer and Swanepoel (1998:23-24) explain that the process of empowerment addresses concrete and abstract human needs.

What is more, PRA goes hand in hand with the promotion of sustainable development practices. Here the learning experience is reversed: outsiders learn from insiders and insiders form outsiders in the process of sharing. Sharing encourages the integration of indigenous knowledge in sustainable sevelopments solutions, which has been excluded in the development tourism of the past.

In this section, several advantages together with the strengths of the PRA methodologies have been summarised. However, there are also (as in all research methodologies) several critiques on this methodology. This will be explained in the next section.

5.5 Critiques on the PRA methodology

PRA has proven to be a handy tool in many situations in involving locals in both development research and in development projects. As with any (qualitative) research method for data collection, a number of critiques have arisen in questioning the validity of the methods and philosophy that PRA stands for. There must be remembered, however, that PRA remains just that. It remains a method and a philosophy, or a tool and is not a quick fix for all problems in a particular development situation. Consequently, when evaluating critiques on PRA this fact should also be kept in mind. There will never be a perfect method for solving all the problems in the field. The reality of the development field is far too complex for this to ever be a possibility.

Adely (2004), Kapoor (2002), Mouton (2001) and Treurnicht and Botha (1999) all wrote about the shortcomings and points of improvements of the PRA methodology. Through my experience of using the PRA tools as part of this research, key issues emerged about the practical challenges of doing participatory development. These issues have also been raised in some of the literature on this topic (Kapoor 2002). The following sections outlines these key issues, with specific reference to the context in which they emerged in the research field, drawing parallels with writing on these topics by other scholars.

5.5.1 Viewing communities as homogenous

There must be remembered that communities are never homogenous. Even people in relatively small and homogenous communities have different ideas and perceptions about what their priorities are, the causes of local problems and potential solutions or approaches to improving their lives.

As one reads through the range of literature that has emerged to critique on or to improve upon participatory development techniques, a recurring theme is the failure to recognise or adequately address inequalities in local communities where development work is being undertaken (Adely 2004:66). If there is not an explicit goal of reaching consensus during PRA exercises and a process for achieving that consensus, individual ideas could get subsumed by the more dominating figures in the group. This may also create conflict. However, when used correctly, PRA exercises can also used to resolve conflicts such as in, for example, gender inequalities (Treurnicht and Botha 1999:66).

Adely (2004:67) explains that Kapoor (2002:108) criticises Chambers on the fact that although he addresses the issue of local differences and inequalities, he assumes that methods of sharing information and sharing it in a public way will enable communities to address these differences and that competing claims will be managed by PRA (Kapoor 2002:108). David Mosse's (1994:497-526) writing about his own experiences doing PRA, argues that the very public nature of PRA activities may in fact ensure that facilitators are only getting the "official" story about a community and that this inevitable ends up being the one shaped by those dominant in the community. From my own experience I learned to identify times that the dynamics of the group took over the process and that participants were to engrossed in discussion that they hardly even noticed me. Other times I could notice that participants were not really sure what should happen next and that these moment I risked getting only the official story or a story that the participants thought that I would like, according to the Placebo effect. Therefore, it is my opinion that the challenge in using PRA methods is keeping energy into the exercises that participants get so involved in doing them and discussions amongst each other, that this risk is minimised.

In the PRA exercises done on Apo Island during this research there were indeed some stronger or more vocal persons present in the workshop. When the groups were divided it was a coincidence that the stronger people were all in the same group. When the groups decided to choose the "best map" it was the map of this group that was chosen. Looking at the maps (see figures in Annex 3) this is indeed the most complete map. In order to avoid only getting this strong group's view, the other participants were asked to update the selected map with the additional comments of the other groups. During the rest of the exercises precaution was taken to also collect the views of the more quiet members in the group, by for instance handing the stick over to the quieter persons themselves. This shows that the success and the validity of the PRA exercises are also dependent on the

ability of the researcher to solve problems while they are occurring and thus the individual qualities of the researcher.

5.5.2 The outsider/insider problem

The fact that the researcher is an outsider in the eyes of the community remains a source of possible difficulties in PRA research. This implies that the researcher has to make certain preparations and spend sufficient time within the community before exercising the PRA techniques together with the community. I do not believe that the data of a researcher who enters the field for one day could facilitate a PRA exercise the next day with success. Such outcomes will not reflect the reality of the situation nor be of any benefit to the given community.

Treurnicht and Botha (1999:65) explain that adequate support for the initiative taker in change and development is of crucial importance. The key determent in whether the PRA exercises are successful and that it reflects the reality of the situation for subsequent action to be taken, is whether there is trust between the outsider and the insider, whether rapport has indeed been established. As explained before, this was not a problematic issue at the time of the workshop, as I have spent already 7 months in the community. In this sense, the issue of rushing that is often mentioned as a disadvantage of PRA exercises is also not relevant. The local people knew and trusted me and recognised the projects that were done within the community. Therefore one can speak of a certain amount of trust within the community. There was an openness for trying new, unfamiliar PRA exercises.

When a researcher lives in a community, does the local community feel obligated to participate when the researcher initiates a PRA process, even though they do not really see the relevance? In this case there cannot be spoken of real empowerment of the community. The community will only do the exercises as a favour to the researcher. Whether this was indeed the case on Apo Island, I can never be completely sure of. This is because of the fact that Filipino's will often hide their real emotions. It is considered extremely rude for someone to say, for instance, that he does not want to attend such a workshop. However, an indication of real interest is not only how many people actually attended the workshop (in the morning), but also how many people stayed for the entire process and duration of the activities and the number of additional people that joined out of interest. A total of 35 participants joined for the morning, 3 leaving during the day and another 6 joined out of curiosity. These numbers suggest that the community was interested in the initiative taken by the researcher. Moreover, during the day several people and even children peaked in, stayed a while and left spontaneously, creating a flexible and relaxed atmosphere.

We have seen that Chambers pointed out that in "best practice" PRA the participatory behaviour and attitudes matter more than the methods themselves (Chambers 1983:212). These changes in behaviour is also related to the necessity of a reversal of the view that professionals sometimes have that empowerment is a process initiated and brought forth by outsiders to local communities. It is my view that empowerment is a process that has to originate within the community itself as a result of either processes within the community or possibly by contact with the outside world.

5.5.3 Critiques on Participation

More often than not there is a difference in what is described in theory in the literature that scholars read and what happens in reality. One possible explanation for this is that authors lack the words to describe a situation accurately or that the reader misinterprets and idealises the writings, taking it too literally.

When one studies some of the literature on PRA (e.g. Chambers 1997, Mosse 1994), one will come to understand that PRA is a whole process, concerning building a relationship with the participants. The PRA philosophy or attitude puts emphasis on local knowledge and empowerment of the local community. This leads to a process where the community is involved in identifying needs, prioritising them, and thinking through solutions; they are full participants in an integrated development process. PRA, at least by its founding proponents, was never really envisioned as a set of tools to pick and choose from in list of possible tools (Adely 2004:68-69). Adely (2004:69) explains that in reality, this is how such methods are typically employed.

Another explanation for the difference between reality and literature is that there is a difference of PRA as a tool for research and for development practice. In my experience in the field of development work, I have come to understand that programmes that will receive funding from an external national or international donor will have to fit a certain predetermined requirements in order to get funding from these organisations. Following this, it might lead facilitators in the development practice to give certain leads to a community during the PRA exercises in order to steer them into a specific way.

Adely (2004:70) questions the basic effectiveness of PRA as an approach, again with particular concerns about the constraints under which development practitioner's work. The following quote has been taken from one of Adely's students concerning the issue of how participatory can participatory be:

"While the exercises seem to be instructive and stimulating in many ways, it is less clear how the outside facilitator would be able to use the experience to make concrete conclusions germane to the project design, implementation, impact and so on. This is perhaps a larger question that I have about PRA. It is not difficult to imagine the value of PRA for a project leader who is working in the field and who can be much more effective with a fuller and more informed picture of the local community. However, I wonder how qualitative insights and more nuanced understanding of a specific local milieu that can be gathered by PRA facilitators can then be transformed into information that is actually used to guide design and inform project evaluation, especially in large organisations with numerous and dispersed decision makers. If PRA exercises merely become the subject of a summary narrative report sent in from the field, I suspect that such reports will only be one among many sources of information used to make decisions, and may lose much of their special significance" (Adely 2004:70).

Similarly these exercises are often conducted as a form of research without any sense of what a follow-up process might be or if there will even be one (Adely 2004:69). In such circumstances, the researcher /development worker in reality is asking local people to

give up valuable time without any clear stake in it for them, except then empowerment and raising high and unmet expectations.

Then, maybe the answer lies in the fact that PRA exercises should focus on sustainable appropriate solutions that the community could manage and implement themselves without too much further external outsider inputs. The problem remains that most development initiatives do require money and in the developing world this means obtaining funding from development organisations. When this then is the case (as was in the case of Apo Island) the researcher/ development worker should commit in giving the community the follow-up assistance that they will need in writing grant proposals or bringing them in contact with local or international organisations. They can then assist communities in the process of not only receiving funding, but also in education on the new project cycle skills that will be needed in order for the local community to work together with the donor. In reality for many rural small communities this will mean that an official people's organisation will have to be established etc.

Another critique on PRA is on the selection of participants. It questions the inclusion of the poor and how members of the community can be encouraged to join and leave the process as they wish. How this issue was dealt with during this research will be discussed in section 5.10.

Looking at the critique on the degree on participatory nature of PRA, it does seem that academics seem to wait for yet another development trend so they can criticise it and write it off as another failed attempt to improve upon development. More specifically, we must remember that PRA is just one of the tools that can be used to give a voice to local people when they decide to join in development and conservation. In the words of Adely (2004:70): "I have to believe that all this focus on participation is a good thing." This is also one of the reasons that this methodology was chosen for my research. Despite the challenges that it still asks from the researcher now and certainly in the future, I also believe that a method that is based on the principle of inclusion and participation is used, the

strong points of one methodology can complement the weak points of another. Next, an exposition of these specific data collection techniques will be given.

5.6. Data collection techniques used in this research

In the light of the previous discussions in this chapter, I present here the specific data collection methods used during my research on Apo Island. These include PRA methods, different interview techniques and triangulation.

5.6.1 PRA methods used in this research

It is my opinion that one of the strengths of PRA methods is their ability to explore and reveal local, fine level detail. Understanding variation between different situations and local contexts is essential if development research is to be equitable and reach those at the margins of society. Through my research I tried to help the local community to share their knowledge amongst themselves in regards to CRM, sustainable development and their ideas for management of tourism in the future. In this way the local community of Apo can take a step towards managing their own development and initiating, planning and designing their own activities. To establish this growth, the following PRA methods were chosen to be used on Apo:

On 15 November 2004 a PRA workshop with representation from all interest groups in the community was organised. The idea behind the workshop was to construct a framework for tourism within the current CRM strategy. In other words: see what the community as a whole perceives as problems of tourism, turning these problems into dreams or opportunities in the future and planning and assigning the designated available resources to it.

A question which emerged from the research of Fida Adely (2004) is how explicit facilitators should be about their "designs" for group formation during PRA exercises. Stated differently, is it legitimate for facilitators to group people in a certain way without making it explicit or without ever discussing why they choose particular groupings? I chose for a random grouping of people to avoid this issue. The group was divided into three groups. This was done by a game of "musical chairs" where music was played and each time the music stopped, someone had to go to a certain group rotating between 1 and 3. This game the participants enjoyed immensely and it was used to break the ice and get energy into the groups, which worked superbly.

The PRA methods of mapping the problems, matrixing, listing the problems and writing solutions had the goal of visualising the research. Simultaneously it encourages open discussions in the local language, Visayan. For these processes I was simply there as facilitator.

Mapping – In their simplest form, maps are used to identify the comparative location and importance of different resources within an area. It is a tool to aid communication and provide a framework for discussion over the relative location of a resource and raise issues, which are affected by these resources (Institute of Rural Reconstruction 1996:7-8). It can also be seen as a good way of breaking the ice in initialising discussion (IIRR 1996:8). Mapping was chosen as a visual interpretation for those who cannot write and to serve as a reference point in order to facilitate a lively discussion. The map was used in order to identify problems on Apo Island related to tourism (making it more visual, more real). The maps were an efficient way for the people to look at, map and locate problems that were bothering them.

<u>Materials used</u>: Colour pencils, paper, pens, tape. These materials were well known to the community (including the poor) as they were used to workshops and therefore it was not needed to use simpler materials such as, for instance, stick and peddles.

Listing and Matrixing - The aim of creating matrixes is to discover individuals/ groups' relative prioritisation of components of a single issue. It is a technique to be used to discuss key constraints/ opportunities as well as understanding preferences. It not only provokes discussion of the criteria for selection, but also attempts to develop an understanding of the basis of making of choices and decisions.

The matrixes in this study were used to list dreams related to the problems identified in the mapping exercises. It was used to give a place to the skills needed for the successful management of tourism. It was not used to indicate prioritisation as the problems are all interrelated with each other. This was an interesting aspect in the PRA process. The community took over the process, as I proposed matrixing to also list priorities in problems (IDS 1996a). Participants felt that this tool was not handy to use and constructed this dual list instead.

Materials used: Colour pencils, paper, pens, tape

The actions of the PRA workshop on Apo Island

The PRA exercises took place on one particular date near the end of the research period. This workshop and its aims and goals are described in this section:

In order to introduce the theme of the PRA exercises¹⁹, I chose to show a Power Point presentation with photo's and facts about Apo and the research done until that point in time. This asked for the use of a laptop. Treurnicht and Botha (1999:64) warn against using high-tech equipment such as computers and cameras, because of the reason that it may alienate locals from the research process. On Apo Island, most people have seen a computer before and the computer was merely used to show some pictures of the underwater coral reef.

The objectives and programme for the day was also explained in this short presentation. It was emphasised that there was no right or wrong, that spontaneity, learning and planning, as a group was important and also fun. This aspect of amusement is supported by Robert Chambers as an important aspect of PRA. As explained before, it was decided to begin the day by showing underwater photo's made of the live coral reef around Apo. Additionally photo's made of dead coral reefs in Thailand at a main tourist destination in Koh Samet during my visit there were shown. The participants, most of them spending their whole lives on Apo, have never seen pictures of the underwater world and really enjoyed these. The showing of these photographs was a powerful tool in setting and creating the correct mood for the beginning of the workshop. Participants were first

¹⁹ From now on referred to as the PRA workshop

surprised at the beauty of the colours of the corals and the fish of "their" coral reef and then looked at disbelief at the photographs of the dead coral reefs in Thailand.

Following this, the Barangay captain then explained an article from the Independent about the destruction of coral reefs in Thailand (Independent 2004) through tourism activities. Prior to the workshop a planning schedule ²⁰was made with times in order to give myself a rough indication for time as facilitator, the participants were never rushed and had sufficient time to complete all exercises leisurely. The workshop was planned for half a day.

Snacks and lunch were provided. Eating is a very important factor in the Filipino culture; nothing is complete without a meal. Additionally, this was also my way of thanking the participants for their time and efforts. Everything went according to plan on this day, except that most participants were late, according to the Filipino culture. This, I accounted for when making the planning, having learnt in the time spent in the community that it will surely happen. I sat with the locals and waited in a relaxed way. Whilst waiting, one of the locals gave me a complement in saying that I have really adjusted to the island life, as I am waiting so patiently unlike most other outsiders that visit for workshops or research. The fact that I could adjust this way has everything to do with the fact that I lived on the island for such a long time, before facilitating this workshop. In this way I do not see these PRA exercises as something "rapid", and could be more accurately be described as Participatory learning and action (PLA) where local knowledge was used in order to use the local resource optimally and in a sustainable way between community and tourism.

5.6.2. A description of participant interviews used in this research

The SSI is a tool that can be used at any time in research. In most cases, a SSI should accompany the use of every other tool, since it will be useful to probe certain questions and follow up topics of interest (IDS 1996b:49).On Apo Island a lot of information can

²⁰ See Annex 8 for this planning

be obtained through simply talking to people. The community spends a lot of time discussing matters either in an informal way or in meetings. All of the following techniques were used:

SSI's are based on written lists of questions or topics that need to be covered in a particular order. According to Mason (2002:62) the SSI has four core principles.

- Interaction or dialogue between interviewer and interviewee.
- Relatively informal conversational interviewing.
- A topic by topic narrative approach.
- The description of the specific context of the interview.

These techniques were also followed in the group discussions. Please see Annex 4 for a list of the questions and their responses.

<u>Materials used</u>: For these interviews I planned to use pen and paper, as well as the recording device on my MP3 player and later a video camera. In the end, this was perceived as being threatening to the community, they felt like they were "recorded". This resulted in only paper and pen being used.

This section described the PRA methods used in this research. It is important, however, to note here that I was responsible for the research design as such, whilst the community simply used the PRA methods as action research tools to support the already ongoing process that was unfolding within the community and that this research followed. It would be false to claim that the community was part of the overall research design, as they had no part in, for instance, writing the research proposal or literature reviews etc. The PRA tools of mapping and matrixing were merely used as an instrument that they could use to list all the issues, problems and opportunities to tourism and make plans for responsible tourism in the future. However, in this process empowerment and ownership really did take place and also during the PRA exercises themselves. Participants altered the exercises themselves as they saw fit. Additionally, the change in attitude and behaviour that took place within me was also something inherent to the PRA philosophy and something that I see as an extremely important aspect in calling this research a personal achievement.

5.6.3 Triangulation

In social research different perspectives on a research topic can be established by the use of triangulation. Triangulation simply means to look at a particular issue from different perspectives. Triangulation can be defined as the mixing of methods or data in order to shed light on diverse viewpoints or standpoints on a topic (Olsen 2004:1). Triangulation is, according to Olsen (2004:1), a method that is used in order to generate dialectic learning: mixing approaches in order to get two or more viewpoints on the subject being studied. Further, triangulation can be viewed as a pluralism of method in order to allow a researcher to use different techniques in order to get access to different aspects of social phenomena (Carter 2003) which can be used to explore and improve knowledge about the real world. Triangulation can confirm particular observations made by participants or on the other hand bring contrasting positions or viewpoints that should be followed up by the researcher.

In 1970 Dezin identified several types of triangulation. One type involves the convergence of multiple data sources. Another type is methodological triangulation, which involves the convergence of data from multiple data collection sources. A third triangulation procedure is investigator triangulation, in which multiple researchers are involved in an investigation (Denzin 1970). In this research the first two, methodological and data triangulation, were used.

Triangulation can also be seen as a method-appropriate strategy of founding the credibility of qualitative research in becoming an alternative to the " traditional criteria like reliability and validity" of a research product By combining multiple theories, methods, and empirical materials, I hope to overcome the weakness or intrinsic biases and the problems that come from single method, single-observer, single-theory studies within some qualitative studies. The combination of methods used for data collection was specifically chosen after a thorough investigation into the culture and the energy of the community of Apo. Those methods were selected, which I knew would work and give the maximum group participation, results, as well as enjoyment.

The data triangulation took place through studying academic papers that researchers wrote on Apo and its future, mainly by researchers at the Silliman University in Dumaguete and interviewing academics and volunteers related to this University. This was done to prevent that because of the fact that I was staying in the community, I became biased and non-objective towards the views of outsiders of the community. Another source of data triangulation were interviews done with foreign tourists visiting Apo Island and looking in the Lonely Planet (the most popular traveller guide book) Thornbird discussions on the Internet about Apo Island, thus also incorporating data sources of tourists that I did not meet. Addditionally, when this research product was written, revised and completed, I have already been away from Apo Island for some time. This, in my opinion was a positive development, resulting in me being able again to take some distance from the community and presenting the data in a more " objective' and less emotionally attached manner.

The triangulation of sources ensured that the picture that is painted of Apo Island not only reflects the community point of view, but also include tourists, private and public sector.

5.7 Specifics about the data collection process

The main research stages will be described in this section. The planning of all the stages in the research process can be found in Annex 5.

5.7.1 Interview schedules and observation schedules of data collection

During the first few months of establishing rapport, participant observations were done in the field, noting down those issues of interest. In other words, unscheduled and spontaneous interviews took place frequently. Only later, meetings or interviews were scheduled. These were mostly scheduled on Sundays when the local officials would have some free time. As this research was part of an ongoing process in the Apo community, these "interviews" often were part of a community meeting or workshop that occurred. This type of interviewing occurred over the entire period from March until December 2004.

For the PRA exercises a planned schedule had to be drafted near the end of the research, giving the community the opportunity to really participate in the research and use it as a tool that they could use. Such a tool can then be used in order to get more clarity about the future of their role as community to regulate tourism and take advantage from tourism activities for themselves. In order to get all the participants together at the same time, the date was set 22 November 2004. Five hours were planned to complete the workshop.

Triangulation was chosen in order to ensure that the data was complete. The views of other players and their position in the whole topic therefore will be accurately examined and presented. Although such outsider data was used, the general presentation of the data, the analysis and interpretation thereof was given from an insider point of view. The recommendations that will be done however combine this knowledge gained as an insider with what I have come to learn outside the community. Knowledge gained from working in the development field and triangulation sources of academic works were integrated in the recommendations.

5.7.2 Dates and settings of data collection

The majority (99%) of all interviews and discussions took place in the Apo village. Interviews were open to all and discussion lengths varied, mostly an hour, sometimes longer and other times shorter. They all took place from March until December 2004. The PRA workshop was the only activity that took the form of a workshop and had a specific location and time: 22 November 2004 at the Apo Island Primary School from 08:00 until 13:00. Ample time was allowed for starting, in Filipino time (thus late).

Other interviews and observations were done at community and barangay meetings or meetings with other sectors like government, private or academics. These were mostly planned.

5.8 Steps taken to gain access to the research field

In order for fieldwork to be successful, especially qualitative research, access to the participants has to be gained with knowledge of and permission from the community. Even more important is to establish rapport and create a feeling of mutual trust. In this way community members will feel safe to talk whilst the researcher is present and will share stories, information and problems about the research question more readily. I entered the Apo community on the 27th of March 2004 and left on the 22nd of December 2004, a period of 9 months. During this time I lived in a small house amongst the villagers on Apo. Sharing the day-to-day life, activities and rhythms of the islanders. This, and the fact that I worked closely with and spend a lot of time discussing issues simply by relaxing and sitting on the beach with locals, made gaining access to participants relatively easy. The community saw me primarily as a development worker that worked with their children and not so much as a researcher who only stayed for a short period of time, only taking from the community and not returning anything in favour. The community of Apo was used to being studied by students of marine biology etc, without ever getting anything back in return, simply being involved in the research or ever being able to use the outcomes. This different approach that I had, of really becoming an insider in the community by living amongst them and working with the community, led to openness. Therefore there was a feeling of trust and willingness whilst conducting research. People did not mind to share their time with me. This might be different when "real" outsiders to the community would try to do the same.

Before my arrival on Apo (and also whilst being there), permission was asked from the Barangay leadership to conduct this research on Apo. For the PRA exercises, the Barangay captain was kind enough to help me construct a list of important players in the several target groups and spread information under the invited participants. This ensured that they would sign in order to commit to attend the session. Without mr. Pascobello's help this session would have been almost impossible to organise. Unscheduled interviews etc. are relatively easy to conduct on Apo Island, as people sit around and like to talk about issues, problems and solutions. This is again in line with the PRA philosophy (Chambers 1992) where outsiders take the time to conduct research and do it in a non-

154

rushed fashion. Workshops and action planning is also thoroughly enjoyed by participants, but with the Filipino "relaxed" culture it might sometimes be difficult to organise a meeting such as this, without the help of the local leader. In this sense Filipinos find it very difficult to commit to a specific time and place.

5.9 Establishing rapport and getting to know the local culture

Conform to the research methods chosen; I preferred to set aside the first four months to get to know the members of the Apo community. This was a challenging time, getting to know a new culture with the sometimes frustrating effect this could have on an outsider. I found the Filipino culture an intriguing one and even more so the strong fishermen and preservation culture on Apo Island. A challenging aspect, however, is the fact that in the beginning I had difficulties with knowing whether somebody meant yes or no. If one would ask a question like for instance: "Will Julie come back from the mainland today? " In 99% of the cases the answer will be " maybe". Not yes or no. This is a measure of safeguard, for when someone says yes and Julie does not return on the particular day, it will mean that they have been wrong, and thus has been losing "face". In this case it is always better to formulate questions either not asking for a direct yes or no, but rather also using maybe: for instance; "will Julie come back from the island today, maybe? Then there is a chance that you would get a yes or no. Another option is not to format direct questions, but indirect ones.

Learning the culture is an important asset for a qualitative researcher when formulating questions. According to Chambers (1983, 1993 & 1994) it is of vital importance for the outsiders to understand the local culture in order to alter behaviour and attitudes towards the local people of the community.

The Filipino culture is a proud one, as outsider it is good to take a few months to get used to the way that questions have to be formulated in order to get a real answer that truly reflects the opinion of locals. Time was in the beginning an important source of misunderstanding and frustration to me. The locals refer to this as Filipino time, which basically means that 10 means elevenish and that the most important person that will attend an event will show up last. Coming from a Dutch working environment and culture where everything is extremely punctual, this particularly took some patience and time to adjust to. However, once one gets used to this, it is quite refreshing for everything not to be regulated by a clock. When everybody is present, then a meeting will start. In the end meetings always take place and those waiting for the meeting to start will make small talk. Sometimes this can also be very interesting for unstructured interviews and group discussions. Another interesting aspect of the Filipino culture is that Filipino's generally do not show when they are angry. This is actually true for all emotions. When somebody gets upset then the locals becomes embarrassed and the person getting angry would have "lost face" Subsequently, it will be useless to try to go into discussion after this. This I observed when one of the private sector owners, got angry with the locals for being late. Afterwards there was no sense of participation to be spoken of. For me, getting angry was not such an issue, because it is not so much in my nature. I did find it interesting how the locals respond to ideas and issues in very much the same reserved way. Therefore, it is difficult to judge whether people are enthusiastic about something, indifferent to it or think it is a bad idea. The reaction to new ideas is always the same: a kind of silent, knowing smile, thinking about the implications of the idea. New ideas or methodologies take some time for them to get used to. However, what did work really well was action planning methods and games to break the ice in order for them to loosen up a bit. This they also enjoyed very much almost being accompanied by lots of laughter and screams.

The biggest challenge during the establishment of rapport was to live with the community, learn the culture and the ways of daily life and to try to build relationships based on mutual trust and respect. It was a time to get to know the influential players in the community, power structures within it, getting to know the local NGO's and institutions for development. During this time a "feeling" for what was playing within the community itself could be developed. This rapport formed the foundation of this research. For the research to be real and truly reflect the situation on Apo Island.

Looking back on this process it is truly my opinion that a real insider view cannot be establish by spending only 3 months within a community. Sufficient time is needed to change the way the researcher sees the community and visa versa. The researcher needs to look through the eyes of the community and get to know their history, culture and relevant framework of the way the world works. The time of establishing report was also the time to get to know those preconceived target groups and adjust the research design if necessary. Additionally during this time, contact was established with the advisor from the CRM project of the DENR of the Philippines. They volunteered to be a source of information if needed.

I tried to integrate in the community and make friends with no hidden motives, because I would spend quite a bit of time amongst them. The locals accepted me only after some time, approximately around the time when the period of establishing of report ended, after 4 months. This I could notice by people coming to me and asking for help on some issues. This was also true for the Barangay captain. I had to literally win the trust of the community, but this did not mean that I could just sit around, relax and do nothing. Such trust is established when there is an indication that the researcher is in the community not only for his own (hidden) agenda, but really to contribute to the welfare of the community. This process was made easier by the fact that I was involved in several community projects on the island.

During the first 4 months contact was made with the following target groups:

- influential people in the Apo community;
- fishermen;
- women;
- private sector/ operators of tourism businesses;
- education and religious leaders;
- local NGO;
- tourists/ volunteers.

The time frame for these actions was 4 months. The above overview of events proves why it was so important to spend such a long period of time for this stage of the research process. Thinking back now, I realise that this process of establishing rapport is actually not one that ends before the researcher leaves the field. New contacts are continuously made and moreover the researcher (outsider) will always be watched on behaviour by the community. In a certain way the researcher has to keep proving her in uncertain, new circumstances.

5.10 The selection of the participants of this research

Systematic sampling is often difficult in participatory methods. Mukherjee (1995) also indicated that sampling is incompatible with PRA, for an important principle underlying PRA is the emphasis on incorporating multiple perspectives and diverse participants into the actual implementation process (Mukherjee 1995). "Even with careful preparation there is much more dependence on people's willingness to turn up and be involved than in the 'captive' interview situation. There may also be logistical problems in identifying a venue and time accessible or conducive for everyone (Chambers and Mayoux 2006:12).

In trying to increase the validity of the data (also out of a quantitative point of view) I wanted to make sure that enough participants took part or rather formed the base of the PRA workshop. 41 participants would be invited by means of a written invitation, ensuring that they would show up on the given time and place. All other community members were also welcome to join, but this was done by word of mouth. Several people spontaneously got involved and joined for short times through the entire workshop, a flexibility that is an important aspect of PRA (Chambers 1997). This is not a normal procedure to take, yet I designed it this way, because I wanted to make sure that enough representation from all the different interest groups or target groups when doing the exercise. In my opinion it also worked as most of those invited joined the discussion or sent someone to represent them, whilst others from the community that were interested could also join. Many children also watched the process as it was open to anyone, facilitating a positive process of learning about participation under the youngsters in the community.

158

Seeing that the population older than 18 is 350, I planned for 32 participants, this being 9% of the population to be present for the entire PRA exercise. In addition to this, I included 9 extra participants to build in a safety net and gain extra information. The participants in the research were identified by drawing lots out of a stratified sample of the above target groups.

The following procedure was used:

- 1) All the names of the people in a specific target group were written on a list
- 2) For this stratified sample the names for each subgroup (target groups mentioned above) were done independently.
- 3) Papers with numbers on it were folded uniformly, put in a big pot and then mixed.
- 4) Without looking at the names or numbers, random papers were pulled out of the pot until the number of pieces of paper (n) that I needed were reached. The person with this number on the relevant list would be invited to the workshop (International Institute of Rural Reconstruction (IIRR) 1996).

For each subgroup n equals (n =):

- influential people in the Apo community-7;
- fishermen-10;
- diveguides-2;
- NGO-3;
- private sector/ operators of tourism businesses-4;
- teachers-2;
- tourists/ volunteers-2;
- healthcare workers-3;
- Women's League –3;
- students-5.

For the unstructured interviews and observation techniques nobody in specific was selected. Of course, all the important players in each target group on the list mentioned above were approached.

The goals of this research was to observe what the role of the community is in regulating tourism and finding best practices for responsible tourism on Apo Island. This requires from the researcher to keep an open eye for following the process, noting everything done and talking to as many people as possible about the issue.

Everything and everyone were seen as possible data sources. I found that very often whist spending time within the community, some locals would start talking about issues related to the research topic. When something was being said that had relevance, these were then also included as "interviews". In total all questions (see Annex 9) were asked to a total of 55 participants. For the PRA exercises, a total of 40 participants were present.

The time frame for the basic selection of the participants as described above was 2 months and overlapped with the process of establishing rapport. It was crucial that the correct participants were selected and that all target groups were represented. In order to do this I had to know most of the players and in working together with the Barangay captain, he could help to indicate those important persons that I missed in the sample.

5.11 Data capturing methods and fieldwork practices

Data was captured by written hand. I had two notebooks, one smaller and a bigger one. The first was used for notes in the field whilst listening to someone. Later full details were recorded, always with name, date and the events that led to the specific context in which statements or observations were noted in the bigger one. This was done in order to remember the circumstances that led to participant's reaction in a certain way. Views often tend to alter with changes in the environment.

Keeping track of fieldwork is an important aspect of quality control. Mouton (2001:107) explains that it is important to keep a record of the main decisions and events during the fieldwork process. These are:

- dates when access was gained to the field;
- dates when interviews were conducted;
- keeping track of the length of interviews and information on interviewers;

• keeping a track of all delays, problems etc. that influence the fieldwork.

Later important factors were typed on the computer, using the computer at the basic level as word processor (Mouton 2001:77) and storage device on the USB storage device. The computer was also used for the literature study on the Internet for searching online data sources. Initially it was planned to use recording devices with a microphone, but as the discussions often took place spontaneously and in groups, I saw this as a possible impediment and decided not to introduce this method. Visual data of Apo were made by a camera, both underwater and above and both analogue and digital. My research assistant²¹ took photographs during the PRA exercises.

During the PRA exercises notes were taken in the small notebook. Additionally to this, the raw data, the original maps and matrixes were duplicated and a summary constructed and printed out for the community to work with in the future. The maps and matrixes were made on A2 paper with pens, highlighters and crayons available for colours. These maps were photographed with a digital camera afterwards in order to be able to include them in this written thesis. All data was stored on an USB-storage device as well as burnt on a Compact Disk (CD), as I was travelling frequently in harsh conditions and did not want the data to be lost or damaged. The time frame for data capturing was 5 months, as it required intensive interviews and group discussions and planning for the PRA exercises.

5.12 Data analysis, interpretation and data editing

Data was edited by first rewriting data neatly in the research data notebook. As soon as research questions were clear, access data was edited. Most data, however, proved of use and nothing was thrown away, for it might be needed later along the research process. All matrix exercises and quantitative data were put in Microsoft Excel spreadsheets. The advantage of this is that you can do certain selections from rough data with these spreadsheets in order to summarise data.

²¹ See Annex 6 for more information

Data analysis involves the stage in the research where the complex whole of data collected is broken down into parts. Analysis involves breaking up the data into manageable themes, patterns, trends and relationships (Mouton 2001:108). Themes are put into one category and then they are compared in order to look for additional themes or sub-themes.

The method of data analysis chosen for this research is the approach described by Rubin and Rubin (1995:226-227). This implicates that data analysis already starts while data collection is taking place. This preliminary analysis indicates to the researcher how to structure the research further. Stated differently, the researcher has a chance to redesign questions to focus in on central themes in the continuation of data collection. In this an adaptive approach is followed, which was the case in this research. After the data collection is completed, a more detailed analysis is done where additional themes and concepts are discovered which build towards an overall picture. Then for the final analysis, material is sorted into categories touching the same concept or theme. Categories are then compared to look for variations and nuances in meaning and connection between themes (Rubin and Rubin 1995:227). The goal is to integrate the themes and concepts into a case study that offers a real-life, accurate, detailed yet subtle interpretation of the daily life and issues on Apo Island. The analysis is complete when the researcher feels that he can share with others what his interpretation means for policymaking, for theory, and for the understanding of the social and political world. I am confident that this process accurately reflects the procedure that I followed for data analysis. At the same time, some data analysis already took place during the PRA exercises by the participants themselves. They discussed issues and problems and put and puzzled different themes together whilst planning for the future.

The reason why this specific data analysis procedure was chosen and used in this research is mainly because of its adaptive approach. Data collection methods can be altered whilst still in the field. This is related to the adaptive approach to development projects as described by Rondinelli. Rondinelli (1993) argues that most development policies are based on the assumptions that reality is manageable and that the future is predictable.

162

This results in universal and 'technical' solutions to development 'problems', and therefore many policies are inappropriate and far removed from the reality they are trying to influence. Rondinelli (1993) suggests that a more helpful way of viewing development policies is to approach them as "social experiments". Experiments take into account the underlying uncertainty and the necessity of trial and error in order to learn. Experiments also take into account that the unexpected may happen, and that both problems and solutions may have to be redefined along the way. Rondinelli links this to wider concerns about the importance of continuous learning, flexibility, and opportunities for local ownership of the development process, thus also in research about development. This adaptive process prevents that the researcher discover questions unasked when it is too late, when already back from the field. Also as this was a qualitative research where the research questions developed or evolved with time, it was a logical step to look for central themes whilst doing data collection. In this way further research could be directed towards the answering of newly formed research questions.

The time frame for final analysis and interpretation was 4 months. This in reality took quite a bit longer than expected as my return to the Netherlands required to work fulltime and other influences outside my span of control caused unexpected delay.

5.13 Measures taken to minimise error and to improve the quality of the research

Keeping track of all the data is an important form of quality control. Therefore an accurate account of all main decisions and events occurring around the research topic were made. Dates and length of interviews, information on participants and problems or delays were all written down regularly. In this research I was the sole researcher and interviewer, with the help of an assistant on technical and administrative issues.

The quality of the data was always checked afterwards, asking a subsequent question in order to verify whether something said was indeed what the participant meant. This was done, because interviews were done in English with some parts in Visayan (local language spoken on Apo) and English not being the mother tongue of most of the participants. A translator, however, was used during the PRA exercises in order to explain techniques. Exercises and discussions were done in Visayan. At that stage I could understand sufficient Visayan in order to understand what was being said, however, when I did not comprehend the translator could explain in detail.

As explained earlier, the PRA visual methods sometimes have the disadvantage of hiding important differences of opinion and perspective when for instance a, map is drawn in group settings. It may not reveal cultural-based information and beliefs adequately. Therefore, these exercises were complemented by other techniques, such as careful interviewing and observation, to crosscheck and supplement the results of the maps and matrixes used.

5.14 Shortcomings and sources of error of the research findings

The fact that I stayed and worked intimately for 10 months with the people of Apo Island, shared their lives, problems, happiness made me passionate about Apo and what is happening on and to it. It made me worried about their future. This involvement of the researcher does pose problems and might mean that subconsciously factors worth reported could be missed or rather that emphasis is put on certain factors that caused exaggeration to a certain extend. To my knowledge this is not the case, but this might be a source of error.

Another issue is that of language proficiency. Interviews were conducted in English with some basic Visayan from my part. PRA exercises were in Visayan, with translator when needed. English was also not the first language of the locals on Apo Island (however English is seen as the national language of the Philippines), which might have caused misunderstandings as another source of error. This error probability is not very high as data was verified with participants. In general English on Apo is of a very high standard, but for accuracy this shortcoming is mentioned.

Another source of error is related to the local culture; Filipino's often do not say what they think. The habit of locals answering with maybe and the researcher's response to this was already explained previously. Moreover, there is a chance that Placebo effects could have played a role in some of the interviews. This Placebo effect takes place when the participant reports something during an interview of an exercise, because they are expected rather than actually being true (Mouton 2001:106).

Further, during all interviews and PRA exercises, no recording equipment was used to capture the vocals of the interviews for permanent records. Pictures were taken, however, of the PRA exercises and group interviews in order to serve as "proof" that research did take place.

5.15 Conclusion

This chapter examined the research methodology used in this research on Apo Island. It noted the developments in qualitative research and the importance of participatory methods within development studies in general. It described the critiques on PRA as a research methodology and it was explained how these possible problems or threats to the quality of the research were prevented in practice during this research on Apo Island. This chapter further presented an overview of the methods used for data collection, data analysis and data editing and provided answers to the reader of why these specific methods were chosen. Finally for accuracy's sake, the possible shortcomings or sources of error in the research process were mentioned.

Chapter 6: Presentation and discussion of data collected

6.1 Introduction

The goal of this chapter is to present the results of observations, interviews, triangulations, mapping and matrixing exercises done during field research on Apo Island. In this chapter the research problem and question will be central to the discussion. The research question enquires into the specific role that the Apo community has to play in order to successfully establish a situation where conservation and tourism development is increasingly integrated. It was formulated as follows:

Given the current situation of tourism on Apo Island, what is the role of the local community of Apo Island in influencing the direction of development and conservation in their local environment?

In order to give a systematic breakdown of the investigation of the research question, this chapter, in line with the objectives of this research, consists out of the following subsections.

- Tourism through the eyes of the local residents of Apo Island (divided into negative factors, positive factors and opportunities).
- The role of the Apo community in creating a space for conservation in tourism related development.
- The role of the Apo community in increasing the economic benefits from tourism.
- The factors that weaken the role of the local community of Apo Island in the integration of conservation and development.
- Conclusion.

6.2 Tourism through the eyes of local residents on Apo Island

Why it is important to understand the mind-set of the islanders towards tourists and their activities on the island? This understanding becomes important in order to comprehend actions taken or not taken by the community in tourism related issues. Stated differently,

it gives insight into the background of the specific role that the Apo community has chosen to play in influencing the tourism situation of the island.

Local attitudes and receptiveness to tourists are critical factors and perhaps the most critical for small isolated village communities of coastal areas (Ali and Juma 2003:9) for the success of tourism. Thus an assessment of local attitudes towards tourism was given particular attention during this study and all villagers interviewed were asked about their opinions on the tourist industry.

On the question whether tourism on Apo Island is a good or a bad development, the following answers were given:

- 52% of the respondents replied that it is good,
- 38 % that it is bad and
- 10% were undecided.

However, within the group of 52% that believed that tourism was in general good for the local residents of Apo, 95% believed that tourism and subsequent development are not without faults.

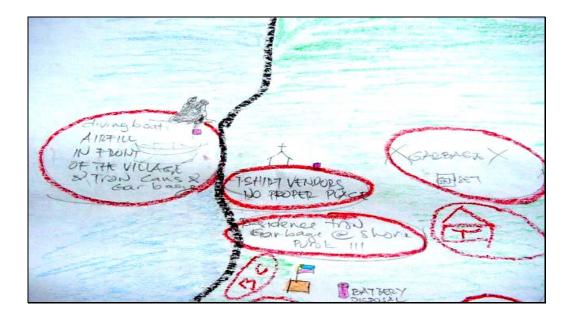
In the following two sections the negative and positive factors will be discussed in depth as reflected by the complete data collection exercises.

6.2.1 Problems with development identified by the local community

In March 2004, when I arrived on Apo Island, it became clear to me that increasing tourism related development was becoming problematic on Apo. In a very early stage of the research I was able to get a general impression of the attitude towards tourism on Apo Island. As presented earlier, we saw that a majority believes that the tourism situation on Apo Island is not ideal and had to be improved. During further interviews and group sessions my first impressions gradually led to a complete view of these positions held by community members.

Therefore, this section will elaborate on the perception of community members regarding the difficulties related to tourism as indicated during the field research. Figure 5 is a photograph of a part of a PRA map indicating some of the problems, which will be discussed below:

Figure 5: Problems related to development on Apo Island as mapped by participants from the local community



6.2.1.1 The conflict between fishermen and tourists

Fishing is extremely important for food and livelihood on Apo Island. Most families are dependent on fishing for a living. Furthermore, there is an existing dominant fishermen culture and the preservation of this culture and the rituals around fishing is of vital importance to the local community. Most men see themselves primarily as fishermen, then maybe a dive guide or volunteer guard (Mendez, S 2004). Women are shopkeepers, midwives or workers in the APLS Visitor Centre etc.

The men of Apo Island help each other dragging boats in and out of the water, with operating nets and together they eat the catch from the fish traps²² etc. This fishermen culture enforces the collective group feeling of togetherness, especially between men. Fishing is such an intricate part of the culture of Apo that I find it appropriate to start with reflections on some main findings about conflicts between fishermen and tourists that came forward whilst doing data collection in the field.

Fishermen on Apo Island have their reservations about tourism and the unknown or unmeasured effects that it is having on the coral reef; their source of livelihood. Their families have been living off the coral reef for years. During the last 30 years the community has been protecting the reef from damage from illegal fishing methods and over-fishing. The fishing methods have been adapted towards more sustainable methods and have broadened the local knowledge system. Every fisherman has come to know the both the quantity and behaviour of the fish intimately. (Pablo 2004b). For the fishermen, development and its increasing tourism numbers has created a visible change in behaviour of the marine life.

"Divers chase away the fish and many times the big dive boats go past so quickly and close to us that it is dangerous and our equipment can get damaged. This is actually against the law, you know" (Pablo 2004b).

Another interview with two young fishermen reflects a similar view: "We, on Apo, have to live from our coral reef, this is our livelihood. Development has brought divers that come to our island in big groups, chasing the fish away and damaging the coral. The fish behave differently when they see the many bubbles from the divers; this we have observed many times whilst fishing" (Mendez, J 2004).

The Deep Ecology viewpoint to sustainable development (discussed in section 2.3), argues that it is good that the fish are chased away, for they have been saved. This, as has been made clear earlier, is a viewpoint I cannot agree with. In section 2.4 the importance

 $^{^{22}}$ Fish traps are traditional catching devices, woven from local materials, approximately 2x2 meters in size, but size can vary.

of helping to sustain co-evolutionary events rather than the individual glory of power and material accumulation in communities (Norgaard 1992: 1981-1990) were described. This, however, still means that not only ecological sustainability, but also socio-economic sustainability needs to be holistically addressed. The emphasis should not be on local communities to stop living from the coastal resources as they have been doing for centuries. The challenge is for local communities all over the world to live in balance with their natural environment. In the case of Apo Island development and its influx of tourists is disturbing the balance between community and natural resources. Who is to blame for this imbalance?

In general terms tourists always seem to blame locals and over-fishing as the cause of coral reef damage and hardly ever indicate that there is an understanding that their activities as a tourist might contribute to the problem. The following quotes clearly indicate this notion:

"I've just returned from diving at Apo Island in the Philippines and I really wanted to share my disappointment with some of the things that are happening there. This was my third trip there as the diving is stunning but now I find that there are very few bigger fish left there. I also noted much more anchor damage to the coral than 2 years ago. Firstly, of the three thresher sharks that were hanging around at Rock Point, two have been caught and killed - one sent to market, one consumed by the islanders - and I didn't see the one that is supposedly still there...the community is not looking after the reef anymore" (Lonely Planet Thorntree 2005:1).

Another reaction to this:

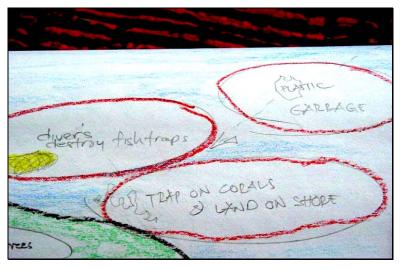
"Everywhere I went in the Philippines I heard similar stories about conflict between fishermen and those who want to preserve the marine life, or fishermen from other islands poaching the few remaining good (relatively unexploited) fishing areas (like Southern Leyte), and having to be driven off by locals and/or policemen with guns... Sad to say, but all the nice dives I did were within Marine Sanctuary's, elsewhere there just were not that many fish... And chatting to locals, I heard stories about how big the tunas the fishermen caught were in the past, whereas now they only catch little ones (which in days gone by were only fit to feed the dogs)" (Lonely Planet Thorntree 2005).

The fact that tourists do not realise that their presence also contribute to increasing pressures on the coral reef on Apo Island is problematic and create friction between the tourism industry and locals. It is also inevitably linked to how the community will react to tourism development, which brings us closer to the research question in place. A particular source of conflict during the time of field research between local community and tourists were the use of Fish traps in the fishing grounds. Whilst I was on the island, I witnessed several heated discussions between different parties regarding the fish traps used by fishermen on Apo Island. Fish traps are closely linked to the male fishermen culture and identity of men on Apo Island. Fresh fish from the fish traps will often be prepared immediately on the fire (Sinukba) or eaten raw with coconut milk (Kinilaw) after it has been brought to land from the traps.

Divers have been destroying the fish traps whilst diving on the reefs of Apo Island. In the PRA workshop two out of three groups identified the issue of fish traps as an important friction point between locals and tourists, especially amongst the fishermen. Tourist divers were smashing the fish traps underwater at Coconut point and Cogun (these were indicated on the PRA maps as problem-areas in November 2004). Tourists were not only freeing fish that were caught in the traps, thus depriving fishermen of their catch and income, but they are destroying the traps so that fishermen cannot use them anymore. Hence, robbing the fishermen of an important asset to ensure an income when catch via other means (like line and hooks and nets) are low.

The fishermen feel particularly frustrated by the fact that they cannot catch those doing the damage in the act, for it happens underwater where is not visible to the community. The fishermen only discover that damage has been done when the trap is hauled to the surface, and this is mostly too late to catch the culprit who is responsible for the action. This causes a lot of anger under the fishermen: "The divers are destroying our livelihood when they destroy the fish traps. They are taking food from our mouths. Why are they doing this? They have enough money to always buy food and they even go on holiday, not us. It takes us longer than a week to make a new fish trap. All my brothers also feel this way; they should keep out of our business" (Tabanera, J 2004).

Figure 6: PRA exercises indicating that the destruction of fish traps by divers is perceived as a problem by the community



During the PRA workshop there was a strong feeling under the participants that tourists had no right to destroy these traps under water. The community feels that "we have been taking care of their coral reef for 30 years" (Tabanera, Bodut and Ronald 2004). These were methods that were allowed within the regulations of the marine reserve. Fish traps are legal in the Apo Island Marine Reserve, according to the Fisheries Act, which provides for the development, management and conservation of the fisheries and aquatic resources, according to Republic Act no. 8550 of the Philippines chapter II, section 51 (Phillipine Republic Act: chapter 2). Talks with community members (Tabanera, Bodut, Ronald 2004) indicated a general view that outsiders should not take matters in their own hands and destroy traps. They should try to understand that the fish traps are a method that is allowed within the regulations of the Marine Reserve.

When divers smash the traps, it leads to bitterness and hate in the local community (Rhodes 2004b). During the PRA workshop participants talked about the feeling of frustration amongst the community as a whole, because the perpetrators are never brought to justice. Community members and fishermen cannot regulate activities underwater. The workers from the PAMB APLS Visitor Centre (Pascobello, Mila 2004b) explained that there are often several boats diving at the same dive spot simultaneously. This makes it difficult to know whom to blame. However, officers from PAMB, the APLS Visitor Centre, the Barangay Captain and two of the Dive guides from Paul's Community Dive School indicated that they were quite sure which operators were guilty. When confronted though, the specific operators and dive guides will always deny the action. The result is frustration and anger within the local community.

In order to make appropriate recommendations in chapter 8 towards a future role for the local community of Apo in order to solve this problem, it is important to also present the opinions of tourists in this section. When looking at the situation at hand from the view of tourism operators and tourists, one comes to understand that many tourists have a very different view of fish traps than the local community. The following interview illustrates this:

"Fish traps are really bad for the environment. If I see a fish trap, I destroy it immediately, as hard as I can, I smash everything so that it cannot be used again. It gives me great satisfaction to free the fish trapped inside of it."

Interviewer: Don't you see it as taking food out of the mouths of the poor? Besides, sometimes, like on Apo Island, it is part of the fishing methods that are allowed within the CRM scheme.

"I don't care about that. The fish traps lie on the coral and trap some fish: when I see it I destroy it and this will not change. I also tell all divers that I lead and meet to do the same" (Patson, G 2004).

Often, conflicts between divers and fishermen have resulted from tourists being ignorant about the exact rules and regulations within the APLS.

"Can you believe that when we went diving some local fishermen were spear fishing? Surely that is illegal and especially so close to divers? Someone might get hurt; surely it's illegal to spearfish? Afterwards I went to set them straight: I screamed at them a little." *Interviewer*: Spear fishing is only illegal in the Philippines when done by scuba gear. Is it not the traditional right of fishermen to spearfish in their own community on their own reef? Did you know that there is a rule on Apo that divers are not allowed to go closer than 50 meters from where fishermen are fishing, and not the other way around? *Response*: "No, I have never thought about that...let me think about that for a moment. Maybe we were the ones too close to them then, now I feel bad at screaming at them" (Homveld, R 2004).

Personally, I question the effectiveness and environmental soundness of these fish traps as a fishing method. They do destroy a large amount of coral whenever they are thrown in the water in a random place. Moreover, the yield is often minimal. The larger fish that do not come to the surface and cannot be caught by other traditional methods are mostly caught in these traps. The smaller fish can still escape through the lattice. Some of these larger fish are protected fish species in the Philippines such as the Bumphead Parrotfish. Bumpheads (Bulbomentopon muricatum) are an endangered and protected species in the Philippines. However, over-fishing in Asia for the live trade to Japan has meant numbers have greatly reduced in the Philippines (Coral Cay 2006:1).

Whilst locals criticise and blame the divers, snorkellers and anchoring of causing damage to the coral reefs with their fins, they chose to ignore the fact that these large structures are causing damage to the corals. Furthermore they are often catching endangered species with these traps. It could be wise to re-examine the fact whether the use of these traps should be seen as a harmless and legal fishing method. It is important to note here that the role of the local community in relation to tourism development also includes reexamining existing practices within the community itself. Thereafter it can be judged whether they are indeed sustainable and not damaging to the environment.

The people-centred development argues that if fish traps would be banned, the fishermen culture will change, as the fish traps are part of the rituals of local culture. Yet, with the

community choosing to embrace tourism as an option for development it means that they will have to make some concessions. This implies that the culture will inevitably change as a result of contact with the outside world. When the community chooses to limit the use of these fish traps, it might be a positive gesture or even an example towards tourists. It will show that the community is serious about further reef protection. This will be discussed further in the recommendations of chapter 7.

In this section it has become clear that the fishermen have a general feeling of distrust towards tourists. In their eyes tourists come to Apo and chase away the fish, destroy the corals and the fishermen's fish traps.

6.2.1.2 Development increases the problem of garbage on Apo Island

Those living in poverty often have problems with disposing garbage in a way that is friendly to the environment. Apo Island is a small island with a mere 72 hectares with most of the surface ground being uninhabited, as it is steep and rocky. Hence, the houses on the island are concentrated in two small villages, Bi-bi and Cogun. Excessive garbage is a problem on many small islands all over the world (Small Islands Voice Global Forum 2006:1) and tourism development very often exacerbates the situation.

Four different kinds of garbage can be identified on Apo Island. These were identified during the PRA workshop on Apo Island.

- Garbage left behind by those living on the island, mostly situated out of the common view.
- 2) Garbage drifting to Apo by the current from other places.
- 3) Garbage left behind by tourists on land.
- 4) Garbage thrown into the water by tourists (PRA Workshop November 2004).

Both number 1 and 2 refer to problems on Apo, which degrade the aesthetic value of Apo Island for tourists and have negative impacts on the environment. It can be seen as a problem related to tourism, but are not caused by tourists themselves. The fact that these 2 points were also included by the participants show the maturity of the way in which the community is used to looking at problems holistically. It indicates that they are also prepared to look at themselves in search of problems, and that other issues such as the reexamination of the use of fish traps might not be closed for discussion. To solve this problem a garbage workshop on how to segregate, recycle and collect garbage was held, which will not be discussed further here. There was a general consensus during the workshop that the community should take a more active role in number 1 and 2 and that the methods of recycling learnt in the Garbage workshop in May 2004 should be encouraged and enforced strictly. It will be the job of the utility workers to ensure that less garbage is lying around on the island, open for the wind to take into the sea. For garbage drifting to Apo from cruise ships, commercial fishing boats and other islands there is nothing that the participants felt they can do about the cause. It would be good to have regular clean-ups taking the junk off the corals like clothing, rice bags and plastic: especially in the typhoon season this is an important action to be taken. If not, then the corals are unable to breath and will die.

Points 3 and 4 were caused by tourists themselves. On all three of the PRA maps garbage from tourism at the main picnic places, the Sanctuary and Bi-bi, were marked (see Annex 3). At Bi-bi there were further markings on two maps that when boats anchor, cans and garbage are often thrown overboard by tourists, including cigarette stumps. On one of the maps there was clearly stated that there might be a lack of enough visible Basurahanas, or garbage bins, on the beaches used as picnic spots.

The group discussed the problems of plastic and garbage on Apo extensively during the PRA workshop. The discussion was mainly focused on tourists leaving their garbage at the picnic place at the Sanctuary and that they are then blown into the sea or the lagoon. Tourists need to be educated by their dive guides or external operators. Participants indicated that more garbage bins painted in a bright colour should be provided on the beaches where tourists visit. Local children that are often playing on the beaches should reprimand tourist when they leave their garbage behind and should also set the example by their actions themselves (PRA Workshop November 2004).

6.2.1.3 Development contributes to the gradual destruction of the coral reef

Recent evidence indicates that coral reefs are deteriorating worldwide, and many are in a crisis. "Symptoms include loss of hard corals, increased abundance of algae, diminished recruitment of coral larvae, reduced biological diversity, and a dramatic increase in bleaching episodes and disease outbreaks" (US. Coral reef Task force 2006:1). Scientists and coral reef managers still lack critical information about the causes, but evidence suggests "a variety of human forces; including population increases, shoreline development, increased sediments in the water, trampling by tourists and divers, ship groundings, poor water quality from runoff and inadequate sewage treatment, over fishing, and fishing with poisons and explosives that destroy coral habitat" (US Coral reef Task force 2006:1). These pressures act separately and in combination with natural factors, such as hurricanes and disease, to degrade reefs (US. Coral reef Task force 2006:2).

The coral reef on Apo Island is also slowly degrading (Alcala 2002). This is a result of a combination of factors, of course. One of these factors is tourism and its interactions with the coral reef, anchor damages and pollution (Alcala 2002:2). An excess of divers diving around the island combined with irresponsible behaviour most definitely has impact on the health of the coral reef of Apo.

Irresponsible diving behaviour and vandalism on Apo Island

Examples of irresponsible behaviour include tourist not being careful enough whilst diving or vandalism, such as people who carve their names in the corals. One such an incident that took place in March 2004 concerned a dive guide from Negros. He carved his name in a hard coral whilst leading a group of divers. Afterwards, he was banned from the island for months and had to do some cleaning –up on the beaches in the community of Apo. Yet, a lot of divers especially when they are starters and new to the industry admire their dive guides and follow their example. Possibly this group of divers /students now think that this is normal behaviour. Another carving of a name in the coral was found a month later in the marine sanctuary (Homveld, H 2004). This means that

dive guides are not setting the correct example, not briefing divers on the rules and regulations of Apo, or simply do not care what their divers do to the reef whilst diving.

Dive groups are exceeding their size limit

In interviews held on Apo and during group exercises (Dive Rangers 2004a, 2004b) it was mentioned several times that the maximum number of a dive groups on Apo Island should be restricted. Yet, the community has refrained from taking action op until that point (with the exception of the fish sanctuary).

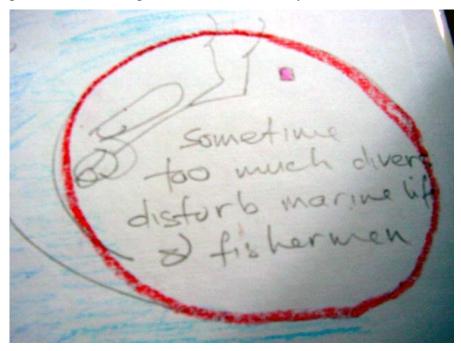


Figure 7: PRA mapping: Too many divers disturb the marine life and fishermen on Apo Island

As can be seen from Figure 7, the participants of 2 out of 3 groups indicated on their maps that there are too many divers around the island. One group indicated in the presentation (and interviewing) of the map that there were too many divers diving simultaneously at one dive spot, whilst another group explained that in general there were too many tourists. The last group did not indicate this, maybe because of the presence of a T-shirt vendor in the group. She believed that more tourists mean more sales and therefore this is better. This shows again that within any given community there are different interest groups with their own motivations and ideas about development and conservation. Further interviews and group discussions mirrored the idea that an

ordinance (law) will have to be passed that will stipulate a maximum number of visitors per day and then also per dive site. At the time of research, this was only the case for the Marine Sanctuary (one dive site) where there is a limit of 15 divers a day. However, what often happens in reality is that boats first dive around the island where they see fit and then would register afterwards. This also leaves a window open for some boats not registering, especially if they dive on sides of the island hidden from the view of the Visitors Office.

The reasons for coral reef damage by tourists on Apo Island.

Why are tourists damaging the coral reef on Apo Island? As mentioned before, coral reef damage on Apo Island and elsewhere in the world mostly happens out of ignorance and tourists simply not being aware of the implications of their actions. This became clear in an interview with a tourist from South Africa:

"I just went snorkelling for the first time in my life. I saw corals and many fish. Amazing it was! I am not a strong swimmer and get tired easily. When the waves came in I had to steady myself and I stood on something I though to be a rock. Then someone said that I was damaging the corals. This I did not know- that they are so fragile. I know nothing about corals except that they are beautiful and that I do not intend to hurt them, but I also do not want to drown, of course. This person explained to me the difference between the rocks and the corals, and next time I need to rest I will look for a rock, but I cannot guarantee that there will be one near enough" (van Vugt 2004).

It was also my observation that Filipino nationals have very little idea about what the behaviour should be when snorkelling. In addition to this and strangely enough, Filipino's in general are very bad swimmers or cannot swim at all and mostly go in large groups, causing a lot of damage when swimming.

This, I also experienced when taking a group of local children from Apo Island snorkelling for educational purposes (with a life vest in order for them to be able to float easily). When water flowed into the snorkels or masks, the reflex to step on something to stand on (on Apo this means that mostly it will be corals) is too strong. Even though I strictly said that this was not allowed, it could not be prevented. If children from Apo Island do this, then what example does this give to others visiting the island? Local residents also have responsibilities to set a good example in living in balance with their own environment.

6.2.1.4 Tourism disturbs the tranquillity on Apo Island

Tourism related noise pollution on Apo Island

Tourism is causing noise pollution at the Bi-Bi beach on Apo Island. The cause is the noise generated when the dive boats visiting from other islands are refilling their dive tanks for subsequent dives. The number of boats can vary from 2 to 20 per day. The boats come from other islands and offer guests 2 or 3 dives per day at Apo. This means that during breaks (mostly close to the shore) the dive staff needs to refill the dive tanks with generators, which creates an incredible amount of noise. This sometimes even happens at night when guests are staying overnight at one of the two resorts. Tanks need to be filled for the following day. The noise then can continue late into the night. The villagers see this as disturbance of their peace and that their calm, tranquil little island is being spoilt by tourism activities.

This point came as a surprise to me when this was mentioned during the PRA mapping exercise. It was unknown to me that the community was experiencing irritation regarding this matter. I have often thought that it is disturbing myself, but did not want to force my views on anybody and never through observation heard people discuss this before. This could be because of the language barrier. "The only solution for this problem would be to make it obligatory for boats to fill tanks next to places on the island where there are no villages and where mooring buoys are available (Mendez, R 2004a)".

Tourist related vandalism on Apo Island.

Another element pointed out during data collection was vandalism. This was often a recurring point in interviews and group discussions. The acts of vandalism mostly

occurred at the lighthouse, where there often is nobody present from the community. Many tourists go for a walk to the lighthouse to look at the view or the sunset or aimply to do something other than snorkel or dive. The stairs at the lighthouse were damaged and graffiti was put on the wall. Even though not a lot of villagers go there, it is important for the lighthouse to remain unharmed for safety reasons. For instance, on many sides of the island there are no lights whatsoever and those areas that have electricity only have it until 10 o' clock at night. Then, the whole island is covered in darkness causing a hazard for the many ships that pass in the night. There are also concerns among community members that vandalism might spread to other places during times where there might be nobody present. Other acts of vandalism took place, as mentioned before, under water destroying the coral colonies.

People on Apo feel that tourists have to act responsibly if they want to visit Apo (PRA Workshop 2004). Community members have their own lives to tend to and cannot police tourists the entire duration of their visits. The first step and role of the local residents would be to inform tourists to refrain from damaging anything when they come to the APLS Visitor Centre to pay the island fee.

6.2.1.5 Effects of development on the local culture of Apo Island

It is inevitable for tourism to have an effect on the local culture of a host community. This is also true on Apo Island.

"Sometimes I do not understand the tourists. They walk around with their bra and panties and call these bikinis. Our women swim in their clothes. I am used to it now, but when we have family visiting, I have to explain to them this strange thing that tourists do in their country" (Henry 2004).

George and Reid (2005:88-107) explain that transformations induced by tourism development may dramatically change such cultures. To avoid corrosive transformation of such local cultures, careful management plans to protect community values are important. This is a point that has not received much attention amongst the current leadership on Apo Island. In summation, this section has explained how the community of Apo Island has indicated clearly during interviews and PRA exercises that there are several detrimental effects of tourism. Luckily, there are also several positive attitudes about tourism on Apo Island that will be discussed in the following section.

6.2.2 Reflections on the positive effects of (tourism related) development on Apo Island

It was discussed in chapter 3 that internationally it is believed that tourism has many advantages for poor local communities, assisting them on their way to a sustainable future. This section will focus on the positive effects "felt" by Apo community members.

On Apo Island, many community members realise the positive changes that tourism activities have brought upon them. "Tourism is good for Apo, because it brings a few lucky ones some income. Also through the diving fees we sometimes have some money to renovate the school or take better care of our reef" (Aldeon 2004b).

Some believe that tourism represents primarily opportunities for the future. Others seem indifferent to the positive effects of tourism (mostly fishermen) and simply want tourists to stop intervening with the behaviour of the marine life around Apo. Yet, many youngsters who do not have the fishermen skills or have originated from communities where there are no fisherman cultures, welcome tourists to the island: "I am no good as a fisherman, so I am looking for work in one of the two resorts on Apo. At the moment there is no room for someone fulltime, but often I can help for 2 weeks or so when they need someone to help renovate or carry water etc. It would be good if there were more opportunities on Apo so that I can stay on Apo and not have to go to Manila to work on a fishing boat and live in the slums" (Alam-Alam 2004).

From these interviews we can see that on Apo Island tourism provides opportunities for those who have not had the indigenous knowledge skills transferred to them, are not naturally good in fishing or might not have grown up in a fishing community. It also gives a chance for approximately 15 women to sell souvenirs to tourists through the informal sector. Single mothers can earn an income and it enables families to earn some additional income.

Additionally, the resorts provide employment for 35 employees. There are 25 employees at Liberty's Community lodge and Paul's Community Dive School earning an average of P3000 per month per person. At Apo Island Beach resort approximately 10 people from the island are employed, averaging P2500 per month per person. This is an approximation. The exact amount is not known, however the incomes were lower than at Liberty's. This number of 10 employees at Apo Island Beach Resort is reduced in the low season whilst extra hands are needed when there is a renovation to be done. Sometimes extra boatmen are needed etc for both of the resorts. The average employment numbers for Apo Island Beach resort can be calculated as 6 per month through the whole year, then the income that goes to the community from these two resorts can be estimated at $(25 \times 3000) + (6x \ 2500) = 75\ 0000 + 15\ 000 = P90\ 000$ per month flowing directly into the community via wages.

Consequently, the direct economical impacts of employment from tourism on Apo in 2004 can be summarised as follows:

The direct benefit from jobs in the resorts and diving was noted: PHP 90 000 per month Added to this the Dive Ranger incomes (see section 6.6 below): PHP 20 000 per month This results in income generated directly of PHP 110 000 per month, amounting to a total of PHP 1 320 000 annually.

Boat profits are estimated at PHP 368,550 per annum in 2000 (assuming that this has stayed roughly the same). In total the direct income to the community amounts PHP 1 688 550, excluding the T-shirt vendors sales.

However, some of these direct employment opportunities can be made much larger if this would be better managed. The interview below indicates that there are still examples on

Apo Island where foreign owned resorts snatch away income opportunities from the locals:

"I can transfer tourists to Apo with my boat in order to earn extra income. This would be very beneficial for my family's economic position. Most boat owners are from Malatapay, however, getting the biggest share from the income. Moreover, the resorts on Apo Island pick up most of their guests with their own boats when guests phone in advance to make a reservation. Then there is no income for us to earn" (Pascobello,W 2004).

From the tourism incomes presented in chapter 4.14 we saw that only 9% of the incomes earned by boats go to Apo residents, whilst the other 91% leak away to other islands and countries (this is excluding the visitors fees that ensure the management of the resource).

The largest income source by far is the diving industry. In 2001, 76% of the \$US were earned by outside operators and the rest by operators from Apo Island. Only the salaries of local dive staff directly went to islanders.

In summation, tourism is an important source of income for 50 adults in the community out of a population of 450 adults. This is about 1/9 of the adult population on Apo. However, this is not evenly distributed amongst all the families on the island and there is still an enormous amount of leakage flowing away from the community. On the other hand, tourism funds were used to bring electricity to the island. A generator was bought and the wiring was done with tourism income. Now everyone on the island has access to electricity due to this tourism fees (Mendez, R 2004b).

Besides the income possibilities that tourism provides for the community and the possibility that if managed correctly this might lead to more income possibilities, some community members also value the friendships made with tourists.

There are some cases where tourists stay long enough to become friends of the local community: The following quote from an interview with an entrepreneur of SME in the village exemplifies this:

"For me I do not really need tourists, I am very, very busy with my fish business, but they are good for our community and sometimes they bring interesting stories about a world that we do not know. One man stayed on Apo for 2 months, he was staying in a tree at Coconut point, lying and sleeping in his hammock and catching fish. We did not mind that: he was close to nature himself. Sometimes volunteers come to Apo to help our community and work with the children and this is also good" (Aldeon 2004b).

These listed positive effects of tourism on Apo Island are closely linked to opportunities that may arise in the future. This could happen if tourism can be managed in such a way that maximises the benefits for the Apo community. Opportunities felt by the local community members are related to the way in which the community will act to realise some of these chances. It will have impact on the role of the community in determining the balance between development and conservation and is important for a complete enquiry into the research question. The next section will look at the hopes and dreams that the locals on Apo Island are holding for the future.

6.2.3 Opportunities for development as identified by the Apo local community

There are many on Apo Island who sees tourism as a way of fulfilling a dream. A dream, not only to earn more income and improve their livelihood situation for the future of their children, but also the dream for a sustainable future for their children. Hopes that the coral reef will survive the influx of tourists and other external pressures made on it are also present in the Apo community.

6.2.3.1 The preservation of the Apo Island coral reef as main priority of the community

One of the dreams listed by the participants of the PRA workshop was to continue the preservation of their coral reef (PRA workshop 2004). During interviewing of this matrix, this was stated as the most important priority of community members. "We do not want to see it deteriorating, for this is our livelihood" (Pascobello 2004d).

A new balance needs to be found between the use of the reef by the community and the pressures of tourism. A balance that will allow those in the community, who do not have

anything to do with tourists and do not choose to, to continue their lives undisturbed. Simultaneously, those who choose to earn extra income from tourism and see it as an opportunity can the do so. The prerequisite is that tourism does not bring the sustainability of the Apo reef in danger. Therefore, it is fundamental that education within the Apo community itself continues. It follows that children and adults need to continue to learn about the relationship between people and nature.

6.2.3.2 The experience and history of Apo Island in NRM, as an example to other coastal communities

The community also realises the importance of the lessons that they have learnt in terms of protection of the marine resources around Apo Island to other communities in the Philippines.

A large number of Filipino people are visiting Apo with the goal to learn something about CRM such as students and other local Barangay leaders who want to implement similar sanctuaries and reserves. There are also several foreign visitors interested in the history of the marine reserve. One dream as indicted in the PRA workshop was that for this education it would be handy if something visible would exist. A small museum was mentioned. Such a museum can provide information about the history of Apo in both Visayan and English. In this way visitors can always learn about the island's history without the need for locals to inform them verbally.

This proposition is in my view a good way to show-case the indigenous knowledge system on Apo and for community members to become proud of their local culture. This in itself is important for the local culture not to be watered down as a result of globalisation and international tourism. Additionally, this showcase will be a possibility and opportunity to educate tourists about their impacts on fragile marine environments.

6.2.3.3 Dreams about the possibility of responsible tourism on Apo

Many islanders pointed out in personal or groups interviews that for them "sustainable tourism" remains a dream. They want to feel that tourists respect their knowledge about

coral reef management, do not destroy their fish traps nor damage the coral reef that they are dependent on. In short, tourists need to adhere to the rules and regulations of Apo Island Marine Reserve.

Tourists need to have respect for what is not theirs and this also applies to dive operators from other islands. They need to ensure that their guests are behaving properly and according to the Protected Area rules and regulations. Additionally, the community feels that a lot of money is flowing away from the island, earned by foreign operator dive schools in neighbouring islands in richer areas. The participants of the PRA workshop indicated that more benefits should be earned locally, through goods and services to tourists. Some participants felt that tourists should stop bargaining for prices: this leads to very little profits for the T-shirt vendors; "what is P10 more or less to them?" (At-at 2004).

6.2.3.4 The potential of creating more income opportunities from tourism

As described above, many community members believe that the income that the community receives directly from tourism should be increased. The Women Association (PRA workshop 2004) displayed ideas in the PRA matrix of opening a village shop and a native restaurant in the village. A native village shop will be a space where women can sell mats and beads made from local materials. It differs from the T-shirts sold by the women as these shirts are bought outside the community, leading to money flowing away from the community.

"Tourists are good for Apo. By selling T-shirts I can earn some money to make a living. My husband has left me and does not send a lot of money home. I have the two boys to look after. Even if I get only P20 commission, it is another bag of rice. But ladies compete with each other for selling the T-shirts to the tourists. They sell for prices below P150, just to make the sell. Then you only get P5 commission, after sitting the whole day in the sun and I am sick with goitre. However, I have to join with the price-war, otherwise my children will not eat. The tourists always want a special price. They always want cheap (Mendez, N 2004)". Some women mentioned that in a shop there can be fixed prices and tourist will not be able to insist on the lowest price which leads to very small commissions for the vendors. However, the single most frequent restriction for informal or SME activities are start-up capital (Heino and Pagan 2001). This is also the case on Apo Island. In order to realise a shop with local products, some start up material will of course be needed, which the women on Apo do not have access to currently. This is a potential issue to be discussed in a meeting between the Barangay officials and the Women's association of Apo Island. Access to a micro-credit loan for these women may be an option. In the recommendations given in chapter 8, more attention will be given to this issue.

A native restaurant was also mentioned during the PRA group discussion as an option to stimulate local income opportunities. Some ladies indicated that they wanted to cook for foreign tourists. A number of ladies in the village are used to cooking for large numbers at birthdays, funerals, fiestas, weddings, workshops and sometimes visitors. The only new skills that they would have to learn are administration and management skills. These can be learnt form the women at the successful co-operative store in the village.

The discussions around these dreams and hopes for the future convinced me that there is an existing willingness for active involvement of the community in making these dreams possible. When asked the question whose responsibility it is to realise these dreams or who will have to take some action to make these dreams a reality, 96% of the respondents, responded that it is the task of members of the local community or local community groups. Similarly, during the PRA workshop when assigning responsibilities and activities that had to be undertaken to turn opportunities into reality, local groups were given the majority of the responsibilities.

For the 22 points where organisations or groups were assigned responsibilities to solving the problems listed in table 1 (below) during the PRA workshop, it is notable that the community assigned themselves 95, 5 % of the responsibilities. Subsequently only 4.5% to organisations/groups consisting of outsiders. This emphasises the significant role that the locals on Apo Island envision for themselves in fighting the problems related to tourism, maximising potential benefits of tourism and increasing conservational measures.

Table 1: An overview of the problems and opportunities related to tourism and groups assigned to activities (for a scanned version of the original table, please refer to Annex 7)

Dreams/Problems	What to do?	Skills needed	Responsible?	First step	
Problems:					
1. Fish traps	Educate guides		Dive Rangers	Call meeting with Dive guides Flyers, paint wall	
2. Plastic	Collect	Knowledge about recycling and segregation Dive skills	Dive Rangers Dive guides Bantay Dagat	Meeting with all DR, BD and utility workers	
3. Destroy corals	Educate		PAMB office	Make Flyers	
4. Air fill noise	Pass ordinance		Barangay council, PAMB	Meeting	
5. Too many divers	Pass ordinance		Barangay council, PAMB	Meeting	
6. Vandalism	Educate/orientate		PAMB office	n/a PAMB office will inform tourists	
7. T-shirt ladies no assigned place	Provide area		Barangay council, PAMB	Meeting	
Dreams:					
8. Park	Planning		DENR, BC, Community, PAMB	Meeting	
9. Protect resources	Implement 1-5 Continuous education		Community	Meeting	
10. Museum	Planning/Funding source		LGU's	Meeting	
11.Responsible tourism	Educate tourist		PAMB office	Flyers	
12. Native shop	Planning/fund source	Creative skills	Women's Association (APCODA)	Meeting	
13. Native restaurant	Planning/fund source	Cooking and management skills	Women's Association (APCODA)	Meeting	

We have looked in this section at the environment of tourism activities on Apo Island and the opinion of various local target groups within the local community of Apo Island on the existing tourism activities. Positive, negative or future opportunities for community members in relation to tourism were displayed here. What has become clear is that there has been awareness at community members of Apo Island during the time of research that the tourism situation is unsatisfactory. A change to the situation is of vital importance.

Moreover, what is particularly noticeable and relevant to the research question is that when asked, the local community identifies themselves as the main party responsible for both solving problems related to tourism and realising opportunities that have not been formalised at the moment of research.

However, such awareness is of course not sufficient to bring about change for the better in a given community. Action, not awareness or claiming the responsibility during interviews, is the sole medium of expression to show commitment within a given community. What concrete actions has the Apo community actually taken to halt the negative impact of tourism and to maximise its benefits? What measures have been taken to create a space for conservation on Apo Island under the increasing pressures of tourism?

6.3 The role of Apo community in creating a space for conservation in tourism related development

What is the role of the Apo Island community in changing existing tourism into a sustainable option for future development? Stated differently, what is the role of the Apo Island community in taking not only conservational measures, but also measures to enlarge income benefits for the local community from tourism?

In order to answer this question we will have to look at the actions that have been undertaken by the community to change existing unwanted behaviour and increasing tourism numbers, at the moment of research. When referring to Community actions and decisions it is important to note here that decisions made by the local leadership (Barangay captain and officials) regarding important issues are always made in consultation of the local people of Apo Island. Local community members are invited to meetings and the majority vote always determines what will happen.

6.3.1 Institutional measures taken to reduce tourism numbers on Apo Island

The ever increasing number of tourists on Apo Island has resulted in some institutional measures taken by PAMB in order to endeavour to decrease these numbers. Tourism numbers on Apo Island has been increasing, not only in the last decades, but the proportion of foreigners versus locals has been steadily increasing in recent years. In table 2 this trend can be observed:

Year	Number of Filipino	Number of Foreign	Total number of	Income from	
	visitors	visitors	visitors	tourism fees	
2003	3,415	6,234	9 649	PHP.	
				1,494,342.00 ²³	
2004	2,694	7,250	9 944	1,522,466.00 ²⁴	
2005 ²⁵	2 000	8,800	11 200	Data not available	

Table 2: To	ourism n	umbers a	and income	on Apo	Island,	2003-2005
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Data Source: DENR, Philippines, 11th August 2005:

The increase in foreigner numbers suggests that the total number of divers and snorkellers have also increased dramatically. Most Filipino's cannot swim and the majority is afraid of the water when they grow older. The number of local Filipino's who visit Apo Island who snorkel or dive is very limited and even negligible. On the other hand, most foreign tourists who visit Apo Island are divers or snorkellers. More than 75% of those coming to Apo visit the underwater world of Apo in some way or another (DENR 2005). As described in chapter 4, the fin damage that divers caused was 10, 7% of all divers visiting in 2002 over a 10 month period. With rising tourism numbers this is estimated to be much more. The impact that snorkellers have by stepping on the corals still remains unmeasured. In short, the increasing amount of divers and snorkellers are increasing the damage to the coral reef.

²³ All was spent including the improvements of the Apo electrification programme

²⁴ All was spent on Apo Island, but 20% used to support other projects from the DENR outside Apo and 5% for administration.

²⁵ Data for 2005 are not from the official records, they are estimations

In order to minimise this damage, the PAMB institution made a decision in 2003 to increase the foreign fee in order to diminish the number of visitors. Local fees were not increased, or else Filipino's will not be able to afford to visit Apo Island. In addition, very few Filipino's are divers as explained in above.

This means that when foreign visitors enter the island, they pay a visitors fee of P50. Additionally, for every day of diving an amount of P200 is paid and for the sanctuary another P100 extra. All these fees are levied differently for foreigners and for locals. The above mentioned fees reflect the fees for foreign visitors

In an interview with the Barangay captain, Mario Pascobello he explained the reasoning behind this action:

"My vision for the future of Apo is to protect our coral reef. We have a lot of pressure from tourism, outsider fishermen, garbage, growing population; this combination is disturbing our balance with nature. The end of last year the community decided to increase the diving fees and entrance fees to the reserve for foreigners. This was done to try and control the number of divers that come here. We thought: increase the diver fees, and then less people will come. This did not work though, divers don't seem to mind these charges, and the numbers of visitors keep on increasing. Action needs to be taken to create an even stronger protection."

The above actions taken by the community and implemented by PAMB are evidence of a feeling of stewardship, a feeling of empowerment in the community and the confidence in its institutional action-taking partner, PAMB. However one might question the earnestness of the community's intention on reducing tourism numbers when one looks at the fact that they have tried making the divers fees more expensive to reduce tourism numbers. With that not having the sought after effect, they have not chosen to put a limit to the number of divers visiting the island per day. If this had been done, the problem of the overload of divers would be solved quite easily. This does place a question mark at the seriousness of the community to reduce tourism numbers, because the option that will surely lead to less income from diving fees has not been not implemented. It appears that the community rather chooses for development and not for conservation, for they are not

prepared to limit the amount of money that they will receive. However, the issue of the superfluous number of divers was discussed in the PRA workshop and there was stated that a law should be passed to limit the number of divers a day (PRA workshop 2004). Only the future can tell whether this was a serious intention or whether this was said as a result of a "Placebo Effect"²⁶ in order to please me as an outsider.

6.3.2 Institutional measures taken on Apo Island to reduce dive sites

Another institutional measure taken on initiative of the local community of Apo Island was implemented in 2002. In order to protect fishermen's rights, the main fishing ground of fishermen, Olo Point, was closed for all types of diving activities. This was done to provide a fishing ground where fishermen can fish undisturbed, separate from boats coming and going and with minimum diver impact on the behaviour of fish. In this way the rights of fishermen have been protected, which in itself is a positive development. However, I rather have my doubts whether it would be wise to create more of these fishing grounds. Firstly, it concentrates the fishing activities and secondly it will mean that the concentration of divers on the remaining dive sites will be even larger. Thereby concentrating the negative effects to less surface of the coral reef, leading to relatively more damage to these sites.

Although most dive operators respect these rules limiting the dive options implemented around the island, it does occur that these regulations are ignored. For example, in August 2004, a dive operator from Negros (on the mainland), which visits Apo Island quite frequently, went diving at Olo point. At that moment Olo point has been closed for more than 2 years. Nevertheless, this dive operator chose to go diving there. When the Barangay captain spoke to the operator's dive guide about this his answer was. "Oh, I did not know that it was closed" when mr. Pascobello expressed his disbelief about that, because it was simply not possible for him not to know as it was in the Apo Island regulations, he replied:

"I saw another dive boat diving there and thought that it was now open for diving again".

²⁶ The Placebo effect is when a participants reports something because they are expected by the researcher rather than actually the case (Mouton 2001:106).

This clearly reflects the attitude of some outsiders that they will do what they want and that rules and regulations simply do not apply to them. In this case the dive guide only got a warning. This example clearly shows the disrespect that outsiders (mostly foreigners) have for regulations made by local communities. They are not aware of the importance of respect for the local community and indigenous knowledge systems. This is in correlation with the work of Chambers (1983) where he explains that outsiders and local communities have different realities and value systems.

It also indicates the fact that on Apo Island regulations are often difficult to enforce, especially where profit may be reduced. Raymundo (2002:7) explains that the attitude of - the customer is always right - prevails among local operators visiting Apo Island and that these operators refrain from explaining the rules and regulations of Apo to their divers. Is there a role for the Apo Island community in making tourists abide by the rules and regulations maintained by the local community? And if so, what is this role?

The warning system on Apo proved not to be enough to force divers to adhere to regulations. It proved that alternative measures or actions would have to be taken in order to prevent this from happening again. A simple warning often leads to a repetition of adverse behaviour and this should be altered.

- According to semi-formal interviews conducted under the Dive Ranger group²⁷ (see section 6.5 for more information on the Dive Rangers) on Apo Island the following options were identified by local fishermen and dive guides:
- an official warning if violating behaviour takes place for the first time;
- a fine when the behaviour continues;
- banning the dive operator to dive there for a few weeks; or
- if behaviour is continuously repeated, the operator should be banned for a longer period or indefinitely (Lewis, Rhodes and Pascobello 2004b).

²⁷ The Dive Rangers is a group of fishermen of Apo Island that was taught how to dive in order to serve as "Game Rangers" for the underwater world of Apo Island, to see that tourists adhere to rules and regulations.

This process will have to be institutionalised. PAMB will have to have the organisational strength to implement these actions and have legal rights to take these steps. Firstly, this implicates that the local resource will have to be owned by the local community, which is the case in the Philippines on Apo Island, but is not always the case in the rest of the world. As Ward (1972:20) explains: "local, popular, control is the surest way of avoiding the tragedy of the commons." In this the role of the community of Apo Island would be to implement regulations and then enforcing these regulations. The Apo community must become more assertive when taking steps if irresponsible behaviour takes place. In order to be successful, a good relationship with both local and national government organisations and the importance of multiple partnerships in the protection of local resources is significant for such processes of regulation.

6.3.3 Restricting the maximum number of divers in the Apo Marine sanctuary

In 2000, the maximum amount of divers to visit the Marine sanctuary has been put on 15 divers a day through PAMB (Alcada 2002:15). Ironically, or maybe not so, this dive site does not seem that popular with outside divers visiting Apo Island. There has been very few days that I have observed more than 10 divers visiting this dive site. This might be a result of either tourists deciding not to dive here, because:

- the extra dive fees that have to be paid in order to dive here (in this case the above mentioned increase of fees in section 6.3.1 will then have worked for the particular site of the Marine Sanctuary and can indeed be seen as an option for the entire diving area around Apo);
- 2) it is simply not as beautiful as the other sites,
- 3) or the dive operators might not promote it.

This issue is one that asks for further research, as it will possibly explain why divers are not choosing to visit a particular site. This research could then be used as a lesson for future regulations to limit diver numbers.

6.3.4 Reward incentives for conservational purposes on Apo Island

The local leadership has also taken action in protecting the endangered fish species from the local fishermen. In a personal e-mail to me on June 17th 2005, mr. Pascobello wrote the following:

"Two weeks ago PAMB declared all kind of sharks, Napoleon Wrasse and the Bumphead Parrot Fish to be protected wherein it is illegal to catch, kill and trade this kind of species on the entire Apo Island. People understand the importance of protecting these endangered species of fish in Apo, but since they are fishermen who depend on fishing for a living we have to give them some incentives not to do this. They will get 100 pesos a month subsidy for their electricity, if they refrain from catching these endangered species and they are happy! Sharks, napoleon and bumphead parrot fish are happy! Also tourists who spot these fish are happy. It is a win-win situation´´(Pascobello 2005).

This shows that very often the community has to have extra incentives to leave big fish behind which could sell well on the market. In this case it is an amount of P100 for electricity sponsored by PAMB. This money will be taken from tourism fees. In this way the money gained from tourism can be used as an incentive to reward local fishermen when they take part in conservation activities. The introduction of tourism in an area means that such innovations will have to be created. The role of the community leaders is then to find these creative solutions where all interest groups remain satisfied with the situation.

6.3.5 Protecting the coral reef through local employment: an example of a sustainable tourism solution

It is well documented that income opportunities in poor rural areas are fundamental to fight poverty and promote sustainable development The idea of the Dive Ranger Programme on Apo Island implemented in 2004, was to train a dozen local fishermen to become Dive Rangers. This can be compared with the Game Rangers in the National Parks in South Africa; they are guardians or keepers of wildlife. Yet, for marine environments this phenomenon is unheard of, because the surveillance of what is happening underwater is complicated. One needs to be able to dive and most local people on Apo do not have these qualifications. The idea was for the Dive Rangers, however, to be trained to use scuba gear - enabling them to have a look under water. They will follow and later guide dive groups and ensure that the island's diving regulations are adhered to (Lewis, Rhodes and Pascobello 2004a).

Combining conservation and development in the form of income opportunities is often done in national parks with game or mountain and forest areas. Yet, this has seldom been attempted in specific relation to coral reefs and coastal resources. In this lies an enormous potential for controlling tourism impacts on vulnerable coral reefs, whilst at the same time making use of the available labour of the local community and new technology (of diving) to supplement existent indigenous knowledge systems.

The idea of the Dive Rangers sprouted from talks in the first half of 2003 between community members and the private sector on Apo Island about how to keep tourism and especially dive-tourism under control and turn it into a situation that will be in sustainable in the future. The 10 Dive Rangers would receive a thorough training in diving and reefbiology (knowledge about mostly corals for they knew everything about fish already) and when they would be operational they would escort dive groups, provide briefings about the marine reserve etc. For this they would receive a good monthly income: P2000 for working 10 days in the month, thus P200 per day. They would monitor the diving activities around the island and the Marine Sanctuary. Whilst creating an extra measurement of control over diving activities, 10 local jobs would be created, resulting in additional local income opportunities and less economic leakage from the local economy. This will create a win-win situation for all the partners: both private sector and the community are dependent on the preservation of the coral reef.

During the field research of this study, the Dive Ranger Programme was started. The training commenced and their future roles, responsibilities were given form. As a participant observer I took part in the training of these fishermen.



Figure 8. Participant observation: 5 of the 10 Dive Rangers and volunteer trainers: fltr Budot, Ronald, Allan, Jo-Jo, Sinon, Suzanne (Participant observer) and David Photo: H. Homveld, research assistant

In this sense the programme itself became part of the environment of this research and without incorporating it in the research product would result in an incomplete understanding of the local context. The Dive Ranger concept is in my opinion an important option for coastal communities to play an active role in the protection of their coastal resource from tourism activities. It combines the important role of the community in managing such a programme with local employment, conservational activities and the usage of the modern dive technology to complement indigenous knowledge skills in order to control tourism activities related to diving and snorkelling. For more information on the strength and weaknesses of the Dive Ranger Programme, please refer to Annex 10.

In this section we have looked at some actions taken by the community to combine conservation with development. Regulations were implemented, dive sites limited, actions taken to restrict the number of tourists and the number of divers to the Marine sanctuary was restricted. We have also seen that the role played by the local community of Apo is not always as effective as it should be in enforcing the rules and regulations that are in place. Many tourists and dive operators ignore the rules, without any implication for their actions. However, in order to integrate conservation in tourism related development on Apo Island it is important that not only ecological sustainability, but also socio-economical stability is ensured. Therefore, the following section will concentrate on the specific role of the local community of Apo in increasing benefits from the existing tourism situation.

6.4 The role of Apo community in increasing the economic benefits from tourism

The small scale of the informal sector, the complete lack of SME entrepreneurial enterprises related to the tourism sector on Apo Island and the large amount of tourism income never reaching the members of the local community of Apo, came as a surprise to me during the research on Apo Island. This is because most preliminary research that came from sources on Apo Island or by academic papers was mostly from conservationist or Deep Ecology viewpoints. This escaped my attention during preliminary research and I assumed that there were sufficient opportunities for the local people to provide goods and services, such as a native restaurant and snacks to tourists. In this assumption, I could not have been more wrong. I assumed this, as neither literature sources covered nor preliminary interviews by e-mail, mentioned this as a problem. This was probably because most early contact was made via the private sector (owned by foreigners) and academics, as most community members had no access to e-mail. In the following 2 subsections the role of the local community of Apo in maximising economic benefits and minimising economic leakage will be investigated.

6.4.1 The role of the local community in maximising economic benefits from tourism on Apo Island

In chapter 3 we saw that CBE seeks to stimulate economic activities related to tourism, run by individual members or community groups. It is not only the idea that there is direct employment in the tourism sector (like is the case on Apo), but that there are more initiatives to also stimulate the informal sector and SME's to make use of unused

capacities. On Apo Island there is an enormous amount of unused production capital. Many men will fish only in the early mornings with the rest of the day to spare and women are mostly busy with household tasks and children, but still have time to be able to make time for running or helping in a small business. The soil on Apo is not fertile and very few vegetables like string beans and corn are grow, which means that not many locals grow food on the island. Therefore, there are many people that would benefit from additional entrepreneurial opportunities. What tourism related entrepreneurial enterprises existed on Apo Island during the time of research?

The non-existent tourism related informal sector and SME enterprises on Apo

We have seen earlier that there are 15 T-shirt vendors on Apo Island, all selling the same types of shirts. More than this does not exist on Apo. For example, dive operators bring guests and provide them (against payment) with snacks, lunch and drinks, taking away a very important potential income for the people of Apo Island. If tourists get off the dive boats to enjoy a lunch in a community restaurant and walk in the community and spend some money in it, the community will earn more money directly. However, then there must also be spending opportunities present, like for instance a diversified informal sector selling souvenirs and food and drinks, and other tourism related goods and services, which at the moment are still lacking on Apo.

In the PRA workshop conducted in this research the women did indicate wanting to start a native restaurant. When this was mentioned, the owner of Liberty's restaurant displayed discontentment. He saw this as unwanted competition, even though it would be two completely different restaurants. Another observation that I made during the time of research is that when visitors asked whether there were places to eat in the village, Liberty's owner denied that there were any on the island. However, there is one family restaurant where tourists can eat in the home of the family. When I asked for an explanation Liberty's owner argued that this would lead to them loosing business and not being able to do so much in the community anymore in terms of development and scholarship projects. This means that the resort is blackmailing the community to not start family restaurants, for then the "charity" given to the community will stop. It seemed to me that the private sector (owned by foreigners) on Apo Island seems to want to prevent community members to start their own enterprises in order to make use of their unused production capacities. They see this as unwanted competition, yet small-scaled entrepreneurial opportunities that result in competition in the private sector would be healthy in order to expand opportunities for the poor and lead to an increase of poverty alleviation. However, one may also argue that those informal businesses should simply put up a sign indicating "family restaurant" clearly for all to see, and then this problem would be solved quite easily.

Therefore, one may argue that on Apo Island, the lack of community involvement or lack of a *role* of the community in tourism related entrepreneurial activities result in the community staying dependent on charity whilst safeguarding the position of this private sector player. It makes the community weaker and increases the dependency syndrome ²⁸ so often seen in development projects (Heck 2003:6).

Moreover, it is healthy for a community to make use of entrepreneurial skills and initiatives and become self-confident as a result of this. In 1990 the World Development report (CGAP 2005:2) found that poverty can be reduced most effectively by promoting the productive use of the poor's most abundant asset, their labour. On Apo this means that income generating and self-employment activities in relation to tourism can be used to not only alleviate poverty, but also simultaneously to decrease the pressure that is exerted on the reef by fishermen from the local community.

By earning a living the feeling of self worth and responsibility in a community increases. There are plenty of entrepreneurial opportunities related to tourism on Apo Island. The community must have the boldness to grab these opportunities and not be influenced by other players in the field or listen to their attempts for dissuasion. In chapter 2 it was explained that a central task of local regulation for sustainable tourism development is to promote entrepreneurial initiatives in local communities whilst increasing sustainable use of local resources. This is also true for the role of the local leadership on Apo Island and

 $^{^{28}}$ *The dependency syndrome"* is an attitude and belief that a group can not solve its own problems without outside help. It is a weakness that is made worse by charity.

simultaneously an assigned role for the community. In summation, there exists a need for effective management of opportunities to create more benefit from tourism for locals on Apo. Inevitably this is in the hands of the community members and their chosen local leaders.

In short, limited direct effects and high leakage rates in underdeveloped areas limits the impact that tourism can have in the stimulation of the local economy and poverty reduction. This is also the situation on Apo Island. This, in turn, is related to the high investment capitals needed for some tourist services and lack of access to capital. Yet, for some possible informal or SME activities, services and goods related to tourism not a lot of capital is needed and possibilities of micro- credit loans on Apo Island should be investigated. This will be referred to in the recommendations in chapter 8.

Other sources of economic leakage on Apo Island

On Apo Island economic leakage is further enlarged by the supply of imported beer and drinks from resorts. Most guests buy their drinks in the resort whilst the sari-sari stores (small home shops) supply these products at a much lower price. Yet all imported goods (also form other islands even) will always lead to leakage out of the community and back into the developed country of origin. In this case it would be much better for the local community of Apo Island if locally made products (such as coconut wine, or very specific types of beer and cakes) would be sold to tourists.

The role of the local community of Apo in increasing economic opportunites from tourism When asked in semi-formal interviews whether they would like to work in the tourism industry (either formal or informal), 65% of the respondents answered yes, 25 % no and 5% I do not know.

When the 65% of those answering affirmatively were asked the question who is responsible for creating the tourism related business opportunities for local residents of Apo Island was as follows:

• 60% said the local community themselves represented by local leaders;

- 20% local and national government;
- 10% said it should be the social responsibility of the private sector;
- 10% did not know.

When local residents of Apo Island were subsequently asked what the specific role of the community should be in maximising tourism related business opportunities (series of interviews 2004), there was a lot of uncertainty on what is meant by the question and what could be done by the local community. In the end, after several clarifications, the following was mentioned.

- Start-up capital and trainings on how to start a business.
- Enhancing local entrepreneurial activities.
- Local leaders should create an environment that is friendly to these activities.
- The production of local goods and products should be increased and encouraged.
- Tourists should be educated about the impact of bargaining for prices.

As part of an answer to the research question at hand, these responses will be assimilated in the conclusion. Another subject that is related to the economic leakage in a community is the way in which the market mechanism determines what the price of a good or service is. This will be elaborated on in the following section.

6.4.2 The role of the local community in recognising incorrect pricing of goods and services in tourism and natural resources

Another problem with tourism is that the market mechanism does not guide consumers to make responsible decisions. Not everyone believes that a free or even a relatively free market is a good thing. A market failure is a case in which a market fails to efficiently provide or allocate goods and services (for example, a failure to allocate goods in ways some see as socially or environmentally sound) (Wackernagel and Rees 1996:135).

Price wars on Apo Island.

In the interviews with T-shirt vendors (T-shirt vendors group interview 2004) another theme that emerged is the fact that the vendors often go into a price war against each other in order to sell their products.

A middleman buys T-shirts that are printed in Dumaguette (Negros) with Apo Island slogans and designs on it. This is where the production income from the printing is earned. Sometimes sarongs are bought in Cebu, leading to more leakage. Other costs that the vendors have to pay include commission for the middleman, transport costs to collect the shirts and the cost price of the shirts. All of these steps cause a flow of money from the vendors and the Apo community to outsiders. Having debts to repay to the middleman, implies that if the a T-shirt that was bought for P120 is sold to a tourist for P150, it will lead to P30 peso commission (Mendez, N 2004). If all the ladies would agree amongst themselves to make P150 the minimum fixed price for a T-shirt, then this would be a reasonable level of income for all the effort and time invested in it. Rather the case is that the ladies end up selling cheaper to most tourists. They are partaking in a bargaining game, which leads to commissions as little as P5 per shirt. The amount of T-shirt sold fluctuates per day and per season. Sometimes nothing is sold and sometimes 4 or 5 per day, per lady.

In order to prevent selling at low prices, the ladies will have to agree on a fixed minimum price. Selling against a higher price should be the goal. However, this is quite difficult, because tourist keep on pretending that the prices that the ladies ask are outrageous. On the contrary it is extremely cheap in comparison with European prices, for example. In this sense, the responsible tourist should be aware of the effect that this bargaining game is having on the ladies when they are buying it. Tourism education on a global level is needed for this. An option is the development of something like a global index for responsible prices per country for general products, comparable with fair trade products²⁹, but called fair tourism products. This can also be done locally on a signboard specifying the commissions ladies get at certain prices etc, or the amount of money going to the

²⁹ Fairtrade products are products that when sold internationally bring back economic advantages to local communities in developing countires where the products are made.

community per product etc. A less utopian solution would be for the vendors to, diversify either their product or the service attached to the product to protect their margin.

What I did find noticeable on Apo Island was that this "T-shirt price war" was not mentioned as a problem at the PRA workshop, although in individual interviews the Tshirt vendors often mentioned this to me. This is probably because at that stage of the workshop the T-shirt ladies were not present as a big boat with tourists docked and they left the workshop for a while to sell T-shirts. This again specifies the importance of the presence of all the interest groups when conducting research and the fact that communities are not homogenous. If all interest groups are not consulted, then fundamental information will be missed.

The market also "fails' in presenting natural resources like coral reefs as free public goods. This leads to a free-rider effect. Most tourist think it as their right to make free use of the coral reef and is subsequently upset when they have to pay an entrance fee in order to dive on a coral reef on Apo Island (Bried 2004, Drum 2004).

In both of these cases there are possibilities to prevent this from happening on Apo Island:

- a responsible buying index for responsible tourists to follow can be made. Signboards can display this information for educational purposes;
- acting on the failure of the market mechanism, by ensuring visitors pay entrance and diving fees.

In this section and its sub-sections it has been explained that the participation and involvement of the local community in management of these tourism related economic issues has been minimal. Neglecting income related issues means that the form of tourism that exists on Apo Island is not optimal in distributing the maximum positive economic effects to the members of the Apo community. The largest amount of money is still earned by outsiders to the community. In turn this means that the community members still have to rely on the coral reef and their fishing activities for their major income. The increased tourism together with these constant fishing activities as main livelihood activities of the families on the island result in ever increasing pressure on the fragile biodiversity around the island. Stated differently, one might say that the role of the local community in maximising economic benefits from tourism in order to create a more sustainable form of tourism for the local community, has been negligible. In the recommendations made in chapter 8, attention will be given to more specific actions that could be undertaken in order to change the inactive role of the community in this matter.

It has been noted and explained in this section that the role of the community in taking steps towards maximising the economic benefits of the tourism on Apo Island has been minimal. Many community members are not sure how to proceed in bettering the situation. If the community of Apo strives for sustainable tourism the economic benefits to the community households will have to be increased. In their book, *The Business of tourism Management*, Beech and Chadwick (2005) describe sustainable tourism as tourism that is economically, socio-culturally and environmentally sustainable. Neglecting any of these three pillars, will inevitably result in an unsustainable situation. However, what has become clear is that the community of Apo Island has a strong feeling of responsibility and realises that the main responsibility in reshaping the tourism situation on Apo, lies with themselves.

On the other hand there are definitely some weaknesses in the approach of the local community of Apo to manage the local tourism situation. These weaknesses within the role of the local community in managing the tourism development do not necessarily mean that the role in itself is worthless and negligible. It is related to the research question and will be discussed here to deal with the research question in place holistically in order to make appropriate conclusions and recommendations. The following section will look at some issues that weaken the role and influence of the Apo local community.

6.5 Factors weakening the role of the Apo Island community in controlling conflicting interests between tourism development and conservation

In every community and in every development situation there will always be different internal interest groups. On Apo these include fishermen, women, followers of the two political parties, private sector – to name just a few. Additionally, there will also be

conflicting interests from outsiders. On Apo these groups can be roughly divided into four categories:

- the private sector;
- the community (bearing in mind that a 'community' is never homogeneous);
- academics;
- the public sector.

All these groups have conflicting interests in both the development and conservation of Apo Island, but all will have benefit if the reef sustainability can be ensured. In order to form efficient partnerships for sustainable tourism development, where all players work together to find an acceptable solution for all, it is important to have clear agreements and fields of responsibility. It is also important to have clearly defined borders between these fields. This section explores the role of the Apo community in controlling diverse and contrasting interests between development and conservation and the groups representing these different interests. It will be shown here that the Apo local community's position and role in steering development towards sustainability is being undermined by weak relationships within and between several outsider and insider groups.

6.5.1 The positioning of the local community versus the private sector on Apo Island

One could assume that the initiative and implementation of several development projects and volunteering time and resources for them by Paul's Diving school was done by nothing but good intentions. However, no formal agreement or contract was signed to ensure the sustainability and the continuance of the support of such projects. Partnerships were formed on good faith. If someone volunteers resources and skill transfer for free, it is difficult for poor local communities to demand formal agreements due to the risk of appearing ungrateful. A formal agreement might even be something that the locals would not for a moment consider. However, when there is a change in relationships between actors, such as personal frictions or priority shifts within the private sector, complications inevitably follow in the case of such good-natured agreements. This is what happened on Apo as due to several problems, the private sector player broke off the partnership in two development programmes. This lead to an immediate stop in the Dive Ranger programme for several months in November 2004. It left the programme without a sponsor, with no funding and resources to fall back on. Even though this relationship was restored at a later stage, and the programme continued after a while, it clearly indicates a weakness in a structure where a community does not sign a formal agreement with partners, as it often the case in the Philippines. In fact, the need for a local community organisation that represents the community formally in agreements around development projects is fundamental to the success of such projects. The APCODA community organisation would be fitting, for they have quite some experience in small development initiatives locally on Apo Island. They are, however, quite weak administratively and organisationally. This will be further discussed in the recommendations made in chapter 8.

In summation the weak administrative and organisational infrastructure on Apo Island results from a lack of appropriate formal agreement between the community and the private sector.

6.5.2 The positioning of the local community versus the academic partners in the integration of conservation and development

Partnerships between poor rural communities and academics are often complicated. This stems from the difference in the level of education. Many academics and important public figures have an enormous need to be recognised for their achievements and find this easy to achieve when working with poor rural people. Some academics in the Philippines still certainly do not have the attitude reflected in the PRA methodology of learning and sharing from and with local communities as reflected in the work of Chambers (Chambers 1994). Instead they act upon a superiority complex, which I observed in the time that I spent on Apo, looking at how such visits and interactions unfolded in practice.

I observed a change in the community members' behaviour when they were talking and reacting to such visitors. It might be described as acting as if they were inferior to these educated visitors. This poses an enormous problem, which I encountered many times in the Philippines. The relationship becomes skew. An example illustrates this statement: Silliman University has always been a partner in conservation of Apo Island and in general the relationship has been good. However, Silliman has received enormous amounts of funding for research and conservation activities on Apo Island from international organisations and universities. They would claim to have organised clean-up activities on Apo Island, (and get funding on the credits thereof) which in reality has been organised completely independently from the Silliman University by the local community themselves. Many community members told me that the money earned never actually reached the community at all.

Additionally, the Apo community received a grant in October 2004 for an environmental programme for children. The grant was claimed by one of the academics at the university on the pretence that the evaluation of the impact of the funds would be more effectively done at Silliman (which at the time seemed like a reasonable explanation to the donor). It was promised that the funds would be made available to Apo within 2 weeks. This never happened, the money stayed with Silliman. If project participants of Apo wanted money for materials etc. needed for the project they would have to buy the materials themselves, then go with the payslip all the way to Dumaguette and then receive this exact amount back from Silliman. These amounts were only small in comparison with the original sum intended for the project. Additionally, this act seemed like begging to the islanders, to go there with their payslips and ask for money. This, I think made them feel small, and in the end they stopped going at all.

Such unethical behaviour of the academic partners should be reversed as soon as possible in order to restore trust in the community in this partner. A solution would be for the university to make the local community a partner in the research process on Apo Island and use methodologies like PRA to enhance participation and further empowerment of the process by the local community. In this way the community would be able to have insight and more control not only over how the budgets are spent, but also in the content and relevance of the research itself. In working together with the academic partners the community can receive valuable outside scientific information such as determining the carrying capacity of the coral reef for community and tourism pressures. This can only be done if and when the local community has trust in the academic partner and have a good working relationship. Recommendations regarding this issue will be done in chapter 8.

6.5.3 Conflicting interests within the community of Apo Island

No one community is ever unanimous or undivided, which in itself is not an unhealthy characteristic. Political opposition is found everywhere in the world, and naturally also on Apo Island. On Apo Island and in the context of this research question, the political ideologies of the two opponents can be seen as seeking for sustainable development (current leadership) on the one side, with the opposition being development without conservation.

Most developments enlarging the role that the community of Apo played in controlling tourism impacts that took place in 2004 can be ascribed to the dedication and passion of a strong community leader. The community has been lead to investigate sustainable solutions for future tourism activities by mr. Mario Pascobello who has a strong fishermen's background and is himself an avid diver with a love for the underwater beauty of the Apo Island coral reef. Hence, he has knowledge of both sides of the debate and can weigh up arguments of both sides of the debate effectively and in a certain sense, also objectively.

Raymundo (2002:4) noted that a unique feature of the Apo experience is the fact that unlike other communities in the Philippines, enforcement and management does not appear to fluctuate with changes in political leadership. During recent elections, for instance, mr. Pascobello, the captain over the last years, ran for re-election against a man from a neighbouring island promoting a lucrative, but highly destructive and unsustainable mollusc harvesting practice (Raymundo 2002:4). Pascobello won with an overwhelming majority, indicating the commitment of the community to sustainable resource use. However, this situation can change easily if the opposition would win the elections. This will have fundamental changes on Apo Island and poses a threat to the future stability of the balance between conservation and development. Then the role of the community in managing tourism activities will most certainly change towards a focus of poor economic development. The Bolisong Marine Sanctuary to the North of Negros was fished intensively after new government officials took office, during a time when policing the sanctuary slacked off (Raymundo 2002:4). During elections in the Philippines it is not uncommon for opposition parties to buy votes and this inevitably leads to a system where the biggest bidder wins (Cadiz 2004:1). Therefore it is important that the conservation of the coral reef leads to direct income opportunities for the locals living on the island.

The above proves the vulnerability of the balance within the local community and the rules and regulations enforced by the local leadership. It also underwrites the importance of the choices that community members make when electing local leadership. Therefore, the direction that the mixture of development and conservation will take in the future is dependent on the choices that community members themselves make.

The vulnerabilities identified in this section can be minimised if the community would choose to do so. Recommendations towards possible actions and further research will be done in chapter 8.

6.6 Conclusion

From the integration of the qualitative and quantitative data in this chapter it becomes clear that the community of Apo was not content with the situation of tourism on their island during the time this research was conducted. Tourism numbers were on the increase and institutional measures taken to decrease the numbers were not working, or tourism operators and tourists alike were ignoring regulations. By presenting some interviews and observation of incidents, it can be deduced that the community felt that they have lost control of development. The community view presented here was that tourists were chasing away the fish, destroying their fishing equipment, having a negative impact on their natural resource, whilst at the same time not valuing their culture and

211

indigenous knowledge systems related to conservation. Moreover, foreigners and other outsiders were gaining more additional benefits from the tourism situation than the local community themselves.

Positive effects of tourism are income opportunities and friends made, volunteers selflessly sharing their (diving) skills with locals and the realisation of a scholarship programme that sends 22 children from the island to school.

More specifically, and in relation to the research question, the role of the community of Apo Island in integrating conservation and development was investigated in this chapter. When asked, the majority of community members assigned roles and responsibilities of conservation and development to themselves. They assigned roles to the community, represented by community organisations, institutions and volunteer groups including local leadership. In short, the main responsibility in tackling tourism related development problems and optimising opportunities for the future lies with the community members of Apo Island. This in itself is a very positive development and underlines the large amount of ownership and empowerment present within the local community of Apo. It could be said that the community has been effective and rather pragmatic in some issues (such as setting clear rules and regulations concerning the anchoring practices and rules in the marine reserve). Other issues such as the lack of local economic progress or entrepreneurial opportunities and the creation of a suitable economic environment for this, demands the urgent attention of local leadership.

Closing this chapter was a discussion of the weaknesses that threaten an effective role of the local community in finding solutions to integrate conservation and development. In the following chapter this research product will be concluded and in chapter 8, recommendations will be made.

Chapter 7: Summary and conclusions

7.1 Introduction

This chapter will firstly summarise and discuss the main findings based on the results of chapters 1 -6 of this research product and therefore the main findings and conclusions of the research made on Apo Island and literature studies done. It will ultimately look at the research question and research objectives as a central theme through the summary, conclusions of the main results and the discussions of these in terms of the literature covered in this thesis.

Secondly, conclusions will be made where it will be shown how the results of this research relate to the literature that has been presented in chapters 2 and 3. Furthermore, the connection between the results presented in chapter 6 and the literature highlighted will be made clear.

7.2 Research summary

During ten months of PRA research the following research objectives were at the basis of all research activities.

- To describe the scenario of tourism and development as perceived by the local community of Apo Island and its implications for conservation.
- To discuss the linkages between sustainable development and tourism. To identify the role and responsibilities of a local community in managing tourism, through an in-depth case study on Apo Island.
- To identify some important weaknesses in the specific role of the community of Apo Island in the management of tourism.
- To suggest an appropriate, possible role for the community of Apo Island in the planning, management of tourism related development for the future.

These objectives were formulated in order to support the enquiry into the following research question:

Given the current situation of tourism on Apo Island, what is the role of the local community of Apo Island in influencing the direction of tourism related development and conservation in their local environment?

By meeting the objectives stated above this study has revealed that the local community has a crucial role to play in protecting their local resources against unwanted tourism development.

The assessment of the local tourism situation through the eyes of the local residents of Apo Island focused on whether tourism is felt to be predominantly beneficial or harmful to the village and the natural and social environment. It has been said before that, local attitudes and receptiveness are critical factors and perhaps more critical for small isolated village communities of coastal areas (Ali and Juma 2003:9) to the direction of tourism developments.

Data presented here showed that the local community believes in tourism as a possibility for sustainable development and that tourism is in general a positive development. However, data also showed that most community members believe that the tourism situation is far from ideal. Development has brought conflicts and frustrations between local community, tourism operators and tourists, which were presented in chapter 6. Community members of Apo indicated in PRA exercises of this research that development with its influx of tourists is disturbing their rustic village and moreover the equilibrium that they have had with the coral reef on Apo for many years. Participants in the PRA exercises and interviews also clearly noted that there are many opportunities related to tourism that the community has been optimised yet. These are mainly related to the economic impacts, but also enlarging conservational activities related to tourism and development.

It has also become clear that the local community of Apo Island perceive themselves to be the most important player to fight tourism unwanted effects, protect their coral reef from tourism pressures and to optimise economic opportunities related to the tourism industry. Stated differently, the local community of Apo Island plays the most important role in integrating conservation with development in order to reach future sustainability. This research also shown that even though this is the case, the community of Apo Island needs to cooperate better and become more equal" with outsider partners such as the foreign owned private sector or academic institutions, such as the Silliman University.

By looking at the example of the Dive Ranger Programme of Apo Island the qualitative discussion showed the importance of the role of local communities to look into options where economic development (in the sense of income opportunities) and conservational activities related to the tourism sector, can be combined. It is only through the involvement and participation of the local community that such "win-win" solutions can be successfully implemented.

This case study of Apo Island also showed that if the community does not take action in developments in their local community, then there is probably no other actor that will readily take ownership or responsibility for the conservation of the coral reef. In the situation of Apo Island, the private sector, international or national NGO's and national governments miss the finer level detail, for instance, to take actions to increase diving fees or to initiate a Dive Ranger Programme.

General conclusions regarding the specific role of the Apo Island community in steering tourism development towards sustainability will be made and interpreted, also in terms of the literature covered in chapters 2 and 3, in the next section.

7.3 General conclusions of the research done on Apo Island, the Philippines

As shown in the main discussion in both the literature reviews and the presentation of data in the preceding chapters of this research product, growth of tourist industry as a form of development has been associated with a wide range of issues, good and bad, depending on the local context and form of the tourism. The particular role that the local community of Apo Island has in directing the tourism activities and impact in their

specific context has been examined and discussed in this research product. A summary was given in the previous section

From the insights gained in my study, I have drawn the following general conclusions about the tourism situation on Apo. These conclusions are linked to the role of the local community during the time of research, but more importantly have implications for the future role of the local community in tourism development.

The first part of the research question addresses the current situation of tourism on Apo Island. Related to this, the following conclusions can be made:

Firstly, tourism unquestionably has some negative effects and drawbacks on Apo Island. It has possibly created many negative environmental effects, which affect the way of life in the study area. Moreover conflicts between tourists and fishermen lead to frustration and tourism behaviour impact on the culture of the local villagers by disturbing the peace and quiet in the village. At the same time it should be noted that most residents do believe that tourism has much to offer the local community for the future.

Secondly, the local community of Apo Island benefit less from the tourist industry than they should do. Resort jobs are few and not all of them are well paid, informal and SME enterprises within the local community related to the tourism industry are almost nonexistent. Poorly organised informal trading activities have resulted in very minimal earnings. Lack of business skills and knowledge about tourists taste and lack of access to credit impede its expansion. Moreover, foreigners earn the majority of tourist income leading to a situation where the local natural resource is being impacted on with no real economic advantages for the local community members. No significant linkages have been created by the tourist industry or by community local leadership to address this issue.

The following conclusions are made directly related to the second part of the research question: what is the specific role of the local community in integrating conservation and development?

The third conclusion of this study reveals that without close supervision and monitoring, tourism can have detrimental effects on a host community. In order to minimise this, the role of the community is central. Apo community members themselves believe that they have the most important role to play in this. Through field research it has become clear to me that other actors do not consider this a priority, or will at least not take the lead in such issues. The important role that the community has to play here is to assign roles amongst themselves and act on it.

The fourth conclusion clarifies the specific role of the Apo local community in integrating conservation in development, with specific relevance to tourism:

The local community of Apo is *responsible for determining the rules and regulations* that will apply within the whole APLS. Here one must consider regulations that will limit the number of divers to specific sites or the island in general, rules for dive operators, rules that determine the duties and powers of the Dive Rangers, anchoring and noise restrictions of dive boats, to name a few. While these regulations are ultimately decided by community members at meetings, the institutionalising of these rules are done by PAMB, whilst the responsibilities for implementation thereof will again be with community members that are part of the Sea guards or Bantay Dagat. Thus, on Apo Island it becomes important that local community structures are strengthened. We have seen that when assigning responsibilities for actions related to tourism problems or opportunities, PRA research participants assigned roles to community institutions and community organisations and not to individuals or the soft term 'community', in general. This shows again that institutions and community organisations are a fundamental aspect when talking about "community" in general.

Fifthly, the following can be said to be the role of the local community of Apo Island in combining conservation and development.

• It is the role of community leaders and community organisations to make sure that clear agreements for all development projects are made and that these are

formalised into contracts with the several partners. Communities therefore need a strong NGO or People Organisation to represent them in this.

- Programmes combining conservation and tourism development needs to be tailormade to local conditions and culture. In this the community must play a fundamental role in all parts of the process of looking for solutions to manage tourism.
- The community has the responsibility of preserving local culture and local knowledge systems.
- It is the responsibility of the community to re-evaluate their own use of the natural resource (such as the use of fish traps and the damage they do to the reef themselves whilst fishing and swimming).
- Members of the local community are responsible for picking up early warning signals of environmental damage from tourism and subsequently to act on it and alter rules and regulations accordingly.
- Institutional procedures need to be established that give allocated persons the authority to act.
- It has become clear that the local community has a role in maximising economic benefits from the tourism. The relative inactivity of the community of Apo Island as a whole in the area of potential informal and SME's has resulted in no development of these sectors on Apo Island. The local community needs to work in collaboration with other partners such as private sector and NGO's to get the skills to be able to create and act on these opportunities.

I have argued many times during this research that local communities are not homogenous, that they consist of different interest groups and not static entities. Therefore it is fundamental to realise the importance of institutions and community organisations to represent the community interest and be involved in development, conservation and research projects. These organisations play a large role in fighting the constraint of community-based approaches as was used in this research such as the lack of homogeneity, representation and bureaucracy. In the light of the field results and the above conclusions made, I will explain how they are related to the literature that has been studied and presented in this work.

7.4 Interpretation of results and literature reviewed

Whilst chapter 2 gave a general overview of the framework of this research and the general issues concerning sustainable development, chapter 3 dealt intensively with the specific role of local communities in tourism, sustainable development and NRM. The positive and negative impacts of global tourism were presented. It was identified that negative impacts arise, according to the UN (UN 1999:9), when there is:

- lack of awareness on the part of decisions-makers about tourism development of the social, economic and environmental balance to be pursued in achieving sustainable development;
- lack of commitment by tourism operators and travellers to contribute to the maintenance of the local environment and culture of the host destination;
- weak institutional framework with inadequate controls can lead to tourism development that is both inappropriate and intrusive;
- unfairly traded tourism, whereby local communities are unable to share in its benefits;
- large flows of visitors in remote or sensitive locations can place considerable strains on local resources.
- expectations of travellers of available goods and services can lead to these items or services, being imported from outside or local supply chains, being distorted to meet demands.
- tourism can change a destination's cultural make-up and, if poorly developed, can increase crime, prostitution and other social problems.

The presentation of the data collected on Apo Island, showed that in this case study, all the above seven points are present, some to a more serious extent than others. Conclusive for the case study on Apo Island is the fact that the local community can play a central role in most of these issues, and should not be seen as being the victims of (tourism) development. In fact they should be given back and claim the opportunity to determine whether and what will happen to local development and the balance with conservational activities. Yet, the responsibility also lies with the local community to claim this responsibility. In order to find solutions to the above points, the role of the community of Apo Island has to be along these lines:

- The local community is the lead player in making decisions concerning tourism development in their rural community. This is based on the social, economic and environmental balance to be pursued in achieving sustainable development.
 Policy makers (duty-bearers) in local and national governments need to work closely with and according to, the advice of local communities in order to comprehend all issues that need to be taken into account to understand the correct balance that decisions should be based on.
- 2) Tourism operators and travellers need to become committed to contribute to the maintenance of the local environment and culture of the host destination. This can only be done if the community take part in active education through their actions and other educational materials and set the example of conservationism themselves. The diving industry as a whole also has to take more responsibility on a global level.
- 3) Within local communities there is a need for a strong institutional framework (in the Apo case study this institution is PAMB) with adequate controls leading to tourism development that is both appropriate and responsible.
- Opportunities need to be created for local communities to share in tourism benefits.
- 5) Through initiatives like the Dive Rangers and putting a platform on the maximum number of visitors per day, large flows of visitors need to be controlled in order to protect remote or sensitive locations.
- 6) Communities need to educate travellers to change their expectations about available goods and services that lead to economic leakages. A more diversified scale of local goods and services should be produced and promoted to tourists.
- The change in the community's cultural make-up and other social problems related to tourism must be limited. The Apo community clearly indicated that they

want to look towards a solution where they can continue their lives without policing tourists the whole year around. In this scenario the responsibility also lies with the tourist to act in a well- behaved way and not disturb environmental and social balances within a community.

Looking at the above seven points one can see the importance of the central role of the local community in rural areas. We have come to understand that many of the local communities do not have the skills necessary for the above roles. Even a relatively strongly empowered local community such as the one present on Apo Island, will need some external help in controlling tourism and making the correct decisions. In chapter 3 we have seen that the UN and the WTO have promised international assistance to local communities facing the challenges of tourism. Can local communities rely on the international community for this guidance? The following was promised:

- to provide technical assistance to developing countries and countries with economies in transition to support sustainable tourism business development and investment and tourism awareness programmes, to improve domestic tourism, and to stimulate entrepreneurial development;
- to assist host communities in managing visits to their tourism attractions for their maximum benefit, while ensuring the least negative impacts on and risks for their traditions, culture and environment, with the support of the WTO and other relevant organisations.

Such assistance can only reach a few lucky communities of which Apo Island is not one. This is one of the reasons why this research has been so important. The emphasis of the argument followed in this research product is that the community plays the most important role in regulating tourism activities, creating more opportunities and making room for conservation. Local communities cannot permit themselves to wait and be dependent on such promises like the UN Summit or national governments. Then the environmental degradation will continue and in many cases the actions will only be taken when it is already too late. This conclusion has vast implications for local communities and their responsibilities in relation to tourism.

In addition, we have seen in chapter 3 that the IDRC (2005:1) arguments that the community are best apt to manage natural resources because of the following:

- communities are better positioned both to respond and adapt to locally specific social and ecological conditions and to represent local interests and preferences;
- they are more knowledgeable about the minutiae of local ecological processes and management practices (built into indigenous knowledge systems);
- they are better able to mobilise local resources, both human and material, through locally adapted or traditional forms of access and management;
- they are more accountable for their NRM decisions and actions given the relative importance of the natural resource to their livelihoods and their proximity to the people they represent.

These four points identified were endorsed by the research conducted on Apo Island. In the next section the role of communities in finding sustainable solutions in their specific local environment will be examined.

7.5 The role of local communities in the enhancement of the sustainable development process

During the literature review of chapter 2 we have seen that some of the keys towards sustainable development as a process are:

- emphasis of the importance of empowered local communities;
- strengthening local communities and their decision making in the world economy and the importance of terms of trade for sustainable development;
- the importance of local resource management;
- implications of technological innovations for sustainable development.

In this section the results of the research on Apo Island will be examined in terms of these four categories.

<u>7.5.1 The importance of the emphasis of strong (empowered) local communities for</u> <u>sustainable development</u>

The outcomes of this research have shown that in order to regulate tourism successfully and even to start having so much as a say about what happens with future tourism activities within their community, the local community in question needs to be truly empowered. This in-depth study of the Apo community has shown that the community has been and still is responsible for identifying early warning signs in the imbalance between human activities (combination of fishing and tourism) and local natural resource. The community members who live on Apo Island are best able to judge whether the natural resource is deteriorating by referring to the knowledge of the indigenous system. On Apo tourists come and go and scientists and academics visit in order to monitor different cross sections of the coral reef. Yet, all these players will not notice gradual degradation of the coral reef. I have come to feel strongly about the fact that if a community would not notice gradual environmental degradation of the natural resource or would restrain from taking any action, then the environment will continue to be damaged by increasing tourism. Other actors will continue to exploit the coral reef, taking what they can for free according to the free-rider effect, without even realising what the future implications of their activities as a collective might be. It is the community's role to indicate that there is a problem and then, through collaboration with partners, either scientists or private and public sector players, design an appropriate measure of action or regulation.

The example of Apo Island shows a community that is used to participating in decisionmaking processes about their natural resource, the coral reef. Moreover we have seen in chapter 4 that Apo Island was seen as the first successful case of CB-CRM in the world. For this to be reached, an advanced level of empowerment and participation is needed. In personal notes that I made during the beginning of the research and again in the PRA workshop I wrote the following: "The fact that the community is so strong and working so well as a team, getting what they want, is something I do not understand and can only admire. It is something that we can only dream of in the western world" (Olivier 2004).

7.5.2 The importance of local resource management on Apo Island

The role of the community related to tourism is not only to be controlling and regulate what tourists do. Sharing experiences and education can be done through setting an example (not littering themselves or damaging the corals whilst fishing) and other educational methods such as flyers. This is in line with the concept of Chambers (1997) in PRA where sharing becomes important, as was discussed in chapter 5. In a situation were information is shared with tourists and tourist operators, the visitors might come to understand that they are also a part of the balance between development and conservation. Hopefully, their actions and reactions will subsequently change. Not only in preserving the natural resource by acting responsibly, but also in contributing to the development of the rural community in ensuring that they spend their money sensibly at local operators, shops and restaurants. However, foreign outside operators and the dive industry also need to take responsibility for the behaviour and actions of their tourists and students.

My conclusion based on the field research done on Apo Island is that the community and the local groups it consist of, hold the conductor's role in determining the balance between conservation and development.

Solutions such as the Dive Ranger Programme should be encouraged in communities dependent on coral reefs. The combination of local stewardship, local employment, conservations and the monitoring of tourism are of vital importance. If conservational activities related to tourism can bring income to families, then the pressure on the coral reef will also become less, as they would be less dependent on fishing methods such as fish traps. Conservational activities should get priority along with a re-evaluation of the use of some traditional fishing methods that are seen as sustainable, but may not be that per definition.

7.5.3 Strengthening local communities and their decision making in the world economy

The role of the community of Apo Island in the regulation of tourism activities is not only that of identifying warning signs and preventing environmental damages, it is also equally important to see that the inhabitants of the island can use development as a way to uplift themselves from poverty. A central task of local regulation for sustainable tourism development is to promote entrepreneurial initiatives in local communities whilst increasing sustainable use of local resources.

In combining conservation with economic development, one no less important than the other, lays the key to sustainable tourism development on Apo Island. Data has proven that the private sector resorts and operators owned by foreigners on Apo Island and surrounding islands enjoy the majority of economic advantages from tourism. This does not only lead to a leakage out of the Apo Island community, but also to leakage out of the Philippines. On a national level this leakage problem of course has to be addressed by the Philippine government, yet on a local level this is a low priority of government policy.

When examining the current situation, who is to evaluate whether the local specific situation is unjust and should be altered? On Apo Island, the private sector is content with its earnings and even dissuades tourists to make use of the current family-eatery in the community. The local government does not seem to see economic opportunities for locals as an option for development aid and national government at this stage is too far removed from the local reality. The academic partner, the Silliman University, has been focusing on the preservation of the coral reef and funding for their own research departments resulting in economic possibilities and advantages to the communities never being investigated. Moreover, these researchers also do not have the economic skills to do so, for their area of expertise is not within development economics, but marine biology.

Therefore, it can be concluded that it is the responsibility of the Apo community leaders to realise that there are hidden potentials in the current situation of tourism on Apo Island. Competition for the private sector in goods and services has to originate within the

225

community. We have seen in chapter 6 that participants have mentioned the possibilities for the roles of the local community in creating more economic opportunities.

- Create possibilities for access to start-up capital and trainings.
- Enhance local entrepreneurial activities and market opportunities.
- Local leaders should create an environment that is beneficial to these activities.
- Establish competition for strong private sector players owned by foreigners.
- Increase the production of local goods and products.
- Increase opportunities for informal sector and small businesses by providing trainings, workshops etc.
- Educate tourists about the impact of bargaining for prices.
- Putting up sign boards with this information for educational purposes for tourists.
- Educate the locals into the rules of competition. Diversification of goods and services so that they can sell their products at the price they desire.

7.5.4 Using technology to work towards sustainable development; the Apo Island case

The use of technology, such as diving skills, in order to broaden the indigenous knowledge system has been an example of how modern technology can be used to complement indigenous knowledge systems of local communities to promote conservation and local employment. The importance of diving skills might prove to be a fundamental contribution to small islands and coastal communities to help in effective CRM under increasing tourism pressures.

7.6 Conclusion

In this chapter it has been made clear that without sufficient involvement of any given community in the management of (tourism related) development the result will be an unsustainable situation. Outsider and insider interests will become unbalanced and will lead to considerable environmental and social- economic deterioration of local environments.

Therefore, the central role that communities have to play in the contribution to local, regional, national and eventually international tourism policy should not and cannot be ignored. The valuable lessons that are learnt from case studies such as Apo Island should be acknowledged. The mistakes made seen as beacons to steer clear of whilst the successes and creativities such as described in this work needs to be followed closely. Replication potential should be closely examined in order to strengthen the link between sustainable development and tourism.

The next chapter will make recommendations for ways in which the local community of Apo Island can become more involved in integrating conservation and development in working towards a solution where tourism can contribute to a sustainable future.

Chapter 8: Recommendations. A stronger role of the local community in integrating conservation in development on Apo Island.

8.1 Introduction

In this chapter recommendations will be made as to how the community of Apo can practically use this research for their benefit. Suppositions on what additional future research could also be beneficial to the community of Apo Island will conclude this chapter.

Recommendations made here are made to facilitate a more active role for the local community of Apo Island in steering the integration of development and conservation. The literature studied in this thesis has indicated that the potential role that local communities play in making decisions about tourism development has not yet been thoroughly researched. The field research done on Apo Island has shown that the local community of Apo Island has played and will play a large role in future development and conservation of their island. However, in the conclusions made in chapter 7, it has been stated that the impact that the Apo community has on certain issues, such as economic benefits and minimising negative environmental and social effects of tourism, is minimal and should be increased.

Therefore, the recommendations made here look at how the local community of Apo Island could play a more effective role in monitoring and acting on development in order to work towards a more sustainable form of tourism and increase the space for conservation. Included in these recommendations are also partnerships that could be beneficial to the future role of the Apo Island community in the management of tourism development on their local natural and socio-cultural environment. The recommendations are made for the local community of Apo Island specifically, as this research was an in-depth case study and is not necessarily related to other local communities.

228

8.2 Enhancing the role of the local community of Apo Island

Recommendations towards the creation of a more active and effective role for the local community of Apo Island in redirecting developments in their local environment will be made under the following points.

- Strengthening the influence of the Apo Island community.
- The preservation of the local culture of Apo Island.
- A bigger role for conservational issues in development on Apo Island.
- Creating an environment that encourages tourism related entrepreneurial opportunities.

8.2.1 Strengthening the influence of the Apo Island community

As explained in section 3.6.1 an empowered community is one who has control of the decisions, which impact their lives. Related to this, the examination of existing literature on empowerment in chapter 2 pointed out that communities that have not developed a means to oversee or regulate tourism development, often feel that they have lost the ability to regulate and oversee tourism activities in their local environment.

Even though the community of Apo Island has been undergoing a process of empowerment during the last 30 years by actively being involved in conservation activities of their coral reef, the present tourism situation has left the community feeling frustrated and helpless in a certain sense. It is my recommendation that local leadership should actively promote a further involvement and empowerment of local groups in the community. The community of Apo Island is a strong community that is used to working in a participatory way with many players from many sectors. This is the result of the long history of preservation in the establishment of the marine sanctuary and reserve and the experience of working with a scale of different partners. Through this process, the community has become empowered in many ways. However, they do not have the skills needed to cope with the influx of tourists and increasing pressures on their local environment. Time after time during my research period I was astonished by the extent of empowerment of the community. However, there were also ample examples in this research where the community when uncertain and when faced with outsiders such as academics and foreign resort owners seem comparatively weak to me.

In the literature study I used the work of Little (1994) to explain that one of the major challenges for the CB-CRM approach is to identify and establish the correct balance of responsibilities among the various actors based on the context specific situation. One of these weaknesses highlighted in chapter 6, was the failure of the community leadership to have a defining role in the designation of roles of partners in development initiatives. This research has shown that this is also true for the community of Apo Island. Therefore this recommendation to concentrate on further empowerment of the community as a whole has been made.

However, "empowerment" of the community as a whole seems an abstract concept. Concretely, this will mean building up the confidence of locals to take action towards tourists, and in negotiations with the private sector, public sector as well as academic institutions. In order to create such a feeling of empowerment in the local community of Apo Island it is my view that it becomes important that local community structures are strengthened. This research used the term 'community' as defined in the definition of terms at the start of this research product. We have also seen that when assigning responsibilities for actions related to tourism problems or opportunities, PRA research participants assigned roles to specific institutions and community organisations and not to individuals or the soft term "community" in general. Agrawal and Gibson (1999:638) accentuated the importance of a focus on institutions, conceptualised as sets of rules describing and prescribing human actions, leading to a substantially different focus for locally-oriented conservation policies in comparison to policies that result from an acceptance of the "mythic" community.

Therefore it is my recommendation that the community can be further empowered by giving specific attention to the following points:

1) Capacity building of the local people's organisation, APCODA.

The role of the people's organisation, APCODA, in development and conservation initiatives should be enlarged and strengthened. For this to happen, capacity building is of vital importance. Staff has to learn additional skills such as contract formulation, negotiation and facilitation skills, proposal writing, monitoring and evaluation skills. This will enable the community to receive external funding for development projects and result in a more effective spending and administration of existing money received from tourism fees available for development and conservation initiatives. APCODA will then have a larger involvement and understanding in the planning, management and implementation of future development projects.

Such a larger role for APCODA will inevitably mean that the organisation will have to become more formalised, for at the moment it is an informal voluntary organisation. It is my recommendation that 1 or 2 people from the community receives a fulltime position with salary in order to concentrate on gaining these skills. There are courses available throughout the Philippines that can help with such training. Additionally, there are many organisations present in the Philippines, for example is the Peace Corps from the USA that send members on missions to enhance capacity building in local organisations. It would be wise if the Apo community look into such possibilities.

Additionally, some community members, local government officials, members of the Dive Rangers and youth have learnt how to use, execute and redesign PRA exercises and interpret data during the time of this research. PRA exercises can be effectively used to facilitate discussions and set priorities for the community and identify the roles of different players in the tourism context. PRA exercises can be used to stimulate the participation of the community even further and lead to further empowerment. This will lead to a confident feeling when going into negotiations about roles of players and partners etc.

231

2) Establishing more rapport between PAMB and local groups in the community of Apo In chapter 4 it has been noted that the PAMB meetings are never held on Apo Island itself. Community members are becoming distrustful regarding their activities and the way in which they spend community earned tourism money. The four PAMB members that are not from the local community of Apo Island, but from academic and government representation, should make an effort to visit Apo Island as often as possible. Meetings should be held on Apo Island and community members should be invited to join, observe and actively participate. In this way openness is created and the community will regain more trust in the organisation.

Additionally, when these meetings are held locally and members dine and sleep on Apo Island, it will provide opportunities for women to cook for additional income. It will also save the money for expensive hotels and restaurants in Dumaguette, which can then be spent on conservation and development activities on Apo itself. By doing this, PAMB can become an example of an institution that provides the framework for sustainable use of the coral reef of Apo Island. Trust is of vital importance from the local community that they support. Moreover, they not only have to concentrate on the preservation of natural resources, but if the use of the coral reef is really to become sustainable, then economic opportunities for employment and income in the tourism sector need to be created for community members. They also have to serve as an example of efficiency and responsibility.

c) Finding sustainable funding for development projects

The initiation of the Dive Ranger Programme could prove to be a success story for the local community's influence in limiting the negative environmental impacts of tourism on the coral reef of Apo Island. Besides the possible positive impacts that this programme may have, it also contributes to the feeling of community pride and gives community members the feeling that they have regained some control over tourism impacts on the coral reef (PRA workshop 2004).

It was also explained in chapter 6 that the lack of the Dive Ranger's own equipment and office restricted the progress of the programme when difficulties with Paul's Dive School occurred. It follows then that, in order for the Dive Ranger to really have an effective role in regulating tourism activities it is important to find funding for the programme, either from NGO's or Governmental Organisations. In addition to this, the private sector on Apo Island can be incorporated in the consortium of partners. This means that the Dive Rangers will be able to operate independently from their own office and make use of their own diving equipment. They will not be dependent on the availability of equipment of Paul's Diving. The rangers will then also be able to join diver groups during the high season when the necessity for patrolling is most needed.

8.2.2 The preservation of the local culture of Apo Island

More attention should be given to make sure that the local culture is preserved and that the traditional sustainable fishing methods are transferred unto the younger generation. These sustainable practices form the basis of the survival of the fishing community from the pressures of tourism. In this respect the PRA exercise and local story telling are important tools that the community already has in hand.

8.2.3 The role of the Apo community in strengthening conservation issues in development

On Apo Island it is important that the conservation aspect of tourism development is enlarged. In order for this to happen a number of steps should be taken:

Firstly, the environmental justification of the use of fish traps should be re-examined. The damage that these structures cause to the reef should be determined and considerations such as catching endangered species should be kept in mind. If it is decided to make the use of these traps illegal, it will be more visible for tourists that the community is serious about conservation activities. Tourists might become more careful themselves to prevent destructive behaviour. This will also eliminate one of the key the friction areas between local community and visitors. However, as fish traps are an inherent part of the local culture this is a complex issue.

Secondly, the tourism carrying capacity of Apo Island should be determined (see recommendations on further research at the end of this chapter). Ali and Juma (2003: 9) indicate the importance in determining the size and scale of tourism that a particular area can hold. When this has been done there should be a re-examination of the no-fishing and no-diving zones and the size of the Marine Sanctuary, for example. The size of the Marine Sanctuary was determined 20 years ago when there were no tourism activities present on Apo. Today the balance between humans and coral reef is much different and these changes should be considered in the decision-making equations.

Thirdly, the number of tourists that visit the underwater environment should be limited to a specific number per day, according to the carrying capacity that will be determined. There should also be a maximum number per dive site per day, such as is the case in the Marine Sanctuary at present. This should be constant throughout the year and not be exceeded in the tourist high season. In this way the community will choose for less income from tourist diving fees and for the preservation of the natural resource.

Fourthly, the APLS Visitor Centre should start a promotional/educational campaign to educate tourists and make them aware of the consequences of their actions whilst visiting Apo Island. This will involve informing tourists at the APLS Visitor Centre. Tourists themselves will have to go to the APLS Visitor Centre and not simply the dive guide from their boat, as is currently the case. Flyers and information can be given about behaviour underwater (by Dive Rangers) and about responsible behaviour on the island. This can include information on garbage disposal, not damaging the corals or taking shells and corals as souvenirs. In the PRA exercise, participants identified other means to help in this process by educating tourists about the impacts of their actions. Clear, colourful signboard can be painted with the rules and regulations of the marine reserve on them. These should be visible from the place where the boats throw anchor. It is also important to bring this in a positive way, not only create the idea of rules and regulations, but also explain how this also benefits the tourists. In the future it will be the duty of the Dive Rangers, once operational, to brief tourists not only about these rules and regulations, but also the reasons behind it, thus sharing a little of the Apo Island story and their knowledge about the strong currents and conditions on that specific day. This is more in the line of sharing between local community and visitors as occurs in CBE and PRA research as described by Chambers (1994). In a later stage of the Dive Ranger Programme the idea is that all tourists visiting Apo will have to hire a local dive guide to minimise outsider operators from other islands. In this way the economic benefits from tourism will increase enormously.

Fifthly, the community members can play a more active role in setting an example to tourists by their own behaviour. Adding garbage bins on the island and making them more visible by painting them, for instance, in a bright colour.

Sixthly, a meeting between the community Barangay officials, the Dive Rangers and all outside dive operators that visit the coral reef should be called as soon as possible. Such a meeting will be to discuss the rules, regulations and possible penalties of the APLS. This recommendation was also mentioned as an action point in the PRA Matrix exercise. From observation, however, I got the impression that community officials and Dive Rangers were reluctant to call this meeting, as they were expecting negative reactions and resistance from these operators. The community can make use of private sector partners on Apo Island, like Paul's Diving, to assist in these talks, especially when there might be a language barrier. It is my recommendation that these talks take place as quickly as possible, for the Dive Rangers cannot possibly control all diving activities around the island. Outside operators need to take responsibility for the actions of their divers and boatmen and if not, should be fined or banned from diving at Apo Island. If the community and the PAMB institution are not clear and strict on these regulations, it will clearly inhibit the sustainable development of tourism on Apo Island.

Lastly, the local community should start working together more actively in the Research and Development Programmes of the Silliman University. It is the responsibility of both partners to find a situation where there is mutual trust and discussion, in the form of a mutual partnership. APCODA can play a role in working with the Silliman University to

235

get insight in the administration of funds that were intended to be spent on research and development on Apo Island.

8.2.4 Creating an environment that encourages tourism related entrepreneurial opportunities

One of the themes discussed in this research product is the lack of economic benefits for the local community of Apo Island. It has become clear that the role of the Apo community in ensuring that sustainable tourism development takes place is not only one of preservation of the natural resources, but also to create economic advantages for the community. Otherwise environmental damage will be multiplied in the future. Field research done during this study, showed that not only is there no healthy environment for entrepreneurial activities on Apo Island, but the private sector are discouraging community members to start tourism related private initiatives. Threats are made to end existing development initiatives within the community. Concerning this topic, the following recommendations are made:

Firstly and most importantly, the role of the community and community leadership is to rapidly realise that a change is urgently required regarding this matter. At the moment some earnings from tourist and diver fees are being spent on development projects for the community in general. As we noted from triangulation sources in chapter 4, the effect that this money has directly on the islanders, is not clear. However, it is my opinion that this money could rather be spent in giving small loans to future entrepreneurs or existing ones to set up or improve businesses related to tourism. Access to start-up capital is the major constraint in the growth of the informal and small formal sector (CGAP 2007:1). This is also the case on Apo Island. If part of the money earned by the diving fees is given as loans to those who want to use it to utilise production capacities, this money can be spent much more effectively. The management of the successful Cooperative store of Apo can help with turning such funds into a ROSCAS ³⁰scheme and no involvement of a bank would be necessary.

³⁰ Rotating savings and credit associations (Roscas) are the most developed informal financial institutions in developing countries, particularly in Africa and Asia. The basic principle of Roscas is almost the same everywhere. A group of people gather for a series of meetings. At each meeting, everybody contributes to a common pot. The pot is given to one member of the group. This member is

Secondly, the education of tourists regarding bargaining and the design of a fixed "responsible tourist indexes" as discussed in chapter 6 is also a recommendation. This is, however, a global recommendation and should be researched further if this is indeed a viable option before this could be implemented.

The above have been the recommendations for changes in the role and activities of the Apo community to find equilibrium between conservation and tourism development. The final recommendation for the community of Apo Island would be to continue the efforts in finding a solution to integrate sustainable tourism with CRM. Apo Island has yet again, through the Dive Ranger Programme and in looking for sustainable tourism development solutions, proven to be a leader in the community participatory development field. They have set yet another example for other local communities in the Philippines and elsewhere in the world.

8.3 Recommendations for other players involved in the Apo Island case study

Through an in depth study of the tourism on Apo Island, this thesis has argued that the local community has a leading role to play in the regulation of local tourism activities. If not, the environment will be damaged, early warning signals will not be picked up and acted upon and economic advantages will continue to flow into the pockets of foreigners. This does not mean, however, that other actors do not have an important role to play or a valid interest in this process of tourism regulation. However, this thesis has aimed to concentrate on the role of the community as the coordinator, whilst also considering the importance of the roles played by other actors. Here are the suggested roles or changes recommended for other partners in the specific case study of Apo Island:

then excluded from receiving the pot in future meetings, while still contributing to the pot. This process is repeated until every member receives the pot. Afterwards, the Rosca is disbanded or begin another cycle.

The Private sector: living up to the claims of environmental and social responsibility The private sector on Apo Island as well as the outside operators from other islands bringing divers to Apo should come to understand that the coral reef that their tourism activities are based on is the rightful property of the Apo Island community by Philippine law. As foreigners they have no right to assume that the reef can be exploited for all parties visiting. Restrictions and regulations made by the community should be followed and all parties involved should pay diving fees.

Another point of attention is that if the private sector truly wants to become partners in development, then they need to stop putting barriers on local entrepreneurs to start small businesses and services related to tourism. Misinforming tourists about the existence of these services in the community should not be tolerated when private sector players claim "social responsibility" as one of their main objectives in order to attract ecotourists. However, there should be remembered that it is still indeed up to the local entrepreneurs' and new businesses to make themselves known to consumers and not for existing business to point customers in another direction.

The role of local government in reshaping tourism related activities on Apo Island Community leaders have to play an active role through the use of networks to higher government structures to get assistance in passing laws and regulations such as in the Dive Ranger Programme. Local government can also play a role in getting assistance to shape a more favourable economic environment for locals.

The role of regional and national government in reshaping tourism related activities on Apo Island

These actors can play an important role in setting rules and regulations towards a more pro-poor type of tourism in the Philippines, leading to less economic leakages firstly away from communities, then regionally and in the end, to other countries. The role of the global diving industry in reshaping tourism related activities worldwide. On a global level, the diving industry, and in particular the biggest player PADI³¹, need to take a more active role in awareness under divers and snorkellers that they not only have an impact on fragile natural environments, but also the lives of community members in rural areas. This should be explained in the course material which students learning to dive will be questioned and tested on. In this way it can be ensured that divers are aware of the delicate balance that they have an impact on and will be encouraged to pay for entrance fees, reducing the free-rider effect. Divers should be taught to act and behave responsibly both under and above the water.

8.4 Themes for future research on Apo Island

The fact that not enough has been done on Apo Island in order to stimulate economic tourism opportunities for the local community has been made clear in this thesis. Further research on Apo Island would include feasibility studies for different enterprises. One example is to determine the feasibility of the local native restaurant or the native shop. It is important to look at factors - in the case of, for example, such a restaurant- how the locals would be able to keep products cold and fresh, seeing that there is only electricity in the village at night and villagers do not have refrigerators. The current private sector restaurants have their own generators. In such feasibility studies there are many factors that need to be taken into account.

Other possibilities for research could be finding out which methods would be most suitable to stimulate sustainable economic development benefits for the local community. Specialists in the field of development economics should do this. It may also be worthwhile to look at the most effective way to provide micro-credit loans to the community of Apo and which method/organisation/ bank will be the most suitable to provide these loans for the local context of Apo Island.

Research concerning the improvement of the conservation activities should encourage a study of what the reason is for the relative unpopularity of the Marine Sanctuary as a dive

³¹ Professional Association of Diving Instructors

site and whether this is related to the extra fee that has to be paid. The exact damage caused by snorkellers and the use of fish traps on the coral reef of Apo is also an area where research is needed. Moreover, research is needed to determine the exact tourism carrying capacity on the island.

Together these topics may provide answers to questions that could prove to be beneficial to the community of Apo Island. Outcomes can be used in order to create a balance between conservation and development and between fishermen and tourists to ensure a sustainable future development for the children of Apo Island.

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Annexes:

Annex 1: A map of the Philippines



Annex 2: A description of the Dive Sites on Apo Island

Here is a list of the dive sites:

Chapel

Boluarte

Largahan

Rock point

Sanctuary

Mamsa point (closed to divers)

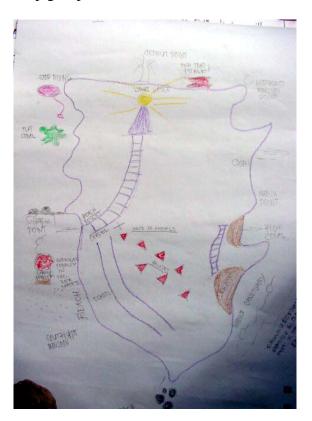
Kan-u-ran

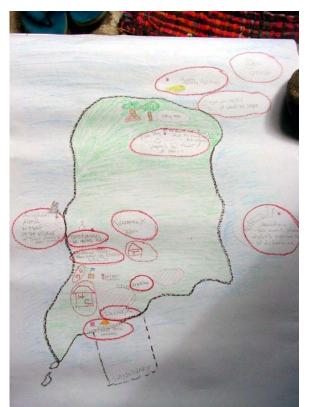
Coconut

Cogon

Annex 3: PRA mapping exercises on 24th of November 2004

Map group 1 :





Map group 2:



Map Group 3:

Annex 4: Tables showing Analysis of Responses to Questions of semi-structured interviews

Questions asked during semi-formal interviews:

1. Responses to the question: Is tourism on Apo Island a good or bad development?

Good	Bad	Undecided	Total
29*	5	21	55

Within this group, a further 28, thus 95% believed that tourism is not all good and certainly does have its drawbacks and that the current situation is not optimal.

2. What are the positive effects of tourism on Apo Island?

- 3. What are negative effects of tourism on Apo Island?
- 4. What are the opportunities related to tourism on Apo Island
- 5. Whose responsibility is it to solve tourism related problems?

Community	Outsider groups	Undecided	Total
institutions, CBO or			
community leaders			
21	1	0	22

6. Who is who is responsible for creating the tourism related business opportunities for local residents of Apo Island was as follows

Community institutions, CBO or community leaders		Private sector	Undecided	Total
33	10	6	6	55

7. Responses to the question when asked whether they would like to work in the tourism industry (either formal or informal), 75% of the respondents answered yes:

Yes	No	Undecided	Total
42	7	5	55

8. What should the role of the community should play in maximising tourism related business opportunities are?

Annex 5: An Overview of the Time frames of the Research Design:

Research stage	Time in months
Literature reviews	5
Identification of suitable case	2
study and making initial	
contact	
Writing of research proposal	3
Establishing rapport	4
Participants selections	2
Data Collection	5
Data analysis and interpretation	5
Final integration: Research	8
report (part time)	

Annex 6

Details research assistant

Assistant details:

Hans Homveld

Dutch Nationality

Profession during time of research: working as a volunteer on Apo.

Regular profession: Commercial Analyst

There were no problems regarding the research assistant. He supported me in the research in a valuable way. During the PRA exercises he conducted the relaxing yoga exercises during the PRA sessions; as women doing such movements as illustration would be frowned upon. These yoga exercises were thoroughly enjoyed and set the trend after the breaks in order to get everyone "thinking" again. He was also responsible for taking photographs during research activities.

Annex 7 Matrix: Problems and Dreams, solutions, skills needed, actors, first action points

ALC: NOT			
Problem	what to do.	What skills.	Who will First
Fishtrajos	EDUCATE GUID	D	DIVE RANGER CALL MEETI WITH DIVE QU
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Air fill	Pass Ordinance		Brgy. Guna) Meetin
Daghan divers Jesturb	Pass Ovolinginge	2	BJJGounail Meetin
vondalism	Educate for	rent	PAME OFFICE meeting
T-shirt ladies No place	provide Areq	- Andrean	BC/PAMB Meetin
preams			
.Park	Planning		DENR, Community Meeting
· protect resources	continuos educa	tion	Community
. Museum	Planning/Funds	iounce	Lauis meetin
· Educate tourist	. Educate touro	4	PAMB office + lyie
. Native shep	Phinning/Fund:	some.	Women's top meet
. Native restauran	H NI		11 11
and			
Standard Street		The state of	

Annex 8. Overall Livelihood impact analysis of tourism and the role of the Apo community

Livelihood impact	Benefit Losses, Problems		Community role
1. Skills, access to education	Х		Х
2. Natural resources		X	Х
preservation (also access to,			
use/productivity of local			
community)			
3. Community organization,		X	Х
cohesion, pride			
4. Access to investment funds,		Х	Х
Infrastructure:			
5. – Water		Х	
6 electricity	Х		Х
7 roads	Х		Х
8. Access to information	Х		Х
9. Funds for the community	Х		Х
Other livelihood activities:			
10. Markets, market		X	
opportunities			
11. Influence over policy	Х		Х
makers			
12. Jobs	Х		Х
13. Opportunities for informal	Х	X	
sector			
14. Opportunities for small		X	
businesses			
15. Access to credit for		X	
entrepreneurs			
16. Casual labour opportunities	Х		
17. Household income	Х		
18. Local culture		Х	Х
19. Overall vulnerability of		X	Χ
households			

Annex 9: Final Planning for "CRM and Ecotourism" Workshop

Log sheet with names, ages and Purok #	5 min	utes
09:30 PowerPoint explaining ecotourism why tourists come to Apo have positive and negative -how should it/ can it be Thailand example Apo CRM example Workshop purpose, objectives, flow of activities Plan for tourism for future of Apo Any questions?	10 mi	inutes
3. Musical chairs- game to divide group into 4 groups Need: cassette player, tape with music	15 mi	inutes
Mapping exercise 10:00 in the 4 groups draw a map of the island and mark all the problems related think on the land and the waters around Apo Use symbols for boats/visitors etc. choose facilitator and interview the map choose the best map	60 ed to to	minutes urism
BREAK and snack 11:00	15	minutes
YOGA EXERCISES 11: 15	10	minutes
4. Draw a new map with all the problems that are relevant in red 11:25	30	minutes
5. Everybody together make a "dream" map 11:55	45	minutes

-the drawer of the best map will be the drawer/facilitator of the dream map.
- FIRST draw the dreams/ opportunities in blue
- change every problem into a dream plus other additional dreams
-how can the community dream to control tourism?
-what should tourism look like in future?

Solutions to map

45 minutes 12:40

Map problems and what needs to be done, what skills needed, who assigned to, how evaluated??

Dreams	What to do	What	skills	Who will do it	First step
		needed			

LUNCH provided

Annex 10: Additional information on the Dive Ranger Programme, Apo Island

1. The objectives and scope of the Apo Island Dive Ranger programme

The Dive Ranger Programme was in the start–up phase for the duration of the time of my research on Apo Island. The objectives of the programme were to help promote coral reef conservation, sustainable economic growth and poverty reduction on Apo Island through the following measures:

- Promoting the continued well-being of the reef through maintenance of the reef

- Promoting ownership of the reef by the local community

- Providing additional work and income for the community from diving activity

- Educating visitors through monitoring, briefing and giving support to incoming dive groups

- Enforcing Barangay, PAMB, Municipal and National rules and regulations (Lewis et al 2004a)

These objectives lead to the formulation of the future roles, responsibilities and tasks of the group of Dive Rangers.

2. The role and responsibilities of the Apo Dive Rangers

The definition of the roles and responsibilities of the Dive Rangers was a result of talks between the Barangay captain of the community and the private sector partner. They can be listed as follows:

- Briefing incoming groups of divers on good diving practice

- Ensuring that Dive Guides properly supervise their divers

- Ensuring that Dive Operators know and adhere to Apo requirements

- Training Dive guides on Apo dive practices and rules

- Observing and reporting boat captain behaviour

- Training boat captains on Apo dive practices and rules

- Diving with or visiting incoming groups of divers and observing, recording and reporting of irresponsible diver behaviour

- Monitoring fish traps to see whether they have been damaged

- Stopping behaviour that is not allowed and explaining the rules to divers

- Stopping behaviour which will damage the reef or marine life thereof

- Observing the behaviour of Dive Guides from outside operators

- Maintenance of mooring bouys
- Regular garbage clean-ups of the reef

- Briefing divers on Apo dive practices

(Lewis, Rhodes and Pascobello 2004b)

This list of duties and responsibilities are quite ambitious if one bears in mind that the participants in the Programme would be fishermen that do not have the diving, language and organisational skills in order to perform these duties. The training programme had to be comprehensive and thorough in teaching the local fishermen these new skills in order to be able to perform these duties effectively. The question now arises how the community would be able to train these Dive Rangers to fulfill these duties and whether they would have the capacity to do so.

3. The capacity of the Apo community and partners to implement the Dive Ranger Programme:

In order to get sufficient training and qualifications to fulfil the above mentioned duties, a gradual training programme based on the international PADI ³² diver educational programme was to be conducted by qualified and experienced PADI Instructors, using local support to ensure the crossing of language barriers. It is obvious that the locals alone would not be able to conduct such an intensive training programme by themselves. They need to learn diving skills that they do not possess, but some knowledge like for instance the difficult and strong currents around the island, they already know intimately. Therefore, the training programme would be a private and public sector sponsored training, Paul's Community Dive School would provide most of the dive equipment, dive tanks etc with some equipment of the local government made available for use. The two instructors of the dive school would volunteer their time together with three Dive Masters in order to conduct the training successfully.

The opportunity of taking part in the Dive Ranger Programme myself, gave me a chance to take part in Participant observation. One of the main advantages that this Participant observation provided in this research is its flexibility. Fieldwork was a continual process of reflection and alteration of the focus of observations in accordance with analytic developments. It permitted me to witness people's actions in different settings and to subsequently ask additional questions concerning motivations, beliefs and actions related to the role of the community in development initiatives and whether they stemmed from conservation or development beliefs, or a combination of the two.

The plan was for the Dive Rangers to become operational in January 2005 to be introduced to Dive operators gradually. At this point the institutional regulations were passed in the form of an ordinance by PAMB: giving the dive rangers the authority to act on when someone infringed on these laws.

At first, the Dive Rangers would only collect information in order to get a general view of the activities that are going on around the island. How often does damage occur, or bad diver responsibility and under which dive operators and which nationalities? (Lewis et al 2004a, 2004b) The Dive Rangers would play the role of researchers regarding this issue. This information can then be used in order to design the further project to adapt it according to topical information and the Dive Rangers can start getting more

³² PADI is the acronym for Professional Association of Diving Instructors; an American based organisation which constantly ensures that its members adhere to the highest standards at all times.

responsibility: briefing groups on the rules and regulations of the island, telling the stories of conservation and then accompanying groups to observe and later guide these groups for additional fees. The plan was for the programme to become, at this point, self sustaining, and providing extra income to the islanders. In this way the experience for tourists coming to the island is more about sharing, learning and understanding why the rules are being imposed and then being aware of their actions under and above water.

4. The legal positioning of the Dive Rangers of Apo Island

In order to have any real effect, authority and impact, it was important for the Dive Rangers to have legal authority which would give them the base and confidence to act on wrongful behaviour, in order to enlarge the role that the community can play in the regulation of tourism behaviour. Regulations had to be specified and details about the sanctions that the Rangers may impose, from a warning to the removal from the water to a ban from diving, clarified. These were the institutional responsibility of PAMB.

Additionally, there had to be clarity on who would be empowered to enforce laws and which steps should be taken when irresponsible diver behaviour is observed. It should be an easily understandable process that could be recognised immediately such as using yellow and red cards like in football matches. At the point of research these processes still needed to be decided on and formalised.

Another decision that had to be made was who should be accompanied by the dive Rangers? The following points were considered important:

All operators should be accompanied at some time

Those operators with critical reports in the past should be accompanied first

Dive sites with fish traps & the fish sanctuary should be frequently monitored Big group sizes used

The visitors centre will coordinate and assign Dive Rangers to groups

Dive Rangers will keep complete records, matching a template and carry cameras There has to be a management structure, - with a head of dive rangers which will fall under the leadership of the Barangay captain

(Lewis et al 2004a:10)

5. Discussion of the strong and weak points of the Dive Ranger Programme on Apo Island :

We have seen in chapter 3 that tourism in fragile coastal areas is a big source of concern which leads to discussions on this subject during the UN Earth Summit. Impact that tourism has is difficult to measure in all areas. For example it is easier to detect damage, in a forest in clear view of every passer-by than at the hidden underwater coral reefs.

Sometimes this damage can be easily detected by fishermen of a community recognising signals from the behaviour of fish. Gradual deterioration in reef condition and health, can only be detected when constant monitoring is provided. This is why the Dive Ranger

programme as described above is such an effective innovation implemented by the Apo community. The programme most certainly could be replicated by other communities reliant on coral reefs and might do a lot for coral reef conservation and sustainable tourism development in the future. As a result of this replication potential, I find it important to identify (even in this pilot programme stage) what the strong and weak points were of the programme at this early stage (only 1,5 year form the start) and what the role of a given community will be in designing such programmes in the future.

6. Strengths of the Apo Island Dive Ranger programme:

The strong points of the Dive Ranger Programme on Apo Island are:

a) The community took concrete action to conserve the coral reef. This contributes to a feeling of empowerment by the community: 'we monitor what those tourists are doing underwater'

b) The feeling of self-worth increased amongst the Dive Rangers from having a proper job. Moreover the programme contributed to new skills learnt by local fishermen, illustrated by the interview with a young fisherman from Cogun.

"I have a responsibility as a dive ranger to take care of the coral reef and the community of Apo have to have trust in us. Therefore we are all grateful that Paul's Diving sponsored this training and that the tourists volunteered to help us. With these skills we can protect our reef and earn a living when the programme starts and we are getting paid. Before we could do nothing, because only 2 people in the community knew how to dive and they were dive guides and always busy. I also need this very much because I am very poor and have 2 children to feed."

c). The programme leads to additional income in the community. In an interview conducted in September 2004 one of the Dive Rangers told me the following:

" It is good that tourists come to Apo. I went away to work in Manila, but it is terrible. So many people and everybody living in dumps. I came back to Apo, hoping to find a job in one of the two resorts. Through the Dive Ranger Programme I learnt how to dive, which will give me responsibilities for 10 days in the month. Now I also have the opportunity to work as a Dive Guide at Paul's diving next to my Dive Ranger responsibilities. I look after the coral reef when I guide tourists and they keep within the rules: and I am earning an income.(Ronald 2004)"

d) The community participation was present from the beginning in the formulation of the project, the formulation of the goals, what skills should be learnt, and in the implementation of the project.

e) The programme makes effective use of a multi-player partnership: private sector, local government and community. Funding for training was acquired from the private sector.

This sector has taken social and environmental responsibility related to its core business. Institutional management and later funding for the salaries came from the PAMB office, leading to capacity building of the institution and direct impact on the community. This means that money received from tourism fees sponsored a part of the Programme.

f) Tourists were attracted by the partners to get involved in the training programme This last point is not easy for poor local communities to arrange, as, Mr Jo-jo told me in an interview:

"I am in charge of the marine sanctuary in Masaplod (on the mainland Negros opposite Apo Island). We also want to train locals like on Apo Island, when the coral has grown back there. People come to dive to look at seahorses and green turtles. We have a problem with training though, on Apo they were very lucky because it is a tourist destination already and tourists volunteered their time to share their skills with the locals. It is wonderful. Here the dive operators all want to charge a lot of money to train us, under the cloak of really giving us a professional training, but I know that on Apo the Dive Rangers received the professional training, because I was there, in Masaplod this guy only wants to make money from us.(Jo-Jo 2004)"

Moreover, the programme established the sharing of skills and learning experience with foreigners. This is in line with the concept of sharing in the PRA methodology as described by Chambers (Chambers 1994).

g) The programme combines conservation activities and the regulation of tourism activities with the creation of direct employment, leading to an activation of the local economy and less pressure on the coral reef. This creates a win-win situation.

h) The programme increases the amount of money that flows directly to families as income, hence increasing local purchasing power. 10 fishermen and their families get an additional income of P 2000 per month, directly increasing the purchasing power of the community with P 20 000 per month, which otherwise would have been spent on development activities anyway(through PAMB), but would not have had direct economic impact as well)

i) The programme promotes conservation of the coral reef through tourist education and active monitoring.

j) The programme is broadening/ extending the indigenous knowledge system on Apo Island by making use of new technology in particular, dive technology. Therefore, the programme is contributing to an adaptation of the knowledge system to the situation where tourists form a part of daily life

Apart from these strengths of the Programme there were also several apparent weaknesses that can be identified whilst reflecting on the Programme.

7. Lessons to be learned from the Dive Ranger Programme on Apo Island :

a) The Apo community had involvement from the start. However, during the time of initialisation and during the negotiations of certain terms and conditions, the process was dominated by the private sector. The community was "thankful" and dependent on the outsider help. This dependency syndrome should be avoided in future initiatives and the role of the Apo community in future negotiations concerning development and conservation projects should be strengthened.

b) There was no formal agreement of responsibilities and commitments between the partners and no terms of reference to fall back on. The whole programme was dependent on the verbal commitment of a private sector player. The example of Apo Island showed that this may lead to complications when personal relations change or tensions arise.

d) During the duration of 9 ¹/₂ months, the Dive Rangers spent time on the programme without getting any form of remuneration for their contributions (however with the training that they received for free, effectively this amount of time can be determined as 4 months). The trainees should have been given small wages, or even rice as compensation from PAMB, this will stimulate motivation.

e) The lack of own equipment and office. If this programme is ever replicated it is recommended that this is purchased beforehand, funding or a loan will be needed for this or a contract for renting /free usage is made with the private sector). Another lesson is that it is of vital importance to have enough money for such a programme. In September of 2006 the project was still at approximately the same stage of operation as in beginning 2005 as a result of a lack of funding (Refer to section 6.8.1 for more detail).

The positive and negative lessons learned form the specific example of the Dive Ranger programme on Apo Island has been explained. What lessons can be learnt, however, regarding the role of the community in designing such local specific programmes such as this Dive Ranger programme in order to preserve coastal resources?

8. The community's role in designing local tailor-made programmes for sustainable tourism development and conservation

The following lessons can be taken from the experience and role of the Apo Island community in the Apo Island Dive Ranger Programme:

Community leaders need to look into possibilities with private/public partners involved in order to come up with creative solutions for combining conservation and tourism development.

Solutions such as the Dive Ranger Programme should be encouraged in communities dependent on coral reefs: combining local stewardship, local employment, conservations and the monitoring of tourism

Community leaders need to make sure that clear agreements are made and that these are formalised in contracts with the several partners in development projects.

Programmes need to be tailor-made to local conditions and culture. In this the community must play a major role in all parts of the process. This will enable specific solutions to manage tourism like in the case on Apo Island.

Sustainable funding is needed, such programmes might be started up with grants, however self-sufficiency in the long term is vital for the continuance of the initiative.

Incorporating outsiders from the private and public sector, volunteers and tourists who are most knowledgeable about the subject of tourism can lead to shared learning and experiences.

Communities must learn how to utilise those specialisations that outsiders have, learn from it and it, adapt it and then incorporate lessons learned in the local knowledge system to ensure that these skills won't be lost in the future

This discussion and identification of the lessons learned from the Dive Ranger Programme on Apo Island stipulate the importance of a bigger role of local communities in all initiatives that concern tourism activities.