

Monograph

**Regional Study on Social Dimensions of  
MPA Practice in Central America:  
Cases Studies from Honduras, Nicaragua,  
Costa Rica and Panamá**

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Edited by CoopeSoliDar RL

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**International Collective in Support of Fishworkers**

[www.icsf.net](http://www.icsf.net)

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## Acronyms

ACG	Guanacaste Conservation Area
ANAM	National Authority of the Environment, Panamá
APROCUS	Fishers Association of La Rosita and Cuero y Salado
ARAP	Authority of Aquatic Resources of Panamá
ASOBUCA	Association of Divers of Cuajiniquil
ASOPARQUE	Association for the Development of Ballena Marine National Park
ASOPESPA	Association of Fishers of Palito, Chira Island
CDB	Convention on Biological Diversity
CGG	Guna General Congress
DIGEPESCA	General Direction of Fishing, Honduras
FENOPEA	National Federation of Artisanal Fishers
FUCSA	Foundation of Cuero Salado
ICF	Institute of Forest Conservation
INCOPESCA	Costa Rican Institute of Fishing and Aquaculture
INPESCA	Nicaraguan Institute of Fishing and Aquaculture
MARENA	Ministry of Environment and Natural Resources of Nicaragua
MINAET	Ministry of Environment, Energy and Telecommunications of Costa Rica
PNMIB	Bastimentos Island Marine National Park
PNMB	Ballena Marine National Park
SINAP	National System of Protected Areas of Nicaragua
SINAC	National System of Conservation Areas of Costa Rica
UPESABO	Artisanal Fishers Union of Bocas del Toro



## PROLOGUE

CoopeSoliDar RL<sup>1</sup> and the International Collective in Support of Fishworkers (ICSF) have joined hands to engage in research work of great interest to the Central and Latin American regions. ICSF is an international non-governmental organization that works to support fishing communities and fishworker organizations, and empower them to participate in fisheries from a perspective of decent work, equity, gender-justice, self-reliance and sustainability. CoopeSoliDar RL and ICSF have formed an alliance to address these issues in Latin America in order to defend the small-scale, artisanal fisheries sector and the well-being of fishing communities.<sup>2</sup>

This research deals with several issues that CoopeSoliDar RL has been working on for many years, namely, conservation through marine protected areas (MPAs) and coastal marine communities, specifically keeping in mind issues of equity, just and equitable distribution of benefits, human rights, and cultural identity as the corner stones for social resilience in the face of developmental challenges. ICSF has engaged in research to bring to light. This collaborative research intends to throw light on the social dimensions of MPAs in Central America and to work towards more equitable marine conservation, which promotes conservation while respecting human rights and the well-being of communities in the coastal-marine space.

## Notes

- 1 CoopeSoliDar RL ([www.coopesolidar.org](http://www.coopesolidar.org)) is an initiative led by a group of professionals seeking points of convergence between conservation and development, especially for local communities. The technical team for this research included Vivienne Solis, Marvin Fonseca and Daniela Barguil (CoopeSoliDar RL) and Mariela Ochoa, Edgar Castaneda and Geodisio Castillo (independent consultants).
- 2 Vivienne Solis, the General Manager of CoopeSoliDar RL, is an ICSF Member from the Latin American region.



## PREFACE

As the conservation of marine resources becomes a growing global priority, the concept of marine protected areas (MPAs) is being widely propagated. Since most MPAs are located in coastal areas of great biodiversity, their development has direct relevance and concern to the livelihoods, culture and survival of small-scale and traditional fishing and coastal communities.

An MPA is considered to be any coastal or marine area in which certain uses are regulated to conserve natural resources, biodiversity, and historical and cultural features. The Convention on Biological Diversity (CBD) defines an MPA as “any defined area within or adjacent to the marine environment, together with its overlying waters and associated flora, fauna, and historical and cultural features, which has been reserved by legislation or other effective means, including custom, with the effect that its marine and/or coastal biodiversity enjoys a higher level of protection than its surroundings”.

As an area-based management tool, MPAs are considered useful in implementing both the ‘ecosystem approach’ and the ‘precautionary approach’, since their design involves managing pressures from human uses by adopting a degree of protection, which can range from strict protection, where all use activities are barred, to less stringent measures like sanctioning areas where multiple uses are allowed and regulated.

In 2004, the Seventh Meeting of the Conference of Parties (COP7) to the CBD agreed that marine and coastal protected areas, implemented as part of a wider marine and coastal management framework, are one of the essential tools for the conservation and sustainable use of marine and coastal biodiversity. The meeting noted that marine and coastal protected areas have been proven to contribute to (a) protecting biodiversity; (b) sustainable use of components of biodiversity; and (c) managing conflict, enhancing economic well-being and improving the quality of life. Following on this, Parties to the CBD subsequently agreed to bring at least 10 per cent of the world’s marine and coastal ecological regions under protection by 2012. In 2006, only an estimated 0.6 per cent of the world’s oceans were under protection.

Protected areas (PAs) need to be seen not just as sites copious in biodiversity but also as regions historically rich in social and cultural interactions, which often have great importance for local livelihoods. In practice, however, MPAs have increasingly become tools that limit, forbid and control-use patterns and human activity through a structure of rights and rules. While numerous studies have examined the ecological and biological impacts of MPAs, few have focused on their social implications for communities and other stakeholders in the area who depend on fisheries resources for a livelihood. A particular MPA may be both a “biological success” and a “social failure”, devoid of broad participation in management, sharing of economic benefits, and conflict-resolution mechanisms. Clearly, for MPAs to be effectively managed, it is essential to consider the social components needed for the long-term benefits of coastal communities.

It is in this context that the International Collective in Support of Fishworkers (ICSF) commissioned studies in ten countries to understand the social dimensions of implementing MPAs, with the following specific objectives:

- to provide an overview of the legal framework for, and the design and implementation of, MPAs;
- to document and analyze the experiences and views of local communities, particularly fishing communities, with respect to various aspects of MPA design and implementation; and
- to suggest ways in which livelihood concerns can be integrated into the MPA Programme of Work, identifying, in particular, how local communities, particularly fishing communities, could engage as equal partners in the MPA process.

The studies were undertaken in Brazil, India, Mexico, South Africa, Tanzania, Thailand, Honduras, Nicaragua, Panama, and Costa Rica. Besides the Mexico study, the rest were based on primary data collected from selected MPA locations within each country, as listed in the table opposite.

The studies were undertaken in the context of Programme Element 2 on governance, participation, equity and benefit sharing in CBD’s Programme of Work on Protected Areas (PoW PA, also referred to as PA PoW), which emphasizes the full and effective participation of local and indigenous communities in protected area management. Taken together, the studies provide important insights into the MPA implementation process from a fishing-community perspective, particularly on issues of participation.

It is clear from the studies that the most positive examples of livelihood-sensitive conservation come from Brazil, where communities are in the forefront of

demanding, and setting up, sustainable-use marine extractive reserves (MERs). Communities there are using PAs to safeguard their livelihoods, against, for example, shrimp farms and tourism projects. The Brazil study also highlights the many challenges faced in the process, which are related, among other things, to the need for capacity building of government functionaries and communities; funding; strong community/fishworker organizations; an interdisciplinary approach; and integration of scientific and traditional knowledge.

In Panama and Costa Rica some efforts have been made to put in place participatory processes. The government of Panama has legally recognized the rights of indigenous peoples to their land, as well as the right to the access and sustainable use of natural resources for their livelihoods in the Comarcas regions. In Costa Rica, Marine Responsible Fishing Areas were introduced as a new category in 2008, where fishing activities can be regulated with the participation of coastal communities to ensure the long-term use of fishery resources. While communities have taken the initiative to declare several responsible fishing areas (Golfo Dulce, Tárcoles, Chira Island and Caballo Island), no participatory management process has, however, been initiated. The responsible fishing areas thus continue to be government-controlled with very little or no involvement of communities and other users.

Country	Case Study Locations
Brazil	<ul style="list-style-type: none"> <li>• Peixe Lagoon National Park, Rio Grande do Sul</li> <li>• Marine Extractive Reserve (MER) Mandira, São Paulo</li> <li>• Marine Extractive Reserve (MER) Corumbau, Bahia</li> </ul>
India	<ul style="list-style-type: none"> <li>• Gulf of Mannar National Park (GOMNP) and Gulf of Mannar Biosphere Reserve (GOMBR), Tamil Nadu</li> <li>• Malvan (Marine) Wildlife Sanctuary, Maharashtra</li> </ul>
South Africa	<p>Five MPAs in three of the country's four coastal provinces, namely:</p> <ul style="list-style-type: none"> <li>• Langebaan Lagoon MPA</li> <li>• Maputaland MPA</li> <li>• St Lucia MPA</li> <li>• Tsitsikamma MPA</li> <li>• Mkambati MPA</li> </ul>

Tanzania	Mafia Island Marine Park (MIMP)
Thailand	<ul style="list-style-type: none"> <li>• Had Chao Mai Marine National Park, Trang Province, Andaman Coast</li> <li>• Ra Island, Prathong Island, Prathong Sub-district, Kuraburi District, Phang Nga Province, Andaman Coast</li> </ul>
Honduras	<ul style="list-style-type: none"> <li>• Islas de la Bahia-Guanaja Marine National Park</li> <li>• Cayos Cochinos Marine Archipelago Natural Monument</li> <li>• Cuero and Salado Wildlife Refuge</li> </ul>
Nicaragua	<ul style="list-style-type: none"> <li>• Chacocente Wildlife Refuge</li> </ul>
Costa Rica	<ul style="list-style-type: none"> <li>• Guanacaste Conservation Area</li> <li>• Ballena Marine National Park</li> <li>• Golfo Dulce Responsible Fishing Area</li> </ul>
Panama	<ul style="list-style-type: none"> <li>• Nargana Protected Area in the Comarca de la Biosfera Guna-Yala</li> <li>• Bastimentos Island Marine National Park in Bocas del Toro</li> </ul>

On the other hand, the studies from India, Mexico, South Africa, Tanzania, Thailand, Honduras, and Nicaragua indicate that communities do not consider themselves equal partners in the MPA process. While, in all cases, there have been recent efforts to enhance community participation, in general, participation tends to be instrumental—communities are expected to participate in implementation, but are not part of the process of designing and implementing management initiatives. The studies also document clear costs to communities in terms of livelihood options lost, expulsion from traditional fishing grounds and living spaces, and violation of human/community rights. The affected communities regard alternative livelihood options as providing limited, if any, support, and, in several cases, as in South Africa, Tanzania and Thailand, they do not perceive substantial benefits from tourism initiatives associated with the PAs. There tends to be a resistance to MPAs among local communities, a mistrust of government and non-governmental organizations (NGOs) that lead such processes, and violations of rules and regulations, undermining the effectiveness of the MPA itself.

The studies in this series of SAMUDRA Monographs stress that there is a strong case for putting in place, or strengthening, a legal framework for supporting community rights to manage resources, building the capacity of both governments and communities, strengthening local organizations, and enhancing institutional co-ordination. They also highlight the need for more, independent studies on MPA processes from the community perspective, given that the few existing studies on social dimensions of MPA implementation have mainly been undertaken by MPA proponents themselves. Where clear examples of violations of community rights, and unjust costs on communities are identified, easily accessible redressal mechanisms need to be put in place, nationally and internationally.

Empowering indigenous and local fishing communities to progressively share the responsibility of managing coastal and fisheries resources, in keeping with the CBD's PA PoW, would undoubtedly meet the goals of both conservation and poverty reduction. This is the challenge before us. The future of both effective conservation and millions of livelihoods is at stake.

**Chandrika Sharma**

Executive Secretary, ICSF



# **Regional Study on Social Dimensions of MPA Practice in Central America: Cases Studies from Costa Rica, Nicaragua, Honduras and Panamá**

## INTRODUCTION

**T**his research focuses on the social dimensions of marine conservation, and makes an assessment of the experiences of coastal and fishing communities with regard to the governance of MPAs in Central America, based on case studies from Honduras, Nicaragua, Costa Rica and Panama.

It examines the national contexts of the above countries in relation to the governance of MPAs. Furthermore, it analyzes the social impacts of MPAs on coastal communities by gathering the experiences and the voices of the communities and institutions involved, and reflects on how to build bridges in the search for forms and models of conservation that respect human rights and which are able to successfully integrate into local development efforts without affecting cultural and/or social patterns.

To this end, this monograph looks at nine case studies across the region: in Honduras, the Islas de la Bahía-Guanaja Marine National Park, the Cayos Cochinos Marine Archipelago Natural Monument, and the Cuero and Salado Wildlife Refuge; in Nicaragua, the Chacocente Wildlife Refuge; in Costa Rica, the Guanacaste Conservation Area, the Ballena Marine National Park and the Golfo Dulce Responsible Fishing Area; and, in Panama, the Nargana Protected Area, in the Comarca de la Biosfera Guna-Yala, the Bastimentos Island Marine National Park, and Bocas del Toro.

The selection of cases was done taking into account the previous experiences of CoopeSoliDar RL from its work across the region. CoopeSoliDar RL has already worked in some of the areas where progress has been achieved in terms of learning processes around issues of importance in Central America. The MPAs were also selected on the grounds of their biological, social and cultural wealth. Each of these marine areas has particular features from which worthwhile lessons may be learned, and which provide useful experiences for this research and for the region as a whole.

The research results allow us to draw meaningful conclusions regarding the implementation of policies on marine conservation and protected areas in Central America, where there is a need to strengthen marine conservation and contribute to the social inclusion and the well-being of coastal communities and fishworkers. It is our hope that this document will serve as food for thought and input to help transform the experiences in marine conservation and protected areas in a positive manner, and in ways that foster marine conservation based on human rights, and that promote equity, and gender- and inter-generational equality.

Some important issues for consideration highlighted by this study include:

- At the Central American regional level, marine conservation has failed to build bridges with local and social needs, so the models of conservation that prevail lack equity and genuine participation, with an absence of equitable sharing of the benefits derived from marine conservation.
- The study analyzed several cases with different governance models, none of which has provided local communities with spaces for participation, despite the many assertions made by the countries considered in this study that such participation is a key element in the implementation of MPAs.
- Coastal communities in the region have been excluded from marine-conservation processes.
- The general trend is that although the authorities recognize the need and relevance of community involvement, the relevant institutions lack the instruments needed to work with communities, or have sometimes chosen a misguided approach to participation, limited to providing 'spaces for consultation' that fail to address power imbalances.
- Communities, in general, claim to be affected by MPAs, and feel that they have been deceived throughout the initiation and implementation processes, and that their human rights have not been fully respected.
- The lack of co-ordination between public institutions, and the absence of a holistic vision of marine-conservation processes has limited the



participation of civil society and the development of an ecosystems-based approach to management.

- At present, other sectors are competing with the artisanal fishing sector; they include tourism, sport/recreational fishing, and industrial and semi-industrial fishing. Also external factors like pollution have severe impacts on MPAs and associated communities, which are way beyond the control of coastal communities, local organizations and authorities.
- Some important issues that are common to all the case studies deserve special attention when promoting marine conservation, namely, cross-border marine areas; gender; women and youth; access rights to resources, information and participation; respect and recognition of social and cultural aspects of fishworkers' lives; tourism in protected areas; and the equitable sharing of benefits.
- Restricted access to resources and traditional fishing areas is one of the greatest costs of marine conservation faced by the communities in the regions of the case studies. However, the study shows that the access is restricted not only by MPAs but by other factors, such as, industrial fishing, commercial shipping routes, tourism development, boundaries and national borders.
- In view of this general situation, it is difficult to see how communities will be able to cope with new challenges, like climate change.
- Central America is confronted by reduced social resilience in these coastal areas, which threatens food security and the social and cultural well-being of communities.

## OBJECTIVES

The general objective of this study is to document the experiences of the coastal artisanal fishing communities in the implementation and governance of MPAs in four Central American countries, namely, Honduras, Nicaragua, Costa Rica and Panama.

The specific objectives are:

- Engage in participatory research to show the social impacts of MPAs in Central America as drawn from the experiences and opinions of the coastal communities of artisanal fishworkers.
- Delineate positive experiences, and identify obstacles in regard to the involvement/participation of coastal communities and men and women artisanal fishworkers in contributing to marine conservation and MPAs.

- Document the important lessons learned, and the key elements needed, to integrate fishing and coastal communities in conservation efforts.
- Draw out the key conceptual and practical aspects of the links between MPAs and coastal and artisanal fishing communities in the region in order to achieve greater equity and inclusion in marine conservation.

## METHODOLOGY

To carry out this research, a bibliographical review was conducted to understand the national contexts that influence marine conservation in Honduras, Nicaragua, Costa Rica and Panama. We analyzed the institutional structures, instruments and legal frameworks for the governance of MPAs, as well as some examples of community initiatives for marine conservation.

Before undertaking the work at the local level through the methodological tools chosen, we applied the instrument of prior informed consent (PIC) in each of the areas, incorporating both the institutional management structures and local stakeholders.

Three instruments were used for collecting primary information and gathering the opinions of local people: (a) a structured questionnaire for local stakeholders (community members and fishworkers); (b) semi-structured interviews aimed at leaders and key officials; and (c) focus group discussions at meetings with local fishing organizations.

Nevertheless, not all three instruments were applied in every country. Their use depended on the context and the research criteria in each case. For instance, in the case of Gunayala, Panama, we used a different methodology adapted to the indigenous context of that area, which consisted in talking with community members, rather than conducting interviews, which were adapted by the Centre for Environmental and Human Development (CENDA) into the language and the reality of the Guna people from the Comarca region.

The questions in the consultations dealt with social impacts; historical reconstruction of the processes behind the creation of MPAs; governance and participation, based on the experiences of communities; views of the members of coastal fisheries communities on how a more inclusive future should be forged in these MPAs; and suggestions for how to better integrate these communities into marine-conservation efforts in an equitable and just manner (see Appendix 1).

The information from interviews, wherever they were carried out (namely, all the case studies in Honduras, the case of Cuajiniquil in Costa Rica, and the Bocas del

Toro in Panama), was analyzed using the spreadsheet software Excel, following a methodology developed by CoopeSoliDar RL to quantify the data collected.

The research was conducted between October 2011 and May 2012. During the months of March through June 2012, CoopeSoliDar RL worked to integrate this final document.

## ANALYTICAL FRAMEWORK

According to Resolution 17.38 of the IUCN General Assembly, 1988, later on ratified under Resolution 19.46, 1994, an MPA is defined as “any area of intertidal or subtidal terrain, together with its overlying waters and associated flora, fauna, historical and cultural features, which has been reserved by legislation to protect part or all of the enclosed environment.”

In recent years, marine conservation and MPAs have achieved prominence globally. MPAs may be set up under different governance schemes. For the purposes of this paper, we will use the concept of governance from the World Parks Congress in Durban, regarding protected areas and conservation: "Governance is construed as the rule-making, decision-making and accountability process which deals with issues related to power, relations, and responsibility"<sup>1</sup>. Also, the IUCN's governance categories for protected areas will be used as reference (See Appendix 2).

Good governance has been described by Grazia Borrini-Feyerabend (2004)<sup>2</sup> as the compliance with several criteria, four of which are fundamental to this research<sup>3</sup>:

**Do no harm:** The processes for managing protected areas must ensure that no damage is caused, at any of the management stages, to the indigenous, rural, and local communities and moving population groups that live around, or are associated with, protected areas. In other words, the costs of conserving a protected area should not be borne by the most impoverished or marginalized sectors, whether directly or indirectly. For example, creating a protected area should not imply that traditional communities have to be displaced. By the same token, creating a protected area should not limit the opportunities for development and traditional use of natural resources by the existing local groups. It is important to take account of those traditions and activities carried out by women, which relate to managing resources, as a way to enhance their knowledge and promote their own well-being as well as that of their families.

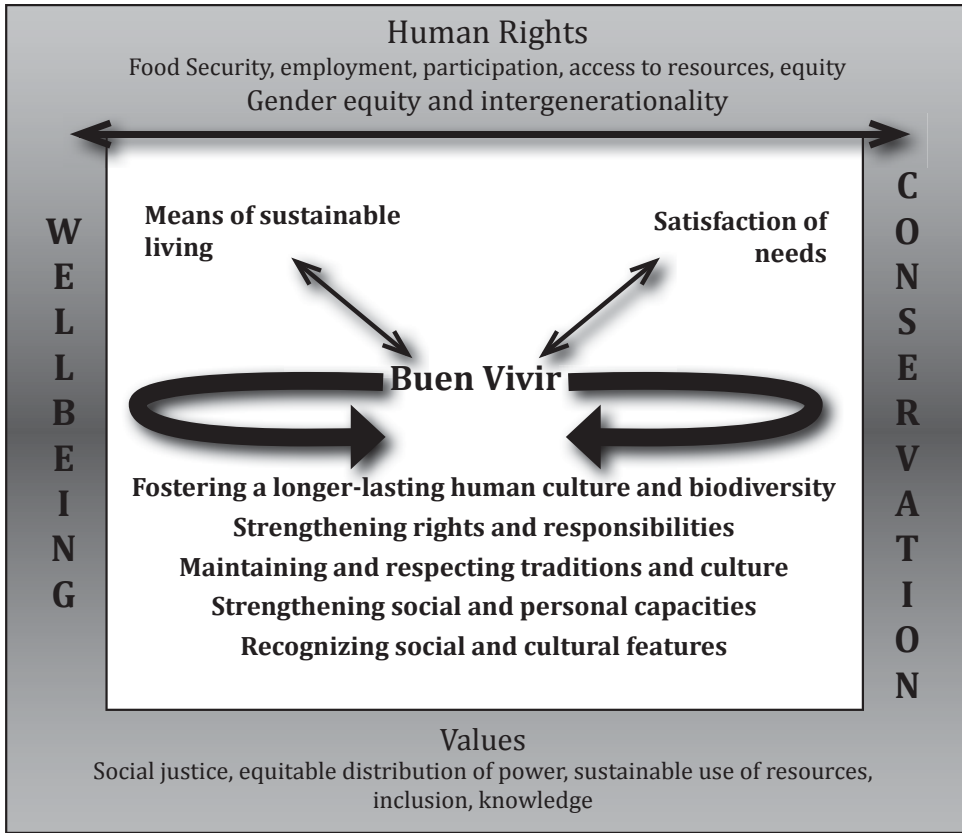
**Subsidiarity:** Decisionmaking and the management of protected areas should be the responsibility and mandate of those institutions closest to the resources.

**Legitimacy and Voice:** The capacity of men and women to influence the decision-making processes derives from freedom of association and freedom of thought. It is important to promote democratic and participatory leadership as well as affirmative action to ensure that both men and women participate on equal terms. This should be based on the principle of equity, by which men and women, youth, and the old are granted the same opportunities to improve and maintain their quality of life.

**Representativity:** The conservation and management of protected areas must seek to ensure the representation of local communities, thus allowing the different sectors in the community – women, men and youth – to defend their own interests and support a diversity of views within the heterogeneity of the community. Hence, organization at the local level is important so that grass-roots communities can engage in the management and the conservation of protected areas.

MPAs should not only promote marine conservation but also the human development of communities whose well-being is dependent upon these resources. Therefore, marine conservation and the governance of MPAs should seek to defend and strengthen the linkages between the different aspects of 'well-being' as a holistic concept, within a framework of human rights and values.

In the Latin American context, the concept of '*buen vivir*' (well-being) is being promoted as an alternative development paradigm, based on a more comprehensive and holistic vision. It is based on human well-being linked to other values that go beyond economic development, such as, "knowledge, social and cultural recognition, ethical codes of conduct, and even spirituality in relation to society and nature, human values, a vision of the future, etc."<sup>4</sup> It also integrates other important elements like the support of bio-cultural diversity through a continuous interaction with ecosystems; the recognition of, and respect for, other forms of knowledge and understanding of the world through collective processes. Social improvement and development are considered to be processes under constant construction and reproduction and as creative ways to exist and act in the world; and the concept of livelihoods as a process to fulfill biological, human and spiritual needs within a free and equitable community. The concept of 'well-being' also stresses the importance of local innovation to attain self-determined development through participatory and inclusive processes<sup>5</sup>.



Based on this concept and its elements, it is possible to establish positions and concrete measures, applicable to conservation and protected areas that can help build a bridge between marine conservation, well-being and human rights. Let us take, then, this concept of well-being as the driving force that brings together conservation and governance processes in protected areas with human well-being of local communities, through respect for their rights, and satisfying their needs and livelihoods. Furthermore, in our view, the strengths and ways of life of local communities should be the starting point to develop conservation based on human development and equity.

## Notes

- 1 Governance refers to the interactions between structures, processes and traditions which help determine how responsibility is assumed and power is exercised, how decisions impacting the public interest are made, and how citizens and other major players express their points of view. (Abrahams, P. et al, 2003).
- 2 Borrini-Feyerabend Grazia (2004). Understanding and Optimising Governance: a Copernican Revolution for Protected Areas.
- 3 Good Governance Indicators for Protected Areas. CoopeSoliDar RL
- 4 Acosta in Gudynas (2011). Buen vivir: Germinando alternativas al desarrollo. In: Otro desarrollo. Espacio de intercambio. February 2011.
- 5 Based on the conceptual basis of *buen vivir* in Indigenous Peoples' Biocultural Climate Change Assessment Initiative (IPCCA). Viewed at: [http://www.peopleandplace.net/on\\_the\\_wire/2010/10/6/climate\\_change\\_buen\\_vivir\\_and\\_indigenous\\_resilience](http://www.peopleandplace.net/on_the_wire/2010/10/6/climate_change_buen_vivir_and_indigenous_resilience)

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# Case Studies and Research Results

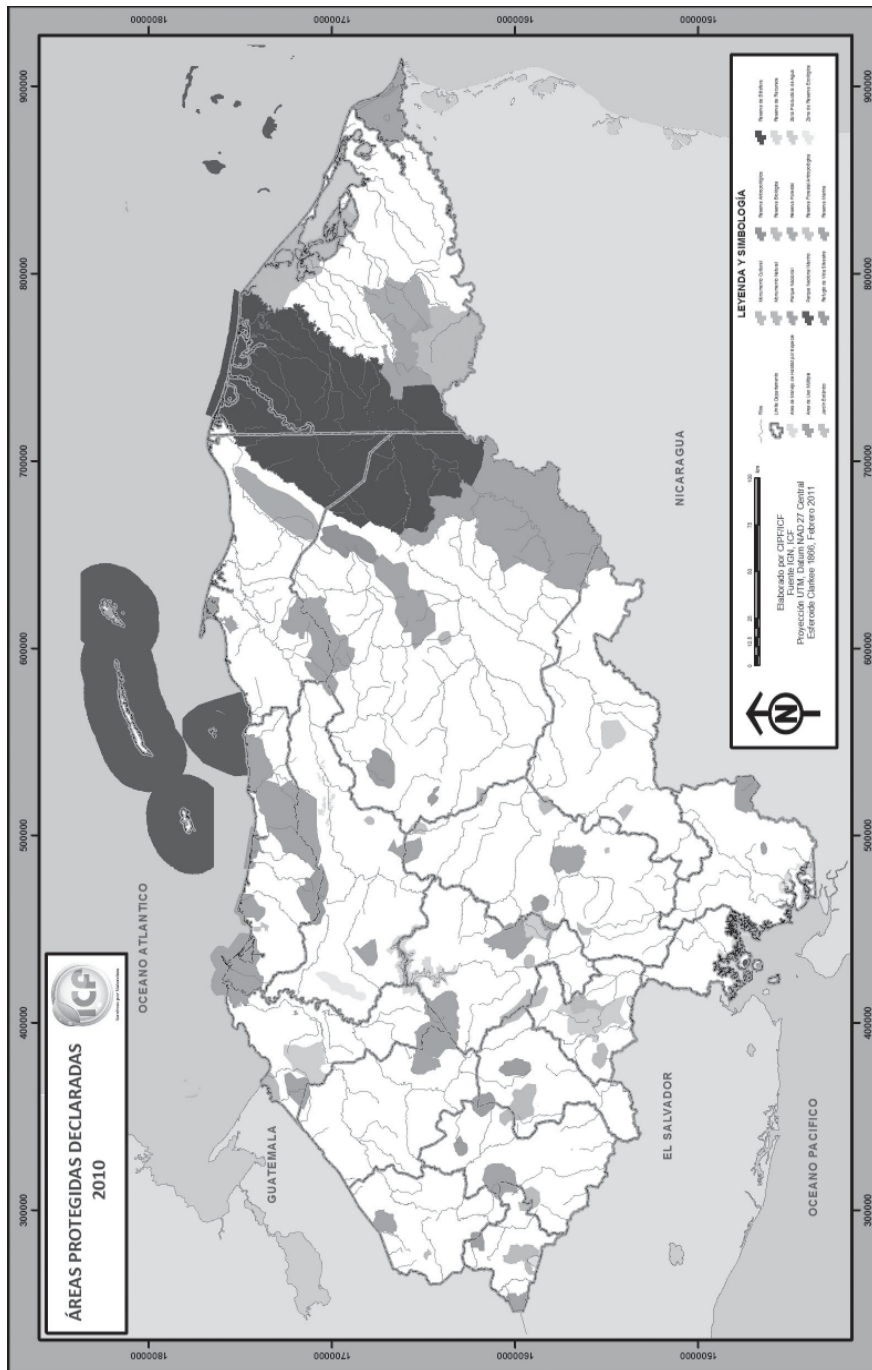
## CHAPTER 1: HONDURAS<sup>1</sup>

### 1.1. THE NATIONAL CONTEXT FOR CONSERVATION AND GOVERNANCE OF MPAs IN HONDURAS

Honduras has 91 protected areas, covering approximately 3.9 mn ha or 36 per cent of the country. These include terrestrial, aquatic and marine coastal ecosystems. The protected areas in this country are defined as "those areas that, whatever their management category, are aimed at maintaining and protecting natural and cultural resources, while taking into account their geographical, anthropological, biotic, social and economic parameters, which justify public interest" (Law for Protected Areas and Wildlife, 2007). According to this law, these protected areas have been classified into five categories<sup>2</sup>, namely, natural monuments, national parks, wildlife refuges, anthropological reserves and biological reserves, all of which are part of the Protected Areas System of Honduras (SINAPH).

The SINPAH recognizes 19 MPAs which belong to different management categories. Some of these were created by virtue of Executive or Legislative Decrees; others are part of current management plans, are currently under review, under co-management agreement or contract or are yet to be declared national MPAs. These 19 protected areas cover 1,037,669.08 ha of the country's territory.

Map 1. Declared Protected Areas in Honduras



Source: Instituto de Conservación Forestal (ICF, or Forest Conservation Institute), Honduras



In Honduras, and the rest of Central America, the government is responsible for the management and administration of protected areas, including MPAs. Through the Law for Protected Areas and Wildlife, the government delegates the responsibility for the management and administration of protected areas and wildlife to the Forest Conservation Institute (ICF), which co-ordinates with other public institutions like the Secretariat of Natural Resources and Environment (SERNA), the Secretariat of Agriculture and Livestock (SAG), and, within the latter, the Honduras National Fisheries Department (DIGEPESCA), as well as the Honduran Tourism Board (IHT), municipalities<sup>3</sup>, etc., to manage and administer protected areas and natural resources. However, it is worth mentioning that, by law, the ICF is able to delegate the management and administration of a particular protected area to individuals, and public or private corporations by engaging in a co-management agreement, thus ensuring local participation, organized or not, in the conceptualization, elaboration and implementation of management plans, operational plans and specific projects (General By-laws for Law for Protected Areas and Wildlife, 2010).

In the case of MPAs, as well as for other areas, co-management is made possible by integrating the efforts of government institutions and NGOs, through co-operation agreements and the participation of local communities through Forest, Protected Areas and Wildlife Advisory Councils. These councils are created with the purpose of improving institutional performance, in their role as bodies for the participation of local communities, and consultation and support with the ICF<sup>4</sup>.

Although Honduran law does not set out any differences between governance types for each of the management categories of protected areas, co-management agreements appear to be a preferred form of governance, where other players get involved with the State in the management of protected areas. The case studies specific to Honduras will provide three examples of MPAs under co-management regimes with the involvement of NGOs (foundations), and, in one of them, the local government. In these cases, we will study the impact, and the level of involvement, of local communities in this type of governance.

### **Box 1: The Co-Management Agreement (Contract)**

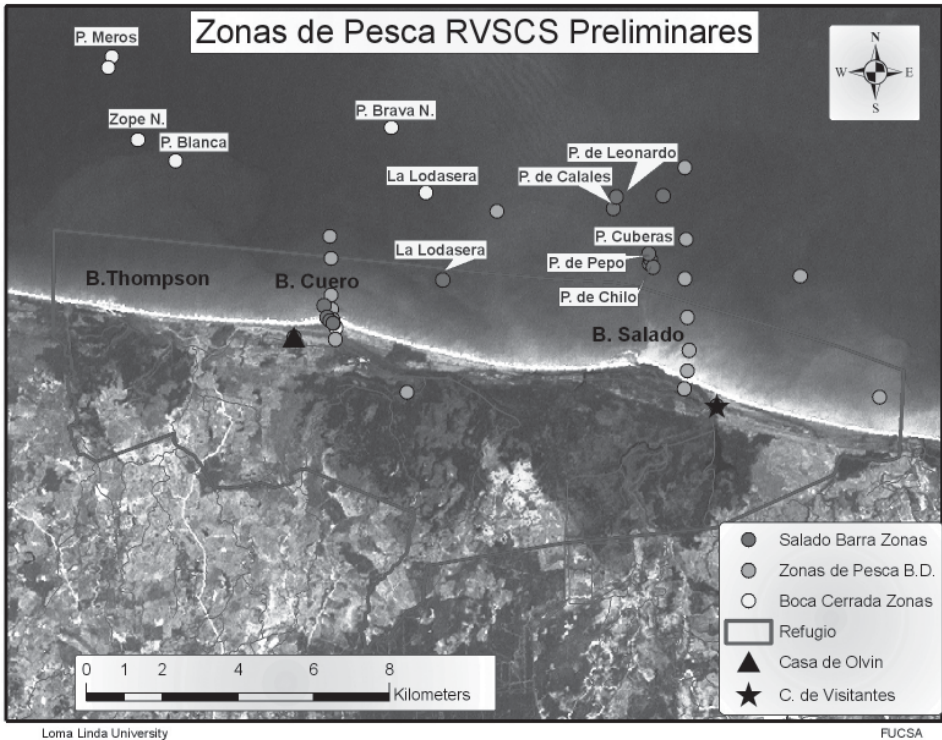
The Forestry Law defines the co-management agreement as a shared management mechanism in which contracts or agreements are signed between the government, municipalities, legally established organized communities and specialized organizations, which ensures the conservation and sustainable use of forest resources and protected areas of Honduras.

According to the ICF/DAP (2011), as of 2011, 33 co-management agreements had been reported between the Honduran government, NGOs, local governments, private corporations, and schools thus sharing responsibility for the management of protected areas. These 33 (43 or 33?? See above?) protected areas account for about half the country's protected areas under co-management agreements (National Strategy for the Co-Management of Protected Areas System of Honduras, 2011). In the case of Honduras, most of these agreements have been signed with NGOs, which have so far become the largest civil society representatives in the management of protected areas.

## **1.2. CASE STUDY: MARINE CONSERVATION IN THE CUERO AND SALADO WILDLIFE REFUGE AND THE SALADO BARRA AND LA ROSITA COMMUNITIES**

The Cuero and Salado Wildlife Refuge<sup>5</sup> is located on the north coast of Honduras, in the municipalities of El Porvenir, San Francisco, La Masica and Esparta. It consists of a system of coastal lagoons, rivers, canals and swamps, with a surface area of approximately 13,225 ha. The refuge is made up of a tropical rainforest, mangrove forest and coastal flora with high biodiversity. In the protected area, 35 species of animals have been identified (manatees, jaguars, monkeys, lizards, etc.), and about 198 species of birds (28 per cent of the total bird population of Honduras) (Strategic Plan and Action Plans for Sustainable Development of Ceiba and Surrounding areas, 2007). The Cuero and Salado Wildlife Refuge was declared a protected area as it serves as the habitat for the manatee (Decree No. 99-87, of 15 August 1987.) However, this was amended by Decree No. 38-89, which also created the Cuero and Salado Foundation (FUCSA), which is the administrator of the protected area through a co-management agreement approved by the Forest Conservation, Protected Areas and Wildlife Institute.

Map 2. The Cuero and Salado Wildlife Refuge Geographical Location



*Source:* Forest Conservation, Protected Areas and Wildlife Institute, 01-2011 Census

The ICF granted the administration of the protected area to the Cuero and Salado Foundation (FUCSA) and the municipalities of El Porvenir, San Francisco, La Masica and Esparta, on behalf of the community interests, through a co-management agreement. This agreement was signed on 24 May 2007 and will be valid for a period of five years.

By means of a secondary protection agreement, the communities are held responsible for the co-management of no-fishing sites<sup>6</sup>, which seeks to protect three marine areas. This sub-agreement confers rights and duties as well as direct involvement in the protection, conservation and decisionmaking through the Fishermen's Association of La Rosita, Cuero and Salado (APROCUS).

## **Results and Analysis of the Collected Data**

### **From the point of view of the administrators of the protected area, the Cuero and Salado Foundation (FUCSA):**

With regard to participation and benefit sharing, FUCSA has very few staff but has got closer to communities in the refuge in the past few years. It was pointed out that some initiatives have had a positive impact and created spaces for the participation of communities, such as, (a) the work with the Salado Barra Fishermen's Association in tourism activities; (b) Community Advisory Councils for Protected Forest and Wildlife Areas, a newly created structure from the ICF, which aim to provide space for local communities to participate in, and be consulted about, the management of protected area resources; and (c) a community-tourism concessions initiative, which is currently being worked on and intends to provide communities with a greater share from the benefits of tourism. Another initiative discussed refers to the protection sub-agreements for the no-fishing sites held by the fishermen's association, APROCUS. However, it has been noted that this project has not fully achieved its purposes due to the stakeholders' lack of follow-up. To attain further progress in this matter, respondents mention that the support of the other institutions involved is required.<sup>7</sup>

Regarding the support to artisanal fishermen from FUCSA, it was mentioned that a project is in place for the creation of collection points for fisheries products from the communities of Salado Barra and La Rosita.

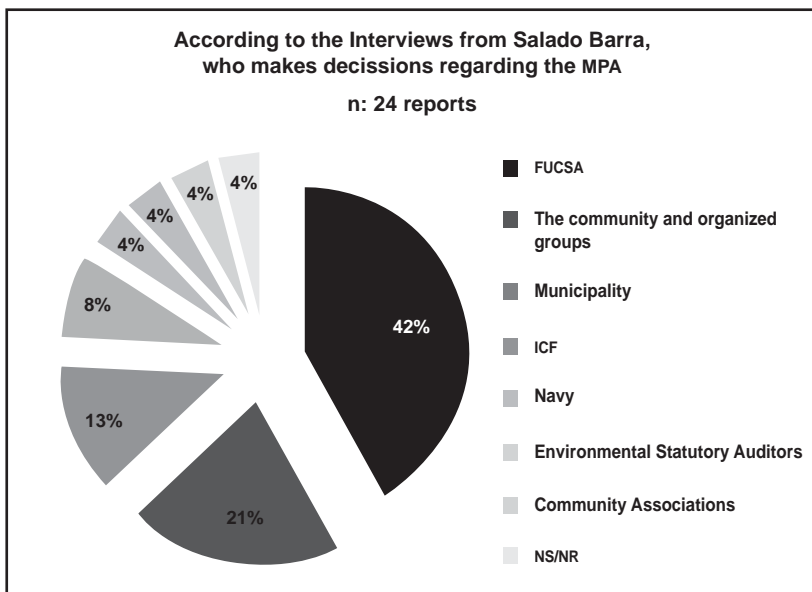
It was pointed out that greater community integration is yet to be achieved. To do this, three important elements are listed as fundamental, namely, improving the quality of community organization; resuming and fortifying the existing agreements; and achieving greater rapprochement between all the sectors involved. In this regard, it was mentioned that FUCSA cannot do everything and rather looks forward to seeing all communities and co-administrators of the refuge work together to protect and conserve its resources.

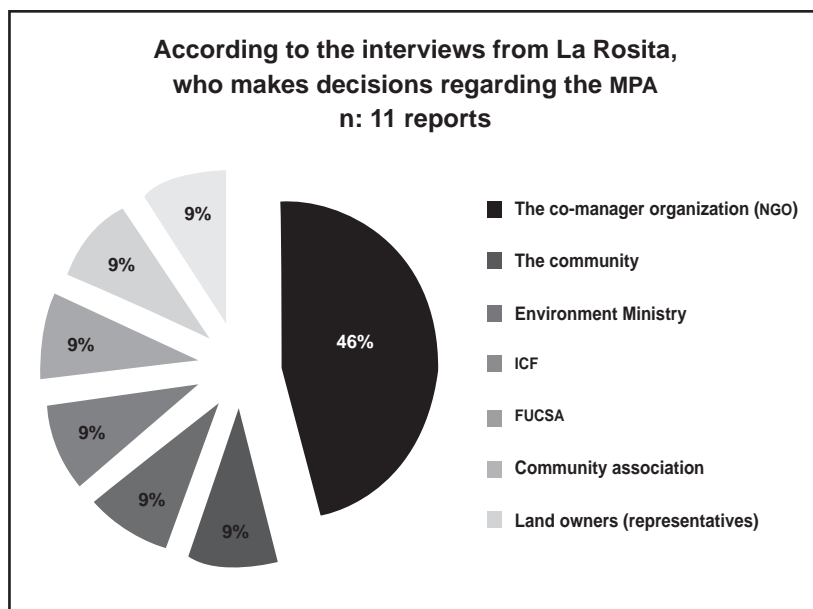
### **From the point of view of the communities of Salado Barra and La Rosita:**

Several communities are located within the refuge, including Salado Barra and La Rosita, where fishing is still an important economic activity, in addition to agriculture, livestock and tourism. The community of La Rosita is located in the refuge, and is considered a zone of influence in terms of the use of natural resources mainly for artisanal fishing. It is characterized as being a highly

organized community, with different local groups (among them, a tourism board, a women's group and a fishermen's association). The community of Salado Barra is located within the refuge and is known mainly for its fishing and farming activities (Ecotourism Development Plan for the Cuero and Salado Wildlife Refuge REHDES FUCSA-2005.) Twenty-three people were interviewed in the communities of Salado Barra and La Rosita; 70 per cent of the respondents were adults (aged 30 to 59 years) and 30 per cent were youngsters (12-29 years); 52 per cent of the respondents were female and 48 per cent male. Occupationally, the people interviewed reported themselves as fishermen (42 per cent), housewives (42 per cent), tour guides and other tourism-related workers (eight per cent), educators (four per cent), and fish sellers (four per cent).

From the point of view of the communities, on the issue of participation, the interviewed fishermen responded that they are concerned about the degree of representation that Community Advisory Councils offer. According to the focus group, the community does not feel represented by the advisory councils, but everyone feels represented by the association or group they belong to<sup>8</sup>. For example, it was mentioned that the fishing sector does feel represented by the association of fishermen. They argue that the advisory council has not organized any community meetings to raise awareness of what is being done. The respondents (members of the community of La Rosita) feel they are more able to get involved in decision-making processes through their local structures than the members of the community of Barra Salado.





With regard to the equitable distribution of benefits, respondents said they are concerned about regulations that restrict fishing and forest use by local people, whereas these regulations are not applied to people from other communities due to a lack of surveillance and control. The absence of employment alternatives and jobs for women and youngsters is another concern. Although profits from tourism are mentioned as a positive factor, not all parties involved are receiving the same share.

Other positive elements pointed out by the respondents were the strengthening of community organizations, the creation of employment opportunities from tourism, production and commercial activities, and community projects (agroforestry and mangrove reforestation), as well as the importance of natural resources to ensure food security for their families and communities.

In relation to the co-management sub-agreement for no-fishing sites, the president of the fishermen's association, APROCUS, says that this is a positive initiative, which incorporated the fishermen's feedback and was considered a benefit for the sector and for the reproduction of the species, but has failed to fully comply with its purposes for various reasons, including the lack of follow-up or support from the authorities in this sub-agreement, which has prevented its implementation; the failure of parties to observe some of their commitments (for example, offering support to APROCUS as an organization); the absence of surveillance and patrolling systems, which has prevented the

fulfilment of regulations, especially those related to fishermen from other communities within community sites.

According to the respondents, in order for this initiative to work (a) all stakeholders, namely, community and formal institutions (FUCSA, DIGEPESCA, military authorities and municipalities) must work together; (b) support should be provided to the communities for organizational strengthening, training, transportation and surveillance equipment; and (c) joint monitoring and patrolling with the navy is required, along with the designation and marking of boundaries, and the use of buoys for demarcation of fishing sites.

With regard to women and youngsters, the 23 interviewees were asked about ways to improve and strengthen their involvement in the decision-making process involved in an MPA. The respondents listed the following elements as fundamental: training and capacity building (53 per cent); more opportunities for women and youngsters in decision-making processes (19 per cent); organized women's and youth groups (16 per cent); working together to achieve profits (six per cent); learning about fishing (three per cent); and creation of more sources of employment, such as tourism (remainder three per cent).

## **Box 2: Voices of the artisanal fishermen from La Rosita and Salado Barra communities**

- “We are being affected by fishermen from Tornabe, San Juan, El Triunfo, Cayos Cochinos and Cayos de Utila who fish using light cane spears (chuzo) and harpoons in our community's fishing sites.”
- “It's been four years since commercial vessels have come to exploit the fishing resources in the area. We believe that is so because there are fewer resources, or because they heard the complaints of a group of fishermen in DIGEPESCA and FUCSA offices.”
- “The Zambuco Lagoon is running out of fishing resources as harpoon fishing is going on in the area, and the water is getting polluted with insecticides from Facusse's companies. Lagoon crabs are gone now.”
- “Crabs used to walk into our backyards but now we cannot find them anymore because outsiders come with their shovels and capture them. They bring their coolers and camp out to catch a large number of crabs, while we no longer get anything.”
- “We fishworkers need to get more support to strengthen ourselves and to obtain fishing gear.”
- “In Salado, some of us (fishermen) work in tourism but we are uncertain whether we will continue to receive benefits from tourism once the foundation fixes their boat engines, so we have fear and uncertainty”.

### *Essential elements for MPAs from the community's point of view:*

During the interview, 15 residents of Salado Barra were asked to describe a well-functioning MPA. They listed the following elements as essential: the conservation of areas with highly productive resources, allowing local communities to generate income and employment; strengthening community organizations; initiating development projects to create decent living conditions for the community (in the areas of sanitation, energy, transportation, education); working in partnership with other sectors (co-administrative foundations, municipalities, etc.); involving communities, young people and fishermen in decision-making initiatives; implementing and enforcing regulations, promoting labelling and marketing schemes; and striving for a contended, socially conscious and responsible community.



## Reflections and Conclusions

*Community involvement* : Community organizational structures are important to foster involvement in a protected area. La Rosita, being a highly organized community, with different local structures representing the various sectors (women, fishermen, craftsmen, etc.) has generated a greater sense of authority and participation in the area, as well as a more equitable sharing of benefits from the conservation of the protected area, which contrasts with the case of Barra Salado.

Women and young people play an important role in community development. Some of them are fishworkers and others are community leaders; they are also members of different groups working on mangrove conservation and getting children involved in conservation activities. Women are also recognized as community leaders in both communities, where they play important roles in organizational structures.

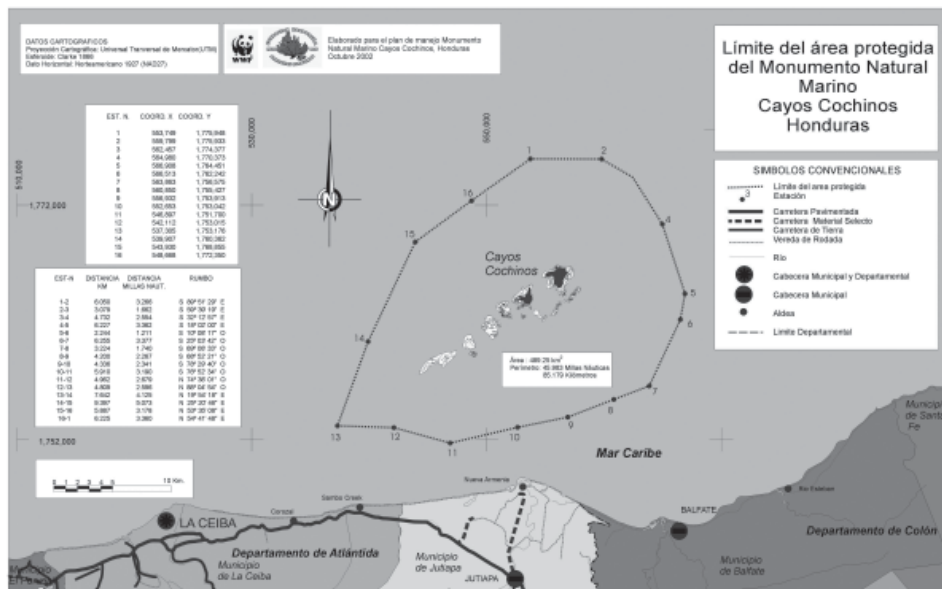
Dialogue and rapprochement between the community and local authorities is vital to generate benefits for the area. First of all, organized community groups are required to contribute more effectively to managing their resources, which can be achieved by getting together key stakeholders (FUCSA, ICF, municipalities, military authorities, and DIGEPESCA).

It is important that the design of projects seeks to promote the conservation of resources, but it is also essential that basic needs (health, housing, education, water, transportation and employment alternatives) are satisfied so as to achieve greater prosperity and improve the quality of life of the community as a whole.

### **1.3. CASE STUDY: MARINE CONSERVATION IN THE CAYOS COCHINOS MARINE ARCHIPELAGO NATURAL MONUMENT. THE CHACHAHUATE AND EAST END COMMUNITIES**

The Cayos Cochinos Marine Archipelago Natural Monument is in the municipality of Roatan, Islas de la Bahía. It has a surface area of 485,337 sq km, which covers the entire archipelago, and is located within the co-ordinates 15°57 north and 86°29 west, covering marine and inland waters to the north of Honduras. It was declared a protected area by the Honduran Congress in 1993, and was later on granted the status of Cayos Cochinos Marine Archipelago<sup>9</sup> Natural Monument through a legislative decree order, in November 2003. The ecosystems protected in the area are coral reefs and mangrove forests.

### Map 3. Cayos Cochinos Marine Archipelago Natural Monument Geographical Location



Source : Management plan for the Cayos Cochinos Marine Archipelago Natural Monument 2008-2012

The administration of the protected area is the responsibility of the Honduran Foundation for the Protection and Conservation of Cayos Cochinos (or the Honduras Coral Reef Foundation, HCRF) through a co-management agreement approved by the ICF. This agency is responsible for implementing and managing the Cayos Cochinos Marine Archipelago Natural Monument. According to the management plan, at the time of creation of the protected area, its main objectives were to (a) preserve representative samples of marine and terrestrial biodiversity, particularly coral reefs, sites of aggregation and island ecosystems, and (b) respect the way of life and customs of local communities and particularly of the Garifunas, which are associated with the use of natural resources of the archipelago, and where the main users of the resource associated with the archipelago come from the coastal communities of Sambo Creek, Nueva Armenia, Rio Esteban, Jutiapa and Balfate, and Chachahuate, East End and Bolaños in the archipelago.

The communities in this archipelago and, therefore, those of the protected area and its area of influence, are predominantly Garifuna, an Afro-American group derived from the mixture of the Red Carib and African people from Nigeria, who arrived on the Caribbean island of Saint Vicent from which they

were displaced to Roatan, Honduras in 1797. Also, but to a lesser extent, there are Mestizos (Ladinos) and Creole in the archipelago, as well as some islanders from Islas de la Bahía. The Garifuna culture is linked to the sea, where artisanal and subsistence fishing are the most important economic activities (Management Plan 2008-2012).

CoopeSolidar R.L., 2011



Chachahuate community, Cayos Cochinos

## Results and Analysis of the Collected Data

### From the perspective of la Cayos Cochinos Foundation

On the issue of community participation, it was mentioned that the protected area was intended to be a reserve and was not meant to include any communities. The communities, on the other hand, disagreed with the creation of a protected area, because they would then be deprived of the benefits obtained from the area, especially fishery resources. Currently, there is a structure that allows for community involvement in decisionmaking on the protected area through an entity called 'Community Commission'<sup>10</sup>. According to the respondents, the Community Commission is comprised of representatives from all of the

Cayos Cochinos communities, who are elected by the local residents and the Cayos Cochinos Committee. The respondents said that the relations between the different organized groups and the foundation have improved because the community is able to participate both in decision-making processes and in the development and updating of management plans, and is allowed to report any complaints to the foundation. However, the interviewees point out that there are still problems regarding the lack of community involvement in the control and surveillance activities, and the unwillingness to support the foundation in this matter. To change this, they say, it is important that more training opportunities, environmental education and employment alternatives are generated.

As for the creation and distribution of benefits from the protected area, the foundation listed the following as priority: support to communities in the implementation of projects<sup>11</sup>, with a percentage of the funds to come from filming fees for television programmes, diving lessons for youth, tourism, and research monitoring activities. It was also pointed out that the communities benefit from the protected area through the generation of employment (tourism) and from sustainable fishing. Young people are participating as tour guides, and women work in different organized groups, like community kitchens, and women's groups selling cassava bread in coastal communities. The newly updated Management Plan states that efforts are being made to recognize rights of access to these resources, where a legal mechanism is envisaged in the decree creating the area, by which it is recognized that fishermen are entitled to perform fishing activities but they need to assume responsibility for the protection and conservation of resources.

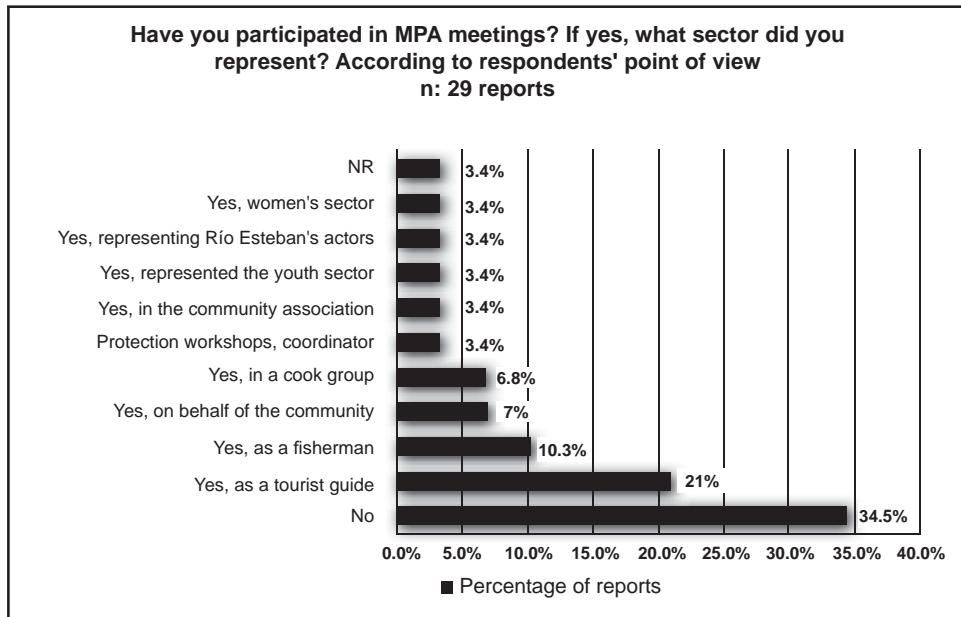
Lastly, the respondents recognize the importance of getting the communities involved in the management of the protected area, as well as in establishing legal structures for communities to be part of decision-making initiatives. Furthermore, it is recognized as essential that communities undergo training and awareness raising, and are provided with the equipment to enable them to achieve these ends.

### **From the perspective of the communities of Chachahuate and East End**

A total of 24 interviews were conducted: 13 in the community of Chachahuate and 11 in the community of East End. Of the 24 respondents, 54 per cent are between the ages of 12 and 29 (regarded as youth) and 46 per cent are adult, aged between 30 and 59 years. No senior citizens were interviewed. The survey included both men (67 per cent) and women (33 per cent). Forty per cent of the respondents were fishermen; 15 per cent, housewives; 12 per

cent, students; 11 per cent, tourist guides; six per cent, middlemen buying and/or selling fishery products; six per cent, construction workers; six per cent, those selling handicrafts to tourists visiting the community; and the remaining six per cent have their own unspecified businesses. The fishing gear used is hook-and-line, although diving is practised for lobster and conch.

With regard to participation, from the point of view of the communities, respondents mentioned that they do not feel part of the management decision-making process for the protected area.



Also, it was mentioned by the focus group that they do not feel represented by the Community Commission at the negotiating table because its members reside in another community called Nueva Armenia, which is far away from these coastal communities. They pointed out that they “need to be represented by people who stay and live in our community”. Another person said that, sometimes, their communities believe that this commission is “part of the foundation”.

The fishermen from the Chachahuatle focus group mentioned that “they are not included in the management plan, and decisions are made in the community of Nueva Armenia”. They also state that the communities must get organized to stand up for their rights. Respondents were also asked if they participated in meetings of the MPA. The results: 34.5 per cent said they do not participate; 21 per cent, representing the tour guides, do participate; 10.3 per cent participate

on behalf of the fishing sector; seven per cent represent the community; 6.8 per cent, the kitchen groups; 3.4 per cent participate in workshops on protection as co-ordinators for the kitchen network; 3.4 per cent represent the board; 3.4 per cent attend on behalf of the youth; 3.4 per cent reported participating as representatives of Rio Esteban; 3.4 per cent said that they act on behalf of the women's sector and their voices get heard; and the remaining 3.4 per cent did not respond.

Although communities have their own organizational structures (such as fishermen's associations, women's groups and the Water Service Board, to name a few), they are unable to influence the decision-making processes regarding the protected area. The community leaders recognized by respondents also fail to influence these processes. In the focus group discussions undertaken with members of all communities, the need for greater involvement was mentioned. They also pointed out that although the management plan provides for the hiring of local people to support the management of the area, the only jobs offered by the foundation are as 'boat assistants'. They pointed out that "everything would improve" if the communities and the foundation (the NGO agency in charge) work together.

Regarding the generation and distribution of benefits, tourism topped the response list (26 per cent in Chachahuat and 28 per cent in East End). However, respondents also cited some problems in relation to this economic activity, such as the unequal sharing of tourism benefits between the two communities (Chachahuat attracts more tourists than East End) and even within these two communities, not all residents receive economic benefits. Other problems that need to be addressed include their limitations to engage in tourism activities. In this regard, training and organizational strengthening are essential to enable communities to derive greater benefits and to work as a network so as to benefit the majority – and not only a few inhabitants. A further problem related to tourism was the use of illegal drugs; while other benefits include those related to food production (26 per cent of the 43 responses in Chachahuat, against 22 per cent for tourism) and trade (26 per cent in Chachahuat and 20 per cent in East End).

The respondents from both communities expressed their concerns in relation to the fishing restrictions that the protected area has brought about:

"The Foundation applies restrictions and we wonder what we will feed on if we don't fish".

"We will not stop line fishing although it is forbidden because no solutions or alternative employment are on offer."

With respect to the policies, support and incentives that have encouraged communities to get involved in decision-making in MPAs, 76 per cent of the respondents from Chachahuat mentioned not receiving any support to get involved in decisionmaking. On the other hand, in the community of East End, 31 per cent of respondents mentioned that they have received support from the Honduras Tourism Communities Network (RECOTURH). However, the same number of respondents mentioned receiving no support to participate in decision-making processes.

The 24 interviewees were asked about the relationship between conservation efforts and women and youth. On the question of how the involvement of these two sectors could be promoted in terms of decisionmaking and the MPA, the following results were obtained: 38 per cent of respondents said that the participation of women and youth must be enhanced, that they require more education and be encouraged to participate; 21 per cent stated consideration should be given to them and they should be invited to meetings; 10.2 per cent believe that creating jobs is essential; 10.2 per cent responded that the integration into youth groups can help enhance their involvement ; seven per cent mentioned that it is important to include both women and youth in local community organizations (in this case, the community association); 3.4 per cent consider that encouraging better communication is a fundamental step; 3.4 per cent mentioned that stopping from acting selfishly is mandatory; 3.4 per cent of the interviewees did not respond, while the remaining 3.4 per cent said they did not know.

With regard to this topic, the focal group members highlighted how women have an important role in the household economy and food security at the community level. Women have turned to the marketing of fishery products and other small businesses. "If women are able to work, the household economy can be improved," they said.

Regarding youth, the respondents highlighted the important role young people have in these communities. In East End, young people are participating as community leaders through the Young Guides Group. In Chachahuat, they are members of organized groups, such as the community association. It was also pointed out that most of these young people are able to fish although their parents believe it is important for them to be educated and seek alternative employment:

"All of our young people know how to fish but we parents want our children to study and work in the city so they can help support our household economy."

"(We) women also work buying and selling fish; we make bread, and manage small businesses."

*Essential elements for MPAs from the community's point of view:*

The 24 respondents were asked to describe a well-functioning MPA. The following essential elements and values were listed: a healthy reef, with plenty of species; a prosperous community which provides its residents with economic alternatives, with equitable sharing of benefits ("benefits for everyone"); a community that attracts tourism, where respect and happiness exist; a cleaner community, where better communication and dialogue with the foundation are feasible; a less restrictive area in terms of resource use; and strong community organizations.

CoopeSolidar R.L., 2011



Children playing in their community, East End, Cayos Cochinos. Children and youth are also important actors



### **Box 3: The voices of neighbouring fishermen from the Chachahuate and East End towns**

#### **Regarding the fishing industry:**

*"Fishermen would only come to the cays to fish for a season, salt the fish to preserve it since they had no way to refrigerate it, and then would take it to the coast and sell it."*

*"Back then there was a lot more fish than now."*

*"Fishing is our means of subsistence and is fundamental."*

*"20 years in the past, nobody lived in the cays. It was just a place to stay during the fishing season, from January to April."*

*"The fishing gears are still the same: the hook and the line."*

*"Once people started to inhabit the cays, they began to harm nature and their misconduct affected the culture."*

#### **Regarding tourism:**

*"They say that tourism is good but it only benefits some members of the community."*

*"The fishermen's association wants to build a hotel or rooms to rent because they think cabins (like those already existing in the community) are costly and more suitable for foreign visitors."*

#### **Regarding regulations in the MPA:**

*"We will not stop line fishing although it is forbidden because they don't offer us any solutions or alternative employment."*

*"The foundation limits our access to some sites, so we wonder what we will feed from if we can't fish at all."*

#### **Regarding sharing of profits:**

*"We'd like to know if the community could receive benefits from the tariff regime that the foundation imposes."*

*"We believe that our community needs to be better organized for us to defend our rights."*

*"The foundation should hire local people to manage the protected area, for example in patrolling activities."*

## Thoughts and Conclusions:

Fishing continues to be one of the main economic foundations of these communities, and is also a cornerstone of their culture. However, the MPA has not made it a priority to use the Garifuna culture as a force for conservation. The culture of coastal communities should be established as an important element in marine conservation, rather than being only put forward as advantageous for tourism.

Structures for community involvement, such as the Commission, fail to fully represent the population, and this is one of the reasons why the community does not feel part of the decision-making process and rather seeks to reach agreements which help improve the relations between the Cayos Cochinos Foundation (the NGO in charge of managing the MPA) and the communities in the area.

Even though communities consider they need to get more involved and participate in decision-making processes, co-managing agencies, such as the Foundation, fail to perceive the existence of issues in terms of participation and representation of communities in decision-making structures. Moreover, it is mandatory that communities feel that they are being represented by an organizational structure, which defends the interests of fishermen, youth, women and children from all communities. It must be noted that the fundamental roles of women and youth in community development are recognized by both communities.

Engaging in dialogues and fostering good communication between all stakeholders is necessary.

As for the sharing of benefits, it is clear that there is no equitable distribution of the benefits generated by conservation.

It is true that tourism has contributed to improve the overall economic situation. Women are contributing more to the economy, working in the kitchen network, in their own small businesses, selling crafts, selling coconut bread or performing Garifuna dances.

It is indispensable that the organizations and institutions working in the MPA provide support to the community representatives in decision-making structures. In this case, no specific strategies have been developed other than just creating participatory structures that end up becoming politicized and not representative.

The communities of East End and Chachahuatate have seen that values and important elements for the governance of the protected area and marine conservation, such as respect, happiness, dialogue, and equitable distribution of benefits, are often

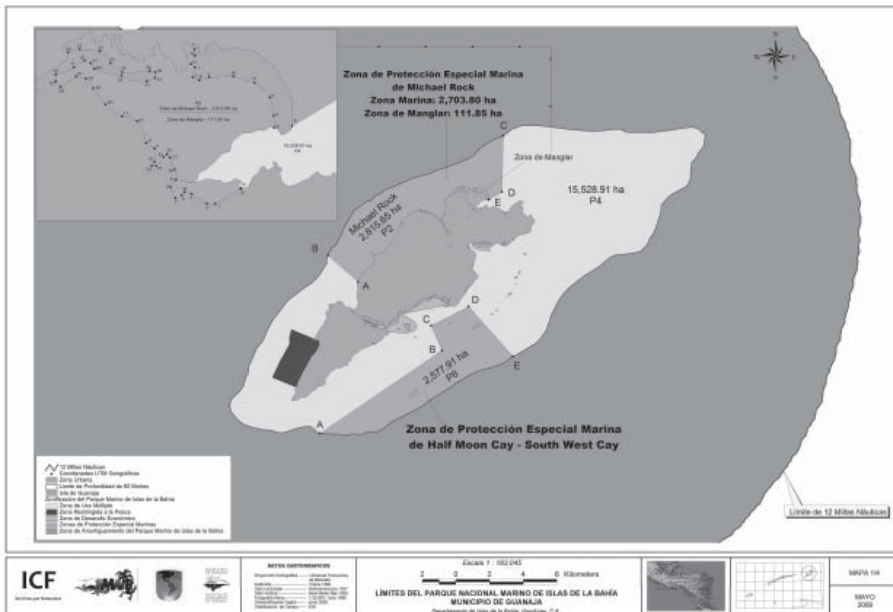
not taken into account in traditional management models, such as is the case with this MPA. These elements and visions embrace a different and needed approach for marine conservation that promotes the social, cultural and human well-being of coastal communities and their inclusion.

#### 1.4. MARINE CONSERVATION IN THE ISLAS DE LA BAHIA MARINE NATIONAL PARK: A MANAGEMENT SITUATION OF MARINE PROTECTED SITES

The Islas de la Bahia Marine National Park was created on 7 June 1997 and is located between 18 and 28 miles in the Islas de la Bahia islands department, in the municipalities of Utila, Roatán and Guanaja, with a surface area of 647,152.49 ha.

Given the surface area of the park, this study will only focus on the municipality of Guanaja. The Isla de Guanaja is located in the Islas de la Bahia island department, 70 km off the Honduran coast and 12 km off the Isla de Roatan, with an area of 57 sq km.

Map 4. Zoning of the Islas de la Bahia Marine National Park, Guanaja Municipality



Source : Islas de la Bahia Environmental Management Programme 2009

In the municipality of Isla de Guanaja, the park boundaries include **two Special Marine Protection Areas** and a **Restricted Fishing Zone** with a surface area of 483.40 ha<sup>12</sup>.

In accordance with the Special Marine Zoning in the municipality of Guanaja, the ecosystems protected in the Islas de la Bahia National Marine Park are coral reefs<sup>13</sup> and mangrove forests, which are important for the fishery economy of the communities who benefit from these resources.

Several communities depend on Isla de Guanaja for fishing and tourism purposes, including those in the towns of Mangrove Bight, Brisas del Mitch, North East Bight, Savannah Bight, East End, El Bight, Sandy Bight, Pelicano, Armadores and Bonnaca (the Cay). These are occupied by Misquitos, Garifunas, Ladino, mulattoes and mestizos. An important part of the economy of local communities is sustained by artisanal fishing, with hook-and-line, in boats with outboard motors or smaller rowing boats (canoes); the other sector is made up of air-tank or skin-divers, who fish with harpoons and target lobsters, conch and mollusks. This type of fishing is meant for household consumption and marketing (Sociological Report on Artisanal Fishing in the Islas de la Bahia Environmental Management Programme, 2000).

Mariela Ochoa, 2012



Some houses in Guanaja Community

## **Administrative Context**

At present, the Islas de la Bahia Marine National Park does not have any management plan. The Forest Conservation, Protected Areas and Wildlife Institute (ICF), a State agency responsible for the management of protected areas, has initiated a process to prepare such a management plan.

In the case of the municipality of Guanaja, the Municipal Environmental Unit is currently managing these areas thanks to an Operational Plan funded by the Inter-American Development Bank (IDB) through the Ministry of Tourism. However, the municipality does not have a co-management agreement.

In October 2011, the ICF created two Forest, Protected Areas and Wildlife Community Advisory Councils, so as to provide spaces for citizen participation/consultation and support to the ICF and those municipalities managing the areas. In relation to the protection and conservation activities of fishery resources, the Honduras National Fisheries Department (DIGEPESCA) is responsible for patrolling activities and dealing with complaints from offenders.

## **Results and Analysis of the Collected Data**

### **From the point of view of the Honduras National Fisheries Department (DIGEPESCA):**

According to the interview with DIGEPESCA officers, when the marine protection sites were declared, the Fisheries Directorate was not invited to take part in the process, and the officers allege that decisions are taken by people from the capital, Tegucigalpa. "They send biologists to conduct the research, to dive and to collect information but they never meet with the fishermen or consult them". It was asserted that had they been consulted, the fishermen would never have accepted the decision to set up the protected sites since they are only being removed from their fishing grounds without being offered any alternatives.

Another major obstacle is that MPAs are very large and difficult to manage because of size and location. To carry out patrolling activities, authorities must travel all over the island, for which they lack funds.

DIGEPESCA officers say people are interested in preserving the coral reef and the protected area, but there are difficulties and limitations, such as the lack of resources to work in inspection, to patrol around all the island's reefs,

and to conduct training workshops with fishermen communities. It was also mentioned that the conservation of marine resources is the responsibility of the municipality, through the Environment Department and DIGEPESCA. However, there is no support of any kind and there is a lack of rapprochement and co-ordination between the institutions for joint activities.

In relation to the communities within the protected area, it was mentioned that drugs and alcohol are the main problems that prevent compliance comply with the regulations. In the main, the fishers fish indiscriminately by diving and then sell their catch to buy drugs. Respondents also pointed out that the Mangrove Bight community is the most organized because its residents do care about preserving the reef, they are more educated and have more money. They recommended working to educate communities and to define proposals and management strategies for marine areas with the communities. In DIGEPESCA's view, prior to seeking measures to protect and preserve the resources, they should come up with economic alternatives and seek conservation strategies only after identifying the needs and desires of resource users. The lack of governmental support for these communities was also mentioned:

*“This island is economically sustainable for the Guanaja who carry out industrial and artisanal fishing activities, but the government does not contribute to improving the situation of the island's inhabitants”.*

### **From the point of view of the communities of Guanaja:**

Twenty-four interviews were undertaken with members of five communities from the island of Guanaja: 33 per cent from the community of Bonnaca<sup>14</sup>, 29 per cent from Mangrove Bight, 21 per cent from El Pelicano, 13 per cent from North East Bight and four per cent from the community of Brisas del Mitch. Of the 24 respondents, 54 per cent were adults, 29 per cent, youth, and 17 per cent, the elderly. Two focus groups were formed. The interviews and focus group discussions revealed the following:

The fishermen are aware of the need for conservation because they have witnessed a significant reduction in fisheries from marine protected sites. However, they make it clear that their means of subsistence and food security must be assured: "If I can't fish, I can't eat...We have to fish to survive". They also mentioned difficulties arising from declining fishery resources in their traditional fishing areas, which forces them to travel longer distances to fish further out, using greater fishing effort.

In relation to the distribution of benefits in the management and regulations of the protected area, the respondents mentioned feeling affected by not being able to freely carry out their fishing activities. These fishermen fish on the south side of the island, an area where most of the fishermen of the island can be found. Thirty-three per cent of the respondents claimed to be affected by restrictions on the fishing areas; 14 per cent do not feel affected but neither do they feel they have benefited from the creation of MPAs; 11 per cent believe they are not affected because hook-and-line fishing has not been forbidden; four per cent claimed not to be affected because they did not know that the MPAs existed; another sector claimed not to be affected by the regulations, while yet another (representing four per cent of the respondents) say they are not affected since they have found other activities as alternatives to fishing.

Examining who is most affected by the MPA regulations, eleven respondents stated that the regulations are directly affecting young divers. This is because these divers are poor and so dive without equipment, for shorter periods, in shallower waters and always inside the limits of protected sites, because they use canoes with oars, and cannot afford the increased fishing effort needed to go farther out. As a consequence, the household economy of these divers is affected by them being denied use of the traditional fishing sites. Also, it was mentioned that adult divers who use air tanks are affected because no economic alternatives are being offered to them. In addition, it was noted that the regulations are also affecting fishermen from outside communities who invade the island's fishing sites using illegal fishing gear, such as nets and harpoons.

Respondents considered that, in general, the fishing communities are being affected by MPA regulations. As for other issues, the limitations of the tourism sector were raised, since it is monopolized by foreign investors and generates only indirect benefits for local fishermen. In addition to the lack of access to natural resources and the unequal sharing of tourism benefits, the absence of support to communities and community organizations was pointed out. Respondents acknowledged that the projects brought to the island or through the efforts of local institutions have created opportunities to strengthen their capacities and community organizations. However, once these projects are integrated, the lack of support and follow-up prevents the further spread of benefits.



Artisanal fisherman in Guanaja

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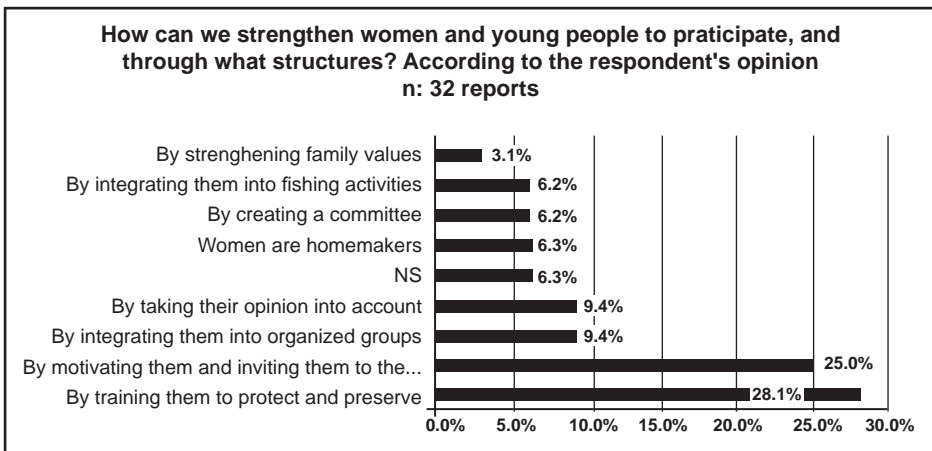
With regard to community involvement, the interviewees mentioned being excluded from decision-making processes regarding the MPA, despite being users of the protected area and having experience and knowledge. Another issue raised was the lack of support to communities for strengthening their skills and educational level.

As regards the respondents' perception of the role of authorities in the MPA, 31 per cent were unclear as to who is the primary authority in the protected area; 15 per cent believed DIGEPESCA is the main authority; 19 per cent felt it is the fishermen because they live from fishing and directly benefit from it; 15 per cent believe it is the municipality; eight per cent said no one has the authority in the area because "anyone can fish and no one says a word"; four per cent consider that the authority vests in the Secretary of Environment; four per cent mentioned the community association; and the remaining four per cent said that it is "all of the authorities", without specifying any particular one.

With regard to women and youth, the 24 participants were asked about how the involvement of women and youth from the community can be improved in the decisions taken about the MPA. Of the respondents, 28.1 per cent noted that women and youth need training on protection and conservation; 25 per cent said they needed to be motivated and invited to meetings; 9.4 per cent highlighted the need to be integrated into organized groups like the Advisory Councils; 9.4 per cent felt their should be taken into account; 6.3 per cent feel that that women are primarily housewives; 6.3 per cent said they do not know how to strengthen participation; 6.2 per cent mentioned setting up a committee for women and youth; and 3.1 per cent called for a strengthening through the application of family values.

During the focus group discussions related to this topic, it was mentioned that those young people who can study, go to live on the coast, whereas those who stay in the community usually end up working in the fishery in artisanal fishing or on industrial fishing vessels. It was also stated that the youth are not taken into account or invited to be part of decision-making processes, that they lack leadership and do not have any organized groups to represent their interests. It was said that women are not considered for participation in in decisionmaking, and, in general, only men get invited.

Respondents also stressed the important role played by women in the household economy, the lack of employment opportunities and sources of work for the youth, as well as the risks faced by young people when diving without tanks. The other problems cited included the emigration of young people from the island due to lack of sources of employment. The importance of educational opportunities for the youth, alongside the opportunity to fish, was also mentioned.





Interviews and Focus groups were important for collecting the perspectives and views of the fisherfolks and community members

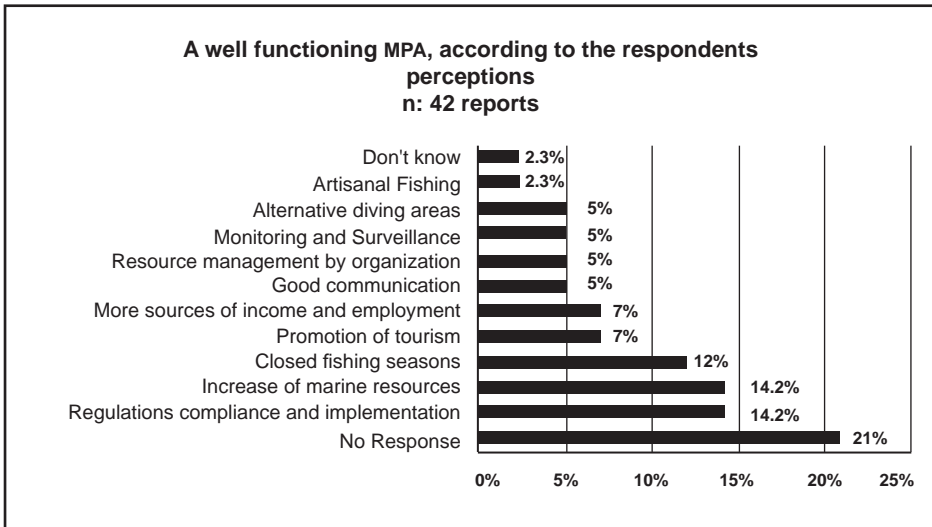
*Essential elements for MPAs from the community's point of view:*

During the interview, the 24 participants were asked to describe a well-functioning MPA. Their responses: 14.2 per cent said that the marine resources must be increased by conservation; 14.2 per cent felt that regulations should be applied; 12 per cent called for seasonal fishery closures; seven per cent said that tourism should be more vigorously promoted as an economic alternative for communities; seven per cent called for higher income and more employment sources; five per cent demanded better communication; five per cent wanted an organization to manage the resources; five per cent called for control and surveillance patrols; five per cent wanted alternative areas for diving; 2.3 per cent felt only artisanal fishing should be allowed; and the remaining 2.3 per cent respondents did not have any definite response.

In the focus group discussions, the following recommendations were put forward: the use of buoys for demarcation of fishing sites is necessary; constant monitoring is required to evaluate the reef's health; seasonal fishery closures should be applied to some fishing areas; and economic alternatives need to be proposed for families that depend on fishing to survive.



Discussions taking place in one of the focus groups



#### **Box 4: Views expressed by fishermen from Isla Guanaja:**

##### **Regarding conservation of resources:**

- "We want to preserve the marine area because we live off it and do not want it to disappear or for the situation in Roatan or Utila to happen where there are so many restrictions that fishermen cant fish."
- "Many years ago, we had a lot more fish, crabs and lobsters than today... We, fishermen, would fill up our canoes and receive more income. We did not have to go that far to fish."
- "Local authorities are not interested in protecting and conserving the area. It is solely the community that cares about all that is happening."
- "We want our children to live off the sea just like we have."
- "We need more community development and sources of employment."
- "We need DIGEPESCA to impose its authority and apply the law."
- "Industrial fishing must be strictly prohibited."
- "The idea of protecting these sites is to preserve the little we still have left."
- "Divers who fished for conch and lobster are now only using hooks-and-line, and do not dive anymore because they can't find anything; they are the ones most interested in conserving the area."
- "For the patrols, it is important for members of the Navy to treat fishermen well and to know how to swim."
- "Agreements need to be respected and they should not trick us as they tricked the fishermen from Utila and Roatan, who are banned from fishing in protected sites; those who used to live from fishing now have to pursue other activities."

##### **Regarding women and youth:**

- "The youth no longer stay on the island; they look for work or go to study on the coast, since there are no job opportunities here. It is the local government that should promote and create more employment opportunities."

- "When we were children, our parents taught us to fish; now young people don't take up fishing; they go to live and study far away and fishing does not interest them; few young people take to it."
- "We don't take women into account much because they are not fishworkers, and only a few of them help their husbands. This is different from the Garifuna peoples whose women work by selling or preparing the fish to be sold. In the island communities, women have other employment opportunities to contribute to the household. "
- "We do not want our children to dive because this is a very risky job. We do teach them how to fish with hooks-and-line but we definitely do not want them to dive".
- "There are only two women involved in fishing; Others have other sources of employment and contribu".

## Conclusions and General Recommendations

It is essential to involve all sectors of society that benefit from marine resources in the processes of marine conservation and protected areas. In the case of this MPA, the resource users have not been involved directly; nor have other relevant actors such as the State institutions that safeguard resources. In addition, there is a lack of rapprochement between the various authorities and communities; there is no communication or co-ordination of activities, and significant limitations prevail in terms of funding for institutions that are in charge of protecting the resources and enforcing the law, such as DIGEPESCA, which prevents them from fulfilling their roles.

The artisanal fishing sector has also expressed concerns related to overfishing and its interest in conservation. Despite having knowledge and experience, the institutions responsible for managing MPAs have failed to involve all stakeholders in decision-making processes. Based on their recommendations and community proposals for MPAs, it is clear that the fishermen are prepared to put together proposals for the conservation and management of the area. However, as long as there are no participatory and representative structures that make that possible, and so long as they are not recognized as key players, no progress will be made to incorporate their views.

The Forest Law for Protected Areas and Wildlife has established Community Forestry Advisory Councils. However, communities do not feel represented

by them, while many are not even aware of their existence. The concept of Community Forestry Advisory Councils has failed to become a truly legitimate and participatory structure for communities and artisanal fishermen. Fishermen do not feel represented by these councils, so it is essential that the issue of marine conservation be directly addressed with fishing communities and local organizational structures. Addressing the conservation of marine sites and listening to management proposals from communities should be the first step before setting up any restrictions.

Prior to the declaration of protected sites, consensus must be achieved between resource users and beneficiaries, putting forward management strategies that integrate the needs and recommendations of artisanal fishermen, along with greater involvement of the fishing sector and local authorities. Organizing the fishery sector is necessary, too, to allow it to be incorporated into decisionmaking, to defend its rights and to define its responsibilities. Fishermen are afraid of being deceived, given the experience of other conservation efforts, where fishermen have been tricked into setting up MPAs, and end up being excluded from the area and unable to carry out their fishing activities.

The issues of food security and improving the living conditions of communities are important concerns of the local populations with regard to marine conservation and their rights as communities.

In this regard, it is essential that marine conservation be addressed comprehensively, with processes that are linked with the human development of coastal communities and the promotion of their quality of life. Dealing with social problems, such as alcoholism and drug addiction, which severely affect coastal communities, should be an integral part of conservation efforts, as well as developing projects to fulfill basic needs, like access to decent jobs, education, health, housing and economic alternatives.

Local government, the non-governmental sector and communities depict tourism as the panacea, as a source of jobs and income. However, communities require other basic needs to be also met, such as access to health, education, housing and land and resources for a decent life.

The organization of communities and recourse to strong organized structures, which are functional, strengthened and consolidated, are essential for participative processes and equitable distribution of the benefits from conservation. The community of La Rosita in Cuero y Salado Refuge is a clear case where local organizational structures feel more empowered and involved

in conservation processes. Organizing communities and developing solid functional structures, which can be fortified and consolidated, is fundamental to improving local participation processes and ensuring a more equitable sharing of benefits from conservation. In the case of La Rosita in El Cuelo and Salado Refuge, it is clear that local organizational structures feel more empowered and involved in conservation processes.



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## **CHAPTER 2: NICARAGUA<sup>15</sup>**

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### **2.1 THE NATIONAL CONTEXT FOR THE CONSERVATION AND GOVERNANCE OF MPAs IN NICARAGUA**

Nicaragua has an abundance of marine biological wealth. Its privileged geographical position in the centre of the Central American isthmus provides it with two oceanic coasts—the Pacific coastal strip and the wide Caribbean or Atlantic shelf area. Nicaragua has the most extensive seagrass beds in the Western hemisphere and the widest marine continental shelf, with coral reef extensions in the Caribbean (MARENA, 1999).

Nicaragua's Pacific coast extends from the cliffs on the peninsula in the Gulf of Fonseca, on the northwest, to the rocky beaches in the Bay of Salinas in Rivas in the southeast. This coastline extends along 360 km, and out to about 3 km in the widest parts. The Pacific coast is a mosaic of ecosystems with a high degree of human intervention (MARENA, 1999). The Caribbean coastline extends from the Coco River, at its mouth in Cape Gracias a Dios, in the northwest of the country, to as far as San Juan del Norte (or Greytown), in the San Juan River delta on the southeast. It has an area of about 60,000 sq km, representing 46.4 per cent of the country's territory, and the coast extends for approximately 500 km, dotted with a variety of coastal lagoons, reefs, banks and cays (MARENA, 1999).

Nicaragua has prioritized the conservation of terrestrial ecosystems, but the protection of the marine environment has not received the same emphasis. While the Nicaraguan System of Protected Areas (SINAP) consists of 72 protected areas, classified into different management categories, only eight of them have marine components. In summary, the coastal/marine protected area represents about 21 per cent of the overall system of protected areas, and if measured against a total potential marine jurisdictional area in the exclusive economic zone (EEZ), which would include disputed marine areas, this percentage would be much lower.

The gap analysis study on marine conservation in Nicaragua (TNC, MARENA, 2009), which is the first of its kind conducted in Nicaragua, depicts the current interests of the Nicaraguan government for the conservation of coastal/marine resources, especially in terms of ensuring ecological integrity and the viability of populations. It is recommended that conservation efforts be strengthened and improved in the design of new MPAs and the existing

ones, so that they are able to comply with the conservation objectives for which they are established.

In this context, and because of Nicaragua's international commitments regarding conservation of marine ecosystems and resources, it is urgent that the country strengthens its conservation efforts and improves the co-ordination between relevant sectors and institutions in order to mitigate the pressures and threats, both marine and inland, which impact the conservation of marine resources in the country. Given this context, it is also essential that marine zoning criteria be developed and implemented based on an ecosystems approach, which promotes the rational use of marine and fishing resources with the participation of the resource users, as another mechanism for managing and preserving national marine resources, and through the application of management systems that are more permissive for human intervention, and through the recognition of modes of community governance that address the local and regional socioeconomic, cultural and institutional conditions.

#### **Box 5: Examples of community marine conservation in Nicaragua**

##### **Indigenous Communities and Miskito Cay Biosphere Reserve**

The Miskito Cay Marine Biological Reserve and Immediate Coastal Strip was established on 31 October 1991, by Executive Decree No. 43-91, with preliminary boundaries and along with a temporary interinstitutional commission to facilitate the development of the reserve, whose permanent limits were to be subsequently defined by the then-called Nicaraguan Institute of Natural Resources and the Environment (IRENA) upon recognition of the geographical and ecological characteristics of the continental shelf adjacent to the Miskito Cays.

Decree No. 43-91 stipulated that the resources from the Atlantic coast of Nicaragua should be monitored closely to ensure the subsistence and benefit of its people, and that there was concern about threats related to the indiscriminate exploitation of resources in coastal waters, especially sea turtles, shrimp, lobster and fish. By token of the same decree, a national commission composed of the following organizations was created: Nicaraguan Institute of Natural Resources and the Environment (IRENA, currently MARENA), Nicaraguan Institute for the Development of the Autonomous Regions (INDERA, no longer existing),

Nicaraguan Institute of Fisheries (INPESCA, currently Ad-Pesca), Department of Internal Affairs, Authorities of the Autonomous Region of the Northern Atlantic (RAAN), Mikupia Indian environmental organization, and the indigenous communities to the north and south of Bilwi. This commission was given the responsibility to develop a comprehensive Preliminary Management Plan within two years. The process to reach this purpose began in 1992.

Consultation with the communities involved and the authorities of RAAN, as well as the analysis completed by the planning team, determined that this protected area should be placed under the category of 'Biosphere Reserve' (Indigenous and Miskito Cay Communities' Biosphere Reserve). This category is compliant with those officially approved under the By-laws for the Regulation of Protected Areas of Nicaragua. The creating decree defined the protected area as a marine biological reserve, but the area was never operated as such because this is a marine area historically used by the indigenous communities and the decree's category was very restrictive. The management plan proposed by the MARENA-USAID Miskito Keys Project suggested the idea of using the Biosphere Reserve category. However that plan was never implemented.

The mission and vision of this reserve were put forward by the Miskito populations during the preparation stage of the management plan. The mission is for the reserve to provide the basis for the socioeconomic development of the communities in order to improve their living standards and income levels by protecting, controlling and appropriately using the resources of the area based on local knowledge, scientific research and training. Likewise, the vision set out that the existing resource-generating economic activities are used by private community companies that promote business alternatives and new activities with investments in technology and training of community members.

Taken from: MARENA-CBA/BRLi/VEGA/WCS, 2004. Plan de Manejo de la Reserva Natural Cayos Miskitos.

### *Cayos Perla (Pearl Cays) Wildlife Refuge*

The Cayos Perlas Reef System, located in the Autonomous Region of the South Atlantic (RAAS), was declared a Wildlife Refuge on 21 October

2007. The declaration by the National Assembly was in accordance with the provisions of the By-laws for the Regulation of Protected Areas of Nicaragua, under Decree No. 01-2007, published in the Official Gazette No. 08, of January 11, 2007.

The Cayos Perlas system is composed of the following 18 cays and seven land masses above sea level: Askill Cay and its two islets, Baboon Cay, Black Mangrove Cay, Bottom Tawira Cay, Buttonwood Cay, Columbilla Cay, Crawl Cay, Esperanza Cay, Grape Cay, Jeff Cay (Walter), Lime Cay, Maria Crow Cam Cay, Maroon Cay, Rocky Boar Norte (composed of three islets), Rocky Boar Sur (Billbird), Savanna Cay, Little Savanna Cay, Seal Cay, Top Tawira Cay, Vincent Cay, Water Cay and Wild Cane Cay. Also included are the reefs associated with the cays, which are found in the Cayos Perlas ecosystem.

Cayos Perlas is one of the most important sites in the Caribbean for the nesting of the hawksbill turtle, and is located in the Pearl Lagoon Basin, home to the Creole, Garifuna and Miskito peoples, Creole-speaking or English Creole and Miskito who have traditionally used the Cayos Perlas (Pearl Cays) for fishing purposes and received other benefits arising therefrom. As a matter of fact, the life and culture of the members of indigenous and ethnic communities of the Pearl Lagoon basin have, and continue to be, historically and traditionally linked to the cays' ecosystems, and the majority of them depend on fishing and using natural resources and benefits derived therefrom.

These cays are the traditional communal property of these communities, and, therefore, are protected by the sui generis or special regime governing community lands as set out in Articles 5, 89 and 180 of the Constitution of Nicaragua, which recognize the rights of use and enjoyment of the common property of the indigenous and ethnic communities of the Atlantic coast of Nicaragua. It is clear that any marine conservation initiative must recognize this framework that grants rights to communities culturally and economically rooted in this marine territory.

—Excerpted from: *La Gaceta – Official Gazette*, 2010.

## 2.2. MARINE CONSERVATION IN THE RIO ESCALANTE-CHACOCENTE WILDLIFE REFUGE AND THE SITUATION OF THE ASTILLERO FISHING COMMUNITY<sup>16</sup>

The Río Escalante-Chacocente Wildlife Refuge is located in the town of Santa Teresa, on the southern coastal zone of the province of Carazo, in the Pacific-South region of Nicaragua. About 90 per cent of the refuge's area sits within the territorial limits of the municipality of Santa Teresa. The remaining area is shared by the municipalities of Jinotepe, in the province of Carazo, and Tola, in the province of Rivas (FFI, DED, MARENA, UNDP, 2007).

The refuge has two clearly identified ecosystems: the tropical seasonal dry forest, located on the terrestrial portion of the refuge, and the marine ecosystem that consists of the maritime portion and a short beach that serves as an ecotone between the two ecosystems. It is one of only five beaches in the world where mass arrivals of olive ridley turtles (*Lepidochelis olivacea*) occur. This is an arrival beach for the almost extinct leatherback turtle. It has the largest and best preserved tropical dry forest in Central America (FFI, DED, MARENA, UNDP, 2007).

The refuge is part of the Nicaraguan System of Protected Areas (SINAP). The creation of the Río Escalante-Chacocente Wildlife Refuge was made possible through Presidential Decree No.1294, published in the Official Gazette on 17 August 1983. According to Article 1 of Decree, the refuge was created in order to "protect the nesting beaches of olive ridley sea turtles (*Lepidochelys olivacea*) and leatherback turtles (*Dermochelys coriacea*), as well as the last redoubts of tropical dry forest on the Pacific because of its socioeconomic, ecological and scientific relevance."



Lobster fishing is an important activity for the communities of the area

An estimated 450 people distributed amongst 70 families live in the six communities inside the refuge. The basic living conditions that characterize the refuge communities are very limited. Houses normally have dirt floors, are made out of wood, blocks or mud bricks, and a quarter of them are in extremely bad condition. In general, there is little access to drinking water, electricity, health services, and there are problems with access roads. As a result of these conditions and the poverty found in these communities, there is a heavy migration to Managua and Costa Rica. Malnutrition problems and diseases are also part of the panorama. Due to the pollution affecting the Acayo and Escalante rivers, infectious diseases are common. There is a high rate of illiteracy (60 per cent of the population). Family income is approximately \$0.50 per day (FFI, DED, MARENA, UNDP, 2007). The residents of fishing communities like El Astillero, Casares and Huehuete carry out their activities around the Chacocente Wildlife Refuge.

The major players by right/law, obligation, responsibility and authority in the management of the refuge are: (a) private owners; (b) Secretary of the Environment and Natural Resources (MARENA), in its role as the governing body for environmental management, responsible for ensuring policy for the establishment of policies in regard to protected areas; and (c) the Mayor of Santa Teresa (see Appendices 3 and 4).

## Results and Analysis of the Collected Data

### *From the fishermen's point of view:*

The fishermen from the Astillero community expressed their concerns about environmental and marketing issues, social and regulatory dimensions and law enforcement. On the environmental issue, the fishermen mentioned that some institutions, specifically the navy, fail to enforce regulations at sea. The use of harmful fishing gear by some fishermen is another problem. In terms of marketing, the challenges faced by the fishing sector relate to middlemen's companies and the price of fuel, which is determined by the middlemen.

The fishermen claimed not to know the sales price of fish and pointed out that not all fishworkers have their own fishing equipment. With regard to other social dimensions, they pointed out the invisibility of the artisanal fishing sector and the need to regain their rights as fishermen. During the meeting, they also spoke about their strengths at the organizational level and the existence of leadership in this sector.

### **The voices of the fishermen neighbouring Astillero**

*"Small fishing boats come to pump here and that causes trouble to all of us."*

*"Nobody knows that artisanal fishermen exist, thus the importance of creating a fishermen's association so we become visible."*

*"We don't know the sales price of fish."*

*"We want to regain our rights."*

*"Our preliminary co-operative is already established."*

*"I have been a fisherman for 40 years, since 1968. I saw others fish and learned the trade because I saw it was good and I liked it."*

*"I like the way the organization works, but trading companies do not appreciate our getting organized. This co-op intends to help fishermen, not compete with others."*

### *From the local government's point of view:*

Regarding the fishermen's situation, the representative from the municipality of Tola mentioned that fishermen are at a survival level. In this sense, he stressed the importance of organizing the sector as a key element in improving their profits and achieving a fair distribution of economic resources. Several concerns have been brought up by the local government in relation

to fishing, ranging from the use of harmful fishing gear such as dynamite, to overfishing, the vulnerability of coastal communities and unfair marketing practices through middlemen companies, which is detrimental to local fishermen: "People have needs and the stores are taking the biggest chunk of the income."

CoopeSoliDar R.L. 2011



Small-scale fishers of the community of Astillero arriving to the coast with their catch

But all is not negative. Municipal authorities have also listed a few important positive aspects, such as examples of good organization, like the Salt Workers' Association and the Small Tourism Entrepreneurs' Association, the fishermen's interest in conservation, and the institutional competence that the municipality sponsors with regard to fishing activities (creation of a fishermen's registry, granting of fishing permits, and so on).

### *From the navy's point of view:*

According to the navy representatives, promoting interinstitutional coordination is essential, for example, between the municipality, the transportation companies and the navy. The navy representative said that meetings are held only as a result of particular issues and circumstances. There is lack of co-ordination between INPESCA and the municipality in addressing the fishermen's issues.

It was mentioned as well that a new initiative for the development of artisanal fishing is already in place. However, this initiative is represented at the central



level by the exporters who are not interested in defending the interests of artisanal fishermen. Also on the list of issues are the lack of economic resources and the breakdown of the sector.

## **Trends and Conclusions**

The local government—in this case, the municipality—recognizes the importance of marine conservation, the situation of artisanal fishermen and their dependence on resources to enhance human and social development, and the need to make progress in this area together with local fishing communities.

From the municipality's perspective, the involvement of local communities in the management of resources marine conservation has not yet been achieved.

Local fishermen have expressed their interest in marine conservation and the sustainable use of resources. Nevertheless, they have been relegated to a secondary status when it comes to the involvement in conservation initiatives. Also, middlemen companies in the fisheries market do not generate any real benefits for fishermen.

Interinstitutional co-ordination is seen as a huge need by all stakeholders in order to address the issue of artisanal fishing and conservation. It is required that, at the local level, the different actors, institutions and resource users come together in favour of marine conservation and the governance of marine resources.

In this case, there is a clear interest of the Astillero fishing community to ensure the responsible use of marine resources and marine conservation. However, the government has failed to provide the support required by this sector to address the above issues.

The organizational factor continues to be fundamental for the fishing sector, not only as a means to represent their interests, but also to strengthen their capacities as a sector, and to strengthen its position and initiatives to compete with other sectors to obtain benefits.



Meeting held with small-scale artisanal fishers of the community of Astillero in March 2011

Generally speaking, the artisanal fishermen do not believe that their human rights are recognized as regards resource access, participation, marketing and human development.

The role of the institutions in ensuring that regulations are complied with at sea is a matter of concern for fishermen, who are affected by the decline in the amount of resources caused by the utilization of harmful fishing gear.

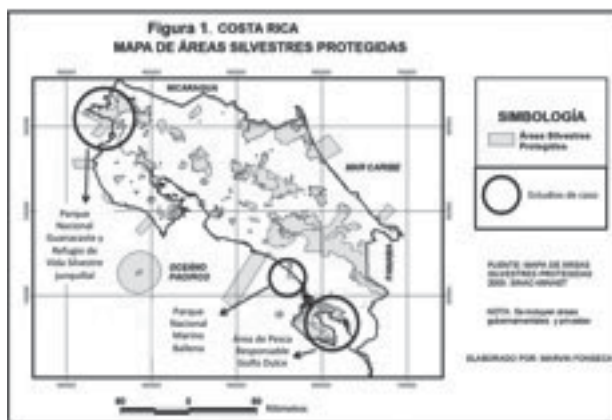
Though the issue of food security is key for artisanal fishermen, it has not been dealt with openly by the conservation initiatives of the country.

## CHAPTER 3: COSTA RICA<sup>17</sup>

### 3.1. THE NATIONAL CONTEXT FOR THE CONSERVATION AND GOVERNANCE OF MPAs IN COSTA RICA

Costa Rica has 168 protected wildlife areas registered under nine different management categories. On the ground, such areas occupy more than 26 per cent of the total national continental (land) territory, while in the sea, 0.9 per cent of the EEZ and 17 per cent of the territorial sea are under protection (UICN, 2011). In Costa Rica, 3.2 per cent of marine territory is estimated to be under some kind of protection (Estado de la Nación/State of the Nation, 2010).

Map 5. Protected Wildlife Areas in Costa Rica



*Source:* SINAC-MINAET, 2005

Despite the initiatives taken to protect the country's marine territory (especially under the categories of National Park, Wildlife Refuge and Natural Reserve), the National System of Conservation Areas (SINAC) has not been able to successfully combine the conservation efforts and policies with the participation of the local communities living in certain protected areas or adjacent zones.

The institution's mission clearly establishes the need to promote the participation of, and respect for, local communities in their efforts towards conservation. Moreover, the recognition of new governance models for MPAs has been very difficult to achieve at the institutional level; hence, the obstacles faced by local communities and indigenous peoples to participate in conservation decisions and the development of their territories. It was not until recent times that three new national initiatives have been established in order

to formalize the management of marine conservation with the co-operation of two different institutions.

First, in 2008, the Costa Rican Fisheries Institute (INCOPECSA) recognized a new category called Marine Areas for Responsible Fishing, which aimed to contribute to marine conservation through fisheries management, thus identifying the responsible use of resources as a tool for conservation. This new category promoted by INCOPECSA has been defined as “areas with significant biological, fishery or cultural characteristics delimited by geographical co-ordinates and other mechanisms that identify their boundaries”. They regulate fishing activities in a particular way in order to ensure the long-term use of fishery resources. For conservation, use and management, INCOPECSA may count on the support of coastal communities and/or other institutions (A.J.D.I.P/138-2008, 4 April 2008. Executive Decree No. 35502-MAG, published on 1 October 2009).

On the other hand, in 2009, the Environment, Energy and Telecommunications Ministry (MINAET), through SINAC, established two new categories of MPAs in the country, namely, Marine Reserves and Marine Management Areas.

Marine Reserves, according to the Executive Decree, have the following hierarchy of management objectives: (a) conserve ecosystems and habitats for the protection of species to ensure the balance and continuity of ecological and evolutionary processes (main objective); (b) promote the provision of benefits to satisfy the needs of human populations and their quality of life (secondary objective); (c) ensure the sustainable use of coastal and ocean marine ecosystems (secondary objective); (d) promote education, scientific research and environmental monitoring to allow the sustainable use and conservation of national resources (secondary objective); and (e) provide low-impact ecotourism (potentially applicable objective) (Article 2, Executive Decree No.35369-MINAET, published in La Gaceta No.139, 20 July 2009).

Marine Management Areas have the following hierarchy of management objectives: (a) ensure the sustainable use of coastal and ocean marine resources (main objective); (b) conserve biodiversity at ecosystem, species, and gene levels (main objective); (c) maintain environmental services as well as cultural and traditional attributes (main objective); (d) promote scientific research, education and environmental monitoring (potentially applicable objective); and (e) facilitate ecotourism and recreation (potentially applicable objective) (Article 5, Executive Decree No. 35369-MINAE, published in La Gaceta No.139, 20 July 2009).

**Box 6: A process of political advocacy and regulations for the Marine Responsible Fishing Areas: Towards forms of governance for the community management of marine territory**

The recognition of forms of community conservation and the consolidation of regulations allowing their recognition has not been easy to achieve in Costa Rica. Faced with this, the artisanal fishermen's co-operatives, CoopeTárcoles RL and CoopeSoliDar RL, have requested that the Board of Directors of INCOPECSA promote a specific initiative in this regard. As follow-up to this request, the Executive Director of the Costa Rican Fisheries Institute (INCOPECSA) created a commission comprised of representatives of INCOPECSA, the Environment and Energy Ministry (MINAE, now MINAET), CoopeSoliDar RL, CoopeTárcoles RL, and other NGOs involved in marine conservation, so as to develop a national proposal which would provide the opportunity not only to CoopeTárcoles RL, but also to other communities and organized groups and request that the Board of Directors of INCOPECSA recognize Responsible Fishing Areas. As part of the joint efforts of CoopeTárcoles RL and CoopeSoliDar RL, the work required to create and negotiate the proposal enabled each party to make contributions to the process. The technical input provided by CoopeSoliDar RL (creation of technical contents, those related to Costa Rican regulations, and collection and analysis of the major developments at a global level) and those of CoopeTárcoles RL (identifying the elements that characterize a town of fishermen: their history, tradition fishing, local needs, etc.) were brought to the Joint Working Committee, so that together we could develop a definitive proposal for Marine Responsible Fishing Areas. INCOPECSA representatives made the legal and technical proposal feasible, as defined within the responsibilities of the institution and, based on this, agreement was reached and subsequently the executive degree for responsible fishing areas was created.

Despite the fact that this proposal, developed as a result of the Joint Working Committee, is not exactly in line with what is defined internationally as a community conservation area, it has enabled the country to progress towards more participatory governance proposals, which must be considered positive in a nation like Costa Rica where decisionmaking tends to be centralized.

Tomado de: Patricia Madrigal y Vivienne Solís Rivera (2008). *A New Governance Model for the Sustainable Use of the Coastal And Marine Environment: Lessons Learned from the Central Pacific Coast of Costa Rica*. Ponencia preparada para la Conferencia de Global Commons. Inglaterra.

Based on: Patricia Madrigal and Vivienne Solís Rivera (2008). *A New Governance Model for the Sustainable Use of the Coastal And Marine Environment: Lessons Learned from the Central Pacific Coast of Costa Rica* (Speech prepared for the Global Commons Conference, held in England).

The efforts made by the country to recognize new categories are part of the initiatives within the framework of the Convention on Biological Diversity (CBD), which intends to increase efforts in marine conservation, and to which Costa Rica, as a country, has committed to increase its conserved marine space by up to 25 per cent (MINAET, 2005 and Coastal Marine Interdisciplinary Commission of the Exclusive Economic Zone of Costa Rica, 2006). The existence of the new categories could help the country becoming committed to promoting a new way for distributing the benefits of conservation to fulfill the needs and quality of life of local communities, as well as the sustainable use of resources. However, some people have expressed their concern that in working towards the goal of increasing the conserved marine space in the country, the well-being of coastal communities could be put at risk if such efforts are not carried out in a comprehensive manner that factors in the needs and rights of coastal communities.

In this context, it is also important to recognize the efforts that some coastal communities have made to contribute to marine conservation in a responsible, innovative way and based on their social and cultural strengths (see box).

### **Box 7: Examples of successful community marine conservation in Costa Rica**

**The Fishermen's Association of Palito and its conservation initiative for the local reef area:** The Fishermen's Association of Palito (ASOPESPA) in Isla Chira, one of the islands located within the Gulf of Nicoya, has implemented a voluntary initiative to protect a reef area. This area was delimited and regulated in accordance with the fishermen's association's wishes. In this area, the use of harmful fishing gear is forbidden, and only hooks-and-line are allowed. Sustainable management and the regulation of responsible fishing in this reef area

have brought about positive results for the local fishermen. The benefits have been derived from the conservation efforts made by fishermen within the coral reef ecosystem.

At present, this area has been recognized as a Responsible Fishing Area by the Costa Rican Fisheries Institute (INCOPESCA). There is still a long way to go towards the recognition of community governance models in the country, which respect the right of communities to participate in the use and management of natural resources. However, this is a good start since communities are receiving the benefits of conservation and are moving toward a more powerful position where community conservation efforts are being recognized (CoopeSoliDar RL 2006).

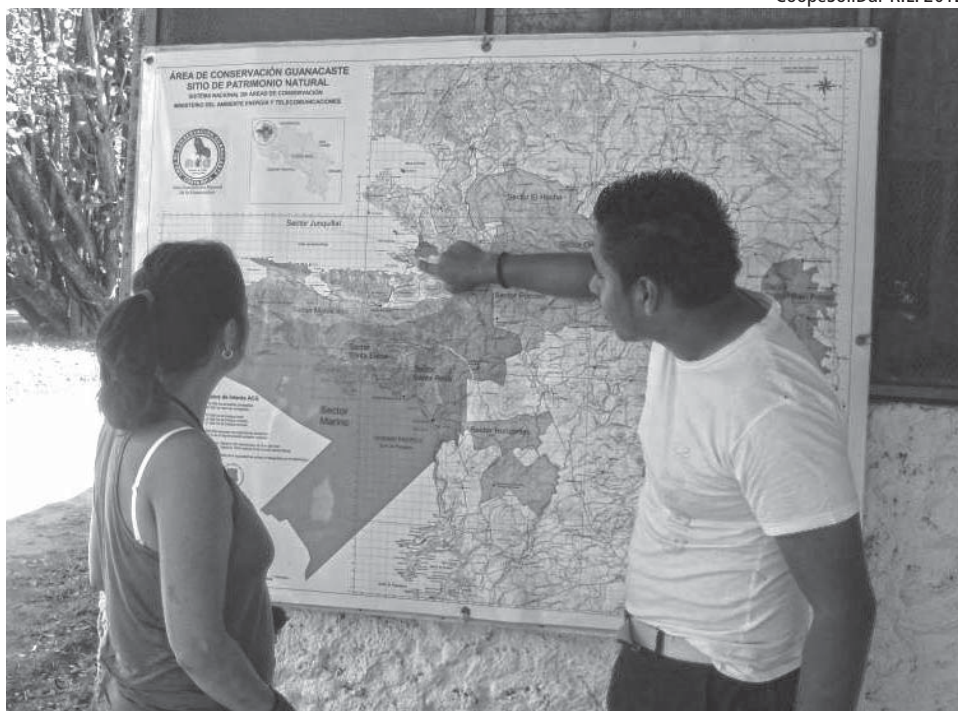
**The Tárcoles Responsible Artisanal Fishing Area:** The Tárcoles Responsible Artisanal Fishing Area is located in the Central Pacific area of the country, and is one of the community initiatives for conservation and the responsible use of resources. It was proposed at the local level with the intention of advancing the cause of marine conservation carried out through the efforts of artisanal fishermen. This initiative, led by CoopeTárcoles RL, the artisanal fishermen's co-operative of Tárcoles, and with the support of CoopeSoliDar RL implemented a community governance and decision-making model at the community level. Responsible fishing practices, the local knowledge for regulation, collective work and the protection of fishermen's rights of access are some of the objectives of this initiative, along with the goal of restoring and recovering fishing resources in the area to secure the livelihoods of a fishing community and its food security.

### 3.2. MARINE CONSERVATION IN THE SANTA ROSA NATIONAL PARK AND THE COMMUNITIES OF CUAJINIQUIL, LA CRUZ AND EL JOBO

The Guanacaste Conservation Area (ACG) is located in the North Pacific area of the country and comprises 43,000 ha, which extend from Punta Santa Elena to Punta Carbonal. It includes between eight and 10 islands and islets (Islas Murcielagos), in addition to four protected areas: (a) Santa Rosa (with a marine portion of 12 km), created in 1971 and extended in the marine portion in 1987 to include Islas Murcielagos; (b) Guanacaste; (c) Rincon de la Vieja (terrestrial parks); and (d) the Junquillal Refuge, created in 1995, with a significant marine area. In 2005, the Santa Rosa National Park was extended to include the area of the Peninsula de Santa Elena.

The Guanacaste Conservation Area preserves important mangrove ecosystems, coastal dry forest, rocky reefs, coral reefs, seagrass beds, and various important wildlife species. It also has two nesting beaches for leatherback turtles.

CoopeSoliDar R.L. 2012



SINAC representative showing the map of the protected area and its marine areas

In this area, there are several neighbouring fishing communities, namely, North Cuajiniquil (the closest), El Jobo (also known as Manzanillo) and Bahía Salinas. These communities are located north of the MPA. Actors from other neighbouring communities can be found, as in the cases of Ostional and San Juan del Sur in Nicaragua. South of the MPA, the main community, between other small ones, is the community of Playas del Coco (*Source*: María Martaa Chavarria, personal communication).

Artisanal fishing is one of the main activities of the communities in the area. They depend mainly on fishing as a way of life. Currently, there are about 50,000 people in the ten neighbouring communities, including approximately 800 artisanal fishermen in three neighboring population centers: Bahía Salinas, El Jobo, La Cruz, and Cuajiniquil (Chavarria, M. 2011. Personal communication).



In ancient times, Chorotega indigenous ethnic groups made use of coastal/marine and fisheries resources, and their fishing gears have been found on the sea bed in the ACG protected area, as well as large conch deposits, also known as “concheros” (accumulation of shells) (*Source*: Maria Marta Chavarria, personal communication).

### **Box 8: What are conservation areas in Costa Rica?**

Conservation Areas, as a way to facilitate the administrative management of wildlife areas and the protection of the country's biodiversity, began to be implemented as an idea in 1989 in an effort to integrate protected wildlife areas within a national system of regional conservation units.

In 1995, the organizational merger of the three directorates in charge of managing and supervising the management of protected areas took place, namely, the General Forestry Directorate, the Wildlife General Directorate and the National Park Service. The merger was followed by the creation of the National System of Conservation Areas (SINAC), in 1998, under the Biodiversity Act. There are 11 State conservation areas within which 126 protected areas are managed under different regimes.

*Source*: [www.sinac.go.cr/historia.php](http://www.sinac.go.cr/historia.php)

## **Research Results and Analysis**

### **From the point of view of the area's administration:**

According to MINAET/ACG, as the institution that safeguards conservation, a conflict exists with fishermen of communities in the area. The 'no fishing' regulations in the national park have created tensions between officials and the fishermen.

There are two fishing associations – the Cuajiniquil Divers Association (ASOBUCA in Spanish) and the Fishermen's Association of Santa Elena—as well as other fishermen who are independent. An estimated total of about 800 workers depend directly on fishing.

A variety of positions have been identified as regards this conflict as it relates to the communities and fishermen. On the one hand, officials point out that including people and community participation is an obstacle to management, and generates conflicts. On the other hand, they understand the need to transform their perspective into a more inclusive management of the area that may include the communities, and provide them with benefits

from conservation. This position recognizes that differences of power exist between communities, the institution and MINAET staff, as well as the difficulties that exist to balance this unequal power, which include the issue of access to information, the lack of communication, and the lack of will of the authorities to recognize the voices of fishermen and other community members as valid and important.

The internal social conflicts of the communities are seen as constraints to achieve participatory management and an equitable distribution of benefits from activities carried out in the protected area (tourism, for instance). Only few benefits have been generated for the communities of the protected area, mainly by tourism-related activities in the ACG, such as lodging and providing meals. However, the officials' view is that the community lacks the organizational capacity to profit from such benefits. As to the use of fishery resources, it is felt that there are other rich fishing grounds and areas outside the ACG that the community could exploit without having to enter and violate the regulations of the area.

Concerning the spaces for civil society participation created by MINAET—the Regional Committees for Conservation Areas and Local Councils<sup>18</sup> - these are perceived as not genuinely representative and as being politicized. There are no spaces integrating or involving communities in decision-making processes. Decisionmaking is relegated to the Technical and Management Committees of the ACG. The first Management Plan for the area is currently under development and, as yet, it has not involved the communities in its decision-making processes.

The only spaces in which community members are taken into account are in the Biological Education programme that works with schools in the region, and the Research Programme that works with youth and children (including groups that have attended camps and species-monitoring trips). However, there are no spaces where either fishermen or other members of the communities can be directly involved in marine management.

For the administration, the issue of a fisheries identity is seen as something 'new'. The community of Cuajiniquil is considered to lack a fishing culture; rather, it is considered a 'pseudo-culture', as traditionally it is a farming community which changed its productive activities once the MPA was established.

### **From the point of view of the small-scale fisherfolk:**

The following results were obtained from the meeting held with the Santa Elena's Fishermen Association, and in the interviews carried out with members of the community<sup>19</sup>:

Most of the people from the community of Cuajiniquil consider, first and foremost, that fishing, directly and indirectly, both in coastal and offshore areas, is their main productive activity.

As expressed by the community members interviewed, there is high rate of unemployment in the area and few opportunities for educational development of young people. The community has an elementary school, but no infrastructure for high school education.

An attribute of the community mentioned by most of the respondents is its tranquility, and freedom of action to work and fish at sea. However, they also mentioned current social problems like drug and alcohol abuse.

The fishing community is mainly engaged in diving, an activity carried out with compressors. According to those interviewed, several fishermen have experienced illness and even death from this activity. After doing a count, the interviewees calculated that about 13 people have been affected by this type of fishing practice. Fishermen recognize that these accidents have resulted from misuse of the fishing gear.

Regarding the establishment of the MPA, most of the fishermen mentioned that they were not consulted about the creation of the park; they also felt deceived by the construction of the park control booth that they helped build. They were told that the booth would help them and would serve as a shelter for fishermen in times of bad weather, but that has never happened. They also think that by declaring the area a national park, fishermen lost their chance of exploiting most of the marine territory for local production.

The fishermen expressed dissatisfaction with the way the MPA is managed. They have expressed their willingness to the authorities to work together on conservation but there has not been any apparent co-ordination that would allow them to be included in the initiative.



Listening to and collecting the community perspectives

Concerning opportunities for participation in MPA decision-making processes, fishermen said MINAET has not provided spaces for consultation with the fishing community. Interviewees said that in those cases where spaces have been provided for dialogue, the authorities have shown a lack of commitment to follow up on agreements made in the meetings they have attended.

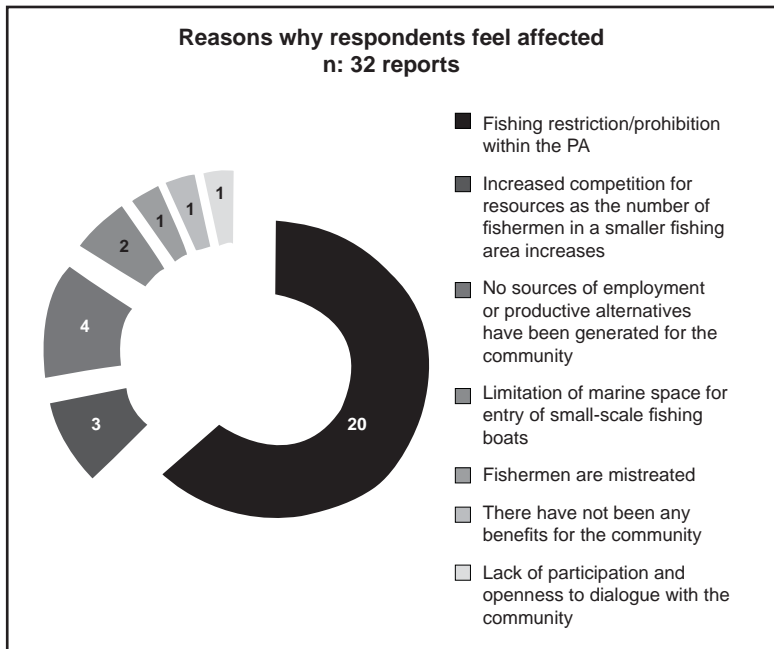
As to the distribution of benefits from conservation, the fishermen interviewed feel that no benefits have been obtained from living near a protected area. Out of those interviewed, two persons reported feeling satisfied with the area; both of them belong to families that have succeeded in launching tourism-related businesses.

It was mentioned that sectors like semi-industrial shrimp fisheries exist, which are causing irreparable damage to marine resources. They are operating in the area without any control or surveillance.

In general (in the case of all but one of the respondents), it was mentioned that since the establishment of the MPA, there has been an impoverishment of the community, the fishermen's incomes have been reduced, and the community has changed negatively.

The interviewees said they were affected by the protected area for different reasons. They mentioned the fishing restrictions and/or prohibition inside the MPA, and how neither sources of employment nor productive alternatives for the community have been generated, even as increased competition for resources, limited entry into the marine space for small-scale fishing boats,

mistreatment of fishermen, lack of benefits for the community and lack of participation and openness to dialogue with the community, continue.



Other negative impacts mentioned due to the establishment of the MPA were the break-up of the community due to people migrating away from the community and their impoverishment as a result of not being able to carry out their traditional fishing activities; therefore, many fishermen ended up selling their fishing equipment.

Concerning large-scale tourism, the danger it represents for the communities was mentioned. Negative examples of property sales and competition for the communities' water were mentioned. The social exclusion of fishermen and their local community caused by this type of tourism was also mentioned: "Fishermen get in the way of tourists, who push them out and, in the end, there is nothing left for the locals."

As for women and youth, the interviews explored how the participation of these sectors of the population can be strengthened. The responses highlighted the following recommendations: generate new sources of employment opportunities; valorize fisheries activities as a source of employment and well-being; increase organization and training; open up spaces for participation; and establish comprehensive programmes to combat social problems like teenage pregnancies and drug addiction.



Interviewing community members and including women's visions

### From the point of view of the community:

According to the interviewees, aspects of responsible fishing should be integrated into regulations for users (on fishing equipment, seasonal closures, zoning), with monitoring and biological studies; with fishermen participating in the decision-making processes regarding fishing zones, use and surveillance; with projects that generate employment and benefits for the communities and conservation, developing commitments and agreements with the community; with training in responsible use, tourism and conservation; and with zoning of priority areas for conservation, among others.

#### Box 9: Voices of artisanal fishermen neighbouring the Guanacaste National Park

- *We live from fishing; we are a community that is totally dependent on this activity.*
- *The village is tiny but has traditions, and although fishing is not that profitable, it does provide food.*
- *They took a lot of the sea away from us when the park was created. That was the best fishing zone.*
- *When referring to fishermen, the media usually say: "They caught a pirate in Cuajiniquil"*
- *This country is all about tourism and in tourism, they say, "These fishermen disturb us and steal from us."*

- *They forget about us, the institutions do not come to our help and we are an easy prey for drugs.*
- *Our situation is complex because we are in a border area and very close to a marine national park.*
- *Fishermen disturb tourists, who push them out, and, in the end, nothing is left for the locals.*
- *We told the Ministry that we must fight together, to protect our resources. The answer was not what we expected; there is no interest.*
- *We have been meeting with people from the park. We are not against the park, but they must provide support, for example, for line fishing and diving, but they don't.*
- *We have fought for justice, but they do not treat us well. When they arrest us, they throw our product into the sea and it is lost.*
- *It is necessary to place more buoys for us to know where the areas are.*
- *Large ships enter the park and nothing is said.*
- *Shrimp fishing vessels cause a lot of damage, and here we have a lot of knowledge about where the shrimp fleet operates.*

## Trends

The case of this MPA presents particular conditions due to its proximity to a border area, which makes it different from the other cases analyzed. The fishing area for the community of Cuajiniquil is a few kilometres away from Nicaragua and very close to the marine national park, which is part of the Santa Rosa National Park. There are regular migrations that change the social and economic dynamics of the indigenous population and that makes it difficult to estimate the real number of users of the marine resource. Likewise, several of the fishermen interviewed mentioned that the uprooting of the migrant populations, and differing conservation values hamper sustainable use and responsible fishing in the area.

There is a sector of the population that perceives, in a rather pejorative way, the small-scale fishing sector. They consider that this sector's behaviour is to seek aid from the government and has developed a way of life based on the help provided by the government for survival.

The community of Cuajiniquil is foremost a community where the main productive activity of most people is small-scale fishing, both directly and indirectly, both coastal fishing and high-sea fishing. Likewise, it is a zone of

high unemployment and lacks opportunities for the educational development of youngsters. There is a primary school but no infrastructure for high school education. The fishing community mainly carries out diving activities using compressors. (Researchers found that nearly 13 persons were affected by this kind of accident-prone fishing activity; people recognize that these accidents have occurred due to the incorrect use of the gears).

Most interviewees reported feeling dissatisfied with the way that the MPA is managed; only some of the interviewees (a minority) reported feeling satisfied with the area; the latter are families who have been able to start tourism activities.

It is observed that the community does not maintain a positive relationship with government institutions, both with respect to conservation and development. Neither is a close relationship with the local government observed.

From the interviews, it can be concluded that efforts to organize, both in the small-scale fishing sector and at the community level, are not consolidated. There is still no integrated work between the various community organizations, and the interviewees mentioned being sometimes distrustful of the way the organizational structures manage financial matters.

Most of the interviewees mentioned tranquility, fishing and freedom of action provided by working at sea as essential attributes of the community. However, they also mentioned drug and alcohol abuse as among the current social problems that have started to appear.

Interviewees agree that the marine resources outside the MPA are badly affected by the impact of fishing, given the number of people who fish there. They also mentioned that the park's area is in a better condition as regards marine resources.

The women of the community have little opportunity for development, they are not actively engaged in the fishing activity and are primarily devoted to household activities. It was mentioned that young people, especially men, start to engage in fishing at an early age.

According to the interviewees, MINAET has failed to promote spaces for consultation with the fishing community; there is a history to this in as much as consultation did not take place when the park was created. They also say that once the park was declared, fishermen lost the ability to profit from the most productive areas of the marine territory. Furthermore, they point to the lack of a more horizontal communication between the parties, which could be



used for dialogue, to listen to positions and make alliances that go beyond vertical top-down consultations with communities.

No benefits of living near a protected area are perceived; this opportunity has not yet generated benefits for people of the community.

Most people only recognize one type of mass tourism, which is the one that the government is promoting in the area; for the moment, this type of tourism is considered a threat to the people's tranquility and the identity of the place. Some still-emerging initiatives by some members of the community to participate in tourist-related activities (refreshment stalls and booths, for example) were mentioned.

Small-scale fishermen have ideas about how to manage the park; they are happy to propose ideas, but have received no response nor been given space to be heard. In most cases, their proposals do not mesh with the park's management system.

Many interviewees reported mistreatment by the control authorities.

They also pointed to illegal and other non-sustainable activities within the park, such as catching ornamental fish for sale.

CoopeSoliDar R.L. 2012



The marine resources contribute to the food security of the families of the communities of the Guanacaste Conservation Area

## Conclusions

In the community of Cuajiniquil, different levels of inequality can be observed, both having to do with the organizational structures and with the productive sectors, especially in small-scale fisheries. Inside the small-scale fisheries sector, there are different levels of vulnerability – between men and women, between small-scale fishers and their clients, between fishermen and the coastguard, and so on.

It is clear that, under the present conditions, the MPA is not fully meeting its objectives. This is backed by reports from the interviewees of fishermen entering the park illegally.

Under the current situation, there is even greater impoverishment of the small-scale fishing communities which, instead of improving the situation, worsens relations with the MPA authorities and therefore affects the resource base in other fishing areas.

If the mechanisms to facilitate dialogue and negotiation between the sectors are not defined and put in place immediately, conflicts will emerge, which will have to be addressed by State and local institutions.

Continued support is needed to turn organizational initiatives into consolidated efforts that will enable the sector to get organized and to be represented in the various decisions that are made.

It seems necessary to have a differentiated comprehensive development plan or policy for the area, which includes other communities in the area, and to address social problems such as drug abuse, teenage pregnancies, inadequate housing and health infrastructure, and so on.

Clear and transparent dialogue with the small-scale fisheries sector is urgently needed; MINAET and INCOPECA must urgently develop a strategy to promote opportunities to discuss and address the needs of the sector with more comprehensive conservation programmes that strengthen human well-being.

### 3.3. PLENTY OF FUNDING: NOT ALL THAT GLITTERS IN THE SEA IS GOLD: THE CASE OF GOLFO DULCE

Golfo Dulce is located in the Osa Conservation Area (ACOSA, in Spanish) and is one of the most diverse regions in Central America (Kappelle, M., et al. 2002).

#### **Box 10: Multiple-Use Areas and Marine Areas for Responsible Fisheries in the Golfo Dulce**

On 16 June 2010, through Extraordinary Agreement AJDIP/191-2010, the INCOPECA Board of Directors registered the Golfo Dulce Area for Responsible Fisheries.

The process was promoted by the Costa Rican Tourism Fishing Federation (FECOFT, in Spanish), which oversaw the development of the management plan and negotiated economically with the artisanal and semi-industrial fleet to secure the declaration of the area for responsible fisheries. As noted in the Management Plan, the importance of sport fishing for the area of Golfo Dulce is acknowledged.

According to INCOPECA (2010), Golfo Dulce has about 150 small-scale fishermen with their families, distributed amongst some 21 fishing areas: Punta Arenitas, Platanares, Punta Panama, Tamales, Potrerros, Matapalo, Carate Corcovado Playa Piro, San Pedrillo, Burica Extremo interno, Punta Islotes Mogos, Guabos, Esquinas, Saladero, Punta Piedra, Coto Colorado, Zancudo, Pavones, Manzanillo, and Punta Banco.

Conservation instruments used for marine conservation in the Golfo Dulce run up against the two national systems of marine conservation that have been developed. MINAET/Sinac has established a management system for setting up MPAs. INCOPECA has established that Areas for Responsible Fisheries can be set up through a fishery management plan, under the concept of Areas for Responsible Fisheries.

#### **Results and Analysis of the Research**

##### **From the point of view of the authorities (The Golfo Dulce Marine Committee—MINAET/ACOSA):**

The Area for Responsible Fisheries was created primarily because of economic interests linked to sport/recreational fishing. It was not an initiative that came from communities and artisanal fishermen in the region.

As regards the management of the Golfo Dulce's Area for Responsible Fisheries, there is no formal or participatory management plan. Actions are taken on the basis of a work plan of the Committee of the Area for Responsible Fisheries.

The Monitoring Committee of the Area for Responsible Fisheries provides the possibility for participation in decisionmaking, where the following are recognized:

- Two influential sports-fishing federations that participate in the Committee
- Mar Viva Foundation
- Universidad Nacional
- INCOPESCA
- MINAET
- The National Coast Guard
- One representative from the National Federation of Artisanal Fishermen (Fenopea, in Spanish)

Concerning the distribution of benefits derived from conservation, the Marine Area for Responsible Fisheries in Golfo Dulce seems to be adopting a more private approach to conservation; where economic interests and more powerful sectors dominate in the management arrangements.

### **From the point of view of artisanal fisherfolk:**

The situation of artisanal fishermen in Golfo Dulce is difficult. They are undergoing a series of social, developmental, training and organizational difficulties.



Small-scale fishing boats in Golfo Dulce

### **Box 11: National Federation of Artisanal Fishermen (FENOPEA)**

The organization was founded on 13 March 2007. It comprises six small-scale artisanal fisheries associations, located in coastal communities in Golfo Dulce.

The core objectives of the federation are to play the role of a legitimate representative in order to defend the interests of this sector and look for projects that may improve fishing activities and the quality of life of fishermen.

The federation has planned the development of several activities such as promoting artisanal fisheries, tourism projects, developing marketing strategies for the sale of fishery products, supporting monitoring, control and surveillance activities, and initiating research to improve fishing gear and strengthen responsible fishing.

*"The sea gives and I give back: conserving to fish and fishing to conserve."*

Source : Victor Rocha, President of Fenopea

Fishermen agree that Golfo Dulce is a marine area with abundant fishery resources and rich marine biodiversity that must be protected, especially to ensure the quality of life of the people who live next to the marine area. However, some fishermen are seeing a decline in the diversity of the fishery resource base.

Fishermen state that the National Federation of Artisanal Fishermen (Fenopea) was created with the objective of finding solutions to organizational issues and for gaining spaces for the communities. They recognize the existence of two artisanal fleets: one of them is oriented to line fishing (previously using trammel nets), while the other fleet uses artisanal fishing dredges for harvesting shrimp (see Box 11).

The fishermen say that the idea to establish the area came neither from them nor from INCOPESCA. According to those interviewed, the idea came from a foreigner with links to the sports fishery, who sponsored the first steps to obtain some sort of marine conservation status for the area.

The fishermen explained that the alliance between the artisanal and sport fishing fleet was created to get the semi-industrial fleet out of Golfo Dulce. It was mentioned that in the process of negotiation, representatives of the semi-industrial and the artisanal fleets received financial payments to secure their exit from the fishing grounds in Golfo Dulce. Resources provided for the artisanal fleet were given with the aim of, among other reasons, altering the fishing licences in order to change the fishing gears. Respondents noted that some fishermen were unwilling to negotiate such changes.

At present, this sector does not back the efforts made by sport fishing representatives. They say that the changes made to fishing licences have harmed their fishing activities. They think it is important to have the licences for their fishery and work activities that are in line with the law. Currently, about 115 new licences have been issued, but according to those affected, they cannot use traditional fishing gears, and no alternatives have been sought to improve their environmental impact.

With regard to management in the Area for Responsible Fisheries, the fishermen interviewed know about the existence of a document that defines the rules to be followed in the area, and which could be revised to incorporate their views.

Artisanal fishermen feel that there are weaknesses in control and surveillance. They pointed out that when the Area for Responsible Fisheries was first established, they observed an increased presence of the authorities. The fishermen interviewed recognize that sport fishing fleets are also targeting finfish, without any control by the authorities. In the same vein, we were informed that

in some parts of Golfo Dulce, small species are being fished and that trammel-net fishermen (from elsewhere) are fishing in areas associated with Golfo Dulce.

According to the focus group interviewed, there are various aspects to the possibilities for participating in decision-making processes related to the MPA. Some fishermen—at least those associated with Fenopea—feel that their voices are being heard in the Monitoring Committee of the Area for Responsible Fisheries. Similarly, women interviewed say that, since the establishment of the area, they have more spaces where they can be heard.

CoopeSoliDar R.L. 2012



Small-scale fishing boats anchored at sea

Other artisanal fishermen highlight the importance of including more representatives; for example, local fishermen fishing for shrimp should have a space in the Monitoring Committee. Increasing the number of artisanal representatives is necessary, given the large area covered by the Golfo Dulce. Some fishermen say they have had to resort to courts to have their rights respected. They point out the importance of recognizing the work and knowledge of fishermen.

As to the distribution of benefits from conservation, fishermen recognize that, following the establishment of the Area for Responsible Fisheries, relations with

State institutions and NGOs have improved. With regard to the relationship with the authorities governing marine resources, fishermen say they have a better relationship with INCOPESCA than with MINAET. Fishermen also feel that some biologists perceive artisanal fishermen as a threat to achieving conservation objectives.

### **Box 12: Voices of artisanal fishermen in the Golfo Dulce Area for Responsible Fisheries**

#### **On the current feelings of the fishermen of the Gulf**

- *This is not INCOPESCA's project; someone from outside gave the money.*
- *We are against the project. It is monstrous!*
- *Challenging such a large project is difficult.*
- *People came here and deceived us.*
- *It's a farce. They have offered all kinds of things.*
- *They paid nine fishermen to change gears; but what are these families to live on? They were given 4.5 million colones. But the gears never came. The "suripera" (a type of throw-net) is not effective.*
- *— for biologists and the State, we are like poison. There are four of us fishermen left with artisanal shrimp fishing licences.*
- *The licences they were given harmed them.*
- *They wanted to discard us, like a log thrown up by the sea.*
- *INCOPESCA's attorney says that licences may be changed whenever they want.*
- *As long as all is in order (the fisherman says), I am a tiger. Otherwise, I am a kitten.*
- *The group of Rio de Pavones has been affected by shrimp vessels; nursery areas have been damaged.*
- *Artisanal fishermen should be making the decisions for the area.*
- *The future is a good choice.*

#### **On women and youth**

- *With the Area for Responsible Fisheries, we women were put on the map; we are there! We do everything; we repair gear and weigh fish. We participate in fishing trips. With the marine area, there is more call for us; our work has become more visible.*



- *Young people should become professionals; the chapter is closing with me.*
- *The young think that they can go fishing with a computer.*

### **On the traditional knowledge of artisanal fishermen**

- *The shark biologists were given a large plaque and money; fishermen got nothing.*
- *I went to sea when I was eight; now they are drowning and discarding us.*
- *The University is now paying for our knowledge.*

### **On land tenure**

- *Houses must be near the sea.*

### **On responsible fisheries**

- *You should be responsible when setting your trammel nets. Responsible fishing is not about not using trammel nets.*

## **Trends**

There are nearly 200 fishermen in Golfo Dulce; these are very different from one another. They use different fishing areas and gear. Fenopea effectively integrates the major small-scale fishing groups, including the small-scale trawling sector.

The recognition process of the Area for Responsible Fishing has allowed the work of women in fisheries activities to be recognized and valued. The organizational process has allowed the work and contributions of this sector of the population to be better appreciated.

It is feared that young people will have to continue to be engaged with the development of small-scale fishing; fishermen want them to become professionals and to engage in other trades.

It is feared that the decisions and authority of the area may be managed according to traditional State systems or by private interests, particularly those related to sports fishing. The constitution of the Monitoring Committee has one representative of the small-scale fisherfolk and other stakeholders, such as MarViva and the University, two small-scale fishing federations, INCOPECA and MINAET, making it an unbalanced negotiating table, where small-scale fishermen are both a minority and a vulnerable sector.

MINAET recognizes the importance and need to strengthen their members' skills in social work and work with communities. It was mentioned that if there are new MPAs, they must be supported and monitored by the local communities. It was mentioned that, so far, SINAC only has experience of developing marine conservation in areas where fishing is illegal and prohibited, and therefore the new categories recently created by the State should allow for new paths of conservation to be opened up with the participation of the local people.

The rotation of INCOPESCA officials in Golfo Dulce makes it difficult to establish a long-term vision of the process, and to monitor the commitments and responsibilities assumed when the process was started. The case of an INCOPESCA official being incorporated through a work permit provided by the sport fishing federation has caused mistrust and doubt.

The need for Fenopea to integrate more persons of the communities affected by the fishing area and to include other stakeholders related to small-scale fishing has not yet been taken into consideration, as is evident from the research carried out.

#### **3.4. MARINE CONSERVATION IN THE BALLENA MARINE NATIONAL PARK IN THE PACIFIC OF COSTA RICA: THE BALLENA, UVITA AND BAHIA COMMUNITIES**

The Ballena Marine National Park is located in the Osa Conservation Area (ACOSA, in Spanish) in the South Pacific of Costa Rica. It was established under an Executive Decree in 1989 with the aim of conserving a rich marine ecosystem. The boundaries were redefined in 1992, and today, the park has an area of 5,375 ha at sea and 110 ha on land (CoopeSoliDar RL, 2002).

As shown in Box 13, this protected area has experienced a long process of conflict between users associated with the protected, particularly with artisanal fishermen from neighbouring communities.

### **Box 13: The case of Ballena Marine National Park**

Ballena Marine Park had a weak local community consultation prior to its creation, which resulted in major conflicts between local users of natural resources and government officials (MINAET).

At the time of the creation of the National Park, there were three communities: Bahía, Uvita and Ballena, which comprised fishing communities (families dependent on the park and its resources), who virtually disappeared when they were not able to use resources of the sea anymore. It was from the sea that they had earned their living.

The local communities asked for legitimate representative structures for collaborative management. As part of the strategy to manage the conflict, the Association for the Development of Ballena Marine National Park (ASOPARQUE, in Spanish) was created in 1997. At that time, this new association brought together 22 local organizations. ASOPARQUE proposed to develop co-management initiatives for Ballena Marine Park.

All the co-management initiatives, however, failed due to legal loopholes that prevented or hindered the State from supporting these collaborative processes. Such failure caused frustration among the parties, a loss of interest, and a deterioration of the channels of communication, increasing, therefore, the escalation of conflicts, which has been present until today.

Taken from CoopeSoliDar RL, 2002. (internal documents): *“El Parque Nacional Marino Ballena y su gente: Un proceso de manejo conjunto en construcción”* (“Ballena Marine National Park and its people: A co-management process under construction”).

### **Status of the Marine National Park from the point of view of its interest groups**

#### **From the point of view of the administration of the protected area:**

It is recognized that the presence of four active fishermen continue to be perceived as a problem for the management of the area. About eight years ago, fishermen started to change their occupations to become tour operators.

The marine park currently does not have any mechanism for participation or communication with the community. As regards this issue of communication and access to decision-making processes, the interviewees said that there are no spaces for involving artisanal fishermen or any other actor from neighbouring

communities and enabling them to take part when making decisions on the management of the area.

It is seen as important to improve communication and information about the area to artisanal fishermen from the community of Dominicalito<sup>20</sup>, since they are considered a possible 'threat' to the area, but little is known about the situation and characteristics of this community.

CoopeSoliDar R.L. 2012



Artisanal fishing boats in Dominicalito

It is mentioned that the people from the community are allowed to use fishing lines; however, in recent weeks, authorities have enforced the law on some of the remaining fishermen, and confiscated several illegal fishing gears.

The administration has focused on regulating tourism activities in the park. Since the institution's monitoring and surveillance equipments have been out of service, control and surveillance activities have been minimal.

In the community of Bahía, migration is evident, but the communities of Ballena and Uvita, on the other hand, have retained their original human populations, even when there are no more fishermen there. The area has been exposed to high real-estate speculation and land sales. This has resulted in people becoming

gardeners or employees in hotels instead of owners of their own land. There is no fish for local consumption. Most of the fish sold comes from the community of Quepos and other places in the Pacific, even though there is demand for fish from tourists.

### **From the point of view of artisanal fisherfolk from the communities of Uvita, Ballena, and Bahía:**

The existing fishermen recognize that very few people (three or four) are left who do this work of fishing. They feel marginalized from any possibility of participation and getting recognition for their work as an honest and worthy activity that could help local development.

The transformation to new sources of income such as tourism, security guard services, and any other occupations has been part of their strategy to survive. The MPA is not seen as a motor for driving development or as a generator of clear benefits for women and young people. However, all of the interviewees recognized the importance of a protection zone.

The fishermen interviewed recognize that tourism is a new source of income, which, however, only benefits those families that have been able to get a loan for equipment and boats. Fishermen claim that some fellow fishermen have successfully made the change to tourism and have done well and advanced; however, many have become so indebted that their properties and family fortunes are now at risk with the banks.

The presence of social problems in the community was mentioned, especially the prevalence of drug abuse and thefts. They also mentioned their preference for the previous situation in the MPA, where the governance system of co-management allowed them to participate in decision-making processes.

Artisanal fishermen feel that the national park is only interested in economic matters (income from visits) and not in the welfare and development of local residents.

Both sectors—the administration and the fishermen—recognize that this process of conservation and development is strictly dependent on the presence of whales during one season of the year. A change in this factor due to climate change or any other environmental factor would have very negative consequences for the park and for the local development. Both sectors have confirmed that 90 per cent of the tourism is national, although larger boats have been observed carrying out sport-fishing tourist activities.



Tourism and real state development on coastal areas results in social inequality

### Trends:

Artisanal fishing is being eliminated as a productive and organizational social sector of the communities surrounding the protected area (Ballena, Uvita and Bahía). It is important to compare these results with the previous study conducted by CoopeSoliDar RL, where fishing activities existed and fishing agreements with the private sector were recognized.

Some fishermen have changed their production activities from artisanal fishing to tourism (whale watching tours and sports fishing). At present, there are 18 tour-operating companies but not all of them are linked to families who used to work as artisanal fishermen.

The expectations for the development of tourism activities related to the park seem not to have been fully realized, and families are experiencing a significant reduction with economic effects and former tourists moving onto other nearby unregulated beaches. The local economy is dependent on activities such as tourism-oriented services; there is no product diversity, and social and economic resilience has worsened.

There is a lack of social analysis and discussion on issues like benefit distribution, equity, gender or intergenerational participation. The interviewed fishermen were the only respondents who mentioned the issue of distribution of benefits, and expressed a lack of clear understanding about the importance of the park to the community.

At the time, there are no open spaces for local participants to be part of the decision-making process in the MPA. There is no plan or strategy to engage in dialogue, consultation or decisionmaking.

## General Conclusions

Costa Rica's experience of marine conservation is only beginning. There is much more to learn and much to draw from the lessons learned in the past. This is particularly important, given the commitment to increase significantly the marine areas under protection.

The existing instruments established by the two State institutions responsible for promoting the conservation and use of marine resources (MINAET/SINAC and INCOPESCA) provide two divergent views about achieving conservation objectives, local development, opening up spaces for civil society participation, distribution of benefits, and management of marine territory.

The new management categories defined by MINAET (the Marine Reserve and Marine Management Areas) open a new scenario for the management of the natural marine heritage. Marine Management Areas can provide an opportunity to use marine resources sustainably. Despite this, and according to national legislation and the experiences analyzed, they can only be conducted under a government-controlled model, with little or no involvement of communities and other users.

As far as MINAET is concerned, examples provided in this study are of two National Parks (Guanacaste and Ballena Marine National Park), both of which are marine areas under a traditional form of management for protected areas on land under a governmental governance model, which shows considerable limitations in taking account of social and economic aspects of conservation.

INCOPESCA is a new actor in marine conservation, and has not developed sufficient expertise in this area. The main innovative feature of the Areas for Responsible Fishing is the possibility to integrate social and fishery production issues within a responsible marine fisheries management framework that also includes conservation.

The instrument of Areas for Responsible Fishing is not a kind of management, but does respond conceptually to a model for marine conservation that provides spaces for shared decisionmaking and the power to influence marine management. INCOPECSA is taking an important step for the country, by opening the possibility for multi-participant platforms to develop fisheries management plans and monitoring responsible fishing areas, thus creating an opportunity for managing under a co-management governance model.

Concerning the establishment of the areas studied, in all cases there were powerful interests that influenced the process for creating the areas. In Golfo Dulce, these related to economic and sport fishing interests; in the Ballena Marine National Park, conservation and tourism interests; in the Guanacaste National Park, conservation interests and a complex political dynamic, given its close proximity to a border area.

Seemingly, in none of the cases have the conservation objectives for which these areas were established been met fully. In the MINAET/SINAC cases studied, various fishing fleets (artisanal and shrimpers) have entered the MPAs. In the case of Golfo Dulce, artisanal fishermen have made formal complaints about the lack of control and surveillance measures.

Concerning control and surveillance, the study provides evidence that actors who are competing directly with the fishermen have been incorporated. According to information compiled on the Golfo Dulce and Ballena Marine National Parks, sport fishing boats are exploiting finfish resources. This is a new aspect of illegal fishing in protected areas.

In none of the cases was any interest shown in defending the social issues associated with fishing, and the culture and identity of coastal marine communities. The views expressed by artisanal fishermen highlight their frustration, deception and manipulation by different actors involved in the creation of the area—NGOs, State institutions, private and technical entities, and academic bodies. Artisanal fishermen are still perceived as a threat to meeting the objectives of marine biodiversity conservation for securing the natural patrimony, and not as a sector with any great potential to be included in marine conservation efforts.

The cases studied show large numbers of families in areas neighbouring the protected areas, living from artisanal fishing. It is interesting how in under 10 years, the number of fishermen in the community in the Ballena Marine National Park significantly decreased from about 30 families down to four fishermen today<sup>21</sup>. During this time, a strong impetus has been given to change



productive activities to tourism and sport fishing, with important implications for the social and organizational fabric of communities neighbouring the park. The same situation seems to be occurring in Golfo Dulce, with interests promoting sport fishing.

Regarding opportunities for participation, none of the cases studied showed that existing spaces for participation are being fully utilized. There is a widespread demand by the artisanal fisheries sector due to the lack of access to decision-making processes, resulting in an inability to influence decisions and to make their positions and voices heard in an assertive matter on key issues of concern for MPAs and in the management of marine resources.

All of the experiences have evolved differently. In the case of the Guanacaste National Park, the interviews show the total absence of dialogue and negotiation; however, the efforts made by some officials concerned with social issues within the institution have been acknowledged. In practice, MINAET/SINAC/ACG do not provide any space that allows fishermen to contribute to conservation efforts and present their needs as fishery workers.

As confirmed by the administrator of the area, in the case of the Ballena Marine National Park, the local councils were created as spaces for participation under the Biodiversity Law. However, these councils are not operating and the decisions are made entirely by government representatives; there is no space for the participation of community or local organizations.

In the Golfo Dulce responsible fishing area, there is a platform for negotiation, but there is an imbalance in the integration of actors, with a greater number of participants representing conservation and academic interests than artisanal fishery and local representatives.

It is important to highlight that in the case of Golfo Dulce, some women representatives say that their participation in meetings and decision-making spaces has improved since the creation of the Area for Responsible Fishing.

The research highlights the need for Fenopea to integrate more people from the communities affected by the fishing area and include other actors involved in artisanal fishing who have not yet been taken into account.

On the distribution of benefits from conservation, the research shows that the country has failed to develop marine conservation instruments that allow human development and welfare of coastal communities to be addressed in an integral way.

In the cases studied, the creation of MPAs has not stimulated the economy or improved the quality for life of artisanal fishermen and their families. Fishermen feel impoverished both individually and as a community, with reduced incomes and changes in the community. This situation is most evident around the Guanacaste National Park and the Ballena Marine National Park. In the case of the Golfo Dulce Area for Responsible Fishing, one can observe a trend of increasing discontent in this sector, particularly associated with the issue of licensing and the changes in gear which, according to fishermen, have had a negative impact on their activities.

On the subject of human rights, the research reveals that fishermen and the communities in the territorial strip bordering the sea have experienced different types of abuses such as the creation of protected areas without prior consultation, and little or no respect for their right to information. In recent years, with the implementation of the Law on the Maritime Shoreline Zone, there have been evictions implemented in coastal communities, separating people and their communities from their living spaces and sources of work. The lack of property rights in coastal areas that would ensure that these communities have a human right to carry out artisanal fishing is undermining them.

## **Recommendations**

The country must rethink the commitments taken up at international and national levels to increase by up to 25 per cent the area under MPAs, adopting a more holistic vision that allows social considerations to be included. Defining conservation categories or mechanisms should be the final link in a participative management process. Prior to this, the communities must be strengthened and helped to build up their capacities and to respond adequately to the responsibilities that they take up.

New forms of marine governance must be recognized for conserving the sea, which involves local actors in ways that coastal communities are aligned with a common cause and not seen as enemies.

The identity of local communities, their traditional knowledge and their connection with sustainable use of resources is necessary and fundamental for preserving and strengthening, in their entirety, conservation and development efforts.

Women and youth engaged in fisheries and other activities in the responsible artisanal fisheries production chain (gear rigging, trade, administration) need

organizational opportunities to improve their quality of life with equity and inclusion.

Co-operation and financial support need to be strengthened and presented to local actors in a special way, by which not only is technical and scientific knowledge recognized and strengthened, but local activities are also geared towards organizing for conservation, and should be recognized, valorized and strengthened.

As the ethical guardian of public goods like the sea, the State should question for what and for whom marine conservation is intended; it should promote management policies and institutional and legal support that responds to the majority, uniting the different interests towards achieving goals that are reasonable and that promote social, cultural and environmental sustainability, in a way that promotes equity.

Both environmental and social resilience should be the guide for marine conservation in Latin America where the local communities, indigenous people and small-scale fishermen, all traditional users of marine resources, should be recognized as part of long-term conservation efforts in a human-rights and equity framework.

Sectoral policies must be consistent and harmonized so as to prevent conflicts developing between policies that promote tourism, real-estate development and foreign direct investment with the rights of coastal communities and artisanal fishing activities.

The country must make a political commitment to recognize protected areas established under a range of participatory governance arrangements, including the implementation of areas under co-management regimes and community conservation initiatives.

It is essential that officials develop social and technical skills for the management of MPAs in order to achieve conservation and development objectives in compliance with indicators of good governance.

Sustainable use of the sea, its management and responsible fishing are priority issues for achieving people-centred conservation of marine biodiversity.

Genuine spaces for dialogue and integration must be opened up to enable full participation in ways that allow the voices of local coastal communities and their sectors to be heard. Progress must be made under the subsidiarity principle of good governance to ensure that decisions are made at the lowest levels and that various leaders of the community are represented.

The distribution of benefits from conservation requires that marine conservation initiatives contribute effectively to poverty reduction in an equitable manner and ensure that protected areas become the drivers of local development.

The country must deal with the new challenge of transborder marine conservation by opening discussions with neighbouring countries, thereby allowing a new era for the responsible management of its transborder marine resources to begin.

Costa Rica has an artisanal fishing fleet located mainly on the Pacific coast, given that it provides the most favourable fishing conditions for the development of small-scale fisheries. The Caribbean coast also has a substantial small-scale fishing fleet, where the Afro-Caribbean and indigenous cultures are key elements for the social and environmental resilience of this region.

## CAPTER 4: PANAMA

### **4.1. THE NATIONAL CONTEXT FOR THE CONSERVATION AND GOVERNANCE OF PROTECTED AREAS IN PANAMA: INDIGENOUS PEOPLES<sup>22</sup>**

Little is known about cases of community conservation at the level of marine and coastal protected areas that have been part of the territories of indigenous people in Central America. The forms of governance by indigenous and local communities include two major groups (Dudley 2008): (i) areas and territories of indigenous people established and operated by them; and (ii) areas preserved by communities, established and operated by local communities. The two groups, which may be difficult to separate, refer to both sedentary and mobile people and communities.

The International Union for Conservation of Nature (IUCN) defines this type of community and indigenous governance as *“protected areas where the administrative authority and the responsibility fall on the indigenous people and/or local communities under different forms of institutions and norms, customary or legal, formal or informal”* (Dudley 2008).

The National System of Protected Areas of Panama (SINAP) has 17 management categories (INRENARE, 1994a; PANAMA, 1998), including a category for indigenous conservation areas, named **Wildlife/Wilderness Area located within a Comarca** (administrative division) **or Indigenous Reserve** and defined as an area located within the legally established *Comarcas* and Indigenous Reserves, that have been declared wildlife protected areas through the Local Associations of each *Comarca* or Reserve according to the current regulations for each of these.

However, one of the main problems in the country and in the Central American region in general is the declaration of protected areas in areas inhabited by indigenous people (World Rainforest Movement and Oilwatch, 2004), without their prior consultation and information<sup>23</sup>, which has resulted, in some cases, in the expulsion of indigenous communities from their traditional lands (Dudley 2008) and in highly conflictive scenarios. Most of the regulations for these areas are not consistent with the holistic vision of indigenous people; these restrictive regulations, in many cases, impair the cultural use of, and access to, the resources that are the main source of life – forests and oceans—of the indigenous people and of which they have made a sustainable use in their territories. Indigenous communities coexist in almost all of the protected areas established in Panama, mainly in the bordering international parks

like: La Amistad International Park (PILA), between Panama and Costa Rica (where the Bri-Bri, Ngäbe and Naso live), and Darién National Park between Panama and Colombia (where the Emberá, Guna and Wounaan live). It is precisely in these geographic regions where the indigenous *Comarcas* overlap with the above protected areas.

In Panama, the protected areas managed by the indigenous people themselves and/or the local communities contribute to the country's economic, social and cultural development (Castillo 2010a). There are 27 protected areas in the Republic of Panama, comprising marine territories under different management categories (ANAM 2006, 2007, 2008). Out of these, there are five marine coastal protected areas, with the presence of indigenous people within and/or in their buffer zones.

The indigenous people of Panama have many limitations that pose vulnerability, but they also possess potential for self-development and to contribute to the country's development (see Box 14). These potentialities are their natural resources, still available in their territories. Their strengths lie in their traditional knowledge, human resources and organizations grounded in their ancestral cultural values and social capital (own identity, associative capacity, solidarity and collective values) that the other national sectors lack (Castillo 2010).

Protected areas encompassing the lands of indigenous people must take into account the presence of these people, their rights to the land and the history of the territories traditionally occupied by indigenous communities, as well as the right to access and secure the natural resources upon which their solidarity-based economy depends, and to continue their agroforestry activities and sustainable use.

The recognition of these rights expressed at its best current governance, are the *Comarcas* (indigenous territories), represented in the Guna General Congress<sup>24</sup>. The Government of Panama has duly and legally recognized the regions as part of the country's administrative system (Panama 1953). Thus, the indigenous territories or regions of Panama have administrative autonomy and decision-making capacity before the government's administrative system.

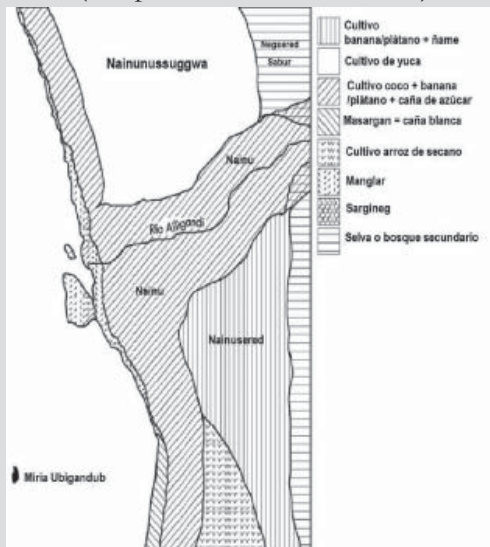
*Comarcas* and the recognition of indigenous autonomy are considered the basis for *shared governance* or *shared self-management* in Panama, which strengthens the intercultural relationship that has always distinguished indigenous and non-indigenous people, setting a new co-management relationship (Castillo 2000, 2003). The case of the Comarca de la Biosfera of Gunayala is detailed below.

**Box 14: Traditional indigenous knowledge as a strength for conservation, sustainable use of resources and territorial organization: An example from the of Guna People of Panama**

Based on traditional knowledge, every indigenous people or communities classifies and or creates zones for the use of their lands which will be dedicated to or managed for different purposes while using the river basin as the pillar of development (See Figure). For instance, the Gunas classified their lands in:

- a) area for protection, where the GALUS are located—they embody two concepts: the first is a particular place, ecosystem or habitat (sea and forest), where animals or people live; the second makes reference to sacred places or spaces, areas that must be preserved and protected, reserved in a strict sense, as core zones (sabar/nabsagan);
- b) area for the use of non-timber products; they are areas belonging to old and new secondary forest, where medicine, materials to build huts (houses), food, among other forest products are obtained; they may be considered buffering zones (negsered o nainusered);
- c) area for production; they are useful for production purposes or nainu (own land or parcel of land) agroforest land, wetlands or mangroves for fishing activities, among others, may be considered a zone for multiple uses and is part of the buffering zone (nainu o nainunussuggwa).

Map 6. Guna Land Traditional uses  
(Adapted from Castillo. 2001)



## Governance context in the case of the Biosphere Region of Gunayala:

The Gunayala *Comarca* is part of the administrative political system of the Republic of Panama (Panama 1953) and has indigenous autonomy. In Chapter II on Governance and Administration of the Fundamental Law of the Guna people (CGK 2001), Article 3 establishes that “the Gunayala *Comarca* constitutes a political division, in which organization, administration and operation is subject to a special regime, established in this Law and in the Region’s Statute”. According to Article 4, the communities will be subject to their own authorities, namely, (a) the General Congress of Guna Culture; (b) the Guna General Congress; (c) Sagladummagan; (d) Local Congress; and (e) Sagla. For its part, the Guna General Congress (GGC) is the highest political-administrative body of deliberation and decision in the region<sup>25</sup>; its pronouncements and resolutions will be mandatory for all authorities and communities of the region, once made public. Any breach thereof shall be punished in accordance with the rules established by the Statute of the Region (Article 9 of the Fundamental Law).

The General Congress of Guna Culture is the highest body of religious expression, and protection, conservation and popularisation of the historical and cultural heritage of the people (Article 7). The norms established in the Fundamental Law of the Guna people also have rules relating to the protection, conservation and sustainable development of natural resources (Chapter VII – Natural Resources). “The natural resources and biodiversity existing in the Region of Gunayala are declared patrimony of the Guna people. Its use, protection and conservation will be carried out as featured by traditional practices laid down in the Statue of the Region” (Article 43). The Guna people have the power to “declare marine or terrestrial places, protected areas and ecosystems; or adopt other measures for the conservation and reproduction of the species”<sup>26</sup> (Article 46).

With regard to collectively owned land and marine resources, they can be managed communally by organized groups, families and individuals. In particular, marine resources are not managed collectively<sup>27</sup>, but by organized groups, families and individuals, unlike the management of land resources (which are collective or communal) by organized groups, families and individuals.

This type of traditional governance has been established, upon recognition of the Guna General Congress as the legitimate authority in charge of the protected area, which is presented below as a case study.



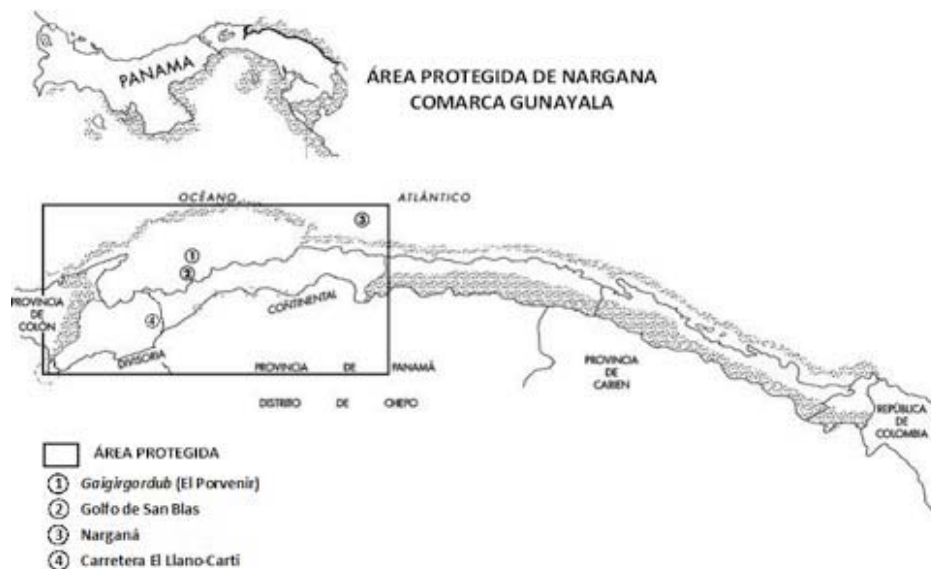
## 4.2. CASE OF MARINE CONSERVATION IN THE COMARCA OF THE NARGANA BIOSPHERE<sup>28</sup>

The Region of Gunayala located to the east in the Republic of Panama, consists of over 365 coral islands, with a length of 320 km and a width of 10-20 km. Its land area covers about 4,480 sq km, reaching a total area of 7,513 sq km of land and sea. The territory of Gunayala is composed of four *Corregimientos* (political administration of the country), with 51 communities; most of these communities (38) are coral islands, 11 are located in the coasts and two inland on the banks of the Mandinga and Gangandi rivers.

The present case is about the protected area located within the Corregimiento de Nargana in the *Comarca* of the Gunayala Biosphere, established by resolution of the Guna General Congress (GGC) in November 1987. Later, it was recognized by the national government by Decree of the Board of the National Institute of Renewable Natural Resources (INRENARE)<sup>29</sup> on 2 August 1994, with an approximate area of 250,435 ha of land and sea, of which 46,341 ha correspond to cultural marine coastal zones<sup>30</sup>. According to the resolution of the declaration of the protected area, the administrative authority and responsibility of the protected area falls on the Guna people, through the Guna General Congress (INRENARE 1994).

The protected area is located in the western part of the region (see Map 10) and protects important coral and forest systems, with 86.14 per cent forest coverage and the rest in a state of natural regeneration or under the *nainu* agricultural system (agroforestry) (ANAM 2009). The greatest diversity of coral species and the country's greatest reef development is located within the Region. Similarly, they are considered among the best preserved of the Tropical Northeastern Atlantic Coastal Biogeographic Province.

Map 7. Map of the Nargana Protected Area



There are 28 communities located within the protected area, in the cultural marine coastal zone. The largest number of communities exist in this *corregimiento* or protected area of Nargana. These communities are engaged mainly in agriculture and fishing for subsistence and marketing, and, to a lesser extent, in activities derived from tourism.

### Results and Analysis

**From the point of view of the administration, the Aquatic Resources Authority of Panama (ARAP)<sup>31</sup>:**

The Aquatic Resources Authority of Panama (ARAP) is the governing body for aquatic resources and their environment. As far as protected areas in indigenous territories are concerned, ARAP's purpose is to ensure the preservation and protection of terrestrial and marine fauna and flora, in order to achieve proper management of the exploitation of natural and man-made, and renewable and non-renewable resources. However, ARAP has a weak institutional presence within indigenous territories, as is the case in the Region of Gunayala, where the institution has not been involved with the region as a whole. This has caused ARAP to be weak in generating information, valorisation, conservation and use of biodiversity, aimed at reducing poverty

levels and preserving marine coastal ecosystems. Besides, monitoring, control and surveillance systems are weak and non-participatory.

ARAP, established<sup>32</sup> five years ago, feels that differences in the decision-making processes between protected areas in indigenous territories and in non-indigenous territories should be taken into consideration; in this regard, community involvement in the process of preparing the Management Plan was mentioned as an important component: “During the preparation of the protected area’s Management Plan, it must be immersed in the consensual opinion of the local community to guarantee the commitment and dissemination thereof”.

There have been both strengths and weaknesses in Panama's attempts to recognize indigenous people and territories and their role in conservation and resource management; the interviews conducted confirmed the importance of the participation and involvement of communities in protected areas. It was felt that ARAP and other involved entities should “promote training in utilization, conservation and management of resources in protected areas, for all the communities and authorities of the region”.

With regard to the management of the protected area of Nargana, ARAP claims to have no information, and is not aware of the management structure of the protected area “because it was not made by ARAP”. While ARAP recognizes the importance of involving local communities in the preparation and implementation of the Management Plan, it is ignorant of its specific role.

ARAP is aware that the *Comarca’s* local institutions must “ensure compliance with environmental regulations pertaining to the area, which may be formalized in the protected area’s Management Plan”.

ARAP recognizes as positive the form of governance in the Guna territory, through the Guna General Congress, which, despite its limited presence in the area, has maintained a close relationship maintained with the highest authorities, which, in turn, facilitates inspection tours, and monitoring and control in fishing areas, rivers and reefs. According to ARAP, the representatives of each sector involved in the management of the protected area are elected through nominations and brought to the Guna General Congress (GGC), with the participation and vote of all regional authorities.

On the issue of gender equity and youth in relation to the management of the protected area, ARAP desires that the entire community must be involved

in implementing the area's environmental management, in order to ensure total compliance and so that the younger generation can internalize the value of good resource management.

As for the benefits perceived by the local communities of the protected area, ARAP considers them to derive from income from ecotourism activities on the site, and from the sustainable use of the environmental resources that the site offers.

ARAP feels that "the perfect area for an MPA would be from Ustupu to Porvenir, comprising an area managed by the Guna people, entirely protected under their laws, and that would not permit fishing or any other activity to those who are not from the community".

As for how the indigenous communities can integrate in a better way in the management and conservation of resources, it was felt that it would be important to build on respect for, and compliance with, national laws, and imparting training for the members of the entire community, regardless of age, in the conservation of resources and in understanding the benefits they provide.

To strengthen the participation of women and youth in the decision-making processes of a protected area, ARAP feels that such participation should be integrated from the beginning, with public consultation in the preparation and implementation of the Management Plan.

Regarding local responsibilities for participation, it was stated that the organization must be subject to the internal laws of the community (*sagla*), which has the last say in any project to be carried out in the community. An example was given of a mass tilapia culture project in the Armila community, which was rejected under *sagla*, after having been initially approved.

In order to ensure respect for the culture and traditions of the communities that have traditionally depended on the sea, while simultaneously working on marine conservation, ARAP feels that it is necessary to make recommendations for the integration of indigenous communities into marine resource management processes in MPAs.

### **From the point of view of *Aggwanusadub*, *Yandub-Nargana* community members, and the *Digi* community<sup>33</sup>**

The leaders who were able to attend the General Meetings of the Guna General Congress (GGC) knew about the origin of the protected area of Nargana. At

one meeting, a fisherman read out Article 46 of *Anmar Igar*<sup>34</sup>: “Guna General Congress may declare protected marine or terrestrial places, areas and ecosystems; or adopt other measures for the conservation and reproduction of species”. This confirmed that the Guna people can exercise autonomy in establishing what they want and accepting projects when they are beneficial for their people, and reject them when they are not. Young people were not aware of the existence of the Nargana protected area; they said that the GGC does not disclose these environmental issues. Only some organizations, like CENDAH or *Balu Wala*, do so through projects. They consider it necessary to communicate these issues, since even in schools the existence of the protected area is unknown. Older people knew better the history of the Nargana protected area, established in 1987 by the GGC itself, administrated first by the Kuna Ecological Association (KEA), which had professional Gunas attached to the Ecological and Management of Wildlife Areas of Kuna Yala Programme (PEMASKY)) and later transferred to the GGC’s administration. Some of the participants mentioned that since then there has been no information or communication in this regard, “we no longer know what is being done or what the GGC does with the protected area; there have been projects since 2000, when the KEA transferred the area of Nusagandi to the GGC, whose projects or programmes currently exist”. It was stated that there has been little or no community participation in events that should have been organized by the GGC. There was also concern about the lack of information about the territory: “We do not know what is happening in our borders; we were told that the settlers have invaded the area or are invading again”.

A participant of the Digir community pointed out: “Now I hear that they want to sell carbon, turn our trees into carbon... I don't understand what that is but we will never, never sell our brothers, the trees, to anyone—they are the future of our children and grandchildren.”

In a discussion on the general aspects of the Nargana protected area, it was felt that though they regard it as a benefit, at present it is not being taken seriously by the GGC. Community members expressed the need to strengthen their skills to better participate in future actions related to the protected area, especially on concrete actions on marine resource conservation and lobster fishing. The creation of a small community MPA project, *Balu Wala*<sup>35</sup>, through an NGO, was mentioned. However, it was noted that the community was not involved in decision-making processes concerning the project’s development, either related to fishing activities or the management of the protected area. The decisions were taken by the Environmental Board of Directors of each *Balu Wala* community and groups. The decisions were not delegated to community members.



Community dialogues as a methodology to collect community perspectives

The closed season for lobster (*Panulirus argus*) and marine turtles in the region<sup>36</sup> was also mentioned; some lobstermen and community members perceived such a closure as a ban, since they were denied the right to fish freely. Reference was made to the project that encouraged the community not to throw garbage into the sea. However, the lack of monitoring of some of these projects was noted; therefore, it was difficult to continue with the initiatives.

Asked about their opinion on the benefits of the MPA, most interviewees agreed that absolutely no major benefits had come from the area. Nevertheless, some benefits were noted: communal tourism in the Digir community, and the closed season which improved lobster production and, therefore, the economic benefits from lobster sales. Some said that only a few members benefitted. The cessation of not dumping garbage into the sea was also mentioned as one of the benefits. But the community has not followed up by clearing the garbage and keeping the MPA clean.

Regarding equitable participation, it was noted that very few fishermen, women and youth have participated in the protected area's management; to date, the

situation remains unchanged. Neither the youth nor local organizations have been involved in the activities. Some interviewees pointed out that the community is not satisfied at present with the protected area since they are excluded from the decision-making process.

Dialogue participants gave the following recommendations for the better working of MPAs:

- Harness the support of environmental agencies.
- Communicate with the local people and deliver updated reports.
- Appoint a responsible person to lead the projects efficiently.
- Install demarcation buoys in the MPA, and monitor them with boats.
- Gain the support of the local congress and the GGC in surveillance.
- Involve the people more involved in the activities of the MPA.
- Organize educational talks and gradually encourage the community members, especially children, to participate.
- Promote education and training within the community.
- Remunerate the persons in charge of the MPAs in each community.

It was also suggested that communities can be integrated in the conservation of resources through training and participation in community meetings with fishermen, farmers and others, with the support of the local congress and the GGC, and disseminating project details to children as part of their educational curriculum.

With regard to strengthening the participation of women and young people, the interviewees further recommended that the best way to do this is by getting them to participate in workshops and meetings and by sharing and thus learning from the experiences of other national and local MPAs.

As for striving for a better quality of life in the community, the interviewees listed the following as important issues: access to water, healthcare facilities, improved community parks, better support for garbage collection and disposal, and heightening environmental awareness among national and foreign tourists.

Finally, it was felt that if such projects are reactivated in the community, awareness among the local people would increase, and that would help promote better and more responsible tourism in the communities.

## Trends and Insights

The government entities ANAM and ARAP do not have much participatory activity with fishermen and their communities, due to weak institutional presence in the region. For its part, the GGC, particularly its Executive Board, is actually unaware of the Nargana protected area management process, which highlights the need for training in environmental issues and MPAs, in a more participatory way by integrating the members of the community into the process. From this point of view, the GGC should think seriously about the need to initiate the implementation of a comprehensive development plan for the *Comarca*.

It is clear that under the current condition of the Nargana MPA, the objectives for which it was created are not being fully met. Likewise, the communal MPAs, which were part of the aforementioned project and that are not recognized by the GGC, also do not meet their objectives, since they were created by short-sighted initiatives that failed to achieve stated goals.

The GGC needs to define and review the Management Plan of the Nargana MPA and urgently define the mechanisms to facilitate dialogue in order to improve the sustainable management of fisheries in the region, and generate profits for fishermen. Furthermore, it is necessary, as a strategy, to prepare for the possibly negative impacts of climate change.

We have observed that fishermen, mainly those engaged in commercial lobster and other seafood fishing, have a new vision; they are more aware of the advantages of fishing closures and sustainable management practices. This is because they understand the needs arising from food and malnutrition-related issues. In addition to this, the young are migrating to cities, abandoning the agricultural plots on which their families depend and leaving their families to fend for themselves. Since agricultural work is strenuous, the youngsters who have remained in the communities tend to choose commercial fishing, mostly for lobster and octopus, in order to make quick money with the minimum of effort. Some of the young who have stayed back in the communities have become conscious of the food issue and have started organizing 'agricultural production groups'. Others who fish and sell lobsters have formed groups of lobstermen. Some approach NGOs like CENDA and others that work in the area, seeking guidance on planned use of land and fisheries.

Different levels of inequity are observed in the Aggwanusadub and Yandub-Nargana communities, which have to do both with organizational structures and with productive sectors, particularly lobster fishing. Continued



support is evidently needed to strengthen fishery organizations through training and technical assistance.

It is urgent to find appropriate mechanisms to ensure that women and young people become more involved in activities related to the management of marine and coastal resources.

The Guna nation has undoubtedly been influenced by an inherently inequitable capitalist system in the region's agricultural and fisheries development. In the light of this, there is a need for innovation and for traditional knowledge and cultural practices to be revived, to counter the sociocultural and economic bombardment by the prevalent Western system of industrial production.

Although Guna authorities participated in supporting the OSPESCA process for a closed lobster season for the Central American Caribbean region, Guna fishermen—the key actors—know little or nothing about this regional regulation<sup>37</sup>.

## Conclusions

The importance of indigenous community governance of MPAs for the proper management of resources is recognized by government institutions like ARAP; this is an important fact, considering the limited presence of public institutions in these territories.

Also equally important is the need to integrate the indigenous communities into the management of MPAs, and to respect their internal decision-making structures and laws.

Although the Nargana MPA is under community governance, in the form of the highest Guna authority, the Guna General Congress, people from the community who were interviewed feel there are certain gaps, such as lack of information, limited participation of the community and lack of integration of young people into management processes.

The situation is similar in the case of the other community management initiatives surveyed in this case study, where decisions are made only by a few.

Even in the community management initiatives—such as the lobster fishing holiday, the small community MPAs, and the participatory process for the implementation of the Coastal Marine Management Plan—there is an urgent need to generate in these initiatives a long-term vision and empowerment that

will enable continuity through local participation. When these community management initiatives are created within the framework of short-term projects, community processes do not seem to have a continuity longer than the framework of the projects in which they were managed. It is, therefore, necessary to work in parallel processes that strengthen communities and people in ways that give local continuity to the initiatives that promote community-based management and, at the same time, do so in an equitable manner, thus providing a firm social pillar to support them<sup>38</sup>.

It is also essential to do this within a rights-based framework that promotes the responsible use of resources and food security, which remains a vital concern for the communities that depend on the resources.

From experiences of community-based management and local governance, it is necessary to highlight the equitable distribution of benefits. In the case of the Nargana MPA, which was created within the structures and initiatives of the Guna people, our study has revealed gaps, leading to questions about the generation of benefits from MPAs, which need to be addressed by the community initiatives.

The perceived benefits generated go hand in hand with resource recovery for some sectors of the community, like the lobster traders and those involved in tourism activities, but they are only economic or productive benefits that do not percolate down to the majority.

Local decision-making structures, like the Guna General Congress, are considered essential for the management of community marine areas; but it is necessary to integrate more actors like women, youth and fishermen, so as to ensure a participatory governance that generates benefits for the majority of the inhabitants of the region.

The access rights issue remains crucial in resource management processes and governance of MPAs. The integration of more community members in decision-making processes is essential even in forms of community governance with hierarchical structures.

The integration and recognition of fishermen, women and youth in the MPA management remains a challenge not only for protected areas with more traditional governance systems but also for the community-based ones. In this sense, it is important to make visible and restore the fundamental role that these actors play within their families and communities for food security and in the organizational efforts for the management and responsible

use of resources. The issue of food security remains a fundamental element in resource conservation and management.

It is still a challenge within small-scale fishing structures at the regional level to achieve fuller participation and support locally, as in the abovementioned case of seasonal closures for lobster fishing, which many fishermen are ignorant of, having being denied a role in the decision-making processes.

#### **4.3. MARINE CONSERVATION IN THE BASTIMENTOS ISLAND MARINE NATIONAL PARK AND SAN SAN—POND SAK WETLANDS, BOCAS DEL TORO—PANAMA<sup>39</sup>**

The Bastimentos Island Marine National Park<sup>40</sup> is located in the archipelago of Bocas del Toro, Panama, located between Bahía de Almirante and the Chiriquí Lagoon. This marine national park was created in 1988, and it is a group of islands and islets, with an area of 13,226 ha, of which 11,596 ha are offshore. This protected area preserves beach, coral reef and mangrove ecosystems. It also preserves important coastal, island and marine ecosystems, species like manatees, more than 200 species of tropical fish, coral reefs, and marine turtle nesting beaches. This park encompasses the largest area of the country's Caribbean mangroves as well as the best preserved coral reefs of this coast, dominated by red mangrove (*Rhizophora mangle*) and white mangrove (*Laguncularia racemosa*). According to the PNMIM management plan (ANAM 2001), diagnosis of the current situation indicates that the park's natural resources are in good condition but are seriously threatened. Unregulated tourism, for example, has brought about land speculation, a significant increase in the demand for marine products for hotels and restaurants, and an exponential increase in tourist visits to certain areas of the marine park. Other threats identified include overfishing, agricultural activities within the protected area and hunting (ANAM 2001).

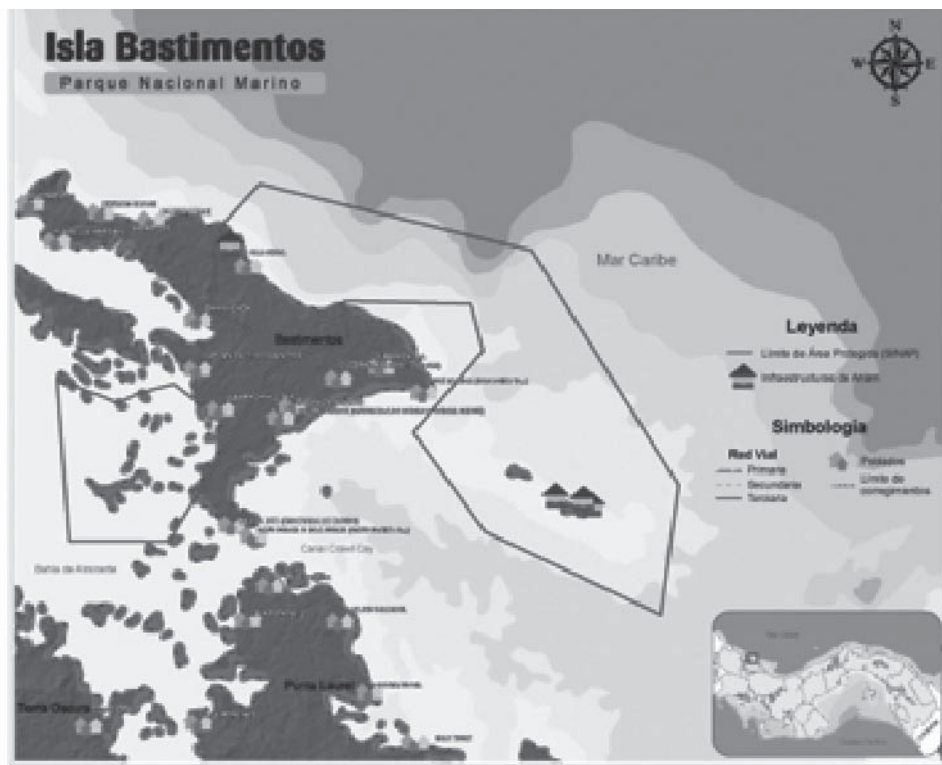
The population of the province of Bocas del Toro is mostly concentrated west of the province in the cities of Changuinola, Almirante and Bocas del Toro City (in Colón Island). Four of the seven indigenous groups present in the country occupy territories within Bocas del Toro, and members of other ethnic groups arrive in the province looking for job opportunities.

The main cultural groups in the area are: *mestizos* with *campesino* roots, indigenous Ngöbes and black people of Antillean ancestry. Migration from the isthmus and between the islands is very intense, especially motivated by the lack of economic opportunities in other regions (Carrión de Samudio 1995, cited

by ANAM 2001). The population of the archipelago of Bocas del Toro is mainly rural.

There are five villages in Bastimentos Island (ANAM 2001), where the PNMIB is located: Bastimentos (Old Bank), Bahia Honda, Segunda Playa (Second Beach), Punta Vieja (Old Point) and Quebrada Sal (Salt Creek). South of the park is Popa Island, where there are five other settlements, namely, Punta Laurel, Tigre, Buena Vista, Popa 1 and Popa 2, with residents mainly from the Ngöbe, Solarte Island (Nancy), also occupied primarily by Ngöbe villagers. Most of the black population of Afro-Caribbean descent live in Bocas City in Colón Island, Carenero and Bastimentos.

Map 8. Bastimentos Island Marine National Park Map



### Administration of the Protected Area

The National Environment Authority (ANAM) is responsible for the conservation of protected wildlife areas in Panama. In the case of the Bastimentos Island Marine National Park, the administration proposal—defined in the Management Plan—contemplates the establishment of a Permanent

Support Committee to serve as a regular and permanent consultation body. This must be created by a resolution of the General Administration of ANAM, a practice that would allow ANAM to evaluate, in the following years, the feasibility to enter into a formal co-management mechanism<sup>41</sup> for the PNMIB's administration. Therefore, governance here is maintained by the government, represented by ANAM.

It is important to point out that ANAM has also been protecting other protected areas in the Bocas del Toro province, such as the San San—Pond Sak Wetland of International Importance (HIISSPS).

### **Box 15: San San - Pond Sak Wetland of International Importance (HIISSPS)**

On 9 June 1993, at the request of the Republic of Panama, the San San—Pond Sak wetland area was included in the Ramsar Convention List of Wetlands of International Importance. With an area of 16,414 ha, its biological and cultural value is recognized within Panama's national system of protected areas. The HIISSPS is located in the province of Bocas del Toro, Changuinola district and is part of La Amistad Biosphere Reserve (RBLA) (ANAM 2004b).

People living in the surrounding areas are mainly mestizo and of European descent, in addition to an indigenous population, the Ngäbe Bugles. There are no communities within the management unit, only some farms with houses for temporary use. A mission by Ramsar (2008) to Panama did not mention the participation of Ngäbe Bugle people. The management plan as a strategic tool of the natural resources management policy does not include the participation of Ngäbe Bugle people.

One of the Management Plan objectives is to attain co-management. If the participation of Ngäbe Bugle people and other local communities surrounding the protected area is not taken into consideration, this objective cannot be fulfilled, namely, to “ensure the participation of organized groups and private enterprise in the development of co-management activities within the protected area, or concessions and on a voluntary basis” (ANAM-CBMAP 2004b). By not achieving the co-management objective, the prevailing government system of governance would remain in the protected area, as represented by ANAM.

## Results and Analysis<sup>42</sup>:

The following summarizes the outcome of the interviews made with ANAM officials and the study's focus groups:

### From the point of view ANAM's central administration:

According to ANAM's administration in Changuinola, the local communities surrounding the protected area were a fortress for conservation, particularly in the form of ADEPESCO, the conservationist fishermen's association of the archipelago, consisting of 12 indigenous communities in the archipelago. According to the ANAM director in Changuinola, ADEPESCO is an organized group, which has participated in the conservation activities promoted for the area and also aids in conservation regulation.

During the interviews, examples of attempts to integrate the communities were mentioned, while also recognizing the enormous personnel and economic constraints faced by the State in providing the support that these communities requested. From the perception of the Regional Directorate and the San San - Pond Sak Wetland Directorate, it is perceived that positive efforts have been made to bring in small-scale fishermen.

CoopeSoliDar R.L. 2012



Interview of ANAM officials at the office in Changuinola, Panamá

Cultural and indigenous issues are considered important for biodiversity conservation. The importance of preserving language and culture was mentioned. From the interviewees' perspective, this participation, which was almost non-existent earlier, has evolved since the protected area was created, shifting it from a situation filled with 'predators' to one of communities becoming more aware and participating in the decisions made.

It is recognized that the law requires the appointment of a District and/or Provincial Advisory Committee on the environment in the region of Bocas del Toro and that this structure was created with the participation of representatives of the municipality, tourism and other sectors. It is said that the committee meets as required, but that ANAM makes the final decisions. The San San—Pond Sak reserve area has no advisory committee.

The administration recognizes that, at the moment, there is no space for local participation in the park's decision-making processes. One of the most serious problems impeding progress on conservation is the lack of funding to implement the Management Plan that was made with local participation: "Management Plans should have funding, and without it, there can be no implementation, and it is difficult to make changes", it was pointed out.

The administration realizes that the communities want to use the park's resources, but that cannot be allowed because legally, the management category does not permit it.

It was pointed out that the communities have benefited from training and being organized into groups, opening up the possibility of receiving support from external sources. In the case of the San San - Pond Sak wetland, the decision-making process is moving toward a co-management system that is still in process, developed by ANAM and AAMVECONA<sup>43</sup>.

The administration feel that tourism is directly benefiting local people: "Earlier, they used to fish and now they are changing." For example, women have developed handicraft activities; and in San San, most fishermen are now defenders of conservation activities.

The administration feels it is feasible to develop fishing and conservation at the same time, and they should be seen as complementary. However, since there are laws, "the fishermen must comply with the law".

According to the administration, the main weaknesses of local organizations are their difficulty in obtaining legal status, the loss of enthusiasm of the participants and leaders when faced with obstacles, and, above all, the

disintegration of organizations. As an example, in Bastimentos Island, the communities proposed the park's expansion. Four years passed and on the fifth year, tourism activities began, and those who had land holdings outside sold them off".

With regard to what can be done for the future, the administrator of the San San reserve mentioned the initiative of creating marine areas for fishing with the participation of fishermen: "I like an initiative that is taking place in Spain, the creation of marine areas specifically for fishing. A specific area is marked off, and no fishing is allowed in that area, but it is allowed in the surrounding areas. Fishermen noted an increase in fish production and now they want to expand the area's borders. It is like starting a bank. If fishermen are involved in the process from the beginning, they will co-operate with conservation".

The need to involve women and youth was also mentioned: "Women and young people must be involved. There were occasions in AAMVECONA when the father, mother and children in a family were working together. It is important to incorporate these aspects if we hope to get there yet".

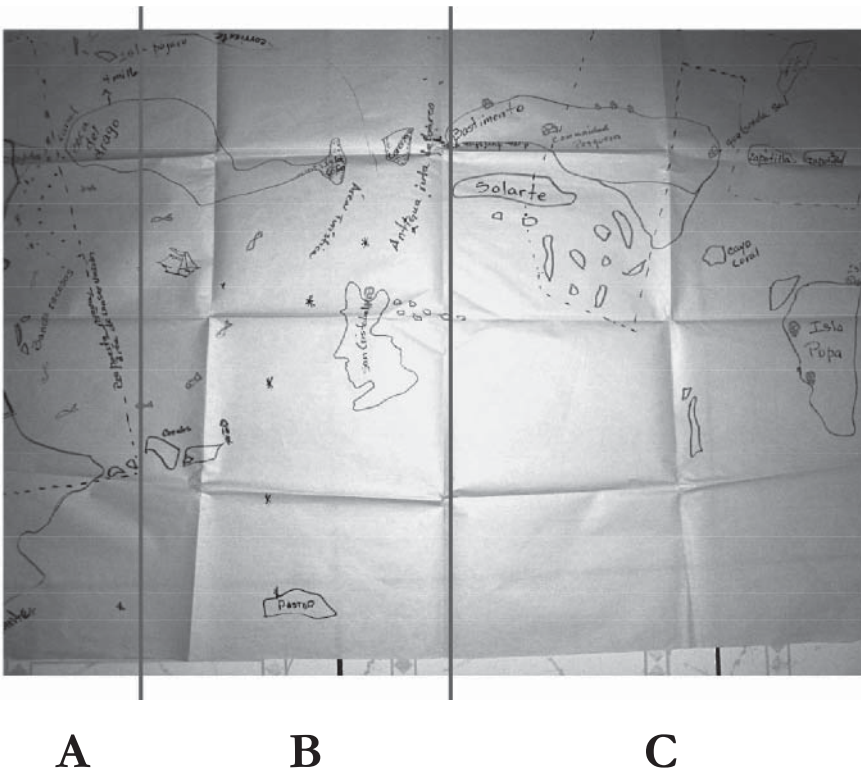
### **From the point of view of the fishermen's organization:**

The Small-Scale Fishermens' Association of Bocas del Toro (UPASABO) is a first-rate organization that brings together 165 fishermen of this marine territory. The association not only has in-depth knowledge of the sector and the territory of its productive activities, but it also displays great organizational capacity. Being organized in an association, the fishermen have been able to make an impact at an institutional level, and also ensure continued access to resources by consolidating around one area, thus avoiding unhealthy competition among themselves.

The association's perception of the main threats facing the sector relate to its development and the improvement of the quality of life of fisher families. A negative development pointed out is the re-routing of commercial and cargo vessels into channels that make traditional fishing zones vulnerable and dangerous to collision from ships. The expansion of the San San - Pond Sak reserve has reduced the fishermen's potential to fish in well-defined rocky banks. The members of UPASABO marked out these threats on the following map of the area:



Mapa 9. Participatory Map by the Small-scale Fishermen's Union of Bocas del Toro



*Source:* Artisanal Fishers Union of Bocas del Toro

Small-scale fishermen point out that the marine space they have historically used has undergone significant changes produced by the emergence of new actors in the archipelago and by changes in the arrangement of the marine space. As shown in the participatory map (Map 13), in Section A, which has been a marine space for artisanal fisheries use, there have been two situations in recent years that have threatened the artisanal way of life. The first relates to the plans for extending the marine space of the San San - Pond Sak Wetlands; if the expansion becomes effective, it would reduce the marine area and the traditional fishing grounds. The second situation affecting small-scale fishing is the route change of large cargo ships entering Puerto Almirante. According to the fishermen, in previous years, the entry of ships was between Cofer Island, Carenero and Bastimentos (shown at the upper end of the participatory map). With the change of entry, large ships are now passing through the channel of Boca Drago, following the same routes and space used

by small-scale fisheries. This situation increases the safety-at-sea risk and vulnerability of small-scale fishing vessels and their crew.

Section B of the map indicates the only area left for small-scale fishermen to use. This is where approximately 20 nearby communities converge, including San Cristobal, Solarte, the fishermen of Almirante, and so on. The increase in the number of local fishermen using this marine space is the result of a reduction in the marine territory consequent to the establishment of the Bastimentos Island Marine Park. The additional problem is the passage of large ships, which may have also affected marine biodiversity.

Zone C in the map is dominated by the Bastimentos Island Marine Park. The lower segment of Zone C has not traditionally been a fishing area. Artisanal fishermen also noted that at the upper end of the map (Zone A) lies Colón Island, which constitutes a spatial node for expansion of tourism activities through the areas allocated for conservation and tourism in Zones B and C. For this reason, it cannot be used by small-scale fishermen. The small-scale fishermen interviewed pointed out that currently they are conducting their fishing operations in more distant marine territories, located in the upper zones of the participatory map. These are open-sea areas and more dangerous for small-scale fishing.

Besides these, some of the other important issues highlighted are:

- Fishermen feel that the current situation is worse than before the establishment of the protected area; they now feel trapped between the marine park and tourism in the protected area.
- Though they have been negotiating with ANAM, the fishermen do not feel close enough to the institution to be able to put forward joint solutions.
- Some fisherwomen were identified as having raised the issue of gender in the association, but, for the moment, women's main activities remain confined to the private sphere.
- As an example of the potentially positive links between conservation and resources, the fishermen point to their relationship with ARAP, particularly in the case of the lionfish campaign.
- The fishermen's association feels closer to ARAP than to ANAM. The problems associated with conservation, in their view, constitute only one of the many other problems they are facing like tourism and the passage of commercial and cargo ships, which is increasingly driving them out into remote and dangerous seas.

## From the point of view of the indigenous people who fish lobsters in San Cristobal Island:

The community of San Cristobal Island is organized and its members work collectively to address development concerns such as supply of water and sanitation services. The community is struggling with poverty. Its members are fully devoted to fishing for lobster and finfish, mainly lobsters. Realizing that fish stocks have been reduced, the members regard conservation as important. While they are not against conservation, they feel that the park, as it has been administered so far, does not benefit them at all; on the contrary, they say they were better off earlier when they could have access to resources, not only marine but also other local resources such as palm leaves for roof thatching.

Community members say they have had no space for negotiation or participation in decisions related to the park; they learn about them through flyers once the decisions have already been made. They bemoan the lack of communication with ANAM, and only recently have they approached ARAP, which is helping them now.

CoopeSoliDar R.L. 2012



Interviewing artisanal small-scale fisherfolks of Bocas del Toro

Tourism in the park area is still incipient and managed by intermediaries. Women's participation in economic activities is confined to handicrafts and traditional dyeing and weaving. Young people in the area do not have any other alternative but to start working in fishing at an early age to supplement the meagre incomes of their families.

### **Trends**

This marine territory, which has traditionally been used for small-scale fishing, has been seriously affected by the presence of new actors and users of the marine area, like commercial and tourist transport operators, on the one hand, and, on the other, by plans to extend the San San—Pond Sak wetland area.

The small-scale fishing population and indigenous communities of the area are living in need and poverty. Hardly any institutions exist in the area that are associated with marine conservation.

Reportedly, the only real occasion for community participation was the consultation for the Management Plan for the Bastimentos Island Park. Since then, there has been no opportunity for further dialogue. As a result, trends suggest that continuing to address conservation in this non-participatory manner will only escalate social and environmental conflicts.

The institutions responsible for environmental conservation, tourism and small-scale fisheries development do not appear to be adopting closer strategic ties or joint activities with the community.

There is also a trend, promoted by those responsible for conservation, to replace artisanal fisheries as a productive activity by persuading those communities that exploit fisheries resources to shift to tourism-related activities. This may lead to food-security problems for these communities, as well as issues related to cultural transformation and other social and economic changes.



Sharing with, and interviewing, fisherfolk of the community of San Cristobal, Bocas del Toro, Panamá

## Conclusions

Panama has the legal basis and social resilience to promote and ensure conservation processes consistent with the strengthening of local culture and identity. In this, the country has a comparative advantage over other countries in the region.

Officials associated with conservation are clear about this reality; but when observing specific cases, a significant gap is evident. In this context, it is essential to implement element 2 of the CBD Work Plan, strengthening, in a comprehensive but differentiated way, indigenous, Afro-Caribbean, *mestizo* and other social groups.

There is an evident reduction of marine territory available for the development of small-scale fishing activities in the area. Any attempt to expand marine conservation areas in the region would cause serious conflicts and illegal actions by the communities. Fishermen recognize that the fishery resource base in traditional small-scale fishery areas is severely affected. In the past—before the creation of the MPA and tourism development—the fishing area and the rotation of fishing activities were greater.

Communities feel that the problem is due to the State's negligence in channeling external resources.

The institutions responsible for both fishing and conservation issues do not encourage dialogue, and they often act separately and independently, without a common and strategic vision to address the issue.

It is important to strengthen organizational structures that support the artisanal fishermen, such as the association, UPESABO.

No development opportunities are reported for the young people in the communities, who can be taught how to fish and work on sea as their parents have done.

Although the authorities themselves recognize the importance of involving more women and youth in the area's developmental processes, no specific initiatives have been developed so far.

## **5. CONCLUSIONS AND FINAL THOUGHTS**

This research, mainly through the analysis of the results of case studies, has enabled us to reach important conclusions and lessons learned in the region which are required to move towards a marine conservation model in which the needs, visions and efforts of women, men and youth from coastal communities and small-scale fishing are taken into consideration in the conservation and responsible use of the sea and its resources..

In this context, the global framework and overall policies of the Convention on Biological Diversity (CBD), especially Programme Element 2 (governance, participation, equity and distribution of benefits) and the Aichi targets are of key importance for making progress and for allowing the region to address environmental, social and economic issues in a comprehensive way while providing 'well-being' for local communities. Our research takes on special importance in this context because it highlights the gaps that exist in our region, which hinders us from achieving these goals and objectives, while also pointing out the lack of tools to fulfil these aims.

### Box 16: Aichi Biodiversity Targets

**Strategic Goal A:** Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

**Strategic Goal B:** Reduce the direct pressures on biodiversity and promote sustainable use

**Strategic Goal C:** Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

**Strategic Goal D:** Enhance the benefits to all from biodiversity and ecosystem services

**Strategic Goal E:** Enhance implementation through participatory planning, knowledge management and capacity building

*Source :* Convention on Biological Diversity (CBD), Taken from: <https://www.cbd.int/sp/targets/>

At the beginning of this research, in our analytical framework, we introduced governance indicators such as *do no harm, subsidiarity, legitimacy and voice and fair representation* and the concept of '*well-being*' as relevant guiding principles and values that would guide the documentation and analysis of experiences of coastal communities and the artisanal fisheries sector in the implementation and governance of MPAs. The concept of well-being was raised in the context of conservation and protected areas within a framework of human rights, welfare and values—social justice, equitable distribution of benefits and power, sustainable use of resources, inclusion and knowledge. Using these guiding principles and elements of governance and well-being, we have reached the following conclusions:

It is clear from this study that MPAs provide the resource base for the food security of Central American coastal communities, as in other parts of the world. But the policies regarding MPAs that overlook the involvement of this sector in decisionmaking tend to restrict or limit the access to resources, which seriously impacts the food-security rights of sea-dependent people and communities, as well as the preservation and respect of traditions and culture as intrinsic elements of well-being.

Thus, conservation efforts cannot be considered complete until they reconcile social aspects with environmental aspects within a framework of human rights and values that enables communities to ensure equitable development at the local level.

All of the countries researched have an interest in strengthening marine conservation, for which purpose, priorities, mandates, legal instruments and commitments have been defined.

It was also determined that these countries have policies and instruments regarding citizens' involvement in conservation and the implementation of MPAs. However, in none of the countries do the people who depend on coastal resources feel represented or integrated into the governance of the protected areas studied, nor do they feel that their needs have been taken into account.

Regarding Honduras, for instance, the predominant actor in the co-management of protected areas is usually the NGO which has been delegated the management of the area, whereas the participation of the other actors, that is, communities and municipalities, is very limited or non-existent.

In this case, progress has been made to include communities in new spaces of participation, such as community advisory councils. Nevertheless, the community members interviewed do not feel represented by these structures either.

With regard to fisheries co-management agreements, these are yet another advance. Yet, at the inter-institutional level, public entities have failed to co-ordinate, strengthen and provide the appropriate follow-up to the fishermen's organizational structures.

In the case of Costa Rica, no help has been forthcoming through existing citizens' participation mechanisms in protected areas, through the regional committees and from local councils as regards representing the inhabitants of MPAs in the anticipated manner. On the other hand, newer mechanisms, created through a more inclusive vision, as in the case of Areas for Responsible Fishing, have been misinterpreted to serve the interests of other sectors, such as sports fishing, without generating any benefits for local communities.

With regard to Nicaragua and Panama, it is also enlightening that fishing communities near protected areas feel that they are not being integrated into, or benefitting from, conservation efforts. The indigenous case of GunaYala, Panama, does not show much progress in regard to the issue of representation and participation. Respondents from this territory do not feel represented in the decision-making structure, nor do they receive information about it, despite this clearly being an indigenous conservation effort. Participation mechanisms have not given legitimacy or voice to communities, nor have they transcended to (provide for) the equitable distribution of power for decisionmaking and social and cultural recognition.

All cases reflected that deeper problems exist in communities—such as those related to issues of access to health, education, high levels of poverty, drug



abuse, teenage pregnancy, etc. that need to be addressed in order to strengthen the human dimension for social participation. In this sense, it takes a more responsible State, whose institutions are able to fulfill their commitments, to safeguard the welfare of civil society. The examples from the case studies also show how social issues overwhelm conservation, and require that they are addressed by the State institutions in their entirety in line with their responsibilities. What can be seen from the study are the fragmented efforts of public institutions, and the lack of co-ordination between different programmes and projects.

In the case studies we were able to observe that authorities and institutions engaged in the management of protected areas are aware that social and economic elements should be part of their strategy. However, there is an enormous gap between the existence of such a willingness and the availability of the tools required to put it into practice.

The efforts made in regard to marine conservation and MPAs that were studied have failed to strengthen the capabilities, responsibilities and rights of civil society, as fundamental elements of the well-being of communities.

In the countries and the case studies we have looked into, the authorities and institutions in charge of protected areas suffer from budgetary and staffing limitations. Other aspects include the lack of comprehensiveness in programmes and methods used to address conservation issues, and a weak State that does not tackle the problems faced by coastal communities in ways that create the social conditions necessary for community involvement. In all cases, management plans, whenever created, have not been implemented.

In all case studies, there have been conservation projects with sufficient resources. However, what can be perceived is a wrong approach, which lacks comprehensiveness to achieve the long-term welfare and involvement of communities and their organizations. Co-operation and financial resources have been available but have been aimed mostly at the ecological and environmental elements of protected areas, thus ignoring the social, cultural and welfare elements of coastal communities.

Bad institutional practices have been displayed in addressing the work with communities; however, there are also practices with very little transparency in communities, and community organizations tainted by previous inappropriate institutional approaches. This also represents a challenge for external organizations in their work with communities to strengthen and restore the system of values. This element will be critical to any conservation action and progress in the future.

To a certain extent, the capacity to engage in local management has been lost, sullied by State practices inconsistent with activating local skills and organizations.

The policies and the management of marine conservation and fisheries management have been, and continue to be, disconnected in all countries. In this sense, the need for an ecosystem-based approach that addresses the connectivity of these aspects is highlighted. This gap can not only be identified when researching at the country level, but it can also be observed at the local level, with the lack of communication and co-ordination between the institutions responsible for these issues.

It is prominent from all the case studies that there are major environmental impacts on the marine resource base coming from external sources, such as pollution, coastal and real estate development, mass tourism, trawling and foreign fleets that significantly affect MPAs and coastal communities as well as the artisanal fisheries sector. These problems transcend the responsibility and the capacity of institutional and community structures to exercise local control, as well as their organizational capacity. This reinforces the need for a comprehensive and co-ordinated approach to marine conservation.

The issue of access to the land and the sea was a constant theme in all the case studies. Coastal communities and fisheries are vulnerable in this sense, when titles to coastal marine territories are not properly designated in ways that protect the rights of inhabitants. In some cases, such as in Panama and Honduras, where land ownership rights have been recognized for indigenous and African-descent communities, respectively, these rights have, however, not been respected in practice. There is no recognition or respect for the traditional uses of resources or community rights to fishing areas.

In the majority of cases, women and youth are not integrated into decision-making spaces, even if their roles are clearly understood and recognized within the framework of production, household economy and community food security. In this sense, the only positive case is that of the Golfo Dulce in Costa Rica, where the efforts made from the Area for Responsible Fishing appear to have facilitated the integration of women. The efforts made by community women and youth in the protected areas studied are also worth mentioning as they contribute to comprehensive conservation and development in their communities.

In some cases, such as in Panama and Honduras, we see that women leaders have had roles in local organizations, and their leadership has been recognized. There are also clear views from the community on how to better

integrate women and youth to be part of decision-making situations, which was evident from the recommendations given in most of the case studies.

In all the cases studied, experiences from MPAs have focused on control and surveillance. But there are no experiences that have generated information for the management of fisheries resources. There are also major limitations on the communities' access to information.

The research shows that, in practice, the benefits that can be derived from conservation are not promoted, nor is there any emphasis on other important elements such as livelihoods, cultural identity, social welfare and human rights. The benefits that are taken most into account are economic in nature, such as those related to tourism and employment, as a result of the neoliberal processes governing conservation in the area, where economic aspects take priority over social and cultural aspects, as well as those related to human rights.

From the case studies, it can be concluded that the communities have clear and concrete proposals for the governance of MPAs. Their visions are fresh, valid and enlightening on issues that relate to an ecosystem approach that not only links conservation to fisheries management and responsible use of resources, but to a more comprehensive set of approaches that include focusing on social aspects that promote local development, equity and the well-being of communities.

The issue of subsidiarity has been a latent theme in all the cases studied, where decisionmaking and management responsibilities in protected areas are still far removed from the most local levels, and municipal participation is at its minimum in specific community cases.

Cultural identity, as in the case of indigenous and Afro-Caribbean communities in Panama and Honduras, has not yet been recognized as a strength for conservation and as an essential element that enables better social resilience. By the same token, the contributions of the small-scale fisheries sector and the responsible use of resources for marine conservation have not been recognized either, which means that respect for the existence of traditions and cultures—fundamental elements of well-being—has not been strengthened by marine conservation strategies or the implementation of MPAs.

The artisanal fisheries sector is one of the most seriously affected sectors of coastal communities and carries the costs of marine conservation in these countries. There is still a need for clear State practices that acknowledge the participation of fishworkers as allies in conservation. The inclusion of this sector continues to be one of the biggest challenges (see Appendix 5) even in

contexts of a participatory and democratic State, where the most vulnerable are still being excluded and the poorest are being discriminated against.

Artisanal fisheries and men and women fishworkers are still not recognized as key to a sustainable way of life and as a strength for marine conservation that promotes safeguarding of fisheries resources and the comprehensive well-being of coastal communities. Artisanal fisheries' work is not dignified in protected areas. On the contrary, what we are able to see from some of the case studies is that MPAs have dismantled and weakened traditional productive fishing structures. In some countries, such as Costa Rica, the social fabric that underpinned artisanal fisheries is now lost and, with that, sustainable livelihoods, food security and social resilience. Here again, we see the importance of an ecosystem approach as a tool for marine conservation to reverse this trend.

Unless we see a radical change in the way that governments and conservation organizations practise marine conservation, coastal communities will eventually weaken and disappear

At the artisanal fisheries level, there are national and regional organizations, (such as OSPESCA and CONFEPESCA) that should provide support to the sector. However, no support has been received by the sector at the local level. In this sense, there do not appear to be any strong artisanal fisheries organizations at the national level in any of the countries or at the regional level, which are able to represent fishworkers and/or defend their interests. In this regard, it is important to re-think the degree of representativeness of these national and regional fisheries entities.

In the light of these findings and within this context, we hereby make the following recommendations:

Central America, as a region, must recognize the importance of artisanal fishing for marine conservation and its contributions to poverty alleviation, local development, food security and food sovereignty, and human welfare. It is urgent that the social and cultural aspects and the livelihoods of fishing communities are recognized as strengths for marine conservation.

Fostering dialogue is an urgent need, so that the structures created to bring the fishing sector together (OSPESCA, CONFEPESCA) can promote real and effective interaction between the conservation sector and small-scale fisheries, whereby communities can participate by talking about their needs and the challenges they face.

In the light of global commitments relating to marine conservation, countries are reviewing and updating their planning tools, which is a process in which

the small-scale fishing sector must be included and enabled to influence those policies that seek to ensure the sustainable use of resources, and enhance well-being and livelihoods.

The Aichi Targets will only be viable if a human-rights approach is adopted, which takes into account social and cultural aspects, traditions, rights of access, local views of the world and, above all, the most endogenous development models.

Working methods must change in marine conservation, towards a more comprehensive approach, which strengthens workers' capacities, is people-centred (with the people and for the people), and which displays a genuine commitment to support and follow up on local participation in the forums where decisions are taken on territories and resources.

Strengthening the State as the guarantor of the rights and welfare of communities, and its mechanisms to fulfill its social, economic and environmental responsibilities in terms of marine conservation is another element worth highlighting.

Local voices must be heard, and grass-roots proposals and recommendations regarding the governance of protected areas heeded. Local visions are often innovative and creative and are in line with the comprehensive and ecosystem-based view that is so urgently needed for an equitable and participative marine conservation that promotes well-being through the distribution of benefits.

In the field of international policies, not only do we need to create opportunities for innovative instruments, such as the recent FAO's guidelines for the sustainability of small-scale fisheries, but to ensure that they are implemented by States. These policies and instruments also face the enormous challenge of reaching out to communities and promoting real progress, as a first step towards an empowering process for informing and defending the rights of communities.

It is our hope that this document will serve as a valuable input for reflection, and help transform experiences with marine conservation and protected areas positively so as to promote equitable and participative marine conservation and MPA governance that shares benefits and strengthens the welfare of fishing communities and their rights.

## Notes

- 1 Prepared by Mariela Ochoa (Honduras). Revised and edited by CoopeSoliDar RL
- 2 The SINAPH by-laws define management categories as alternatives or management types applied to a protected wildlife area in order to meet specific natural and/or cultural resource conservation objectives aimed at producing socio-economic and ecological benefits for society
- 3 In the case of Honduras, municipalities play an important role in terms of participation. They are entitled by law to be part of regional and local-level bodies for the participatory management of protected areas, and, at the municipal level, take charge of the management of natural resources and planning policies for use in their jurisdiction (including in protected areas).
- 4 According to the Forestry Law, Forest Advisory Councils, Protected Areas and Wildlife Areas are as follows: National Forest Advisory Councils, Protected Areas and Wildlife Areas, Forest Department Advisory Councils, Protected Areas and Wildlife Areas, Forest Municipal Advisory Councils, Protected Areas and Wildlife Areas, Forest Community Advisory Councils, and Protected Areas and Wildlife Areas.
- 5 The Law for Protected Areas and Wildlife define a 'wildlife refuge' as the area where protection is essential to the existence of wildlife species. Its main function is to ensure the perpetuity of wildlife species, populations and habitats for scientific or recreational use where it is not contrary to the primary objective. The controlled use of some resources may be allowed, if deemed appropriate in the corresponding management plan.
- 6 La Rosita, Salado Barra and Boca Cerrada are fishing communities that received support from WWF and MARFUND in 2009 in order to create a fishermen's association, which would be in charge of managing no-fishing sites as part of a model project in Honduras. The name given to the association was 'Fishermen's Association of La Rosita, Cuero and Salado' (APROCUS). Barra Salado, in El Porvenir, Cuero and Salado, in La Masica, and Barra Thompson in Esparta, were defined as no-fishing sites by APROCUS.
- 7 These agreements involve the participation of the Fishermen's Association, the Cuero and Salado Foundation and the ICF, DIGEPESCA and the municipalities.
- 8 For instance, women and local artisans' groups, municipal board, tourism committee, etc.
- 9 The Forestry, Wildlife Protected Areas and Law, Protected Areas and Wildlife defines natural monuments as areas characterized by at least one outstanding

natural feature for the national interest, which deserves to be protected due to its unique condition. Their main function is to protect and preserve natural features and genetic material, provide recreational, educational and research opportunities, whenever compatible with the primary objective.

- 10 This Commission is part of the negotiating process ('table') with the Committee of Cayos Cochinos (which is constituted by law, and incorporates representatives from different ministries). The negotiating table allows participants to present strategies, proposals, conservation measures and projects, among other ideas. Meetings are held once a year to reach agreements with communities.
- 11 These projects are partly funded with a percentage of the profits the foundation receives from private companies shooting TV reality shows on these islands. It must be noted that the filming of these programmes was once seen as a threat by the community of Chachahuat, as revealed by the SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis performed by Ives JA (2007) for the 2007 Management Plan.
- 12 According to research conducted by the Municipality of Guanaja, with the implementation of the Marine Terrestrial Protected Areas Management Project of the island, it was possible to determine that the site was used by fishermen for the extraction of fish, lobster, conch and molluscs, based on aspects such as the rocky formation, existence of seagrass and diversity of corals. However, at the present time, the site is impacted by sedimentation and overfishing, which explains the existing of a reduced amount of life. And it is delimited as a Fisheries Restricted Area with the objective of future recovery.
- 13 Coral reefs located in this department belong to the Mesoamerican Reef System, which is part of the world's second largest reef barrier, covering an area of approximately 16,000 ha, according to studies conducted by the Islas de la Bahía Environmental Management Programme (2002, Special Law on Protected Areas, Islas de la Bahía, Decree No. 75-2010, published in the Official Gazette on Monday, 26 July 2010).
- 14 In Bonnaca, the number of respondents was higher because two of their main activities are hook-and-line fishing, and dive fishing for lobster and conch. They wanted to take part in the process because currently some patrolling is taking place in the marine park and they are being affected by the regulations. Fishermen from Pelicano, Mangrove Bight and North East Bight participate in the same way.
- 15 Prepared by Edgar Castañeda (Nicaragua) and CoopeSoliDar RL
- 16 For this case study, the consultant did not conduct specific interviews. The field study data was taken from the meetings during the Nicaragua visit in

March 2011, which was attended by CoopeSoliDar staff, as well as officers from the Nicaraguan Foundation for Sustainable Development (FUNDENIC) and, specifically, from the meetings held with the local government of Tola, the navy and the artisanal fishermen from the Astillero community, which is located in the Chacocente Refuge.

- 17 Prepared by Vivienne Solís, Marvin Fonseca and Daniela Barguil (CoopeSoliDar RL associates)
- 18 According to Article 29 of the Law on Biodiversity, Regional and Local Councils are constituted as civil participation instances conformed by representatives of different sectors: environmental organizations, local governments, academia, public offices, community organizations, agricultural sector, and others in which the participation of indigenous representatives is fostered. Ley de Biodiversidad (Law on Biodiversity) no. 7778, 1998.
- 19 A total of 25 interviews were carried out, and four were made collectively. We interviewed 32 people in total, 30 men and two women. To carry out the interviews with other fisherfolk, fishermen from the Association of Fishermen of Santa Elena joined the researchers. As suggested by the park administration, an interview was also done with the Lara family, who have developed tourism activities in the area. Also, some of the owners of the fish-receiving stations were interviewed. All respondents reside in Cuajiniquil. Of the sample of respondents, 53.1 per cent were adults (30-59 years old), 21.9 per cent were young (15-29 years), and 6.3 per cent were adults of 60 years and older.
- 20 The community of Dominicalito is located north from Ballena Marine National Park. It is constituted by artisanal fishermen. This community is currently experiencing some conflicts due to land evictions in the coastal marine zones.
- 21 Study conducted by CoopeSoliDar RL in 2002 as part of the research entitled in Spanish “El Parque Nacional Marino Ballena y su gente: Un proceso de manejo conjunto en construcción” (“*Ballena Marine National Park and its people: A co-management process under construction*”).
- 22 Prepared by Geodisio Castillo, Panama
- 23 Free prior informed consent, covers all issues related to the lives of indigenous people, because it is an extrinsic right to exercise the right to self-determination and a basic component of the right to lands, territories and resources. Several international instruments, such as the Declaration of the Rights of the Indigenous People, Convention 169 of the International Labour Organization, and the Convention on Biological Diversity, establish this principle and provide a normative basis to demand compliance.



- 24 According to Huertas (2012), Article 90 of the Political Constitution of Panama recognizes and respects the ethnic identity of indigenous communities; this recognition gives constitutional legal force to the indigenous congresses or councils that are the indigenous autonomous governments and they are autonomous because the government does not define the scope in that regard, but rather leaves it to indigenous customs, which explains the respect to the forms of political organization (congresses or councils). <http://gubiler.blogspot.com/2012/02/autonomia-y-derecho-la-libre.html>, 11-02-12.
- 25 Enforceable decisions are made in the General Meeting of the GGC. This meeting requires a minimum attendance of two-thirds of the recognized communities that comprise the region, represented in their *Saglagan* and official delegates (Article 11). Article 12 indicates that these are chosen in the plenary of each Local Congress. Each delegation will be led by the community *Sagla*, who may speak and vote on behalf of their community.
- 26 For example, the Guna people establish closed seasons on lobster and a temporary ban on marine turtle fishing for five years.
- 27 The fact that in Gunayala, the collective management of marine resources is not present in Guna traditions or activities is because only in the late 17th century did the Gunas migrate from the mountains to the coast and the sea.
- 28 Prepared by Geodisio Castillo (Panama).
- 29 Currently, the Environment National Authority (ANAM). Since the establishment of the protected area, there were agreements, and the agreement of co-operation and technical and administrative assistance between the GGC and ANAM currently remains in force, but there are no concrete actions by the two entities.
- 30 In particular, the Cultural Zone includes both the terrestrial and the marine environment of the Guna culture. The terrestrial part includes all the land used for agricultural activities, physical infrastructure, communities and religious sites in the mainland and in the islands. The marine part includes the sea from the continental shelf, reefs, islands and mangroves. Its land comprises 52,038 ha and its marine zone, 46,341 ha.
- 31 The National Authority of the Environment (ANAM), which is the country's governing body on environment and natural resources, did not respond to the interview questionnaire. Therefore, the opinions and perspectives of ANAM on protected areas in indigenous territories could not be obtained.
- 32 Law No. 44 of 23 November 2006, which created ARAP, unifies the different agencies involved in the public administration of coastal and marine resources, agriculture, fishing and related activities, and introduces other provisions (No. 25680, Digital Official Gazette, 27 November 2006).

- 33 In the case of our interview with Guna leaders and communities, two collective dialogues were carried out with fishermen/farmers (both have productive activities) and lobster buyers of the Aggwanusadub and Yandub-Narganá communities: 23 people participated, including community leaders, fishermen and lobster buyers, and independent traders, as well as four women. Subsequently, a second dialogue was conducted within the framework of a lobstermen's meeting in the Digir community, which was attended by 20 people, among them seven women. In total, 43 people participated in the dialogues.
- 34 Fundamental Law of the Guna people.
- 35 A group created between 2004 and 2005, in the Dubbir, Uggubseni, Digir, Aggwanusadub, Yandub-Narganá and Wargandub communities. However, many who participated in the community dialogues said they did not know how Balu Wala began to organize, nor who directed it.
- 36 Article 45 of *Anmar Igar* stipulates that “there will be a closure season for all animals vulnerable to partial or total extinction, to be indicated by the regional authorities; no means or techniques enabling large-scale exploitation and endangering their existence in the seas, coasts and lands of Kuna Yala will be used”.
- 37 It is here that the Centre for Environmental and Human Development (CENDA) is developing participatory workshops through its pilot experimental project on lobster management by using artificial shelters (shadows/Cuban houses), located in Nainus Marinos, particularly in the fishing zones of Aggwanusadub and Yandub-Narganá. So far, several workshops for fishermen, students, authorities and leaders of the communities, among others, have been held in association with MASPLESCA and ARAP to raise awareness on the regulation of a regional seasonal closure for lobster fishing established by Central American countries.
- 38 Recently, from 2 to 25 June 2012, the Research and Development Institute of Kuna Yala (IIDKY) of the Guna General Congress (administrative and cultural) carried out the first workshop on strategic planning (situational) aimed at strengthening institutions on a long-term basis. All topics that have emerged from this case study were subject to discussion. The leadership and officials of the Guna General Congress acknowledged the governance situation as having been correctly presented in this paragraph.
- 39 Prepared by Vivienne Solis and Marvin Fonseca, from CoopeSoliDar RL
- 40 The category of the Marine National Park is defined by the National Environment Authority (ANAM) as follows: “Area that has a representative sample of marine coastal or island ecosystems, also contributing to the

re-establishment and maintenance of marine fauna species, for sustained use” (Resolution No. J D -09-94, through which the National System of Protected Wildlife Areas was created, and the administrative entity of the National Institute of Renewable Natural Resources, which defines each of the management categories).

- 41 The Environment General Law contemplates co-management of protected areas as a process in which two or more social actors negotiate, define and formalize shared management roles and responsibilities. It is a dynamic and continuous process of dialogue, to promote a participatory, decentralized and democratic scheme. It generally supposes an agreement between the State and civil society organizations, foundations, nonprofit associations, community organizations, NGOs and others.
- 42 To accomplish this case study, the Small-Scale Fishermen Union of Bocas del Toro (UPASABO) gave its support and co-ordination. A field trip was made to Bocas del Toro province, focusing on Puerto Almirante and the indigenous community of San Cristobal Island. The primary data collection was obtained by conducting in-depth interviews with various actors: (a) ANAM representatives, the Regional Director and the Director of the San San - Pond Sak Wetland; (b) Regional Director of the Aquatic Resources Authority of Panama (ARAP); (c) UPASABOA representatives; and (d) representatives of San Cristóbal’s indigenous community.
- 43 The organization AAMVECONA was created in the year 2000 as part of a strategy promoted by The Environment National Authority aimed at incorporating civil society to conservation processes and protection of natural resources of the San San - Pond Sak Wetland; becoming key actors in the transformation process and population approach to protected areas joint management (<http://www.aamvecona.com/es/index.php>).

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# APPENDICES

## APPENDIX 1

Methodological Tools Used and Interview Checklist (for Focus Groups and Interviews)

Interview guide (Community members):

Name::

Community:

Age:

Female\_\_\_\_ Male\_\_\_\_

Occupation:

1. How many years have you lived in this community? Where is your family?
2. What do you like most about living in this community?
3. Tell me about the protected area and how this has been associated with the development of the community?
4. Does the community receive benefits from the MPA?
  - a) Yes
  - b) No

What type of benefits?

<b>Benefits</b>	<b>Women</b>	<b>Men</b>
Food		
Tourism		
Commerce		
Production		
Organizational Strengthening		
Others: specify		

5. Have you felt affected by the MPA establishment and/or regulations?

a) Yes

b) No

Which ones?

Why?

How have women been affected? Men? Youth?

6. Has the community changed since the creation of this MPA (economic-productive activities, social dynamics, culture, migration, etc.)?

7. Have you changed your livelihood since the creation of the MPA?

8. Who would you say is the main authority of the MPA?

9. Who would you say makes the decisions regarding the MPA?

a) the municipality,

b) people in the capital

c) people in the Ministry of Environment,

d) others

e) do not know

10. Does the community participate in decisionmaking?

11. Do you know of the Management Plan?

12. Has the community been involved in the definition of the MPA, its regulations and/or the Management Plan?

13. Are decisions delegated to community members?

14. What organizations/structures represent the interests of the community? Are there organizational structures that represent the specific interests of segments of the population of the community, such as women, youth and/or fishing workers?

15. Do these structures have a space in the area's management system? Or is there an organized group that represents the interests of the community within the management structure of the MPA?

a) Yes. If yes which ones?

b) No



16. Have you participated in meetings of the MPA? If yes, through which committee/council/organization?
  - a) Yes
  - b) No
17. If you have participated, which sector of the community do you represent in the meetings?
18. Do you feel you are able to influence decisions that are made for the management and regulation of the MPA?
19. Have fisherfolk, local organizations, women and youth participated in the area's management in the past?
20. How satisfied are you with the MPA?
  - a) Very satisfied
  - b) A little satisfied
  - c) Not satisfied at all

Why?

- i) Lack of or limited access to natural resources
  - ii) Exclusion in decisionmaking
  - iii) Lack of support to communities or community organizations
  - iv) Inequality in the distribution of benefits of conservation (entrance fees, tourism, etc.)
  - v) Lack of education, lack of capacity
  - vi) Others
21. How do you imagine an MPA working well?
  22. How do you think the community can be integrated in a better way in resource management and conservation?
  23. How can we strengthen the participation of women and youth in decisionmaking in an MPA? And through what structures?
  24. What types of support, policies and/or incentives from outside the community have contributed to make you feel involved in the decisionmaking of the MPA?
  25. What types of policies or other factors have been obstacles for your participation?

Interview Guide (MPA management institutions):

**Name:**

**Institution:**

**Position:**

1. When was this MPA established and under what kind of legal framework?
2. What were the objectives of its creation (environmental, social, cultural, others)?
3. Who would you consider the authority over this MPA?
4. How does the management structure of the MPA work?
5. Which actors are integrated in the management/governance structure (s)?
6. Is there a gender equity approach to integrate women and/or youth in the management structure of the MPA?
7. How is the management structure conformed, and how are the representatives elected in the management structure?
8. Does the community or community organization(s) have a specific role within the MPA management?
9. Is there some structure that represents the interests of the community within the management structure?
10. How are the decisions made? Are there some decision-making structures/bodies that integrate other actors? Do these structures operate at different levels?
11. Is there any interaction or relationship between the MPA authorities and community organizations? If yes, what form does this relationship take and how has it changed over time?
12. What principles of civil society participation are integrated into the management of this MPA?
  - a) Consultation of regulations
  - b) Inclusion in management decisionmaking (definition of regulations, mapping areas, etc.)
  - b) Participation in surveillance and/or monitoring

- c) Participation in activities (tourism)
  - d) Access to resources
  - e) Capacity building for resource management
  - f) Integration of local knowledge in decisionmaking
13. Who is involved in decisionmaking regarding:
    - a) rules/regulations for resource management
    - b) rules/regulations for responsible use of resources
    - c) promotion of human welfare (access to resources, equitable distribution of benefits, capacity building, etc.)?
  14. Does the institution give support to community organizations? In what ways?
  15. Do you have mechanisms of communication/information with the local communities of the MPA?
  16. What benefits do local communities perceive from the MPA?
  17. Are there policies or actions directed to benefit various sectors of the community, such as women and youth? Are measures adapted culturally (language, cultural traditions taken into account) when the MPA has communities of ethnic and cultural diversity?
  18. Do communities perceive problems regarding the MPA?
  19. Have the structures of community participation changed in the Management Plan of the area over time?
  20. Have there been changes in the productive activities of the community(ies) since the establishment of the MPA? (Inquire about these changes according to gender.)
  21. In your opinion, how would an ideal MPA be?
  22. How do you think communities can be better integrated in the management and conservation of resources?
  23. How can women and youth participation be strengthened in MPA decisionmaking? And through what structures?
  24. What are the obstacles and weaknesses that you perceive regarding organization and local responsibilities to achieve community participation?

25. How can we achieve marine conservation while respecting the culture and traditions of the communities (which have traditionally relied on the sea)?
26. What are your recommendations for integrating communities in MPA management?

**Focus Groups:**

- I. Participatory Analysis: MPA context and social, cultural and economic impacts.
  
- II. Role Play: If the community should have to organize to create and improve its own MPA, how would they do it?
  
- III. Final Reflection: How can community rights and responsibilities be strengthened in MPA conservation and resource management?

## APPENDIX 2

<b>“The IUCN Protected Area Matrix”: A Classification System for Protected Areas Comprising both Management Category and Governance Type</b>														
<b>Protected Area categories</b>	<b>Governance Types</b>			<b>A. Governance by government</b>			<b>B. Shared governance</b>			<b>C. Private governance</b>			<b>D. Governance by indigenous peoples and local communities</b>	
	Federal or national ministry or agency in charge	Sub-national ministry or agency in charge	Government-delegated management (e.g., to an NGO)	Transboundary management	Collaborative management (various forms of pluralist influence)	Joint management (pluralist management board)	Declared and run by individual land-owners	... by non-profit organizations (e.g., NGOs, universities)	...by for-profit organizations (e.g., corporate owners, cooperatives)	Indigenous peoples' protected areas and territories – established and run by indigenous peoples	Community conserved areas – declared and run by local communities			
Ia. Strict Nature Reserve														
Ib. Wilderness Area														
II. National Park														
III. Natural Monument														
IV. Habitats/ Species Management														
V. Protected landscape/ seascape														
VI. Protected Area with sustainable use of natural resources														

Source: International Union for Conservation of Nature (IUCN)

### APPENDIX 3

#### **The different actors in the Chacocente Wildlife Refuge and their functions/ roles:**

The functions of MARENA Central are as follows:

- Facilitate the organization of landowners taking part in the development of the refuge management plan.
- Approve and legalize the Refuge Management Plan.
- Develop a Methodology Technical Guide for the creation of property management plans.
- Coordinate and supervise the implementation of the refuge management plan.

The functions of the MARENA (Province of Carazo) Delegation are as follows:

- Facilitate the organization of landowners taking part in the implementation of the refuge management plan.
- Disseminate the Methodology Technical Guide to land owners taking part in the development of the property management plan.
- Approve property management plans.
- Coordinate, monitor and supervise the implementation of the refuge management plan.
- Coordinate, monitor and provide support in the implementation of property management plans and facilitate the funding process for the development of the refuge management programs.
- Carry out supervision and surveillance tasks in the refuge, directly or indirectly through the Park Rangers squad.
- Define, supervise and serve as a guide for the Park Rangers squad's tasks.
- Promote interaction activities between local institutions in order to coordinate efforts and actions leading to the implementation of the management plan.

The functions of private property owners (including communities, as per the definition) in the management of the refuge are:

- Exercise the right of full possession of their property. This is not an absolute right but is regulated by the country's legislation.
- Manage their parcel of land in compliance with general standards, zoning and rules of use defined in the refuge management plan.
- Partake of the benefits arising from the refuge development.
- Take part in other decisions, which can impact the refuge development.
- Get involved in the implementation of the management plan and/or shared management of the protected area.

The functions of the Santa Teresa Municipality in the management of the refuge are:

- Partake of discussions regarding the refuge management plan.
- Approve the management plans for individual parcels of land within the refuge.
- Monitor and control activities regarding the management of the refuge in conjunction with MARENA.
- Incorporate the refuge management plan programs into their strategy and municipal development plans.
- Generate funding mechanisms to support the implementation of the refuge management plan programs.
- Be part of the Coordination and Follow-up Commission for the implementation of the refuge management plan programs.

The role of the Astillero Community Development Committee (CDC) is:

- Coordination of the development of the Astillero micro-zone
- The CDC has an elected and participatory structure recognized by the Municipality of Tola.

Source: FFI, DED, MARENA, PNUD, 2007.



## APPENDIX 4

### *Legal frameworks that recognize rights to participate in policies and decision-making processes for the conservation of protected areas*

The *Constitution of Nicaragua is the fundamental law* of the country. It contains several articles regarding the environment which aim at ensuring its conservation for the Nicaraguan population. This means that environmental protection is a constitutional right and has a social function. These articles are the basis for further laws to regulate and exploit the environment and natural resources, including the legal creation of protected areas and the design of Management Plans.

The Constitution is above any other law, for which purpose it has been declared that "No laws, treaties, decrees or provisions which conflict with or alter constitutional provisions shall have any value." Articles 60 and 102 of the Constitution are the legal basis governing the principles of environmental, economic and social development. The Constitution states that "Nicaraguans have the right to live in a healthy environment, as part of their social rights, for which purpose the State has an obligation to preserve, conserve and restore the environment and natural resources."

In addition, paragraph 3, Article 5 of the Constitution recognizes the right of indigenous peoples to maintain communal forms of land ownership and enjoyment, use and exploitation thereof, in accordance with the law and paragraph 3 Article 89 states: "The Atlantic Coast (Caribbean Coast) communities are entitled to maintaining traditional forms of property, as well as to the use and enjoyment of the waters and forests that are found on their community lands."

The Constitution guarantees the right to private movable and immovable property (Article 44), and the instruments and means of production. However, it also stipulates: "By virtue of its social function, the right to private property may be subject, for a public or social purposes, to limitations and obligations as imposed by law."

The General Law on Environment and Natural Resources (Law No. 217) entered into force in 1996. It establishes the norms, definitions and mechanisms to preserve, maintain and recover the environment and natural resources, in accordance with the general principles the Constitution promulgates.

The Law defines special norms for citizen participation in environmental management. Article No. 2 grants all citizens the right to seek any type of administrative, civil or criminal remedy against those who breach the law. This right can be exercised individually by any citizen.

The Law creates the Nicaraguan System of Protected Areas (SINAP) and sets the following objectives for Natural Protected Areas:

- preserve the natural ecosystems representing the different biogeographic and ecological regions of the country;

- protect river basins, hydrological cycles, aquifers, samples of biotic communities, genetic resources and the genetic diversity of wild flora and fauna;
- encourage the development of adequate technologies for the improvement and rational and sustainable use of natural ecosystems;
- protect the natural landscapes and environments of historical, archaeological and artistic monuments;
- promote recreational and tourism activities in harmony with nature; and foster environmental education, scientific research and the study of ecosystems.

According to the *Municipalities Law* (Laws N.40 and 261), municipalities are legally competent to decide upon environmental issues. Their powers are regulated by Laws No. 40 and 261, also known as the Municipalities Law (1997). The Constitution stipulates that municipalities can influence the development of protected areas, given their political, administrative and financial autonomy. In regards to this competence, Article 7, paragraph 8 of the Municipalities Law reads as follows: “Develop, preserve and control the rational use of the environment and natural resources as the grounds for the sustainable development of the municipality and the country by encouraging local initiatives in these areas and contributing to monitor, patrol and control activities in co-ordination with the corresponding national entities.”

Article 13 of the *Nicaraguan Fisheries and Aquaculture Law and By-laws* (Law No. 489) sets out that the Minister of Development, Industry and Commerce (MIFIC), as the person responsible for managing the use and exploitation of fishing resources, is the competent authority to enforce this law and accompanying by-laws through the Nicaraguan Institute of Fisheries (INPESCA) and the General Directorate for Natural Resources (DGRN), without prejudice to the capacities granted to other government institutions. INPESCA’s capacities include the monitoring, patrolling and control of the fisheries and aquaculture sector, as well as ensuring that the governmental resource users abide by their corresponding obligations and laws.

In accordance with Article 78, in order to engage in artisanal fishing activities, fishermen are required to obtain a fishing permit valid for five years (per individual vessel) and a fisherman’s ID, granted by the MIFIC, both of which will be delivered by the corresponding municipalities and serve as permanent tracking and control instruments. The MIFIC shall be able to delegate the issuance of fishing permits to the appropriate municipalities through a delegation agreement to be signed by both parties.

Article 79 states that for the exclusive purpose of artisanal fishing, in addition to inland waters, an additional three-nautical-mile belt is authorized. This belt is measured from the low-water mark along the Pacific Coast and Caribbean Sea. In the case of

Autonomous Regions, they hold the exclusive rights for community and artisanal fisheries inside the three miles adjacent to the coastline and 25 miles around the cays and adjacent islands.

With respect to fishing gear and methods, Article 39 states that the MIFIC will enforce the provisions of the Nicaraguan Mandatory Technical Standard for Fishing Gears and Methods (NTON. 03045 -03), which was approved in July 2004 and published in the Official Gazette No. 173 of 3 September. The NTON 03045-03 describes the technical specifications for the correct use of fishing gear and methods for the extraction of fishing resources existing in the country's bodies of water, such as maximum and minimum dimensions, characteristics and restrictions.

### *Current Government Policies*

The National Reconciliation and Unity Government (GRUN), through the Secretary of the Environment and Natural Resources (MARENA), has a new environmental policy in place with a participatory model, which promotes sustainable management for the defence, restoration and protection of the environment. This new approach involves citizen participation, and is different from previous policies which would define policies disconnected from citizens' views and become inapplicable in practice. Nowadays, local participation is a factor to be taken into account, where governance is accomplished by establishing alliances with municipal and regional governments. With the new model, the issues and solutions raised by citizens are captured. The environmental policies of GRUN aim at defending nature and the environment, as part of the new 'citizen power' development model, which improves the population's well-being without compromising the quality of life of future generations. This policy is meant to overcome poverty and preserve natural heritage, while respecting the rights of indigenous peoples and ethnic communities (INC and MARENA, 2009, taken from National Human Development Plan). This model incorporates the right to live in a healthy environment, where people own their natural heritage, and are able to care for it, protect it, restore it and sustain it.

Neoliberal governments applied an economic model grounded on the overexploitation of natural resources. Under the excuse of achieving economic growth, these governments planted the seeds of an irrational exploitation of national resources, thus causing the environmental deterioration of sea, forest, soil and biodiversity resources.

## **APPENDIX 5**

*La Nación* newspaper, 8 June 2012

### **Fishermen in distress**

Representatives from the Puntarenas Fishermen's Association attempted to take part in the World Ocean Day forum held at the Congress. However, they appeared in their everyday work clothes: T-shirts and shorts, for which reason access to the premises was denied.

Still itching to attend the event, they went to a nearby second-hand clothing store and bought trousers and shirts, and got dressed up. Back in the Congress, they were then allowed into the room where Congresswoman Maria Eugenia Vargas was in charge of the event, and was joined by Costa Rican top model Leonora Jimenez. Mrs. Venegas would later offer the fishermen an apology. The fishermen were rallying against environmental associations.

*Source:* La Nación Digital, available at <http://www.nacion.com/2012-06-08/EIPais/desde-la-barra.aspx>

## APPENDIX 6

### LIST OF PARTICIPANTS IN FOCUS GROUPS AND INTERVIEWS

#### HONDURAS

#### Protected Area: Bay Islands-Guanaja

No.	NAME	ORGANIZATION/COMMUNITY
1	Amalia Jackson	Mangrove Bight
2	Devin Powery	Mangrove Bight
3	Darrin Antunez	Mangrove Bight
4	Olden Evans	Mangrove Bight
5	Allan Wood	Mangrove Bight
6	Ray Powery	Mangrove Bight
7	Orliey Moore	Mangrove Bight
8	Juan Fonseca	Pelicano
9	Odair Philips	Pelicano
10	Juan Castillo	Pelicano
11	Cristopher Ranquin	Pelicano
12	Alen Kelly	Pelicano
13	Marlen Edith Paguada	North East Bight
14	Esteban Mendosa	North East Bight
15	Yessenia Moore	North East Bight
16	Katy Marroquin	Brisas del Mitch
17	Justo Grant	Bonnaca
18	Astor Philip	Bonnaca
19	Kevin Giron	Bonnaca
20	Demuen Hucestere	Bonnaca
21	Yamileth Oliva	Bonnaca
22	Delia Mancia	Bonnaca
23	Danny Kelly	Bonnaca
24	Newmon Dixon	Bonnaca

**Protected Area: Cayos Cochinos**

<b>No.</b>	<b>NAME</b>	<b>ORGANIZATION/COMMUNITY</b>
1	Leticia Arzu	Chachahuate
2	Miguel Angel Nuñez	Chachahuate
3	Ciriaco Jimenez Velazquez	Chachahuate
4	Carlos Enrique Fabbs	Chachahuate
5	Maria Dolores Castillo	Chachahuate
6	Roman Norales	Chachahuate
7	Cesar Augusto Martinez	Chachahuate
8	Valerio	Chachahuate
9	Carolin Buelto	Chachahuate
10	Jose Antonio Arilla	Chachahuate
11	Osman Orlando Batis	Chachahuate
12	Kelsy Yolanda Jimenez Batiz	Chachahuate
13	Gabriela	Chachahuate
14	Rigoberto Villafranca Vicina	East End
15	Dina Rodriguez	East End
16	Mario Flores	East End
17	Emerson Vidal Martinez	East End
18	Enma Zulema Sanchez	East End
19	Jazer Farid Aranda	East End
20	Jorge Castillo	East End
21	Pedro Nolasco	East End
22	Jose Angel Flores	East End
23	Exson Alejandro Flores	East End
24	Silvia Ramirez	East End

**Protected Area: Cuero y Salado**

No.	NAME	ORGANIZATION/COMMUNITY
1	Maria Rosa Moreno	La Rosita
2	Carmen Aleida Mencia	La Rosita
3	Olivia Manuela Cabachuela	La Rosita
4	Jose Daniel Rivas	La Rosita
5	Roman Aguilar	La Rosita
6	Glenda Alvarez	La Rosita
7	Jose Adalid Aguilar	La Rosita
8	Blanca Lizeth Alvarez	La Rosita
9	Erick Herrera	Salado Barra
10	Francisco Rodriguez	Salado Barra
11	Onestes Eucebio Hernandez	Salado Barra
12	Jose Arturo Rodriguez	Salado Barra
13	Veronica Herrera	Salado Barra
14	Sandra Maldonado Rubi	Salado Barra
15	Maritza Jannett Martinez	Salado Barra
16	Fatima Rodriguez	Salado Barra
17	Bryan Edilberto Hernandez	Salado Barra
18	Edwin Danilo Paz	Salado Barra
19	Antonia Perez	Salado Barra
20	Mirian Rodriguez	Salado Barra
21	Norma Aracely Solis	Salado Barra
22	Juan Carlos Rodriguez	Salado Barra
23	Jose Armando Jimenez	Salado Barra

### Authorities and NGO Participants

No.	NAME	ORGANIZATION
1	Edgardo Ortega	Unidad Municipal Ambiental de Guanaja
2	Madgell Moore	DIGEPESCA
3	Adrian Oviedo	Fundación Cayos Cochinos
4	Ana Paz	Fundación Cuero y Salado

### Costa Rica Ballena Marine National Park

No.	NAME	ORGANIZATION/COMUNITY
1	Juan Luis Sánchez V	Management Parque Nacional Marino Ballena
2	Fernando Vásquez	Artisanal fisherman, Ballena
3	Junior Monge	Artisanal fisherman (now dedicated to tourism), Ballena.
4	Wilson Monge	Artisanal fisherman (now dedicated to tourism), Ballena
5	Gabriel Manzanarez	Artisanal fisherman, Ballena
6	Geovanni	Artisanal fisherman, Ballena
7	Bolívar	Artisanal fisherman, Ballena
8	Johnny Umaña	Dominicalito, fisher receiver
9	Luis Ángel Jiménez	Dominicalito, Artisanal fisherman
10	Franklin Noguera Noguera	Dominicalito, Artisanal fisherman
11	Rigoberto Barquero	Dominicalito, Artisanal fisherman
12	Gerardo Palacios	Marine Commission of Osa Conservation Area, Coordinator



**Golfo Dulce Responsible Fishing Area  
FENOPEA  
(Participants Focal Group)**

No.	NAMES	ORGANIZATION/COMMUNITY
1	José Andrés Sanchez	Playa Zancudo
2	Juan Jiménez Jiménez	Asociación de Pescadores Bahía Pavones
3	Ronald Caballero Soto	Zancudo
4	Francisco Gutiérrez Cortés	Golfito
5	Edwin Artavia	ASOPEZ
6	José Pedro García García	Playa Puntarenitas
7	Lorenzo Concepción Caballero	Asociación Pilón, Pavones
8	Ramón Loaiza Alfaro	Asociación Pilón, Pavones
9	Ronald Valverde Quirós	Asociación La Palma
10	Gerardo Zamora	INCOPECA/Golfito
11	Carlos Mora	Golfito
12	Didier León Mena	Puerto Jiménez
13	Nirleidy Artavia	La Palma
14	Lizeth Castillo	Zancudo
15	José Luis Calderón Aguilar	Golfito
16	Cirilo Quintero	Puerto Jiménez
17	Álvaro Gutiérrez Calderón	Golfito

**Guanacaste Conservation Area**

No.	NAMES	ORGANIZATION/COMMUNITY
1	Agustina Alvarado R.	Asociación Santa Elena, Cuajiniquil
2	Heriberto Morales	Asociación Santa Elena, Cuajiniquil
3	Nora Alemán Canales	Asociación Santa Elena, Cuajiniquil
4	José Alfredo Montiel Montiel	Asociación Santa Elena, Cuajiniquil
5	Anselmo David Morales	Asociación Santa Elena, Cuajiniquil
6	Marina Maribel Gutierrez C	Asociación Santa Elena, Cuajiniquil

7	M. Argerie Cruz Carmona	Asociación Santa Elena, Cuajiniquil
8	Cristobal Morales	Cuajiniquil
9	Raúl Blanco	Cuajiniquil
10	Jadder Blanco	Cuajiniquil
11	Porfidio	Cuajiniquil
12	Oscar Rosales	Cuajiniquil
13	José Antonio Guerrero	Cuajiniquil
14	Marcial García	Cuajiniquil
15	Oscar Rodríguez	Cuajiniquil
16	Faustino	Cuajiniquil
17	David García	Cuajiniquil
18	José Ramón Espinoza Calderón	Cuajiniquil
19	Luis Fernando Ortega	Cuajiniquil
20	Marco Antonio Seas Sosa	Cuajiniquil
21	Enrique Blanco Arana	Cuajiniquil
22	Miguel Ángel Bermúdez	Cuajiniquil
23	José Lara	Cuajiniquil
24	Nayudel Lara	Cuajiniquil
25	Gerardo Gutiérrez Gómez	Cuajiniquil
26	Luis Alberto Campos	Cuajiniquil
27	Marciano	Cuajiniquil
28	Don Toño	Cuajiniquil
29	Luis Fernando	Cuajiniquil
30	Fran Lara	Cuajiniquil
31	Luis Campos Traña	Cuajiniquil
32	Olger Lara	Cuajiniquil
33	María Marta Chavarría Días	Research Programme/ Marine link Guanacaste Conservation Area with Marine Programme SINAC



## *cendah*

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Panamá

Protected Area: Narganá, Guna Yala

### FIRST DIALOGUE

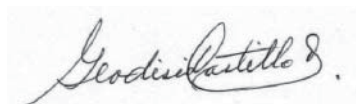
15 December 2011

Community of Yandub-Narganá and Aggwanusadub Comarca Gunayala

No.	NAMES	ORGANIZATION/COMMUNITY
1	Leroy Morris	Nadigana - Yandub-Narganá
2	Leandro Alba	Bondi – Yandub-Nargana
3	Kenneth Morris A.	Nadigana – Yandub-Narganá
4	Teonila Herrera	Aggwabundor - Aggwanusadub
5	Maritza García	Aggwabundor - Aggwanusadub
6	Rosa Herrera	Aggwabundor - Aggwanusadub
7	Angel Obaldía	Nadigana – Yandub-Narganá
8	Gregorio González	Nadigana – Yandub-Narganá
9	Mary Bonilla	Aggwabundor - Aggwanusadub
10	Feliciano Stócel	Bondi – Yandub-Narganá
11	Rolando Obaldía	Nadigana – Yandub-Narganá
12	Eligio Ossa	Bondi – Yandub-Narganá
13	George Rivera	Bondi – Yandub-Narganá
14	Kyrnaky Obaldía	Nadigana – Yandub-Narganá
15	Benjamín Obaldía	Nadigana – Yandub-Narganá
16	Alexis González	Aggwanusadub
17	Victorio Campos	Aggwanusadub

18	Iguayoikiler Ferrer	Yandub-Nargana
19	Enzo Pérez	Yandub-Nargana
20	Arturo González	Aggwanusadub
21	Eduardo Soo	Aggwanusadub
22	Enrique Obaldía	Aggwanusadub
23	Adolfo González	Yandub-Nargana
24	Yonilia Castillo	Interviwer
25	Geodisio Castillo	Facilitator

Responsible:



**Geodisio Castillo**  
geodisio@gmail.com



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## SECOND DIALOGUE

10 April 2012

Community of Digir Comarca Gunayala

No.	NAME	ORGANIZATION/COMMUNITY
1	Edilberto Martínez	Digir
2	Eleterio Durán	Digir
3	Adriano Pérez	Digir
4	Dianeth Marquéz	Digir
5	Jean Carlo Salcedo	Digir
6	Laurentino Martínez	Digir
7	Rodmey Ramírez	Digir
8	Onelio Díaz	Digir
9	Latislao Obaldía	Digir
10	Andrei Obaldía	Digir
11	Francisco Stocel	Digir
12	Edwin Flores	Digir
13	Susana Pérez	Yandub-Narganá
14	Yanedy Pérez	Yandub-Narganá
15	Yizeth Pérez	Yandub-Narganá
16	Edwin Flores	Digir
17	Baldomero De León	Wargandub
18	Yenny Díaz	Yandub-Narganá
19	Ilka Aris	Uggubseni
20	Hercilia Pérez	Achudub

21	Yonilia Castillo	Interviwer
22	Geodisio Castillo	Facilitator

Responsible:



**Geodisio Castillo**  
geodisio@gmail.com

**Observations:**

The first dialogue was done with an organized group of farmers, some dedicated to lobster fishing.

The second dialogue was done with lobster fishers, some dedicated to agriculture (a smaller percentage), and the majority were from the community of Digir.

Also, individual interviews were carried out with community leaders and organizations.