

Gender, Tourism, and Participatory Appraisals at the Corumbau Marine Extractive Reserve, Brazil

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Abstract

The Corumbau Marine Extractive Reserve was created in a region of rich biodiversity, located in the South of Bahia State, Brazil, to meet the revindications of artisanal fishermen in a context of increasing predatory industrial fisheries. The aim of the Marine Extractive Reserve is to improve the sustainability of fisheries stocks and the economy of artisanal fishermen's families, protecting the local biodiversity for the locals' collective use. However, at Corumbau the natives are facing social problems that have increased due to tourism growth. The present research contributes to the Management Plan in sectors that are crucial to assess the aspirations and subjective aspects related to the natives' daily life at individual, familiar and communitary levels. The Participatory Appraisal with a Gender Equity Perspective (PAGP) was applied to five communities at RESEX Corumbau, showing, by gender, the greatest problems artisanal fisheries' families are facing. Tourism is growing in the area, reflecting the residents different and contradictory interests. It can develop commerce and jobs, but also intensify some social and environmental problems in this area.

Keywords: protected areas, Marine extractive reserves, gender, artisanal fisheries, participatory appraisal, tourism

Introduction

Since 1989 Brazil has been experimenting with a new conservation category, the Marine Extractive Reserve, or "Reservas Extrativistas Marinhas." This article concerns the author's work in the Corumbau Marine Extractive Reserve (Corumbau RESEX), which is located at Costa do Descobrimento, 800 km south of Salvador, capital city of the State of Bahia, Brazil. The region is home to part of what remains of the Mata Atlântica, areas of mangroves and coral reefs, included in the UNESCO's World Heritage List in 1999.

Corumbau RESEX has a Marine area of approximately 90,000 ha, is at the border of land and marine environments,

and its limit on the maximum line of high tides, in a rich biological diversity ecosystem. The RESEX focuses on aquatic resources and encompasses open water marine environments in coastal areas. The land area, where the extractivists live, represents its surrounding area. This is the main source of social conflicts. While the Marine reserve is an area of common property protected by law, the land area is governed by commercial and private property laws, and where economically stronger sectors, such as the hotels and tourism businesses, exert a considerable influence, as observed at Corumbau RESEX.

The area is in a historical region of Brazil known as Costa do Descobrimento, where the Portuguese first arrived. Over time the local indians, mostly belonging to Tupinambá and Pataxó nations, were dispossessed of their land, enslaved and miscegenated to white people, giving rise to "mamelucos," the ancestrals of the majority of the local population. Some Pataxó local villages are now trying to reevaluate their culture, aiming at the turistic commerce (Grünewald 2002, 2005). The artisanal fishermen are mostly descendants of this indigenous population, but are culturally integrated to our society.

RESEX is a new frame of Conservation Unit in Brazil, initially implemented in the Amazonian context. As a type of co-management arrangement, it has comparative advantages in offering different elements, as resource users can offer local ecological knowledge as well as an insider understanding of the social and cultural context, while the State can play a central role in offering support and providing a legal framework that codifies and legitimizes local identity and rights over resources. Its creation reflects growing official recognition in Brazil of the role of traditional resource users and their management systems in environmental conservation and it is the product of the struggles of rubber-tapper unions, under the leadership of Chico Mendes. Thanks to these struggles, legislation was passed in 1989, allowing for the establishment of Extractive Reserves. These conservation and development initiatives have emerged as the policy instrument used by the Centre for Traditional Populations (CNPT) with-

in the Brazilian Institute for the Environment (IBAMA) for decentralizing managerial responsibility for natural resources to communities that have a proven history of sustainable use, according to the National System of Conservation Units (BRASIL — SNUC 2000). This policy trend is significant in that it represents the first government sponsored effort to protect the common property resources upon which small-scale fishers depend.

To date, there is no data to confirm the viability of Marine Extractive Reserves in Brazil. According to Pinto da Silva (2004), results from a pilot project in Arraial do Cabo, Rio de Janeiro, Brazil's first open-water RESEX, suggest that significant social barriers to collective action exist. The difficulty in undertaking comparative study is that there are few cases available with similar variables to support generalization. This is especially true if gender is an important variable in the case study, as in this work. In many case studies a wide diversity of theoretical approaches are used and data are not easily comparable across studies (Stern et al. 2002).

The great number of private economic interests involved in the Corumbau RESEX area works against the understanding and support of the local populations regarding the conservation policy and the participatory processes which may have solutions (Robotton 2002) to the existing conflicts between the local society and the Conservation Unit.

The Participatory Appraisal with Gender Perspective (PAGP) seeks to contribute with the goal of promoting visibility, legitimacy and inclusion of the important female experiences and perspectives in RESEX. Joint actions are considered in which gender and social issues are linked to environmental problems so as to diminish poverty and subsequent social exclusion.

The coastal zones of the south region of Bahia State have gone through social and environmental changes in the last 10 years. The intense industrial fishery led to the exploitation of the native marine stocks, deeply harmed shrimp stocks in the area, disrespecting the ecologic Marine processes and the biodiversity. In order to meet demand caused by intense tourism activity, an extreme exploitation of the land took place, even though the urban infrastructure did not keep pace with the increase of domestic sewage and solid waste generation.

The Corumbau RESEX was established in September 2000 thanks to the initiatives of local leaderships among nine different communities, at the region of Porto Seguro and Prado, state of Bahia. The RESEX was created to protect the region from the predatory fishing of industrial fleets, ensure the self-sustainable exploitation and grant the conservation of renewable natural resources, traditionally used by the local extractive population. Research institutions and government agencies, however, must provide essential support to guaran-

tee effective results. After the creation of a RESEX, a utilization plan must be developed which defines who, when and how resources can be used, through a participatory process with the communities. This plan must then be approved by IBAMA/CNPT and published in the federal record in order to codify the rights and responsibilities of government and resource appropriators. Finally, the plan is implemented. This final phase is clearly the most challenging, as it requires, for its long-term resilience, robust locally derived institutions sustained by community participation and government support, as discussed by Pinto da Silva (2004).

The users' rights to the resources have been guaranteed to the traditional extractive populations, counting 484 registered members. The artisanal fishers, distributed in several communities along the coast, are organized in three associations. It has been verified that only 14%, 25% and 45% of the residents respectively of Cumuruxatiba, Corumbau and Caraíva communities, are aware of the norms that regulate the RESEX and their participation. Long distances, meeting schedules which are incompatible with women's daily activities, and lack of information on the creation and management process, were pointed out as obstacles to the participatory process.

Extractive reserves in the Amazon offer significant potential for political organization and improved environmental and social resilience compared to other conservation approaches. Begossi et al. (1999) observed that products from an Extractive Reserve may be handicrafts, fruits, vegetables and medicinal plants cultivation, fish, and tourist-related activities. Extractive Reserves in their original context in Amazon rainforest, among rubber-tappers and "caboclos" (descendants of Indians and Portuguese) shows economic viability. According to the author, in spite of some debility, Extractive Reserves continue to be a conservation alternative, and in Brazil they are the only legal types of conservation area allowing native residents. This has not yet been achieved for Corumbau, where a satisfactory level of institutional development must still be attained. The present situation shows a wide gap between the potential of this conservation alternative and the reality. This case study aims to demonstrate that Marine Extractive Reserves may be far from the best alternative in the eyes of native residents in the coastal area.

As studied by Pinto da Silva (2004), Marine Extractive Reserves may confront significant social barriers to collective action and in several cases the local resource governing institutions are not robust, which may undermine the role of fishers as players in the decision-making process. This is the case when the RESEX has not significantly fortified local management institutions and has overlooked or not been able to deal with the obstacles to participation and empowerment. The process of social information begins before reserve cre-

ation and must continue, including stakeholders such as local government and fishing associations and fisher families. Gender equity in participation and information is part of necessary measures to a successful co-management.

There is a contradiction involving the relations of use of the land-sea space, where fishermen live and work, and which is important for production and reproduction (Silva 2000). On one hand, the reserves protect the marine environment, and primitively assimilate the traditional knowledge and the social occupation of the marine spaces (Diegues 2000, 2004). On the other hand, the surrounding land area offers no infrastructure or conditions for the permanence of the extractive populations, which is a primary condition for the achievement of additional economic activities and the socio-cultural reproduction of the communities. This situation causes several problems that significantly harms the communities in the Marine Extractive Reserves.

In the case of the Corumbau RESEX, the surrounding communities live in isolation and with a low quality of life due to the poor state or absence of roads and bridges, and the absence of electricity, health care or schools, which demonstrates the lack of governmental support. Because of growing real estate speculation in the area and tourism development pressures, RESEX residents are being forced to sell their houses at very low prices and to move far away from the shore. Due to the increasing privatisation of access to and use of the coastal strip, reaching the sea is becoming more difficult for the communities. According to Maldonado (1986) this contributes to a gradual cultural erosion and towards the complete exclusion of the fishermen from areas near the seashore.

This hinders the active participation of the local extractive population in the management decision-making processes. Participation is also limited, particularly in the case of women, due to several difficulties. Two key problems for women are motherhood and cultural traditions, that preclude speaking at meetings and even grasping the issues.

Conceptual Framework

Improving the quality of life of the RESEX residents and their participation in the management practices might lead to a better organization, enabling a social and ecological redirection, adaptive and flexible, that will lead to the construction of resiliency and sustainability in sociologic systems (Folke et al. 1998). Such acknowledgement results in new priorities for the conservation of the ecosystems, such as social inclusion, and social and ecological resilience, within a new management concept, "adaptive management" (Gunder-son and Holling 2000).

To deal with the Corumbau reality, this study adopted

the conceptual framework from ecological anthropology, including the contributions of environmental anthropology, in the context of contemporary environmental discourse (Milton 1993, 1996, 2002) and the research vision from applied anthropology. The enormity and complexity of environmental problems in the developing world deserves the utmost attention by the social sciences. This is especially the case as the questions of culture and ecology are increasingly intersected with the innumerable political and economic problems in the developing world. If environmental problems are to be understood in their totality, anthropology must play a part in their description and clarification.

Recent ecological anthropology studies have included concerns for the environmental, technological and social nexus, emphasizing questions of power and inequality, the evaluation and critique of developing world programs, and the analysis of environmental degradation (Netting 1996, 270).

Ecological anthropology traditionally examined and defined ecology in terms of its broader relationship to culture, and was concerned with environmental issues to the extent that they influenced human physical and cultural change. Environmentalism could be sought within the framework of its modern manifestations, in which it is viewed largely in relation to global processes of social and economic change. As a consequence, solutions must be understood in terms of the structures, routines and ideas embedded in human cultures, rather than prevailing scientific perspectives.

Ecological anthropology contributes to the development of anthropological knowledge and extends models of sustainability into ecological approaches. The presence of ecology, an interdisciplinary undertaking, and the concept of the ecosystem in anthropology add new dimensions both to theory and methodology, bringing additional hybrid vigor to the field of anthropology (Moran 2000).

Applied anthropology refers to the application of the principles, theories, methods and approaches of anthropology to the interdisciplinary identification and solution of human problems through building partnerships in research and problem solving; acknowledging the perspectives of all people involved; focusing on challenges and opportunities presented by biological variability, cultural diversity, ethnicity, gender, poverty and class; and addressing imbalances in resources, rights, and power (Schröder 1997).

Conditions for Sustainable Tourism in a Marine RESEX

Tourism is growing at RESEX Corumbau. According to the model developed by Butler (1980), the area is in the early stages of tourism development, but villages already face problems related to the carrying capacity for tourism activity,

such as lack of basic infrastructure and going through a transition phase from involvement to development.

Sustainable tourism discourse has been guided by the paradigm of sustainable development, which suggests a controlled growth of activities so as to guarantee long-lasting economic performance, maintaining the ecological balance, and taking into account the population's traditions and its involvement in this process. Peripheral areas experiencing an economic downturn in traditional industries such as agriculture often consider tourism to be a viable alternative. Unfortunately these areas do not always enter the business of tourism with a very clear understanding of the associated difficulties and challenges. Blackman et al. (2005) studied 11 cases of tourism development in peripheral regions from around the world. These cases were analyzed using an adaptation of Tourism Systems Framework. Factors found to contribute to the success of tourism development in peripheral regions included the presence of leaderships, effective private-public sector partnerships, the identification and development of specialist attractions, government control and support, good market research, and community involvement. The analysis also identified a number of barriers to successful tourism development, including a lack of control over negative impacts, difficulties with finance, community opposition and lack of infrastructure.

Several works have pointed out the potentialities of tourism activities and their negative aspects in relation to the recipient communities, together with the necessity to redistribute the profits derived from tourism through job options, education and entertainment (Figueiredo 1999; Mendonça 1999; Ruschmann 1997, 2000; Coriolano 1999; Midaglia 1999). As Skourtos et al. (2005) have discussed, the interaction of economic activities, ecological factors and social values contribute to an increase in the complexity of policy options and intervention failures. Conflicts between users, their relationship with the State and their interaction with the natural environment must be analyzed in depth.

The importance of coastal zones to the tourism industry and the need to protect such resources is not only vital to the economy of nations. This is a growing dilemma for many localities and regions, according to Phillips and Jones (2006). Beaches, as all Bahia seashore, have become synonymous with tourism. If tourism is to be a positive force in the lives of local residents, it is contingent upon local response, involvement and support. According to Liu and Wall (2006) many tourism plans for developing area destinations give inadequate attention to human resources development. Furthermore, many tourism plans espouse forms of tourism that do not fit well with existing human resource capabilities, so that local people find it difficult to participate in tourism and, consequently, benefit less than might otherwise be the case.

As discussed by Jenkins (1980), there are obvious reasons why governments in developing countries should positively intervene in tourism. When funds are required to support investment in tourism, the government is often the only agency able to raise or guarantee the loan. At the macro level, the government has ultimate responsibility for the allocation of funds and resources for specific sectors. It is a government responsibility to decide on regulations and loans which can affect tourism. But in developing countries the problem of resource scarcity and consequently allocation is acute. Strong government control is necessary to prevent exploitation and waste, and to ensure that the benefits from tourism are optimised. In developing countries tourism is largely an economic activity with social consequences.

Other approaches suggest that the work directed to the management of the protected natural areas be done by getting their populations involved and working hard to surpass the restrictions imposed by institutional bureaucracies and by lack of participatory and better-structured planning, which would contribute to the identification of the interests involved in the activity. Even though the natural asset is extremely fragile and subject to negative changes caused by visitors, its use for tourism purposes is necessary to consider since this is one of the few alternative activities for economic growth (Krippendorf 2000).

Tourism in this case study is an intervening variable, or mediator, a factor that may affect outcomes but that may in turn be affected by interventions, as a tourism management plan, subject to contingencies of the conservation and sustainable use of marine resources. As observed by Stern et al. (2002, 454), the context must be taken into account in making policy choices, even if policy cannot quickly change them, because the outcome of an intervention may depend on the state of variables when the intervention is tried.

Gender Analysis in the Marine RESEX Context

Gender analysis is essential for projects of local development to be effective and to bring benefits to the communities when they involve women as sources of knowledge and cultural diffusion, enhancing their role, their experience and the importance of their work (Abramovay 1993a, 1993b). Women are greatly responsible for subsistence and socialization in the families, and it is important to consider the interrelation among preservation practices, use of natural resources and balance in gender relationships.

Investigations have demonstrated (Rocheleau and Edmunds 1997; Heathcote and Thomas 1997) that the introduction of the variable "gender" brings another dimension to natural environment analysis, due to the distinctive power rela-

tions between men and women in many societies. Within the 'gender' dimension there might be reciprocity and negotiation, and the possibility of negotiation carries important implications for planning and management, since it gives planners and communities a certain standard to judge equity concerns.

When speaking of reproductive work, it refers to the social and biological reproduction of the domestic workforce by performing several tasks, such as collecting water and firewood in the rural area, cooking, cleaning and keeping the house and the vegetable garden, assisting and raising children, going shopping, and caring for the family health. While men are mostly culturally linked to the productive sector, society and culture grant women the maternal role, which reinforces biological ties and creates symbolic meanings of proximity to nature. Mothers try to conform to productive and reproductive roles that are supplementary, but often concurrent and contradictory, and their perception and experience with environmental conditions are different than men's, especially in rural environments (Di Ciommo 1990, 1998).

A gender perspective concerning RESEX planning and management is a crucial way to equitably assure men and women the access and management of resources, goods and services. In several studies in Latin America, scholars (Aguilar 1998, 2000; Aguilar and Valenciano 1999; Fassaert 2000) have concluded that women's active participation in the development projects has shown efficiency in guaranteeing the projects continuity and sustainability.

The 'gender' variable is important to understand the effects of resource management. Considering suggestions from Stern et al. (2002) to a general conceptual framework within which theoretical propositions can be presented, we could say that gender relations are an influential factor that can be altered by policy intervention or where we can introduce possible interventions. Gender can be considered an independent variable to institutional arrangements, as in political representation rules, and can be viewed as a contingency, a moderator variable, connected to the existence of boundaries, poverty, interdependence and heterogeneity. In the outcomes aimed for by the project, gender must be included in the democratic control by the commons.

Objectives

The participatory appraisal with gender perspective allows a better understanding of the daily life in Corumbau RESEX communities and presents their needs in face of the new productive reality they are undergoing. This investigation aimed at listening to and discussing with the involved population, its chief problems and needs as well as the possible conflicts they thought worth mentioning. The study and

the analysis consider that gender role specifications set diversified experiences for both men and women. This case study does not provide a comparison with other studies on other tropical areas or tropical fisheries, considering that Corumbau RESEX was created in 2002 and it is too early to do a complete evaluation of local co-management.

Methods

A Participatory Appraisal with Gender Perspective (PAGP) was carried out with the aim of promoting the active participation of the various interest groups of the RESEX communities, especially women, in the management of the area, faced as they are with changes imposed by tourism. The PAGP techniques and tools used were those recommended by the World Conservation Union — IUCN through the series *Toward Equity Module* (Aguilar 1998, 2000; Aguilar and Valenciano 1999; Rocio Rodrigues 1999; IUCN 2000). In order to provide an analysis with a gender perspective, information gathering and data presentation were disaggregated by gender. This enabled us to look at the needs and demands of men and women separately. According to Aguilar (1998, 1999, 2000), in many projects that used a gender equity perspective, principles, conditions, strategies, actions and procedures were identified which favored the attempts of progress, impacting the gender relationships inside the families and in the communities. The methodologies of the PAGP can be applied to rural communities, given that it has been tested in several countries of Central America.

The Work Sessions (IUCN 2000) with group dynamics among men and women are characterized by:

- a) Facilitators recognize the local knowledge of women and men with respect to the situation being appraised.
- b) Data collection and analysis is a group process in which both women and men participate.
- c) It is based on horizontal communication strategies.
- d) Planners and technicians are in direct contact with the community.

Through a systematic process, PAGP helps to identify particular problems and their origins, where knowledge is built up with the participation and collaboration of the people affected. Rather than observing the group as an homogenous unit, PAGP recognizes that women and men have different needs, perceptions and realities in accordance with their age and sex. It is designed to assist the introduction of changes necessary in the delivery of policies that seek to achieve equity. The aim of PAGP is to expose the power relations in the community and to promote collective responsibility, environmental justice, and quality of life for the populations involved, so as to decrease poverty and consequent social exclusion.

Two Work Sessions with group dynamics among men and women were highly responsive: “Rain of Dreams” (Aguilar and Valenciano 1999, 44) and “What Hurts Most” (Aguilar 2000, 133). This manuscript will focus on the data of the above mentioned dynamics. The former was designed to identify the main aspirations of men and women with regard to improving their personal, community and environmental conditions. The latter aimed at identifying critical problems, and to understand how they affect men and women in their personal, domestic and public lives.

Only a very small number of men turned up to the PAGP meeting, while women appeared in great number — overall 17 men and 118 women participated in the workshops. Although the small presence of men limits the possibility of comparative analysis, it highlights the existence of power relations between men and women in the communities. At the artisanal fishery communities, such as Corumbau RESEX, the traditional division of the work sets the social opportunities, and the meetings were named “feminine” for involving family topics and domestic activities.

During the months of November and December 2004, there were some meetings with residents of five different communities at RESEX Corumbau: Caraíva, Indian village Barra Velha, Corumbau, Embassuaba and Cumuruxatiba.

Firstly, the accounts made by the participants of PAGP activities were written down, and later examined and classified under categories, which allowed the collection of the resulting data and final analysis. In the Work Sessions “Rain of Dreams” and “What Hurts Most,” strips of colored paper were used to identify men and women. The accounts were anonymously copied and later pasted on a poster under the proper color. The overall view of the accounts showed how each group was influenced by the problems, encouraging a discussion of the issues and promoting awareness through the collective construction of knowledge. Ambitions and distresses were written down just as they were expressed; however, some help was given to those who did not know written language.

When compared to men’s presence, women’s presence was minimal at the local associations and the RESEX council meetings. Nevertheless, at the PAGP meetings the presence of a very small number of men was observed, while women appeared in great number since such meetings represented an opportunity they had to express opinions and to socialize as well.

Results

The article shows data obtained with PAGP at Corumbau RESEX during 2004, from a gendered angle, discussing the differing aspirations of men and women in fishing communi-

ties, as well as the differing priorities of local communities. The results are reporting the greater “Dreams” and “Distress” by gender at Corumbau RESEX, firstly in communities as a whole. Then we present briefly some particular characteristics of each one of the communities: Caraíva, Barra Velha Indian Village, Corumbau, Imabassuaba and Cumuruxatiba, since they have diverse conditions.

“Dreams” such as basic sanitation, leisure activities and training courses were not so important for men as for women. Women also tended to be more concerned about family welfare, including health and hygiene. Women also explained how vulnerable they are to violence, which is expressed in a variety of ways, and which is worsened by their financial dependence on men.

Lack of health care was ranked first as a cause for concern by both men and women, and education as second. This demonstrates that health care and education are of equal concern to men and women in the community. In private, most women highlighted problems caused by family conflicts and violence.

Both men and women pointed out that associations and community organizations were non-existent, and referred to the problems caused by the lack of local policies for housing, health care, water supply, employment creation, and basic services. Other factors distressing women included the lack or loss of their own houses, non-existent water supplies, grief caused by loss of family members through death or by the separation imposed by distance and by the lack of family support. These were not mentioned by men.

The results also highlight the extent to which women are concerned about their children’s welfare and health care, and their efforts to balance their reproductive and productive roles, which aim to keep family members at work. Many women were concerned and distressed about the absence of proper medical care in the communities. The lack of piped potable water raises further concerns, particularly about health. Job and income opportunities were also listed as “dreams” by women, highlighting the importance given to financial independence and having the means for family support. Mothers “dream” of public day-care centers for children up to 6 years old, where they can be left while they go to work. Participants pointed out that job opportunities abound during tourist season and they can benefit from the large number of tourists in the community. Daycare centers could therefore really make a difference to the lives of many women.

The “Rain of Dreams” dynamics aimed at identifying the chief desires of men and women regarding the tangible possibilities of improving personal, communitarian and environmental conditions. As for the “What Hurts Most” dynamics, the goal was to spot crucial and significant problems, and



Photo 1. Caraíva River

how they affect men and women in their personal, domestic and communal lives. Women were socialized in order to easily recognize people’s needs. When reporting their accounts, they clearly expressed their concerns towards family and other members of the community, but did not spontaneously express their own needs.

The overall results involving all the information gathered at the “Rain of Dreams” workshops held at RESEX Corumbau revealed (Table 2) that women show great expectations towards improvements in the communities, namely electric power, 16% of the accounts, education, 15%, and health care improvement, 14%. Following are owning a house, 8%, better roads, 6%, and water supply, 5%. Data shows how concerned women are about their children’s welfare and health care. Electric power at RESEX in order to access resources and information is a great “Dream” shared by many.

In the face of the possibility of an accident involving a child, a night emergency, an emergency labor, together with very bad road conditions, and many other situations a woman comes across in her daily life, many women expressed their concerns and distresses regarding the absence of proper medical care in the communities. Additionally, the poor quality of the water in a large part of the region is another source of pre-occupation, since it causes verminosis and contamination. In Caraíva, the absence of basic sanitation and good quality water, and the contamination caused by drain overflow in the rain season, are just some of the problems that affect public health. The small local health center works at very limited hours, and records that verminosis (*Ascaris lumbricoides*, *Giardia lamblia*, *Schistosoma mansoni* and *Entamoeba histolytica*) is present in all tests performed at all age ranges.

The greatest mothers’ “Dream” is not only to have public daycare centers where they can leave their children and go to work, but also the hope that such centers provide good quality assistance to them.

Men also showed up and expressed their wish to have better working conditions starting with the purchase of a boat and the possibility of collective transportation, which would make it easier for the family to travel to other places. School transportation is also a “Dream” many fathers share, since their children attend day- or night-school in other villages.

Furthermore, special attention from the government to the communities’ priorities, especially with the construction of roads, was emphasized by four out of 37 men’s total account, outnumbering concerns such as owning a house and personal and domestic goals. This shows that men’s dreams are related to better conditions for the fishing production, such as the flow of the produce. Nevertheless, their special

Table 1. “Rain of Dreams” — Needs, Desires and Expectations at the RESEX Corumbau Communities

CATEGORIES	Caraíva		Barra Velha		Corumbau	Emba-suaba		Cumuru-xatiba
	M	W	M	W	W	M	W	W
Access to electric power	0	21	0	6	16	7	16	0
Access to quality education	2	24	0	6	13	4	8	5
Better health care services	1	18	1	6	13	1	7	6
Water supply	0	7	0	1	9	2	1	2
Owning a house	0	1	0	9	2	1	2	14
Better roads	0	8	0	2	6	4	5	1
Nurseries	1	5	0	1	1	0	1	10
Work and wage	0	7	0	3	3	0	0	6
Union, association and community strengthening	0	2	2	1	5	0	0	6
Personal and family happiness	0	0	0	0	2	0	0	7
Training courses	0	11	0	0	2	0	0	0

The number of answers does not refer to the number of individuals, but to the number of opinions. M - Men/ W - Women

interests involved both quality education and electric power, which accounted for 16% and 19% of masculine statements, respectively. It is worth mentioning that quality education and electric power were mentioned by both men or women all over RESEX as chief priorities.

Women's "Dreams" regarding installation of safety equipment, pay phones, street pavement, better choices of goods and food, concern problems related to the community infrastructure, which directly affect their lives. Women also mentioned the difficult working conditions they come across, and the necessity of a more diversified market with better rates since the population has to either travel long distances for shopping or pay the high prices charged in the communities, as a result of the transportation costs. Among men's concerns are the loss of cultural identity (7% of the accounts) and the abandonment in face of the problems (4%).

Women demonstrated much interest in attending training courses which would qualify them for a job and, consequently, to the chance of having their own income. They also have better opportunities to perform productive activities in the fields of hotel, tourism, trade and other services than men do. Many women expressed their desire to have their own income to acquire financial independence to help the immediate family as well as more distant relatives. This demonstrates their responsibility and sensitivity towards problems that affect the family as a whole.

Needs regarding health care represented 18% out of 28 total accounts given by men, and 14% out of 254 total women's accounts. Education was the second most mentioned factor of distress, mentioned by 14% and 13% of men and women, respectively. This suggests that health care and education equally concern men and women in the communi-

ty. Nevertheless, the lack of roads and bridges, which represents the third factor of distress, accounted for 21% of the men's accounts, but just 11% of the women's. It can be inferred that men's working and living conditions greatly depend on good roads and bridges, since they are necessary for the trade of the fishing product. On the other hand, 9% of the overall women's accounts pointed to family conflicts and violence, which shows gender diversity when exposing their weaknesses in the presence of relations of authority and power. Although such behavior was not clearly pointed out by women during the discussions, they were recorded in the private vote.

Men and women accounted for 11% and 8%, respectively, of the accounts regarding the nonexistence of association and organization in the communities, together with problems related to local policy. This shows that they are aware of the importance of joint action, association and collective strengthening to overcome the adversities they have to face. The lack of a job or work was mentioned as a factor of distress by men and women. The lack or loss of their own house, the nonexistence of water supply, the losses of loved ones in the family, caused by death, by the separation imposed by distance, and by the lack of family support and aging are mentioned as factors of distress by 6.2% of the women, whereas they are not present in the men's accounts, probably because men's socialization does not motivate them to show their distresses. About 2% of the women at RESEX do not have many expectations for the future; only at the Cumuruxatiba community does this rate go up to 9%.

The study shows that when considering chief desires, concerns and adversities, RESEX as a whole demonstrated a common preference, but some characteristics of the villages

Table 2. "What Hurts Most" — Distresses or Problems, Privations and Difficulties at the RESEX Corumbau Communities

CATEGORIES	Caraíva		Barra Velha		Corumbau	Embas-suaba		Cumuru-xatiba
	M	W	M	W	W	M	W	W
Education	0	10	0	0	6	4	16	2
Health care service	1	6	2	6	9	2	7	8
Local policy, lack of union and community organization	0	5	1	2	9	2	4	3
Lack of roads and bridges	0	4	0	1	3	6	16	3
Lack of electric power	0	2	0	5	4	3	7	0
Lack of job and work	0	2	0	0	4	1	2	8
Conflicts and domestic violence	0	9	0	0	5	1	3	6
Lack of public safety	0	3	1	0	0	0	0	0
Water supply	0	1	2	3	5	0	0	0
Death of family members, aging and lack of family support	0	0	0	0	0	1	0	8

The number of answers does not refer to the number of persons, but to the number of opinions. M - Men / W - Women

can be pointed out to show differences regarding their socio-economic conditions and standards of tourism development.

Women in Caraíva demonstrated high expectations and hopes in relation to what they can get in return for the appraisal and the implementation of participatory management. Since this community has the highest tourist flow, it shows the importance of acquiring new values, such as education and information, that will lead to better living and working conditions. School conditions are in a state of total abandonment, including poor management, absence of good teachers, shortage of school supplies, and disorganization in the school lunch distribution. Electric power is currently a privilege of those who have their own generators. Water of quality is found only in some private properties and hotels that have their own artesian wells.

The Barra Velha Indian Village is farther from the ocean and has a communitarian vegetable garden, which is an additional source of food; therefore, it does not depend solely on the fishing product. They have the help of the National Indian Foundation (FUNAI) but have reported problems concerning health care, alternatives to improve their income, and lack of electric power. Indian women would like to have the village visited by tourists so that they would have the chance to sell their crafts and, consequently, make some money. Such craft works based on seeds are considered unique since they are made of local natural materials, and the technique used by the native women goes from generation to generation. The women in the Indian community Pataxó de Barra Velha were the only ones among all the RESEX communities to mention, either in "Dreams" or "Distresses," the need of public policies on birth control and the distress of those women who, at very early ages, already have seven or eight children.

Corumbau is among the coastal communities of greater natural beauty and fragility, with high potential for tourism. Some planning actions must be taken to keep control of the

negative impacts caused to the area by the growing number of tourists who visit it, and also to avoid harmful consequences to the community. Nevertheless, water supply is a limiting factor for both residents and visitors. At the fishermen's village, sewage is discharged in the mangrove located behind the houses, on the banks of the Corumbau River. There is also no electric power, which is not an obstacle to the construction of large hotels that have their own power generators, and resorts located about five kilometers from the small village and reserved for the wealthy tourists. Local residents get their water from a cistern, which is manually operated. Such tasks are performed by women, just as in other needy areas in Brazil and developing countries (Heathcote and Thomas 1977), and represent one of the most tiring and lengthy tasks of a woman's daily routine. The Corumbau community is particularly difficult to reach in the rain season; therefore, provisioning and medical care are also difficult to provide. Among all communities, Corumbau was the first one whose residents mentioned the "Dream" of having a vegetable garden, which would be an alternative source of food and would also ensure better nutrition for the population.

Imbassuaba is a small community near Cumuruxatiba and Cahy River, one of the most visited sites in the area, mainly in high seasons. However, the residents point out a lot of problems regarding their daily lives, such as the isolation they face as a result of the poor conditions of roads and bridges. This small group of residents has no schools to attend, since the only school in the area was shut down by the city government two years ago. They grow vegetables in their backyards which, in addition to the fish, help improve the quality of their food.

Even being one of the easiest communities in the RESEX to be reached, and having visitors in the summer and on the holidays, Cumuruxatiba's roads are in a very poor condition, which is a limiting factor to a higher flow of tourists.

In the workshops held in Cumuruxatiba women emphasized their "Dream" of personal and domestic happiness, which shows their concerns regarding personal and emotional problems overcoming material acquisitions. Violence, drug and alcohol abuse were pointed out by women as a source of conflict in the family. This may be due to the fact that Cumuruxatiba is open to a greater number of visitors, therefore being exposed to new values. Intermediate teaching is provided to the young, which raises their expectations regarding a better future, but at the same time creates a feeling of frustration in the face of very few job opportunities. Women expressed their desires to have their own income, including the purchasing of a boat, so far a traditional male interest and occupation.

During the study it was observed that women in all RESEX Communities brought their little children to the



Photo 2. Corumbau Beach

workshops since they did not have a place or anybody to leave them with. This corroborates the recommendation made by Aguilar and Valenciano (1999) and Aguilar (2000) that it is mandatory that the administration of the management projects stimulate women's involvement by providing daycare centers to their children.

Conclusion

Brazil has seen government initiatives to devolve powers to local communities to manage fisheries resources. These are also based on the recognition that for management to be effective, the participation of local communities is critical. A slightly different concept of Marine extractive reserves — RESEX — is presently being consolidated and applied in Brazil.

The results demonstrate that even if communities are given rights over inshore waters, benefits are minimal if they lack similar rights over their land on the coasts. This is particularly true in the context of the other, more powerful interests, such as tourism, keen to gain access to coastal lands. This article explores this initiative from a gendered angle and discusses the differing aspirations of men and women in fishing communities, as well as the differing priorities of local communities, the tourism industry and conservation groups.

The use of the Participatory Appraisal with Gender Perspective has reached its goal in identifying the needs, expectations, privations and problems of the visited communities. After the meetings, elections have been held for the Women's Sections of the Fishermen's Associations, concerned with ensuring the interests of the fisherwomen, who are also fishermen's dependents. Such initiative will contribute to their strengthening and lead to the growth of female participation in the productive activities and in the decision-making processes related to the community; therefore, increasing the control and the access to the benefits resulting from such activities.

We emphasize the need for the Marine Corumbau RESEX to consider issues of land and sea together. "Rusticity," seen as an essential ecotouristic feature, creates problems for the RESEX population, with the burdens falling mainly on the women. Performing their daily activities under prevailing conditions is becoming increasingly difficult and strenuous. The construction of roads is another issue that needs to be discussed, giving rise to conflicts between local people and conservation organizations. This is due to the potential threat it represents by encouraging tourism, which, as discussed, could result in environmental and cultural damage.

The aspirations of women to earn income from their work, and the interest expressed in training courses to help them in the job market demonstrate the need for public day-

care centres for small children. If these existed, it would really help mothers to get jobs, particularly in high tourism seasons when there are more and better opportunities. This would also allow mothers with small children to attend meetings and to participate more in the management decisions of the RESEX.

This research has particularly highlighted the contradictions that exist in safeguarding the marine ecosystem, the locals' rights and different interests of the land residents. The State's role to create specific conservation measures required for the marine area also needs to take into account the relationships between land and sea, and the complementary roles played by women and men in sustaining life and livelihoods.

Ensuring a balance within such a diversified and contradictory set of interests is a challenge that will have to be faced by the management of the RESEX. To guarantee sustainability, it is particularly important to set rules to control tourism activities and the distribution of its benefits, and also to restrict other economic interests, notably with regard to the real estate speculation in the area.

This must go hand in hand with assuring the regular participation of the population in the RESEX administration, ensuring gender equity. This could help in empowering the community through participatory management, raising the quality of life of the residents, with their contribution to the conservation of ecosystem biodiversity.

The use of the word "community" does not imply a lack of awareness about the existence of different social groups, with different power relationships, that do not allow it to be a cooperative and an undistinguished unit. However, it is possible to say that the workshops on "Dreams" and "Distresses" at RESEX Corumbau could pinpoint critical problems, at material and non-material levels, leading to consequences on the quality of life that ranged from housing, education, electric power and water to personal happiness, hopelessness, violence, alcohol and drug abuse.

Corumbau RESEX is not a socio-environmental unit. Both the Pataxó Indian Community and the Imbassuaba Community stand out from the others when considering the production, since they grow subsistence crops as a complement to fishing.

The absence of roads and bridges and the lack of drinking water and water supply were also pointed out as privations. While for some residents electric power is a "Dream," for others, who make their living off of tourism and hotel business, keeping the place simple is a way to attract ecotourism, a profitable activity in high seasons.

A "Dream" women have that goes beyond their personal goals is to have the community united in their causes and fighting for the group welfare. Their participation in the management is expected to contribute rules for political strength-

ening and income production, thus keeping the traditional knowledge and maintaining the native population in the area. Additionally, environmental education actions directed to tourists and residents must be performed considering the subsidies and information provided by the appraisal. If the goal is sustainable tourism, the communities may benefit by improving the basic infrastructure of the villages.

We conclude that this kind of Conservation Unit, the Marine Extractive Reserve, presents many difficulties and contradictions when adopted as a frame of Conservation Unit in the context of poor artisanal fisheries on coastal areas which have special tourism attractions. This work recommends the realization of studies that could offer a deeper understanding about whether or not a Marine Extractive Reserve is the appropriate Unit of Conservation for sustainable development in the Brazilian coastal area, or if other institutional arrangements would be more efficient, like Land Property and Sea Collective Use Right to the fishworkers or a Fishing Accord.

Synchronizing such diversified and contradictory interests is a challenge that must be faced by those in charge of the development and implementation of the new Management Plan. Whenever there is an implementation or attendance meeting the Unit administration must have someone in charge of the little children so their mothers can attend the meetings. The gender equity perspective may lead to the empowerment of the community through participatory management.

Endnote

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References

- Abramovay, M. 1993a. *Regional Course Memory on Gender and Sustainable Development*. UICN — União Mundial para a Natureza. San José, Costa Rica.
- Abramovay, M. 1993b. *Gender on Sustainable Development*. Social Program Conservation. San José, Costa Rica.
- Aguilar, L. 1998. *Lo Que Comienza Bien Termina Mejor: elaboración de propuesta con enfoque de género*. Unión Mundial para la Naturaleza — UICN/Fundación Arias para la Paz y el Progreso Humano. São José, Costa Rica.
- Aguilar, L. 2000. *Sobre Marinos, Marinas, Mares y Mareas: Perspectiva de género en zonas marino-costeras*, 1st edition. UICN/Absoluto. São José, Costa Rica.
- Aguilar, L. And G.B. Valenciano. 1999. *Quien busca...Encuentra: Elaborando diagnósticos participativos con enfoque de género*. Unión Mundial para la Naturaleza — UICN/Fundación Arias para la Paz y el Progreso Humano. São José, Costa Rica.
- Begossi, A. 2000. *Conservation Ecology, Human Ecology and the Management of the Commons*. 8th Annual Conference of International Association for the Study of Common Property. IASCP 2000, Bloomington, Indiana, EUA, mai 31-jun 4.
- Begossi, A., R.A.M. Silvano, B.D. Amaral, and O.T. Oyakawa. 1999. Uses of fish and game by inhabitants of an extractive reserve (Upper Juruá, Acre, Brazil). *Environment, Development and Sustainability* 1, 73-93. Netherlands: Kluwer Academic Publishers.
- Blackman, A., F. Foster, T. Hyvonen, B. Jewell, A. Kuilboer, and G. Moscardo. 2005. Factors contributing to successful tourism development in peripheral regions. *The Journal of Tourism Studies* 16, 2.
- Brasil-SNUC. 2000. Law # 9985 of July 18, 2000. Establishes the National System of Conservation Units and makes further arrangements, Brasília, DF.
- Butler, R.W. 1980. The concept of a Tourist Area Cycle of Evolution: Implications for management of resources, apud STORI, F.T. *Pescadores e Turistas em uma Área Marinha Protegida: Uma Contribuição ao Plano de Manejo da Reserva Extrativista Marinha da Ponta do Corumbau, Bahia, Brasil*. Master Thesis. UFSCar, SP, Brazil. 2005.
- Coriolano, L.N. 1999. *Turismo e Degradação Ambiental no Litoral do Ceará*. In A. Lemos, (ed.), *Turismo, Impactos Socioambientais*, 93-103 São Paulo: Ed. Hucitec.
- Di Ciommo, R.C. 1998. *Ecofeminismo e Complexidade*. PHD Thesis. ILCSE. Universidade Estadual Paulista, UNESP, Araraquara, SP, Brazil.
- Di Ciommo, R.C. 1990. *Maternidade e Atividade Profissional*. Master Thesis. ILCSE. Universidade Estadual Paulista, UNESP, Araraquara, SP, Brazil.
- Diegues, A.C. 2004. *Traditional Knowledge and Social Appropriation of the Marine Environment*. In E. Rodrigues, A.C. Paula and C.M. Araujo (eds.), *Roteiros Metodológicos: Plano de Manejo de Uso Múltiplo das Reservas Extrativistas Federais*, 125-157. Brasília: IBAMA.
- Diegues, A.C. 2000. *O Mito Moderno da Natureza Intocada*, 3rd edition. São Paulo: Hucitec/Nupaub, Universidade de São Paulo — USP.
- Fassaert, C. 2000. Participatory appraisals with gender perspective. *Revista Agroforesteria en las Américas — Enfoque de Género*. Costa Rica: CATIE (Centro Agronómico Tropical de Investigación y Enseñanza) 7, 25, 33-38.
- Figueiredo, S.L. 1999. *Tourism and Culture: A Study of the Cultural Changes in Soure as a result of the ecologic tourism exploitation*. In A. Lemos (ed.), *Turismo, Impactos Socioambientais*, 207-222. São Paulo: Ed. Hucitec.
- Folke, C., F. Berkes, and J. Colding. 1998. Ecological practices and social mechanisms for building resilience and sustainability. In F. Berkes and C. Folke (eds.), *Linking Social and Ecological Systems: Management Practices and Social Mechanisms for Building Resilience*. Cambridge University Press.

- Grünewald, R.A. 2005. Turismo e o “resgate” da cultura Pataxó. In Banducci Jr. And M. Barreto (eds.), *Turismo e identidade local: Uma visão antropológica*, 4th edition. Campinas, Brazil.
- Grünewald, R.A. Tourism and cultural revival. 2002. *Annals of Tourism Research* 29, 1004-1021.
- Gunderson, L.H. and C.S. Holling. 2000. *Panarchy: Understanding Transformations in Human and Natural Systems*. Washington: Island Press.
- Heathcote, I. and M.P. Thomas. 1997. Feminism and environmental management: The role of rural women in developing countries. *Journal of Environmental Education and Information* 16, 1, 61-78.
- IUCN. 2000. Sek...and ye shall find: Participatory Appraisals with a Gender Equity Perspective. In L. Aguilar, G. Briceño-Ilsie and Valenciano (eds.), *Toward Equity Module. Module 2. World Conservation Union/Arias Foundation for Peace and Human Progress*. San José, Costa Rica.
- Jenkins, C.L. 1980. Tourism policies in developing countries: A critique. *International Journal of Tourism Management* 1, 1, 22-29.
- Krippendorff, J. 2000. *Sociologia do Turismo: para uma nova compreensão do lazer e das viagens*. São Paulo: Aleph Ed.
- Liu, Abby and G. Wall. 2006. Planning tourism employment: A developing country perspective. *Tourism Management*, 27, 1, 159-170.
- Maldonado, S. 1986. *Pescadores do Mar*. São Paulo: Editora Ática.
- Mendonça, R. 1999. Turismo ou Meio Ambiente: Uma Falsa Oposição? In A. Lemos (ed.), *Turismo, Impactos Socioambientais*, 19-25. São Paulo: Ed. Hucitec.
- Midaglia, C.L.V. 1999. Turismo e Meio Ambiente no Litoral Paulista: Dinâmica da Balneabilidade das Praias. In A. Lemos (ed.), *Turismo, Impactos Socioambientais*, 32-56. São Paulo: Ed. Hucitec.
- Milton, Kay. 2002. *Loving Nature: Towards an Ecology of Emotion*. London: Routledge.
- Milton, Kay. 1996. *Environmentalism and Cultural Theory*. London: Routledge.
- Milton, Kay. 1993. *Environmentalism: The View from Anthropology*. London: Routledge.
- Moran, E.F. (ed.). 2000. *The Ecosystem Approach in Anthropology. From Concept to Practice*. Ann Arbor: University of Michigan Press.
- Netting, Robert M.C. 1996. Cultural ecology. In D. Levinson and M. Ember (eds.), *Encyclopedia of Cultural Anthropology*, 267-271. New York: Henry Holt.
- Pinto da Silva, P. 2004. From common property to co-management: Lessons from Brazil’s first Marine extractive reserve. *Marine Policy* 28, 5, 419-428.
- Phillips, M.R. and A.L. Jones. 2006. Erosion and tourism infrastructure in the coastal zone: Problems, consequences and management. *Tourism Management* 27, 3, 517-524.
- Robotton, I. 2002. *Helping People Help Themselves*. CADISPA Project. Glasgow, Scotland: University of Strathclyde.
- Rocheleau, D. and D. Edmunds. 1997. Women, men and trees: Gender, power and property in forest and agrarian landscapes. *World Development* 25, 8, 1351-1371.
- Rocío Rodrigues, C. 1999. *Compartiendo Secretos: Sistematizando desde la equidad*. Unión Mundial para la Naturaleza — UICN/Fundación Arias para la Paz y el Progreso Humano. São José, Costa Rica.
- Ruschmann, D.V.M. 1997. Planning and land occupation through tourist activity growth: Basic conditionings from the environmental. In *Turismo e Ambiente: Reflexões e Propostas*, 49-54. São Paulo: Hucitec.
- Ruschmann, D.V.M. 2000. *Turismo e Planejamento Sustentável: A Proteção do Meio Ambiente*. — Campinas, SP: Papirus.
- Schröder, P. 1997. A Antropologia do Desenvolvimento: é possível falar de uma subdisciplina verdadeira? *Revista de Antropologia* 40, 2, 83-100.
- Silva, G. 2000. Tudo o que tem na terra tem no mar: a classificação dos seres vivos entre os trabalhadores da pesca em Piratininga, RJ. In A.C. Diegues (ed.) *Imagem das Águas*. São Paulo: Hucitec/NU-PAUB, Universidade de São Paulo, SP.
- Skourtos, M., I. Tziritis, A. Kontogianni. 2005. Bottom-up environmental decision making taken seriously: Integrating stakeholder perceptions into scenarios of environmental change. *Human Ecology Review* 12, 2, 87-95.
- Stern, P.C., T. Dietz, N. Kolsak, E. Ostrom, and S. Stonich. 2002. Knowledge and questions after 15 years of research. In E. Ostrom, T. Dietz, N. Dolsak, P.C. Stern, S. Stovich, and E.U. Weber (eds.), *The Drama of the Commons*. Committee on the Human Dimensions of Global Change. Division of Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.