Dreams vs painful realities

There are contradictions aplenty on both land and sea in the Corumbau Marine Extractive Reserve

his article describes some of the social and environmental aspects of the Ponta do Corumbau Marine Extractive Reserve, located on Costa do Descobrimento, 800 km south of Salvador, the 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, recognized in 1999 as a World Historical Site by the United Nations Educational, Scientific and Cultural Organization (UNESCO).

Marine extractive reserves are a form of marine protected areas with defined user rights that are contracted out to the communities of resource users that live in the surrounding area. They are an adaptation of the *reservas extractivistas* or RESEX, a novel and unique partnership in natural resource extraction and conservation that Brazil has been experimenting with since 1989.

On the one hand, the move reflects growing official recognition in Brazil of the role of traditional resource users and management systems environmental conservation. On other, it is the product of the struggles of the rubber tapper unions, under the leadership of Chico Mendez. It is thanks to these struggles that legislation was passed in 1989, allowing for the establishment of extractive reserves. Extractivie reserves comprise collaborative management regime where government works in partnership with local communities for the sustainable use of resources

Originally, RESEX focused on protecting terrestrial and other inland ecological systems and populations, but now they can cover land, sea or both. The original decree that created RESEX states that "extractive reserves are territorial spaces"

designated for the self-sustaining use and conservation of renewable natural resources by extractive populations".

In the case of the marine extractive reserves, a marine area is assigned for the exclusive use of a number of people (small-scale fishermen, traditional communities, etc.) who live around it.

Although it is a partnership between the people and the government, the initiative has to come from the local population, and the participation of the people is a must. Comunities that live adjacent to RESEX, and the organizations that represent them (associations, co-operatives, syndicates, unions, etc.) may apply for the rights to extract resources from the RESEX.

A central plank in all RESEX is the development of a utilization plan (*plano de utilização*) that determines who can use the resources in question and how. In essence, this is a social contract, binding the resource users to a mutually agreed set of operating rules. Such rules could govern measures such as minimum catch size, technology used, or restricted access to important breeding grounds.

Public forum

Decisions over what the rules should be are defined by the resource users themselves at a public forum where they have the right to vote on decisions made. It is essential that resource users participate at this stage since the adherence to rules depends, to a large their on widespread understanding and prior approval. The utilization plan, along with the process leading to its creation, is also important for resolving (or at least revealing) conflicts amongst resource users as well as conflicts between resource users and the larger community.

further essential element is the concession contract that legalizes the user rights of the communities. This agreement is prepared by IBAMA, the Brazillian Institute for the Environment, and signed by both parties. Individual resource users are then issued with Authorization of Use certificates. These entitle them to open-ended user rights, which, in practice, extend for 10-20 years, but may be extended for as long as the RESEX fulfills its purpose.

According to Antonio Carlos Diegues, the framework of restricted access to, and economic use of, the coastal sea space of the RESEX offers Brazil a way to begin controlling the highly destructive and unmanaged development of its extensive coastal zone (harbouring a wide range of habitats of high conservation value, not only coral reefs), while, at the same time, reinforcing the resource-use rights and territorial claims of local communities to the micro-environments of small-scale fishing.

Such controls are clearly needed in southern coastal zones of Bahia State, which have been subject to significant environmental and social changes in the last 10 years. Intense industrial fishing was initiated to exploit the local marine stocks, with no respect for biological processes or biodiversity. Tourism development has given rise to demands that have led to a disordered occupation

of the land, while the urban infrastructure has been unable to keep pace with the increase in domestic effluents and litter, affecting the mangrove forests and the margins of the rivers.

As this article shows, there are many problems that need to be addressed if RESEX are to function effectively. One such issue, highlighted by the work of Alpina Begossi, is that, athough a great variety of extractive reserves now exist in Brazil, few can be said to be the result of a legitimate process of local organization in the face of the threat of depletion of their resources.

This is not the case with the Ponta do Corumbau Marine Extractive Reserve (Corumbau RESEX). In 1998, a group of artisanal fishermen from nine communities in the municipalities of Prado and Porto Seguro came together to create a conservation unit that would protect the region from the unsustainable prawn trawling being carried out by the industrial fishing fleet.

Sustainable exploitation

The Corumbau RESEX was then established in September 2000, thanks to the initiatives of artisanal fishermen from nine different communities, with its use conceded to the traditional extractive populations, in accordance with the National System of Conservation Units. According its founding decree, the Corumbau RESEX "aims at ensuring the

sustainable exploitation and the conservation of renewable natural resources, traditionally used by the local extractive population".

he extractive population of the RESEX comprises 484 registered members, traditional users of the resources resident in nine communities: Curuípe, Caraíva, Aldeia Indígena Pataxó de Barra Velha, Corumbau, Veleiro, Barra do Cahy, Imbassuaba, Cumuruxatiba and Japara. When the families of these fishermen are included, the RESEX resources will directly benefit some 1,750 people.

The Corumbau RESEX includes part sea, and part land, with areas of foreshore, dunes and mangroves. The marine part of the Corumbau RESEX covers 90,000 ha, with its landside boundary demarcated by the high-water level. The land areas, where the extractive communities live, make up the 'surrounding area' or 'buffer zone'.

The property rights and user rights regimes that govern conservation, ownership and resource extraction differ in the two areas, giving rise to contradictions in the conservation and resource extraction policy objectives of the RESEX and complicating life and livelihoods in the communities.

In the publicly owned marine area, only the extractive communities have resource extraction rights. However, the land area is under private ownership and the extractive communities have no resource extraction rights there. Furthermore, there are no guarantees or conditions provided for the permanent settlement of the extractive populations in the surrounding land area, a key condition for establishing economic activities and for providing sociocultural stability in communities.

This contradiction between the land and sea components of the Corumbau RESEX, arising from the way that the property and use rights regimes have been set up, is the root cause of many of the social conflicts, and represents a major problem for the effective functioning of the RESEX. Alpina Begossi's work in the Amazon concluded that extractive reserves do offer significant potential for political organization, and

improving environmental and social resilience, compared to other conservation approaches. Such a satisfactory level of institutional development has still to be attained in Corumbau.

One major stumbling block for achieving satisfactory levels of institutional development is that the 'surrounding areas' where the communities live are isolated. Roads are unpaved, the bridges precarious and there is no regular transport by boat.

There is no electricity supply in the villages, with the exception of Cumuruxatiba and some hotels that possess generators. This is a constraint for fish storage and increases the dependence on intermediaries to market products. These factors also work against the active participation of the local extractive population in the establishment and development of a utilization plan and their participation in the wider management decisionmaking processes of the RESEX.

A further stumbling block, and source of social conflicts, is the presence of more powerful economic interests such as hotels and tourism businesses. These interests are fueling a growing speculation in real estate. RESEX community residents are being forced to sell their houses at very low prices and move far away where there is no infrastructure or government assistance of any kind.

Also, due to the increasing privatization of access to, and use of, the coastal strip, access to the sea is becoming more difficult for the communities. This is leading to a gradual cultural erosion and the complete exclusion of the fishermen from areas near the seashore.

Private interests

The variety of private economic interests also makes it difficult for the local population to support conservation policies and participative processes that are capable of offering alternative solutions to the conflicts existing in local society. Tourism is expanding in the Corumbau RESEX. Visitors are attracted by the tranquility, freedom and the beauty of

the countryside, particularly in the littoral zones, and by the hospitality of its people.

owever, the capacity of the villages to support tourist activity is quite limited. This is mainly due to a lack of basic infrastructure, such as energy, piped water, the treatment and disposal of solid and liquid waste, and health and education facilities.

The National System of Conservation Units assures the participation of the local populations through co-management, where power is decentralized, in ways appropriate to the daily reality of the local context. The RESEX utilization plan was drawn up and approved in 2002, and should lead on to the management plan.

Meanwhile, the fishermen do not appear to be familiar with the objectives of the planning exercise. Recent research shows that just 14 per cent of the residents of Cumuruxatiba, 25 per cent of Corumbau and 45 per cent of Caraíva knew about the utilization plan in force and the rules that regulate the reserve.

The factors indicated as obstacles to the participative process were the large distances between the venues of meetings, the incompatibility of the timing of meetings with daily routine activities (principally for the women),

and the shortage of information about the process of foundation and administration. A Participatory Appraisal from a Gender Perspective (PAGP) exercise 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 IUCN—the World Conservation Union. In order to provide an analysis with a perspective, information gathering and data presentation were disaggregated by gender. This enabled an examination of the needs and demands of men and women seperately.

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 a homogenous unit, PAGP recognizes that women and men have different needs, perceptions and realities in accordance with their age and sex.

Equity goals

Through the use of appropriate tools, it seeks to expose the power relations in the community. It is designed to assist the introduction of the changes necessary in the delivery of policies that seek to achieve equity. The aim of PAGP is to promote collective responsibility, environmental

justice and quality of life for the populations involved, so as to decrease impoverishment and consequent social exclusion.

t has been demonstrated that the introduction of the variable 'gender' adds another dimension to the analysis of natural environments, given that there are unequal power relations between men and women in many societies, power relations that are subject to change. Within the gender dimension, there can be complementarity and space for negotiation. The possibility for negotiation has important implications for planning and management, since it puts the planners and the communities at a level where it is possible to promote greater equity in the distribution of the benefits, and user and management rights.

The PAGP carried out in the Corumbau RESEX had aimed to understand the obstacles to the participation of the traditional population in the management plan, as well as to obtain information on the local infrastructure available to the residents and visitors. It aimed at providing information to improve the participative process, which would safeguard the success of environmental policies in the face of the reality of the expansion of tourism in the region, with economic and cultural consequences for its inhabitants.

The application of PAGP achieved its objective of identifying the needs, expectations, wants and problems of the communities visited. The main needs are related to access to electricity, quality education and better health conditions.

Beyond that, the wants most highlighted were roads and bridges and piped potable water. While, on the one hand, electricity is a dream for both male and female residents, on the other, there are those living by hotels and tourist resorts who prefer to preserve the bucolic and rustic aspects that attract tourists, leading to profitable business during the seasons. Thus, the lack of surfacing on the sand roads of Caraíva, for example, makes daily life very difficult for the women, but is seen by others as giving a picturesque air to the place.

The onus of maintaining this rusticity falls, in the end, on the local population, particularly on the women who, in their day-to-day lives throughout the whole year, have to cope with extremely tiresome conditions. Roads are also the subject of debates and conflicts, both among the population and between conservation bodies, who see in them the threat of mass tourism and a consequent loss of cultural and environmental character, which represents a great contradiction for the administration of the Conservation Unit.

The possibility of seeing the community uniting around its objectives, and fighting for the collective welfare, is an important 'dream' for the women, even transcending their individual objectives.

It is hoped that participative management can result in measures favouring political strengthening and income generation, preserving local knowledge and the permanence of the native population in the area. The preparation of a socio-environmental participatory appraisal can contribute to the involvement of the population in public policies for improved living conditions, the systematic inspection of tourism enterprises that affect the life of the communities, and the sharing of benefits with the residents.

Another benefit to be sought is environmental education aimed tourists and the community, based on information and output of the appraisal carried out. If the objective were sustainable tourism, then the communities should benefit with improved basic infrastructure in the villages.

Reconciling such a diversified and contradictory set of interests is a challenge that will have to be faced by those in charge of the development and implementation of the new management plan.

Rules needed

Most importantly, in order to guarantee sustainability, rules must be set not only to control tourism activities and the distribution of its benefits, but also to restrict the way economic interests are

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causing real estate speculation in the area. At the same time, the regular participation of the population in the RESEX administration must be assured, while maintaining gender equity. This could help to empower the community through participatory management, to raise the quality of life of the residents and to ensure their contribution to the conservation of ecosystem biodiversity.

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