

## Community-based ecotourism in the Pedras Negras and Currealinho Extractive Reserves, Guaporé River Valley

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### Abstract

This paper presents a case study of a community-based ecotourism project in the Guaporé River Valley, located in Rondônia, western Brazilian Amazonia. It provides an account of the potential benefits of ecotourism for traditional communities in tropical forest areas while also reviewing some of the obstacles to its implementation. The project is being implemented in two extractive reserves. Extractive reserves are protected areas used by traditional extractivist populations whose livelihoods depend on extractivism supplemented by subsistence agriculture and small-scale animal husbandry. These areas aim to protect the ways of life and culture of extractivist populations and to secure the sustainable use of natural resources. The paper describes and discusses the advances and constraints of the project in five key areas. These include (1) building an institutional base for ecotourism development by securing the support and involvement of the local and state governments, NGOs and funding agencies; (2) strengthening the capacity and organisation of the communities to manage the project; (3) the level of social and economic benefits obtained by the community; (4) the environmental conservation of the areas; and finally (5), the marketing of the product offered on the national and international ecotourism market.

### Resumen

Este artículo presenta un estudio sobre un proyecto de eco-turismo de base comunitaria en el Valle del Río Guaporé, localizado en Rondônia en el Oeste de la Amazonia Brasileña. El estudio indica los beneficios del eco-turismo para las comunidades tradicionales en áreas de bosque tropical, así como los obstáculos para su implementación. El proyecto en cuestión se está desarrollando en dos reservas 'extractivistas', las cuales son áreas protegidas habitadas por poblaciones tradicionales, cuyos medios de sobrevivencia incluyen actividades extractivas, agricultura de subsistencia y crianza de animales de granja. Estas áreas naturales protegidas buscan mantener la forma de vida y cultura de estas poblaciones, y al mismo tiempo asegurar la utilización sostenible de los recursos naturales. Este artículo analiza los avances y obstáculos del proyecto en cinco aspectos principales. El primero incluye la construcción de las bases institucionales para el desarrollo del eco-turismo, mediante el aseguramiento del apoyo y la participación del gobierno, ONGs y instituciones de financiamiento. El segundo aspecto constituye el fortalecimiento de la capacidad y organización de las comunidades para que estas se involucren en el manejo del proyecto. El tercer aspecto evalúa los beneficios sociales y económicos obtenidos por las comunidades durante el desarrollo del proyecto. El cuarto aspecto se refiere a las actividades de conservación ambiental desarrolladas por el proyecto. Finalmente, el quinto aspecto discute los problemas encontrados en el mercadeo del producto eco-turístico tanto en el mercado nacional como internacional.

### Introduction

Until the early twentieth century the extraction of latex (natural rubber) of the *Hevea brasiliensis* tree (*seringueira*) was main economic activity of communities living in the immense area of Amazonian forest. However, the development of synthetic rubber and the establishment of rubber plantations in Malaysia supplying world markets at lower prices than native rubber lead to a

sharp reduction of rubber production in Brazil. In turn this affected the communities of rubber tappers in Amazonia resulting in the loss of income and livelihood.

Recent years have seen the emergence of a number of approaches seeking to combine biodiversity conservation with the development needs of local populations. One of the most promising initiatives is community-based ecotourism, which is based on the premise that economic benefits from socially and ecologically responsible tourism will encourage local populations to protect natural ecosystems and their biodiversity. While ecotourism is certainly an attractive concept, its practice is riddled with difficulties that must be better understood in order to improve both its socio-economic and ecological success. This paper presents the practical experience of a community-based ecotourism project in the Guaporé River Valley, located in Rondônia, western Brazilian Amazonia.

There are a number of key areas that need to be addressed by approaches seeking to develop ecotourism as a means of simultaneously achieving conservation and development objectives. These include building a solid institutional basis for ecotourism development by securing the support and involvement of local and state government, society, NGOs and funders; strengthening the capacity and social organization of the communities involved to manage and sustain the project; generating concrete social and economic benefits for the communities involved; placing the product offered effectively on the national and international ecotourism market; and guaranteeing the protection of the reserve's natural resources and the cultural-historical heritage of their inhabitants. The paper describes the advances of the project in some of these areas and also the constraints that still affect its long-term sustainability. The paper is primarily practice-oriented and aims to present the results and lessons of an ongoing project.

## **Context**

Since 1997 the local communities of the extractive reserves of Pedras Negras and Curralinho, in Rondônia, Western Brazilian Amazon have been developing ecotourism as an income generating activity and means of guaranteeing the environmental sustainability and conservation of the forest. This initiative has been implemented in collaboration with grassroots organizations, namely the OSR (Organização dos Seringueiros de Rondônia) and the AGUAPÉ (Associação dos Seringueiros do Vale do Guaporé), and an NGO, the ECOPORÉ (Ação Ecologica Guaporé).

The communities of Curralinho Extractive Reserve (population: 7 families; area: 1758 ha) and Pedras Negras (population: 19 families; area: 124.409 ha), live of subsistence agriculture, hunting and fishing. Both areas are located in the Guaporé River Valley in the Brazilian State of Rondônia, western Amazonia.

A social movement formed by rubber tappers and other traditional populations of Amazonia proposed the concept of extractive reserves. They were defined not only as conservation areas but also as areas for the sustainable development of traditional populations in which improvements in production, health and education should come about. Extractive reserves are areas designated for extractivism or the collection of forest products such as rubber, seeds and others without damage to the balance of the local ecosystem.

In effect, according to the legislation, the preservation of the area and its sustainable development are both key goals of Extractives Reserves. In the decree that regulates the creation of extractive reserves they are broadly defined as areas of public domain, occupied by traditional groups that depend on forest products for their survival and that carry out, under a land-use concession, sustained use of natural resources according to a pre-established management plan approved by the relevant environment agency.

In defense of their way of life and the ecosystems they inhabit, the rubber tappers of Amazonia, including those in Rondônia have organized to fight for the creation, implantation and consolidation of the extractive reserves. Since its creation in 1990, the Organização dos Seringueiros de Rondônia (OSR) has been seeking mechanisms to implement and consolidate the 22 extractive reserves of the state.

The communities of rubber tappers or *seringueiros* present a singular culture, using forest resources for their survival. They have developed a way of living that accomplishes a balance between human needs and nature and contributes to environmental conservation. Unfortunately, the culture of the *seringueiros*, as well as the conservation of the rich biodiversity of extractive reserves (Resex) is threatened. This is essentially because families have difficulties in remaining inside the reserves due to difficult survival conditions, including precarious access to health care and education, lack of employment and income earning opportunities and ill nutrition.

### **Implementing ecotourism: the process**

During the last 3 years many efforts have been directed at pulling together resources for the implementation of ecotourism infrastructure and training; finding partners for the promotion and implementation of the ecotourism project; building the capacity of communities involved and facilitating their self-organization.

The operation began in earnest in March 1999 and has since been receiving groups of Brazilian and foreign visitors. The highlight of the tour is the contact and opportunity to interact with *seringueiro* communities, especially in Pedras Negras. The visitors can experience everyday life in the community, walk in the forest, fish, participate in the manufacture manioc flour and other activities such as pottery, observe birds and other wildlife, as well as learning the oral traditions and stories of the rubber tappers about the forest and its myths.

The decision of selecting ecotourism as an economic alternative came from the work developed by the OSR and AGUAPÉ with the technical assistance of the NGO ECOPORÉ, which in the beginning of the 1990s, surveyed the socio-economic situation of the recently created state extractive reserves including the economic potential of each reserve.

The OSR and AGUAPÉ, established over 10 years ago with the aim of defending the interests of the *seringueiros*, have worked since the early 90s in the consolidation of the state extractive reserves in the proposal of economic alternatives and intervention in policies to enable the maintenance of the rubber tappers in the extractive reserves and the conservation of the natural resources.

In this work, the OSR and AGUAPÉ have had the financial support of institutions such as WWF-Sweden and technical support of WWF-Brazil, ECOPORÉ, OXFAM, and the government of Rondônia- PALANAFLORO, which have enabled the training of leaders and their own institutional strengthening.

After ecotourism was selected as an economic alternative, two assessments of the potential of the area for this activity were undertaken, followed by economic viability studies. During this period community meetings were held with the direct participation of the OSR and AGUAPÉ and the technical support of ECOPORÉ for the definition of the parameters for the activity in each region, and the elaboration of a work plan that would back applications for funding from agencies. In addition, there were awareness raising discussions with the community regarding the positive and negative effects of ecotourism and about the possible difficulties in the management of the initiative.

The totality of the financial resources obtained in the first phase of the project, the phase of community organization and testing with the first groups of visitors (1998-1999) was US\$ 40,000. For the second phase that involved the establishment of physical infrastructure and the provision of training, there was US\$150,000.

Both areas proposed are located in the Guaporé River Valley, but their ecology is different which also means that each offers different attractions for the visitors. For the Pedras Negras area, the implantation of a rustic jungle lodge with capacity for 12 people was proposed. For the Curralinho area, the establishment of a Visitor's and Environmental Education Center with interpretative trails was proposed together with a beach camp on the river.

The Guaporé Valley (located in the southwest of the state of Rondônia) distinguishes itself by the product offered both in terms of ecological as well as cultural attractions. There are also important historical attractions represented by the cluster of archeological sites found in the region and other monuments such as the Príncipe da Beira Fortress, that according to archeologist Eurico Miller, denote the occupation of the region by pre-colonial indigenous groups followed by European occupation.

In what concerns natural resources, because it includes areas of confluence between the Patanal (wetlands), the Cerrado (Savannah) and the Amazonia forest, the region of the Guaporé Valley is among the regions in Amazonia with the greatest biodiversity. Based on these data on biodiversity and endemism, the area is considered 'Priority area for Conservation', identified as one of the Biological Corridors by the IBAMA (Brazilian Institute for the Environment and Renewable Natural Resources).

During the whole process of implementation, technical support for the participatory planning, monitoring and evaluation of the activities planned and executed was provided to guarantee the self-management of the project by the community. There were also eight training courses for community members including first aid, guide, catering and management of lodges, as well as visits to other areas with similar projects.

Questionnaires undertaken with the community and visitors reveals that the ecotourism experience is having positive results. According to the visitor's views, the project has a high potential of success given its originality and quality. At the community level there have been important socio-economic gains. These include providing an employment opportunity for men and young people and in particular for women. It has also strengthened the capacity of the community and its self-valorization and esteem. In turn these gains have contributed towards community self-organization and empowerment. In the ambit of conservation, so far it is possible to observe that the communities and the local government have changed their views in relation to the importance of protecting conservation areas and the historical importance of the *seringueiros* in the processes of local development.

### **Issues in the development of community-based ecotourism in the Guaporé Valley**

Despite encouraging results, the development of ecotourism is a difficult and slow process considering the personal limitations of community members and low levels of schooling. Community members, for example, did not know what a hotel or a lodge was and had never been in one. They also did not have any idea of what receiving tourists in their community involved. This was one of the largest problems, since although in principle the community agreed to receive the tourists they did not know exactly what to show them and could not understand what motivated people coming from so far away to visit their community and see how they lived. The idea of ecotourism, therefore, was an attractive one for the community but in the beginning there was some insecurity, which gradually gave way to an increasing understanding and commitment.

The community's commitment with the project is expressed by its involvement in collective activities. The Pedras Negras community, to start receiving tourists still in 1999 built a 'pachiuba' and straw house (traditional *seringueiro* house) and in this same period organized a vegetable garden and community orchard to for the use of families and also to support the lodge. Four community members also participated in training activities in the Rancho Grande Lodge, an ecotourism enterprise in Rondônia. The Curralinho community organized two beach camps and also participated in training activities.

Based on the sale of manioc flour and brazil nuts, the two main sources of income in the Pedras Negras community, the annual family income is approximately US\$ 400. The community started to earn income from temporary employment with the works for the implementation of the project's infrastructure. The actual reception of tourists and catering activities involved 14 out of the 29 families in the community. Some of the families earned US\$ 50 to US\$80, a significant value when compared to the average annual income.

There are already some activities in the region of Guaporé Valley that claim to combine the activities of tourism with conservation. However, much of these activities are far from conforming to the principles of ecotourism. Counter to efforts to conserve the region, aggression to the fauna is evident in a range of activities such as predatory tourism, illegal hunting and fishing.

The Curralinho reserve is located in the urban perimeter of the Costa Marques municipality, the city distancing 10 km from the reserve. The access to the reserve is therefore easy by boat or overland (a one hour walk). With only 1.757,65 ha, the predominant ecological characteristic is permanent and seasonally flooded areas that together with 16 internal lakes favour the concentration of fish. During the dry season, river beaches are formed with over two kilometres long where regional and migratory birds reproduce as well as turtles.

Because of its suitability for leisure activities including pic-nicking, swimming and fishing, the beach at Curralinho has been used by the population of the Costa Marques town in a disordered way that constitute a threat to the conservation of the area. The use of trolling fishnets within the lakes is common, including during the reproduction period, as well as hunting in the reserve. The construction of beach huts, the sale of food and drinks and the accumulation of garbage left by the beachgoers also constitute conservation problems.

Pedras Negras, in contrast with Curralinho, is protected by distance and does not yet receive a large flux of tourists. However, its protection is threatened by professional fishermen that ignore the boundaries of the reserve; by the lack of knowledge of local politicians and communities regarding the importance of the area for local development the maintenance of the local and global ecological balance; lack of policies and actions that support the consolidation of the extractive reserves and enable the permanence of the communities in the area as protectors of the forest.

Within this context, it was found that some of the threats to conservation identified above are related on the lack of information of the local population and the visitors to the area. In an effort to revert this situation, there have been efforts to propose and implement activities of environmental education.

A programme of 'environmental interpretation' for the Curralinho and Pedras Negras reserves has been elaborated having as its target public secondary school students of the municipality and the state and visitors of the ecotourism project. The programme aims to achieve the following results: raise the awareness of the local community regarding the role of the *seringueiros* in the process of development of the region as well as their role in the conservation of the forest;

change the behaviour and habits of the community that impact negatively on the reserves; increase the participation of the communities in the protection of the reserves and other natural habitats in the region; enhance the acknowledgement of the *seringueiros* and the self-esteem of their communities; raise the awareness of the tourists regarding the preservation of tropical forests in protected areas such as extractive reserves and how their destruction can have local effects and contribute to wider global impacts.

Various methods and activities were developed in order to send out this message. These include aquatic and land trails in the flooded forest (*mata de igapó*) and lakes, both conducted by *seringueiros*; establishment of an interpretative centre; demonstration of daily activities of community members; establishment of an ecological beach camp and educational campaigns with supportive material such as leaflets; undertaking questionnaires and participate in interviews in the local radio; and talks and puppet theatre in the local schools. All these activities addressed the theme of extractive reserves and the litter in the river. The environmental education activities for Curralinho were implemented in 1999 and are currently in their second year of operation already presenting some encouraging results.

Besides the issue of the fragility of the ecosystems in which they inhabit, extractivist populations were for a long time economically and politically marginalised. This generated among the extractivist communities a total disbelief in their future and prevented them even from struggling for changes. The community of Pedras Negras was a clear example of marginalisation. It was an isolated community without government support, education was precarious and only covered primary education, it did not have a health post or medicines, had no communication or transport infrastructure. As a result the self-esteem of the community was low. This situation can now be turned around with the appreciation and attachment of ecological-cultural value to their livelihoods and traditions.

A key issue concerns the marketing of ecotourism in the national and international markets. Some difficulties can be identified. Firstly, ecotourism appeals to a reduced public formed by people interested in environmental and social development issues that are willing to travel simply. Secondly, the product offered is costly as a result of the area being remote, which makes it accessible only to a small group. Thirdly, few tour operators have confidence in community-based projects, especially in their initial stage of development. Small initiatives with capacity to receive groups of between 12 and 25 people offer only modest economic returns to tour operators.

### **Concluding remarks**

In the case of extractive reserves, the consolidation of ecotourism is a slow process and depends from social and political organisation as well as community participation. However, in addition to the development of ecotourism, the improvement of essential services for the local population such as health, education and communication must be simultaneously pursued.

In conclusion, the implementation of community-based ecotourism is complex and the results can only be seen in the long run. This sometimes complicates the work with the communities that need urgent answers to their basic needs. However, when developed as a supplementary alternative to other activities it can contribute towards the consolidation of the extractive reserves and the conservation of tropical forests.

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