

PRO-NATURA Newsletter

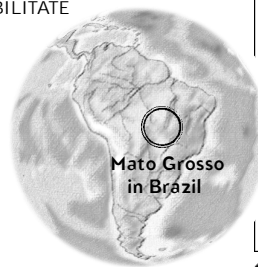
January 2002

Member of UICN, World Conservation Union

Biodiversity conservation and sustainable development over 10 million hectares

IN THE BRAZILIAN AMAZON

THE NORTHWEST OF MATO GROSSO IN BRAZIL IS THE MOST ADVANCED PIONEER FRONTIER INTO THE HEART OF THE AMAZON FOREST. IT IS THERE, IN THE JURUENA REGION, THAT SINCE 1990 PRO-NATURA HAS UNDERTAKEN A BROAD PROGRAMME OF SUSTAINABLE DEVELOPMENT WHICH AIMS TO SAVE WHAT IS LEFT OF THE PRIMARY FOREST, TO REHABILITATE EXHAUSTED AGRICULTURAL LAND AND TO ENABLE LOCAL FARMERS TO EMPLOY SUSTAINABLE PRACTICES IN ORDER TO AVOID ACTIVITIES WHICH FURTHER DESTROY THE FOREST. A FUNDING OBTAINED IN 2001 BY PRO-NATURA FROM THE GLOBAL ENVIRONMENTAL FACILITY (GEF) FOR THE NEXT 7 YEARS WILL ALLOW THIS ACTIVITY TO BE CONSIDERABLY DEVELOPED OVER AN AREA OF MORE THAN 10 MILLION HECTARES.



Since the 1970s, destruction of the Amazon forest has assumed alarming proportions : 700,000 km², or 15% of original vegetation in the Brazilian Amazon, has already been destroyed. Today, it is in the state of Mato Grosso where the main destruction is taking place. In reality, Mato Grosso has for the last 20 years seen the arrival of waves of colonists, either spontaneous or encouraged by the Federal Government in order to reduce population pressures in the states in the South and the North East of Brazil. Encouraged to occupy vast stretches of cheap forestland at the frontier, these colonists were at first encouraged by the Government to plant coffee and other perennial crops. But, without any experience nor understanding of this particularly fragile Amazonian ecosystem, most of these small-holders went bankrupt. In order to survive, they practise an extensive system of agriculture on terrain which is subjected to slash and burn. Soil, which is no longer bound by vegetation,

is left to the ravages of erosion and soon becomes unproductive. This, in turn, makes it a continuous necessity to burn more new forest areas. Such lands can no longer be used for crop production, but are converted to pasture and continue to be burned regularly. After 10 to 15 years such land becomes completely degraded and useless for any agricultural purpose. The areas of the forest which remain are used for a range of forest products. Only about ten different tree species are regularly exploited for timber. But in order to obtain them, new roads are opened and, in the process, the forest is often seriously damaged in order to reach the few required species. All along these routes new colonists establish themselves and start to slash and burn. In this way, the forest becomes all the more vulnerable to forest fires.

The 7 municipalities concerned by the project.

Pasture area on the road to Cotriguaçu. Systematic burning every year leads to a rapid degradation of the soil.



INNOVATION TOWARD SUSTAINABLE DEVELOPMENT

In 1990, Pro-Natura started a pilote scheme in Juruena



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Agroforestry in the Juruena Research Centre.

It is in this context that in 1990 took place, on the initiative of the British Government and the British company ICI, an Anglo-Brazilian conference organised in Brasilia in conjunction with the Brazilian Ministry of the Environment. The object was to establish an integrated strategy to fight deforestation in Mato Grosso through the realisation of mutually agreed projects for sustainable development which could be repeated elsewhere on an even larger scale. Over a period of 10 years, it is essentially in the Municipality of Juruena which covers 320,000 ha, that Pro-Natura's activities have been unfolding. In Juruena, Pro-Natura established

a Research Centre for Agroforestry, testing rotational land use models that could overcome the slash and burn degradation cycle that has become common place in the Amazon as a whole. This project was entirely financed by the British company ICI / Zeneca up to 1996, after which continuation was assured by the European Commission, the World Bank and the State Government of Mato Grosso, through activities in support of local agricultural colonist organisations, studies of sustainable forest management for timber and non-timber products.

The financing implemented in 2001 for a period of 7 years by the Global Environment Facility will now permit the extension of the expertise thus acquired to 6 other municipalities: Aripuanã, Castanheira, Cotriguaçu, Colniza, Rondolândia and Juina, covering an area of more than 10 million ha.

How to contain pressures on forest areas through sustainable agriculture and forest management

> Those in charge of the project

>>> Up to 1996

- Strategic counsellors :
Geoff L. P. RANDALL and Martyn COLLINS, biologists

- Co-ordinator :
Yucatan TEIXEIRA, agronomist

>>> From 1996 on

- National project co-ordinator :
Prof. Peter MAY, economist
- Technical-Operational Manager :
Antonio Claudio HORTA BARBOSA, agronomist
- *Paulo NUNES*, agroforester, field manager with the Juruena project from 1992-1995, recently re-assumed a managerial post as regional field co-ordinator for the GEF project.

During 10 years, important work on the terrain has been conducted, starting with an agreed model for the integration of Pro-Natura into the local community, encouraging sustainable agricultural practices, which would allow the populace better living conditions, as well as building good relations with local and regional organisations.

- A parcel of land of the same size as that of the colonists (100 ha) was bought to serve as a model farm for experimentation and demonstration purposes - right in the heart of the area deforested and colonised in Juruena.
- Trials and demonstration of agroforestry and integrated silvo-agro-pastoral practices (trees-arable land-cattle raising) are complemented by information on techniques of biological soil enrichment.
- A nursery for native plants has been installed.

- The creation of an Association for Rural Development and Environment of Juruena (ADERJUR) for small-holder s has served to encourage the sale of local produce (honey, fish, etc.).
- A weekly local market was organised in co-operation with ADERJUR and the "Society of Rural Women".
- Courses of environmental education, have been organised in the community centre



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Environmental education for children.

of Juruena, supported financially by Pro-Natura.

- A data bank storing studies of soils, vegetation and society carried out throughout the Juruena area.
- A partnership for the sustainable exploitation of wood products has been established with the main forest company of Juruena, Rodhen which is working a 25,000

ha timber estate. The creation of a nursery allows continual replanting of the working zones at the same time as demonstrating the best ways to protect biodiversity. A sample parcel of 100 ha has demonstrated that it is also possible to succeed with sustainable small-scale exploitation of the forest.

Rehabilitation of degraded areas by creating "Carbon Sinks"

In 1998, the French carmaker Peugeot decided, on top of its efforts to cut CO2 emissions at source, to establish an experimental "carbon sink" in Amazonia to absorb CO2 from the atmosphere to mitigate climate change. Pro-Natura suggested that this operation should be carried out in the Juruena region in order to establish a synergy with its programme of sustainable development in Mato Grosso. A partnership was set up between Peugeot, the French Office National des Forêts (ONF) responsible for the reforestation project and Pro-Natura in charge of the socio-environmental aspects of the project

and of creating synergy with the sustainable development programme in the region.

This project aims to test the proposition that it is possible to fight against the greenhouse effect while at the same time regenerating degraded terrain and assuring the sustainable economic development of the local population.



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in brief... in brief... in brief...

MADAGASCAR

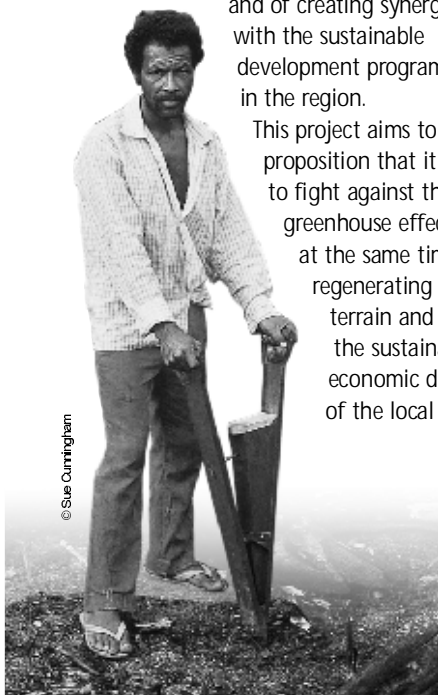
> The last "Canopy Raft" scientific mission took place between 10th October and 10th December 2001 in the National Park of Masoala. A total of 75 researchers of 12 different nationalities, including 38 Malagasy, took part in the scheme. It was the third scheme of this type organised by Pro-Natura, the two others having taken place in French Guyana and Gabon.

The carbon sink trees are native species. The seeds have been collected in the region.

in brief... in brief... in brief...

NIGERIA, GHANA and IVORY COAST

> Practical agroforestry training now takes place in 5 agriculture schools in Nigeria and one in Ghana. This project is financed by the French Co-operation and the Leventis Foundation. It is an extension of the programme established at Ilesha in 1997 (see Newsletter of January 2001). A similar programme is starting now in the buffer zones of the Tai National Park in Ivory Coast.



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Traditional agriculture in tropical zones uses slash-and-burn to clear the land which is cultivated for 2 to 3 years and then "set aside". However, demographic pressures tend to reduce the duration of set aside and therefore destroy the fertility of the soil.

The sustainable development programme expands thanks to funding provided by the Global Environment Facility (GEF)

in brief... in brief... in brief...

SUSTAINABLE DEVELOPMENT AND AGRARIAN REFORM IN BRAZIL

> In collaboration with the Ministry of Agrarian Development of Brazil, Pro-Natura opened an office in Paris to organise the promotion in Europe for products of the Brazilian Agrarian Reform Programme.

TRAINING PROJECT LEADERS IN NIGERIA

> With the aim of spreading throughout the Niger Delta the Akassa participatory sustainable development project, a training centre has been created on the same site. It is financed by Shell and the French Co-operation.

In 1997, the GEF initiated financial support toward Pro-Natura's efforts to conserve remaining biodiversity through economic activities based on sustainable use of the Amazon forest. This initial GEF support then led to awareness that it is not possible through forest conservation and extractive uses alone to protect against massive destruction - an integrated regional land use strategy is essential. Such an approach was approved for financing by the GEF beginning in 2001. The project area now covers 7 municipalities, in an effort to protect a forest zone of more than 10 million ha.

This operation is a large scale extension of the results from Jurueña, and includes the following elements: participatory regional and municipal level agro-environmental zoning; creation of demonstration units endeavouring to test and develop agroforestry practices adapted to the local situation (on about 10 farms per municipality); testing and demonstrating methods for sustainable timber and non-timber forest management in each municipality with private timber companies, training and diffusion of information on practices which help to protect biodiversity.

An expanded partnership with institutions and companies

During the 10 years of work at Jurueña, collaboration has been established with a broad range of federal and state institutions. For the GEF project, the state Environmental Foundation in Mato Grosso (FEMA), is the responsible government authority, with Pro-Natura acting as an implementing agency on the government's behalf. Working relations have been established with all municipal governments in the project region, and with the National Agrarian Reform Institute. This collaboration extends to all institutions and private sector companies willing to co-operate, and has attracted additional donors.



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The partnership for sustainable forest management over 25,000 ha with the logging company Rodhen, has led to the use of the wood residues to run an electric generating station supplying 6 industries in the region.

> Pro-Natura as an organisation



Created in Brazil in 1986, Pro-Natura is a non-governmental organisation that specialises in sustainable development. In 1992, after the Rio Conference, Pro-Natura became one of the first NGOs in the Southern Hemisphere to gain international status. Today it is a global organisation that is composed of two major hubs: Instituto Pro-Natura in Brazil, which is responsible for the Americas and Pro-Natura International in France, responsible for Europe, Africa and Asia. A strategic co-ordination Council manages the organisation.

www.pronatura.org

INNOVATION TOWARD SUSTAINABLE DEVELOPMENT

Pro-Natura International • 15, avenue de Ségur • 75007 Paris • France
Tél : (33) 01 53 59 97 98 • Fax : (33) 01 53 59 94 46 • Email : pro-natura@wanadoo.fr

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