Forest rehabilitation and management in eastern Brazil

An ITTO project in the Middle Doce River Valley of Brazil is rehabilitating water recharge areas and riparian forest stands

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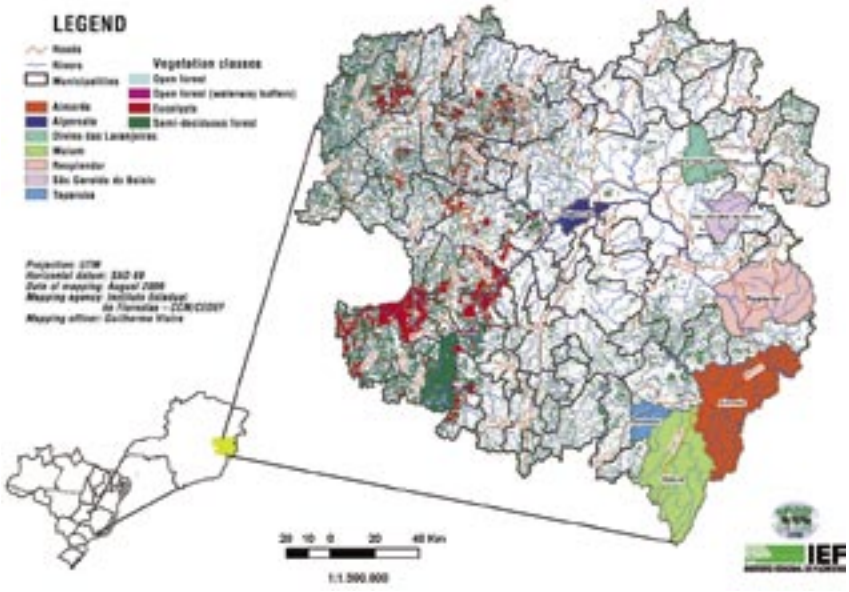
OVER THE PAST 50 years, the Middle Doce River region, which was once covered by lush inland Atlantic forests, has experienced an extensive loss of forest cover. The forests have been almost completely replaced by pasturelands for cattle-raising purposes, based on the general belief in the region that all trees should be cut down because they interfere with cattle grazing. The lack of forest cover, the burning of grasslands and compact and shallow soils have all reduced the retention and infiltration of rainwater as well as the number of river sources, contributing to this rural area's status as one of the poorest and most inhospitable regions in Minas Gerais and in Brazil as a whole.

Project sites

Figure 1: The Middle Doce River region, including its seven micro-watersheds



To combat this situation, a pilot project on forest rehabilitation and management in degraded areas is being implemented with financial support from ITTO in the municipalities of Aimores, Divino das Laranjeiras, Governador Valadares, Mutum, Resplendor, São Geraldo do Baxio and Taparuba in the Middle Doce River Valley in Minas Gerais, Brazil *(Figure 1)*. The executing agency is the State Forest Institute of the National Secretariat for the Environment and Sustainable Development of the State of Minas Gerais. This project, PD 62/99 REV.3 (F) 'Reforestation pilot project for the recovery of degraded areas in the Middle Doce River region, state of Minas Gerais, Brazil', became operational in October 2004 with an expected duration of four years. The total project budget is nearly US$800,000, with an ITTO contribution of US$524,000.

The overall objective of the project is the establishment of pilot demonstration units for the rehabilitation of degraded forest areas in the micro-watersheds of the Middle Doce River, with a view towards rehabilitation of the forest cover and establishment of production forests. Thus, the project will contribute to the implementation and dissemination of reforestation and forest management models that are compatible with the realities of the region.

The project is specifically aimed at rehabilitating 300 hectares of water recharge areas and riparian forest stands along riverbanks and river sources; planting 100 hectares of production forest; and managing 1000 hectares of degraded secondary forests where the species *Miracrodruon urundeuva* (aroeirinha) is predominant. The project strategy is based on the establishment of plots by rural producers in each of the seven micro-watersheds of the area. Up to 40 families will implement field activities.

Project resources are being used to assist in covering the costs of activities related to the production of site-specific seedlings and their subsequent planting and management. Resources are also being used for training activities, exchanges between rural producers and technicians, the implementation of a social and environmental diagnostic and monitoring program, and the dissemination of project outputs.

Forest management activities are being implemented in areas that were previously occupied by aroeirinha, as this forest species has an enormous capacity for both sexual reproduction and vegetative propagation in degraded soils and inhibits the regeneration of other native plant species. By appropriately managing aroeirinha, it will be possible to control its dominance, rehabilitate forest productivity and improve the quality of pastures.

It is expected that after its completion, the project will have contributed to the sustainable utilization of forest resources in the region and will have improved the income levels of rural producers, thus helping to reverse the current cycle of impoverishment that affects the region.

Natural regeneration of aroeirinha. *Photo: Danilo Rocha*

Regeneration of aroeirinha under forest management. *Photo: Danilo Rocha*