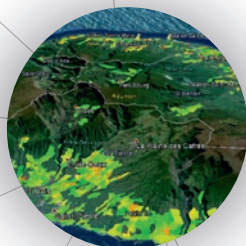
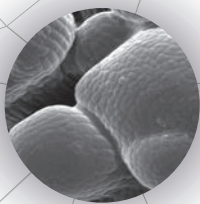


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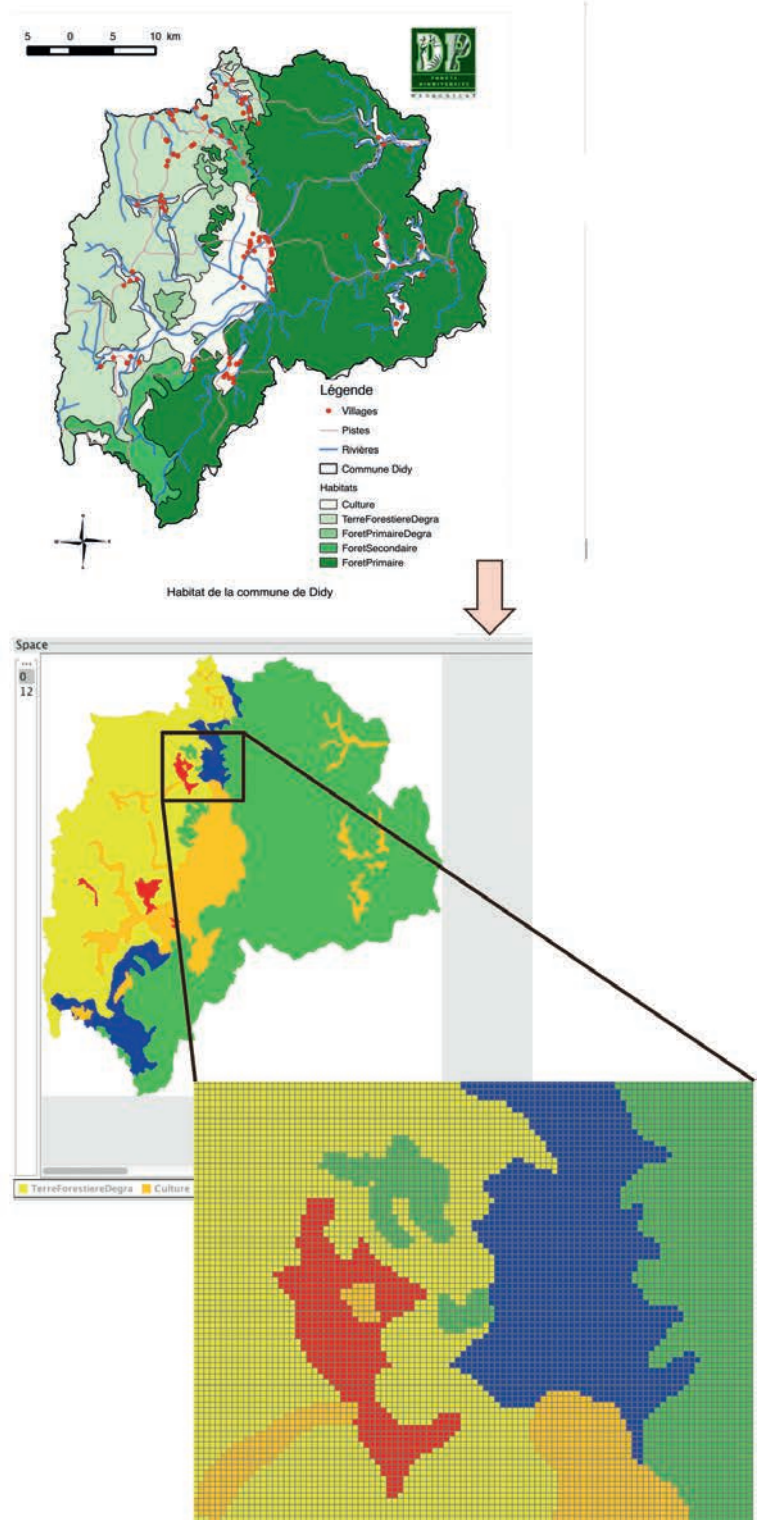


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Impact of decentralized forest management programmes on socioecosystem sustainability in a legal pluralism context

In a situation marked by the rapid disappearance of primary forests in Madagascar, the State has set up a decentralized programme generally for the management of natural resources, and more specifically for forest resources, which have been assigned to local communities (COBAs). The latter are therefore in charge of proposing management plans (zoning, quotas, permits, etc.) that ensure the ecological, economic and social sustainability of their region. A monitoring and evaluation protocol applied to 18 COBAs in Didy municipality (Alaotra Mangoro region), as well as a simulation model, were jointly developed to assess the impact of these plans on the socioecosystem sustainability. Impact assessment is based on an understanding of the ecological dynamics (including population and land-use dynamics), socioeconomic dynamics (including the distribution and allocation of income from forest resources and other income-generating activities) and legal-institutional dynamics (observance of rights, COBA obligations and stakeholder involvement in the decentralized management process). Many disciplines are therefore necessary to get an overall understanding of the socioecosystem within the area of the concerned local community. The effectiveness of management plans on the behaviour of populations also depends on the opportunistic exploitation of a set of regulations derived from State laws, customs and practices. All disciplines called upon as well as regulations at different levels (park and forest administration, customary authorities, etc.) represent viewpoints on the socioecosystem that need to be identified, formalized and injected into an integrated simulation model. Several scenarios were simulated to assess the respective advantages and disadvantages of different management models, from traditional management to decentralized management for protection and/or exploitation, including concessions.

Contacts: S. Aubert, sigrid.aubert@cirad.fr and J.-P. Müller, jean-pierre.muller@cirad.fr (UPR GREEN)
For further information: COGESFOR project, www.cogesformada.org



▲ From the mapping of a municipality to the simulation of practices and their regulations.