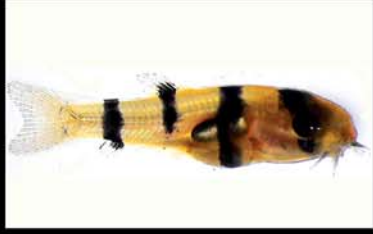


les dossiers d'**AGROPOLIS** INTERNATIONAL

Expertise of the scientific community



Biodiversity

Science for humans
and nature

'Identification and analysis of operating principles for the eastern coastal region of Madagascar—towards integrated management' project



E.Rakotoarisoa © CIRAD

▲ Contrasting uses of the sea in Madagascar—coastal fisheries and petroleum development.

Coastal regions of Madagascar are of major ecological and economic interest for the sustainable development of Madagascar and the Indian Ocean region. For instance the coral reefs and mangroves, breeding sites for shrimp and most of the coastal fauna, represent a potential annual income of €100–200 million. This income includes the environmental services that these habitats provide. It is thus essential to preserve the diversity, health and complementarity of coastal ecosystems in Madagascar. However, the coastal ecosystems on this island are now seriously threatened by natural phenomena, but especially by human activities. This raises questions on the urgency and necessity of applying strategies for effective management of coastal areas: Is it possible to implement integrated management strategies for coastal areas in Madagascar, and what relevant monitoring-assessment methods could be introduced to protect coastal areas and especially to ensure sustainable development?

This study strives to address these questions through a systemic-type approach. It accounts for different scales at which significant interactions between biodiversity constituents take place, social organization conditions, public policies (international and national), forms of local governance, and economic development activities. This will help to gain greater insight into the features of the ecosystems present in Madagascar and how they are managed. This project, which is funded by the Institut Français de la Biodiversité, CNRS and IRD, is focused on studying the eastern region, which is typically representative of the coastal biodiversity of Madagascar. Researchers of different disciplines (law, economy, biology, sociology, anthropology, computer science), from both industrialized and developing countries, are involved.

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For further information: <http://sites.google.com/site/gizcmadagascar>

LECOB implements *in situ* and mesocosm experiments, as well as long-term monitoring of biodiversity, to validate the predictions of modelling approaches.

In addition to its basic support from the CNRS Institute of Ecology and Environment and the *Université Pierre et Marie Curie*, the unit is funded through French National Research Agency projects, CNRS 'Continental and coastal ecosphere'

projects, a *Fondation TOTAL* and *Université Pierre et Marie Curie Chair* on 'Extreme Marine Environment, biodiversity and global change', and two European Commission projects, including a Marie Curie research training network. LECOB participates in the French *Réseau National des Stations et des Laboratoires Marins* and in the CNRS-Ifremer ECCHIS research group devoted to chemosynthetic ecosystems. Its international involvement

also involves the coordination of a working group of the Scientific Committee for Ocean Research (SCOR) as well as the CNRS European research group on the Diversity of Organisms Associated with Marine Wood Falls (GDRE DiWOOD). ■