



Celebrating the International Year of Biodiversity with Success Stories from the Field

An integrated approach to managing the natural heritage of Guatemala

It seems the fantastical landscape of legends: a lush expanse of rainforest, traversed by meandering rivers and sparkling lakes, reveals at its core a treasure-trove of sacred Mayan monuments, of which the temples of Tikal, Yaxha, Ceibal and Mirador are but the best known. This landscape is the focus of the GEF project “Improvement of the Management Effectiveness in the Maya Biosphere Reserve”, currently being implemented by the Inter-American Development Bank (IDB) in conjunction with a loan operation, together totaling over USD 33 million.

Beyond its cultural riches, the Maya Biosphere Reserve (MBR) in Guatemala harbors a wealth of biodiversity.



[Watch the Maya Biosphere Photogallery](#)

It contains 17 natural ecosystems, more than 40 species of mammals, 256 species of birds, 97 species of reptiles, 32 species of amphibians and 55 species of fish, as well as cedars, pines, bread-nut trees, gum trees, relict mangroves (the most inland occurrences of mangrove in the Yucatan Peninsula), rare mollusk-based reefs, caves and cenotes within its borders. Equally important is the MBR’s role in bridging borders: the 2.1-million-hectare reserve is the core of a regional corridor connecting protected areas in Mexico and Belize, thus forming part of Mesoamerica’s most extensive tropical broadleaf forest, the Selva Maya, which is thought to contain 8% to 12% of our planet’s biodiversity.

Yet, the legendary natural heritage within the MBR faces a number of very real challenges. A local population growing by 7% to 10% annually, and the productive activities required to sustain it, are exerting considerable pressure through rapid expansion of subsistence agriculture and unplanned human settlements. In addition, conservation goals are poorly integrated into sectoral policies for the development of agriculture, tourism and oil production within the Reserve. Claudia Santizo, Secretary of the Consejo Nacional de Áreas Protegidas (CONAP), the agency overseeing the MBR

since its creation in 1990, can attest to these challenges. She and her team have worked diligently with communities, local authorities, national agencies and international actors on reducing fires and deforestation, the two lead causes for biodiversity loss in the MBR. But in the past, CONAP's limited resources have been no match for the expanding degradation: in 2003 alone, 398,000 ha (almost 19%) of the MBR were burned.

Now, with support from the GEF project, CONAP, who is executing the project on behalf of the Ministry of Environment and Natural Resources (MARN), is able to take a lead in tackling the threats facing the Reserve. The project is providing crucial assistance with fire control and monitoring equipment, management tools and coordination mechanisms, complemented by investments in infrastructure (for protected area management, tourism and water treatment), and incentives to adopt more sustainable technologies and capacity training.

Despite being in execution a relatively short period of time, the project is already showing results. Through the physical demarcation of 260,000 hectares of protected areas within core zones of the MBR, land tenure has been clarified and the levels of protection of these areas have increased. Since protected areas in the core zones contain particularly valuable wilderness areas, better protection of the demarcated areas is anticipated to result in significant biodiversity benefits. By strengthening the capacity of those communities that depend on the MBR's forest resources to take an active role in the Reserve's management, the project intends to increase protection of the MBR. So far, members of ten communities have benefited from training on managing protected areas and generating income from activities that are more sustainable than slash-and-burn agriculture. Communities will use this training as they participate in updating existing or developing new plans for five protected areas.

In general, CONAP is placing a particularly strong emphasis on integrating diverse stakeholders into the management of the MBR. One of the first activities the project funded was the design of seven "Joint Operation Centers". These centers, which serve as entry points to the protected areas, provide facilities to all enforcement authorities in the MBR and will increase the effectiveness of their presence in the Reserve through joint actions and better coordination. The project will also strengthen environmental governance capacity at the municipal and regional level, as well as fund activities to collaborate with Mexico and Belize on transborder issues. It will improve harmonization of sector policies and assist in the resolution of natural resource use conflicts.

In addition to resolving conflicts, the project is actively pursuing synergies between the socio-economic development of the Petén and the protection of the MBR. Eduardo Cofiño, the project's Director, underlines that the GEF and IDB loan funding are fundamental to jointly addressing these two intrinsically linked aspects of managing the Reserve: "We have to protect the Petén-Itzá watershed and develop sustainable tourism; it's the only way to preserve the remaining forest cover. The best way to protect the Biosphere is the promotion of sustainable uses." This view reflects a clear recognition of the socio-ecological integrity of the Reserve; a vision that is central to the current project but has not been part of conservation strategies for the MBR in the past.

The challenges confronting Cofiño and his colleagues in making this vision a reality are considerable. But with the support from the GEF and the IDB, the first elements of an integrated management approach are now being put into place, thus laying the foundation for something just as monumental as the stony sentinels of Mayan civilization rising above the canopy: a participatory management system that achieves the delicate balance between extracting benefits from the MBR and protecting the forest that is home to one tenth of our planet's biodiversity.

Project facts: Improvement of the Management Effectiveness in the MBR - GEF project grant \$3.66 million – co-financing: \$10.94 million - Duration: 2009-2014.

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Editor's note: To celebrate the International Year of Biodiversity, every two weeks we will highlight a GEF project that is creatively addressing the challenges to conserve and sustainably use biodiversity. These examples of good practice in conservation and sustainable use will demonstrate the contributions that biodiversity makes to local and national economies and that halting the loss of biodiversity is indeed possible.