



USAID
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MADAGASCAR

GLOBAL CLIMATE CHANGE

MAY 2008



USAID continues to be a principal supporter in preserving Madagascar's rich forests. This not only helps protect one of the world's most unique repositories of biodiversity, but also greatly assists in mitigating the effects of climate change through maintaining Madagascar's extensive carbon sinks.

For more information, visit:
<http://www.usaid.gov/missions/mg>

BACKGROUND

Madagascar, an island nation in the Indian Ocean to the east of southern Africa, is home to flora and fauna unlike anywhere else in the world. However, its unique natural resource base and rich biodiversity are threatened by deforestation, bush fires, soil erosion, and declining soil productivity.

Madagascar's natural resources are not only important for the economic development challenges that the country faces, but also for mitigating climate change. Protecting forests and vegetation is beneficial to the climate because they remove carbon dioxide from the atmosphere, and store carbon both above ground in their biomass and in the soils below.

SECTOR-SPECIFIC CLIMATE CHANGE ACTIVITIES

USAID helps protect Madagascar's unique resources against further environmental degradation by building local capacity to manage forest and agricultural resources in a more sustainable manner.

FOREST ECOSYSTEM MANAGEMENT

USAID enables the public sector in Madagascar to achieve more effective stewardship of its forest ecosystems by providing assistance to the Ministry of Environment, Water and Forests which includes both the Malagasy Forest Service and Park Service. USAID supports a variety of training and technical assistance activities to build the capacity of the government, local nongovernmental organizations, and communities, to improve management of their natural resources.

More specifically, USAID provides support in the implementation of decentralized, participatory zoning plans and has enhanced efforts to monitor and control illegal trade of endangered species. In 2007, this support led to a number of seizures of illicit exploitation of rosewood destined for international markets. USAID played a key role in assisting the Ministry of Environment, Water and Forests undertake an organizational restructuring activity that expanded its implementation capacity from one person to an entire department. In terms of field level activities, USAID has recently supported sustainable household energy projects, incorporating local forester resource planning, community and individual forest management, and improved charcoal production systems.

Within the context of the President of Madagascar's commitment to triple the protected areas by 2011, USAID continues to be a primary support to the Government of Madagascar (GOM) in the expansion of Madagascar's Protected Area System (SAPM). New sites were selected on science based priority setting that considers viability of species and connectivity to maximize biodiversity conservation. Site selection integrated forest zoning and socio-economic factors from regional planning. The GOM created a total of 413,163

PARTNERS

USAID's partners in climate change activities in Madagascar include:

- Chemonics International
- Conservation International (CI)
- Development Alternatives, Inc. (DAI)
- International Resources Group (IRG)
- Malagasy Forest Service
- Malagasy National Park Service
- Ministry of Environment, Water and Forests
- National Office of the Environment
- United States Forest Service
- United States Geological Survey
- Wildlife Conservation Society
- World Wide Fund for Nature

Because partners change as new activities arise, this list of partners is not comprehensive.

PROJECT HIGHLIGHTS

Community Based Natural Resource Management:

Working together, USAID and the Government of Madagascar, with the help of national environment and development actors and national authorities, signed twenty three agreements related to the transferal of natural resource management to communities; twenty one agreements related to fire management; and nine agreements to improve the standard of living of rural farmers' federation members.

Alternative Energy Investments:

Alternative energy sources and technologies, such as community woodlots, will be explored to ultimately reduce dependence on harvesting fuel wood from primary sources.

hectares of new protected areas, which represents 57% of the target for new areas of biological significance under improved management. Protected area management practices have improved by integrating ecological monitoring into park management, and by mapping conservation target areas.

FIRE MANAGEMENT

Based on a request from the President of Madagascar, USAID helped launch a national bush fire campaign to reduce the overall impact of uncontrolled bush fires across the country. From a climate perspective, forest and bush fires are undesirable because they release carbon emissions into the atmosphere. To monitor the impact of this program, USAID provided training to the Malagasy Forestry Service at national and regional levels, to collect data and analyze satellite imagery of night fires in Madagascar. With this modern system, national and regional stakeholders are able to respond very quickly to incidental fires occurring anywhere in the country, as demonstrated by the early identification of several fires in forested zones in 2007.

PROVIDING ECONOMIC ALTERNATIVES

In addition to working with the public sector, USAID seeks to promote private sector initiatives that foster income generation while limiting forest degradation. USAID has supported reforestation projects in collaboration with international investors and promoted alternative domestic and exotic high value species. Also, a new permitting system was developed to auction off a limited number of permits located outside of the protected area network. Through engaging the private sector investors in the profitable expansion of forest plantations, pressure has been alleviated on natural forests.

USAID also works on climate change mitigation through improved agricultural techniques, and reducing slash and burn agriculture. One effective intervention encouraged the growth and export of lychees, a local fruit. Thirty thousand households participated in lychee production and over 15,000 adopted new agricultural techniques, which resulted in a 55% increase in income. Additionally, 12 communes earned USAID's "green commune" designation by implementing activities to reduce slash and burn practices, and promoting sustainable management of natural resources.

FARMER TO FARMER APPROACH AND DECENTRALIZED MANAGEMENT

USAID uses an innovative peer learning approach to combat unsustainable agriculture practices and promote economic development, while decentralizing management of natural resources. An example of this is support for Lapa Ara-Drafitra Ivoaran'ny Ambanivolo (LADIA), a local agricultural demonstration and training center, where farmers learn from others how to better manage crops and improve linkages with other actors in the value chain. Such an approach has already improved environmentally sound farming practices on over 6,500 hectares of agricultural land.

USAID also supports the transfer of management of forest areas from the government to local communities. This transfer provides local communities the incentives to stop destructive slash and burn agricultural practices and to adhere to more sustainable forms of land use. As a result of these kinds of activities, the rate of deforestation has begun to slow considerably. An analysis conducted this year clearly shows a decrease of annual deforestation rates from 0.82% between 1990-2000 to 0.55% between 2000-2005.