

The Makira REDD+ Project

In 2001, the Government of Madagascar, in collaboration with the Wildlife Conservation Society (WCS), created the 372,470-hectare Makira Forest Protected Area. Through carbon credit sales from avoided deforestation, the Makira REDD+ Project will finance the long-term conservation of one of Madagascar's most pristine remaining rainforest systems containing rare and threatened biodiversity, improve community land stewardship and governance, and support sustainable livelihood practices for local people.

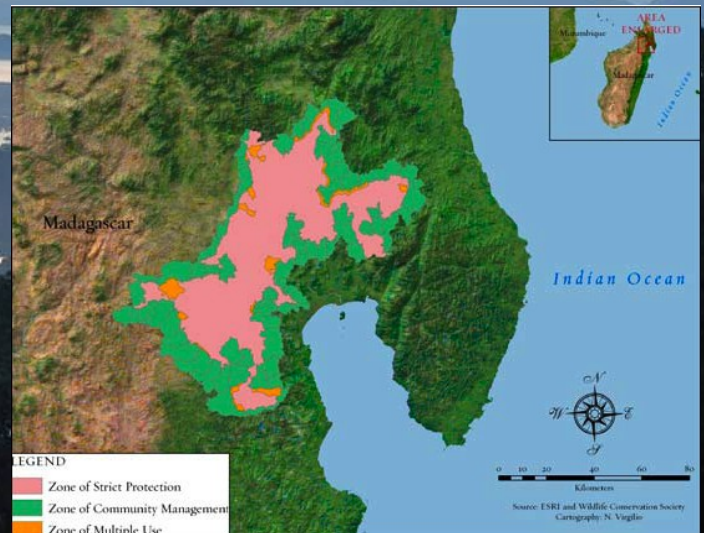


Figure 1: The Makira forest lies within the Antongil Bay landscape in northeastern Madagascar.

Project Summary

- The Makira Project is verified by the Verified Carbon Standard (VCS) and is awaiting validation and verification by the Climate Change, Community and Biodiversity Alliance (CCBA) Gold Standard.
- 830,772 Voluntary Carbon Units (VCUs) were verified in September 2012 for the vintage years 2005-2009.
- The Makira Project will generate an average of 500,000 tCO₂e in verified emission reductions each year between 2010 and 2020.
- The project activity uses the REDD Methodology Framework (REDD-MF), Approved VCS Methodology VM0007, version 1.0.

Benefits of the Makira Project

Climate – The Makira Project will prevent the release of more than 33 million tons of CO₂ over the next 30 years by addressing the principal causes of deforestation in the area – slash-and-burn agriculture, threats from bushmeat hunting, collection/exploitation of timber and non-timber forest products, and burning of forest land for cattle grazing.

Biodiversity – Makira forests contribute to the protection of roughly half of Madagascar's unique floral and faunal biodiversity, and one percent of the world's biodiversity. Madagascar's largest protected area, Makira is home to 20 of Madagascar's identified 97 lemur species, the greatest diversity of lemurs in any single protected area, including the silky sifaka, one of the world's 25 most endangered primates. The forest also contains hundreds of bird species and thousands of plant varieties, many of which are found nowhere else on Earth. By reducing deforestation the Makira Project will not only reduce critical habitat loss, habitat degradation and fragmentation, but also contribute directly to the protection of Makira's wildlife.

Ecosystem Services – The Makira forests serve as a zone of watershed protection and catchment, which provide clean water to over 250,000 people who live in the greater landscape and a key input to the agriculture-based economy of local people living in and outside of the Park.

Community – The Makira Project strives to empower the 50,000 people living around the protected area by allocating 50% of carbon revenues to these communities, with the remainder going to the management of the protected area and governmental climate change initiatives. Specific community interventions include improvements in infrastructure, education and health services, training and technical assistance for sustainable agriculture and support for alternative livelihoods. Most importantly, the Makira Project empowers local communities by strengthening land tenure security and resource rights that are coupled with greater decision making over forest resources and participation in park management.



Children from a Makira forest community

Makira Project Management Plan

In collaboration with the Ministry of Environment and Forests, Madagascar National Parks, WCS, local authorities and community stakeholders, the Makira Project achieves permanent forest conservation through an integrated approach to reduce human threats to the region's forests while at the same time engaging these communities in the management of the project area by:

- **Creating the Makira Natural Park:** The creation of the protected area and related management plans sets clear limits and roles on the use of forest resources, including sustainable use and controlled occupation zones that avoid displacement of deforestation to forests outside the project area.
- **Building capacity for sustainable resource management:** WCS is working alongside local communities in the protection zone to strengthen their institutions and capacity to secure formal use rights and to manage their natural resources. These sites and activities are based on comprehensive land use plans that include low carbon development systems.
- **Setting up participatory co-management structures:** Bringing all stakeholders into the management of the protected area has reduced deforestation and forest degradation activities in the project area. Nearly 50 out of the 80 required community-managed sites have been established, and it is expected that all will be in place by end-2014.
- **Development of alternative revenue sources:** Development of alternative livelihoods for local populations will improve revenue of rural people in the protection zone of the protected area and thus reduce pressure to harvest high value species like rosewood and ebony.
- **Creation of equitable carbon benefit sharing mechanisms:** In June 2008, the Government of Madagascar and Makira Carbon Company developed an agreement outlining the benefit sharing and management mechanism for the Makira Project. After costs for the issuance and registration of Makira VCUs are paid, the net proceeds from carbon revenues will be distributed (See Figure 1). Over 90% will be distributed to Malagasy stakeholders in a benefit-sharing arrangement.

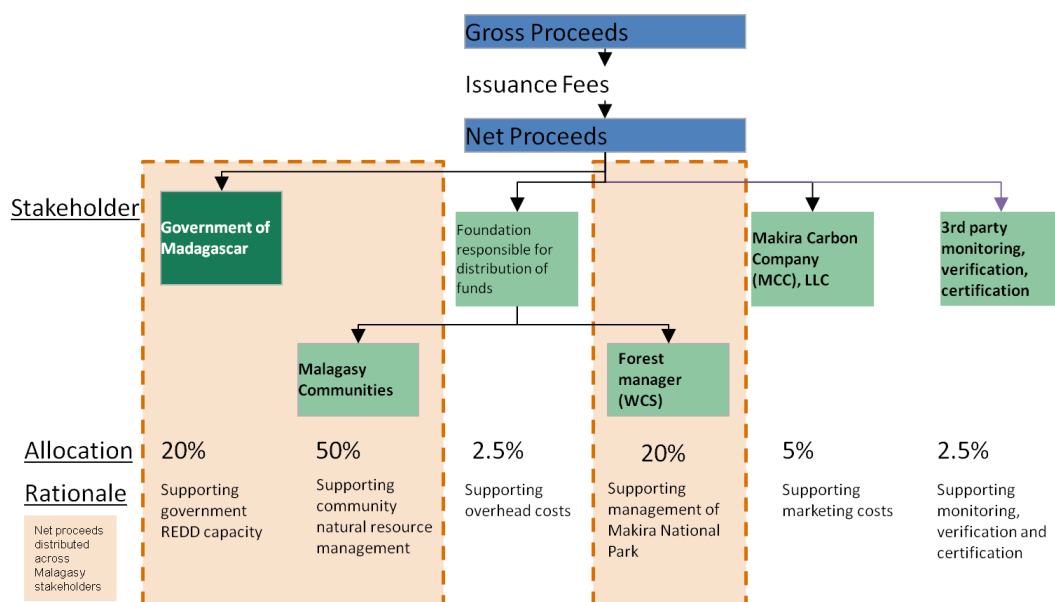


Figure 2. Benefit-sharing mechanism

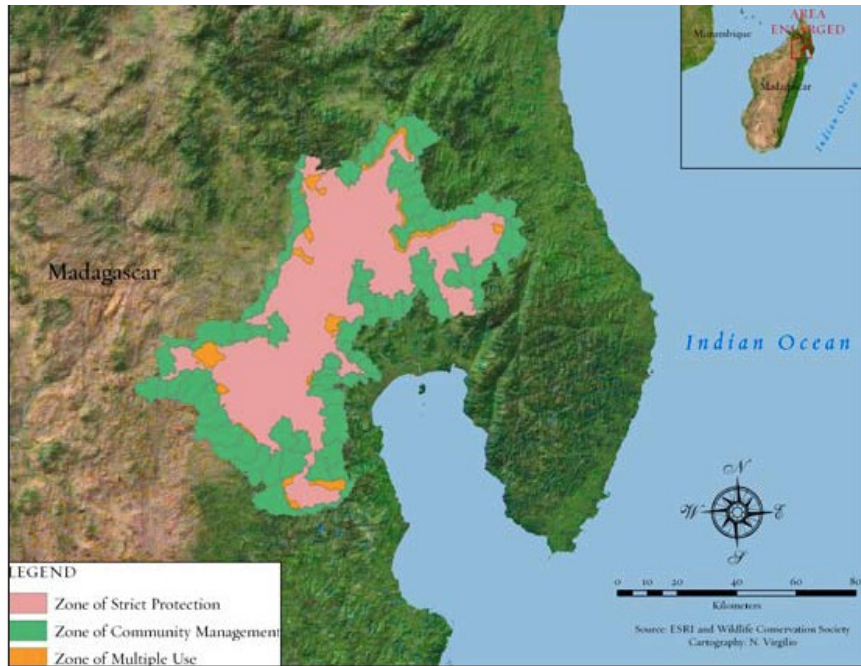
Pricing and Credits Available

The Makira REDD+ Project will prevent more than 33 million tCo2e over the course of 30 years. On September 28, 2012, the Makira Project achieved validation under VCS and verification of 830,772 2005-2009 Verified Carbon Units (VCUs). 1,251,401 VCUs are estimated from 2010-2012, but have yet to be verified. Please contact Todd Stevens or Amy Harclerode to discuss pricing of Makira VCUs based on volume.

Todd Stevens
Executive Director, Global Initiatives, WCS
Vice President of the Makira Carbon Company (MCC)
Tstevens@wcs.org; 917-689-5453

Amy Harclerode
Senior Development Officer, WCS
aharclerode@wcs.org; 718-741-1652

Profile: Biodiversity Impact – Makira REDD+ Project



LOCATION

Lies within the Antongil Bay landscape in northeastern Madagascar.

IMPORTANT DATES

First given protected status as the Makira Protected Area in 2005 and protected permanently by government decree in 2012.

SIZE

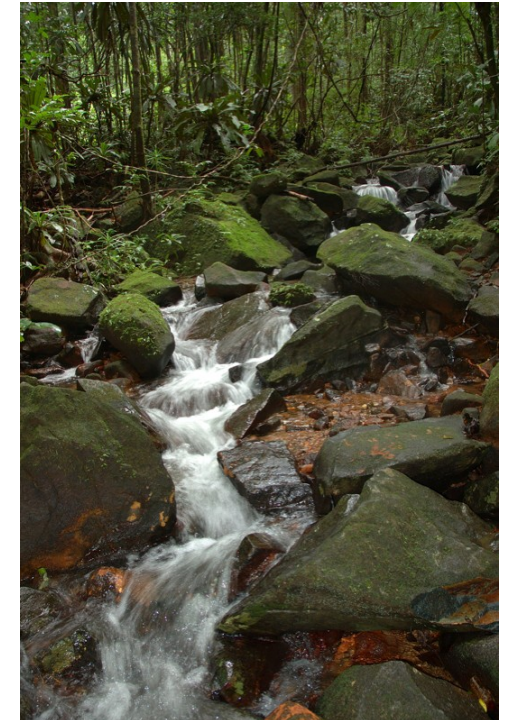
372,470 hectares (the largest tracts of intact rainforest remaining in Madagascar)

BIODIVERSITY PROTECTION

About one half of Madagascar's unique biodiversity—and one percent of the world's biodiversity—exist with the greater Makira landscape.

The Makira forests lie within the Antongil Bay landscape of northeastern Madagascar on the eastern coast of Africa and represent one of the largest expanses of humid forest left in the biologically rich Eastern Rainforest Biome of Madagascar. The Makira Natural Park protects one of the largest remaining contiguous tracts of low and mid-altitude rainforest in eastern Madagascar—ecologically and biologically important because of the high biodiversity value and large numbers of plants and animals found nowhere else in the world. The forests of Makira are a key, intact biodiversity stronghold and a vital bridge maintaining connectivity across protected areas in the region.

Madagascar's largest protected area, Makira is home to 20 of Madagascar's identified 97 lemur species, the greatest diversity of lemurs in any single protected area, including the silky sifaka, one of the world's 25 most endangered primates. The forest also contains hundreds of bird species and thousands of plant varieties, many of which are found nowhere else on Earth. By reducing deforestation the Makira Project will not only reduce critical habitat loss, habitat degradation and fragmentation, but also contribute directly to the protection of Makira's wildlife.



The lush flora and fauna of the Makira Forest is unparalleled in Madagascar.

Profile: Community Impact – Makira REDD+ Project



Children from the Ambodivoangy community in Madagascar, dance as part of an ecotourism activity.

LOCATION

The Ambodivoangy community, a community-managed forest resource site

MEANING

Translates roughly into “under the orange trees”

SIZE

6,445 acres with 4,606 acres of forest (more than 70%)

POPULATION

2,920 individuals

HOUSEHOLDS

163

BIODIVERSITY PROTECTION

Various species of lemurs, birds, and plant varieties

CARBON CREDITS GENERATED

Nine million tons (projected)

The Makira project will protect one of the largest remaining blocks of rainforest in Madagascar. As part of the project, WCS helped establish an ecotourism site and provided members of the Ambodivoangy community with management and leadership training, supported 37 schools to integrate environmental education into school curriculum, and developed 33 youth clubs. This work showed an increase of productivity among trained farmers from 3 to 7 tons of paddy rice per hectare. Honey production also increased to about 20 liters per hive from improved beekeeping techniques, producing an income of 80,000 ariary per hive (at local honey prices).

The Makira Project strives to empower the 50,000 people living around the protected area by allocating 50% of net carbon revenues to these communities, with the remainder going to the management of the protected area and governmental climate change initiatives. Specific community interventions include improvements in infrastructure, education and health services, training and technical assistance for sustainable agriculture and support for alternative livelihoods. Most importantly, the Makira Project empowers local communities by strengthening land tenure security and resource rights that are coupled with greater decision making over forest re-sources and participation in park management.



Community members living in the Makira landscape.

Profile: Climate Impact – Makira REDD+ Project

The Makira project will prevent more than 33 million tons of CO₂ of greenhouse gas emissions over the course of its 30 year term. Without the Makira project, more than 100,000 ha of forest - more than 30% of the project area – could be deforested based on the business as usual scenario. To create these emission reductions, the Makira project will progressively reduce the rate of deforestation over the first ten years from 0.27% (based on the historic deforestation from 1995 to 2005) to about 0.02%. This analysis is based on the ADP REDD+ Methodology Modules under the Verified Carbon Standard (VCS), and is considered a relatively conservative estimate of the climate benefit. The relatively high baseline deforestation rate coupled with the observed biomass density (417 t/ha) accounts for the relatively high emission factors (479 tons CO₂/ha) and reductions potential.



These rainforests are a vital source of water for more than 150,000 local residents.

Profile: Ecosystem Services Impact – Makira REDD+ Project

The Makira forests serve as a zone of watershed protection and catchment, providing clean water to over 250,000 people who live in the greater landscape, and are also a key input to the agriculture-based economy of local people living in and outside of the Park.

Climate regulation is critical for livelihoods and wellbeing in Makira and around the world. WCS work will help local people in Madagascar to develop durable approaches to conservation within and beyond this important landscape.



The Wildlife Conservation Society saves wildlife and wild places worldwide.



© WCS Kevin Tagami

Communities located within the Makira Forest rely on ecosystem services for their survival.