



**ADIDY MAITSO
ASSOCIATION**
Madagascar



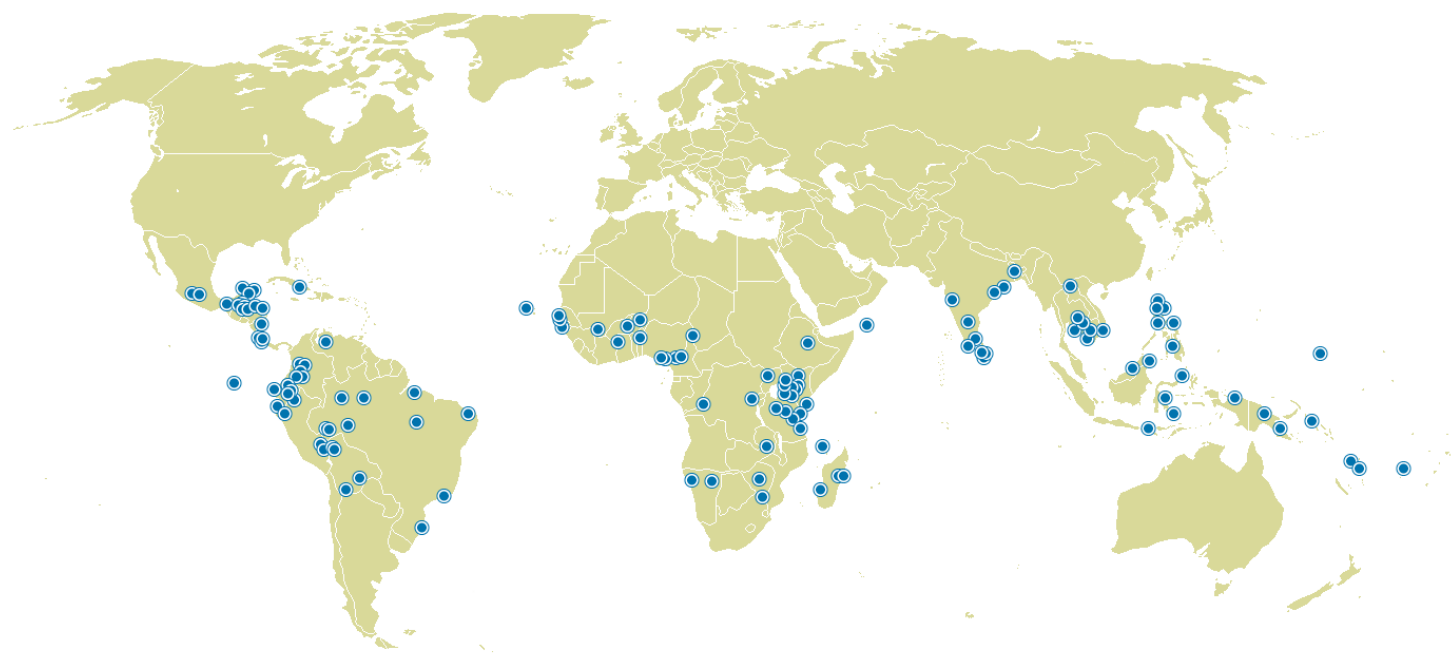
Equator Initiative Case Studies

Local sustainable development solutions for people, nature, and resilient communities

UNDP EQUATOR INITIATIVE CASE STUDY SERIES

Local and indigenous communities across the world are advancing innovative sustainable development solutions that work for people and for nature. Few publications or case studies tell the full story of how such initiatives evolve, the breadth of their impacts, or how they change over time. Fewer still have undertaken to tell these stories with community practitioners themselves guiding the narrative.

To mark its 10-year anniversary, the Equator Initiative aims to fill this gap. The following case study is one in a growing series that details the work of Equator Prize winners – vetted and peer-reviewed best practices in community-based environmental conservation and sustainable livelihoods. These cases are intended to inspire the policy dialogue needed to take local success to scale, to improve the global knowledge base on local environment and development solutions, and to serve as models for replication. Case studies are best viewed and understood with reference to *'The Power of Local Action: Lessons from 10 Years of the Equator Prize'*, a compendium of lessons learned and policy guidance that draws from the case material.



Click on the map to visit the Equator Initiative's searchable case study database.

Editors

Editor-in-Chief: Joseph Corcoran

Managing Editor: Oliver Hughes

Contributing Editors: Dearbhla Keegan, Matthew Konsa, Erin Lewis, Whitney Wilding

Contributing Writers

Edayatu Abieodun Lamptey, Erin Atwell, Toni Blackman, Jonathan Clay, Joseph Corcoran, Larissa Currado, Sarah Gordon, Oliver Hughes, Wen-Juan Jiang, Sonal Kanabar, Dearbhla Keegan, Matthew Konsa, Rachael Lader, Patrick Lee, Erin Lewis, Jona Liebl, Mengning Ma, Mary McGraw, Gabriele Orlandi, Juliana Quaresma, Peter Schechter, Martin Sommerschuh, Whitney Wilding, Luna Wu

Design

Oliver Hughes, Dearbhla Keegan, Matthew Konsa, Kimberly Koserowski, Erin Lewis

Acknowledgements

The Equator Initiative acknowledges with gratitude the Adidy Maitso Association, and in particular the guidance and inputs of Andoniaina Rabeloson. All photo credits courtesy of the Adidy Maitso Association and Conservation International. © CI/Hajasoa Raeliarivelo (*cover photo; page 11, top-right*); © CI/Norotiana Mananjean (*page 7, top*); © CI/John Martin (*pages 4; 6; 7, bottom; 9; 10; 11, bottom-right*); © CI/Alain Andriamamonjisoa (*page 11, bottom-left*). Maps courtesy of CIA World Factbook and Wikipedia.

Suggested Citation

United Nations Development Programme. 2012. *Adidy Maitso Association, Madagascar*. Equator Initiative Case Study Series. New York, NY.

ADIDY MAITSO ASSOCIATION

Madagascar

PROJECT SUMMARY

Adidy Maitso Association was established in 2005 with the aim of conserving the natural resources of Didy Forest – a dense moist forest of medium altitude in the Alaotra Mangoro region of eastern Madagascar. The forest lies within the Ankeniheny-Zahamena Corridor, which is renowned for its high species endemism and unique biodiversity. The Association works through 16 local community associations to manage and restore the forest corridor, educate local communities on the economic benefits of biodiversity conservation, and provide training to local farmers and women's groups on agricultural and income diversification.

The group is actively engaged in maintaining an indigenous tree nursery, patrolling and surveying local forests to regulate against unsustainable forest use, radio programming, training on improved agricultural practices for greater crop yields, and running a demonstration and training centre for local farmers.

TABLE OF CONTENTS

Background and Context	4
Key Activities and Innovations	6
Biodiversity Impacts	8
Socioeconomic Impacts	8
Policy Impacts	9
Sustainability	10
Replication	10
Partners	11

KEY FACTS

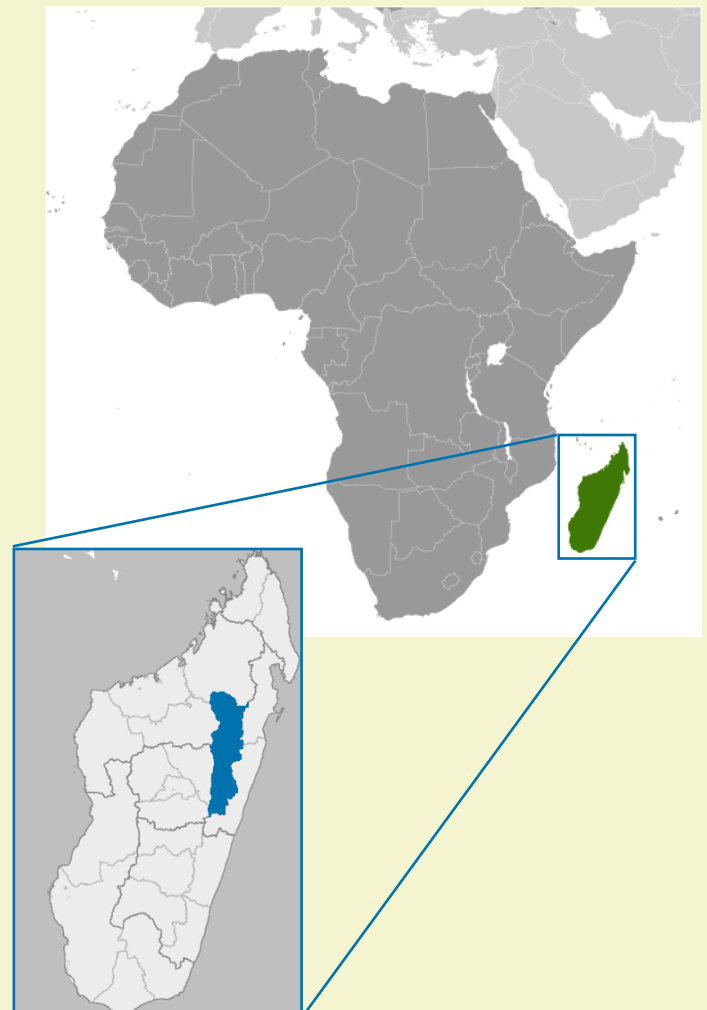
EQUATOR PRIZE WINNER: 2010

FOUNDED: 2005

LOCATION: Ambatondrazaka, Alaotra Mangoro region

BENEFICIARIES: 218 members in 16 villages

BIODIVERSITY: Ankeniheny-Zahamena forest corridor



Background and Context



The Adidy Maitso Association is a for-profit association located in the Ambatondrazaka district of the Alaotra Mangoro region of Madagascar. Founded in 2005 and formalized in 2008, the organization brings together 16 *Koloharena* community associations (*Koloharena* is a Malagasy word which translates literally to “looking after the wealth” and refers to a village association that works to improve the living standards of communities while conserving biodiversity.) Significant pressures were being exerted on the natural resources of the Didy Forest, a dense moist forest of medium altitude (600-1200 meters) within the Ankeniheny-Zahamena Corridor, which is renowned for its high biodiversity, species endemism and recognized for connecting an important network of protected areas in the country. A shortage of arable land had driven the local population to rely too heavily on the resources of the forest, resulting in environmental pressures such as the practice of slash and burn farming, illegal logging, the (over)collection of non-timber forest products, and some illegal mining operations.

Drawing up of community management plans

After numerous lobbying efforts on the part of partners and supporting organizations, including the French Global Environment Fund (FFEM) and Conservation International, the management of natural resources in Didy was transferred to the community level in 2000. Community management units or VOI (*Vondron’Olona Ifotony*) were constituted to bring together volunteers who share common goals, such as the sustainable management and protection of renewable natural resources and improving the community’s living conditions. Each management transfer site was furnished with a management plan which was developed in a participatory manner with stakeholders from the Ministry of Environment, communities, and local partners. The plans included, among other things, the zoning of a management site, where community member are allowed to access and use natural resources (within the parameters of certain restrictions); a conservation site, where community members are forbidden from taking or using resources; and a controlled occupancy site,

where communities are allowed to build homes and use land for farming. The zoning was based on both ancestral boundaries and local knowledge regarding natural limits.

Each community management unit also drafted a tailored management plan. One common feature to all management plans were monthly monitoring of the core conservation zone through community patrols. These patrols, however, were done on a voluntary basis without remuneration and, while some community members were motivated by a prevailing conservation ethic, there were no economic incentives in place and the local standard of living remained predominantly and comparatively low. Community members quickly realized that conservation could not take place over the long-term without consideration for alternative income generation activities and adequate economic incentives to adhere with newly introduced restrictions on resource access and use. It was in response to this challenge that the Adidy Maitso Association was formed.

Roles of Adidy Maitso and its member communities

A division of responsibilities made possible a harmonious working relationship between the Adidy Maitso Association and community management units. The communities retained responsibility for the conservation of biodiversity and the sustainable management of renewable natural resources, while Adidy Maitso assumed responsibility for creating livelihood alternative options. Adidy Maitso also committed to improving the institutional (governance) framework of each management unit, and to introducing adequate incentive structures. The association has since ensured that each community management unit has accountable leadership with clear and transparent decision-making mechanisms. It has also supported each community in the preparation of regular reports to both the mayor and the local forest service. This has closed a communication gap between the mayor, traditional chiefs and an essential stakeholder in the enforcement of community zoning. By providing the local forest service with information on how it can best support community

regulation of zoning restrictions, Adidy Maitso has effectively facilitated a harmonization of enforcement efforts. So too, community members that participate in patrol activities now receive an indemnity and stipend which, while not objectively substantial, provide enough of an incentive to ensure ongoing participation.

Adidy Maitso's overarching goal is to improve local livelihoods – and the overall living conditions in its constituent communities – and to reduce local dependence on the unsustainable extraction of forest resources. The association also works to promote social cohesion with a view to catalyzing and sustaining community action in service of protecting the region's biodiversity. Among other objectives, Adidy Maitso works to: promote alternatives to *tavy* (slash-and-burn) agriculture, identify and develop livelihood alternatives, conduct capacity building and peer-to-peer knowledge exchange in agriculture and livestock management, secure funds to run a micro-financing program for *Koloharena* communities, ensure the protection and ongoing provision of ecosystem services, and conserve local biodiver-

sity. While the vision of the organization has not changed substantially since it began, the association now places greater emphasis on communication (environmental education campaigns) and capacity building. Although local people had been heavily dependent on unsustainable methods of resource extraction for an extended period of time, changes in behavior have largely taken place through awareness raising and environmental education.

Organizational structure

The association is governed by a general assembly and a board of directors, which consists of a steering committee, an auditor, a coordinator, and supervisory committees. Adidy Maitso is comprised of 218 members across 16 villages. The general assembly has a statute and meets three times a year. The organization is headed by a president and vice president with the support of two secretaries and a treasurer. Presidents of the various *Koloharenas* serve as advisors.



“Improving the living standards of forest dependent communities allows us to save biodiversity and fight poverty.”

Andoniaina Rambeloson, Adidy Maitso Association

Key Activities and Innovations



Adidy Maitso Association activities focus on three broad program areas: i) strengthening local action in natural resource protection and degraded forest restoration, ii) improving agricultural productivity, and iii) promoting alternative livelihoods.

Mobilizing community action in forest conservation

In regards to strengthening local action in natural resource protection and degraded forest restoration, Adidy Maitso has focused on capacity building, awareness-raising, and oversight of community patrols to safeguard local forests and forest resources. Outreach and communication activities are primarily conducted via workshops, festivals and through extensions services to individual communities. Awareness-raising has concentrated on the importance of biodiversity and healthy ecosystems to human wellbeing, the economic benefits of sustainable natural resource management, and the respective roles and objectives of the *Koloharena*. The association has been equally active in reforestation, focusing on eucalyptus trees outside conservation sites as a means of offsetting or supplementing community fuel wood and timber needs.

Indigenous plants are also used for the enrichment of natural forests. Community members participating in tree planting and conservation activities are often remunerated (if only modestly) for their efforts.

Improvements in agricultural productivity

As concerns the Adidy Maitso commitment to improving agricultural productivity, the association uses agricultural extension officers to disseminate new technologies, training in animal husbandry, and information on more efficient production methods to local farmers. Specific interventions have included rice cultivation, crop protection (hedging), seed distribution and diversification, and organic fertilizer use. Crop protection methods to fight parasitic plant diseases use natural materials rather than chemical inputs. The association has

disseminated locally-evolved insect and pest management methods, tested by various *Koloharena*. One method involves the use of local artisanal soaps (*savony gasy*) and white citron, where another (from Ranomena) uses a liquid made from zebu bone and sisal leaf extracts. Seed diversity is encouraged, as is the use of organic fertilizers. In fact, Adidy Maitso promotes the combined use of compost, natural fertilizer, and clay to make seeds more resilient.

Livelihoods diversification

To promote alternative livelihoods and diversify local sources of income, Adidy Maitso is involved in identifying and linking with emerging markets and distribution channels for new products. The association has also focused on a number of key sectors to expand local income-generation opportunities, including small-scale potato and bean processing businesses, chicken rearing, apiculture (bee-keeping), fish farming, and pig and zebu rearing. An important and complementary aspect of this activity area is the promotion of diversified and off-season crops such as onions, bananas, soybeans, cassava, corn, and white beans. This not only supplements rice production, but also improves local food security.

Awareness-raising and extension services

Adidy Maitso dedicates a good amount of resources and energy to outreach, both to disseminate information and to garner community participation. One early barrier to outreach encountered by the association was the high rates of illiteracy amongst local farmers. This challenge has been overcome through radio programming which broadcasts news and information on environmental conservation activities, sustainable livelihood opportunities, resource management rules and regulations, and improved farming techniques. A complementary communications tactic employed by the association has been the use of on-the-ground agricultural extension and outreach officers; engineers who travel to local farms to conduct trainings, workshops and on-site demonstrations on environmental-



ly-responsible farming techniques.

A training center (called *Maison Koloharena*) has been established to carry out capacity building activities and serves as a communications outpost for participating engineers. Engineers fall into one of three categories: farming facilitators, farming extension agents, and model farmers. The farming facilitators are responsible for outreach, make courtesy calls at the request of community members, raise awareness on conservation issues and priorities, and disseminate improved agriculture and animal husbandry techniques. Farming extension agents also make courtesy calls, but their main responsibility is conducting demonstrations for farming communities throughout the corridor. The model farmers have applied the new techniques in their own fields, which are then used as demonstration sites of best practice for the entire community. Model farmers also mobilize people from the wider community to attend demonstrations, where they then share their expertise, tried and tested methodologies, and achievements. To ensure a process of ongoing and responsive learning, each farming facilitator, extension agent, and model farmer is responsible for producing one radio show each week.

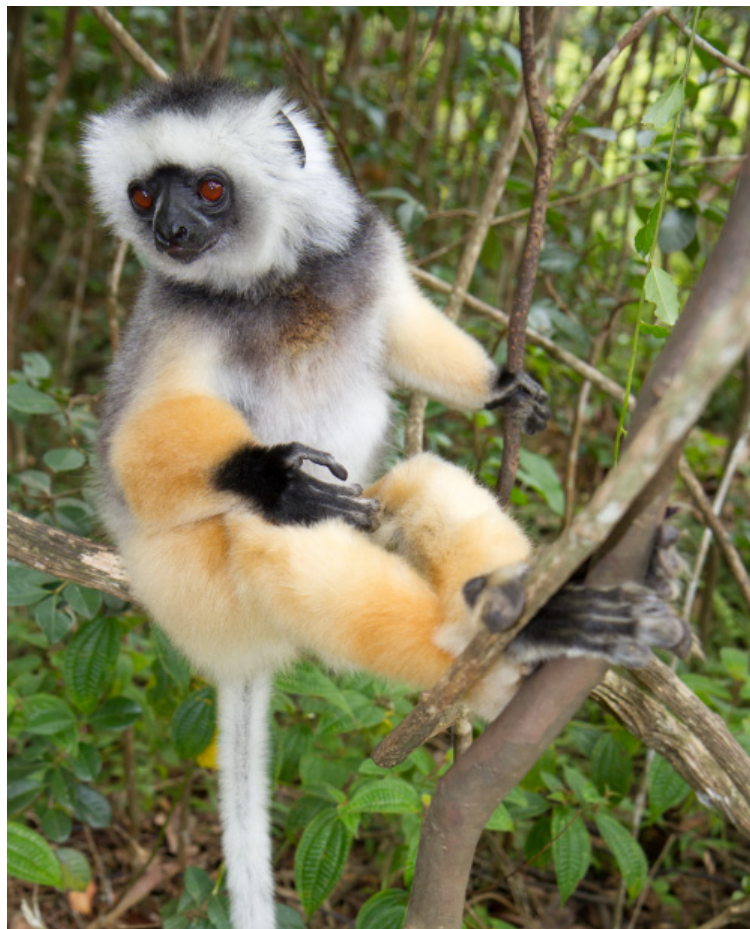
In addition to the above activities, Adidy Maitso also helps its members to identify and secure micro-finance. As one example, the association works with a network of rural micro-credit agencies known as *Ombon-Tahiry Ifampisamborana Vola* to connect member families with financing for off-season crop cultivation.

Innovative uses of communication technology

The Adidy Maitso Association takes pride in its innovative communication methods. The local radio and farming engineer programs have been crucial to the project's success. Initially, the radio program consisted of a do-it-yourself microphone that had a range of only 20 meters in one of the *Koloharena*. The potential of this tool to disseminate information more widely was quickly appreciated and recognized. The association was able to work with partners to obtain solar panels, a more powerful transmitter, office furniture, and computers. Radio programming now reaches farmers across the entire corridor. The radio program office now has an information and communications centre which houses a library, TV room, and the radio station equipment.

The farming engineer program was ultimately the outcome of a trial and error process. Unsatisfied with the sustainability of one-off training courses, the association worked with partners to train and position technicians in the roles of farming facilitators, farming extension agents and model farmers. This train-the-trainers approach has thrived, and represents a model for high-impact and effective environmental education and knowledge transfer. The engineers are financially compensated by the Adidy Maitso Association, and meals are often provided by those communities receiving the training.

Through the use of both radio programs and on-the-ground farming engineers, the Adidy Maitso Association has effectively instituted a spoke-and-wheel approach training and informing local farmers on environmental challenges and improved agricultural techniques.



Impacts



BIODIVERSITY IMPACTS

Like all of the dense forests of eastern Madagascar, Didy is rich in biodiversity. The area is home to several species of lemur, including the iconic *Prolemur simus*, and is an important nesting site for the Madagascar Ibis (*Lophotibis cristata*) and other endangered bird species. Notable plant species include the Red Stinkwood (*Pygeum africanum*), the *Dalbergia* genus, and several species of orchid.

Adidy Maitso helps protect the fragile ecosystems of the Ankeniheny-Zahamena Protected Area by supporting community management units to responsibly and sustainably manage their natural resources. Since the initiative began, rates of deforestation have been reduced, as have rates of poaching and hunting of threatened species. (Previously, an estimated 10-20 tons per week of the endangered rosewood tree were illegally being felled and removed from the forest.) The association has undertaken comprehensive awareness-raising campaigns to educate the local population on the importance of biodiversity and ecosystems services to human well-being. These same campaigns have also sensitized the local farmers to the irreparable damage caused by unsustainable farming techniques such as slash-and-burn agriculture. The latter was a leading cause of forest fires which would decimate sensitive habitats and result in the loss of rare and endangered flora and fauna. Community patrols report a reduction of forest fires by 65 percent. The association has also undertaken a concerted reforestation effort at a rate of 15 hectares of new forest per year. Ostensibly, the outcome has been the realization of a 'green belt'; a chain of communities working to protect and reforest the Ankeniheny Zahamena Corridor. The long-term objective of the association is to expand the corridor by six times its current size.

The association has not only equipped local farmers with information on existing environmental challenges and persistent socio-economic problems, but, through capacity building and outreach, furnished them with the tools and knowledge needed to respond.

New and more efficient practices have been taught to (and are increasingly adopted by) local farmers who have subsequently improved their agricultural yields. Greater agricultural productivity and crop diversification have provided an incentive for local farmers to replace destructive practices with more sustainable methods. Adidy Maitso's conservation activities have had a positive, discernible impact on species numbers and ecosystem health, as observed by the local community, local government (mayor and traditional leaders), and local forest services. The association is currently in the process of developing an improved system of data collection based on a combination of surveillance patrols and information received via instant message.

SOCIOECONOMIC IMPACTS

The social objectives of the Adidy Maitso Association are to improve the living conditions and overall well-being of the member communities and to promote social cohesion, which it aims to achieve through promoting the exchange of knowledge and expertise among member associations. Adidy Maitso uses a variety of tools to promote knowledge sharing, including site demonstrations, workshops, radio programs, and the farming engineer program.

Improved livelihood options

Agricultural diversification and the adoption of improved agricultural techniques have allowed the majority of families to improve their diets and livelihoods. The practice of intensive rice growing has allowed households to double or even triple their rice yields (from 0.8 – 1 tons per hectare to 5-6 tons per hectare). Market garden cultivation, generally practiced by the women, has brought a diversification of foodstuffs at the family level and an increase in the financial stability of each household as the surplus legumes grown are currently being sold in the local marketplace. Similarly with the cultivation of beans for the Toamasina market, the main provincial bazaar, market operators have signed a deal with an association member communi-

ty to purchase their entire crop production. Heads of households are no longer attracted by jobs with forestry businesses which merely pocket the lion's share of benefits for the companies, and pay only a menial salary for the labor of employees. Farmers practicing slash-and-burn agriculture are now abandoning the method in favor of an improved rice-growing system which is more feasible and compatible with environmental concerns.

Empowerment of women

Didy is a municipality belonging to the district of Ambatondrazaka in the fief of the Sihanaka ethnic group. The Sihanaka cultural tradition involves major decisions being taken by men while the women occupy themselves with household tasks and the raising of children. At the time the association was formed, all members were men and women were left out of debates and exchanges. This trend has since been turned around, and association members are now of both sexes. At the level of office management, women take on the roles of secretary, treasurer and counselor. In regards to the division of labor, rice-growing and the production of compost to fertilize the soil are all given to men while the gardening-related tasks fall to the women. This division of tasks makes an equal burden of responsibility for family development. A patrol committee is constituted by men and women and the sanctions given for infractions are applied without distinction of sex, social class or status within the community.

Job creation and income generation

The association has observed a 25 percent increase in income among its target population, about half of whom have benefited from new income-generating activities. Through the employment of farming engineers and radio technicians, 48 new jobs have been created for local people. Temporary allowances and benefits have been shared with over 80 community associations.

POLICY IMPACTS

As a cooperative federation of associations, Adidy Maitso has been able to leverage its size and influence to impact various political processes. Since Didy is included in the new protected area of Ankeniheny-Zahamena, the association has participated in the local consultations to draft a development plan. The association holds an advisory role in the management of this new corridor. Adidy Maitso was similarly consulted prior to implementation of the Develop-

ment Plan of the Aloaoatra Mangoro Region.

The association also holds significant sway at the municipal level, where it is often consulted for guidance regarding development and conservation planning. One example was a successful lobbying effort by the association in which they petitioned the mayor to pass a decree confronting illegal mining and logging in the town. The decree was adopted following meetings with municipal authorities, the technical service, the presidents of member communities, and the presidents of the Adidy Maitso Association.



“When forming strategic priorities, policy-makers should take environmental protection into consideration, and acknowledge grassroots communities as the primary guardians and managers of forest resources.”

Andoniaina Rambeloson, Adidy Maitso Association

Sustainability and Replication



SUSTAINABILITY

The Adidy Maitso Association contributes to environmental sustainability through its role in integrating communities into the management structure of the Ankeniheny-Zahamena Protected Area. The association plans to develop the 12,000 hectares of 'plain lands' in Didy so communities have more arable land on which to expand agricultural production instead of encroaching on the natural forest. This proposed venture will require a number of drainage and irrigation projects. The association is currently building a canal for this purpose, and is using funds exclusively gathered from member contributions. This capacity to self-finance community development projects at once reflects a high degree of local ownership as well as a sustainability model to meet local demands and overcome identified challenges.

In fact, the Adidy Maitso Association operates primarily on the annual contributions of its members—amounting to USD 2.50 per month and USD 10 per year—as well as shares of the profits from the community enterprises and productive activities. The UNDP/GEF-Small Grants Programm has also been an important source of financial sustainability for specific development, reforestation, and income-generation projects. Additionally, members of the association regularly volunteer their time by holding fundraisers. While volunteer fundraising has been successful to date, the association is drafting a business plan to move beyond volunteerism.

The association has plans to expand its current training center; the anticipated return on investment is high as the venue grows and evolves to become an essential conduit of community information and knowledge exchange. Fundamentally, the program component that ensures the long-term sustainability and ongoing relevance of the association is the farming engineer program. On-the-ground farming facilitators, extension agents, and model farmers are selected based on comparative expertise and outreach capacity. All are locally recruited, as the method of bringing in outside trainers proved less

successful and ultimately unsustainable. Farming engineers require compensation and on-going training, but the knowledge that they transfer to neighbors has been invaluable and greatly strengthened capacities in the region.

Through environmental education and awareness-raising campaigns, the association has effectively instilled a conservation ethic amongst the local population, which is essential for long-term sustainability. So too, community members are provided with up-to-date information on the laws that govern natural resources. Awareness and education have empowered community members to tackle emerging problems, encouraged reciprocal investments of time and resources by community members, and, by turn, bolstered the association's social sustainability.

REPLICATION

Adidy Maitso Association is one of the first cooperative associations established in the Ankeniheny-Zahamena Corridor. It has unequivocally played a leadership role in sharing and disseminating environment, farming and development best practice with other communities. Two cooperative associations modeled after Adidy Maitso have been formed in the Alaotra region. Through its community management units, the association has promoted the sharing of knowledge and experiences. Exchange visits and communications campaigns have been the preferred medium for best practice transfer. Central also in this regard has been radio programming, which has allowed the association to reach new and more remote audiences of local farmers. At the same time, demonstration sites have been an important vehicle of replication, particularly in attracting new members to become involved in conservation and sustainable farming activities.

While Adidy Maitso believes knowledge sharing to be an essential component of their various projects, they have encountered a number of obstacles along the way. For example, the association is at

times confronted with conflicting interpretations and different levels of understanding among members when attempting to implement a new project. When faced with this problem, the initiative tries to gradually convince members to adopt a unified vision.

PARTNERS

Conservation International has provided organizational, technical and financial support. As one example of their contributions, Conservation International lobbied for the establishment of the Ankeniheny-Zahamena Protected Area and helped to set up local management units. They offer continued support not only in terms of biodiversity conservation but also in improving local livelihoods by promoting income-generating activities through a small grants program. The radio station was established in part by material assistance from Conservation International.

ERI (a program funded by USAID) were founding partners to the association and pivotal in helping to establish the technician program, the radio station, the training center, and the supply center.

The UNDP/GEF-Small Grants Programme (SGP) has provided funding

support which was directed towards communications, reforestation and livelihood diversification activities. So too, SGP has linked the association with prospective carbon market schemes, such as REDD+ which could provide long-term financial sustainability.

The Ministry of the Environment and Forests provides monitoring and evaluation, supervision, training, awareness-raising and communication support and have been an important source of knowledge and training on forest laws and protected area management.

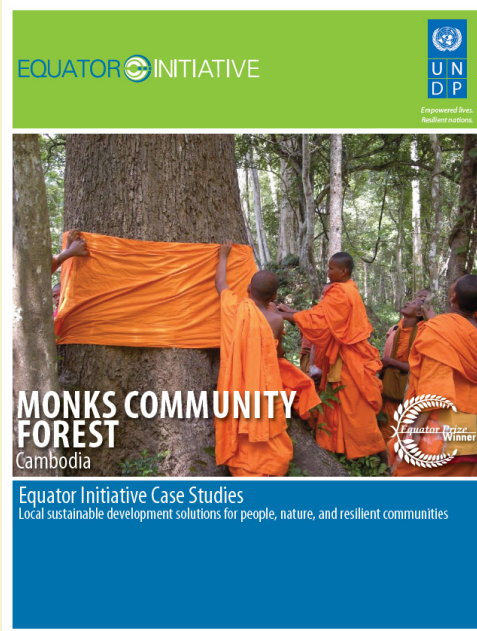
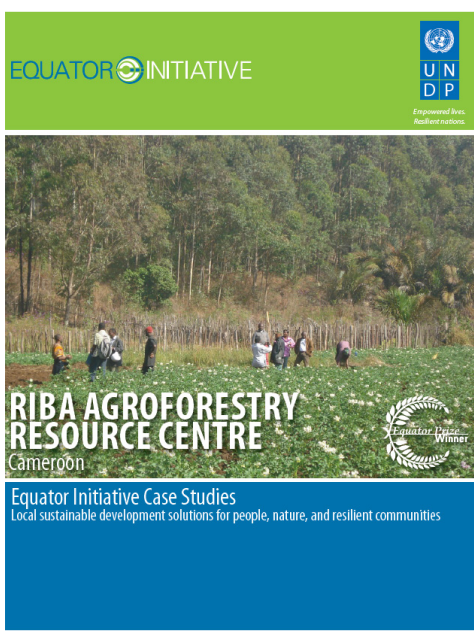
The association also maintains close working relationships with local government authorities who often provide support with monitoring and evaluation, awareness-raising, communications, and facilitation. The local government has been indispensable in terms of raising awareness of environmental challenges and in providing small stipends to radio station staff. In terms of launching the initiative, local government authorities helped pave the way for association activities by adopting the decree which gave legal rights of land ownership to the communities. A number of non-governmental organizations provide support with technical training and in linking the association with potential donors.



FURTHER REFERENCE

- Adidy Maitso Association Photo Story (Vimeo) <http://vimeo.com/15780802>

Click the thumbnails below to read more case studies like this:



Equator Initiative
Environment and Energy Group
United Nations Development Programme (UNDP)
304 East 45th Street, 6th Floor
New York, NY 10017
Tel: +1 212 906-6691
Fax: +1 212 906-6642
www.equatorinitiative.org

EQUATOR  **INITIATIVE**

The United Nations Development Programme (UNDP) is the UN's global development network, advocating for change and connecting countries to knowledge, experience and resources to help people build a better life.

The Equator Initiative brings together the United Nations, governments, civil society, businesses and grassroots organizations to recognize and advance local sustainable development solutions for people, nature and resilient communities.

©2012 by Equator Initiative
All rights reserved

