



WWF

ANNUAL
REPORT

MADAGASCAR

2017

An aerial photograph of a lush green mangrove forest. A winding, light-colored river or canal cuts through the dense vegetation. A small white boat is visible in the middle of the river. The forest extends to a sandy beach in the bottom left corner.

2017 Annual report

WWF Madagascar

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FOREWORD



«
**CONSERVATION,
COMMUNITY
ENGAGEMENT AND
THE MOBILIZATION
OF YOUTH...**
»

The year 2017 has been full of successes for conservation in Madagascar. Thanks to technical support from WWF, **10 new sites have now been added to the international list of Ramsar wetlands:** The Tsiribihina mangroves, the Barren Islands Archipelago, the Nosy Ve Androka coral reef, Lake Sofia and the Onilahy, Ambondrombe, Antrema, Sahmalaza, Ankarafantsika and Benevika wetlands. Madagascar now has a total of 20 Ramsar sites, covering over two million hectares.

2017 was also the year that WWF celebrated 20 years of conservation efforts in the Fandriana Vondrozo Midongy (COFAV) Forest Corridor. In recent years, WWF has worked tirelessly with 74 community organizations that now autonomously direct the sustainable use of their own forests in the Vondrozo and Ivohibe districts. The road was certainly long and full of obstacles, but the results were incredible: more than 1,200,000 trees have been planted, restoring 874 hectares of degraded forest. Their determined work was rewarded with the appearance of new water sources!

This commitment to reforestation, which helps preserve the natural capital of Madagascar, was shared by many in 2017 – **more than 80,000 trees were planted in 2017** after 1,800 volunteers were mobilized in the month of March in three different regions of Madagascar. 66,000 trees were planted in the Atsimo Andrefana region, 180,000 square feet of mangroves were planted in Diana and 4,500 trees were planted in Analamanga.

Finally, 2017 was also marked by the mobilization of Madagascar's youth to preserve their environment through various eco-friendly actions. In March, **nearly 7,000 young people joined to celebrate "Earth Hour" under the slogan "Namako ny tany" (the Earth is my friend) in order to promote the adoption of everyday actions that protect nature.** Large parades in Antananarivo, Morondava, Ambilobe and Toliara demonstrated that Malagasy youth are at the heart of the fight against environmental degradation in Madagascar. This energy was visible again in October, when more than 5000 young people came together for the celebration of World Lemur Day in Toliara.

Conservation, community engagement and the mobilization of youth were what defined 2017, a year full of success.

Nanie Ratsifandrihamanana
Director
WWF Madagascar

FORESTS

Madagascar's forests have gained worldwide fame as the home of highly diverse and completely unique flora and fauna, owing to the island's prolonged isolation. The island is home to 5% of the world's species, of which 80% are found nowhere else in the world. However, the lemurs, tortoises, chameleons, and geckos that form the basis of Madagascar's thriving ecotourism sector are in danger of losing their habitats because of rampant deforestation.

Fortunately, WWF Madagascar is taking action to save the forests and the fauna and flora that depend on them, by focussing on habitat conservation and restoration. Aerial surveillance and community patrols provide powerful data for dissuading, finding and prosecuting those contributing to illegal deforestation of protected areas.

WWF helps grassroots organizations in local communities to lead massive reforestation campaigns, thereby compensating for forest lost due to human activity. Furthermore, as charcoal production represents one of the main causes of forest degradation, WWF works to promote the use of charcoal-efficient cooking stoves, that consume up to a 50% less of charcoal, in addition to influencing national regulations with the aim of promoting a more sustainable wood energy value chain.

All of these actions help to ensure that both people and nature can thrive.





An interregional committee working to protect the Northern Highlands

Madagascar's Northern Highlands are piloting an interregional committee to preserve biodiversity in the region and advance the socio-economic development of local communities. The group will serve as a platform for the exchange of ideas and for making important decisions that impact all of the territories on the committee. The hope is that the regions of Sava, Sofia and Diana can bolster sustainable development together.

This part of Madagascar has great economical potential in the realms of tourism, raw materials, hydraulic energy and agricultural land. The three regions Sava, Sofia and Diana strengthened their communication to improve the coordination of the Northern Highlands. Major threats related to deforestation were identified and good practices against forest clearings within each region were shared.

The promoters of the projected areas in this region make up the committee, which includes members such as WWF, MNP, MBG and TPF.



Radio broadcasts to combat deforestation

With the help of WWF, forest patrols jointly led by the Forest Administration, the authorities and local communities were able to identify new areas of deforestation and illegal tree clearance in the forests of Beonotra (Sambava district) and in Andrafainkona (Vohemar district), both located in the COMATSA forest corridor in the Northern Highlands of Madagascar.

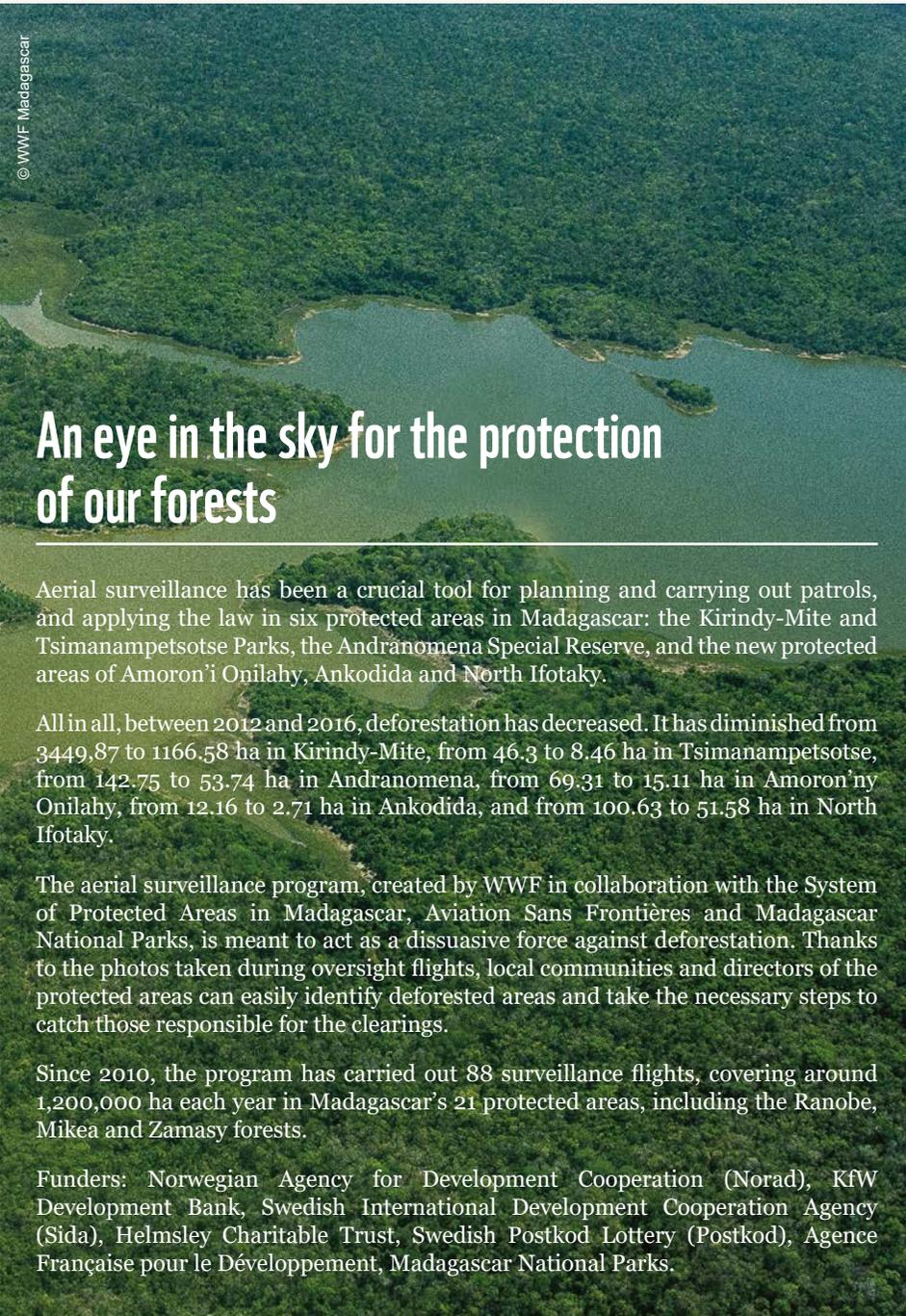
300 hectares of forests were lost in Vohemar, according to the patrols' data. It represents an enormous loss not only for the biodiversity of the region, but also for communities who depend on forest resources.

To combat this situation, the communities enlisted the help of local radio stations to spread information and thus fight the large-scale clearing of forests, with the help of the Forest Administration.

Radio is one of the best ways to reach these rural zones, where the damage to the forest is most significant.

Funder : United Nations Development Program (UNDP)





© WWF Madagascar

An eye in the sky for the protection of our forests

Aerial surveillance has been a crucial tool for planning and carrying out patrols, and applying the law in six protected areas in Madagascar: the Kirindy-Mite and Tsimanampetsotse Parks, the Andranomena Special Reserve, and the new protected areas of Amoron'i Onilahy, Ankodida and North Ifotaky.

All in all, between 2012 and 2016, deforestation has decreased. It has diminished from 3449,87 to 1166,58 ha in Kirindy-Mite, from 46,3 to 8,46 ha in Tsimanampetsotse, from 142,75 to 53,74 ha in Andranomena, from 69,31 to 15,11 ha in Amoron'ny Onilahy, from 12,16 to 2,71 ha in Ankodida, and from 100,63 to 51,58 ha in North Ifotaky.

The aerial surveillance program, created by WWF in collaboration with the System of Protected Areas in Madagascar, Aviation Sans Frontières and Madagascar National Parks, is meant to act as a dissuasive force against deforestation. Thanks to the photos taken during oversight flights, local communities and directors of the protected areas can easily identify deforested areas and take the necessary steps to catch those responsible for the clearings.

Since 2010, the program has carried out 88 surveillance flights, covering around 1,200,000 ha each year in Madagascar's 21 protected areas, including the Ranobe, Mikea and Zamasy forests.

Funders: Norwegian Agency for Development Cooperation (Norad), KfW Development Bank, Swedish International Development Cooperation Agency (Sida), Helmsley Charitable Trust, Swedish Postkod Lottery (Postkod), Agence Française pour le Développement, Madagascar National Parks.

From charcoal producers to organic pepper farmers

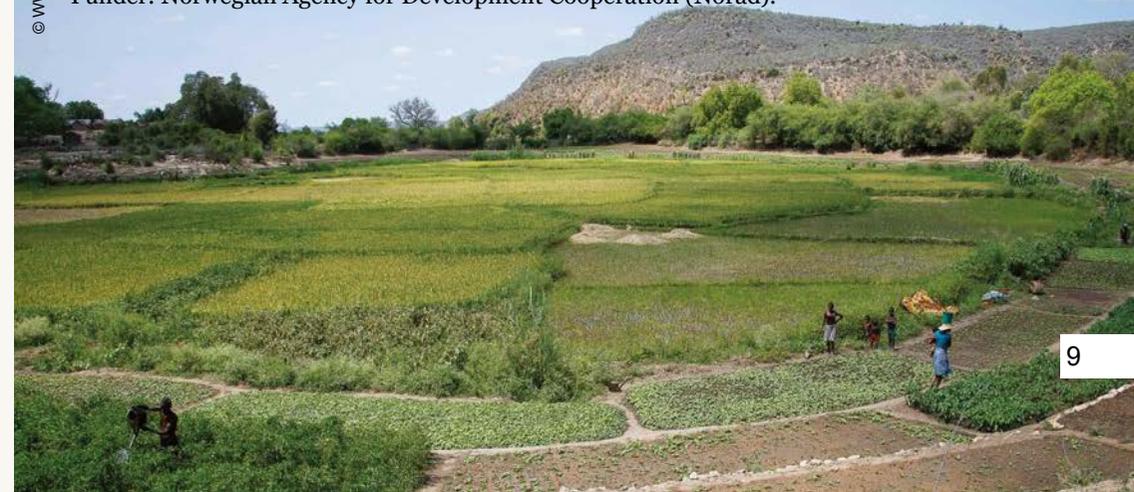


Damo Radison began to grow peppers in 2012, after receiving training supported by WWF in the Mahafaly Plateau. He has 8 children and is 41 years old. He is a member of the Soamanampy community in the Amoron'I Onilahy protected area, which is located in the southwest of Madagascar. He is one of many villagers who have abandoned charcoal production and dedicated themselves to agriculture.

According to Radison, "the community always raises awareness in the villages about the negative impact of setting fires and cutting down trees, not to mention that there are patrols that seek out and punish those who cut down trees. But the thing that will save our forest and that will decrease the production of charcoal in our area, it's peppers!" He elaborated that 50 kg of peppers bring in 15,000 ariary, whereas a bag of charcoal goes for only about 4,000 ariary.

Thanks to the peppers, Rafidison's young kids can now go to school. It is a source of pride for him, considering that he can neither read nor write. What's more, the future seems bright because his oldest sons already have their own plots of peppers. The members of the Soamanampy community, like Rafidison, are models of ecological and economic success, and they are already teaching courses about the cultivation of peppers and providing seeds to anyone who wants to achieve economic success through this occupation.

Funder: Norwegian Agency for Development Cooperation (Norad).



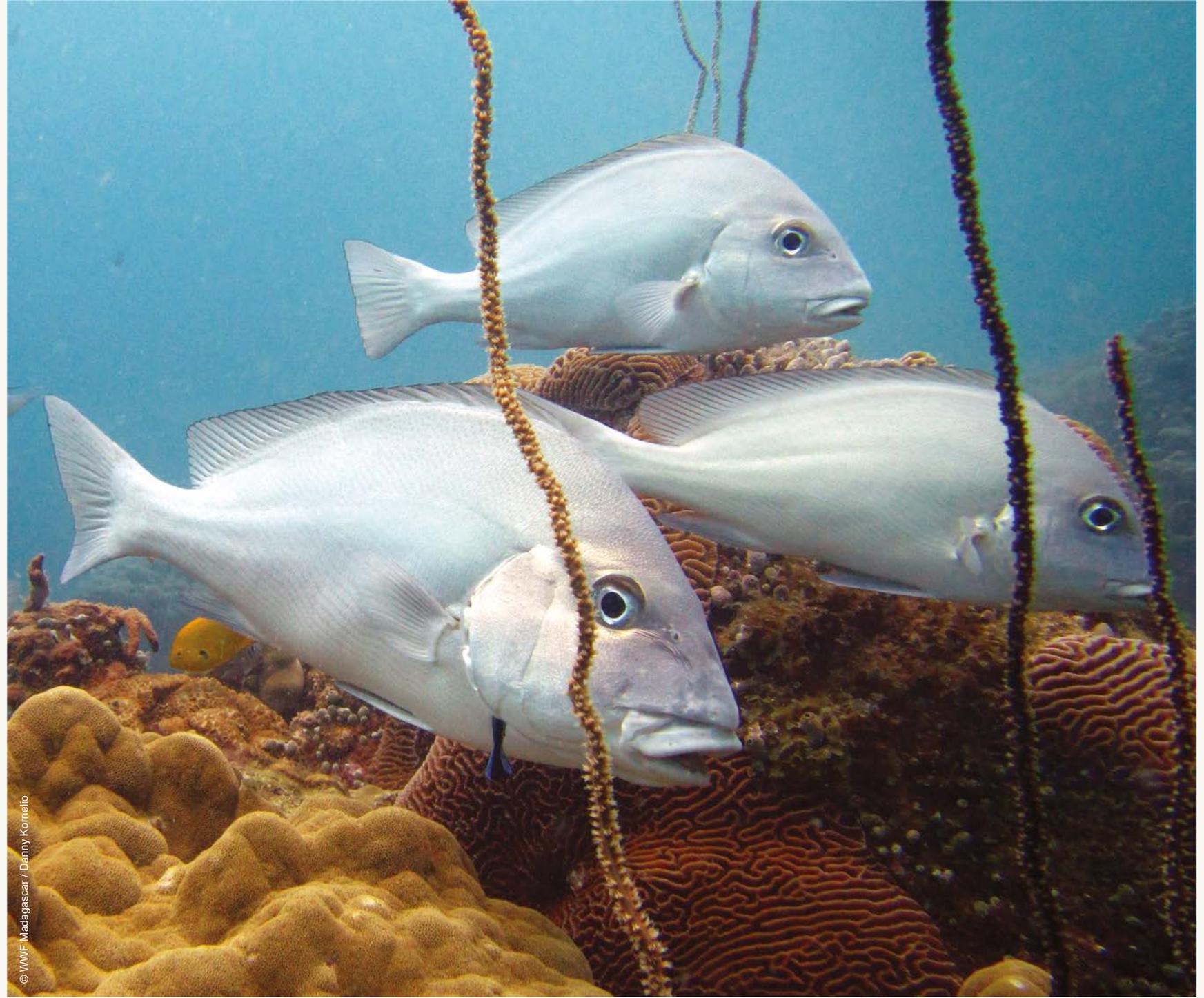
© WWF Madagascar

OCEANS

Madagascar is home to some of the largest, most beautiful, and biologically diverse largest coral reefs in the world. Many more species of fish and birds live in its mangrove ecosystems. Oceans have long provided a source of food for Madagascar's coastal populations, and more recently have become the sites of a budding ecotourism sector. However, under-regulated use of the ocean's valuable resources has resulted in the degradation of marine ecosystems and a decline in marine animal populations.

To combat this, WWF works with local governments to establish marine protected areas in the Northern Mozambique Channel and Madagascar. WWF also works with communities to help them develop local regulation of marine resources. These communities are making substantial progress in reforesting mangroves, developing ecotourism, and designating temporary fish reserves to allow marine species to reach maturity before catching them.





© WWF Madagascar / Dany Komello



After 10 years of restoration, Kaday's mangroves have returned

Since 2007, the restoration of mangroves has been one of the key conservation actions carried out by WWF Madagascar in the Manambolo Tsiribihina landscape. From 2011 onwards, annual planting campaigns have been carried out with local communities and youth. The numbers speak for themselves: more than 2 million mangroves have been planted since 2007, reforesting over 330 ha of land.

At the Andranokaolo site near the village of Kaday, 119 km to the north-west of Morondava, 340 ha of mangroves have been restored in 10 years. Additionally, 1000 ha of mangroves have regenerated naturally following the plantings, some even outside the zone of restoration.

Satellite images from Google Earth taken in 2004, before the restoration led by WWF, show a totally barren landscape. In images from 2007, after the beginning of the restoration, we can see the new mangroves growing, and by 2017 the degraded area is completely covered with mangroves!

Funders: Swedish International Development Cooperation Agency (Sida), Helmsley Charitable Trust, Norwegian Agency for Development Cooperation (Norad), Swedish Postkod Lottery (Postkod).

Seaweed farming makes for happy people... and fish!

Christophe became a seaweed farmer in 2017, after training under a WWF program.

People laughed at him. In the small village of Ankilimionga on the southern coast of Madagascar, most people are fishermen. However, overfishing has led to a steady decrease in the number of fish in the region. Seaweed farming presents a sustainable alternative, benefiting not only communities, but also the marine resources which they depend upon.

The method of farming is pretty simple: he ties algae onto a line, weights both ends, submerges the line and waits. Today, Christophe cares for 120 lines of seaweed, which he harvests 2 to 3 times per month. The harvested seaweed is sold to the Ocean Farmers Society, which exports it to countries around the world.

In 2017, 136 households, of which 37 were in Ankilimionga, adopted this activity which is loved by people and fish alike!

Funder: Norwegian Agency for Development Cooperation (Norad).





The resources in the Western Indian Ocean are estimated at 333.8 billion dollars!

333.8 billion dollars. That is the estimated total of marine assets in the Western Indian Ocean as evaluated in the report “Relaunching the Economy of the Western Indian Ocean: Actions for a Sustainable Future,” released by WWF in January of 2017.

The Western Indian Ocean economy is the fourth-strongest in the region, ahead of those of Mozambique, Mauritius, the Seychelles, the Comoros Islands and Madagascar. In fact, the GDP of the Madagascar, estimated at 10.6 billion dollars, is around half of the gross marine product of the Western Indian Ocean, which is valued at 20.8 billion dollars.

Fish, mangroves, aquatic plants and coral reefs are among the most precious assets of the Western Indian Ocean, according to the report, which was made in collaboration with the Boston Consulting Group and CORDIO East Africa. Coastal resources and the ocean’s ability to act as a carbon sink are both vital for the well-being of communities and for the health of the Western Indian Ocean Economy.

Funder: Belvedere.

CLIMATE & ENERGY

Madagascar is one of the countries that is suffering most from the devastating effects of climate change. For people in Madagascar, climate change is not an abstract concept, but a threat upon their ability to make a living, with most people depending on farming or fishing for income and subsistence.

Moreover, climate change is severely afflicting biodiversity in Madagascar. The island is still considered a biodiversity hotspot in terms of its number of species of animals and plants. Indeed, 80% of plants and animals in Madagascar are unique to the island, and not found anywhere else on earth. However, climate change is decimating their habitat.

With this in mind, WWF has empowered local communities to lead natural resource preservation efforts in their territories. Today, community patrols take care of their own forest and marine areas, and ecological monitoring is also led by local communities. At the same time, WWF has paired with local communities to foster new agricultural and fishing techniques that are better adapted to climate change, and to help them combine their traditional activities with more sustainable means of income, such as beekeeping or ecotourism. The goal is to create both a better present and future for people, whilst also protecting the island's wonderful biodiversity.

Another challenge is improving people's access to electricity, as currently there is a lack of infrastructure in most of Madagascar. Fewer than 15% of the population has access to electricity.

Renewable energy presents a sustainable alternative, and an amazing opportunity that WWF is promoting through a solar electricity training program.





© WWF Madagascar

1000 hectares of forest are saved each year thanks to « fatana mitsity »

Did you know that each citizen of Ambilobe and the surrounding area consumes 120 kg of charcoal per year? That's around one cubic meter of wood, or 16 mangrove trees. Charcoal production for daily domestic use in the town of Ambilobe puts enormous pressure on the mangrove forests of northwestern Madagascar.

To relieve this pressure, WWF Madagascar and ADES joined forces to promote the use of «fatana mitsity» - a more fuel efficient stove - in the Ambilobe district. The objective was to reduce fuelwood consumption in the Ambaro bay. Additionally, they aimed to educate the population about sustainable consumption of forest resources.

5,880 «fatana mitsity» were sold during these three years and the results are already apparent. Families who bought the «fatana mitsity» reduced their coal consumption by 47% and their fuel consumption by 31%! According to WWF's analysis, this large-scale action saves about 1000 hectares of natural forest per year in Ambaro Bay.

Funder: Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (BMZ).



Quality honey promotes the resilience of mangroves and communities

Razeny is the president of the Matavy Entea (“beautiful to watch”) beekeepers’ group in Antanandahy, a village in the heart of the Tsiribihina delta mangroves, on the west coast of Madagascar.

Razeny is a “mpiandriake,” meaning he makes a living by fishing. But he says that overfishing and climate change have upset his main business. As a result, he adapted and began to produce honey from mangroves. He has already produced and sold 80 liters of honey.

«Beekeeping is an important part of my income. It pays for the education of my five children. I fish at sea in the morning, and I take care of my eight hives in the afternoon.»

His group now has 10 members who have been trained in beekeeping through the efforts of the FITAME (Firaisantsoan’ny Tantsaha Menabe) federation of farmers in the Menabe Region, and with the support of WWF.

Razeny and his group took part in the third «Reniala Menabe» fair in September 2017, an event that promotes the region’s economy and culture.

Razeny is also a member of the mangrove monitoring committee in his community. According to him, beekeeping and conservation are linked: «It is vital to protect our forests because if there are no more mangroves, there will be no more honey and no more beekeeping. And above all, healthy mangroves give honey of good quality and abundance.»

Funders: Swedish International Development Cooperation Agency (Sida), Helmsley Charitable Trust, Norwegian Agency for Development Cooperation (Norad).



Drinking water for the communities of the Mahafaly Plateau

Ankililaza is one of ten villages where WWF has drilled wells to provide drinking water to communities that manage natural resources in the Mahafaly Plateau. These wells allow the communities in Tsimanampetse National Park to have access to clean water.

Now, the communities have their own well and a watering trough for the animals, ensuring an adequate supply of water all year-round in the semi-arid landscape, which sees less than 550mm of rain per year. The wells are run using solar energy, and a committee elected by the villagers decides how the water is used.

A 20-liter jug of water costs 500 ariary, and is distributed thanks to a service provided by the committee. Thanks to the money earned from selling the water, the pumps can be serviced periodically.

This WWF initiative reinforces the resilience of these communities that have to deal with southwestern Madagascar's specific climate. Scientists' projections show that by 2050, the average temperature in southwestern Madagascar will have increased by 2°C during the months of December and February. This will lead to more evaporation of surface water, thus exacerbating the issue of water scarcity in the region.

Funder: Centre de Recherche et de Développement international (CRDI) Canada.



Let there be light!

Rural electrification through solar energy has spread to Madagascar.

In 2017, WWF sponsored eight women—four from the village of Andranomilo in the Northern Highlands and four from Ambakivao in the Manambolo Tsiribihina region. They traveled to India and successfully completed a six-month training course taught by the Barefoot College NGO to become “Female Solar Engineers.”

And then there was light in Ambakivao! Around 200 households in this small village, situated in the heart of the mangroves on the west coast of Madagascar, have been illuminated both inside and outside since the beginning of December 2017.

Electrification is also happening in Andronomilolo, which will be equally equipped by the end of 2018.

This initiative is now entering the national spotlight with the proposed opening of a training center for female solar engineers in 2019. The creation of the center, which will be located in Tsiafajavona near Ambatolampy, is part of a national program directed by the Malagasy government, which hopes to train 744 women from isolated rural villages in solar technology by 2030.

Funders: Belgians and Swiss private donors, La Française des Jeux, Commission de l’Océan Indien / European Union, Indian and Malagasy governments.



© WWF Madagascar / Justin Jin

© WWF Madagascar

GOVERNANCE

Madagascar has long struggled with problems of governance, especially since the 2009 political crisis. Even today, corruption amongst government officials and a lack of law enforcement facilitates both the illegal trafficking of natural resources and the unfair and unsustainable use of land and natural capital. This corruption stands in the way of Madagascar's development.

WWF Madagascar works to build up local communities' capacities to manage natural resources in community managed areas. WWF helps to reinforce the power of community-based regulations, known as «dina,» in order to combat deforestation and other natural resource damage. Additionally, WWF creates partnerships with grassroots civil society organisations who work with the environment, and both pool resources and help them to develop enabling conditions that make their work more efficient. Through these partnerships, and by working directly with the national government to create stricter environmental regulations, WWF Madagascar hopes to support fledgling democracy and better ensure responsible governance of natural resources.







“Mahery” youth organization mobilizes Morondava to help the environment

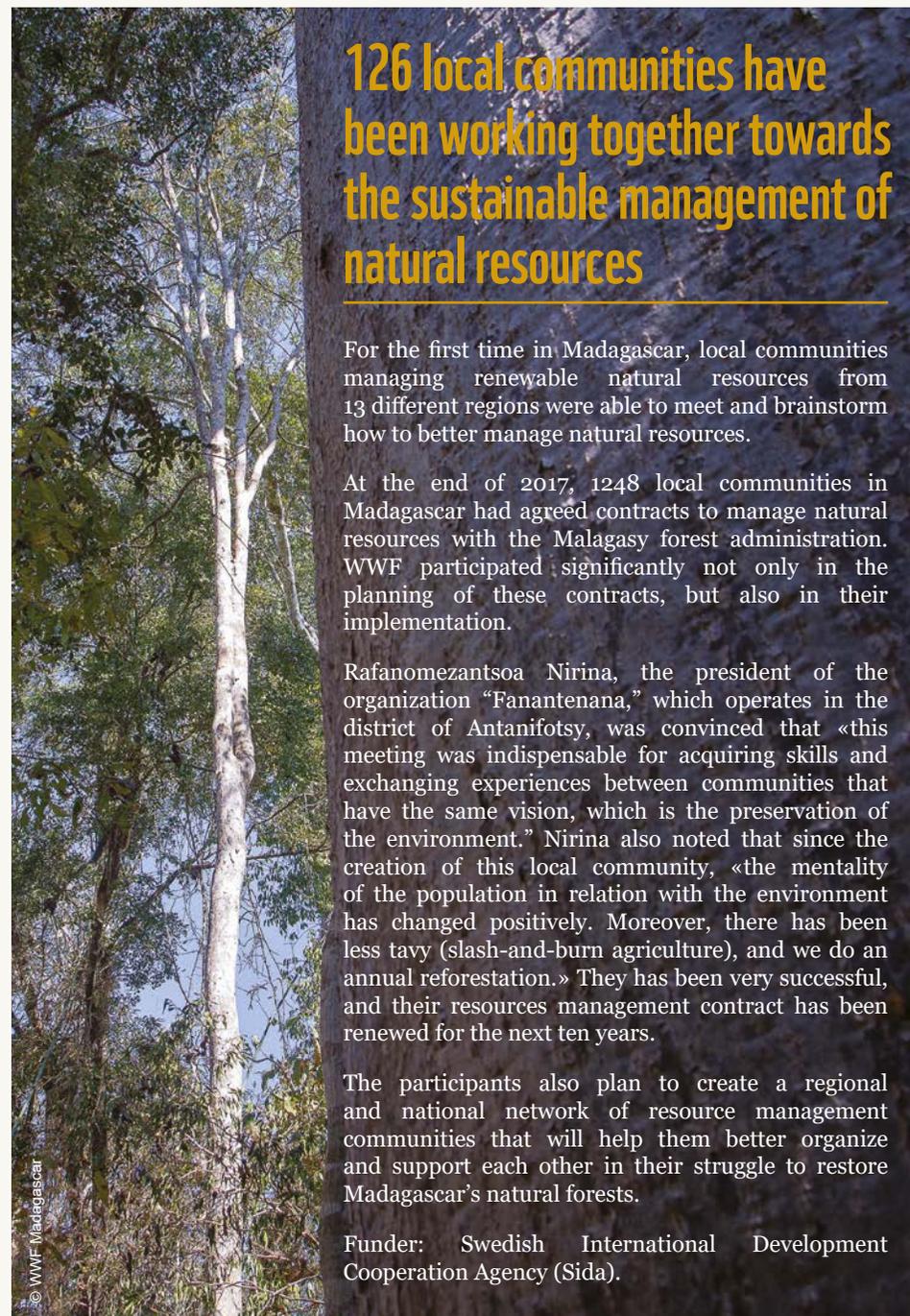
The “Mahery” (strong in Malagasy) Consortium is a federation of 11 youth organizations and associations, that unites more than 200 young people in Morondava. They campaign for the sustainable management of Menabe mangroves and good governance.

250 students from 5 different schools received lessons about these issues from their peers who were involved in the youth groups. The young people also raised awareness in the streets of Morondava.

The main objective is to increase environmental understanding among citizens, especially the youth. They must take responsibility by adopting eco-friendly actions in their everyday lives. During the school visits, trash cans were distributed along with some posters containing the key messages of “Mahery” awareness campaigns.

The headmaster of Lycée Pole Morondava announced that the regional Club Vintsy (a youth club that helps to protect the environment) wanted to join the consortium. He hopes that partnerships between the groups will continue.

Funder: Swedish International Development Cooperation Agency (Sida).



126 local communities have been working together towards the sustainable management of natural resources

For the first time in Madagascar, local communities managing renewable natural resources from 13 different regions were able to meet and brainstorm how to better manage natural resources.

At the end of 2017, 1248 local communities in Madagascar had agreed contracts to manage natural resources with the Malagasy forest administration. WWF participated significantly not only in the planning of these contracts, but also in their implementation.

Rafanomezantsoa Nirina, the president of the organization “Fanantenana,” which operates in the district of Antanifotsy, was convinced that «this meeting was indispensable for acquiring skills and exchanging experiences between communities that have the same vision, which is the preservation of the environment.” Nirina also noted that since the creation of this local community, «the mentality of the population in relation with the environment has changed positively. Moreover, there has been less tavy (slash-and-burn agriculture), and we do an annual reforestation.» They has been very successful, and their resources management contract has been renewed for the next ten years.

The participants also plan to create a regional and national network of resource management communities that will help them better organize and support each other in their struggle to restore Madagascar’s natural forests.

Funder: Swedish International Development Cooperation Agency (Sida).

Six countries working together towards the conservation of the Western Indian Ocean

2017 was marked by the first UN Ocean Conference. WWF supported the countries in the Northern Mozambique Channel (notably Mozambique, Madagascar, the Seychelles and Tanzania) as they fleshed out a plan for volunteer engagement in order to work towards UN Sustainable Development Goal 14, which aspires to the sustainable management of oceans and their natural resources.

To cement the progress made during the conference, WWF and CORDIO helped the governments of Mozambique, Madagascar, the Seychelles, France, the Comoros and Tanzania in creating a roadmap for the collaborative and sustainable management of the Western Indian Ocean.

Establishing fishing management plans for key shared fish stocks such as tuna, promoting improved governance through delineating and planning maritime spaces, and tackling the risks posed by pollution and climate change are the major steps proposed in the plan.

Funder: Sida (Swedish International Development Cooperation Agency).



National laws concerning bioenergy and fuelwood energy are in the works

The draft of a national bioenergy law and a specific decree about fuelwood energy, written by an inter-ministry committee that was supported by WWF, have been finalized and shared in 2017 for feedback. The law and decree are expected to pass through Parliament in 2018.

For Rina Andrianarivony, the Fuelwood & Alternatives Program Officer at WWF Madagascar, “this regulatory framework allows us, among other things, to limit the exploitation of fuelwood to an amount that is sustainable for the forest.” According to him, “the country needs this law to bring up to date its authority through the means of sanctions to stop illegal production. We need a sustainable fuelwood sector for the benefit of our communities and forests.”

The development of this regulatory framework was based on WWF’s work in southwestern Madagascar. It is a pioneer region for the sustainable management of fuelwood energy.

Funders: Swiss donors.





2017 IN FIGURES



FORESTS

10



new recognized wetlands of high international importance under the Ramsar Convention.

850



hectares of degraded forests have been restored over 20 years of intervention in the COFAV forest corridor.



OCEANS

\$333.8



billion, the estimated total of marine assets in the Western Indian Ocean, according to a WWF report.

10

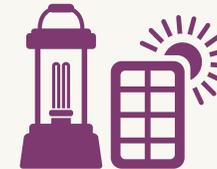


years of reforestation made a mangrove forest thrive again in the Tsiribihina delta.



CLIMATE & ENERGY

200



households in the Tsiribihina Delta mangroves are lit by solar energy.

1,000



hectares of forest were saved thanks to the adoption of nearly 6,000 energy-saving stoves which use less charcoal in northwestern Madagascar.



GOVERNANCE

126



community organizations from 13 regions of Madagascar came together to improve the sustainable management of their resources.

7,000



young people committed to eco-gestures during the «One Hour for the Earth» celebration.

FINANCIAL REPORT 2017

99% of WWF Madagascar's expenditures are directed towards projects



INCOME	2017	%
WWF sources	5 099 091	33,21%
Sources of Public Sector Financing	10 088 211	65,71%
Other direct aids	162 020	1,06%
Other income	2 789	0,02%
Total income	15 352 112	

EXPENSES	2017	%
Main Program Office Activity	167 441	1%
Project Costs	18 423 521	99%
Total of expenses	18 590 961	

SUMMARY	2017
Total revenue	15 352 112
Total expenditure	18 590 961

in thousands of MGA

in thousands of MGA

in thousands of MGA







WWF Madagascar in 2017

10

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1,000

hectares of forest are saved thanks to the adoption of nearly 6,000 energy-saving households using less charcoal in northwestern Madagascar.



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Why we are here.

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony and nature.