

IMPACT Madagascar

IMPlimenting ACTions for sustainable environmental change in Madagascar through local community-led conservation initiatives

Annual Report 2021



Cover photos (left to right): Mother & baby *Propithecus coronatus* in Mandrava forest, Madiromirafy; community reforestation event in Dabolava; *Haliaeetus vociferoides* chicks in Madiromirafy; collection of wild tree seeds and saplings for cultivation in community nurseries.

OUR MISSION

IMPACT Madagascar was born from the idea that it is not possible to protect the environment and its biodiversity without also considering the people who depend on its resources on a daily basis.

Our small team works alongside local people in order to empower communities, running community-led programs and coaching practical conservation skills that are sustainable for both people and the environment.

Since its foundation in 2014, IMPACT Madagascar has been working with local communities to alleviate poverty and provide achievable and sustainable environmental protection using a holistic approach that includes:

Community development & community conservation

Environmental outreach & practical environmental education

Forest & wetlands biodiversity & habitat monitoring

Reforestation & ecological restoration

Community health

Scientific research



Crowned sifaka mother & baby in Mandrava forest.



VOI member during World Lemur Day parade (Maevatanana, Oct. 2021)

CONTENTS

Introduction from Co-Founder, Josia Razafindramanana, PhD	1
Map of Project Sites	2
Target Species for Our Conservation Actions	3
<i>Summaries Of Site Activities:</i>	
ANKIRIHITRA SITE	4
MADIROMIRAFY SITE	6
DABOLAVA SITE	8
MAHAJEBY SITE	10
VOHITRARIVO SITE	12
2021 ANNUAL SITE TOTALS	14
<i>Other Projects:</i>	
Support for Communities Affected by the COVID-19 Pandemic	15
Wetland Conservation and Sustainable Fishing	16
Our Rangers Ran for Wildlife	17
Progress Towards Ankirihitra-Madiromirafy New Protected Area	18
Updates: Red-ruffed Lemur Translocation Project + Climate Change Mitigation Using Nature-Based Solutions	19
Financial Summary	20
Donors & Partners	21

MESSAGE FROM OUR CO-FOUNDER:

Josia Razafindramanana, PhD

2021 was another challenging year as everyone around the world navigated the second year of the COVID-19 pandemic. Madagascar was affected by the continued loss of tourism and the economic challenges that this brought. In addition, Madagascar was also hit especially hard by the effects of the current climate crisis: extreme weather conditions, drought and the resulting food shortages in the south, intense rain and flooding in the northwest... In 2021, we at IMPACT Madagascar focused on climate change mitigation at the local level and supported communities more than ever before, offering effective solutions to these drastic changes and difficulties.

We also supported biodiversity more than ever. As more people had no choice but to rely on natural resources, leading to the increased frequency of habitat threats and overexploitation, our role in protecting wildlife became even more imperative. We amplified our environmental surveillance activities, boosting the amount and intensity of wildlife patrols across our sites. In tandem, we also significantly improved the community livelihood activities, providing sustainable sources of income and responding to the changing climate.

2021 was also special because we reinforced our nature-based solutions approach and have already achieved remarkable progress in ecosystem restoration and tree seedlings production. Additionally, the creation of the New Protected Area for the rare remaining dry gallery forests and its surrounding wetlands has been well supported by authorities at the community, local, regional, and national levels.

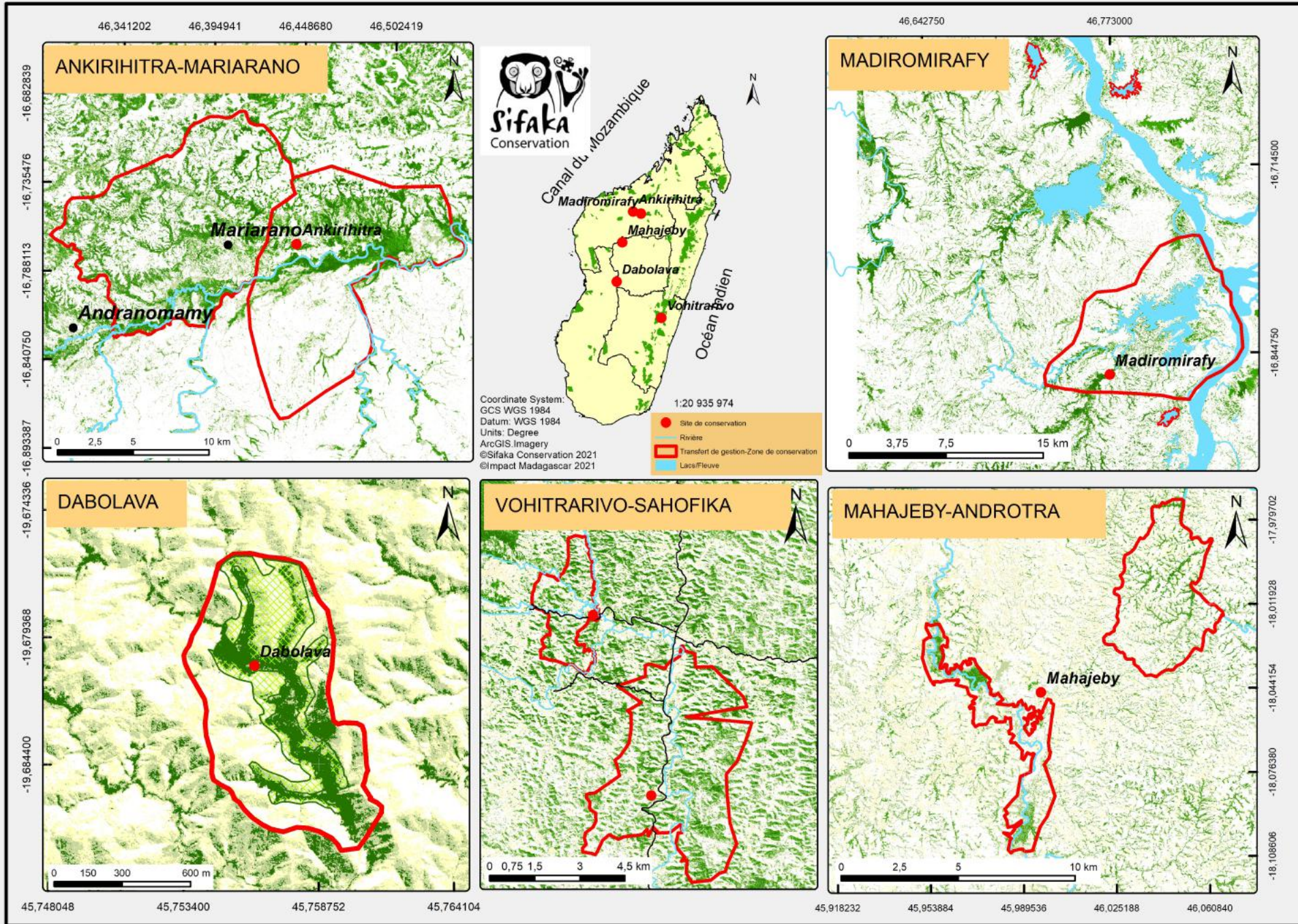
We are thankful to our supporters and donors for believing in what we are doing and for their continuous support and valuable advice. All these collaborative efforts will certainly bring positive change to communities and wildlife alike.



A handwritten signature in black ink that reads "Josia Razafindramanana". The signature is fluid and cursive, with a long horizontal stroke at the end.

Josia Razafindramanana, PhD
Co-founder & member of Board of Directors

LOCATION OF OUR PROJECT SITES



TARGET SPECIES FOR OUR CONSERVATION ACTIONS

These species are all classified as Critically Endangered (CR) by the IUCN Red List. They are particularly vulnerable and are at great risk of extinction. For the species below it is indicated at which of our five project sites they are found.



Mongoose lemur
(*Eulemur mongoz*) CR
Found at: Ankirihitra, Madiromirafy



Crowned sifaka
(*Propithecus coronatus*) CR
Found at: Ankirihitra, Dabolava,
Madiromirafy, Mahajeby



Greater bamboo lemur
(*Prolemur simus*) CR
Found at: Vohitrarivo



Madagascar fish eagle
(*Haliaeetus vociferoides*) CR
Found at: Ankirihitra, Madiromirafy



Damba cichlid fish
(*Paretroplus maculatus*) CR
Found at: Madiromirafy



Madagascar big-headed turtle
(*Erymnochelys madagascariensis*) CR
Found at: Ankirihitra, Madiromirafy, Mahajeby

ANKIRIHITRA SITE



The municipality (*commune rurale*) of Ankirihitra is found in the Boeny region of Madagascar. In this rural area of northwestern Madagascar our conservation activities are focused in the villages of Ankirihitra, Mariarano, Belaingo, Andranomamy, and Antorolava and the habitats surrounding them. This site is home to an exceptional amount of biodiversity and is well known at the national level for its large expanse of dry and gallery forests. These forests are some of the last remaining fragments of these habitats types in the country. Additionally these forests are home to numerous threatened and endemic species, including four lemur species. This site makes up part of the New Protected Area (NAP) that we are establishing and its remarkable species richness is one of the reasons it is so important to protect. This environment also provides vital ecosystem services to local communities who actively participate in its conservation and sustainable natural resource management through getting involved in community-based conservation associations (VOIs).

Wildlife rangers carried out patrols 5 days a week, resulting in 254 days of patrols

Patrols have proved to be an effective method of monitoring and controlling habitat threats. The most prevalent habitat threats in Ankirihitra are bushfire outbreaks and illegal logging, which both cause significant damage to the forests. In 2021, we observed an overall 32% increase in the occurrence of threats recorded in Ankirihitra. These threats were particularly linked to bushfire and burnt trees due to severe drought and high temperatures in the area, which are some of the most severe impacts climate change has on our conservation efforts.

However, through the increase in patrols, the threats have been stopped and managed on time. This was facilitated through our project supported by IUCN Save our Species and co-funded by the European Union (*read more about this project on page 15*). Prior to 2020, the trends of threat occurrence and abundance have significantly decreased.



A student from Mariarano plants a sapling



VOI members watering seedlings in labohazo



Transport of saplings to Ambalavato Mariano



Community reforestation event

35,000 tree seedlings produced in the community nursery

These seedlings were made up of 14 different tree species. 28,000 seedlings were planted by 879 people, including students, VOI members, patrollers, authorities, and local residents. A total of 10 hectares was restored.

Two awareness-raising sessions attended by at least 200 local people were carried out related to the prevention and the fight against bushfires. This is a serious threat in this area, especially during the dry season and our community rangers worked hard to fight bushfires in the forests.

After scoring highly on the evaluation conducted by DIREDD Boeny Betsiboka, the Voavonjy Ankirihitra COBA was renewed for another 10 years! 10 more years of working hard to sustainably manage the natural resources of Ankirihitra.



Community members making rocket stoves



Environmental education class at the Ankirihitra primary school

Practical conservation education program carried out for households and students

Through our practical conservation education program, 8 local people were trained and they produced 100 fuel-efficient stoves within a month period. Environmental education was taught at two local schools.



Mongoose lemur couple (*Eulemur mongoz* CR)



Infant crowned sifaka and mother (*Propithecus coronatus* CR)

In the labohazo forest, at least 10 newborn crowned sifakas were observed

This site is home to three diurnal lemur species: *Propithecus coronatus* CR, *Eulemur mongoz* CR, and *Eulemur rufus* VU.

526 beneficiaries took part in sustainable livelihood activities

These activities included: market gardening, irrigated rice cultivation, and poultry farming. Our team also investigated the possibility of introducing beekeeping as a new activity for 2022 and as requested by local communities.

Beneficiaries of the rice cultivation program produced 15.3 tonnes of rice, of which 6% was sold, 39% was consumed by the beneficiaries and their families, 2% was stored for next season's seeds, and 53% was stored for future use.

Beneficiaries of market gardening activities produced a total of 28 kg of cucumber, 119 kg of zucchini, and 783 kg of leafy greens (from 5 varieties: anamalaho, ramirebaka, tissame, petsai). These beneficiaries sold all their products at local markets.



A beneficiary looking after her ducks

MADIROMIRAFY SITE



The Madiromirafy site makes up the second half of the NAP that we are in the process of establishing. This site is found in the region of Betsiboka and if it becomes a formally protected area it will be the first in this region. This site is made up of two distinct ecosystems: the Mandrava dry and gallery forest and a vast system of wetlands and lakes. These wetlands are home to numerous species of water birds, aquatic reptiles, and fish in addition to providing resources to local people and acting as a vital source of water. The forest is also an important reserve for numerous critically endangered and threatened endemic species. Our activities are focused in the villages of Madiromirafy, Anjiakely, Ambalasarana, Anosibe, Ambodimadiro, and Marosakoa.

290 days of patrols were carried out in the forest and wetlands

Each month forest patrollers (*polisin'ala*) covered about 56 km and wetlands patrollers (*polisin-drano*) covered 630 hectares. Two new wetland patrollers joined the team.

The biggest threats were the use of illegal fishing gear and the destruction of riverbanks through land clearance for agriculture in the wetlands. In the forest, the most prevalent threats were slash-and-burn agriculture (*tavy*), charcoal making, and illegal and selective logging in the forest. Charcoal production has been reduced by 37% compared to 2020 (27 down to 17), and logging was significantly reduced by up to 58% during the last two years. The frequent forest and wetland patrols helped to reduce the occurrence of these threats.



Community nursery of fast growing tree species



Tree planting by the women's association



Forest rangers during a patrol



Wetland rangers patrolling Lake Madiromirafy

50,400 tree seedlings were produced

More than 17,400 were planted to restore 10 hectares of degraded land during the community tree planting days. Since 2018, the number of seedlings produced has increased each year.



Community reforestation event with VOI members

VOI AINA Madiromirafy contract renewed for 10 more years

VOI AINA had a successful final evaluation and they can continue their natural resource management activities. 252 new VOI members joined, almost doubling the total number of members, resulting in a total of 549 local people now involved in community-conservation activities.



At least 8 lemurs born in 2021 in the Mandrava forest

30 groups of crowned sifaka were observed, made up of 152 individuals, including 5 babies. One group of *Eulemur rufus* was also observed with 6 adults and 3 babies.



Distribution of ducks to beneficiaries for poultry farming

Top left: Water birds observed during wetland monitoring. Top right: *P. coronatus* individuals in the Mandrava forest. Bottom left: *H. vociferoides* chicks. Bottom right: *E. rufus* mother and baby observed during lemur survey

New protection given to a sacred nesting island for endemic water birds on Lake Madiromirafy

An agreement was made between IMPACT Madagascar and the *fokonolona* (the village council) to protect these important nesting places.

During a wetland inventory, 26 aquatic bird species were found on Lake Anjikely, 19 species found at the lakes of Marosakoa, and 9 species on the lakes of Ambodimadiro.

Two *Haliaeetus vociferoides* chicks were born!

Our team set up a camera trap above the nest and were able to capture footage of the two chicks. Madagascar fish eagles are the biggest raptors in the country and are critically endangered; these births are exciting news for this species.

Impressive yields from sustainable livelihood activities carried out by 701 beneficiaries

In 2021, there were 701 beneficiaries of livelihood generating activities including market gardening and vegetable farming, rice cultivation, poultry farming, and two new activities that were introduced this year: beekeeping and peanut farming.

These beneficiaries successfully produced a total of 69.64 tonnes of corn, 7.51 tonnes of rainfed rice, and 9.38 tonnes of peanuts. Market gardening activities were also successful and beneficiaries produced 2,439 kg of leafy greens (5 varieties), 22 kg of eggplant, 432 kg of cucumbers, 417 kg of zucchini, 59 kg of onions; 45 kg of cabbage, 1,011 kg of tomatoes, 5 kg of carrots.



A beneficiary spraying insecticide on his peanut and maize crops



Rainfed rice paddy of a beneficiaries

DABOLAVA SITE



The Dabolava project site is located in the central highlands of western Madagascar, in the region of Menabe. The Amboloando forest, the dry deciduous forest of Dabolava, is the most southerly known distribution range of the crowned sifaka, as discovered back in 2010. This site is also home to many other endemic flora and fauna species, including reptiles, birds, micromammals, and plant species that are found nowhere else.

15,750 seedlings were produced in the community nursery

13,200 of these seedlings were planted on about 6 hectares of degraded land. 735 community members participated in the reforestation campaign, including village leaders, VOI members, village council members, local authorities, students, and teachers.

In the Amboloando forest, patrols are carried out 6.5 days a week, covering an average of 80km per month

Six new rangers joined the Dabolava patrol team this year. The main threats in the forest were bushfires and the presence of people's activities (increased by 18% since 2020), namely guinea fowl traps and gold mining (increased by 10% since 2020). However, other threats were significantly reduced. In 2021, there was no charcoal burning in the vicinity of the conservation area and no illegal logging, compared to 2020 when both of these activities made up 12% of the threat occurrences each.



Community reforestation event



VOI members tending to the tree seedlings in one of the community nurseries



Propithecus coronatus individuals in the Amboloando forest

There are three groups of crowned sifaka, with 16 individuals, including one newborn

There were no lost or dead individuals during the whole year. The number of individuals has progressively risen since 2015.

The creation of a fourth additional group is necessary in order to keep the populations stable and to improve genetic diversity.

2,860 local people attended awareness raising sessions focused on the importance of reforestation and fighting bushfires

Firebreaks were established to protect the forest from spreading bushfires. Dabolava rangers reinforced a 7.5km strip and constructed a new firebreak around the area (with a total of 15 km). With this construction as well as daily monitoring of habitat threats, they successfully prevented fire from entering the conservation area for all of 2021.

The conservation area was increased from 60ha to 95ha. This increase in land area will provide a larger restoration area and more protected habitat for the crowned sifaka.

VOI RIANALA's contract for the community management of renewable natural resources was renewed for another six years.

There are a total of 130 VOI members, with 45 newly joined in 2021



Capacity building session for VOI members



Rangers constructing firebreaks around the conservation area



Dabolava wildlife rangers in uniform



A beneficiary with his successful corn crops

A total of 339 beneficiaries were involved in five livelihood programs

These programs included rainfed and irrigated rice cultivation, corn farming, market gardening, and poultry farming. 70 beneficiaries also signed up for pig farming which is a new activity that will launch in 2022.

These beneficiaries produced:

- 72.87 tonnes of rice cultivating 27.76 hectares of land
- 19.47 tonnes of corn on 14.25 ha of land
- 2,813.5 kg of dark leafy greens (5 varieties), 424 kg of lettuce, 92.5 kg of cabbage
- 767 kg of cucumber, 640 kg of zucchini, 150 kg of onions, 2023.5 kg of tomatoes
- 52 beneficiaries also raised ducks which had a 73% survival rate. These ducks were vaccinated which helped to prevent disease and keep them healthy.

MAHAJEBY SITE



The Mahajeby project site is located in region Bongolava in central-western Madagascar. We implement conservation activities in four villages at this site: Mahajeby, Kamolandy, Ambohimena, and Sahatampoka. This site is home to several fragments of dry deciduous and gallery forests, as well as important wetlands and rivers. These ecosystems host a variety of endemic and threatened taxa, which the local community conservation associations work hard to protect.

80,326 tree seedlings produced in the Mahajeby nursery! 46,812 of these seedlings were planted in the forests by 650 community members, reforesting and restoring 25 hectares of land.

397 community members participated in two awareness raising sessions that focused on bushfire control, reforestation and restoration.

18 groups of crowned sifaka, made up of 80 individuals were closely monitored in 2021, with 11 newborns.



Two wildlife rangers during a patrol

There are 3 groups of patrollers who surveil different forest fragments in this area each week and together they carry out patrols 7 days per week. Altogether, **these rangers carried out a total of 1,008 patrols!** This environmental surveillance was carried out by 22 patrollers. Of these patrollers, 12 joined in 2021. Each month, these patrollers covered 80 to 100 hectares of land in during their environmental surveillance.

There were **147 new VOI members**, making the total 303 members.



The mayor of Mahajeby planting a tree sapling during the community reforestation event



VOI members with their tools before a community tree planting day

The habitat threats most frequently encountered by forest patrollers were the spreading of bushfire, logging, and livestock grazing in the conservation and restoration areas. A significant decrease (23%) of logging was observed between January to December 2021 (52 occurrences vs. 12).

This year, an inventory was conducted for the first time in the wetlands of Mahajeby

Our wetland specialist discovered that there are 13 species of water birds, 4 species of aquatic reptiles, and 6 species of fish in this area. Next year we plan to carry out an intensive biodiversity survey of these wetlands to assess and establish conservation measures specifically focused on this important ecosystem.



Mahajeby wetlands



Mahajeby rangers in the wetlands

2021's livelihood activities included market gardening, rainfed rice cultivation, and duck farming and a total of 427 beneficiaries took part

They produced 121.17 tonnes of rice on 46.13 ha of land.

Market gardening activities were also very successful and they produced:

- 19.77 tonnes of leafy greens (5 varieties)
- 2,757 kg of carrots
- 1,416 kg of green beans
- 369 kg of peppers
- 4.7 tonnes of cabbage
- 1,327 kg of cauliflower
- 2057 kg of cucumber
- 3975 kg of zucchini
- 588 kg of onions
- 197 kg of leeks
- 3350 kg of tomatoes



Beneficiary with her vegetable garden

With the crops they produce, market gardening beneficiaries sold them in local and regional markets (66% of total crops) or consumed them in their household (34%).

Successful development of embroidery as new livelihood program

Women of Mahajeby joined a trial to start embroidery as a livelihood activity. There were a total of 31 women who joined and were given materials for embroidering. They made beautiful and intricate designs on tapestries, clothes, and more, embroidering using different methods.



A Mahajeby woman working on her embroidery

VOHITRARIVO SITE



Vohitrarivo is our southernmost project site and the only one that is located in the southeastern part of Madagascar. This site is in the region Vatovavy on the southeastern edge of Ranomafana National Park. Our activities are focused in the villages of Vohitrarivo, Sahofika, Ambodimanga, Ambohipo and Ambodigoavy. At this site, we are partnered with the organization Help Simus whose activities concentrate on the conservation of the critically endangered greater bamboo lemur (*Prolemur simus*). Together we carry out activities focused on the protection of this species and its habitat, as well as supporting the surrounding local communities.

22,089 seedlings were produced in community nurseries and 10,740 seedlings were planted during reforestation events

1,172 people participated, including students, VOI and community members. These seedlings were made up of 32 native forest species whose seeds were collected locally from the forest. These community forest restoration activities covered about 3 ha of previously degraded land with seedlings.

1,382 people attended two awareness raising sessions that focused on the importance of community reforestation and ecological restoration



Market gardening beneficiary with her successful garden



Pond of a beneficiary where they raise their fish



Renewal ceremony for VOI MIARADIA and VOI SAMIVAR

49 rangers carried out patrols 5-6 days a week resulting in a total of 288 patrols this year in the forest, covering 1448 km in total

There are three VOIs at this site: VOI MANIRISOA, VOI MIARADIA, and VOI SAMIVAR, the latter two of which were officially renewed in 2021. There were 46 new members in 2021, which makes a total of 546 people working together for community conservation.

There was a combined total of 1,437 beneficiaries for all livelihood activities

These beneficiaries came from all the villages that make up the Vohitrarivo site. Activities included rice cultivation, bean farming, fish farming, and market gardening.

These beneficiaries produced:

- 38.6 tonnes of rice and cultivated 9.75 ha
- 3.96 tonnes of dry beans produced on 6.76 ha
- 34.1 tonnes of dark leafy greens (5 varieties)
- 730 kg of lettuce
- 171 kg of angivy
- 924 kg of carrots
- 479 kg of cucumber
- 1310 kg of zucchini
- 6214 kg of cabbage
- 5 kg of green beans
- 19 kg of tomatoes

69% of their products were used in beneficiaries' household and 31% were sold in local and regional markets.



A beneficiary with her thriving green bean plants



Beneficiaries with agricultural equipment and materials

The fish that beneficiaries raised had an average of 98.12% survival rate. Beneficiaries and their families consumed 14% of their fish and they sold 86% at local markets.

At five local schools, students participated in taking care of their own school vegetable gardens

A lead gardener came to each school to train and support the groups of students in their gardening. After training sessions, the students participated in taking care of the gardens.

These schools produced 69 kg of carrots, 25 cabbages, 2 kg of zucchini, 8 kg of eggplant, 6 kg of green beans and a variety of leafy greens including 28 bunches of ananandrano, 8 kg of ravim-boatavo, 353 bunches of petsai, and 116 bunches of ramirebaka. All the vegetables they grew were used in the school canteen for students' meals.

Additionally, initial steps were taken to develop a vanilla cultivation program which we aim to have in action in 2022.

2021 ANNUAL TOTALS *for all sites*

203,565 seedlings produced at on-site nurseries

154,986 seedlings planted in community reforestation events

4,423 community members helped plant tree saplings

54 hectares of land restored and/or reforested

423 crowned sifaka individuals surveyed, including **30** newborns

10 VOIs in total made up of **2,348** VOI members, with **566** new members joined in 2021

1,535 days of patrols carried out in the forests and wetlands by **131** wildlife rangers

4,397 hectares of land covered on average per month during patrols across our sites

3,430 beneficiaries of **8** types of income-generating activities

255.45 tonnes of rice produced by beneficiaries

89.11 tonnes of corn

9.38 tonnes of peanuts

3.96 tonnes of dry beans

95.24 tonnes of vegetable and fruit produced by market gardening beneficiaries:

59.91 tonnes of leafy greens

11.1 tonnes of cabbage

3.76 tonnes of cucumber

6.46 tonnes of zucchini

6.4 tonnes of tomatoes

3.7 tonnes of carrots

1.42 tonnes of green beans

1.33 tonnes of cauliflower

1.15 tonnes of lettuce

797 kg of onions

369 kg of peppers

197 kg of leeks

171 kg of angivy

22 kg of eggplant

SUPPORT FOR COMMUNITIES AFFECTED BY THE COVID-19 PANDEMIC

Project supported by the IUCN Save Our Species Initiative and co-funded by the European Union

At the end of June 2021, the IUCN Save our Species initiative and the European Union began to support our activities to provide **support to rural communities affected by the COVID-19 pandemic**. Due to the loss of revenue and the economic impacts caused by the pandemic, many people struggled with earning livelihoods and providing for themselves and their families. Additionally, this resulted in increased pressure on natural resources and a rise in the exploitation of wildlife.

The specific program focuses on **ensuring the protection of Madagascar's wildlife while also providing for communities**, and is supported by the [IUCN Save Our Species](#) initiative and co-funded by the [European Union](#).

Activities are carried out in the regions of Boeny and Betsiboka at our Ankirihitra and Madiromirafy sites. **Both of these sites host an incredible array of biodiversity including five species classified as Critically Endangered** by the IUCN Red List. These species are among this project's targets for wildlife conservation and protection. They include: crowned sifaka (*Propithecus coronatus*), mongoose lemur (*Eulemur mongoz*), Madagascar big-headed turtle (*Erymnochelys madagascariensis*), Madagascar fish eagle (*Haliaeetus vociferoides*), and damba cichlid fish (*Paretroplus maculatus*). There are numerous other at-risk species in this area that are in dire need of immediate protection before their already small populations shrink even more. Through this project, **we take action to combat threats using sustainable and effective methods**.

One part of this project aims at **increasing environmental protection through wildlife monitoring**. For the first 6 months of this project (the second half of 2021) there have been 532 patrol days in the forests and wetlands carried out by 60 community rangers. This is a **131% increase from the same 6-month period in 2020**. During patrols rangers also work to extinguish bushfires, which are quick spreading and frequently occur during the dry season.

The other part of this project works to tackle the root of habitat threats in this area by providing alternative livelihoods to help reduce reliance on natural resources. Many people cannot fulfill their basic needs and have nowhere to turn for their sustenance other than to their surroundings. The first half of this project resulted in a **56.5% increase from 2020 in the number of beneficiaries of alternative livelihood activities**. There was a total of 1,112 households who received materials for rice cultivation, vegetable farming and market gardening, and duck farming, in addition to attending trainings on effective farming techniques.

Addressing ecological issues by tackling the socio-economic needs of local people is key for a success in conservation.



Madiromirafy patrollers



Distribution of ducklings to beneficiaries for poultry farming activities



This publication was produced with the financial support of the European Union through IUCN Save Our Species. Its contents are the sole responsibility of IMPACT Madagascar and do not necessarily reflect the views of IUCN or the European Union.

WETLAND CONSERVATION AND SUSTAINABLE FISHING

Project funded by the Van Tienhoven Foundation for International Nature Conservation



In 2021, we carried out the first half of another exciting and important project; this project is supported by the Van Tienhoven Foundation for International Nature Protection. **The aim of this project is to conserve and protect threatened and endemic freshwater species found in the Madiromirafy wetlands.**

These wetlands are home to a variety of endemic and endangered species, as well as being an important source of water and food for local communities. We worked to achieve our goal by implementing a **sustainable fishing management plan and monitoring the health of the wetlands.**

Through the management plan, **382 local fishers were registered** and given proper identification badges and fishing cards. Additionally, 239 fishers from the villages of Marosakoa, Madiromirafy, Anjikely, and Ambomadiro were beneficiaries of legal and safe fishing gear, including nets and fishing line. We also carried out awareness-raising sessions about fishing regulations and sustainable use of the wetlands. These were accompanied by increased wetland patrols to ensure the regulations were being followed.

Lastly, our team, including local VOI members and our wetland specialist, conducted much needed initial biodiversity assessments of these freshwater habitats. **They counted thousands of individuals and identified 26 species of aquatic birds** (9 in Ambomadiro lakes and 19 in the Marosakoa lakes). Additionally, the pair of Madagascar fish eagles that nests next to lake Anjikely had two chicks in 2021. This species is critically endangered and these new births are important for this species' survival in this area and also its global population.

We will continue with more biodiversity surveys in 2022 and for the first time we will also be able to test the quality of the water. Using a water quality meter we will assess and monitor the water quality by measuring several parameters including Dissolved Oxygen, pH, and turbidity. We will use this data to inform future conservation actions and measures.

This project concentrates on the intersection of biodiversity conservation and human-use; it is necessary to address both for successful sustainable long-term conservation. Residents of this area rely on the wetlands for their livelihoods and our conservation efforts acknowledge this need.



Our wetland specialist examining a fishing net



Fishers with their newly issued identification badges



After the distribution of regulation fishing gear



Wetland biodiversity survey

OUR RANGERS RAN FOR WILDLIFE

Wildlife Ranger Challenge

For the second year in a row, our Mahajebby rangers participated in the Wildlife Ranger Challenge. This is a global initiative that focuses on raising awareness and funds for wildlife rangers across Africa. It gives us a chance **to acknowledge how hard they work year-round to protect wildlife and their habitats.** We were the only team from Madagascar and we were happy to represent!

This year, **two ranger teams trained together for months** to prepare for the race. Team Fosa and Team Sifaka were made up of 8 total rangers who ran the half marathon together on race day and competed with other teams across Africa. **They wore a full kit (including a 22 kg backpack) during the 21 km race and finished in 3 hours and 23 minutes!** They ran up and down hills, on dusty rocky paths, through forests, all in the dry heat and bright sun of Mahajebby. We are immensely proud of these motivated and extremely resilient individuals.

Through the Wildlife Ranger Challenge we got to celebrate these rangers' efforts as well as the efforts of the 150+ ranger teams from 19 different African countries who also took part. It is essential to support rangers and habitat patrols because they act as the first line of defense for the environment. Frequent environmental surveillance, carried out by our community rangers, has proved to be an effective method of reducing habitat threats, preventing habitat destruction, and ensuring natural resources are not being overexploited.

The funds raised by this campaign covered 60 rangers' salaries. This supports the patrolling of vulnerable habitats and endangered wildlife and also provides livelihoods for rangers and their families.

Without the essential work of these rangers we would not be able to do the work we do.



Team Fosa (Gabriel, Hita, Hery, Samuel)



Team Sifaka (Velo, Rado, Venance, François)



The two teams running the race with all their gear



Progress Towards Establishing the Ankirihitra-Madiromirafy New Protected Area

For the past few years, IMPACT Madagascar has been working to establish a new protected area (NAP - Nouvelle Aire Protégée, in French) encompassing our Ankirihitra and Madiromirafy project sites. This NAP would range across the two regions of Boeny and Betsiboka in northwest Madagascar. This proposed protected area would act to formally protect 66,224 acres of rare dry and gallery forests and wetlands. This area will be provided with much-needed protection to the endemic and threatened fauna and flora found there, some of which are found nowhere else in the country. This protection is also vital for local communities because of the myriad ecosystem services the forests and wetlands provide.

2021 has been another successful year of making progress towards establishing the Ankirihitra-Madiromirafy New Protected Area. Our main activities were:

Holding meetings and workshops with decision makers, policy makers, and authorities

In June, members of the IMPACT Madagascar team met with policy and decision makers to discuss the creation of this NAP. Attendance at this meeting included regional authorities, representatives of DIREDD Boeny Betsiboka, representatives of the central Ministry of Environment and Sustainable Development including the Minister, the Director of Cabinet, the Director of Protected Areas and Natural Resources and Ecosystems (DAPRNE), the Director General of Sustainable Development (DGSD), and technical advisors. In the end, all the political decision makers present at the meeting accepted and supported the establishment of this NAP. The Minister in particular affirmed her support and her conviction that this NAP is a necessity and has the chance to be very important in the Betsiboka and Boeny regions.



IMPACT team members with the governor of Betsiboka



Public consultation in the village of Antsohihy, Ankirihitra

Conducting public consultations with local communities

Our team visited 29 villages within 7 municipalities in the Boeny and Betsiboka regions for public consultations related to the creation of the NAP. These consultations include interviews and surveys of people, elders and local authorities with the aim of informing them about the NAP, what the benefits are, identification of concerns and/or probable impacts of the NAP, hearing their recommendations and opinions, and to gain their support and agreement in the protecting of this area.

Through each stage of this process we have received unanimous support from stakeholders including local, regional, and national government authorities and local communities. The next step in this process is to obtain a temporary protection decree, through the Protected Area commission workshop, that will protect the area while the permanent decree is processed.



Meeting in June 2021 with policy and decision makers



UPDATE: TRANSLOCATION OF RED RUFFED LEMURS IN NORTHEASTERN MADAGASCAR

Since 2018, primatologists from IMPACT Madagascar have been working on a red ruffed lemur (*Varecia rubra*) translocation project along with GERP and the NGO Antongil Conservation. Five individuals of this critically endangered species were translocated from a heavily degraded habitat in Ambolohosy, to the forests of Farankaraina Tropical Park in Maroansetra.



In 2021, our team followed the translocated individuals for 5-6 months to assess their well-being in their new environment. Through this monitoring we found that the lemurs are adjusting well to their new habitat, in a home range of approximately 20 ha. Two of the females gave birth to three babies, which shows a great success of the translocation program.



This project is also being supported by various organizations including Bioparc Zoo de Doué la Fontaine, La Palmyre Zoo and others. This translocation program has been filmed by the BBC and is part of the document film “Endangered” narrated by Ellen DeGeneres. This project is also being promoted by the Ellen Fund.

CLIMATE CHANGE MITIGATION USING NATURE-BASED SOLUTIONS



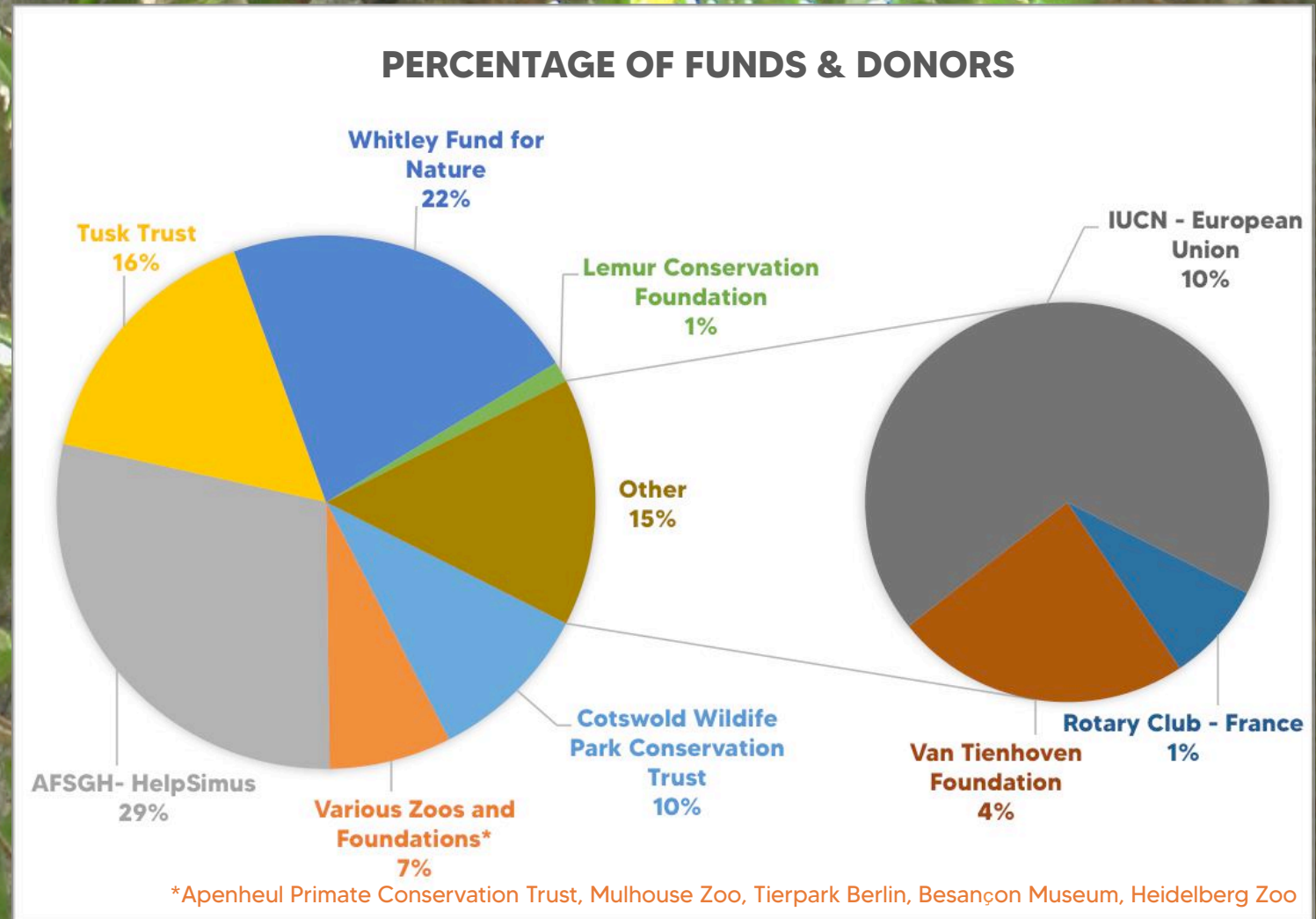
As part of our work towards climate change mitigation and adaptation strategies, we began carrying out a program focused on nature-based solutions, supported by Whitley Fund for Nature. Through this program we are increasing the use of climate resilient agriculture methods by training local people across 17 villages in northwest Madagascar. In addition, we are also providing improved irrigation systems that will allow for more food security for these communities. The program reaches 1,654 beneficiaries, all local households relying on sustainable natural resources management for their future.

Across the sites included in this program (Mahajeby, Madiromirafy and Ankirihitra and surrounding villages), we protect 40,800 hectares of dry and gallery forest and wetlands, rivers, and lakes through regular habitat patrols. We also work to carry out important ecological restoration activities. In 2021, we restored 45 hectares of land in the forests and along riverbanks as part of this program. We have also produced more than 165,000 saplings in our community-led nurseries in preparation for reforestation efforts that will take place in the near future.



FINANCIAL STATEMENT 2021

Below is a chart showing where our funding comes from based on the donors and the percentage of our total received funds.



THANK YOU VERY MUCH TO OUR DONORS & PARTNERS!

DONORS



PARTNERS





www.impactmadagascar.org



@impactmada



@impactmadagascar



@impact_mada