IMPACT MADAGASCAR

Annual Report 2018



"We've been dedicated to finding conservation strategies that are both practical for local people, and beneficial for Madagascar's precious wildlife. Together with Sifaka Conservation, see how we made a difference in Madagascar this past year."

IMPACT MADAGASCAR

GERP

Sifaka Conservation

OUR VISION

Madagascar is a land full of possibilities, with a unique and beautiful biodiversity but also with unique challenges when approaching biodiversity conservation projects. Well known by its endemic and iconic flora and fauna, Madagascar is also recognized by its high rates of poverty and deforestation.

Impact Madagascar was born from the idea that it is not possible to protect the environment without also considering the people who depend on its resources on a daily basis. Since its foundation, in 2014, Impact has been working with the people of Madagascar to provide solutions for the problems of deforestation, pollution, and poverty through a variety of projects which involves community development, biodiversity conservation and conservation education. Our small team of staff works alongside local people in order to empower the population and build capacity at the community level.

"The Sifaka Conservation Programme at Impact Madagascar aims to build a bright and sustainable future for local people and their natural resources"



OUR PROJECT:
SIFAKA CONSERVATION

The Sifaka Conservation is a program aiming to protect the remaining population of crowned sifakas (*Propithecus Coronatus*) and its habitat in the highlands and the northwestern of Madagascar, while improving the livelihoods of local communities to become less dependent on natural resources.

Through scientific research and community conservation programs, the team strives every day to protect these lemurs from threats such as habitat destruction, forest fragmentation, slash-and-burn agriculture, and illegal hunting.

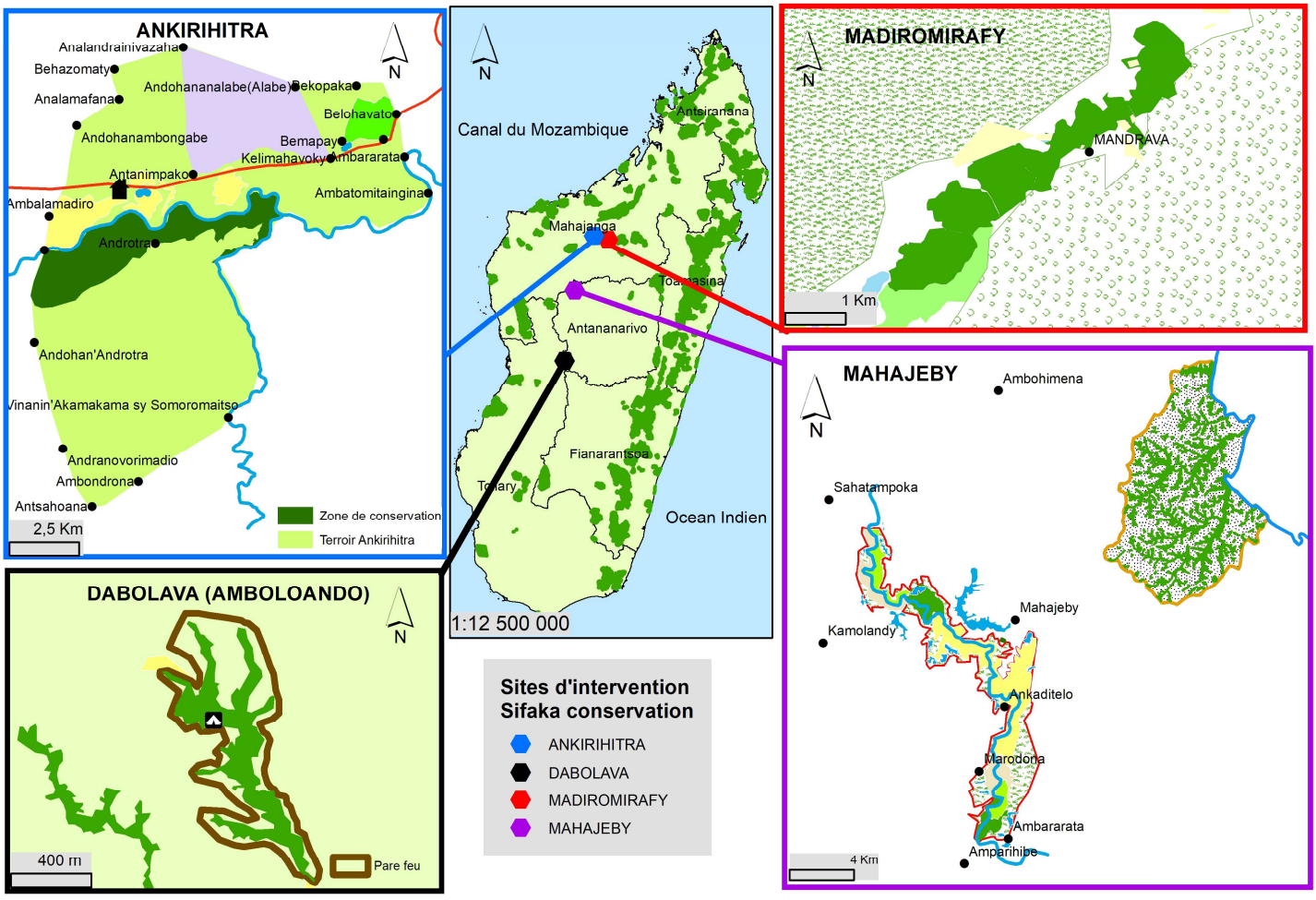
The objective of the program is two fold:

- Protect the newly discovered populations and their habitat by creating new community-managed protected areas and connect the most isolated populations by exchanging individuals between sites.

- Promote better wellbeing to local communities at the level of households through alternative livelihood and community development, in line with biodiversity conservation.



Target sites for Sifaka Conservation



MADIROMIRAFY SITE

The natural habitat of Madiromirafy is characterized by the diversity of its ecosystems, namely wetlands, lakes and rivers, the Mandrava forest gallery and the wooded savannas of western Madagascar. This habitat is particularly exceptional because of the presence of endemic and / or threatened species such as the lemur species - *Propithecus coronatus* (EN) and *Eulemur rufus* (VU) - and the bird species *Haliaeetus vociferoides* (CR), *Lophotibis cristata* (NT) and plant species such as *Adasonia* sp. Due to the outstanding biodiversity value of Mandrava gallery forest, the preservation of habitat in line with the sustainable use by local communities is highly recommended and is the main mission of the Sifaka Conservation Program.

The main activities carried out on this site in 2018 had resulted into:

- A better understanding of the ecological and social behavior of *Prophitecus coronatus* in the Mandrava gallery forest : 2 groups were followed for behavioral & ecological observations: 66.72% of their time are spent on resting, 21.35% devoted to feeding, they feed on 16 plant species: *Cynometra sakalava* is the main food source (68.48% of their feeding time). Three other plant species are essential for their feeding : *Garcinia calcicola* (8,88%), *Schisantespermum rondifolium* (6,34%), *Treculia perrieri* (4,53%). The territory of the 2 groups varies between 1.38 Ha to 2.36 Ha.

- Tree planting for forest restoration : 200 people participated in the tree planting event and planted more tan 4000 seedlings (3 Ha of restored Surface).

- Production at the tree nursery : 10,300 saplings of 6 species.

- The critical areas for bushfire were identified and firewall was installed .

- Assessment of tourism activities: The forest-lake-river network of Maevatanana-Madiromirafy-Mangabe is favorable to the tourism, presenting a great diversity: *Haliaeetus vociferoides* (Madagascan fish eagle),*Pteropus rufus* (Madagascar flying fox), a great variety of birds and forest with *Propithecus coronatus* and other lemur species.







MADIROMIRAFY SITE



- 1 school with 3 classrooms, 1 shelter and toilet facilities was constructed in the village of Anosibe to allow children from the nearby forests to benefit from education, for long-term success of conservation efforts.

- Local conservation committee (VOI): The VOI has strenghened through continuous coaching from the Sifaka Conservation team and the evaluation from time to time. The VOI has planted 3000 saplings in the reforestation area, as part of their participation in the Mandrava forest conservation programme.

- Habitat & crowned sifaka monitoring: the Mandrava gallery forest has been divided into 8 subzones, in which patrols are being conducted 4 days per week. More tan 123 individuals of crowned sifaka, spread into 25 groups were monitored. The level of threats was decreased : 5 tres were logged from the Conservation zone.

- Inventory of fish and birds: 18 species of water birds (from 7 families) were identified from the Madiromirafy wetlands. 20 species of fish (from 10 families) were inventoried from the lakes and rivers of Madiromirafy.

- Ecotourism: we launched the ecotourism programme in Mandrava forests and the use of hovercraft to facilitate the transportation of the Project staff and tourists in the area. Two groups of tourists visited the Madiromirafy wetlands and the research camp. The tourists were satisfied of the visit and has written encouraging messages in the Golden book of the VOI. Three groups of tourists are already booked to visit the area for 2019 dry season.







Preliminary behavioral ecology of crowned sifaka in gallery forests in Madagascar

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Madagascar is known for its biodiversity coupled with high anthropogenic threats across various types of habitat. More research and conservation programs are implemented in the eastern part where the rainforest is considered as part of the natural heritage, internationally recognized. It has been reported that the dry deciduous and gallery forests in the western and southern parts of the island are neglected for research and conservation. This study examines the ecology of one critically endangered lemur species, the crowned sifaka, occurring mostly in dry forests and the remaining gallery forests. The study was conducted in Mandrava gallery forests, Madiromirafy-Maevatanana, aiming to provide the first information in behavioral ecology of crowned sifaka in gallery forests in Madagascar. Data were collected during the mating season (between November and February), of which two groups of crowned sifaka were followed from 8am to 4pm every day (Group A = 4 individuals, Group B = 3 individuals). Group scan and focal animal sampling were conducted to assess the daily activity budget, the dietary and habitat use of the species in gallery forests. As a result, the feeding activity of the crowned sifaka occupies 20 % of their active time. Social interactions, mostly dominated by affiliative behavior occurs at 7.46% of their active time. Dietary is composed of fruits and seeds (45%) and leaves (31%). Food is dominated by one plant species at 61% of feeding time and four other plant species cover 28%. Crowned sifaka in gallery occupies lower height mostly below 5m.

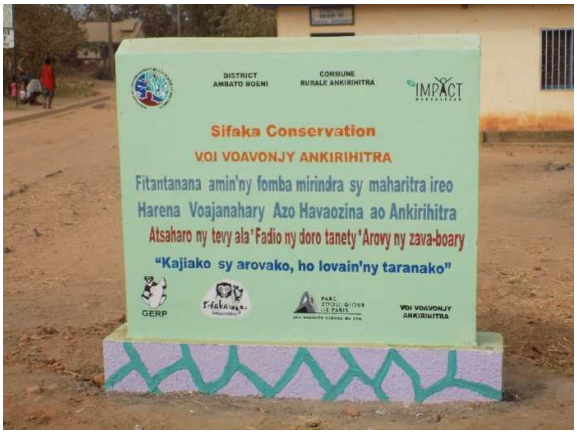
During the mating season, males and females were monitored separately. In terms of activities, males and females tend to rest for most of their time (66% for females and 67% for males). The dietary is composed of more leaves (70% for females and 67% for males) and seeds and/or fruits (31%). The mating males are more active than females. The male exhibits protective role for the chosen female in front of the other males of the group. The male stays close to the chosen female for up to 85% of the time. Females participate more in the intergroup aggression (62%) than males (38%). Contrariwise, males participate actively in intragroupe aggression (81%) than females (19%). Males practice more of markings (86%) compared to females (14%) during the mating period.

These results demonstrate the flexibility of the behavioral ecology of crowned sfiaka to cope with the remaining fragment of forests: frugivory according to food availability, use of lower habitat and small home range size. The results also present preliminary findings (unique of its own) on behavioral of crowned sifaka during the mating season. This study contributes to the little information currently known on the species and will help the ongoing Sifaka Conservation program for the remaining the crowned sifaka across the western Madagascar.



ANKIHIRITRA SITE







Impact Madagascar and Sifaka Conservation focused on five actions:

- Community-based conservation of Ankirihitra with the VOI Voavonjy and Sifaka Conservation—communicating the conservation programme with 4 board signs.

- Implementation of the Ankirihitra Conservation Management Plan

- Continuation of the forest restoration of Ankirihitra :

Tree nursery production: 8000 seedlings (from 3 main species, *Khaya madagascariensis, Albizia lebbeck, Acacia leptocarpa*) produced for forest restoration and reforestation

- Expansion of the conservation áreas through local management transfer of the natural resources: a new community-based conservation management has been started in Mariarano to extend the target area outside of Ankirihitra.

- Launching the process for the creation of "New Protected Area" in Ankirihitra: Transformation of the status of the forests under the intervention of the NGO Impact Madagascar-Sifaka Conservation in the Rural Commune of Ankirihitra. This future new protected area has been approved by the regional entities (representative of Ministry of Environment, and Municipalities), and is part of the greater regional conservation zone delineated with the Forestry Agency in Boeny Region.

- Due to insecurity problem, the survey of the crowned sifaka population was not completely achieved. Only 36 groups of crowned sifaka were monitored compared to 137 groups from Year 2017.



ANKIHIRITRA SITE

- There is a net decrease in threat presence in the forest, but still some trace of bushfire, clearing and selective logging as well as some trace of hunting were observed.

- Community development: 105 households are involved in the livelihood activities, in line with biodiversity conservation. The livelihood activities are duck farming, improved agricultura (Vegetables) and improved rice cultivation (intensive rice cultivation). Those households were coached and monitored in the implementation of the activities











MAHAJEBY SITE

Sifaka Conservation continued conservation actions and awareness raising in Mahajeby site:

- Crowned sifaka survey: from an estimated Surface of 1082 Ha, a density of 6.10 individuals per km2 was recorded (66 crowned sifaka with melanistic variation, from 14 groups), *Eulemur fulvus* and other vertebrates (Encounter rate: 60.59% of birds, 23.09% of reptiles and 2.88% of amphibians);

- Other Fauna: 36 species of birds, 10 species of reptiles and 3 species of amphibians were recorded from Mahajeby area.

- Behavioral monitoring of 2 groups of crowned sifaka.

- Massive campaign awareness sessions for villages and schoolchildren on the management of renewable natural resources: 970 people attended the event sessions

- Threats monitoring of the four forest fragments : there was an increase of observed threats in Mahajeby compared to 2017, due to the conflict within the VOI. It has been recorded : 52 selective loggings, 11 traces of bushfire, cattle pasturing in forest and bird hunting.

- The VOI has been trained about conflict resolution with regards to natural resource management and has came up with action plan to mitigate the lack of communication within the local conservation association.

- Establishment of a New Protected Natural Area: the delineation of the new protected area was completed and preliminary validation workshop was conducted

- Establishment of (i) a tree nursery for fast growing tree species (*Acacia, Eucalyptus, Melia*—5,000 saplings produced), and (ii) a tree nursery for 7 forest species (10,000 saplings produced)

- Monitoring of the VOI FIARO activities: Forest patrols carried out, four villages tree nurseries developed with 850 saplings planted already.







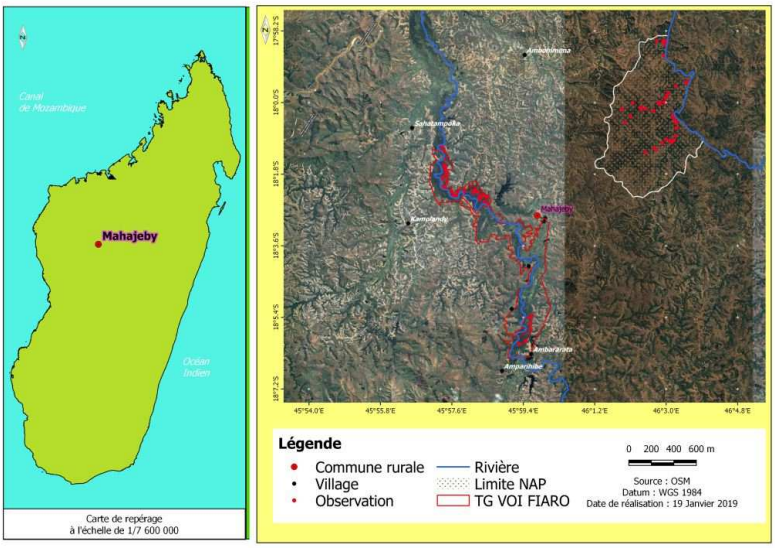


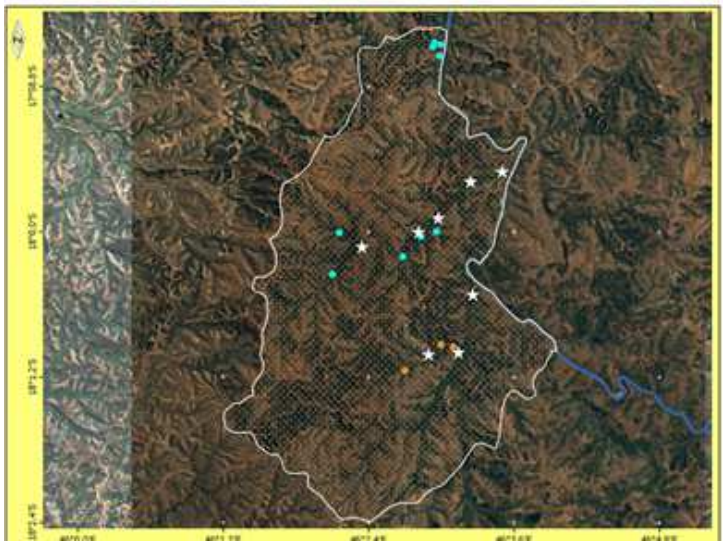


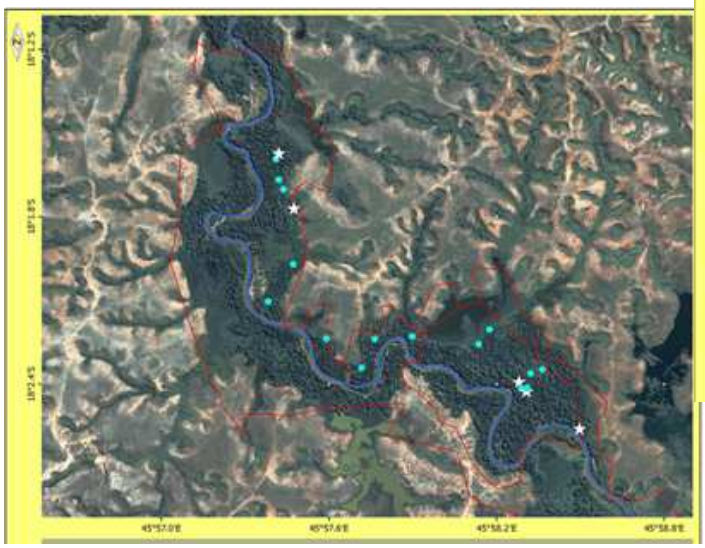
MAHAJEBY SITE

- Environmental education: 144 pupils participated in practical Environmental education. Of which 64 students participated in the Green class activities. The students established vegetable gardens, created their own tree nursery for Acacia species and have visited the forests during which, they have observed 17 species of animals. The students and children participated in this programme reported their first visit in a forest and having seen lemurs and various species of animals and plants.

- Initiating the integration of the wetland system in the conservation actions in Mahajeby: the representative of the fisheries Ministry visited Mahajeby lakes and rivers for in situ assessment.









DABOLAVA SITE

-One of the highlights in Dabolava area was the implementation of the event called "Sifaka festival" aiming to raise awareness on the importance of taking care of the environment, and conservation of endangered species. Four villages participated in this event.

During the “Sifaka festival”, a parade was held during 1.5 km to communicate to public about the sifaka, the forests and environment. 800 participants: VOI members, schoolchildren and various people from different local entities. During the two days event, 1000 to 1500 people were sensitized. The event was very well received by local communities and the villagers showed a real interest for environment and conservation.



- Community reforestation in Amboloando with the presence of elders and regional authorities. During the 3-day tree planting event, 767 people participated with a total number of 5105 planted saplings on a surface of 4 hectares. The seedlings reforested are from *Albizzia lebbeck*, *Cassia* sp, *Albizzia* sp, *Accacia mangium*, *Accacia rovumae*, *Syzigium sakalavarum*, *Melia azedarach* (a mixture of Pioneer and forest plant species).



The maintenance of the reforested area was carried out by the local technical agents, and focuses on weeding, cleaning of the savannah, preparing the saplings, replacement of dead saplings and setting mulching to avoid the strong dehydration during the dry season. The survival rate of reforestation has reached 80%.



- Practical environmental education in the 4 schools of Dabolava, with focus on the environment, hygiene, biodiversity and lemurs of Madagascar: 10 teachers and 109 students from 4 schools received theoretical training and practical activities sessions through the creation of vegetable garden.

DABOLAVA SITE

- Establishment of a firewall (6.5 km long) around reforestation areas and a dual-band firewall (5 km long) around the conservation zone to stop bushfire during the dry season.

-Participation at the “Dabolava Economy Fair” : sixty visitors visited the booth of the Sifaka Conservation. Twenty rocket stoves produced by the VOI were sold.

- Mid-term evaluation of VOI Rianala by the regional representative of the Ministry of Environment. 67% of the activities of the Dabolava management plan were carried out with good results. Some recommendations and technical advice were provided by the forestry agents.

- Awareness campaign on “fight against bushfire” in villages surrounding the Amboloando forest. 200 people were sensitized in the village of Soanafindra and Dabolava. According to the public evaluation survey, 80% of people are convinced to monitor and stop bushfire.

- Seedling production at the tree nursery for reforestation and forest restoration: 16,000 saplings from 6 forest species and 5 other exotic non-invasive species were produced

-Daily monitoring of sifaka groups and patrolling around the conservation area: The data helps to better understand the use of reforested areas by the lemurs and to monitor the ecology and adaptation of the groups in such small fragmented forest. The total number of Sifaka at Dabolava is currently 11 individuals, the composition of each group is as follows group 1: 5 individuals, group 2: 3 individuals, group 3: 3 individuals. No conflict is observed between the 3 groups throughout the year.

- The patrol officers also identified the threats and their occurrence in Dabolava site. The main threat is tree cutting as well as gold mining and bush fires in the surrounding zone.







COMMUNITY DEVELOPMENT

In 2018, we have worked with the people living surounding the forest areas:





ANKIHIRITRA

2 villages: Ankihiritra and Mariarano

- We develop poultry farming: 35 beneficiaries with 175 duck heads distributed of which 155 survived.

- Agriculture: Improvement of agricultural techniques for vegetables (9 types of vegetables) and improvement of crop quality by pest control techniques training. 25 beneficiaries for a total cultivated area of 15.33 acres in Ankihiritra village and 60 beneficiaries and 8.31 acres cultivated in Mariarano village.

- Rice production (SRI: System of Rice Intensification) support for rice production equipment and training,10 beneficiaries and 21.3 acres cultivated.

- Rafia-based crafts for women: technical and material support

- Bee farming: preliminary assessment of feasibility that will lead into technical and material support



DABOLAVA

We worked with 4 villages in Dabolava area: Dabolava, Soanafindra, Ambinda, et Valoanaka.

Our work has focused on:

- Monitoring and evaluation of the practice of SRI (System of Rice Intensification) and SRA (System of improved rice cultivation) with a total of 41 beneficiaries having 46 cultivated ricefields with a total area of 673.18 acres or 6.73 ha.

- Launching, monitoring and evaluation of the practice of Improved vegetable agriculture in the villages of Soanafindra, Ambinda and Dabolava: 64 beneficiaries, 123 pack of seeds distributed and 24.9 acres cultivated.

COMMUNITY DEVELOPMENT

MADIROMIRAFY

4 villages in Madiromirafy area: Anjihikely, Madiromirafy, Anosibe, and Ambodimadiro.

- Launching, monitoring and evaluation of poultry farming: 107 beneficiaries with 380 ducks and 56 chicks distributed.

- Launching and follow up of the vegetable agriculture and marketing : 91 beneficiaries ,106 people trained, 225 sedes pack distributed for 2.53 hectares cultivated.

- Environmental education: vegetable garden created for the two schools (vegetables: Zucckini, greens, salads and cucumber). 59 students involved.











COMMUNITY DEVELOPMENT

MAHAJEBY

3 villages in the area: Mahajeby, Ambohimena and Kamolandy.

Our activities :

- Launching, training and monitoring of improved techniques on agriculture as well as composting techniques and pest control: 119 beneficiaries, 50 people trained, 60 pack of sedes distributed and 7.5 ha cultivated.

- Installation and monitoring of reforestation villagers tree nurseries of *Eucalyptus*, *Melia* and *Acacia* accross 3 villages.

- Environmental Education : vegetable gardning for children: 80 children attended the practical training sessions

Yields: 107 petsai (greens) boots produced, 82 zucchini ; 65.71% success rate in the acacia plantation.

- Rehabilitation of 3 wells in Kamolandy Fokontany to improve Access to safe water in the area.









FAMILY PLANNING: HEALTH AND WOMEN'S EMPOWERMENT

This year 2018 we had the opportunity to take our first steps in a new project on family planning, community health and women's empowerment.

In addition to ecological research and biodiversity conservation, we have been working on improving the basic health and/or family planning for women and girls.

Our intention is to increase the number of population informed about family planning options and health promoting behaviors and to facilitate the access to different contraceptives and health promoting materials.

Including family planning and health in our conservation projects, we aim to empower women and girls and gave them more opportunities to finish their education and to engage in livelihoods to provide source of income for their families. Also, that would give them the opportunity to be more present in the community life, decision making and in general, all the activities related to environment and conservation efforts the communities.

For the time being we have started to develop the project in two sites: Madiromirafy and Dabolava but we expect to expend it to the other Sifaka Conservation sites during 2019.

In order to have more information about the health status of the population we have contacted the health authorities of both regions to know more about the higiene habits, use and knowledge of contraceptives, number of children etc… of the women in fertile age (14 to 49). A survey was conducted on women in various villages.







FAMILY PLANNING, HEALTH AND WOMEN'S EMPOWERMENT

We interviewed 83 women in Madiromirafy area and 139 women in Dabolava area.

Apart from the health survey on women, a workshop was conducted in Madiromirafy (with 80 women) and another one in Dabolava (with 45women). The workshop aims to introduce to women and girls, the family planning and sexual & menstrual health. The second step of the Project was the promotion of contraceptives and reusable cloth pads for girls (planned for 2019).

The workshop consisted in a simple and clear explanation about women's anatomy. Focusing in menstruation and how they can get pregnant. We explained about contraceptives, sexual health and menstrual health and we tried to transmit them the importance of make their own choices and to understand their bodies. The social aspects with regards to selfcontrol was part of the discussion. The discussion aims to encourage them to participate in the community life and to understand the links between health and environment.

As results, the level of attendance was very high,. The participation and satisfaction of the participants were good with several questions related to health and being important in the communities. The data collected from the health surveys and from regional and local authorities served as baseline or benchmark for our follow-up programme.







SCHOOL CONSTRUCTION IN ANOSIBE

Anosibe is a rural village in northwestern Madagascar, near Mandrava, situated among sprawling wetlands and gallery forests. These wild ecosystems are home to an incredible number of endemic species. Nestled deep within this isolated, beautiful region is the township of Madiromirafy. Here, there is no public school, and children must walk three hours each day to attend classes. During the rainy season, between November and April, the journey becomes too treacherous, forcing children to stay at home.



Determined to give their children better access to education, the community of Anosibe have built their own school: the small classroom is made of palm leaves, and the pupils are taught by a single teacher who is paid by parents of the students. Nonetheless, the school is not big enough to accommodate more than 20 primary school students, and those who are able to attend do not have desks or benches to work at, or school books to learn from. Furthermore, the school is not officially recognised by the state, and the teacher receives no basic training.



Impact Madagascar with the help of Costwold Wildlife Park and other Donors, has built a new primary community school in Anosibe, to replace the small classroom, and will provide with desks and educational materials such as text books and exercise books. The new school will increase the capacity of the current classroom, and will provide a safe and comfortable learning environment for the students and teachers. Alongside the school-build, we will also work with the teacher to officialise the school with the National Ministry for Education and will provide appropriate training to the teachers for a better education to the young generations.



The school has two classrooms, with capacity for 80 students and a library/teacher's room (which could also be used as classroom), and a shelter for outdoor activities and workshops with children, parents and teachers. Appropriate bathroom facilities were also constructed for the use of children and teachers. More than 50 desks will be provided to the schools with library, teaching equipment, and other materials.



The inauguration of the school will be in May 2019

Other projects where Impact Madagascar participated : Vohitrarivo ,Sahofika and Ambodigoavy sites



The main achievements of these sites have been:

- The Monitoring and evaluation of VOI MIARADIA of Vohitrarivo: patrols, reforestation & villagers tree nurseries

- Official ceremony for Sahofika's VOI SAMIVAR: management plan and tools, annual work plan for 2018, mapping of the different management zone

- Support and supervision of VOI activities in Vohitrarivo and Sahofika: two days of patrols per month financially supported by the Impact Madagascar organization in bamboo lemurs sites.



- Initiating the local management transfer for Volotara and Ambodigoavy.

- Tree nurseries in Vohitrarivo and Sahofika for aiming to produce 15,000 seedlings annually

- Ecological research in collaboration with students from the University of Antananarivo

- Community development through livelihood activities on improved agriculture and rice cultivation



- Environmental education in schools and in households (hygiene and waste management)

For more information, please visit:

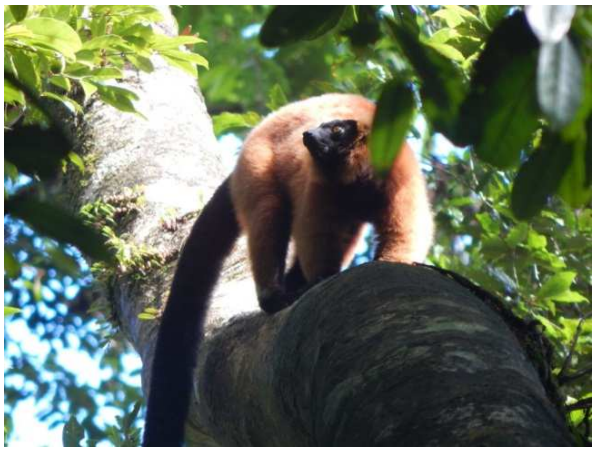
http://www.helpsimus.org/blog





RED RUFFED LEMUR (*VARECIA RUBRA*) TRANSLOCATION (Participation of the Sifaka Conservation team)







The red ruffed lemur has a very restricted range, inhabiting only the remaining primary forests of the Masoala Peninsula and the region immediately north of the bay of Antongil in northeastern Madagascar. They are the most frugivorous of Madagascar's primates, with as much as 75-90% of their diet consisting of fruits. This species is polygamous and its social organization is described as fission/ fusion and communities are usually multi-male/ multi-female and number 5 to 31 individuals.

The most recent IUCN assessment places *Varecia rubra* in the Endangered category, mostly because of its presence in a major national park. Nonetheless, Masoala is today impacted by illegal logging and the status could be soon reassessed as Critically Endangered.

In 2018, The Sifaka Conservation team, in collaboration with GERP and Antongil COnservation, conducted a translocation of 1 group of *Varecia rubra* living in a destroyed hábitat the Ambolohosy forest. Two individuals (one male and one female) of this species were translocated to the Farankaraina Rainforest and were monitored before, during and after the release of the animals in the forest.

Following the capture of the animals, they have been put in large enclosure for aclimatation in the new forest area where they were released after 1.5 months.

Behavioral surveys following the post-release show a good progress to adaptation to their new home.

More animals are now in preparation of a second translocation to reinforce the population in the Farankaraina forest.

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