

CEPF Final Project Completion Report

Organization Legal Name:	Conservation Centrée sur la Communauté
Project Title:	Filling Knowledge Gaps for Local Conservation of Marine Flagship Species in three Key Biodiversity Areas, North Madagascar
Grant Number:	66337
CEPF Region:	Madagascar and Indian Ocean Islands
Strategic Direction:	2 Enable civil society to mainstream biodiversity and conservation into political and economic decision-making.
Grant Amount:	\$72,531.00
Project Dates:	April 01, 2017 - September 30, 2019
Date of Report:	December 18, 2019

IMPLEMENTATION PARTNERS

List each partner and explain how they were involved with the project.

Conservation Interational :coordination with their ongoing community interventions at Ambodivahibe marine protected area and training provided to their Diego technical staff (2)

Ministry of Environment and Sustainable Development: Evaluation visit to the project,Follow up law enforcement

Ministry of Education: Development of Youth programme and coordination of activities within Regional,localAuthorities,teachers in schools at intervention sites

Ministry of Agriculture and Fisheries: Advised on potential livelihood development according to the Ministry policy.

Ministry of Health: strengthened and facilitated community access to health,water sanitation by coordinating with other partners.

University of Antsiranana: students joined in the fieldwork on the project and also collected and used data for their Masters theses.

C3: Overall coordination, management and implementation of the project. Provide technical and organizational support in the implementation of the project. Provide the necessary financial support to cover the costs necessary for project activities.

CONSERVATION IMPACTS

Summarize the overall impact of your project, describing how your project has contributed to the implementation of the CEPF ecosystem profile.

6 relevant feeding sites and 10 nesting sites for sea turtles have been localised in the 3 KBAs. Among those sites, Ampasimena in the KBA of Ambodivahibe had the largest number of nests (54) and is of high conservation priority. Species can be identified by the nature of their tracks. *Chelonia mydas* and *Eretmochelys imbricata* nesting was confirmed, with a predominance of the former

For dugongs, people's knowledge on dugongs is very poor and limited especially within the younger generation of fishers. Only fishers over 40 have actually seen dugongs or retain old memories. The species is rarely observed nowadays in Madagascar, with C3's work highlighting Nosy Hara Marine Park as the last significant refuge for the species. C3's recent cultural study on dugongs confirmed that dugongs were used by ancestors for food and oil to cure ear diseases.

During the project a dugong was accidentally caught close the Ambodivahibe marine protected area in 2018 (confirming it as a foraging area) and the animal was slaughtered illegally and the meat distributed. A few days later a contact from the village called C3 to report the incident and the team gathered samples for genetic analysis. This issue needs to be addressed urgently as a loss of an endangered species within the MPA demonstrates it is currently dysfunctional. *Threat assessment for marine endangered species and habitats*

- Turtle meat and egg poaching

Beach surveys revealed the presence of numerous turtle remains in the Bay of Rigny KBA with 67 remains compared to 15 in Ambodivahibe and 7 at Nosy Antaly in Ampombofofo. Direct observations of the condition of the remains at the nesting sites confirmed that almost 100% of the turtles were killed deliberately for their meat. The presence of irregular fisher encampments in AntognonyBaro (Bay of Rigny) and Ampasimena (Ambodivahibe) suggests that poachers stay and wait on beaches for gravid females to arrive for nesting. Both eggs and turtles are poached. Three species of sea turtles have been encountered and identified from remains and/or tracks: *Chelonia mydas*, *Eretmochelys imbricata* and *Lepidochelys olivacea*.

Key informant (older knowledgeable fishers, as identified by community leaders) and Conservation Ambassadors (community outreach volunteers recruited by C3) were interviewed about turtle poaching and market data. According to these consultations, green turtles are the main target of poachers. Fishers catch female turtles that emerge to nest, the meat is then sold between 2,500 Ar to 3,000Ar (US\$0.70 – 0.80) per kilo in the village or transported to Diego's main market. On average, 5 to 6 turtles are killed per month in Bay of Rigny and Ambodivahibe, approximately 120-145 individuals per year. The meat of the dugong caught close to Ambodivahibe in 2018 was sold at 10,000 Ar (\$2.80) per kilo.

- Survey on artisanal fisheries effort

Key informant interviews and socio economic studies led by C3 in 2017 and 2018 verified that most of people in Ampombofofo make a living from agriculture (about 90%). In Bay of Rigny and Ambodivahibe (Ampondrahazo, Ivovona and Ambavarano), 80% of households are dependent on fisheries. Almost 100% capture fish and octopus. In some areas in the locality of mangrove forests, such as Ambodivahibe and Bay of Rigny, fishers practice crab fishing. Gillnet, longline, spear guns, harpoons are the main fishing gears used.

- Mangrove survey

The mangrove study focuses on the mangrove-specific compositions of the three KBAs, thus a quick inventory of mangroves to produce a map to identify their composition but also their level of exploitation. Eight species were identified: *Rhizophora mucronata*, *Ceriops tagal*, *Avicennia marina*, *Bruguiera gymnorrhiza*, *Limnitzerara cemoza*, *Sonneratia alba*, *Heritzieria littoralis*, *Xylocarpus granatum*.

According to the observations, the amount of exploitation of mangrove for wood is higher the further the sites are from the village, with the exception of Ampombofofo where no cut was observed near the village. This is certainly due to the lack of patrols and surveillance at remoter sites.

- **Seagrass survey**

During the seagrass survey, six different sites were surveyed. In total we confirmed the presence of 8 species *Thalassia hemprichii*, *Halodule uninervis*, *Halodule wrightii*, *Halodule uninervis*, *Cymodocea rotundata*, *Cymodocea serrulata*, *Syringodium isoetifolium* and *Thalassodendron ciliatum*. The use of gillnets (*Jarifa*) and natural disasters, cyclones, are the main threats to seagrass.

Public awareness

Awareness-raising activities on the protection of the marine habitats such as mangrove and seagrass and endangered marine species dugongs and sea turtles were raised and reinforced with implication of young leaders (Junior Ecoguards) and quarterly social mobilizations (cleaning of trash, mangrove restoration, for the protection of the marine and terrestrial environment are carried out in different villages of the KBAs concerned. About 2000 people were impacted directly by the awareness. IEC materials were also produced and distributed during awareness events.

Local capacity for community based management

40 Conservation Ambassadors and 70 Junior ecoguards have been recruited and trained in monitoring and outreach to convince and encourage other members of their community to follow the same path with positive behavioural changes. 12 Master students from the University of Antsirananana were also trained in standard marine survey techniques to improve their professional competence.

Planned Long-term Impacts – 3+ years (as stated in the approved proposal)

Impact Description	Impact Summary
Effective community-based conservation of endangered marine species and habitats in North-east Madagascar through LMMA creation	

Planned Short-term Impacts – 1 to 3 years (as stated in the approved proposal)

Impact Description	Impact Summary
1) Information on the status and threats to marine biodiversity and associated socio-economic drivers leading to resource overexploitation at MDG16 (252 ha), MDG34 (9400 ha) and MDG8 (188,300 ha) and relevant management recommendations	
2) A high level of awareness among local populations (circa. 10,000), in particular youth, about marine endangered species and habitats, threats and management options	
3) Greater local capacity for implementation of local conservation management practices with 40 adults, 10 University students and 60 youth trained in marine conservation monitoring and	

Describe the successes or challenges of the project toward achieving its short-term and long-term impact objectives.

1. Long term impacts (3+ years) – Effective community based conservation of endangered marine species and habitats in north-east Madagascar through LMMA creation

- **C3 is on track to achieve this with hopefully a follow up project funded by CEPF from 2020. The small CEPF grant currently active is helping to build capacity of the community in Bay of Rigny, implementing the dina and conducting baseline inventories of flora and fauna as the basis of new LMMA creation in 2020.**
- **UNDP SGP funding in 2020 is assisting C3 in supporting all these KBAs in mangrove managements, improving local enforcement, monitoring and conservation capacity. We will also be performing initial feasibility studies for rural enterprise to support communities and diversify income to improve their resilience and reduce dependence on fisheries**
- **Based on the success of this project, C3 has committed long-term to the communities (assuming funding will be raised for 2020 – 2024) in order to consolidate management challenges, formally protect critical sea turtle nesting beaches and mangrove forests and fisheries. Integral to this will be the development of suitable and profitable enterprises in the communities.**
- **CI continues to work at a landscape level and focus on policy in Ambodivahibe and C3 complements their approach by working on the ground with communities to identify resource management challenges and solutions as well as building long-term capacity for governance and leadership.**

In the case of Bay of Rigny, initially community members seemed hostile towards the concept of NGOs working in resource conservation, for fear of having a negative impact on their fishing activities. Thanks to the efforts of awareness, the villagers are more than ever ready to take charge of the management of their resource.

Similarly in Ambodivahibe, resentment and turmoil exists between the community and CI based on the implementation of a LMMA that they don't see as beneficial in real terms. As such C3 had to convince the community its approach was different and through really listening to concerns and consulting and involving them in this project we clearly built a level of trust with them, so much so that they felt compelled to report the illegal capture of the dugong in their LMMA direct to C3 staff in Diego. It is essential that CI addresses these problems before the proposed extension of LMMAs into Bay of Rigny or they may be destined for the same failures. Once trust is lost in conservation NGOs it is nearly impossible to start over and promote resource management at the community level.

The concept of LMMA has been thoroughly discussed and there are high motivation levels within these target communities in relation to the implementation of LMMAs. C3 in collaboration with the Mihari Network have been successful in convincing community members to participate in the establishment of their LMMA which is currently underway. Further investigations with local and regional authorities and other organizations concerned on the different stages are planned in order to achieve and implement the LMMA in Ambolobozkely and Ampombofofo. Exchange

visits between communities and with other LMMAs were also made with the Mihari network during the forums or meetings.

1. **Short term impacts were :** gathering data on the status and threats to marine biodiversity and associated socio-economic drivers leading to resource over-exploitation and management recommendations. Ensuring a high level of awareness among local populations, in particular youth, about marine resources and ensuring greater local capacity for implementation of local conservation practices with 40 adults, 10 university students and 60 youthtraining in monitoring and outreach.
- **C3 achieved its objectives in obtaining comprehensive data sets on endangered species and marine habitats including exploitation levels.**
- **Recommendations focus on LMMA development with C3's assistance on the ground, resource provision for enforcement, implementation of appropriate dina at each site coupled with the careful selection and introduction of sustainable livelihoods at each community to provide them more economic resilience in the face of dwindling fisheries and farming and to provide a buffer to environmental shocks such as cyclones. Regeneration of sites such as replanting mangroves has already begun and will continue into 2020 - 2021 with UNDP funding.**
- **Awareness was raised within populations, impacting more than 2000 inhabitants, from all generations and also the wider Malagasy and international public via traditional media (press, TV) and social media (Facebook, Twitter).**
- **Targets were exceeded with 40 Conservation Ambassadors, 12 University Students and 70 Junior Ecoguards recruited and trained throughout the project period.**

Were there any unexpected impacts (positive or negative)?

Highly interest of young people to integrate into our environmental education program through the setting up of the Junior ecoguards network, high interest from other NGOs in the project and also young people from other communities approaching us to replicate our model elsewhere.

PROJECT COMPONENTS AND PRODUCTS/DELIVERABLES

Describe the results from each product/deliverable:

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
1	Critical dugong and sea turtle foraging and nesting habitat identified across the 3 KBAs	1.2	Report with management recommendations for sea turtles and dugongs	
1	Critical dugong and sea turtle foraging and nesting habitat identified across the 3 KBAs	1.1	Map of dugong foraging habitat and sea turtle nesting sites based on Key Informant interviews, satellite and aerial imagery and nesting beach surveys	
2	Threat assessment for marine endangered species and habitats completed across the 3 KBAs	2.4	An analysis of the market in sea turtle and dugong products based on Key Informant interviews and direct observations	
2	Threat assessment for marine endangered species and habitats completed across the 3 KBAs	2.2	Nearshore, shallow seagrass bed maps showing species composition, extent and health	
2	Threat assessment for marine	2.5	Report with management recommenda	

	endangered species and habitats completed across the 3 KBAs		tions for marine biodiversity protection	
2	Threat assessment for marine endangered species and habitats completed across the 3 KBAs	2.3	A profile of artisanal fisheries including bycatch rates, fishing gears and mortality rates from fisher interviews	
4	Increased public awareness of marine biodiversity	4.2	8 public awareness events delivered by Junior Ecoguards and Conservation Ambassadors at at each KBA	
5	Local capacity developed for community-based management of marine species and habitats	5.3	At least 2 schools in each KBA engaged formally in the Junior Ecoguard programme with teachers briefed in use of the Manual and Toolkit	
5	Local capacity developed for community-based management of marine species and habitats	5.1	40 community members recruited as Conservation Ambassadors (CAs) and trained in outreach, advocacy	

			and monitoring	
5	Local capacity developed for community-based management of marine species and habitats	5.4	Increased institutional capacity of C3 Madagascar as evidenced by comparison of civil society tracking tool scores at start and end of project	
5	Local capacity developed for community-based management of marine species and habitats	5.2	60 youth recruited and trained as Junior Ecoguards across the 3 KBAs to inspire interest and understanding of marine conservation issues	
2	Threat assessment for marine endangered species and habitats completed across the 3 KBAs	2.1	Mangrove forest maps showing species composition, extent and levels of exploitation	
3	Socio-economic profiles for the 3 KBAs	3.1	Household surveys completed at each KBA to elicit data on livelihoods, awareness of marine resources, rules and regulations	
3	Socio-economic	3.3	Report with management	

	profiles for the 3 KBAs		recommendations for improving socio-economic conditions and local governance with regards to marine biodiversity conservation	
3	Socio-economic profiles for the 3 KBAs	3.2	Analysis of the existence and weaknesses in governance structures (including the dina) required for effective community-based management of marine resources	
4	Increased public awareness of marine biodiversity	4.3	Sensitisation of communities about potential management options (using examples from other communities in the MIHARI network)	
4	Increased public awareness of marine biodiversity	4.1	IEC (information, education, communication) materials in local dialect at each KBA (postcards,	

			brochures, posters, infoboards, tshirts)	
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Describe and submit any tools, products or methodologies that resulted from this project or contributed to the results.

- **Training of young people in schools through C3 educational and communication programme (Teacher Training)**
- **We used the existing Junior Ecoguard Manual and Toolkit from our Tusk-funded project contains contains copybooks, pends, colouring pencils, scissors, glue, endangered species posters, toxic fish poster, DVDs, Dugong childrens storybook, African habitats book, Fish storybook, Childrens Coral reef colouring book, Junior Ecoguard tshirts and stickers of the donors and partners**
- **Design and installation of infoboard on seagrass, mangrove, sea turtles and dugong in each village.**
- **Developement of IEC materials : T-shirts for junior ecoguards and Conservation ambassdors, postcards on endangered species,**
- **On March 20 th to 22 th, 2018 took place in Nosy Be the Seagrass-watch training funded by GEF. Specialists trainers on seagrass watch led the training. Two staff from C3, Mihary and Anwar, participated to this training. Basic knowledge of the importance, the different speciesof seagrass and their characteristics, but also the methods of seagrass monitoring and seagrass survey were shared during the training.The courses thus included a theoretical part and a practical part.**
- **We used standardised methods of SocMon, Seagrass watch, AIMS manual on mangrove monitoring, Junior Ecoguard Manual and Toolkit, MIHARI network community exchange process, UNEP CMS Dugong Questionnaire and IUCN Sea turtle methods manual.**
- **We have developed and incentives model approach to LMMA creation which we will be following up on at each KBA for the period 2020- 2024, subject to funding secured.**

LESSONS LEARNED

Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building.

Consider lessons that would inform:

- Project design process (aspects of the project design that contributed to its success/shortcomings)
- Project implementation (aspects of the project execution that contributed to its success/shortcomings)
- Any other lessons learned relevant to the conservation community

- **C3's specific experience related to this proposed intervention is its innovation in actively empowering communities to manage their coastal and marine resources, including key endangered species through this CEPF large grant funding from in the orphan KBAs of Bay of Rigny and Ampobofofa in the extreme north. In this project it was noted that communities resented authorities and international NGOs, with a deep lack of trust and continual flouting of fishing regulations. This came from a combination of factors including lack of communications, lack of staff from the same ethnic groups, lack of time spent understanding complex socio/cultural and economic issues and a top-down approach to managing resources. Trust needs to be rebuilt if there is to be long-term community management of resources here. C3 instead deployed its field staff for at least 50% of the time on the ground, working in consultation with communities, using standardised survey methods including SocMon, IUCN sea turtle nesting survey guidelines etc to complete full assessments of each area. Based on these assessments, C3 later follows up with feasibility studies on livelihoods, sanitation and education services and infrastructure.**
- **C3 invests in Malagasy staff, providing every staff member with training both at home and abroad to build individual's capacities and maintain a feeling of pride and ownership in the local organisation. We feel it is urgent to invest in these remote neglected KBAs and the key sites within them (e.g sea turtle nesting beaches with high exploitation rates/high nesting rates) from 2020 if we are to have a positive and lasting impact on marine biodiversity conservation before it is too late. We hope to be invited to apply for follow up funding from the CEPF facility in order to build on this successful project and deliver the required resources and training to communities in order that they are empowered to take critical actions for nature.**
- **The sites are very remote and we spent a lot of time and funding reaching them (a reason why they are neglected even by international NGOs). As such a priority will be obtaining a 4WD vehicle in 2020 in order to make more efficient use of time and funds.**

SUSTAINABILITY/REPLICATION

Summarize the successes or challenges in ensuring the project will be sustained or replicated, including any unplanned activities that are likely to result in increased sustainability or replicability.

- **The CEPF funding is enabled us to conduct thorough but rapid assessments at each KBA with a view to implementing our successful environmental stewardship model in Rigny Bay, Ampombofofo and Ambodivahibe with livelihoods and incentives in return for active coastal management and regeneration by communities.**
- **C3 activities complement others stakeholders activities in the site and in Ampombofofo, marine component do not have support from NGOs. In Complex Bay of Rigny, this KBAs, is part of an extension of protected area initiated by Conservation International but they lack on the ground support from the community and endangered species exploitation continues.**

- **Community from Bay of Rigny now actively starting to participate in the management and supervision of their locality. These accomplishments testify the increased participation of communities in the management of their resources, through the mobilizations carried out. It is essential that further LMMAs are set up on the basis of mutual trust and delivery of key services in response to credible socioeconomic and ecological research or they too are destined for failure and wastage of donor funds.**
- **C3 is the key technical organization responsible for highlighting the endangered status and plight of the dugong and Green and Hawksbill sea turtles at the regional and national levels and sits on all national biodiversity advisory committees. Key areas have been identified already and in need of community patrols especially during peak nesting season. Communities are keen to address the issue but lack the resources and training at the current time. C3 is in a position to deliver this capacity building across these remote northern sites.**
- **C3 will be aiming to secure a budget of \$300,000 for a period of 2 years minimum from 2020 – 2021 in order to implement the community stewardship model, i.e. develop full local governance of marine resources, protect key biodiversity sites through LMMAs and patrols and deliver suitable sustainable livelihoods. Already \$77,000 have been secured as of time of writing.**

SAFEGUARDS

If not listed as a separate project component and described above, summarize the implementation of any required action related to social, environmental or pest management safeguards.

ADDITIONAL COMMENTS/RECOMMENDATIONS

Use this space to provide any further comments or recommendations in relation to your project or CEPF.

- **We are very grateful for our first CEPF grant and we look forward to a long-term relationship with this Fund as there is so much we can achieve together at these remote sites in the coming years.**

ADDITIONAL FUNDING

Provide details of any additional funding that supported this project and any funding secured for the project, organization or region as a result of CEPF investment.

Total additional funding (US\$)

Type of funding

Provide a breakdown of additional funding (counterpart funding and in-kind) by source, categorizing each contribution into one of the following categories:

- A. Project co-financing (other donors or your organization contribute to the direct costs of this project)
- B. Grantee and partner leveraging (other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF-funded project)
- C. Regional/portfolio leveraging (other donors make large investments in a region because of CEPF investment or successes related to this project)

INFORMATION SHARING AND CEPF POLICY

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned and results. Final project completion reports are made available on our website, www.cepf.net, and may be publicized in our e-newsletter and other communications.

1. Please include your full contact details (name, organization, mailing address, telephone number, email address) below.

Name: Rakotoarimino Voninjanahary Lalarisoa Organization: Conservation Centrée sur la Communauté Mailing address: Lot 31 Boulevard de la Liberte Antsiranana Madagascar Telephone number: 261 32 80 883 15 E-mail address: lala@c-3.org.uk,info@c-3.org.uk