CRITICAL ECOSYSTEM PARTNERSHIP FUND

CEPF Final Project Completion Report

Organization Legal Name:	Missouri Botanical Garden
Project Title:	Compilation and Dissemination of Plant Information for Priority Key Biodiversity Areas in Madagascar
Grant Number:	66265
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:	$123,390.00
Project Dates:	June 01, 2016 - December 31, 2018
Date of Report:	May 13, 2019

Implementation Partners

List each partner and explain how they were involved in the project

We worked with two national partners based in Antananarivo:

1. **The national NGO Madagasikara Voakajy MaVoa which specializes in the application of conservation science and the implementation of site-based conservation through community participation to protect endemic Malagasy species and their habitats. This partner has been involved in the evaluation of stakeholder needs for biodiversity and the organization of the various project workshops (opening, closing and regional workshops). The members of this NGO participated in the surveys of some managers sites using the form validated for this purpose. In addition, they helped the team within the MBG in the administrative and logistical organization. They also participated in facilitating some of the sessions in the various workshops.**

2. The Botanical and Zoological Park of Tsimbazaza is our technical and scientific partner in this project. The role was mainly focused on the search for botanical voucher specimens made from the 31 targeted KBA deposited in the herbarium. Besides they also ensured the curation of this voucher for an accurate identification. We proceeded by taxa for this research: the lists of priority taxa were regularly sent to the PBZT team

Conservation Impacts

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

a) Reliable information on accessible plants for 28 sites KBA;
(b) Consideration of plant resources in the planning and implementation of biodiversity conservation actions and conservation site management;
c) Strengthening communication between researchers and protected area managers in order to develop applied research conducted in protected areas.

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

Impact Description	Impact Summary
1. Biodiversity knowledge at each KBA will be strengthened and at sites that currently have a promoter, management of the flora will be reinforced; the importance of plants will also be better integrated into both site operations and community-based natural resource management.	The plant heritage (flora and vegetation) of all KBAs is described to enable an informed decision to be made on site operations; for example, managers who are aware of the level of collections in each type of plant formation at their sites will be able to prioritise botanical collections / flora research in a given plant formation. For example: Tsinjoriake with MBG has set up a botanical collection project to better understand the flora of this KBA. The cost of the project significantly exceeded the budget available for the 2018 Annual Work Plan. Site managers were asked to provide 5 plants important for their sites in order to provide them with extensive scientific information on these plants, how many are threatened? A database on the vernacular names of some plant species has also been made available to those responsible. The research impact is the use of the database to inform local populations about the plants in their area.
2. A strong collaborative relationship will be established between MBG and those responsible for the KBAs that currently have promoters, enabling MBG to continue making a useful contribution to the management and conservation of the flora of these sites beyond the time frame of the proposed project.	During the implementation of the project, the implementation team led by Marina Rabarimanarivo established a climate of trust with managers mainly through telephone calls, exchanges of correspondence by e-mail and especially workshops at the central and regional level.
3. For each KBA that does not currently have a promoter, reliable botanical data will strengthen the information base on its biodiversity values and contribute to the process of assessing its conservation importance.	Initially, 31 sites were identified as targets, but due to changes in status and reconsideration of KBA's boundaries, the number of KBA sites is 28, six of which have neither promoters nor managers (orphan sites). 19 of the 26 have legal status. These 6 sites are Ambato Boeny, Ambatofinandrahana, North Pangalane, Ambila Lemaitso wetlands, Port-Berge and Vohibola. The impact sought by the project is that the knowledge of the flora of these "orphan" sites should be greatly enhanced. It is obvious that only two KBAs Ambila Lemaitso and North Pangalanes sites have found the

	knowledge on flora improved, but for the other 4, the data themselves are missing. This is to say that these sites are really a priority for botanical collections
4. Key actors in the policy and donor sectors will have an increased awareness and appreciation of how to access botanical information and expertise, and how this information and expertise can be effectively harnessed and integrated into their program planning and execution.	During the last regional workshops, a session on the importance and potential uses of data and knowledge established for each site was held with participants from different categories ranging from students to policy makers in the Ministry of Biodiversity: academic institutions, research centres, national and international NGOs working for the environment, the private sector and representatives of donors
5. The value and capacity of Madagascar's national herbaria will be strengthened as a result of improvements in the curation and identification of the collections examined for each of the KBAs and the data compiled and made available.	In total, 25 families,220 genera and 745 species have been treated for collection curation to complement data on 28 KBA sites. From these taxons data on ca. 2500 specimens preserved at TAN and TEF were reported/updated in TROPICOS and sometimes the species pages in MadCat were updated with new data on either collection identification or collection locations by assigning the most accurate geographical coordinates as far as possible. Endemic familiies and the three large families in the malagasy flora have been treated : Fabaceae, Orchidaceae, Rubiacaeae.
6. The Madagascar Catalogue will be strengthened and made more accessible and relevant in Madagascar as a result of the conceptual and informatics improvements made during the project.	Several points of improvement have been made to the Madagascar Catalogue database to meet some of the needs of stakeholders. - The names of the 28 (arrangements of 31 initially defined sites) are now among the important sites to be codified for the distribution of the species - The dedicated page and each site is also a reinforcement of the capacity of this Database for the dissemination of synthesized information on Madagascar's flora. - The demand for training on the use of the TROPICOS and MadCat database is increasing, especially from those in charge of protected area management as well as from departments in charge of forests and natural resources such as the Directorate for the Development of Forest Resources, for example
7. Plant conservation in Madagascar will be strengthened through better integration of information on flora and vegetation into planning and management of the targeted KBAs and more broadly into national policy- and decision-making as well as the identification of donor priorities and the allocation of donor support.	In addition to the integration of some KBAs into the process of updating the GAP (reconsideration of the target taxa of the revised GAP based on the new information compiled and synthesized for the site), the managers at the level of the Water and Forestry Department in charge of biodiversity whose plants made the following comments:: * The Catalogue of Plants of Madagascar (MadCat): www.tropicos.org/Project/Madagascar: the only complete online database DB for Madagascar flora * MadCat: a DB developed by Missouri Botanical Garden

	for more than one decade with several partners, offering an authoritative input for World Flora Online (WFO° * In 2017 Madagascar joined the WFO Consortium through the Madagascar Plant Specialist Group (MPSG), reflecting the will of the country to contribute to this global effort with information on its exceptional flora * It will become THE NATIONAL authoritative database for the Malagasy flora

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

Impact Description	Impact Summary
1. Dedicated, site-specific pages will be available for 31 KBAs via the on-line Catalogue of the Vascular Plants of Madagascar, facilitating dissemination of relevant botanical information to stakeholders.	Summary and homepages for some sites are developed for each of 28 sites: the structure of summary page has been validated through close interaction with end users during workshops and individual contacts. Link in MadCat is currently available for some sites if for others it is under construction.http://www.tropicos.org/ProjectWebPortal.aspx?pagename=PA_Tsinjoriake&projectid=17 is the link for Tsinjoriake Protected Area homepage as part of the project « Madagascar's Protected Areas: A Bilingual Book and Associated Database Reviewing their History, Biodiversity and Guiding the Future » This overview was intended to show the current level of knowledge of each site.
2. The widely-scattered information currently available on the flora of each of the 31 targeted KBAs will be compiled, verified and validated, rendering it accessible and of use to on-site the conservation managers at a minimum of 21 sites and the local communities (representing tens of thousands of individuals) with which they work, as well as for conservation planning and policy- and decision-making in the at least 50 relevant Government agencies (at national and regional level) and an estimated 40 NGOs operating in Madagascar.	Various sources of information have been considered but to date the bulk of primary data occurence is issued from TROPICOS. Recent litteratures on malagsy flora have been consulted. A floristic master list has served a tool for data compilation and validation. Update and and new additions have been directly brought to this list. There are also those lists resulting from floristic studies at some sites KBAs but at the time being they are not added to the master list as we have to assess on their accuracy. The most significant result is the master list of primary data occurrence currently known for the all 31 KBA sites. An initial species list is available for each of 31 sites. A gap analysis on collection allows a classification of the KBA sites into four categories: 11 (almost 30%) sites with less than 100 specimens : sites almost unknown botanically 12 present between 100 to 600 plant specimens: fairly well known sites 8 are known from more than 600 specimens: well- known sites Within the first category, no collection was made within 5 sites Another significant result is the archive of scanned and pdfs format documents on various works done for the sites. In total, the project team visited more than 10 libraries and archived more than 250 docs

	in pdfs and scanned formats
3. Gaps in the botanical knowledge of 31 KBAs will be assessed making it possible to identify needs and opportunities for future inventory work at these sites.	A gap analysis on collection allows a classification of the KBA sites into four categories: 11 (almost 30%) sites with less than 100 specimens : sites almost unknown botanically 12 present between 100 to 600 plant specimens: fairly well known sites 8 are known from more than 600 specimens: well- known sites Within the first category, no collection was made within 5 sites
4. In-country capacity will be strengthened to interpret and utilize botanical data for a broad range of conservation applications, involving staff and local community members at 21 KBAs with promotors/managers, as well as Government personnel in at least 30 agencies (regional and nationa level) and key staff at an estimated 15 NGOs.	At the stage of the project, the interpretation and the utilization of botanical data for conservation purposes have consisted on explaining how to translate raw data into information that inform the conservation of the biodiversity: this has been shared to all participants at regional workshops. Participants represented variuos categories of stakeholders . So far, 20 NGO and GO and associations responsibles of the management of KBA sites , two categories of gpvernemental departerments (Regional Directorate of Forest and Directorate of the Protected Areas System), representatives from 3 local community associations involved in the management of the KBA have received capacity building on how data from TROPICOS have been used to assess the risk of extinction of the plant diversity in the KBA sites according the IUCN red List for example.
5. Close interaction and sustained dialog between MBG and the persons responsible for managing 21 KBA sites will be established, facilitating the effective integration of information on plants into planning and policy- and decision- making (e.g., identifying species of conservation concern), and enabling the identification of opportunities for further collaboration (additional inventory work, training of on-site botanical expertise, application of the IUCN Red List criteria to species likely to be threatened, etc.).	Marina has sustained dialog between policy and decision makers and especially with the sites managers using the electronic message and most of the time with phone call. Some managers are based in remote places with no internet connection. For those based in Antananarivo, Marina met these responsible at their offices (Mr Jeannin Ranaivonasy, for Beza Mahafaly site, Hélène Ralimanana, for Itremo site, etc). Marina made a point of establishing close contact with them. the project implementation team has made a considerable effort to create an atmosphere of trust between MBG and the other stakeholders. for the compilation, sharing and dissemination of botanical information: - Eight (08) regional and national workshops are being held in different locations with a total of 217 participants (site managers or representatives; all KBA stakeholders; environmental decision-makers and policy makers; research and conservation institutions or NGOs; students from the University of Antsiranana, Mahajanga and Toliara; donors,....; - More than 200 participants trained in the different training courses (see above) given during the project; - Three visits carried out Oronjia, Ankaratra and Tsinjoriake) for the practice of botany training as partof the sites' needs with 70

	participants
6. A deeper understanding will be developed among all key project stakeholders (on-site managers, local community members, policy- and decision-makers, and members of the donor community) of the importance of plants, the roles they play (for humans and as the main structuring component of terrestrial ecosystems), the threats they face, and how best to manage and conserve them.	The main results of the project concern flora and more precisely its taxonomic or thematic structure, as ecosystem services are provided by KBAs or have not been thoroughly studied. But relative information can be mentioned by people from the sites or by the literature itself. Capacity building was carried out through various workshops: - Training on the use of the Tropicos/MadCat database; - Botanical training to know some typical taxons , important species identified, relocation of target species, demonstration of botanical collections in the field and processing of research data, etc.) - The field trips in Oronjia, Tsinjoriake and Ankaratra provided an opportunity to demonstrate to stakeholders the methods used to identify the important plants identified. - Threats (whether they were mentioned by those working in the sites or by literature that affects habitats) were mentioned in all the media used to disseminate knowledge about KBAs. - The concept of Species of Conservation Concern or species at-risk (concerns regarding status and hreats, and are commonly declining or appear to be in need of concentrated conservation actions.) - Session on the Red List of Species and CITES; - Examples of better uses of available data for site biodiversity management.
7. MBG's input and recommendations will lead to strengthened conservation of botanical diversity in Madagascar through: a) the explicit integration of plants into conservation planning and management at no fewer than 10 KBAs; b) the development and implementation of targeted plant conservation actions (including but not limited to in-situ and ex-situ conservation measures) at a minimum of 10 sites; and c) catalyzing the development of community-based botanical knowledge and capacity at no fewer than 10 KBAs.	The period dissemination of the provisionary results of the project has served the KBA managers coincided to the period during which Madagascar National Park were updating the management plan and amenagement for most of the PA they are in charge. In total, MNP agency has xxx KBA touched by the project. For example Ankarafantsika PA , the management plan includes some of the important species identified for the site to be among the target species. As for the plant conservation action, no record has been made during the project lifetime. The project has no success in catalyzing the development of community-based botanical knowledge apart from the estbaloshement of initial ethnobotanical

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

We defined the success of the project on the following 3 points:

1. ***Data on the plants at all 31 KBA are captured, verified, validated and being accessed by stakeholders via dedicated Catalogue pages, enabling use of this information for a diversity of applications*:**

Of the 31 sites, 28 sites have sufficient data to establish the state of knowledge of the site's biodiversity. The page dedicated to sites in Catalog is developed. For example, for the Tsinjoriake site, the URL link on this page is as follows :
http://www.tropicos.org/ProjectWebPortal.aspx?pagename=PA_Tsinjoriake&projectid=17
The information presented here is based on the data published in the book: Goodman, S. M., Raherilalao, M. J. & Wohlhauser, S. (eds.). 2018. Les aires protégées terrestres de Madagascar : Leur histoire, description et biote / The terrestrial protected areas of Madagascar : Their history, description, and biota. Association Vahatra, Antananarivo
On this page, there is a link to additional information required by KBA managers: information such as bibliographical references on the sites as well as the vernacular names of the plants.
The challenge for this dedicated page for each site is to update the data beyond the project : this aspect of database management is dependent on the availability and access to new data and subsequent analysis to be taken into account in the page.

2. KBA managers and other stakeholders understand the value /importance of plants and botanical information for site management and biodiversity conservation

During the different workshops, managers and other stakeholders of the project had the opportunity to learn more about the intrinsic value and heritage value of Madagascar's flora and their site in particular. For example: the vernacular names of plants that link local populations including site guides and agents to plant resources have been widely cited as important information.
At the end of the project, they have a better understanding of the important species of each site for their integration into actions on biodiversity within KBAs. In other words, we borrow the following sentences: The scope of mobilized securities has been broadened to better convince and dialogue: the mobilization of different values is linked to the contexts of KBA sites; the dialogue between the actors has forced us to broaden the scope of the values given to the flora of each KBA. Many managers and KBAs invested in plant diversity protection or management, which initially focused their arguments on intrinsic or heritage value, now give way to instrumental value (ecosystem services).
3. Working relationship is established between MBG and KBA managers and among managers facilitating project implementation while stimulating exchange to identify opportunities for additional collaboration

The core team working on the Madagascar plant database (MadCat or http://www.tropicos.org/Project/Madagascar) has developed a well-established relationship with the managers of more than 20 KBA who own them: frequent telephone conversations, e-mail exchanges and, above all, workshops in the regions. These sustained interactions have created a climate of trust: the managers have understood that with MBG as the reference institution for Madagascar's flora, collaborations can be established beyond the life of the project. For example, Madagascar National Parks, which manages a large network of PAs in Madagascar, through the Head of Research, has expressed their desire to collaborate in training their agents on the knowledge of the flora of their respective KBA sites.

Were there any unexpected impacts (positive or negative)?

An unexpected positive impact : at the launch of the Goodman and al. book, in 2018, where the Flore part was taken up in more detail, the Director of the MNP who was among the speaking people during the event , highlighted in his presentation the value of scientific research for the management of KBA sites in Madagascar. This event gathered most of conservation and research communities working on the Biodiversity and various ecosystems in Madagascar and the take-home message on the value of scentific data and information was clear. In total more 300 people working on Environnement and Biodiversity were present at this book launch ceremony.

Project Components and Products/Deliverables

Describe the results from each product/deliverable:

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
1	Assessment of needs and opportunities, targeting KBA operators and decision? and policy?makers; evaluation of data availability, selection of content type for KBA pages and acquisition of existing data	1.1	Catalogue of the needs and opportunities, as well as available data resources as determined in consultation with the stakeholders;	1. Botanical information needs - Complete and up-to-date floristic list (Scientific names and/or vernacular names) - Complete botanical inventory (terrestrial and aquatic) or additional, - Detailed or more detailed data on target plants, habitats or themes - Documents, articles on plants 2. The need for botanical training - Capacity building in site botany (Botany in general, plant identification, botany collection and specimen preservation, floristic inventory methods, ecological monitoring, monitoring of vegetation ……..) - Training of parataxonomists - Training on the recognition and knowledge of the target species of the sites (flagship species, rare, endemic species, important, indigenous plants most used in the economic activities of local populations...) - Training on the more frequent use of MADCAT 3. Other needs identified - Implementation of a local herbarium - Continuation of in-depth research (background for new inventory) - Enhancement of useful plants for sustainable development by: a) in-depth studies on useful plants likely to be overexploited or b) development and reforestation of native plants for the restoration of natural forests - Communication, exchange and equitable sharing of information (reports, articles,...)
1	Assessment of needs and opportunities, targeting KBA operators and decision? and policy?makers;	1.2	A shared archive established to enable consultation of information of the resources	In total, about 500 documents were identified, acquired, available and compiled for the 28 sites. More than half of them came from the VAHATRA Association when compiling the documents available for the book "Madagascar's terrestrial protected areas: their history, description and biota". Tables x and x show the number of documents available per theme () and per document

	evaluation of data availability, selection of content type for KBA pages and acquisition of existing data		and to facilitate their eventual integration into the online Catalogue site for each KBA.	type () in each targeted KBA site. The five sites that have a lot of documents are Menabe Antimena, Ankarafantsika, Antrema, Bezà Mahafaly and Kirindy Mité while the five poorest in documents are Baie de Rigny, Port Bergé, Ampombofofo, Lac Tseny and Vohibola. These are the briefs that present the most abundant type of document in terms of number of documents followed by reports, publications and the floristic list for all the targeted sites. For the themes, the ecology theme, vegetation monitoring, taxonomy, others and environmental impact are the five sites with the largest number of documents available for all 28 sites
2	Development of customized, site-specific pages for each KBA as part of the Catalogue that reflect identified partner/stakeholder needs.	2.1	Site-specific homepages developed for each KBA and available online.	Available for some KBA sites as pilot exercise. The development for all KBA will go beyond the project lifetime and MadCat team will be in contact with managers for further update if neededede
3	Data compilation, verification, validation and population of dedicated site pages within the Catalogue and identification of gaps in botanical knowledge of KBAs.	3.1	3.1 Linkages to site relevant data established on dedicated site pages established and functional.	The sites dedicated pages present key information for the sites based on two primary components: 1) the results of an analysis of the floristic composition of the site, and 2) information provided about the site by the site managers. The pages can be updated easily to incorporate new information and new components, and they provide links to the relevant resources with Tropicos, many of which are automatically updated as relevant new is generated, as well as links to external resources. Currently the site homepage contains specimens list, species list, bibliographic references linked to its physical documents, Pressure and threats that prevail on the site and to some extent on specific species , plant species with vernacular name. Queries allow obtention of specimen list as linked to TROPICOS, species list as linked to MadCat. There is an option of exportation and mapping of the primary data occurence. Each record could be displayed with all associated data (label data -exciccatae). The same type of queries will be developed within the summary information on the flora for the other category of information
3	Data compilation, verification,	3.2	Preliminary species list established for	This list is available in the dedicated page for each KBA.

	validation and population of dedicated site pages within the Catalogue and identification of gaps in botanical knowledge of KBAs.		the KBA.	
3	Data compilation, verification, validation and population of dedicated site pages within the Catalogue and identification of gaps in botanical knowledge of KBAs.	3.3	Report on preliminary assessment of the current level of botanical knowledge with recommendations on how to close the gaps.	The main recommendations for a large impact of the project are three folds: 1. The managers and promoters of the KBA sites pointed out the lack of local expertise in understanding the flora of each site. This issue is national in scope and the urgency of developing local expertise in the field has become a priority.., 2. Indeed, 8 sites have a collection density of more than 10 collections per km² and 13 sites have a density of 1 collection per km². From a botanical point of view, these sites are very poorly known. In other words, knowledge of the flora of these sites must be improved and therefore they are a priority for botanical inventories. 3. Priority for assessment is given to species 1,296 endemic species not yet treated In other words, 47% of endemic species whose conservation status is still undefined are given priority for Red List assessment to better inform the decision or choice in protecting / conserving the plant diversity of KBA sites.
3	Data compilation, verification, validation and population of dedicated site pages within the Catalogue and identification of gaps in botanical knowledge of KBAs.	3.4	Initial species list available for each KBA	The Preliminary lists shared with managers during the last regional workshops have evolved and so the results analysis of important taxa. Also during the reporting period, new data and information have been available through release of official Red List and assessments submitted to IUCN. They have been used to update the list of threatned species . So new version of potentially important species are ready to be shared with managers.

3	Data compilation, verification, validation and population of dedicated site pages within the Catalogue and identification of gaps in botanical knowledge of KBAs.	3.5	List of potentially important species established for each of KBA and data delivered through dedicated KBA pages and Mini-reports to KBA managers on the summary and thematic pages for each KBA for feed back	13,939 collections for all 28 sites are divided into: - 194 families of Vascular plants among the 249 existing in Madagascar including the five endemic families of Madagascar: - 1,018 genera among the 1,704 existing in Madagascar, including 312 endemic genera that represent all endemic genera in Madagascar; - 3,102 species among the 11,549 species listed in Madagascar, including 2,323 endemic to Madagascar and 685 native and 94 naturalized; - 33 species belonging to endemic families: five (05) species of Asteropeiaceae, one (01) species of Barbeuiaceae, the two (02) known species of Physenaceae, 16 species representing nine (09) genera of Sarcolaenaceae and 9 species of Sphaerosepalaceae; - 127 local endemics - 3 sites/28 with almost the total number of endemic families in Madagascar which are the three (03) sites of the Eastern Coastal Forest and Wetland Groups (Ambila Lemaintso, North Pangalane and Vohibola) respectively 5, 5 and 4; - 2 sites/28 with more than 10% of the number of species in the Endemic Families of M/car (104 spp. for all 5 endemic families): Itremo and North Pangalane respectively with 11 species and 12 species ; - 18 sites/28 with more than 70% of endemic species - 20 sites/28 with more than 10% of endemic species with restricted distributio
4	Communication and interaction with site managers; presentation of project progress and results; targeted user training.	4.1	Reports on 10 workshops, summarizing progress, problems and opportunities	In total , 6 regional workshops and 2 national workshop held in Antananarivo were organised and 4 reports in total were produced
4	Communication and interaction with site managers; presentation of project progress and results; targeted user training.	4.2	Posters to communicate on key themes, a series of brochures for on-site use a series of environmental	In total, 19 sites were able to have the deliverables: brochures, posters and roll-ups. The six sites that do not have managers/developers (Ambato Boeny, Ambatofinandrahana, Ambila Lemaintso, North Pangalane, Vohibola and Port Bergé) and the three other sites (Ampombofofo, Bombetoka and Tseny Lake) with almost no data were not developed into these deliverables. For these 19 sites, the number of deliverables produced

			education tools and lesson packages for site managers and local managers	are: - 95 Posters (5 posters/site) ; - 950 Brochures (50 brochures/site) ; - 19 Rolls up (1 roll up/site). For all sites: - 60 brochures prepared for the presentation of the overall results of the project; - 50 customised USB sticks with verified data, synthesised from all KBA sites; - 35 baskets for the supports; - Nine (09) KBA website pages created and completed available online in the MadCat database and 11 templates (website page) ready to be placed in MadCat
4	Communication and interaction with site managers; presentation of project progress and results; targeted user training.	4.3	Final project report	Final project report
5	Sub grant #1: Mavoa will provide assistance for 1) conducting the needs assessment and 2) helping in the project workshops facilitation (prepraration, facilitation, reporting)	5.1	Survey test accomplished from two or three selected KBAs and questionnaries for surveys finalized	MaVoa has mainly carried out this activity at KBA sites located in their area of operation to facilitate investigations. The tested and validated form was used for subsequent surveys with managers and other categories of project stakeholders.
5	Sub grant #1: Mavoa will provide assistance for 1) conducting the needs assessment and 2) helping in the project	5.2	Compilation for workshop reportings (national and regional)	Individual reports exist but not a compiled version

	workshops facilitation (prepraration, facilitation, reporting)			
5	Sub grant #1: Mavoa will provide assistance for 1) conducting the needs assessment and 2) helping in the project workshops facilitation (prepraration, facilitation, reporting)	5.3	Financial reports sent every quarter and approved by MBG	The periodicity was not respected; two financial reports have been submitted
6	Sub grant #2: Parc Botanique et Zoologique de Tsimbazaza The Flora Department , Herbarium section will provide two staff botanists, who will assist with specimen search work and data compilation, and the verification of specimens received from the KBAs,	6.1	Accomplishment of the actual work planned verified by means of monthly progress report	Progress reports were submitted : some are monthly and others described progress made during more than one month
6	Sub grant #2: Parc Botanique et Zoologique de Tsimbazaza The Flora Department , Herbarium section will	6.2	Financial reports sent every quarter and approved by MBG	The periodicity was not respected; two financial reports have been submitted

	provide two staff botanists, who will assist with specimen search work and data compilation, and the verification of specimens received from the KBAs,			

Please describe and submit any tools, products, or methodologies that resulted from this project or contributed to the results.

They are tools for disseminating information, knowledge and importance of plant diversity in terms of flora and vegetation. For dissemination, in addition to the page dedicated to the KBA site in the MadCat database, dissemination tools were provided to the site managers/sponsors.
For the various supports at each KBA site involved in this project, the following information is always available:

1. **Legal status of each site (e.g. Harmonious Protected Landscape of Amoron'i Onilahy, Kirindy Mitea National Park)**
2. **Logos: Always present for each KBA site:**

- **Logo Ministry of Ecology, Environment and Forestry (MEEF),**
- **Logo of the project leaders : MBG, PBZT & MaVoa**
- **Logo of CEPF and Tany Meva, funding project**
- **Logo of site manager, Logo of the partners of the site that the manager wished to mark in the supports**

Brief descriptions of each site with a location map including the following informations:
Where is the site? Its surface area, the different ecosystems there and a small overview on wildlife if data exist.

1. **Floral knowledge of the site: summaries based on analyses of the floral data collected for each site during the project are visible here, with supporting photos, as follows:**
1. **Families: Families number present in the site compared to existing families number in Madagascar, presence or not of endemic families.**
2. **Genus: genus number present in the site compared to existing genus number in Madagascar, number of endemic genera in the site**
3. **Species: species number present in the site compared to existing species number in Madagascar, number of native species endemic and non-endemic, specifying their rarity and naturalized species**
4. **Threatened species: number of species already assessed for the IUCN Red List according to the different categories of threats (e.g. Critically Endangered, Endangered, Vulnerable...)**
1. **Potential of each site: development activities, tourist sites ….**
2. **Threats to each site.**

Note: In addition to all information mentioned above, in the flyers, the address and contacts of the site manager were also indicated.

At the end of the project, each KBA site with a manager received: 5 posters, 50 flyers and 1 roll-up.

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)*
- Describe any other lessons learned relevant to the conservation community

The success of such a project has required an alliance with partners who are specialists in such a field of action on biodiversity in Madagascar: the partners have been approaches and have been involved in the very design of the project.
Needs assessments prior to any compilation greatly helped in designing the structure of tools of data and information dissemination
Another aspect of the project worth mentioning is the sustained interaction with data users, mainly KBA site managers: we had to create an atmosphere of trust with them.
The project has allowed us to valorize the data we have compiled, structured for more than 30 years since the implementation of the MBG program in Madagascar, to really serve the conservation of plant diversity in Madagascar

Sustainability / Replication

Summarize the success 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.

During the last regional workshops, we broadened the categories of participants by inviting managers of sites or protected areas that are not included in the project to share the results of the project with them as well as their value in the management itself for the conservation of biodiversity. At the end of these workshops, MBG was asked to collaborate with these non-KBA CEPF sites for training of their agents in the flora of their site.
During the project closing workshop, the MNP Research and Monitoring Officer advanced the financial and technical possibility of extending the project to other MNP sites and above all to set up a training programme for their field staff.

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

Additional Funding

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

Total additional funding (US$)

Type of funding
Please 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 investm*ent 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 Web site, www.cepf.net, and publicized in our newsletter and other communications.

1. Please include your full contact details (Name, Organization, Mailing address, Telephone number, E-mail address) below

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