

CEPF FINAL PROJECT COMPLETION REPORT

I. BASIC DATA

Organization Legal Name: Royal Botanic Gardens Kew

Project Title (as stated in the grant agreement): Mapping the Vegetation of Madagascar

Implementation Partners for this Project: Royal Botanic gardens, Kew, Missouri Botanical Garden, Center for Applied Biodiversity Studies

Project Dates (as stated in the grant agreement): January 1, 2003 - December 31, 2005

Date of Report (month/year): June 14, 2007

II. OPENING REMARKS

Provide any opening remarks that may assist in the review of this report.

This project is now complete, with the exception of publishing of the hard copy vegetation atlas. This is currently at the publishers (RBG Kew), with publication anticipated this autumn. The project has come in on budget, and all major objectives have been met.

III. ACHIEVEMENT OF PROJECT PURPOSE

Project Purpose:

Natural resource planners and managers use accurate vegetation and habitat information to make informed and environmentally sound decisions.

Planned vs. Actual Performance

Indicator	Actual at Completion
Purpose-level:	
Indicator 1.	Achieved. The first technical workshop was held on June 20th 2003 in Antananarivo. The workshop was attended by 16 delegates from botanical and conservation organizations from Madagascar and abroad. The second technical workshop took place in Antananarivo on the 4th of August 2004, and was attended by 29 people from 18 organizations. The third technical workshop was held in Antananarivo on July 21st 2005. >30 participants from 23 organizations attended. Through this process, the Vegetation map and classification scheme was accepted by the science community as appropriate for conservation planning and management in Madagascar. Reports of each technical workshop are available on the project website http://www.kew.org/gis/projects/mad_veg/documentation.html

<p>Vegetation map and classification scheme is accepted by science community as appropriate for conservation planning and management in Madagascar, through their participation in series of technical workshops (Jan 2003 - Jan 2004).</p>	
<p>Indicator 2. All GIS data are in the possession of the Ministry of Water and Forests and ANGAP, and are available to other stakeholders through the project web pages (July 2004 – July 2005).</p>	<p>Achieved. All GIS data have been supplied to the Ministry of Water and Forests and ANGAP, and are available through the Project website at: http://www.kew.org/gis/projects/mad_veg/datasets.html</p>
<p>Indicator 3. Corridor and protected area design initiatives run by CI and other NGO/GO's utilize the vegetation map to identify key unprotected areas requiring protection, i.e. gap analysis (July 2004 – July 2005)</p>	<p>Achieved. The CEPF vegetation map is being actively used by CI and others in the Durban Vision Process.</p>
<p>Indicator 4.</p>	<p>Achieved. Feedback from the 20 partner organisations that attended the Users Workshop on 21st April 2006, was that they had the technical capacity to use the digital map and its</p>

<p>Technical capacity exists in-country within NGO/GO institutions to utilize and manipulate digital version of vegetation map and intermediary data sets within GIS systems for future conservation activities (July 2005).</p>	<p>associated datasets. Many partners (e.g. CI, DGEF, FTM) are already doing so.</p>
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Describe the success of the project in terms of achieving its intended impact objective and performance indicators.

The project has been very successful in achieving its intended impact objective and performance indicators, as described above.

Were there any unexpected impacts (positive or negative)?

The most unexpected impact was positive – that of the advent of the Durban Vision process, by which the protected area network in Madagascar will be tripled from 2002 levels. This initiative was timely for this project, and the CEPF vegetation map is now being used as part of that process to identify areas of high botanical diversity and poorly protected vegetation types.

IV. PROJECT OUTPUTS

Project Outputs: Enter the project outputs from the Logical Framework for the project

Planned vs. Actual Performance

Indicator	Actual at Completion
Output 1	Digital and hard copy versions of a vegetation map designed and made publicly available for conservation, scientific research and natural resource management purposes.
Indicator 1.1 Participation and production of workshop reports from conservationists, researchers, natural resource managers and other stakeholders involved in the compilation process occurring	Achieved. The first technical workshop was held on June 20th 2003 in Antananarivo. The workshop was attended by 16 delegates from botanical and conservation organizations from Madagascar and abroad. The second technical workshop took place in Antananarivo on the 4th of August 2004, and was attended by 29 people from 18 organizations. The third technical workshop was held in Antananarivo on July 21st 2005. >30 participants from 23 organizations attended. The User's workshop was held in Antananarivo on April 21 st 2006, and was attended by 40 people from 20 institutions. Reports of all the workshops are on the Project website.

<p>during the technical workshops (June 2003, July 2004, July 2005) and the users' workshop (September 2005).</p>	<p>http://www.kew.org/gis/projects/mad_veg/documentation.html</p> <p>Karyn Tabor of CABS attended the first 3 technical workshops and presented the contribution of MODIS time series data to the vegetation classification analysis.</p>
<p>Indicator 1.2. Publication and distribution of digital and hard copy versions of the map, with translations in Malagasy, French and English. Map distributed on CD and Internet (December 2005).</p>	<p>Partially achieved. The digital map has been published on the internet at http://www.kew.org/gis/projects/mad_veg/datasets.html</p> <p>Versions of the map have also been sent out, on request, by CD. The hard copy atlas is currently being published, with publication anticipated for autumn 2006. Following advice from the participants of the User's workshop in April 2006, only two languages, English and French, have been used in the final products.</p>
<p>Indicator 1.3. Peer-reviewed publication on methods and results written in French.</p>	<p>Not yet achieved. The vegetation atlas includes the methodology in both English and French, and will be peer-reviewed. Other publications will follow.</p>
<p>Output 2:</p>	<p>Delivery of all Landsat and MODIS products, all co-registered, to Madagascar conservation-based collaborators, researchers and other stakeholders.</p>
<p>Indicator 2.2. Digital data publicly accessible on the web (ongoing January 2003 – December 2005).</p>	<p>Achieved. All digital data produced by this project are available through the Project website at: http://www.kew.org/gis/projects/mad_veg/datasets.html</p>
<p>Indicator 2.3. Distribution of digital (CD) version of data made to government,</p>	<p>Achieved. Digital data, including the map itself, has been sent to partners (DGEF, ANGAP, CI etc.) on CD on request.</p>

science and conservation community in Madagascar, as well as internationally (ongoing January 2003 – December 2005).	
Output 3:	A revised vegetation classification scheme for Madagascar, developed, published and made accessible to non-specialists through the Madagascar Biodiversity Network.
Indicator 3.1. New vegetation classification scheme agreed to by specialists and users, and produced by means of the workshop reports (January 2003 – June 2003).	Achieved. The vegetation classification scheme agreed by specialists and users is based on that of White (1983). White's physiognomic classification is described on the website at: http://www.kew.org/gis/projects/mad_veg/classification.html The workshop reports detailing this process are to be found on the website at: http://www.kew.org/gis/projects/mad_veg/documentation.html
Indicator 3.2. New vegetation classification used for vegetation map produced published and used in scientific literature (Jan 2004-December 2005).	Achieved. The new vegetation map employs this classification scheme. See http://www.kew.org/gis/projects/mad_veg/datasets.html Cloud holes in vegetation classification filled with 250m MODIS classification produced by Karyn Tabor of CABS.
Indicator 3.3. Vegetation map adopted and used by non-specialists after publication.	Ongoing. The CEPF Vegetation Map of Madagascar has been adopted by the Durban Vision Group, by project partners (e.g. CI) and by many other users, as evidenced by downloads from the website. The hard copy atlas will ensure much wider circulation within Madagascar.
Output 4:	Malagasy personnel trained in the use of remote sensing and GIS for conservation purposes.
Indicator 4.1. Successful recruitment of one promising Malagasy Research Fellow by quarter 1 of project. Completion of work plan on the use of remote sensing/GIS	Achieved. Andriambolantsoa Rasolohery, a Malagasy national, was trained in the RBG Kew GIS Unit for a period of three years. He has now returned to Madagascar, where he is working for Conservation International doing remote sensing and GIS analysis.

by year one. Completion and publication of vegetation map and methodology by year three.	
Indicator 4.2. Participation of Malagasy personnel in periodic workshop training sessions culminating in September 2005, focusing on the use of GIS for conservation and natural resource management.	Partially achieved/ongoing. Malagasy personnel were major contributors and participants in the technical workshops, where presentations on the methodologies employed were delivered. This was not formal training, but was a learning process for all involved. In the final User's Workshop in April 2006 participants were split into user groups, who tested out the utility of the map. All learnt from this process, and all were able to use the map effectively by the end of the workshop. RBG Kew and MBG have the capacity to ensure that training in the use of this map will be ongoing over the next few years.
Indicator 4.3. Trained personnel employ GIS as part of conservation research and management projects	Achieved/ongoing. The uptake of the digital map, and the popularity of the workshops, emphasizes that GIS is an accepted part of conservation research and management. This is not as a result of this project, but this project has contributed to the understanding that these are valuable techniques.
Output 5:	.A network of botanists, conservationists and other stakeholders working in collaboration throughout Madagascar
Indicator 5.1. Participation by a wide range of botanists in the data gathering process resulting in information exchange and cross-validation of data and expertise, including representatives from two major herbaria in Madagascar at PBZT and FOFIFA.	Achieved. The popularity of the workshops and the joint field trips illustrate what a collaborative effort this project has been. DGEF and PBZT personnel have participated enthusiastically in the process, and herbarium specimens collected on the field trips have been deposited in these herbaria.
Indicator 5.2. Participation by botanists, conservationists, and other stakeholders in the data synthesis	Achieved. The participation by a wide range of stakeholders in the workshops, data gathering and data synthesis stages has been enthusiastic and welcome. The technical workshops, in particular, have been exceptionally positive. 683 field data forms have been filled in on 71 field trips, making the ground truthing component of this project

<p>and interpretation process resulting in the publication of workshop reports and scientific publications.</p>	<p>substantial.</p> <p>Karyn Tabor of CABS participated in 2 field trips collecting GPS locations and photos to use to increase accuracy of vegetation map.</p>
<p>Indicator 5.3. An interactive website dedicated to mapping the vegetation of Madagascar to which botanists, conservationists and other stakeholders can contribute vegetation data, enabling the map to be updated during and beyond the project timeframe.</p>	<p>Achieved. See http://www.kew.org/gis/projects/mad_veg/default.html</p> <p>The development of this interactive website has been an innovative feature of this project. The interactive field data form has allowed a wide range of field workers to contribute information, and comments on the accuracy of the vegetation map have also been logged and incorporated into the process. The website will continue to be maintained by RBG Kew in the future, hopefully leading to updated versions of the map.</p>
<p>Indicator 5.4. Training has been completed for botanists, conservationists, and other stakeholders in the use of the vegetation map and database for their specific projects.</p>	<p>Partially achieved/ongoing. Botanists, conservationists and other stakeholders were participants in the technical workshops, where presentations on the methodologies employed were delivered. This was not formal training, but was a learning process for all involved. In the final User's Workshop in April 2006 participants were split into user groups, who tested out the utility of the map. All learnt from this process, and all were able to use the map effectively by the end of the workshop. RBG Kew and MBG have the capacity to ensure that training in the use of this map will be ongoing over the next few years.</p>
<p>Indicator 5.5. An increase in the number of collaborative projects that result in: 1) more complete, unified database of species data available to conservationists, and 2) better synchronized conservation strategies implemented among conservation groups.</p>	<p>Ongoing. We are continually adding to the dataset that we have associated with the CEPF vegetation map. For example, data from ca. 80,000 herbarium specimens is being incorporated into the Madagascar GIS, which is shared between Kew and other partners in Madagascar. These and other data plugged into the Durban Vision process will result in better informed and synchronised decision making amongst conservationists in Madagascar.</p>

Describe the success of the project in terms of delivering the intended outputs.

Nearly all of the planned outputs of this project have been delivered. Those that remain, such as the hard copy map, will be delivered within the next few months.

Were any outputs unrealized? If so, how has this affected the overall impact of the project?

The hard copy vegetation atlas has not yet been delivered, but is in the process of being published. This should not have a negative impact because the digital version of the map is available now, and is being used by conservation practitioners in Madagascar.

V. SAFEGUARD POLICY ASSESSMENTS

Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project.

VI. LESSONS LEARNED FROM THE PROJECT

Describe any lessons learned during the various phases of the project. Consider lessons both for future projects, as well as for CEPF's future performance.

The application process for CEPF funding was initially very cumbersome, with some difficulties experienced with the online application mechanism. Assigning expenditure to specific logframe outputs was also difficult, as many activities were directed towards more than one output. On the plus side, the reporting framework was very user friendly, and is an approach that we have introduced to other projects.

Project Design Process: (aspects of the project design that contributed to its success/failure)

The most important aspect of this project's design was the consultative approach to developing the classification and the map. Many stakeholders and technical experts were involved, via the workshops, from the beginning. This ensured buy in by nearly everyone, and generated a lot of positive input.

Project Execution: (aspects of the project execution that contributed to its success/failure)

There were no significant problems encountered in Project execution. The publication of the atlas has taken more time than anticipated, but this is because we want to get it right. The five pages of recommendations that came out of the User's Workshop need to be incorporated into the final version, and this takes time.

VII. ADDITIONAL FUNDING

Provide details of any additional donors who supported this project and any funding secured for the project as a result of the CEPF grant or success of the project.

Donor	Type of Funding*	Amount	Notes

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***Additional funding should be reported using the following categories:**

- A** *Project co-financing (Other donors contribute to the direct costs of this CEPF project)*
- B** *Complementary funding (Other donors contribute to partner organizations that are working on a project linked with this CEPF funded project)*
- C** *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.)*
- D** *Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)*

Provide details of whether this project will continue in the future and if so, how any additional funding already secured or fundraising plans will help ensure its sustainability.

The Project website will continue to be maintained by RBG Kew, and information will continue to be collated to enable future iterations of the vegetation map to be produced. MBG and RBG Kew staff in Madagascar will distribute the vegetation atlas, and respond to enquiries about its use.

VIII. ADDITIONAL COMMENTS AND RECOMMENDATIONS

The CEPF vegetation map represents the best set of baseline data that we have about the extent and status of Madagascar's native vegetation. It should be used as the basis for measuring future change, and monitoring the status of Madagascar's indigenous vegetation.

VIII. INFORMATION SHARING

CEPF aims to increase sharing of experiences, lessons learned and results among our grant recipients and the wider conservation and donor communities. One way we do this is by making the text of final project completion reports available on our Web site, www.cepf.net, and by marketing these reports in our newsletter and other communications. Please indicate whether you would agree to publicly sharing your final project report with others in this way.

Yes ___X___

If yes, please also complete the following:

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