

CEPF FINAL PROJECT COMPLETION REPORT

I. BASIC DATA

Organization Legal Name: Society for Environmental Exploration

Project Title (as stated in the grant agreement): Biodiversity Research and Awareness in the Lesser Known Eastern Arc Mountains: Mahenge, Rubeho, Ukaguru and Nguru (BREAM)

Implementation Partners for this Project: The University of Dar es Salaam (UDSM); Forest and Beekeeping Division (FBD); World Wide Fund For Nature (WWF-TPO); Museo Tridentino di Scienze Naturali, Trento, Italy: Francesco Rovero and Michele Menegon; Nocturnal Primate Research Group, Oxford Brooks University, UK: Andrew Perkin; Missouri Botanical Gardens (MBG).

Project Dates (as stated in the grant agreement): July 1, 2005 - November 30, 2007

Date of Report (month/year): March 2008

II. OPENING REMARKS

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

The BREAM project undertook biological and socio-economic research into eight forest reserves in four of the lesser-known mountain blocks, all relatively unexplored, and all remote and logistically difficult study sites. This ambitious goal utilised a variety of methods to survey an extremely wide range of taxa with a limited staff team, a logistical challenge in itself.

Furthermore, this project was constrained by financial considerations, as the need to pay full forest reserve fees (before the CEPF-negotiated discount came into effect) was not budgeted for and therefore consumed a very significant and unplanned part of the budget.

However, despite these hindrances, the project has been an overwhelming success. A phenomenal amount of data has been collected, including the discovery of many new species and range extensions; law enforcement in the reserves by FBD was actively improved; and conservation initiatives enhanced through raising community awareness and the subsequent active participation of communities in forest management.

III. ACHIEVEMENT OF PROJECT PURPOSE

Project Purpose

- * Management recommendations proposed for nine catchment forest reserves in the Morogoro District
- * Reduction of encroachment beyond catchment forest reserve boundaries
- * Sustainable community forest projects established
- * Reduction of illegal poaching and harvesting within catchment forest reserves
- * Data available as a baseline for future monitoring initiatives within the Eastern Arc Mountains

Planned vs. Actual Performance

Indicator	Actual at Completion
Purpose-level:	
<p>FBD incorporates recommendations made as a result of this project into planning enforcement and policy discussions and actions. Protected status of catchment forest reserves under investigation enforced.</p> <p><i>*Management recommendations proposed for nine catchment forest reserves in the Morogoro District</i></p> <p><i>* Reduction of illegal poaching and harvesting within catchment forest reserves</i></p>	<p>Management recommendations have been compiled in each of the Technical Reports, for Sali and Mselezi FRs in Mahenge, Ulanga; for Kanga and Nguru South FRs in Nguru, Mvomero; for Pala Ulanga and Ukwiva FRs in Rubeho, and for Mamiwa Kisara North and South FRs in Ukaguru, both of which lie in Kilosa District.</p> <p>Management recommendations were also directly submitted to FBD at the time of meetings to present short reports on human disturbance (including photos, GPS points, and GIS maps), which were compiled immediately following fieldwork for each mountain block. These were presented to FBD on our return from each field phase in meetings with the Regional Catchment Forest Manager (Mr. Mialla) or the Acting Manager (Mr. Beleko), and also sent to Dr. Kilihama (now Director of FBD). These reports highlighted urgent illegal issues that needed to be addressed by FBD. The law was subsequently enforced on several occasions after we notified FBD of illegal activities, e.g. planks were confiscated from several villages around forest reserves, and the largest ever find of ~1700 planks at Maskati village, Nguru South FR, was confiscated and the perpetrators successfully prosecuted.</p> <p>There has therefore been an enforcement of the protected status of these forest reserves, and a subsequent reduction in illegal activities within the reserves studied during this project.</p> <p>Recommendations have begun to be incorporated, with evidence of political will and commitment from the government and local authorities to support conservation, through the participation of FBD representatives in the Frontier/WWF-TPO workshops and Frontier community days.</p> <p>For example, District Officials have pledged to follow up these workshops with the communities involved to assist in implementation of Community Action Plans; District Officers will now be stationed at remote villages adjacent to FRs e.g. Sali and Mselezi villages; District Officers will clearly explain the legalities of Forest Reserves to local communities; District Officers will assist villages in composing by-laws for forest management, to assist in the prevention of illegal activities; boundaries of all forest reserves will be more clearly defined; FBD will be relocating Mselezi village inhabitants who live within Mselezi FR.</p>
<p><i>* Reduction of encroachment beyond catchment forest reserve boundaries</i></p> <p><i>*Sustainable community forest projects established</i></p>	<p>Management recommendations at a community level were facilitated through the development of Community Action Plans (in WWF-TPO workshops) for Participatory Forest Management, which is a significant step towards reducing encroachment and illegal activities within forest reserves.</p> <p>Training and materials for energy-saving stoves were provided to communities, to reduce the need for firewood and reliance on forest resources. Communities were exposed to other community projects, e.g. bee-keeping, to encourage implementation of their own ideas, and access to the CEPF small grants scheme was explained by WWF-TPO.</p>
<p>Further research/monitoring is conducted within the same catchment forest reserves under investigation.</p>	<p>All data has been compiled in the three Technical Reports which will be the comprehensive source of baseline data for these sites, for future monitoring of these reserves.</p>

<p><i>* Data available as a baseline for future monitoring initiatives within the Eastern Arc Mountains</i></p>	<p>A number of resources have been compiled to accompany these Technical Reports. Resources include the detailed vegetation analysis reports, a camera-trap database, an amphibian and nocturnal mammal acoustic database, and consultant ornithological, community and nocturnal mammal reports.</p> <p>Data has been contributed to the National Biodiversity Database of Tanzania, TROPICOS Database of Missouri Botanical Gardens. Specific biological data has been provided on request to scientists.</p> <p>Human resource-use data has been compiled in short Government reports for immediate action by FBD.</p> <p>General results and community day findings have been outlined in Swahili reports for the local communities.</p> <p>Thus the data from this project has been made available in several forms to stakeholders and interested parties, to facilitate further research and monitoring within these forest reserves.</p>
<p>Additional data contributed to the CEPF Conservation Outcomes database</p>	<p>Data has been contributed to the CEPF Conservation Outcomes database via UDSM's National Biodiversity Database of Tanzania.</p> <p>Data additional to this has been contributed following completion of each Technical Report. Data for Mahenge and Nguru South has already been submitted. Data for Ukaguru and Rubeho will be submitted on completion of the final Technical Report.</p>

Describe the success of the project in terms of achieving its intended impact objective and performance indicators.

This project was extremely successful in achieving the main outputs.

In terms of scientific knowledge of biodiversity and human resource-use, this project has collected and distributed a vast amount of data for a total of 8 forest reserves in 4 mountain blocks, few of which have been previously studied. This has considerably improved scientific knowledge of this hotspot, and has included the discovery of at least fourteen new species (amphibians and reptiles) but potentially several more (including small mammals).

Enforcement by FBD has been improved within these forest reserves, through increased engagement with District Officials leading to prosecution and reduction of illegal practices, and better collaboration of District Officials with local communities.

Community awareness and capacity building has been successfully implemented, with communities developing Community Action Plans as part of participatory forest management schemes, using energy-efficient stoves to reduce need for forest resources, and exploring potential community forest projects.

All data and information has been (or continues to be) compiled in one Technical Report for each District (Mahenge, Ulunga; Nguru, Mvomero; Ukaguru and Rubeho, Kilosa). This will enable government management of these forest reserves, community participatory forest management, the monitoring and conservation of biodiversity, and the preservation of ecosystem services both for local communities and nationally.

Were there any unexpected impacts (positive or negative)?

This project made a major contribution to global biodiversity monitoring and conservation efforts through developing unexpected collaborations with a diversity of national and international institutions and specialists. Collaborations that were developed during this project (unplanned in the project proposal) included:

Mr. F. Mbago (Department of Botany, University of Dar es Salaam, Tanzania)

Mr. Neil Baker, Tanzania Bird Atlas Project, Iringa, Tanzania

Mr. Colin Congdon and Mr. Steve Collins, African Butterfly Research Institute, Nairobi, Kenya

Ms. Antje Ahrends and Dr. Rob Marchant, KITE, University of York, UK

Mr. Quentin Luke, East African Herbarium, Nairobi, Kenya

Mr. Charles Meshack, Mr. David Loserian, Ms Nike Doggart (TFCG-PEMA, Dar es Salaam & Turiani, Tanzania)

Dr. G. Rathbun, California Academy of Sciences, San Francisco, USA

A good and active relationship was developed with FBD, through direct communications with the Regional Forestry Manager, Mr. Mialla; meaning that we were able to provide detailed accounts of illegal activities and FBD were able to respond fairly rapidly in many cases to deal with these activities. This actively encouraged and improved law enforcement for the duration of this project.

Our Tanzanian Community Liaison Officer / Research Officer undertook Frontier's unique BTEC qualification in Tropical Habitat Conservation, achieving a Distinction overall. This quantifies the experience he gained on this project and will assist him in continuing with a successful career in this field.

Community activities undertaken by Frontier went far beyond the remit of the original proposal. Environmental education and games were conducted with the children while structured interviews were carried out with a representative sample of the adults to obtain information regarding their knowledge and attitude towards the forest reserves. A presentation on all aspects of work and forest importance was made to the local community, by Frontier-Tanzania, including talks by Forest Officers. A discussion was then held with all participants to highlight issues of importance to the local community in the forest and ensure their views were included in this project. More community days were conducted than anticipated, through involving several villages surrounding each reserve. This information was compiled (along with biodiversity and human resource-use findings) into a brief for WWF-TPO to provide detailed information prior to the community workshops; WWF-TPO and the villagers both commented on the usefulness and productivity of this work. A Kiswahili report was produced to accompany each Technical Report, summarising the biological findings and detailing the community and human resource-use findings, for each local community visited during this project.

IV. PROJECT OUTPUTS

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

Planned vs. Actual Performance

Indicator	Actual at Completion
<p>Output 1: Frontier-Tanzania Environmental Research Series Technical Report; Ulanga District. Covering Mselezi and Sali catchment forest reserves (site numbers 70 and 74). Frontier-Tanzania Environmental Research Series Technical Report; Morogoro District. Covering Kanga and Nguru South catchment forest reserves (site number 103). Frontier-Tanzania Environmental Research Series Technical Report; Kilosa District. Covering Ikwamba, Mamboto, Mamiwa Kisara North, Mamiwa Kisara South, and Pala Ulanga catchment forest reserves (site numbers 146 and 120). Data to include * species inventory of flora (trees, shrubs and herbs) * species inventory of fauna (small mammals, amphibians, reptiles, birds, butterflies, primates and forest antelopes) * occasional information on medium to large mammals from camera traps, direct observation, tracks and signs * information on IUCN Red List species * habitat description notes * human resource use assessment * indigenous knowledge * record of community days conducted * record of environmental awareness activities conducted (WWF-TPO) * record of Forest Officers who received training in the field</p>	<p>Frontier-Tanzania Environmental Research Series Technical Report; Ulanga District. Covering Mselezi and Sali catchment forest reserves. Published and circulated.</p> <p>Frontier-Tanzania Environmental Research Series Technical Report; Mvomero District. Covering Kanga and Nguru South catchment forest reserves. Awaiting publication and circulation.</p> <p>Frontier-Tanzania Environmental Research Series Technical Report; Kilosa District. Covering Mamiwa Kisara North, Mamiwa Kisara South, Ukwiva and Pala Ulanga catchment forest reserves. Awaiting publication and circulation.</p> <p>Technical Reports include: * species inventory of flora (trees, shrubs and herbs), detailed vegetation and habitat analysis, habitat description notes, plant diversity and richness assessments; * species inventory of fauna (small mammals, amphibians, reptiles, birds, butterflies, primates and forest antelopes and other large mammals), faunal species diversity, richness and measures of relative abundance, including detailed information on medium to large mammals; * information on endemic, forest-dependent, IUCN Red List species; * information on range extensions; * human disturbance and resource use assessment including GPS points and production of GIS maps of disturbance; * indigenous knowledge gathered through questionnaires on traditional and current forest uses, including medicinal plants, hunted species, pole and timber species, and other uses, information on local management such as Village Environmental Committees and activities; * record of community days conducted, including activities, and results of community discussion highlighting issues of concern; * record of environmental awareness activities conducted (WWF-TPO), including identification of forest threats, and Community Action Plans as part of Participatory Forest Management; training in energy-saving stoves and exposure to other sustainable forest projects; * record of Forest Officers who received training in the field * management recommendations for FBD; * ranking and prioritisation of mountain blocks for conservation, through updating Burgess <i>et al.</i>'s 2007 review of the biological importance of the Eastern Arc Mountains, utilising this new data.</p>

<p>1.1. Sali and Mselezi catchment forest reserves, Ulunga District, surveyed by December 2005. Kanga catchment forest reserves, Morogoro District, surveyed by April 2006. Nguru South catchment forest reserves, Morogoro District, surveyed by August 2006. Mamboto and Ikwamba catchment forest reserves, Kilosa District, surveyed by December 2006. Mamiwa Kisara North catchment forest reserve, Kilosa District, surveyed by March 2007. Mamiwa Kisara South catchment forest reserve, Kilosa District, surveyed by May 2007. Pala Ulunga catchment forest reserve, Kilosa District, surveyed by July 2007.</p>	<p>Sali and Mselezi FR, Ulunga District, surveyed by December 2005. Kanga FR, Mvomero District, surveyed by April 2006. Nguru South FR, Mvomero District, surveyed by August 2006. Ukwiva FR, Kilosa District, surveyed in preference to Mamboto and Ikwamba FRs based on advice from Eastern Arc experts and the higher priority of this site for biodiversity conservation, and lack of funds to survey the latter two FRs due to unexpected cost of FR fees, surveyed by December 2006. Mamiwa Kisara North and South FRs, Kilosa District, surveyed by March 2007. Pala Ulunga FR, Kilosa District, surveyed by April 2007.</p>
<p>1.2. WWF-TPO conduct environmental awareness activities within Ulunga District between mid September 2005 - December 2005. WWF-TPO conduct environmental awareness activities within Morogoro District between February - August 2006. WWF-TPO conduct environmental awareness activities within Kilosa District between October 2006 - July 2007.</p>	<p>WWF-TPO conducted environmental awareness activities within Ulunga District in Nov 2006, within Mvomero District in February 2007, within Kilosa District between April – May 2007.</p>
<p>1.3. Frontier-Tanzania Environmental Research Series Technical Report, Ulunga District, compiled by February 2006. Frontier-Tanzania Environmental Research Series Technical Report, Morogoro District, compiled by October 2006. Frontier-Tanzania Environmental Research Series Technical Report, Kilosa District, compiled by October 2007</p>	<p>Frontier-Tanzania Environmental Research Series Technical Report, Ulunga District, compiled by April 2007. Frontier-Tanzania Ulunga District Kiswahili Report, compiled by April 2007.</p> <p>Frontier-Tanzania Environmental Research Series Technical Report, Mvomero District compiled by Mar 2007. Frontier-Tanzania Ulunga District Kiswahili Report, compiled by Dec 2007.</p> <p>Frontier-Tanzania Environmental Research Series Technical Report, Kilosa District, awaiting completion. Frontier-Tanzania Kilosa District Kiswahili Report, awaiting completion.</p> <p>A number of additional reports and resources have been compiled to accompany these Technical Reports. Resources include the detailed vegetation analysis reports, a camera-trap database, an amphibian and nocturnal mammal acoustic database, and consultant ornithological, community and nocturnal mammal reports.</p>
<p>Output 2. Faunal specimens deposited at the University of Dar es Salaam, Department of Zoology and Marine Biology for taxonomic verification, distribution to an international network of taxonomists and storage as appropriate.</p>	<p>Faunal specimens deposited at the University of Dar es Salaam, Department of Zoology and Marine Biology by May 2007.</p>
<p>2.1. Specimens from Sali and Mselezi catchment forest reserves, Ulunga District, collected by December 2005.</p>	<p>Specimens from Sali and Mselezi FRs, Ulunga District, collected by December 2005.</p>
<p>2.2.</p>	

Specimens from Kanga catchment forest reserve, Morogoro District, surveyed by April 2006.	Specimens from Kanga FR, Mvomero District, collected by April 2006.
2.3. Specimens from Nguru South catchment forest reserve, Morogoro District, collected by August 2006.	Specimens from Nguru South FR, Morogoro District, collected by August 2006.
2.4. Specimens from Ikwamba and Mamboto catchment forest reserves, Kilosa District, collected by December 2006.	Specimens from Ukwiva FR, Kilosa District, collected by December 2006.
2.5. Specimens from Mamiwa Kisara North catchment forest reserve, Kilosa District, collected by early March 2007.	Specimens from Mamiwa Kisara North FR, Kilosa District, collected by March 2007.
2.6. Specimens from Mamiwa Kisara South catchment forest reserve, Kilosa District, collected by early May 2007.	Specimens from Mamiwa Kisara South FR, Kilosa District, collected by March 2007.
2.7. Specimens from Pala Ulanga catchment forest reserve, Kilosa District, collected by early July 2007.	Specimens from Pala Ulanga FR, Kilosa District, collected by April 2007.
Output 3. Data sharing; *Data contributed to the Biodiversity Database of the Department of Zoology and Marine Biology, University of Dar es Salaam * Data contributed to the CEPF Conservations Outcomes database via the Biodiversity Database of the Department of Zoology and Marine Biology, University of Dar es Salaam * Data contributed to the TROPICOS database of Missouri Botanical Gardens inclusive of botanical specimens. * Data contributed to the FBD database through the Monitoring and Evaluation Unit.	Data sharing; * All data contributed to the Biodiversity Database of the Department of Zoology and Marine Biology, University of Dar es Salaam by May 2007. * Data contributed to the CEPF Conservations Outcomes database via the Biodiversity Database of the Department of Zoology and Marine Biology, University of Dar es Salaam by May 2007. * All data contributed to the TROPICOS database of Missouri Botanical Gardens inclusive of botanical specimens by March 2008. * Data continues to be contributed to the FBD database through the Monitoring and Evaluation Unit in Disturbance and Technical Reports.
3.1. Frontier-Tanzania Environmental Research Series Technical Report for Ulanga District delivered to stakeholders by March 2006.	Frontier-Tanzania Environmental Research Series Technical Report for Ulanga District delivered to stakeholders by May 2007. Hard and electronic CD copies of the Technical Report delivered to FBD Regional Forest Manager (Mr. Mialla/Mr. Beleko), Ulanga District Natural Resource Officer (Mr. Kulita/Mr. Makotta) and Catchment Forest Manager (Mr. Lugendo), and Prof Howell of UDSM. The Frontier-Tanzania Ulanga District Kiswahili short report was delivered to the Chairmen, Environmental Committees and Head Teachers of Sali, Mselezi and Isongo villages. Electronic copies of the Technical and Kiswahili Reports were distributed amongst the scientific community and posted on the Frontier website www.frontier.ac.uk and the Eastern Arc website www.easternarc.or.tz , along with Consultant Reports on vegetation analysis, nocturnal mammals, ornithology and community activities.

	Accompanying resources are available on request, and include a database on camera-trapping results, and a database of acoustic recordings of nocturnal mammals and amphibians,
3.2. Frontier-Tanzania Environmental Research Series Technical Report for Morogoro District delivered to stakeholders by end of November 2006.	Frontier-Tanzania Environmental Research Series Technical Report for Morogoro District to be delivered to stakeholders on completion, following the same procedures as above.
3.3. Frontier-Tanzania Environmental Research Series Technical Report for Kilosa District delivered to stakeholders by November 2007.	Frontier-Tanzania Environmental Research Series Technical Report for Kilosa District to be delivered to stakeholders on completion, following the same procedures as above.

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

The project has again been successful in delivering the outputs relating to reporting, specimens and data.

The Technical Reports include data and analysis above that were specified in the original proposal. Not only do they contain all research conducted in the forest reserves during this project, but comprehensive literature reviews of these mountain blocks above and beyond anything previously conducted. This makes these Reports a comprehensive resource of all existing information for these lesser-known mountain blocks. The first report (Ulanga District) has been distributed with much interest and positive feedback from the scientific community, government officials and local communities. Government officials have already begun to act on this project's recommendations and findings, communities have already been assisted to develop Community Action Plans and have begun to apply for CEPF small grants for community projects, and several institutions, individuals and organisations within the scientific community are using the data to update global information on the hotspot. Although the final 2 reports are not quite completed, we intend to complete and circulate them as soon as possible, and anticipate that these reports will have the same positive impact.

All faunal specimens were deposited at UDSM, and many have been circulated to taxonomists world-wide for identification and inclusion in taxonomic reviews. Many new species have been discovered and descriptions are underway.

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

Ukwiva catchment forest reserve in Kilosa District was surveyed in preference to Mamboto and Ikwamba catchment forest reserves based on advice from Eastern Arc experts and the higher priority of this site for biodiversity conservation. The large area of forest at Ukwiva was better suited for the intensive survey effort employed by BREAM, as Mamboto and Ikwamba are extremely small forest reserves, too small to employ standard methods such as 4km large mammal transects. Additionally, the unexpected expenditure on FR fees meant there were insufficient funds to survey these two forest reserves as well.

The training of Forest Officers relied on there being Forest Officers available to accompany the field team. Unfortunately, with the change of Presidency in Tanzania, and the resulting governmental and bureaucratic movements, it was extremely difficult for FBD to spare Forest Officers. Ultimately, less Forest Officers than hoped were able to join the project in the field. However, those that could not were still kept informed of project activities with regular meetings during field phases (on occasions of re-supply), and both the Kiswahili Report and the Technical Report will prove useful to District Officers, as these were both well-received when distributed in Ulanga District.

The Officers also attended our local Community Days to present their work and join in discussions about community forest management. Therefore there was minimal effect on the overall impact of the project.

Production and distribution of the final 2 reports has been delayed for a variety of reasons. Almost 2 years of fieldwork has produced a phenomenal amount of data, and the time needed for data analysis, taxonomic identification (of a considerable number of specimens), consultant reports to be received and incorporated and writing up of reports was underestimated, as was the time needed for reviewers comments to be received and incorporated. However, this has had little effect on the overall impact of the project, as Disturbance Reports and Management Recommendations have been prepared and given to FBD, and incorporated into community workshops to ensure that immediate action can be taken where necessary to address ongoing illegal activities. Draft reports have been circulated to Eastern Arc experts and workers in the field to help with formulating plans for further research in the area, and specific data has been provided on request. Thus all project outputs can be met even though the final two reports have not yet been officially distributed.

V. SAFEGUARD POLICY ASSESSMENTS

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

N/A

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 remoteness and inaccessibility of these forest reserves was perhaps slightly underestimated during project planning. This had consequences in several aspects. Additional expenditure was necessary for a number of reasons. Armed game scouts were needed due to the unexpected presence of large game. In order to survey large areas of the forests, base camps were often a full day's walk apart, which meant that porters were a significant additional expenditure. Costs of food and petrol were often dramatically more expensive in these remote and impoverished areas, particularly during times of food shortage. The remoteness of these areas, coupled with difficult terrain, heavy rains and poor roads meant that vehicle maintenance, and even the cost of petrol for major detours, are more significant costs. This should be considered in future.

A major unexpected cost was the need to pay Forest Reserve fees for the entirety of the first field phase at the full rate until the CEPF-negotiated discount came into force. This was a significant cost that must be considered for future projects.

This project had a major community aspect, and developed good relations with communities encountered during the course of the survey, with community days and opportunities for locals to express their opinions. Although these villages are rarely visited, common complaints were that previous researchers passed through with minimal interaction or economic benefits to the village, and that they often did not know what researchers were doing, and even if it was legal. Good relations were established, despite the fact that when our fairly large and equipped team arrived, villagers often felt that the forest reserve fees paid to the Government did not benefit them directly at all, and so some measure of resentment could have been expected. Frontier's policy of relying on local supplies meant that we provided a boost to the local economy through purchasing supplies and hiring local labour. There were occasional problems which were negotiated, but we advise that future projects, even those that are strictly research, consider how they can benefit local communities and take the time to explain their work.

The length of time allocated to report-writing needs to be sufficient. In this case, almost 2 years of fieldwork has produced a phenomenal amount of data, and the time taken for data analysis, taxonomic identification (of a considerable number of specimens), incorporation of consultant reports, and consultation and review with external experts, has been underestimated. The numerous and extensive collaborations within this grant have been a strength of this project, but have been a major factor contributing to delays in the compilation of the final reports. Interestingly, our research has resulted in several findings which entail lengthy correspondence with consultants to arrive at expert conclusions, or to obtain clarification on issues such as the taxonomic controversies prevalent in the Eastern Arc. The reports have also necessitated a comprehensive literature review and verification of grey literature records which has been extremely time-consuming though a real highlight of the final reports. Therefore compressing a project of this scale into satisfactory reports over only a few months in order to respect agreed deadlines has been impossible and in fact undesirable.

This project has experienced problems concerning the lack of qualified botanists in Tanzania. Several botanists were employed during the course of BREAM, but a variety of problems were encountered. Strenuous field conditions restricted our ability to permanently employ senior botanists, and many botanists in Tanzania lacked formal botanical training which slowed the process of accurate data collection. Although we were able to overcome this through utilising the assistance of expert taxonomists in all specimen identification, and contracting expert vegetation analysts, the lack of field botanists is a significant and continuing hindrance to projects with a major botanical component.

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

Given the lessons learned, the flexibility of both planning and execution meant that problems were successfully overcome and appropriate solutions implemented.

The overall design of the project meant that it was successfully implemented, although we recommend more comprehensive reporting as part of the proposal design and to set aside contingency funds for unexpected costs. A lengthier period for report writing, taxonomic identification and external consultation was necessary; however this need stems from the success of this project in terms of data collection and collaboration, which could not reasonably have been anticipated.

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

Collaborations initiated during planning of the project were comprehensively developed and broadened during the execution of the project. These collaborations, promoted by CEPF, have proved to be integral to the success of the project.

A wide variety of methods were needed to assess the extremely broad range of focus taxa. There was a significant logistical difficulty in combining and effectively standardising all these methods, while ensuring that the field team did not reach unmanageable sizes. There was a need to streamline and strictly timetable activities, to prevent spending excessively long periods of time fitting in all the methods at each work site. Methods utilised were successfully standardised into systematic, repeatable work units at the outset of the project, which enabled successful execution of the project. This project utilised Frontier's history of standard, repeatable methods that have been used throughout the Eastern Arc since 1989, and later adopted by other researchers, while incorporating methods from experts in fields new to Frontier.

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
SEE	A	US\$ 25,827.03	Additional funds for FBD fees – not included in original proposal

***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.

VIII. ADDITIONAL COMMENTS AND RECOMMENDATIONS

VIII. INFORMATION SHARING

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned and results. One way we do this is by making programmatic project documents available on our Web site, www.cepf.net, and by marketing these in our newsletter and other communications.

These documents are accessed frequently by other CEPF grantees, potential partners, and the wider conservation community.

Please include your full contact details below:

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