CEPF SMALL GRANT FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	Biodiversity Inventory for Conservation npo
Project Title:	The Njesi Plateau expedition; A quantitative assessment of biodiversity on the Serra Jecci massif (Mozambique) - addressing a biogeographical gap in the East African Rift
Date of Report:	31 August 2017
Report Author and Contact Information	Merlijn Jocque, Dr.

CEPF Region: Africa, Eastern Afromontane Biodiversity Hotspot

Strategic Direction: 2.3 Advance the identification and prioritization of KBAs in Africa and the Arabian Peninsula.

Grant Amount: 20.000USD

Project Dates: 1 July 2016 – 31 August 2017

Implementation Partners for this Project (please explain the level of involvement for each partner):

Rift Valley Corporation (James Egremont-Lee), Logistics for the Njesi-expedition, and launch of the Associação Capital Natural Niassa (http://fuzetest2.co.za/), an initiative to durable manage a large region.

Natural History Museum Maputo (Emidio Sumbane), participation in the field and acquisition of research and export permits.

Conservation Impacts

Please explain/describe how your project has contributed to the implementation of the CEPF ecosystem profile.

Biodiversity in Niassa, Mozambique is only fragmentarily documented and in many regions is scant. The current BINCO Biodiversity Express Survey assessed biodiversity on three mountain peaks in the Njesi Mountain range on several taxa.
This expedition, gathering information on the distribution of amphibians, mammals and birds, plants and several invertebrate species, will provide a baseline study for future monitoring and surveys. Despite being a snapshot (in the dry period), the biodiversity data collected during this project is a first important step towards evaluating the ecological value of this region. Based on the collected information a preliminary evaluation of the Njesi mountain range as a global KBA is presented.

Additionally the data collected during this project contributes to advance the development of The Luatize Integrated Resource Management Area (LAGRI). LAGRI is a large area, close to 1.000.000 ha, north of Lichinga that integrates forest management with agriculture and conservation. The conservation part aims to create wilderness zones, centered around some of the more intact natural regions. It is the flagship project of the Associação Capital Natural Niassa. BINCO was invited on the openings conference of ACNN in Lichinga (18-19 July 2017) to present the results from the Biodiversity Express Survey and use these observations to illustrate the natural value of the region in the application for substantial funding with WCF to create the Luatize Integrated Resource

Management Area (LAGRI). The LAGRI area will be a combination of Wilderness, Integrated and Agriculture areas, in which Wilderness areas constitute protected natural regions (such as the Njesi plateau), and both Integrated and Wilderness areas will be durably managed forestry and agriculture areas.

Please summarize the overall results of your project against the expected results detailed in the approved proposal.

The biodiversity survey was completed as planned. Surveys were successfully completed and results can be found in the dynamic report online (www.binco.eu), where they will be added as additional information form the ongoing analyses and identifications becomes available.

A Biodiversity Survey expedition with Mozambique and international scientists

A successful expedition to three mountain peaks on the Njesi plateau (Niassa, Mozambique) 21 days in the field (5-25 November 2016), with 13 people; and 8 scientists from Belgium (2), UK (2), The Netherlands (1), USA (1), Mozambique (1) and Malawi (1). Data was collected on birds, mammals, amphibians, reptiles, plants, spiders and selected other invertebrate groups.

Data on the diversity of selected taxa on Mt Jecci

A more advanced version of the expedition report containing several fully identified groups of invertebrates and additions to other groups is placed online. This report will ongoingly be updated as some of the final identifications become available.

Updated IUCN Red List status for the long-billed tailorbird

The long billed tailor bird was observed and caught in mist nets on the expedition, see the BES report version 6.3 for an overview of all birds caught in the mist nets and collected data. The manuscript evaluating the Red List position of the long billed tailorbird is in preparation.

Dynamic expedition report with species occurrence data published online

See previous

International peer reviewed scientific publications with joined co-authorships

Manuscripts in preparation are:
Jones, S.E.I*, Jamie, G.A.*, Sumbane, E., Jocque, M. Ornithological exploration of Mounts Chitagal, Sanga and the Njesi Plateau with a review of the biogeography and conservation importance of northern Mozambique's Afromontane avifauna. Ostrich.

Jamie, G.A., Jones, S.E.I. Sex-role partitioning in territorial interactions in the Endangered Long-billed Tailorbird Artisornis moreaui with no evidence for interspecific competition. Journal of Field Ornithology.

Jones, S.E.I, Jamie, G.A. Notes on morphometrics and moult of selected Afromontane highland avifauna from Mts Chitagal, Sanga and the Njesi Pleateau, northern Mozambique. Bulletin of the African Bird Club

Jamie, G.A., Jones, S.E.I. Taxonomic appraisal, distribution and population estimation of the Endangered Mozambiquan Long-billed Tailorbird Artisornis moreaui. Bird Conservation International.

Clause J.K., Loader S., Farooq H., Jocque M.J. The Herpetological Diversity of Northern Mozambique Sky Islands (Part 1: Reptiles, Part 2: Amphibians). African Journal of Herpetology.

van Berkel T., Sumbane E. & Jocque M. Are sky islands in North Mozambique a refuge for large mammals? An overview with additions from the Njesi expedition. Oryx.

Jocque. R. and Jocque M. Contributions to the arachnology of northern Mozambique, with the description of a new Cicynethus sp. (Zodaridae). Zootaxa.

Please provide the following information where relevant:

Hectares Protected: NA
Species Conserved: NA
Corridors Created: NA

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

The project had clearly defined and realistic short-term objectives. Achieving the short-term objectives within the proposed timeframe was therefore relatively straightforward, controllable and successful. The team worked well together, and a productive collaboration between BINCO and in country organizations is ongoing.

The long term challenge is an effective conservation of the mountain forest ecosystems. These increasingly rare habitats house a wide range of unique plant and animal species, and only occur in small fragmented patches prone to deforestation. The observations made on the Njesi expedition, partly by revealing the presence of a couple of endangered species (such as the long billed tailorbird) and several invertebrates new species to science further confirm the value of these mountain forest patches. Although isolated regions were chosen for the survey, a surprisingly high hunting pressure (traps) was observed in the survey regions, partly explaining the absence of many large mammals. The key for a balance between people and nature lies in a durable use of natural resources in the region and an appreciation from local communities that natural resources are finite. A challenge for the future will be to gain insight in the demand for natural resources, durably manage, equally distribute and have the whole local community on board. The effectuation of the long-term objective, will largely depend on securing funding, but a firm base of collaboration is present and an application for funding is in progress. The data collected during this project contributes to advance the development of The Luatize Integrated Resource Management Area (LAGRI). LAGRI is a large area, close to 1.000.000 ha, north of Lichinga that integrates forest management with agriculture and conservation. The conservation part aims to create wilderness zones, centered around some of the more intact natural regions. It is the flagship project of the Associação Capital Natural Niassa. An application by ACNN for substantial funding with WCF is close to being submitted to create the Luatize Integrated Resource Management Area (LAGRI).BINCO will be responsible for the biodiversity assessment and monitoring in this project.

Collaboration between Mozambique scientists and researchers worldwide

A successful expedition to three mountain peaks on the Njesi plateau (Niassa, Mozambique) 21 days in the field (5-25 November 2016), with 13 people; and 8 scientists from Belgium (2), UK (2), The Netherlands (1), USA (1), Mozambique (1) and Malawi (1). A preliminary expedition report with all scientists as co-authors is placed online (www.binco.eu/wp-content/uploads/2016/08/BES6-v1.0-prelim.pdf). Contact has been made and collaboration is ongoing with the Natural History Museum and Instituto de Investigação Agrária de Moçambique (IIAM) in Maputo for publications. Collaborations and sharing of information is ongoing and where appropriate local scientists are

invited to participate in the study and publication of expedition results. The Mozambique counterpart Emidio Sumbane (working at the Natural History Museum in Maputo) was trained in bird and small mammal surveys during the expedition. He joined the respective teams and was learned all relevant techniques.

Biodiversity observations of the mountain forest on the Njesi plateau made available

The observations from the expedition are made available in the freely available and dynamic online expedition report BES6 on the BINCO website (www.binco.eu). A more advanced version of the expedition report containing several fully identified groups of invertebrates, plants and additions to other groups is placed online at the end of August 2017. BINCO reports are “dynamic” reports. This means that reports are supplemented with information on the identifications as they become available. This is approach is used to distribute available information as soon as possible when it becomes available, without having to wait on some of the components that require more time, such as molecular analyses and identifications of some of the invertebrate groups. This is largely on schedule. Some groups and analyses take longer than expected to secure identifications. Also an unexpected setback happened with some of the invertebrate samples. The samples for the opilionids collected from the pitfall traps, which were sent to the Natural History Museum in Buenos Aires for identification, were stopped at customs and destroyed despite all necessary paperwork. We are still trying to get official feedback of what happened and why they were destroyed. This resulted in the loss of several species new to science. Because of this we avoided sending more samples by post and tried to carry all samples to the experts, causing a substantial delay.

Assessment of KBA status on the basis of the new data

A preliminary evaluation of the KBA is included with the project report. In the understanding that as good as no information from previous studies is available, and the current survey is a snapshot of the occurring biodiversity, the presented results should be interpreted carefully and seen as an absolute minimal assessment of the region as a KBA. Our findings suggest that the region has merit as a KBA, mostly carried by the bird observations and with the long billed tailorbird as the flagship species.

Raised awareness of public on the biodiversity and conservation value of Njesi plateau

A wide range of Mozambique based stakeholders (100+) are made aware of the value of the Mt. Jecci region during the launch of the ACNN (July 2017). Posts on facebook and BINCO blog post about the Njesi expedition, as well as in the Riftvalley Newsletter are first steps to inform the public on the importance of this region. A short documentary (https://www.canvas.be/video/expeditie-mozambique) on Canvas (National Belgian television) presented the value of this region for biodiversity but also marked the absence of large mammals, partly due to hunting pressure. Additional press releases and associated raised awareness of the broader public are planned with the completion of scientific publications.

Effective conservation of the Mountain forest ecosystem around the Njesi plateau, Niassa, Mozambique

This is some of the first Information about the biodiversity of Mt. Jecci ever collected. BINCO believes that biodiversity knowledge, through increased surveying and monitoring, and through the collection and dissemination of primary data contribute directly to the protection of selected areas and individual species. The studied region is part of LAGRI north of Lichinga, a large initiative that integrates durable forest management with durable agriculture and conservation of valuable natural regions. The conservation part aims to create wilderness zones, centered on some of the more important wilderness zones such as the Jecci mountain range.

Were there any unexpected impacts (positive or negative)?

The biodiversity express survey was met with a wide interest and enthusiasm from a wide range of stakeholders, from people in the villages to a long list of companies and government representatives.

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 projects designed or implemented by your organization or others, as well as lessons that might be considered by the global conservation community.

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

The project in itself was straightforward. A component that might need more attention in these kind of rapid biodiversity surveys is finding a better way to explain the people in the villages why the collection of biodiversity data is important, and frame this in the broader picture of durable management of natural resources. The biggest challenge here is finding the right medium (movie, play, interactive dialogue,…) and freeing up enough time to present this concept to the people. In this project we presented this information, but more depth and impact could have been reached.

Project Implementation: (aspects of the project execution that contributed to its success/shortcomings)

Nothing new here, local knowledge and collaboration with a wide range of stakeholders is crucial.

The main lesson learned was the confirmed importance of a local partners and collaborations with a wide range of stakeholders with extensive network and information available. There are always unexpected elements during the implementation of the project and having a wide range of collaborators increases the possibility for a more efficient completion of the project.

Also, no project stands in itself. There always is overlap between projects and joined interests by large number of people and organizations. Wide and open collaborations, increase the impact of the project and carry much further than a mere project completion.

Other lessons learned relevant to conservation community:

We had a hard lesson learned with sending biological samples internationally (from Belgium to Argentina) through the postal services. Despite all the necessary paperwork (collection and export permits, as well as import permits, accompanying information on the included samples and contact information from start and end user, these samples were destroyed at customs. For sending valuable biological samples, it is better to carry in the samples to avoid unnecessary loss of valuable and irreplaceable scientific material.

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
RGS	A	5000 UKP	Research Grant, contribute to expedition costs
WWF Belgium	B	2000 EURO	Cover travel from Pim Niesten, Wildlife cameraman

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 *Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF project.)*

C *Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)*

Sustainability/Replicability

Summarize the success or challenge in achieving planned sustainability or replicability of project components or results.

The challenge in achieving an effective conservation of the Mountain forest ecosystem around the Njesi plateau, Niassa, Mozambique depends on working with the local communities and forging a durable use of natural resources. Sustainability is regardless of the approach, whether it will be through establishing a regional provincial or national reserve or through a local initiative depends, or none of these. In brief this means a locally holistic respected community sense on the durable use of natural resources is needed to avoid unsustainable harvesting and disturbance of the natural ecosystems, resulting in alterations of the ecosystem and the loss of species.

Summarize any unplanned sustainability or replicability achieved.

NA

Safeguard Policy Assessment

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

Our project triggered the need for **research and export permits.** Thanks to the support and collaboration with Museu de Historia Natural, Maputo and the Serviços Provinciais de Florestas e Fauna Bravia, both research permits and export permits were successfully obtained.

Our project also triggered the need to produce **H&S report** including animal handling and the need to report on implementation of the plan. Health and Safety report was prepared before the expedition and is added here “Risk assessment and emergency response plan_Moz_2016”. Necessary evacuations were categorised into ‘Priority’ or ‘Critical’ classes. Priority Cases are incidences in which the patient is in no immediate further danger, but the facilities in the field are unsuitable (e.g broken arm). Critical cases are defined as cases where the patient’s life is at risk if immediate action is not taken (e.g. venomous snakebite). All expedition members were briefed

before the expedition (first on Skype, and a second time on the first day of the expedition in the field) about possible hazards and the H&S report and all procedures (in case of emergencies) were more extensively covered in the beginning of the expedition.

Additional Comments/Recommendations

Project outputs in terms of reports, blogs and publications will be updated on the BINCO website.

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.

Please include your full contact details below:

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*****please complete the tables on the following pages*****

Performance Tracking Report Addendum			
Project Results	**Is this question relevant?**	**If yes, provide your numerical response for results achieved for project from inception of CEPF support to date**	**Describe the principal results achieved during project period (Attach annexes if necessary)**
1. Did your project strengthen management of a protected area guided by a sustainable management plan? Please indicate number of hectares improved.	No		Please also include name of the protected area(s). If more than one, please include the number of hectares strengthened for each one.
2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?	No		Please also include name of the protected area. If more than one, please include the number of hectares strengthened for each one.
3. Did your project strengthen biodiversity conservation and/or natural resources management inside a key biodiversity area identified in the CEPF ecosystem profile? If so, please indicate how many hectares.	No		
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.	NO (but see LAGRI)		
5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1below.	NO		

If you answered yes to question 5, please complete the following table.

Table 1. Socioeconomic Benefits to Target Communities

Please complete this table if your project provided concrete socioeconomic benefits to local communities. List the name of each community in column one. In the subsequent columns under Community Characteristics and Nature of Socioeconomic Benefit, place an X in all relevant boxes. In the bottom row, provide the totals of the Xs for each column.

Name of Community	Community Characteristics								Nature of Socioeconomic Benefit												
									Increased Income due to:												
	Small landowners	Subsistence economy	Indigenous/ ethnic	Pastoralists/nomadic	Recent migrants	Urban communities	Communities falling below the poverty rate	Other	▪ Adoption of sustainable natural	Ecotourism	Park management activities	Payment for environmental	Increased food security due to the adoption of sustainable fishing,	More secure access to water resources	Improved tenure in land or other natural resource due to titling, reduction of	Reduced risk of natural disasters (fires,	More secure sources of energy	Increased access to public services, such	Improved use of traditional knowledge	More participatory decision-making due to	Other
Total																					

If you marked "Other", please provide detail on the nature of the Community Characteristic and Socioeconomic Benefit: