

CEPF FINAL PROJECT COMPLETION REPORT

I. BASIC DATA

Organization Legal Name: BirdLife International

Project Title (as stated in the grant agreement): *Small Grants for Building Research Capacity among Tanzanian and Kenyan Students*

Implementation Partners for this Project: BirdLife International – African Partnership Secretariat, Nature Kenya, Wildlife Conservation Society of Tanzania

Project Dates (as stated in the grant agreement): September 1, 2006 - June 30, 2009

Date of Report (month/year): 31 July 2009

II. OPENING REMARKS

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

Acceleration in environmental and habitat degradation, habitat and biodiversity loss, over-exploitation of resources and loss of species are some of the threats facing biodiversity conservation. Concerted efforts are being put in place to overcome these threats through: site protection, site management, invasive species control, species recovery, captive breeding, reintroduction, national legislation, habitat restoration, habitat protection and awareness-raising and communication. However, lack of sufficient biological knowledge, shortfalls in funding, and lack of sufficient capacity still pose a major challenge. This project was developed to fill gaps in biological knowledge while at the same time developing the capacity of a cadre of research scientists.

When the Critical Ecosystem Partnership Fund (CEPF) launched its 5-year conservation programme in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania (EACF), the focus was to address most of these thematic areas. These included improving biological knowledge in the hotspot through research, monitoring, education and awareness raising, integrating and engaging local populations into biodiversity conservation and livelihood initiatives and building the capacity through small scale efforts to increase biological knowledge of the sites and efforts to conserve Critically Endangered Species in the hotspot and connectivity of biologically important patches. This particular project focused on building the research capacity of Tanzanian and Kenyan students, by funding postgraduate research within the EACF, a world-renowned biodiversity hotspot, home to 333 globally threatened species. This was part of CEPF's

US\$ 7 million investment in the conservation of the EACF. This mostly came from the early realization that student researchers were not being adequately represented among the CEPF grantees. Yet in most of the developing countries, government allocation to research and academic institutions is still below average making it difficult for students to secure funding to finish their thesis work. In view of this, US\$ 200,000 was set aside for Kenyan and Tanzanian postgraduate student research in the EACF. This programme was launched in the last quarter of 2006 with a purpose of ensuring that a comprehensive and complementary suite of small grant projects is in place to address connectivity issues, biological knowledge of sites and the conservation of threatened species.

III. ACHIEVEMENT OF PROJECT PURPOSE

Project Purpose: *Targeted efforts to increase connectivity, biological knowledge, and the conservation of threatened species are supported through the Small Grants Programme for student research.*

Planned vs. Actual Performance

Indicator	Actual at Completion
Purpose-level:	
1. <i>At least 16 Small Grants supported by 2007.</i>	In total 26 small grants were awarded by the end of June 2009, at an average of \$6118 each and ranging from \$400 to \$9389 in size.
2. <i>At least 10 projects show demonstrable impacts on connectivity and biological knowledge by 2008.</i>	Out of the 26 funded small projects, five (5) projects contributed knowledge necessary towards efforts to increase connectivity, 12 contributed to the biological knowledge of particular species (including mollusks, plants, birds, mammals, reptiles and amphibians), 10 site-focused studies contributed new knowledge about the sites, and seven (7) addressed other knowledge issues mainly on livelihoods, ecosystem services and climate change. A total of 32 KBAs in the EACF were covered by the studies.

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

Firstly, the profile raised for the project led to attraction of a high number (68) of good quality proposals covering aspects of forest connectivity, biological knowledge of threatened species, in addition to community livelihoods, ecosystem services and climate change. A thorough and transparent process was used to select 26 of the proposals for funding.

Secondly, the project provided small grants to 26 postgraduate students, 13 from Kenya and 13 from Tanzania to who undertook relevant research in the EACF. This also enabled the individual students to complete their studies. This number of grantees exceeded the initial target of 16 students. Out of the USD160, 000 for disbursement to the various grantees, a total of USD 159, 074 (99.4%) was disbursed. .

Thirdly, substantial new knowledge on connectivity, key species and sites as well as livelihood and ecosystem services in the EACF was derived from the research undertaken by the 26 grantees. This is summarised in a report (**Attachment 1**). The outcomes of the grantee research were also profiled in a special issue of the TFCG's *Arc Journal* in November 2008.

Fourthly, sufficient project monitoring and evaluation measures were put in place and grantees were linked with each other and to the wider network of stakeholders. The project was constantly monitored through a well structured implementation structure consisting of the Coordination Unit and the project implementation team. The grantees were also linked to the wide network of researchers and conservationists as part of information sharing, transfer of skills and expertise. The climax of the programme was when grantees were brought together in a conference in Dar es Salaam Tanzania to share and learn from each others experiences. Proceedings from this conference (**Attachment 2**) were prepared and disseminated to all the participants. The project also was evaluated through a monitoring and evaluation consultancy (**Attachment 3**). A review of information generated both on biological knowledge and connectivity was conducted and a synthesis report compiled which showed that the impact of the project is quite significant (**Attachment 1**).

Were there any unexpected impacts (positive or negative)?

- (1) Small grants were provided to 26 students, much more than the anticipated minimum of 16.
- (2) A network of grantees was linked to each other and to the wider network of stakeholders in the EACF
- (3) Scientific conference of the grantees was held, during which they shared research results among themselves and other participants
- (4) Even though the aspect of co-financing had not been given too much focus at the onset, it emerged that through this project, grantees were also able to mobilize additional resources. Nine (9) grantees reported to have received additional funding for their research totaling US\$ 24,458 (ranging between US\$ 600 and US\$ 5,385).

IV. PROJECT OUTPUTS

Project Outputs:

Planned vs. Actual Performance

Indicator	Actual at Completion
<p>Output 1: The EACF Co-ordination Unit administers the Small Grants Programme, including transparent reviewing, receipt and distribution of funds, issuing of contracts, local reporting and final evaluation, stakeholder awareness and reports to CEPF.</p>	<p>The EACF Coordination Unit: (1) transparently reviewed 68 proposal submissions (and re-submissions where relevant) , including 51 received during the grant cycle and 17 others later, before an amendment to this project (for extension) was withdrawn by CEPF, and (2) through leadership of BirdLife International, created awareness about the small grants, received and disbursed funds, issued contracts to all grantees, ensured reporting by all</p>

	grantees and led a process of evaluating the programme in terms of lessons learnt and new knowledge generated.
<i>1.1. At least 6 CU meetings monitor the small grants for student research programme by 2007</i>	The CU normally held quarterly meetings. Between the start and end of this project (late 2006 to June 2009), a total of 10 CU meetings were held both in Kenya and Tanzania. During these meeting, tracking implementation of the small grants for postgraduate students was always one of the main agenda items,
<i>1.2. Materials produced for awareness of the programme and distributed to at least 20 key stakeholders</i>	Awareness materials were produced at the start of the project. This was meant to raise the profile of the project and call for proposals. Over 500 posters and cards were printed and distributed widely to persons at academic and research institutions in Kenya, Tanzania and beyond. Electronic versions of the same were posted on TFCG, Nature Kenya and BirdLife websites and circulated via email to an audience of more than 500 contacts on BirdLife's distribution list.
<i>1.3. At least \$ 160,000 distributed to grantees to support Small Grant projects by March 2006</i>	By the end of the project, a total of US\$ 159,074 had been distributed to the 26 funded projects.
<i>1.4. At least 16 contracts issued to grantees by end of 2007</i>	25 contracts had been signed by the close of 2008. The additional grantee whose project was approved in early 2009 signed his contract in February 2009.
<i>1.5. At least 16 reports received from grantees by 2008</i>	A total of 23 first progress reports, 11 second progress reports and 3 final reports had been received by 30 th December 2008. By the end of the project on 30 th June all the grantees had submitted their first and second progress reports. 22 had submitted their final progress reports. These reports were reviewed in terms of their outputs against planned activities and before the subsequent tranche of money were disbursed. However, it is worth noting that some of the reports from students were delayed because of the logistical problems they experienced in the field making some of them spend more time in the field than initially planned.
<i>1.6. Process for review and forms developed for final evaluation of student research projects documented by end 2006</i>	A process for review was developed. However, it was not until end of 2008-early 2009 that the monitoring and evaluation was done through a consultancy (Attachment 3)
<i>1.7. Information availed to CEPF on final evaluations of the small grant programme by end 2008</i>	A report was prepared through a consultancy on the final evaluation, including lessons learnt (Attachment 3). Even though this exercise started in quarter 4 of 2008, it was not until early 2009 when the report was ready. This was occasioned by the slow pace of response to questionnaires circulated by the consultant largely because most this work was undertaken close to December holidays break.
Output 2: A comprehensive and complementary suite of Small Grant projects is in place to address connectivity issues, biological	By the end of the programme, a total of 26 small projects were in place, addressing connectivity (5 projects), biological knowledge on species (12

<p>knowledge of sites and the conservation of threatened species.</p>	<p>taxon-focused studies) and sites (10 site-focused studies) , community livelihoods (4 projects), ecosystem services (2 projects) and climate change (1 project). A total of 32 KBAs were covered by the small projects and taxa coverage included: mammals (4 projects), birds (3), plants (8), insects (3) and snails (2).</p>
<p><i>2.1. Guidelines for application to the Small Grants programme in place by end Q3 of 2006 and made available widely</i></p>	<p>Guidelines for application were in place and disseminated by the end of September 2006 thus allowing the first batch of proposals to be received within a month. Guidelines were concise and useful in guiding the applicants. Based on lessons learnt from the initial applications, in later in 2007, these guidelines were slightly amended to clarify in detail limits for certain budget lines. The amended guidelines were disseminated by email and new applicants were duly informed of the need to revise applications in line with the amendments.</p>
<p><i>2.2. Transparent, objective and timely review process in place, understood by other stakeholders and operational by end Q3 of 2006</i></p>	<p>A transparent, objective and timely review process was agreed upon by the CU in the meeting of 25 October 2006 and became operational since then. A well structured template to guide the reviewers with a scoring scheme was developed during this meeting (Attachment 4) and circulated to all the reviewers every time a batch of proposals was sent out for review. Reviewers composed of CU members (8 individuals) and they all the adhered to this scoring system.</p>
<p><i>2.3. Successful applicants aware of potential collaborators and opportunities for linkages.</i></p>	<p>Successful recipients of the grants regularly received information on who is working where from a contacts database that was being maintained as part of a separate BirdLife-coordinated biodiversity monitoring project. To maximise and ensure that students got as much support as possible, the students were linked to other researchers working in the same areas or had similar interests. This was aimed at reducing duplication of efforts, standardizing methodologies and protocols, sharing of resources and equipments and access to technical support. Students were also incorporated into the contacts database and all of them subscribed to the EACF email discussion forum.</p> <p>Grantees working in the same sites and from the same institutions were linked to each other to share relatively expensive equipment, e.g. cameras and GPS equipment.</p>
<p><i>2.4. At least 16 Small grant projects in place are monitored to maximise cost-effectiveness and impact of the CEPF investment by end 2008.</i></p>	<p>The 26 projects were effectively monitored in most cases by the students' academic supervisors who occasionally made field visits. Also, BirdLife national Partner NGOs (Nature Kenya and WCST) used the network of contacts on the ground to facilitate the student projects. From the progress reports submitted and the subsequent review of the reports, it was easier to monitor the student work especially looking at progress against targets set in the proposals. Where there were issues to be highlighted, this was pointed out.</p>
<p><i>2.5. At least 16 small grant projects contributing information to the sustainable biodiversity monitoring system in the</i></p>	<p>All grantees were provided with a template for contributing information to the sustainable biodiversity monitoring system. Where relevant to</p>

<i>hotspot</i>	their studies, grantees filled and returned the template (8 grantees from Kenya). Project progress reports from the grantees were also reviewed and relevant data populated to the Outcomes database and used in compilation of the 2008 biodiversity status and trends report. The students were also supporting in distribution of Management Effectiveness Tracking Tools to the Protected Areas personnel. However, this process of aggregating monitoring information from the small projects is continuing because some of the final reports came in towards the end of June 2009.
2.6. A summary of new biological knowledge of threatened species, key sites and connectivity produced by end 2008	A summary report synthesizing new biological knowledge of threatened species, key sites, connectivity and other information has been compiled in February 2009 (Attachment 1). This summary was produced through a small consultancy given to one of the grantees. However the version produced in February 2009 has since then been circulated to grantees for review. A final version (attached) has now (in June 2009) been circulated to all the stakeholders. A publication in a peer review journal based on this synthesis is planned for the last quarter of 2009.

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

The EACF Coordination Unit: (1) transparently reviewed 68 proposal submissions (and re-submissions where relevant) , including 51 received during the grant cycle and 17 others later, before an amendment to this project (for extension) was withdrawn by CEPF, and (2) through leadership of BirdLife International, created awareness about the small grants, received and disbursed funds, issued contracts to all grantees, ensured reporting by all grantees and led a process of evaluating the programme in terms of lessons learnt and new knowledge generated.

By the end of the programme, a total of 26 small projects were in place, addressing connectivity (5 projects), biological knowledge on species (12 taxon-focused studies) and sites (10 site-focused studies) , community livelihoods (4 projects), ecosystem services (2 projects) and climate change (1 project). A total of 32 KBAs were covered by the small projects and taxa coverage included: mammals (4 projects), birds (3), plants (8), insects (3) and snails (2).

The project supported 5 PhD students and 21 MSc students. During the past Coordination Unit meetings, it was resolved that member institutions endeavour to provide any job or career advancement opportunities especially for the unemployed graduate grantees. Two of the grantees have been offered internship opportunities by BirdLife secretariat and one employed by NatureKenya as a Conservation Programme Officer whereas one engaged as an intern also at Nature Kenya. Even though there is no well structured follow up programme, opportunities for studies and jobs are disseminated to them as they arise. Students have contributed articles for the E-Bulletin for the BirdLife coordinated monitoring project, submitted articles to a special issue of the Arc Journal published by the Tanzania Forest Conservation Group and in Nature East Africa published by Nature Kenya. Several students have either prepared their manuscripts for publication in peer reviewed journal as a mechanism of sharing their results with the wider audience. At least one student was featured on a local Television station in Tanzania.

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

No, all the outputs were realised

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 demand for postgraduate research grants is quite high in East Africa
- Feedback to grantees could be improved by doing it in a periodic manner which could be streamlined with calendars of partner universities.
- Formal institutionalization of the grants and student supervision with the university could have been useful

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

The following design aspects contributed to the project's success:

- A special need was identified to support postgraduate students and pursued.
- The fact that the staff of the Coordination Unit (CU) member institutions were not eligible for this funding was a good idea as it prevented any conflict of interest.
- The involvement of the CU from the project design stage to the implementation and monitoring and evaluation was very useful since it provided guidance.

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

The following execution aspects contributed to the project's success:

- A well coordinated project implementation team comprising of BirdLife Africa Partnership Secretariat and the BirdLife Partners in Kenya (NatureKenya) and Tanzania (Wildlife Conservation Society of Tanzania) was key in ensuring that the project was well implemented. The fact that students had to submit progress reports which had to be reviewed against goals was useful in keeping track of progress by students. The disbursement of subsequent tranches of funds was highly dependent on satisfactory reports and therefore this ensured that the grantees endeavored to fulfill the requirements and adhere to their workplan. Also the fact that their supervisors had to sign off their progress reports ensured that their academic supervisors were in agreement with their achievements.
- Synthesis of new information generated from the various small projects, emphasis on preparation of articles for various newsletters and journals, and presentation at conferences ensured that the information generated is widely disseminated to various audiences.

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.

NB: Although nine of the grantees obtained an additional US\$ 24,458 from 11 other sources, it is difficult to verify if this was a result of CEPF grant of success of this project.

Donor	Type of Funding*	Amount	Date Received	Notes
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		
		\$		

***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 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 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

Additional recommendations are detailed in the following two attached reports:

- The Evaluation of Small Grants for Student Research in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania (EACF) Hotspot
- Synthesis of new knowledge derived from a portfolio of CEPF-funded postgraduate research projects in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania (2006-2009)

The following attached documents are referred to within the text of this report:

Attachment 1: Synthesis of new knowledge derived from a portfolio of CEPF-funded postgraduate research projects in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania (2006-2009)

- Attachment 2:** Proceedings of the postgraduate research grantees conference
Attachment 3: The Evaluation of Small Grants for Student Research in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania (EACF) Hotspot
Attachment 4: The reviewer's scorecard

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.

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Synthesis of new knowledge derived from a portfolio of CEPF-funded postgraduate research projects in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania (2006-2009)

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Executive Summary

The ‘*Small Grants for Student Research in the Eastern Arc Mountains and Coastal Forests Hotspot*’ project was set up to run from June 2006 to December 2008. However, the project’s duration was extended by a further six months (to June 2009) to allow enough time for all grantees to complete their field research and submit reports. It supported research work of graduate and postgraduate students within the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania (hereafter EACF). The project was aimed at producing information that significantly contributed to new knowledge on (critically) threatened species, Key Biodiversity Areas and small-scale efforts to increase connectivity of biologically important habitat patches. A total of 26 postgraduate students were provided with small grants (average size per grantee = \$ 6118) from this programme to undertake their research. The grantee progress and final reports that had been received by February 2008 were used to undertake this synthesis resulting into compilation of new knowledge and findings generated.

The synthesis involved review of the 26 grantee reports. Findings and new knowledge generated by the respective projects were collated with a focus on knowledge on: a) threatened species, b) Key Biodiversity Areas (KBAs) and c) efforts to increase connectivity of biologically important habitat patches. However, other new knowledge beyond these remit areas was also synthesised.

The grantees’ research contributed immensely in terms of new biological knowledge. Out of the 26 funded small projects, five (5) projects contributed knowledge necessary for efforts to increase connectivity, 12 contributed to biological knowledge of particular species (including molluscs, plants, birds, mammals, reptiles and amphibians), 10 site-focused studies contributed new knowledge about the sites, and seven (7) addressed other knowledge issues mainly on livelihoods, ecosystem services and climate change.

Some of the projects were undertaken in some sites for the first time or after a very long time and others were more comprehensive than the previous research at the same sites. Some of the findings involved discoveries of possibly new taxons while others involved re-discoveries of species a long time since the last records.

In terms of **site** coverage and new knowledge on sites, a total of 32 KBAs (or sites within these KBAs) in the EACF were covered by the grantees’ research, six of which were covered by more than one project.

New information on **species** came in form of species discoveries and re-discoveries, detailed taxa-specific site inventories, site records, new distributional details, species-specific threats, population trends and one Red List re-assessment. In terms of discoveries and re-discoveries, highlights included (1) records of an elephant shrew with morphological features similar to the Golden-rumped elephant shrew, but different colouration, (2) finding of a plant-inhabiting mite that is new to science in the Tanzania side of EACF and (3) re-discovery after 80 years of a snake species in Uluguru Mountains. Other highlights included: (1) detailed studies of birds found in nine Kenyan sites that came up with species lists and information on species of conservation concern, (2) herpetofaunal studies in three Lower Tana River forests that

recorded for the first time in the region 7 amphibian and 17 reptile species, and (3) a new site record made for the Blue-tailed gliding lizard in the Uluguru Mountains. As regards Red List Assessment, the area of occupancy of *Warburgia stuhlmanii* in Dakatcha and Marafa Forests was evaluated as Vulnerable based on field observations and land cover changes and its extent of occurrence.

The following new information relevant to **livelihood improvement and ecological services** was generated (1) there was a general advantage to apicultural farms being closer to Arabuko sokoke forest for both livelihood and ecological services, (2) there are a lot of potentials for Eco-tourism and sources of livelihoods in Amani Nature Reserve (e.g. presence of endemic taxa, scenic views and historical aspects of the reserve), but these are limited by a number of constraints, (3) Plant-inhabiting mites *Tetranychus evansi* and *Eutetranychus* sp are devastating some cultivated plants in parts of EACF, (4) Agroforestry systems play an important role in reducing Carbon elements in the atmosphere (e.g. storing significantly higher amount of carbon compared to only crop fields system in Matombo Rural District, Tanzania),

As regards new information relevant to **connectivity**, it was observed that (1) In Kwale District, coastal Kenya, there was a decrease in forest connectivity between 1986 and 2003, and an increase between 2003 and 2009, and there was heavy interaction between two most important land use types (farmlands and settlements), with farmlands increasing between 1986 and 2003, but largely being replaced by settlement areas between 2003 and 2008, (2) the Tana River Mangabeys (*Cercocebus galeritus*) played a role in forest connectivity as a seed disperser in Lower Tana River Forests, (3) in Kimboza Forest Reserve the influence of canopy cover and soil played a role in regeneration and establishment of the invasive *Cedrela Odorata* which inhibits regeneration of other plants, (4) natural seed banks played an important role in forest regeneration in Zaraninge Forest, including the emergence of rare plants and the forest had high seed bank density and more seed emergence of rare plants than Mbwebwe forest, and (5) for birds, although certain forest patches seemed interconnected no obvious avifaunal exchange between the patches could be witnessed.

1.0 Introduction

This report synthesises new information generated from research projects conducted by postgraduate students between June 2006 and June 2009 in Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania (EACF) under a small grant programme. The programme was managed by BirdLife Africa Partnership Secretariat and two national partners (Nature Kenya and the Wildlife Conservation Society of Tanzania) and was funded by the Critical Ecosystem Partnership Fund (CEPF) at a budget of US\$ 200,000. It received guidance from a Coordination unit¹ and supported work relating to two of CEPF's Investment Priorities (IPs) in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania (EACF): (1) Supporting targeted efforts to increase connectivity of biologically important habitat patches, and (2) Supporting efforts to increase biological knowledge of the sites and to conserve threatened species. The programme was to contribute towards building capacity in research and conservation amongst Kenyan and Tanzanian students. Funded postgraduate students were to undertake research work that focused on critically threatened species and sites and small-scale efforts to increase connectivity of biologically important habitat patches.

This small grant programme was part of CEPF's five-year (2004-2008) US\$ 7 million investment in the EACF, a region that had in 2003 been assessed and found to contain 333 globally threatened species found in 160 sites. The projects funded by the small grant programme were therefore aimed at, among others, contributing towards improved biological knowledge for some of these species and sites.

1.1 Methodology

The 26 student grantee progress and final narrative reports were reviewed and analysed broadly for what was perceived by respective investigators as new knowledge especially on the following:

- a) Study species or taxon (discoveries, re-discoveries, distributional records, ecology, threats, conservation action, assessment of red-list status, etc.)
- b) Sites (species records, threats, conservation status and action, etc)
- c) Information that may contribute towards efforts to increase habitat connectivity

¹ The conservation efforts and the day to day activities of the CEPF programme within EACF region is coordinated by a Coordination Unit (CU) comprising of International Centre for Insect Physiology and Ecology (ICIPE), WWF -East African Regional Programmes Office (WWF-EARPO) including the Tanzania Programmes Office (WWF-TPO), Tanzania Forest Conservation Group (TFCG), BirdLife International and Neil Burgess as a co-opted member representing the Eastern Arc Mountains Conservation Endowment Fund (EAMCEF) as well as WWF-US. BirdLife International is represented in the CU by BirdLife Africa Partnership Secretariat and its Partners in Kenya (Nature Kenya) and Tanzania – (Wildlife Conservation Society of Tanzania - WCST) respectively. The role of the CU is to ensure effective, efficient and coordinated approach amongst stakeholders is established to achieve the CEPF conservation outcomes for the Eastern Arc Mountains and Coastal Forest Biodiversity region of Kenya and Tanzania.

- d) Other aspects, e.g. on community livelihood improvement and ecosystem services

2.0 Findings

2.1 New knowledge generated on species (Table 1)

2.1.1 Birds

Bird studies conducted at a total of nine sites in Kenya (Musila 2008, Ogoma 2008 and Soi 2008) did not reveal any new information on distribution for the following five globally threatened species of interest: Spotted ground Thrush *Zoothera guttata*, Plain backed sunbird *Anthreptes reichenowi*, Sokoke pipit *Anthus sokokensis*, Fischer's turaco *Tauraco fischeri*, and Sokoke Scopsowl *Otus irenea*. These sites included Mrima, Marenje, Kaya Gandini, Mtswakara, Mwache, Dzombo Hill, Kaya Waa, Gongoni and Diani forests. These three studies resulted into more comprehensive bird species lists for some sites: e.g. a list of 140 compared to the 1995 survey list of 51 for Gongoni Forest; 95 in Marenje compared to 44; 93 in Kaya Gandini as compared to 43; 88 in Mtswakara compared to 32; 82 in Dzombo as compared to 50; 74 in Diani as compared to 48; 89 in Mrima as compared to 50). These comparisons are made in reference to the survey of 1995 by Waiyaki (1995). A survey list of 54 was made in Kaya Waa and 91 in Mwache. Focussed searches for the Sokoke Scops-owl in all the above forests except Gongoni didn't yield any sightings, probably confirming the previous findings (Waiyaki, 1995) that this species is not found in those sites. However, the sites were intensively studied for composition of bird communities in relation to habitat structure leading to the unanimous observation that forest specialist species were most affected by the disturbances in the forest sites. Key threats of particular concern observed for respective sites were: intensive pole extraction in Kaya Gandini, Mtswakara and Mwache; quarrying in Mwache and Kaya Waa; high and relatively high levels of logging in the interior of Gongoni forest.

2.1.2 Mammals

The following results were significant for mammals:

A total of 449 individual small mammals captured in Ulugurus were identified to 15 species (14 of rodents and 1 shrew- *Crocidura* shrews) by Kalumanga (2008), with higher trap success being observed in fallow than cultivated lands. Kalumanga (2008) also made more records (five trapped) of the globally vulnerable lesser-pouched rat *Beamys hindei* than had previously been recorded.

Rapid surveys of small mammals in Saadani National Park were undertaken by Sabuni (2008) revealing the existence of 16 genera of small mammals belonging to seven families. Family Muridae had the most species, which exceeded 80% of small mammal contribution in Saadani National Park, followed by Soricidae family with 6.46% contribution. The family Viverridae had the smallest contribution to small mammal population of only 0.34%. For all species, sex ratio was biased towards the females with exception of *Crocidura* spp which was male biased.

Ngaruiya (2008) estimated that between the year 2000 and 2008 the population of the Golden-rumped elephant shrew *Rhynchocyon chrysopygus* in Arabuko-Sokoke Forest

could have increased by 3.6% and 11.7% at *Brachystegia* forest and *Cynometra* respectively and reduced by 50% in the mixed forest. In the Gede Ruins National Monument, the population could have increased, as was demonstrated by an increase to more than 20 individuals in an area that had earlier been thought to have lost the species (FitzGibbon, 1994). This improvement is owed to interventions such as fencing of the area.

Of particular interest is that Ngaruiya (2008) recorded individuals of an elephant shrew that was morphologically-similar to Golden-rumped Elephant Shrew at Boni-Dodori but had a different colouration. The specimen is undergoing further molecular analysis to confirm its taxonomic status.

2.1.3 Gastropods

The family Streptaxidae of land snail had the highest number of species (Eight) followed by Subulinidae (six) in Shimba Hills National Reserve (Ndalila, 2008). The families Maizaniidae, Pomatiasidae and Endodontidae had one species each. The most abundant species was *Gonaxis quadrilateralis* belonging to family Streptaxidae. Wet season in Shimba Hills National Reserve had the highest number of individuals of land snail followed by the interphase between the dry and wet season and the least number of individuals is found in dry season. Indigenous forest parts have the highest diversity levels of land snails while the grasslands had the least diversity. The plantation forest and the scrub are significantly different from other vegetation types in terms of abundance of land snails, for instance significantly different from, indigenous forest, grassland/scrub, and grassland. Rainfall and other environmental variables like litter cover; relative humidity and canopy cover had a positive and significant influence on the snail richness while the temperature significantly affected the abundance and richness.

Gulella taitensis an endemic and endangered land snail is not uniformly distributed in the ten surveyed Taita hills forest fragments and high numbers were recorded in the protected than the unprotected fragments (Mwaura, 2009). The study recorded high number of *G. taitensis* (207) compared to previous survey by Lange (2006) which had recorded 37 from five fragments only. Most environmental variables associated positively with the *G. taitensis* densities. Calcium is significant for the snail's survival and has a significant correlation with litter cover, canopy cover and log density and these influences the distribution between the forest fragments. Exotic trees also had a negative effect on *G. taitensis* survival thus conservation of the remaining remnants of Taita Hills forest vital since the survival of this snail depends on a combination rather than one environmental factor. Molecular work revealed there is heterozygosity in banding pattern between the ten fragments in this species in Taita hills and there exist possibility of having a hybrid or sub-species within the species.

2.1.4 Reptiles

A Blue-tailed gliding lizard *Holaspis guentheri* sub sp *laevis* was recorded for the first time in the Uluguru Mountains (Kalumanga 2008). This was previously believed to be endemic to Udzungwa and Usambara Mountains. Kalumanga, (2008) also made a re-discovery after 80 years of by recording seven (7) individuals of Ornate shovel snout snake *Prosymma ornatissima* a species that was first recorded in 1926.

Of the 37 reptile species recorded in Lower Tana River Forests (Nguku 2008), 17 species were recorded for the first time in the study area. Crocodiles and snakes were noted to be the main source of conflicts among the people in lower Tana River Forests. Chameleon and amphibians are viewed fairly by the locals. Forest size influences species richness of herpetofauna in Tana River Forests while threats to these species include deforestation and human population pressures. The current study was noted to yield 48% more new findings than the previous studies on herpetofauna at the study sites (Nguku 2008).

2.1.5 Amphibians

Nguku (2008) recorded 19 species of amphibians in the Lower Tana River Forests of which seven (7) were new records for the site. Threats to the amphibians included deforestation and human population pressure on the forest habitat. Kalumanga (2008) on the other hand recorded two individuals of a strict forest endemic frog *Leptopelis uluguruensis* in the Uluguru Mountains.

2.1.6 Plants

Of the 216 plant species recorded in the study by Kiluma (2008) while quantifying threatened plant species in East Usambaras, 146 species were from Tongwe Forest Reserve while 70 species were from the proposed Derema Forest Reserve. Out of all these, 14 species were in the Vulnerable category according to IUCN red list of 2008. Derema Forest Reserve had nine Vulnerable plant species while Tongwe Forest Reserve had five plant species which were also Vulnerable. Threatened plant species found both in Tongwe and Derema Forest Reserves were being commercially extracted (*Beilschmedia kweo*, *Anglocalx brownie*, *Macaranga conglomerate*, *Cephalosphaera usambarensis*, *Isobertinia scheffleri*, *Allanblackia stuhlmannii* and *Khaya anotheca*). None of the vulnerable species were used for cultural purposes. However, *Uvariadendron usambarensis* which is Vulnerable was used for medicinal purposes together with other species which are not threatened, e.g. such as *Solunum incanum*, *Anthocleista grandiflora* and *Harungana madagascariensis*.

Mwanika (2008) assessed the conservation status of *Warburgia stuhlmannii* against the IUCN Red List criteria and found it to be Vulnerable (VU). This study was done in Dakatcha and Marafa Forests, Kenya. The species area of occupancy was estimated to be less than 2,000 km². Field observations and calculations based on landcover changes showed that its extent of occurrence had reduced by more than 50%. The species therefore assessed to be Vulnerable.

Table 1: Summary of taxa/species-specific new knowledge

Class	Scientific name	Common name (if known)	2008 IUCN Red List status	Summary of new knowledge/actions on species/taxon	Site(s) where studied	Country	Reference
Aves (Birds)				141 bird species were recorded in all sites, with 93, 88 and 91 species recorded in Gandini, Mtswakara and Mwache respectively. Fischer's Turaco <i>Tauraco fischeri</i> (NT) and Plain backed sunbird <i>Anthreptes reichenowi</i> (VU) plus 14 Kenya's coastal biome restricted species were recorded in all forests.	Kaya Gandini; Kaya Mtswakara; Mwache Forest	Kenya	Musila 2008
Aves (Birds)				127 species (14 forest specialist, 32 generalists, 39 forest visitors) recorded. Fischer's Turaco <i>Tauraco fischeri</i> (NT) recorded in all study forests, Plain backed sunbird <i>Anthreptes reichenowi</i> (VU) recorded in Marenje, Mrima and Dzombo. Despite a focused search for Sokoke Scops-owl <i>Otus irenea</i> (EN) in all sites, species was not found.	Kaya Waa, Diani, Mrima, Marenje, Dzombo	Kenya	Soi , 2008
Aves (Birds)				140 species belonging to 50 families recorded; 14 East Africa coast biome species, 14 regionally threatened species and 10 forest specialist species were recorded; Southern Banded snake-eagle <i>Circaetus fasciolatus</i> (NT) and Fischer's Turaco <i>Tauraco fischeri</i> (NT) were recorded	Gongoni Forest	Kenya	Ogoma 2008
Mammalia (small mammals)				16 genera belonging to seven families recorded; Muridae composed >80% of small mammals, Soricidae 6.46% and Viverridae 0.34%. For all species, sex ratio was found to be biased towards the females with exception of <i>Crocidura</i> spp which was male biased.	Saadani National Park	Tanzania	Sabuni 2008
Mammalia (small mammals)				15 species (14 rodents and 1 shrew) recorded; More abundance observed in undisturbed cf. disturbed areas, and in fallow cf. cultivated land.	Uluguru Mountains		Kalumanga 2008

Class	Scientific name	Common name (if known)	2008 IUCN Red List status	Summary of new knowledge/actions on species/taxon	Site(s) where studied	Country	Reference
mammalia	<i>Beamys hindei</i>	Lesser-pouched rat	VU	Five individual recorded	Uluguru Mountains	Tanzania	Kalumanga 2008
Mammalia	<i>Rhynchocyon chrysopygus</i>	Golden-rumped Elephant Shrew	EN	Recorded in Arabuko-Sokoke Forest and Gede Monument Forest; In Arabuko, population estimated to have increased at Brachystegia and Cynometra forests by 3.6% and 11.7% respectively, and reduced by 50% in the mixed forest; Gede population could have increased too. Not recorded in Boni and Dodori.	Arabuko-sokoke, Gede, Boni, Dodori	Kenya	Ngaruiya 2008
Mammalia	?	Elephant shrew	??	Morphologically-similar individuals to Golden rumped Elephant Shrew recorded. Undergoing further analysis to confirm taxonomic status.	Boni, Dodori		Ngaruiya 2008
Reptilia	<i>Holaspis guentheri sub sp laevis</i>	Blue-tailed gliding lizard		New record for site. Was only believed to be found in Udzungwa and Usambara Mountans.	Uluguru Mountains	Tanzania	Kalumanga 2008
Reptilia	<i>Prosymma ornatissima</i>	Ornate shovel snout snake		Re-discovered after 80 years; 7 individuals of this species was recorded	Uluguru Mountains	Tanzania	Kalumanga 2008
Reptilia				37 reptile species recorded: 19 lizards, 1 crocodile, 16 snakes, 1 tortoise) 17 of these species were first records for the study area. Main threats to herpetofauna include deforestation, population pressure	Lower Tana River forests- Mchelelo, Shakababo, Mambo Sasa	Kenya	Nguku 2008
Amphibia		Herpetofauna		19 amphibian species recorded 7 of these amphibian species were first records in this study area	Lower Tana River forests- Mchelelo, Shakababo, Mambo Sasa	Kenya	Nguku 2008
Amphibia	<i>Leptopelis uluguruensis.</i>			Two individuals were found, it is strict forest endemic frog	Uluguru Mountains	Tanzania	Kalumanga 2008

Class	Scientific name	Common name (if known)	2008 IUCN Red List status	Summary of new knowledge/actions on species/taxon	Site(s) where studied	Country	Reference
Gastropoda	<i>Gullela taitensis</i>	Land snail	EN	Not uniformly distributed; high number in protected forest fragments; preference of indigenous to exotic trees; Calcium associated significantly with snail survival and had positive correlation to litter cover, canopy cover and log density; a combination of environmental factors influence its distribution; there was heterozygosity in molecular banding patterns within and between fragments; possibility of having a hybrid or sub-species within this species.	Taita Hills Forests	Kenya	Mwaura 2009
Gastropoda				Eight families were recorded. Streptaxidae had the highest number of species representing eight species, followed by Subulinidae having six species; <i>Gonaxis quadrilateralis</i> was most abundant species; Overall, wet season had the highest number of individuals of land snails followed by the interphase between the dry and wet season. The least number of individuals was in the dry season. Indigenous forest had highest diversity levels and abundance than grasslands; Rainfall, Litter, relative humidity and canopy positively influence snail richness while the temperature affected abundance and richness.	Shimba Hills Forest	Kenya	Ndalila 2008
Insecta		Bees		There were differences in bee abundance and species richness in different forest types of Arabuko-Sokoke, with a higher abundance noted in mixed forest compared to the <i>Brachystegia</i> and <i>Cynometra</i> forest types. The various forest types also supported different bee fauna; family Apidae was dominant in the mixed and <i>Cynometra</i> forest, while the family Halictidae was dominant in the <i>Brachystegia</i> forest.	Arabuko-Sokoke Forest	Kenya	Mwangi 2008
Plants							

Class	Scientific name	Common name (if known)	2008 IUCN Red List status	Summary of new knowledge/actions on species/taxon	Site(s) where studied	Country	Reference
				146 plant species were recorded in Tongwe Forest Reserve of which five were vulnerable; 70 plant species were recorded in the Derema Forest Reserve of which nine were vulnerable; threatened plant species found both in reserves were being utilized for economic value, cultural and medicinal purposes.	Tongwe and Derema forest reserves	Tanzania	Kiluma 2008
Magnoliopsida Brongn.	<i>Beilschmedia kweo</i>	Mfimbo	VU	14 individuals were recorded, all were found in Derema Forest Reserve. Villagers in IBC Msasa in Derema use for economic value especially timber, and cultural purposes	Tongwe and Derema forest reserves	Tanzania	Kiluma 2008
Magnoliopsida	<i>Macaranga conglomerate</i>		VU	4 individuals were recorded, all from Derema Forest reserve It is also used for timber	Tongwe and Derema forest reserves	Tanzania	Kiluma 2008
Magnoliopsida	<i>Cephalosphaera usambarensis</i>		VU	6 individuals were recorded in Derema Forest reserve. Has economic value for timber and building poles	Tongwe and Derema forest reserves	Tanzania	Kiluma 2008
Magnoliopsida	<i>Isobertina scheffleri</i>		VU	3 individuals were recorded in Derema Forest reserve	Tongwe and Derema forest reserves	Tanzania	Kiluma 2008
Magnoliopsida	<i>Allanblanckia stuhlmannii</i>		VU	5 individuals were recorded in Tongwe Forest reserve. Used for firewood , timber and building poles	Tongwe and Derema forest reserves	Tanzania	Kiluma 2008
	<i>Anglocalyx brownii</i>			7 individuals were recorded in Tongwe forest reserve	Tongwe and Derema forest reserves	Tanzania	Kiluma 2008
Magnoliopsida	<i>Khaya anthotheca</i>		VU	2 individuals were recorded. They were found in Derema Forest reserve Has economic value for timber	Tongwe and Derema forest reserves	Tanzania	Kiluma 2008
	<i>Uvariadendron usambarense</i>			5 individuals were recorded in Derema Forest reserve	Tongwe and Derema forest reserves	Tanzania	Kiluma 2008

Class	Scientific name	Common name (if known)	2008 IUCN Red List status	Summary of new knowledge/actions on species/taxon	Site(s) where studied	Country	Reference
	<i>Warburgia stuhlmannii</i>		VU	Data collected for IUCN Red List status assessment. Area of occupancy estimated to be <2,000km ² thus in criterion B2b; extent of occurrence had reduced by >50%; Thus qualified for Vulnerable.	Dakatcha Forest, Marafa Forest	Kenya	Mwanika 2008

2.2 Coverage and new knowledge on sites (Table 2 and 3)

The grantee projects were undertaken in a total of 32 Key Biodiversity Areas (KBAs) in the EACF (Table 2). Thirteen of these KBAs were in south coastal Kenya in Kwale District. Most of these sites had not been studied intensively before and therefore were potential sites to reveal new biological knowledge about the sites.

Mwache F.R. and Kaya Waa forests were found to be threatened by quarrying (four quarrying companies on site) and ineffective management (Musila 2008) and block and sand harvesting respectively (Soi 2008). The entire area around Diani forest, Kaya Gandini and Mtswakara had been transformed by agricultural and human settlements into habitats unsuitable to forest bird species (Soi 2008; Musila 2008). In Gongoni forest, habitats were significantly disturbed (Ogoma 2008). Kaya Gandini and Mtswakara (Musila 2008) and Kaya Waa (Soi, 2008) were threatened by the reduced cultural protection of Kayas as sacred sites, mainly because the traditional Mijikenda values seem to eroding away amongst the locals communities.

Between the years 1989 and 2001, spatial data showed forest cover had improved in Tong'omba Forest Reserve, Kilwa Tanzania. Of recent, the impact of human disturbance had been increasing over the years, and has therefore reduced forest internal complexity but forest diversity seems to be constant (Chikira, 2008). For example, the forest basal area and forest volume in 2008 is lower than it was in 2005 with more reduction in more disturbed forest strata. Pole cutting and logging has had negative impact on forest basal area and volume.

The survival and distribution of *Guillella taitensis* in the Taita Hills forests is tied to the environmental parameters and forest conditions (Mwaura, 2009). For example, Calcium is reported to significantly correlate with litter cover, canopy cover and log density and these influences the distribution between the forest fragments (Mwaura, 2009).

Mwanika's (2008) land cover analyses for of Dakatcha and Marafa forests (1975-2000) show that extensive depletion of the dense forest cover resource had occurred from 82.2% to 34.2% giving way to degraded woodland class and settlement mainly influenced by both human and climatic factors. Human activities such as farming, charcoal burning and timber logging and settlement were observed to be presently covering 51%, 11.4% and 4.3% respectively. Social studies conducted showed lack of conservation awareness among communities in Marafa Division

Ngaruiya's (2008) results on the condition of the surveyed areas at Arabuko Sokoke Forest, Gede ruins, Dodori and Boni forests shows that all these sites were almost similar based on habitat variables surveyed especially those suitable for the occurrence of the Golden rumped elephant-shrew *Rhynchocyon chrysopygus* e.g. litter cover, litter depth and % canopy cover necessary for nests and foraging sites and protection. However, Gede forest was reported to be more suitable for the species owing to its litter cover and litter depth.

Nguku's (2008) findings in Lower Tana River Forests shows that habitat characteristics do not differ significantly across the three study forest fragments (Mchelelo, Shikababo, Mambo Sasa), except for differences in soil moisture content.

The main threats facing the sites include deforestation, population pressure, overgrazing, invasive species and floods.

The number of pollinating insects was found to reduce across a gradient as one moves away from Arabuko-Sokoke Forest, implying that there was higher abundance of these insects closer to the forest (Mwangi 2008). There were differences in insect abundance in different forest types in Arabuko-Sokoke Forest with the higher abundance being observed in *Brachystagia* than in mixed forest (Mwangi 2008).

Mligo's (2008) study on vegetation community structure and distribution pattern revealed that Zaraninge Forest is characterised by small to medium sized trees ranging between 9.5cm and 44.9 cm DBH. The fact that it has few to rare larger sized trees (also shown by low stem density of trees) demonstrates that the forest has faced a lot of disturbance. The higher abundance of smaller-sized class signified forest regeneration as clearly demonstrated by presence of numerous seedlings and herbs. Mligo (2008) also found that tree species and community distribution are influenced by fires, moisture and exploitation.

Joint Forest Management (JFM) as an institution was identified as a possible reason why New Dabaga Ulongambi Forest Reserve (NDUFR) has recovered from human degradation (Lugandu 2008). It was found to be a generally stronger arrangement for sustainable management of forests than the conventional government management arrangement. JFM has made people to be aware of rules of forest use, physical boundaries, legitimacy and fairness of rules on benefits, and many other aspects related to forest use and rules (Lugandu 2008).

Native plant species form majority of vegetation in Udzungwa Mountain National park. Mzeru (2008) found that 14.4% of plants in Udzungwa Mountain National Park were composed of invasive plant species as compared to the native plants (85.6%). Invasive species were mostly distributed at lower altitude of the park (92%) as compared to higher altitude. *Lantana camara* was shown to be a dominant invasive plant species in the park followed by *Olyra latifolia*.

Table 2. Name of KBAs/sites covered by grantee research.

Site	Number of projects
1. Arabuko-sokoke Forest	2
2. Boni Forest	1
3. Buda Forest Reserve	1
4. Dakatcha Forest	1
5. Diani Forest	1
6. Dodori National Reserve	1
7. Dzombo Hill Forest	1
8. East Usambara Mountains (Tongwe Forest Reserve, Derema Forest Reserve, Amani Nature Reserve)	2
9. Gede Ruins	1
10. Gongoni Forest Reserve	1
11. Kaya Mtswakara	1
12. Kaya Gandini	1
13. Kaya Kinondo	1
14. Kaya Lunguma	1
15. Kaya Muhaka	1
16. Kaya Teleza	1

Site	Number of projects
17. Kaya Waa	1
18. Kilwa District Coastal Forests (including Tongomba Forest Reserve)	2
19. Lower Tana River Forests	2
20. (Mchelelo, Shakababo, Mambo Sasa)	
21. Marafa Forest	1
22. Marenje Forest	1
23. Mrima Hill Forest	1
24. Mwache Forest Reserve	1
25. New Debaga Ulongambi Forest Reserve	1
26. Sadaani National Park	1
27. Shimba Hills Forest	1
28. Shimoni Forests	1
29. Taita Hills Forests	1
30. Udzungwa Mountains National Park	2
31. Uluguru Mountains (including Kimboza Forest Reserve)	3
32. Bagamoyo District Coastal Forests (Zaraninge Coastal Forest)	1

Table 3: Summary of new information from site-focused studies

Site name	Is it a KBA (1) or within a KBA (2)	Country	Summary of new knowledge/actions on the site (e.g. threats, species discoveries etc.)	Reference
Mwache FR	1	Kenya	Quarrying is a key threat. Other threats: firewood collection and extraction of building poles	Musila 2008
Kaya Gandini and Kaya Mtswakara	1	Kenya	Threats to forest habitat on the increase since the local community is devaluing the Duruma culture which requires that Kayas are not destroyed	Musila 2008
Gongoni Forest	1	Kenya	Forest habitats under threat from human activities such as hard wood removal for commercial timber production, The local extraction of forest products for local subsistence services including debarking for medicinal use, wild fruits for domestic consumption, etc.	Ogoma 2008
Kaya Waa	1	Kenya	Threatened by sand harvesting quarrying for building blocks	Soi 2008
Tongomba Forest Reserve	2	Tanzania	Observed reduction in tree basal area and volume between 2005 and 2008; Forest cover could have improved between 1989 and 2001.	Chikira 2008
Kimboza Forest Reserve	2	Tanzania	No clear pattern in densities of invasive <i>Cedrela odorata</i> in relation to distance from their stand - probably other factors such as canopy cover and soil play role in their regeneration and establishment.	Patrick 2008
Arabuko-Soko forest	1	Kenya	Four main orders of insects as pollinators identified; Pollinating insect abundance reduce across a gradient away from forest; majority of insect visitors and pollinators to Mango tree were Bees; Majority of visitors to Cashewnut tree were ants but main pollinators were bees.	Mwangi 2008

Site name	Is it a KBA (1) or within a KBA (2)	Country	Summary of new knowledge/actions on the site (e.g. threats, species discoveries etc.)	Reference
New Debaga Ulongambi Forest Reserve	2	Tanzania	Joint Forest Management (JFM) has led Forest Reserve to recovery from human degradation.	Lugandu 2008
Udzungwa Mountains National Parks	1	Tanzania	14.4% of plant composed of invasive species; invasives mostly distributed at lower altitude of the park; <i>Lantana camara</i> was most common invasive plant species in the park followed by <i>Olyra latifolia</i> .	Mzeru 2008
Derema Forest Reserve	1	Tanzania	Nine Vulnerable plant species recorded	Kiluma 2008
Tongwe Forest Reserve	1	Tanzania	Five Vulnerable plant species recorded.	Kiluma 2008
Dakatcha and Marafa forests	1	Kenya	LANDSAT Imagery of 1975-2000 indicated extensive depletion of dense forest cover from 82.2% to 34.2%; farming, charcoal burning and timber logging represent 51%, 11.4% and 4.3% respectively of the depletion.	Mwanika 2008

2.3 New knowledge on connectivity (Table 4)

In a study on the Tana River Mangabeys *Cercocebus galeritus* (Kimuyu, 2008), the mangabeys are shown to be effective seed dispersers of most fruit plants in the Tana River forests. They disperse seeds through: (1) swallowing fruits and defecating viable seeds (germination confirmed from 55% of mangabeys dung piles), (2) holding a great number of seeds in cheek pouches and later spitting them some distance from the parent tree (especially for small seeded plants), and (3) picking and moving around with large fruits and later dropping the seed.

The Tana River Mangabeys responded to decline in fruits by increasing their diurnal range length and adjusting their ranging patterns to have access to new fruiting trees. Kimuyu's (2008) study demonstrated that the mangabeys can move across forest fragments through non-forested corridors. This may facilitate arrival of seeds to suitable sites for germination. A one-kilometer stretch separating Mchelelo West and Guru South patches (cleared for agriculture in 1960s and 1970s) is now on way to full regeneration. Tana River Mangabeys among other dispersers are believed to have facilitated this regeneration. The trees most preferred by the Mangabeys during this study were *Phoenix reclinata* and *Ficus sycomorus*. Ten tree species constituted 93% of total feeding scores of Mangabeys during the study. Out of these ten, six tree species were confirmed to germinate from faecal clumps. Two of the germinating species (*Ficus sycomorus* and *Garcinia livingstonei*) are pioneers with the ability to colonise new habitats hence can play a more immediate role in regeneration of non-forested or cleared areas.

Invasive species may play a significant role in displacing native plants, making it unsuitable for ecological processes to take place hence act like 'gaps'. Invasive species therefore affect natural connectivity. *Cedrela odorata* is an invasive species which is believed to threaten natural forest in Kimboza Forest Reserve (Patrick 2008). This species has been observed to colonise the natural habitat and kill the native plants and it is observed to disperse from the central stands to other areas (Patrick 2008). Patrick (2008) found that the density generally decreased with increasing distance but this showed unclear pattern of neither density of *C. odorata*, nor its number of saplings and seedlings with increasing distance from their stands.

Connectivity can be achieved through forest regeneration and tree establishment through various processes. Ecological restoration is used as a process of assisting the recovery of an ecosystem that has been degraded, damaged or destroyed. For example, forest can be restored through natural restoration, artificial planting, soil seed bank or from coppicing (Pima 2008). In Zaraninge and Mbwebwe coastal forests forest regeneration from seed bank composition showed that the two forests are similar in diversity and species composition. They have high regeneration potentials from seed banks following presence of more trees of smaller DBH (<10cm) in both forests. Both forests also had seedlings germinating in the upper soil layer (0-10cm). Despite this, seed bank density was found to be high in Zaraninge (a relatively pristine forest) and more seed emergence (5% of it being rare plants) was observed than in Mbwebwe. It was further found that there were scanty relationship between species composition of standing vegetation and composition of the seed banks in both forests based on the number of germinated seeds.

Despite close proximity of the Gandini, Mwache and Mtswakara forests, there were no observed avifaunal exchange observed, although seems to be interconnected ecosystem (Musila, 2008). However, further bird ringing and prolonged observations are needed to really confirm this observation.

Land use dynamics coupled with the type of forest management scenarios (government vs community) were shown to have effects on both forest connectivity and cover between 1986 and 2009 in Kwale District, Kenya (Wambugu, 2009). Measurements of the distance between forest pixels across landsat images of 1986 and 2003 and Aster imagery of 2008 showed fluctuations in connectivity, with 2008 having the lowest connectance index (hence highest connectivity) compared to 2003 and 1986. In 1986, the average distance between selected sample forests and any other forest pixels around them was 2152m, compared to averages in 2003 (3616m) and 2008 (1633m). Therefore, forest connectivity declined between 1986 and 2003, and increased between 2003 and 2008.

Table 4: Summary of new knowledge on connectivity

Site(s) covered	Country	Summary of new knowledge/actions on connectivity (e.g. threats, species discoveries etc.)	Reference
Mwache; Gandini; Mtswakara	Kenya	No bird species observed dispersed from one forest to another even though the three sites were connected to each other	Musila 2008
Bagamoyo Coastal forest (Zaraninge)	Tanzania	Seed bank density is high in a relatively pristine forest (Zaraninge) and more seed emergence was observed than in Mbwebwe	Pima 2008
Bagamoyo Coastal forest (Zaraninge)	Tanzania	Forest restoration in the coastal forests depends on seed banks at the surface soil horizons which act as a repository of rare plant species.	Pima 2008
Tana River Forests	Kenya	The Tana River Mangabeys <i>Cercocebus galeritus</i> were shown to be effective seed dispersers of most fruit plants in the Tana River forests (see details in text above).	Kimuyu 2008
Kimboza forest reserve	Kenya	<i>Cedrela odorata</i> colonise the natural habitat and kills the native plants and is observed to disperse from the central stands to other areas; factors such as canopy cover and soil, tended to have significant relation, and probably their interactions, playing a role in their regeneration and establishment than aspect of distance from the stands alone.	Patrick 2008
Shimoni Forests, Marenji, Mrima Hill, Dzombo Hill, Buda, Gongoni, Kaya Kinondo, Kaya Mtswakara, Kaya Gandini, Kaya teleza, Kaya Lunguma and Kaya Muhaka	Kenya	There was a decrease in forest connectivity between 1986 and 2003, and an increase between 2003 and 2009. There was heavy interaction between two most important landuse types (farmlands and settlements), with farmlands increasing between 1986 and 2003, but largely replaced by settlement areas between 2003 and 2008.	Wambugu, 2009

2.4 Knowledge on livelihoods, ecosystem services and climate change (Table 5)

Mwangi's (2008) study on bee diversity and floral resource utilization along a distance gradient from the Arabuko Sokoke forest found higher bee diversity and species richness at the forest margins compared to the farm lands that were located 6 km away. He also found the abundance of several bee genera such as *Amegilla*, *Lipotrichis* and *Xylocopa* to decline with the increasing distance between the farmlands and the forest margins. The findings also showed differences in bee abundance and species richness in different forest types of Arabuko-Sokoke, a higher abundance was noted in mixed forest compared to the *Brachystegia* and *Cynometra* forest types. The various forest types also supported different bee fauna; family Apidae was dominant in the mixed and *Cynometra* forest, while the family Halictidae was dominant in the *Brachystegia* forest. The honeybees were the most prolific pollinators, they pollinated over a third of the flowering plants, while the all the wild

bee species combined pollinated just over 50% of the flowering species. He found all bee species to pollinate more than one flowering species.

Sande's (2008) results on bee keeping and forest conservation generally showed that forests are important for apiculture and hence merit conservation. For example, bees were either observed or reported to visit a total 71 plant species around Arabuko Sokoke Forest. 70% of these plants flowered continuously over a period of two months while 28% flowered over one month every year. A plant with a flowering period of more than one month is considered important for apiculture. Also, honey quantity decreased as the distance from forest increased irrespective of the type of hives while honey quality did not depend on the distance from forest except for its sugar content (Sande et al. 2009).

Amani Nature Reserve (ANR) was observed to have a lot of potential for eco-tourism, some of which is already known to the local people as potential sources of livelihood (Shoo 2008). The potentials include the presence of endemic plants (e.g. African violet *Saintpaulia*) reptiles, birds, amphibians, forests, scenic views and historical aspects which attract tourists. Only 22.7% of the surveyed households were engaged in eco-tourism-related activities which contribute 9.6% of the total household income annually around ANR. Shoo (2008) identified a number of constraints to eco-tourism in ANR: poor road network, growing human population, and poverty within and in the surrounding areas

People in Uluguru Mountains downstream identify status of water availability and watershed as important (Mpiri, 2008). They identified 17 different types of crops as water dependents and therefore have to be irrigated. Paddy was the most mentioned crop as water dependent hence irrigated followed by tomatoes. The least number of people mentioned banana as an irrigated crop.

Toroitich's (2008) assessment of diversity of plant inhabiting mites in Eastern Arc Mountains and environs led to records of five species of mites. In Tanzania two species of the collected species were identified as *Typhlodromus* (Anthoseius) near *transvaalensis* (Nesbitt), (Ascidae) *Lasioseius* sp and *Typhlodromus* (Anthoseius) near *crassus* Van der Merwe. In Kenya, those collected and already identified are *Amblyseius largoensis*, *Typhlodromus* (Anthoseius) sp and Ascidae, probably *Lasioseius* sp. Invasive mite species *Tetranychus evansi* was collected in an African eggplant farm near the Uluguru mountains of the EACF namely Mukuyuni area. However, this pest was not collected in the Eastern Usambaras and its environs where vegetables were grown in Muheza in the area surrounding Amani nature reserve. The common citrus mite, *Eutetranychus* sp. was collected in the citrus fruit orchards visited in this area.

The assessment of carbon storage in agroforestry systems in Uluguru Mountains at Matombo, Morogoro Rural, Tanzania (Mugasha 2008) indicated that the agroforestry system stored significantly higher amount of carbon compared to crop fields system and therefore it seems suitable for adoption. The amount of Carbon in litter and herb layers was the same in the two systems. The species with the least amount of Carbon was *Psidium guajava* followed by banana plants. *Cocos nusifera* stored the highest amount of carbon.

The study on vegetation response to climate change and human impacts from East and West Usambara Mountains (Mumbi 2008) provided a new approach for the Eastern Arc Mountains of Tanzania on the use of multiproxy analyses to elucidate the relationship between and within ecosystem dynamics, vegetation response and climate change. The results of radiocarbon ages from Derema, Mbomole And Dume cores showed that the middle-ages hugely invert the depth vs. time relationship faced with tricky situation on the difficulty in providing reasons for inversion and contamination. The last 1000 14C yr BP provide interesting results with regard to ecosystem dynamics, vegetation response and climate change. Period 1000-200 14C yr BP showed the local vegetation was influenced by wet-dry episodes supported by fluctuating herbaceous pollen spectra. Period 200 14C yr BP to present, all cores demonstrated reduction of forest tree cover during the colonial period due to massive logging and a stable recovery of all vegetation types just before independence and post-independence periods following the introduction of forest conservation measures, including forest ordinances. Abundance of coprophilous fungi is indicative of increased human impacts in the forest, including forest fires, cultivation and grazing. It is envisaged that the current project will allow the development of palaeoecological research in Tanzania and allow for the transfer of methodologies, data analysis techniques and vegetation modelling technique to this country. The development of such local expertise has implications for agronomists, archaeologists and conservationists working in the area in order put in place long-term and sustainable science-based land management strategies. Such an approach requires that local knowledge of the environment, its long term history and how present and future environmental changes may impact on the flora and fauna are well developed locally. The study concludes that although natural, human-induced impacts and climate change on ecosystem and will continue, lessons we get are: ecosystems are able to bounce back when appropriate conservation interventions combined with long-term monitoring and evaluation are implemented on flora and fauna.

Table 5: Summary of new knowledge on livelihoods and ecosystem services

Site name	Is it a KBA? (1 or 0), 2- within a KBA	Country	Summary of new knowledge generated as a result of the study	Reference
Amani Nature reserve	1	Tanzania	There is enormous natural (flora, fauna and sceneries) and cultural resources for development of viable eco-tourism ventures in the reserve. However, these are not fully exploited and residents have limited knowledge on this potential. Eco-tourism contributed only 9.6% to total household income annually in ANR and only 22.7% of the surveyed households were engaged in eco-tourism-related activities; Constraints to Eco-tourism in ANR include poor infrastructure, growing human population, and poverty within and in the surrounding areas.	Shoo 2008
Uluguru south	1	Tanzania	17 types of crops are irrigated in the Uluguru downstream; Of the irrigated crops most respondents mentioned paddy as the most grown crop, followed by tomatoes; Respondents mentioned banana as the least irrigated crop in the area. People in Uluguru Mountains downstream generally identify status of water availability and watershed protection as important.	Mpiri 2008
Kenyan and Tanzanian EAMCF	1	Kenya /Tanzania	Five species of mites are distributed in both Kenyan and Tanzanian part of EAMCF; In Tanzania two species of those collected has been identified as <i>Typhlodromus (Anthoseius) near transvaalensis (Nesbitt, (Ascidae) Lasioseius sp</i> and <i>Typhlodromus (Anthoseius) near crassus Van der Merwe</i> ; In Kenya Taita hills those collected and already identified are <i>Amblyseius largoensis, Typhlodromus (Anthoseius) sp</i> and <i>Ascidae, probably Lasioseius sp</i> . Invasive mite species <i>Tetranychus evansi</i> was collected in an African eggplant farm near the Uluguru mountains of the EACF namely Mukuyuni area.	Toroitich 2008

Site name	Is it a KBA? (1 or 0), 2- within a KBA	Country	Summary of new knowledge generated as a result of the study	Reference
Uluguru Mountains	1	Tanzania	The amount of carbon in the soil was generally different in agroforestry system than in only cropland system; Amount of Carbon in the litter and herbs layer was the same in the two systems; Species with the least amount of Carbon was <i>Psidium guajava</i> followed by banana plants; <i>Cocos nucifera</i> stored the highest amount of carbon than the other components; Generally, agroforestry stored significantly higher amount of carbon compared to crop fields system	Mugasha 2008
Eastern Arc Mountains and forests	2	Tanzania	Dumu cores are the oldest, possibly date back to onset of Holocene period; Derema and Mbomole cores lost their exact age based on perceived contamination of parent rock and the cores itself; Dumu core showed the wettest period being 5000-4000 years ago when water tables was high and higher proportion of montane forests; 4000-3000 14C yr BP showed slightly dry condition than previous years (abrupt aridity); 3000-2000 14C yr BP showed period of forest recovery and formation of sub-montane, lowland forest and with high temperatures; 2000-1000 14C yr BP showed start of human influence on environment; 1000-200 14C yr BP is another period which saw increase in human impact to the environment with periodic spells of droughts; 200 14C yr BP-present is a period again of forest recovery with dominance of submontane and lowland forests though with increased human impacts on environment again.	Mumbi 2008
Arabuko-sokoke forest	1	Kenya	Higher bee diversity and species richness was found at the forest margins compared to the farm lands that were located 6 km away; the abundance of several bee genera such as <i>Amegilla</i> , <i>Lipotrichis</i> , and <i>Xylocopa</i> declined with the increasing distance between the farmlands and the forest margins. The honeybees were the most prolific pollinators, they pollinated over a third of the flowering plants, while the all the wild bee species combined pollinated just over 50% of the flowering species. All bee species pollinated more than one flowering species.	Mwangi 2008

Site name	Is it a KBA? (1 or 0), 2- within a KBA	Country	Summary of new knowledge generated as a result of the study	Reference
Arabuko-sokoke forest	1	Kenya	E.g. bees were either observed or reported to visit a total 71 plant species around Arabuko Sokoke Forest. 70% of these plants flowered continuously over a period of two months while 28% flowered over one month every year. A plant with a flowering period of more than one month is considered important for apiculture. Also, honey quantity decreased as the distance from forest increased irrespective of the type of hives while honey quality did not depend on the distance from forest except for its sugar content	Sande 2008 & Sande et al. 2009

3.0. Conclusions and Recommendation

The success of this small grant programme is evidently beyond expectation. It contributed immensely to new knowledge on threatened species, key biodiversity areas and connectivity and made new unexpected discoveries. Study projects were carried out in 32 KBAs sites. Substantial new information was generated and grantees demonstrated great potentials for generating massive new knowledge given the resources. It is therefore recommended that a long term funding scheme be established for upcoming student researchers to tap their potential in information generation as has been demonstrated by these small projects.

References

- Chikira, H. S. 2008. Impact of Human Disturbance on Coastal Forests: The case study of Tongomba Forest Reserve in Kilwa District, Tanzania. *Unpublished project report*.
- Kalumanga, E. 2008. Abundance and Diversity of Small Mammals in Disturbed and Undisturbed Forests at Uluguru Mountains. *Unpublished project report*.
- Kiluma, L. S. 2008. Quantifying the Abundance, Distribution and Local Use of Rare Plant Species in East Usambaras Tanzania. *Unpublished project report*.
- Kimuyu, D. M. 2008. Role of the Tana River Mangabeys (*Cercocebus galeritus*, Peters) in forest regeneration. *Unpublished project report*.
- Lange, C. 2006. The endemic land snail *Gulella taitensis* of the Taita Hills forests, Kenya: on the brink of extinction. *Oryx* 40 (3): 362-364.
- Lugandu, S. D. 2008. Effects of Joint Forest Management Institutional Arrangements on Forest Condition and Local Livelihood. *Unpublished project report*.
- Mligo, C. 2008. Ecological Dynamics and Conservation Importance of the Eastern African Coastal Forests ecosystems in Tanzania. *Unpublished project report*.
- Mpiri, A. 2008. Willingness to pay for irrigation water: A case of southern Uluguru slopes, Tanzania. *Unpublished project report*.
- Mugasha, W. A. 2008. Assessment of Carbon Sequestration in Agroforestry System for improved livelihood in Uluguru Mountain. *Unpublished project report*.
- Mumbi, C. T. 2008. Vegetation response to climate change and human impacts in the Eastern Arc Mountains. *Unpublished project report*.
- Musila, S. M. 2008. Density and Inter-fragment Dispersal of Bird Species in three coastal Forest Fragments, Kenya. *Unpublished project report*.
- Mwangi, K. N. 2008. Bee diversity and floral resource utilization along a distance gradient from the Arabuko-sokoke forest. *Unpublished project report*.
- Mwanika, M. 2008. Land use dynamics and human impacts on conservation status of *Warburgia stuhlmannii* in Dakatcha and Marafa forests. *Unpublished project report*.
- Mwaura, A. N. 2009. The ecology and molecular characterisation of the endangered and endemic *G. taitensis* (land snail) of the Taita Hills, Kenya. *Unpublished projects report*.
- Mzeru, D. P. 2008. Altitudinal distribution of Invasive plant species: Udzungwa Mountains National Parks. *Unpublished project report*.
- Ndalila, M. N. 2008. The distribution, diversity and population status of land snails from Shimba hills national reserve, Kenya. *Unpublished project report*.
- Ngaruiya, G. W. 2008. Ecological Survey of The Golden Rumped Elephant Shrew (*Rhynchocyon chrysopygus*) in the North Coastal Forests of Kenya. *Unpublished project report*.
- Nguku, J. K. 2008. Distribution, diversity and population status of herpertofauna in lower Tana River forests, Kenya. *Unpublished project report*.
- Ogoma, M. 2008. Conservation Status of threatened endemic birds in Gongoni coastal forest reserve, Kenya. *Unpublished project report*.
- Patrick, C. 2008. *Cedrella mexicana* impacts on indigenous tree diversity in Kimboza forest reserve, Morogoro, Tanzania. *Unpublished project report*.
- Pima, N. E. 2008. Rare Plant Species Composition and Restoration Potential through seed Bank in Zaraninke coastal forest, Bagamoyo District Tanzania. *Unpublished project report*.

- Sabuni, C. 2008. Assessment of species Composition and Diversity of Small Mammals at Saadani National Park. *Unpublished project report.*
- Sande, S. O, Crewe, R. M., Raina, S. K., Nicolson, S. W and Gordon, I. (2009). Proximity to a forest leads to higher honey yield: Another reason to conserve. *Biological Conservation, In Press*
- Sande, S. O. 2008. Beekeeping for forest conservation: Filling a knowledge gap at Arabuko Sokoke Forest, Kenya. *Unpublished project report.*
- Shoo. A. R. 2008. Potential and Constraints of Eco-tourism in Improving Nature Conservation and livelihoods. *Unpublished project report.*
- Soi, B. C. 2008. Bird-Habitat Relationship in Kenyan South Coast Forests. *Unpublished project report.*
- Toroitich, F. J. 2008. Assessment of the Biodiversity of tetranchid mites in the Eastern Arc Mountains and East African Coastal Forest Mosaic Hotspot. *Unpublished project report.*
- Waiyaki, E. M. 1995. Effects of forest fragmentation, isolation and structure on the richness and abundance of bird communities in major coastal forests of south coast, Kenya. *Unpublished MSc Thesis, University of Kent, UK.*
- Wambugu, G.M. 2009. Simulating the Effectiveness of Two Forest Management Scenarios in a Multiple-use Kenyan Coastal Environment: The Case of Kwale District. *Unpublished Msc. Dissertation, Kenyatta University.*

Annex 1: List of grantees and titles of research projects they undertook

Grantee	Project Title	CEPF contribution (US\$)	Level	University
Kenneth Njoroge Mwangi	The proximity of the farms to Arabuko – Sokoke forest influences the diversity of insect pollinators and fruit set.	7750	MSc	University of Nairobi
Susan Sande Okoth	Beekeeping for forest conservation: Filling a knowledge gap at Arabuko Sokoke Forest, Kenya	9182	PhD	University of Pretoria
Simon Deus Lugandu	Effects of Joint Forest Management Institutional Arrangements on Forest Condition and Local Livelihood	8025	PhD	The Open University of Tanzania
Elikana Kalumanga	Abundance and Diversity of Small Mammals in Disturbed and Undisturbed Forests at Uluguru Mountains	8326	MSc	University of Dar es Salaam
Bernard Cheruiyot Soi	Bird-habitat relationships of some Kenyan coastal forest bird species	5487	MPhil	Moi University
Charles Patrick	<i>Cedrela mexicana</i> impacts on indigenous trees diversity in Kimboza Forest Reserve, Morogoro Tanzania	3985	MSc	University of Dar es Salaam
Christopher Sabuni	Assessment of Species Composition and Diversity of Small Mammals at Saadani National Park	5044	MSc	Sokoine University of Agriculture
Simon Nganda Musila	Density and Inter-fragment Dispersal of Bird Species in Three Coastal Forest Fragments, Kenya	9108	MSc	Kenyatta University
Mligo, Cosmas	Ecological Dynamics and Conservation Importance of the Eastern African Coastal Forests ecosystems in Tanzania.	8021	PhD	University of Dar es Salaam
Ann Njeri Mwaura	The ecology and molecular characterization of the endangered and endemic <i>G. taitensis</i> (land snail) of the Taita Hills, Kenya.	9389	MSc	Kenyatta University
Julius K. Nguku	Distribution, diversity and population status of herpetofauna in lower Tana River forests, Kenya.	8439.29	MSc	Nairobi University
Mercy Nelima Ndalila	The distribution, diversity and population status of Land snails from Shimba Hills National Reserve, Kenya.	6712	MSc	University of Nairobi
Hassan Senkondo Chikira	Impact of Human Disturbance On Coastal Forests: The Case Study Of Tong'omba Forest Reserve In Kilwa District, Tanzania.	4920	MSc	Sokoine University of Agriculture
Grace Wambui Ngaruiya	Ecological Survey Of The Golden Rumped Elephant Shrew (<i>Rhynchocyon Chrysopygus</i>) In The North Coastal Forests Of Kenya.	6833	MSc	University of Nairobi
Maurice Ogoma	Conservation status of threatened endemic birds in Gongoni coastal forest reserve, Kenya	6778	MSc	University of Bremen
Mercy Mwanikah	Land use dynamics and human impacts on conservation status of <i>Warburgia stuhlmannii</i> in Dakatcha and Marafa forests	5458	MSc	Moi University

Grantee	Project Title	CEPF contribution (US\$)	Level	University
Rehema A.Shoo	Potential and Constraints Of Eco-Tourism In Improving Nature Conservation and Livelihoods	5520	MSc	Sokoine University of Agriculture
Nancy Eliad Pima	Assessment of Rare Plants and Restoration Potential through Seed Bank in Zaraninge Coastal Forest, Bagamoyo District Tanzania	7080	MSc	Sokoine University of Agriculture
Mzeru Deogratias Paul	The status of invasive plant species at Udzungwa Mountain National Parks	4900	MSc	Sokoine University of Agriculture
Linda Stephen Kiluma	Quantifying the Abundance, Distribution and Local Use of Rare Plant Species in East Usambaras Tanzania	5920	MSc	Sokoine University of Agriculture
Faith Jebet Toroitich	Assessment of the biodiversity of tetranychid mites in the Eastern Arc Mountains and East African Coastal Forest Mosaic Hotspot	3375	PhD	North-West University of South Africa
Kimuyu Duncan Maingi	Role of the Tana crested mangabey (<i>Cercocebus galeritus galeritus</i> Peters) in forest regeneration	5739	MSc	Moi University
Cassian T. Mumbi	Vegetation response to climate change and human impacts in the Eastern Arc Mountains	5640	PhD	University of York
Wilson Ancelm Mugasha	Assessment of Carbon Sequestration in Agroforestry Systems for Improved Livelihood in Uluguru Mountains	3,713	MSc	Sokoine University of Agriculture
Aloyce Mpiri	Willingness to pay for irrigation water: A case of Southern Uluguru Slopes, Tanzania	3,929	MSc	Sokoine University of Agriculture
Geoffrey Mwangi Wambugu	Simulating the impacts of two forest management scenarios in a multiple-use coastal environment	400	M.Sc	Kenyatta University



**Proceedings of the Postgraduate
Research Grantees Conference**
27th February 2009

Small Grants for Student Research in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania



Starlight Hotel, Dar es Salaam, Tanzania

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icipe
African Insect Science for Food and Health



Tanzania
Forest
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Group



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Executive Summary

As part of the larger CEPF conservation US\$ 7 million investment in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania (EACF), a Small Grants programme worth US\$ 200,000 was launched in October 2006 to support the research work of Kenyan and Tanzanian postgraduate students focusing their thesis work on the EACF. The main purpose of this funding was to support student research work that would contribute significantly to the conservation of Critically Threatened species, generate information that contributes to Red List Assessments, or increase connectivity of biologically important fragmented forest patches characteristic of EACF. The programme would also significantly contribute to building the much needed individual and institutional capacity in applied research and conservation biology. Field research was conducted within the Eastern Arc and Coastal Forests of Kenya and Tanzania. The programme funded by CEPF was administered by the EACF Coordination Unit (CU) through the BirdLife Africa Partnership Secretariat and its Partners in Kenya (NatureKenya) and Tanzania (Wildlife Conservation Society of Tanzania). As part of improving networking and information exchange linkages of students to seasoned researchers, e-forums, newsletters and distribution of relevant information necessary to forge linkages and long-term collaborations, stimulate networking, exploiting and tapping from existing synergies where similar research interests exist was pursued. However, besides this virtual links, climax of the small grants programme was on 27th February when the grantees were brought together at a conference in Dar Es Salaam not only to present results from an array of their various research work to themselves and various audience but also get an opportunity for a face-to-face interactions and exchange of experiences, develop acquaintances amongst themselves and various stakeholders. The conference organised in both oral and poster presentation brought together 63 participants comprising of student grantees, academic and research institutions personnel and representatives from the civil society including the members of the CEPF/EACF Coordination Unit who have been part of the grant management process from the initial stage until now. The results demonstrate that focused work by students can go a long way in contributing to knowledge for the conservation of biodiversity hotspots. Important information was generated for improving connectivity between fragmented habitats, for example, by documenting the significant roles played by primates in forest dynamics, and the distribution of plants through seed dispersal. The students also investigated links between biodiversity, livelihoods, and ecosystem services including carbon sequestration in agroforestry systems. One project demonstrated that honey yields and quality for communities adjacent to Arabuko-Sokoke Forest, Kenya, benefit from forest conservation. At the end of the conference, the best three presentations were selected and awarded based on their contribution and significance to science, linkage to past work and presentation skills. A brief brainstorming session provided an opportunity for participants to deliberate on the way forward and to provide feedback and general comments on this programme and on conservation issues in the region. Dr. Mwangi Githiru used this session to give technical tips and guidance on effective presentation skills useful to the audience if they have to give talks at conferences in future.

Overview of the Postgraduate Research Grant Programme in Eastern Arc and Coastal Forests of Kenya and Tanzania

The Critical Ecosystem Partnership Fund (CEPF) is currently mobilizing and providing financial and technical assistance towards the conservation of biodiversity hotspots. Biodiversity hotspots are regions characterised by high species diversity and a large number of endemic plant species, which have been negatively impacted by anthropogenic activities and as such are designated as priority regions for conservation investment. CEPF is a joint initiative of Conservation International, l'Agence Française de Développement, the Global Environment Facility, the Government of Japan, the John D. and Catherine T. MacArthur Foundation and the World Bank. The Partnership aims at dramatically advancing conservation of the earth's biodiversity hotspots- the biologically richest and most threatened areas. The fundamental goal is to ensure that the civil society is engaged in biodiversity conservation. The purpose of CEPF in the Eastern Arc and Coastal Forests of Kenya and Tanzania (EACF¹) is to improve biological knowledge and appreciation of biodiversity among the local populations, stimulate support for conservation, and promote conservation science and best practices. CEPF investment in the Eastern Arc and Coastal Forests of Kenya and Tanzania region began in 2003 with the initial compilation of an Ecosystem Profile² (Conservation International, 2003) and allocation of \$7.1million as funding towards a five-year conservation programme. The process of choosing conservation priorities and targets was consultative and participatory during which key stakeholders were engaged and focal elements of biodiversity conservation were identified and narrowed down into a few practically achievable targets.

As part of this larger CEPF conservation investment in the region, a Small Grants for Student Research in the Eastern Arc Mountains and Coastal Forests (EACF) of Kenya and Tanzania region programme was launched in October 2006 to support the research work of Kenyan and Tanzanian postgraduate students focusing their thesis work on EACF. The programme, funded by CEPF, was administered by the EACF Coordination Unit (CU³) through the BirdLife International (BirdLife Africa Partnership Secretariat and BirdLife Partners in Kenya and Tanzania – Nature Kenya and WCST). The main purpose of this funding was based on the premise that the outputs from student research work would contribute significantly to the

¹ After the 2005 global review of the biodiversity hotspots, the former EACF was geographically split into two hotspots namely Coastal Forests of Eastern Africa and the Afromontane hotspots respectively. The hotspots increased from 25 to 34 after this reappraisal

² The purpose of the ecosystem profile is to provide a rapid assessment of underlying causes of biodiversity loss, define measurable outcomes for conservation of species, sites and corridors, understand the existing institutional framework and identify funding gaps and opportunities for investment. The ecosystem profile recommends strategic funding directions that will contribute to the conservation of biodiversity in the EACF region

³ The Coordination Unit is a group of four organisations that are working together and with CEPF to achieve the CEPF outcomes for the Eastern Arc/Coastal Forest of Tanzania and Kenya. The CU is the 'eyes and ears' of CEPF in the region. It comprising of BirdLife International (Africa Partnership Secretariat, Nature Kenya and Wildlife Conservation Society of Tanzania), International Centre for Insect Physiology and Ecology (ICIPE), World Wide Fund For Nature - East African Regional Programmes Office and Tanzania Forest Conservation Group (TFCG) and Dr. Neil Burgess a co-opted member

conservation of Critically Threatened species, generate information that contributes to Red List Assessments, or increase connectivity of biologically important fragmented forest patches characteristic of EACF. Secondly, the programme targeted providing support towards capacity building of upcoming scientists. Through supporting students to pursue their postgraduate research; the programme would significantly contribute to building the much needed individual and institutional capacity in applied research and conservation biology. Field research was conducted within the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania.

A call for proposals was made in late 2006, which provided guidelines on the application process. The applications were received continuously and went through a thorough review process conducted by a team of experts from the Coordination Unit. This grant scheme has significantly contributed to individual and institutional capacity for Kenyan and Tanzanian students and generation of the much needed biological knowledge on key sites, species and other priority thematic issues such as livelihoods and climate change. A total of 68 high quality applications were submitted between October 2006 and September 2008; an indication that the demand was high despite the limited resources. Of the 26 approved projects, 12 were from students registered at Tanzanian universities, 10 at Kenyan universities and four were registered at universities outside East Africa contributing to 21 Masters and 5 PhD degrees. Through engagement of the student grantees, besides the breadth of information generated and the degrees acquired, they have significantly gained a lot of experience in project implementation.

The Conference

Overview

Various virtual methods have been used to improve networking and information exchange between the grantees and other stakeholders: e-forums, newsletters and distribution of relevant information from the BirdLife Africa Secretariat. Besides these the climax of the small grants programme was on 27th February, 2009 when the grantees were brought together at a conference at Starlight Hotel, Dar es Salaam. This was not only to present their research results, but also get an opportunity for face-to-face interactions among themselves and with other stakeholders. The conference was held back to back with the Final Assessment Workshop of the CEPF 5-year US\$7.1 million conservation investment in EACF, which took place on 25th -26th February 2009 at Courtyard Hotel, Dar es Salaam.

During the conference, both oral and poster presentations were made. In total 63 people participated comprising of student grantees, academic and research institutions personnel and representatives from the civil society including the members of the EACF Coordination Unit.

Official Opening Ceremony

John Salehe, WWF Eastern Africa Regional Programme's Ecoregion Leader, Eastern Africa Coastal Forest Ecoregion Programme and a member of the Coordination Unit chaired the first session. While extolling the successes and achievements made by the students, he encouraged and challenged them not to be complacent but instead pursue highest levels of academic degrees and professional careers as this would guarantee them employment or promotions ensuring social mobility.

Welcome remarks were delivered by Dr. Hazell Shokellu Thompson, BirdLife International's Regional Director for Africa. He expressed his excitement for getting an opportunity to attend the conference. He decried the serious threats (current and emerging) facing biodiversity and feared that there was probably little to show by 2010, the year set to assess the gains made in significantly reducing world's biodiversity loss. There was a very small window of opportunity that remained if something was to be achieved to save biodiversity in the face of threats both current and emerging as presented by climate change phenomenon. He emphasized the need for building capacity for scientists as no single state had developed without the critical mass of scientists. This is even critical in developing countries where most of the biodiversity is threatened. He stressed the link between biodiversity and livelihoods. The grantees were encouraged to pursue their lifetime dreams and climb their professional ladders. He described the conference as unique since it brought a blend of professional and amateur scientists together. He thanked CEPF through John Watkin the Grant Director, Critical Ecosystem Partnership Fund who was present for providing the funding for this programme.

In his opening and welcome remarks, John Watkin commended the achievements from this programme including the conference. John described conservation work as a vocational calling. He mentioned he was very impressed by the quality of abstracts and mentioned the greater emphasis Conservation International/CEPF places on scientific publications and biodiversity database as key elements in its global conservation work. He emphasized the importance of forging and maintaining linkages and coalescing efforts together for the mutual benefit in pursuit of varied or similar interests. He encouraged researchers to share data as this is the hallmark of information sharing. He described the grantees as representing the cream of future scientists. He congratulated grantees for accessing funding from this competitive grant programme. He also encouraged grantees to conduct follow-up work, share the results widely with site-based stakeholders such as protected area personnel and communities. He wished everyone the best of luck and also congratulated BirdLife International for excellent management of the grant.

The conference was officially opened by Mr Joseph J. Kigula on behalf of the Director of Forestry and Beekeeping Division, Tanzania. In his opening remarks and on behalf of the Tanzanian Government, he thanked CEPF for supporting the students in conducting their postgraduate research in EACF and acknowledged the usefulness of the findings in conservation planning. He emphasized the importance of research as a basis for informed, science-based conservation and sound natural resource management efforts. He also commended the Coordination Unit and all the grantees for their dedication and dexterity, which contributed to the successful implementation of this programme. He encouraged everyone to participate actively during the sessions and subsequent discussions.

A presentation by Paul K. Ndang'ang'a of the BirdLife International, provided an overview of the programme in terms of the progress made to-date. This gave way to oral presentations from the over 20 grantees, which included 15 minutes of presentation and 5 minutes of questions, reactions and lively discussions for each presentation.

Summary of the conference proceedings

The sessions graciously chaired by the members of the CEPF/EACF Coordination Unit, were divided into various thematic topics:

- Biological knowledge and Connectivity (12 presentations),
- Livelihoods, Social and Environmental Economics (4 presentations)
- Disturbance and Invasive Ecology Land Cover Change and Climate Change (4 presentations).

All presentations are provided on the attached CD while the abstracts for each are included below. An evaluation panel comprising of members of the Coordination Unit (Dr. Neil Burgess, Dr. Ian Gordon and Nike Doggart) did an excellent job in evaluating and subsequently identifying three best oral presentations. This assessment was based on objective and transparent criteria that saw three outstanding presentations bag awards in the form of books in recognition of their work and the presentations during the conference. The best was Faith Toroitich (Plant inhabiting mites of EACF with special reference to the family Tetranychidae) followed by Grace Ngaruiya (Ecological Assessment of Golden-rumped Elephant-shrew in Kenya's North Coastal Forests) and third was Elikana Kalumanga (Abundance and Diversity of Small Mammals in Disturbed and Undisturbed Forests in the Ulugurus). Besides their presentation skills, results from these three best presentations revealed one remarkable commonality. It emerged that the first had also discovered and documented two new species of mites during her fieldwork in EACF (subject to molecular confirmation); the runner-up could potentially have discovered a new species of Elephant-shrew in Boni and Dodori Forests. The third re-discovered the Ornate shovel snout snake, *Prosymna omatissima*, an erstwhile considered locally extinct species in the Ulugurus in Tanzania after 80 years of its original discovery. This is a clear testimony that a lot in terms of biological knowledge still remains unknown within the region. Also displayed were posters as well as other advocacy material from various projects and institutions.

Programme

CEPF Investment in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania Programme for the CEPF Student Grantees Conference, 27th February 2009, Starlight Hotel, Dar es Salaam

26th February 2009: Arrival and Registration

27th February 2009

07h45-08h00: Registration

Session Chair: Lota Melamari (Rapporteur: Alex Ngari)

08h00-08h10: Welcome and Opening Remarks from Dr Hazell Shokellu Thompson, Regional Director for Africa, BirdLife International

08h10-08h20: Welcome and Opening Remarks from John Watkin, Grant Director, Critical Ecosystem Partnership Fund, Conservation International, US

08h20-08h30: Official Opening by Mr J.J. Kigula, for the Director, Forest and Bee Keeping Division

08h30-08h45: An overview of the Student Grantees programme (Presentation by Paul K. Nding'ang'a)

Oral Presentations

Session I: Biological knowledge and connectivity: Session Chair: Lota Melamari (Rapporteur: Alex Ngari)

08h45-09h05: Abundance and Diversity of Small Mammals in Disturbed and Undisturbed Forests in the Uluguru Mountains, Tanzania: **Kalumanga Elikana**, Senzota, R.B.M. & Massao, Catherine

09h05-09h25: Ranging behaviour and seed dispersal by Tana crested mangabey (*Cercocebus galeritus galeritus* Peters 1879): **Kimuyu Duncan Maingi**, Wahungu, G.M., and Kairu, J.K.

09h25-09h45: Assessment of Rare Plants and Restoration Potential through Seed Bank in Zaraninge Coastal Forest, Bagamoyo District Tanzania: **Pima, Nancy**, Munishi, P.K.T and Madoffe, S

09h45-10h05: Molecular Characterization and Some Environmental Factors Influencing Distribution of the Endangered and Endemic *Gulella taitensis* in Taita Hills, Kenya: **Mwaura, A. N.**, Ndiritu, D., Lange, C. and Githui, K.

10h05-10h20: Tea Break, Group Photo and Posters presentations/viewing

Session II: Biological knowledge and connectivity: Session Chair: John Salehe (Rapporteur: George Eshiamwata)

10h20-10h40: Density and inter-fragment dispersal of bird species in three coastal forest fragments, Kenya: **Musila Simon Nganda** and Shyam Manohar

10h40-11h00: The Distribution and Diversity of Terrestrial Snails in Shimba Hills National Reserve, Kenya: **Ndalilah Mercy**

11h00-11h20: Species Composition and Diversity of Small Mammals in Saadani National Park, Tanzania: **Sabuni, C. Andrew,** Makundi, R. H. and Munishi P. K.T.

11h20-11h40: Bee Diversity around the Arabuko Sokoke forest and their foraging preferences: **Njoroge Kenneth**

11h40-12h00: Distribution, diversity and population status of herpetofauna in lower Tana River forests: **Nguku Julius**

12h00-12h20: Conservation status of threatened endemic birds in Gongoni coastal forest Reserve, Kenya: **Ogoma Maurice**

12h20-12h40: Bird-Habitat Relationships in Kenyan South Coast Forests: **Soi, B. Cheruiyot**

12h40-13h00: Ecological Assessment of Golden-rumped Elephant-shrew in North Coastal Forest in Kenya

Ngaruiya, **Grace W.,** Mwangi, E & Chira, R.

13h00-13h45: Lunch & Poster presentations/viewing

Session III: Livelihoods, Social and Environmental Economics: Session Chair: Dr. Ian Gordon (Rapporteur: Paul Nnyiti)

13h45-14h05: Effects of Joint Forest Management Institutions on Forest Resource Condition and Local Livelihoods in New Dabaga Ulongambi Forest Reserve, Iringa Tanzania: **Lugandu S. Deus**

14h05-14h25: Willingness to pay for irrigation water: A case of Southern Uluguru Slopes, Tanzania: **Mpiri Aloyce**

14h25-14h45: Assessment of Carbon Storage in Agroforestry Systems and Farmers Capacity to Implement a Carbon Project at Matombo, Morogoro Rural, Tanzania: **Mugasha W.A**

14h45-15h05: Potential and Constraints of Eco-Tourism in Improving Nature Conservation and Livelihoods: **Shoo Rehema**

15h05-15h25: Tea Break, Poster presentations and viewing

Session IV: Disturbance and Invasive Ecology Land Cover Change and Climate Change: Session Chair: Nike Doggart (Rapporteur: Paul Ndong'anga)

15h25-15h45: Impact of Human Disturbance on Coastal Forests: The Case Study of Tong'omba Forest Reserve in Kilwa District, Tanzania: **Chikira, H. Senkondo**⁴

15h45-16h05: Plant inhabiting mites of the Eastern Arc Mountains and East African Coastal Forest Mosaic Hotspot with special reference to the family Tetranychidae: **Toroitich Faith**, Haas Fabian, Knapp Markus, Theron Pieter and Ueckermann Eddie

16h05-16h25: Impact of *Cedrela odorata* on Plant Species Diversity in Kimboza Forest Reserve, Tanzania: **Patrick Charles**

16h25-16h45: The status of invasive plant species at Udzungwa Mountain National Parks: **Mzeru Deogratias, P & Madoffe, S.S**

16h45-17h05: Brainstorm on the way forward

17h05-17h25: Closing Remarks

17h25-17h30: Vote of Thanks: **Lota Melamari**

⁴ Presenter did not turn up for the conference

ABSTRACTS

Impact of Human Disturbance on Coastal Forests: The Case Study of Tong'omba Forest Reserve in Kilwa District, Tanzania.

Chikira, H. S., Malimbwi, R. E. & Luoga, E. J
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Abstract

Coastal forests offer an array of products and services of socio-economic, biodiversity and ecological importance locally and in regional context. However, such benefits are threatened by human activities. The objective of this research was to investigate the impact of human disturbances on forest stand parameters; woody species diversity and forest cover change in Tong'omba Coastal Forest Reserve (TCFR), Kilwa, Tanzania. The forest was stratified into undisturbed and disturbed strata, 80 concentric plots laid systematically and measurements were taken for estimation of stocking, basal area, volume, species diversity and forest cover change. Microsoft Excel Programme was used to analyze the inventory data while spatial data was analyzed by Arc-view software. The basal area and volume in year 2008 were relatively lower as compared to 2005 but the difference was not significant. The results between two forest strata showed that disturbed stratum had significantly lower values of basal area and volume ($P < 0.01$) than the undisturbed one while the differences on stocking was not significant. The findings on species diversity indicated that differences in values of Shannon Index between the strata were not significant ($P = 0.210$). Similarly, indices of Dominance, and Importance Value, indicated that same major dominant species occur in both strata. Analysis of spatial data revealed that forest cover was generally improving between 1989 and 2001. The study concluded that human disturbances, particularly pole cutting and logging had negative impact on basal area and volume. The results however showed that disturbances had no significant impact on species diversity, and forest cover change from 1989 to 2001. The study recommended more efforts be taken by the Government to protect TCFR from illegal tree cutting and institute proper management strategies like Joint Forest. Further research, using latest and high resolution satellite images to quantify and locate degradation in this forest is recommended.

Abundance and Diversity of Small Mammals in Disturbed and Undisturbed Forests in the Uluguru Mountains, Tanzania

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Abstract

Small mammals are a poorly known fauna in the Eastern Arc Mountains. In order to contribute to the knowledge of this faunal group, small mammals were trapped in the Uluguru Mountains, Tanzania in order to assess their abundance and diversity in the disturbed and undisturbed forests. Trapping was done in four major habitats (with three replicate plots in each habitat)

located within the same elevation (1200-1300 m.a.s.l). The habitats included the intact forest slightly disturbed forest, cultivated field and the fallow land. A total of 449 individuals, spread over 14 species of rodents and *Crocidura* shrews identified to the genus level only were trapped. Trap success was higher in the undisturbed forest (forest habitat A and B) than in the disturbed habitats ($H_{0.05, 8, 12, 11, 9} = 24.84$, $\chi^2_{0.05, 3} = 7.815$, $P = 0.001$). Species diversity was high in the undisturbed forests than in the disturbed forest. This study demonstrates that although modified forest habitats are reported to support a diverse small mammal community by creating habitat heterogeneity, it is at the expense of forest-adapted species.

Key words: abundance, diversity, small mammals, disturbances, Uluguru Mountains

Ranging behaviour and seed dispersal by Tana crested mangabey (*Cercocebus galeritus galeritus* Peters 1879)

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Abstract

The riverine forests along the lower Tana River basin are highly fragmented mainly due to anthropogenic disturbances and changing river course. Seed dispersers, including primates can aid in natural regeneration and in improving connectivity between the forest patches. The ranging behaviour and contribution of Tana crested mangabey (*Cercocebus galeritus galeritus* Peters 1879) to seed dispersal was examined in two adjacent forest patches, Mchelelo West and Guru South, in the west bank of lower Tana River basin between December 2007 and April 2008. The study was limited to one group of mangabey, consisting of around 52 individuals, whose range covers the two forest patches. Ranging behaviour was examined by following the group throughout the day and recording its position after every 30 minutes. Frequency scan method was used to record feeding behaviour. Incidences of defecations were recorded *ad libitum*. Faecal samples were analyzed in laboratory to determine seed content. Some dung piles were left intact at the deposition sites, marked and monitored for germination and secondary dispersal. Seedling surveys were done within the main sleeping sites and within selected ranging sites as well as control sites.

Mangabeys showed non-random ranging patterns. A total of 2772 feeding scores were recorded from 27 different plant species and invertebrates. The top ten tree species constituted 93% of total feeding scores. Seeds were swallowed, spit or dropped under the parent tree or carried in cheek pouches and dropped at some distance from the parent tree after the pulp was taken. Among tree species, *Phoenix reclinata* was the most preferred followed by *Ficus sycomorus* while *Hunteria zeylanica* received the least preference. Although mangabeys defecated throughout the day, a great deal of defecations were recorded in the morning before they left their sleeping sites and they displayed a clumped spatial pattern of defecations. A total of 1485 seeds belonging to 13 different plant species (apart from *Ficus spp*; whose seeds were not counted) were extracted from 64 dung samples. Six out of the major tree species in mangabeys diet were confirmed to germinate from fecal clumps. Two of the germinating species (*Ficus sycomorus* and *Garcinia livingstonei*) are pioneers with the ability to colonise new habitats hence can play a more immediate role in regeneration of non forested or cleared areas. Mangabeys play

significant roles in primary dispersal of seeds and range widely between forest fragments thus their role in forest dynamics and distribution of plants cannot be understated. Future studies should examine how secondary dispersers and seed predators influence germination potential of seeds already dispersed by mangabeys. Focus should also shift to recruitment rates of seedlings and to details on mangabey interactions with the pioneer species.

Key words: Tana crested mangabey, Seed dispersal, forest regeneration

Quantifying the Abundance, Distribution and Local Use of Threatened Plant Species in East Usambaras Tanzania

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Abstract

This study quantified the abundance, distribution and local use of threatened plant species of East Usambaras in Tongwe and Proposed Derema forest reserves. The objectives of the study were to identify threatened plant species and determine their population characteristics and distribution and also assess, quantify and document different utilization and extent of use of different plant species of ecological, cultural and economic importance focusing on threatened species.

A total of 216 plant species were identified, of which 146 plant species came from Tongwe Forest Reserve while 70 plant species came from the Proposed Derema Forest Reserve. A total of 14 species were identified as threatened plant species under the category of vulnerable species in accordance to IUCN red list of 2007. None of the identified species fell in the category of Endangered and Critically Endangered. Proposed Derema Forest Reserve leads with nine vulnerable plant species followed with Tongwe Forest Reserve with five vulnerable plant species. Threatened plant species found both Tongwe and Derema Forest Reserves are being utilized for purposes such as economic value (*Beilschmedia kweo*, *Macaranga conglomerate*, *Cephalosphaera usambarensis*, *Isoberlinia scheffleri*, *Allanblackia stuhlmanii* and *Khaya anthotheca*), cultural purposes (*Adansonia digitata*, *Ficus cycomorus*, *Ricinodendron heudoletii*), medicinal purposes (*Solunum incanum*, *Anthocleista grandiflora*, *Harungana madagascariensis* and *Todalia asiatica*).

Effects of Joint Forest Management Institutions on Forest Resource Condition and Local Livelihoods in New Dabaga Ulongambi Forest Reserve, Iringa Tanzania

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Abstract

Joint Forest Management (JFM), as recognised by Tanzania Forest Policy (1998), is an institutional arrangement that is claimed to ensure sustainability of forest resources and improve the livelihoods of the people living around the forest resources. It was introduced for

implementation in New Dabaga Ulongambi Forest Reserve (NDUFR) in 2002. Despite strong forest policy support to JFM, little is known about how its institutions affect forest condition and livelihood of people living around the forest reserve. This study is an effort to bridge this knowledge gap.

PRA approaches, structured household interviews and participant observations were used in collection of socio-economic data. Both descriptive statistics and regression analysis models were used to determine causal factors for observed changes. Livelihood strategies were estimated using K-means cluster analysis. Data on changes in land cover and land use patterns before and after the introduction of JFM were collected from landsat images, physical observation and analysed using Geographical Information System (GIS). Markov probability model was employed to forecast vegetation cover trends of NDUFR up to 2012.

Results from Landsat images and digital aerial photograph and physical observation of NDUFR and testimony from discussions with communities showed gradual improvement in vegetation cover of NDUFR. The benefits, which are directly received from the NDUFR, are in form of fees from forestry service such as research, visiting which are subsequently and inadequately beneficial to Village Natural Resource Committee (VNRC) monitoring activities and to some village development activities. JFM related interventions outside NDUFR such as tree planting woodlots and plantations, which are normally done on household lands, have a significant impact to livelihoods of people surrounding NDUFR. Although transactions are low for VNRC institutions as compared to central government institutions, financing them is problematic hence likelihood of jeopardising the successes which have been recorded so far. The village level good governance practices have been strengthened through the application of JFM approach.

The study recommends increased capacity building to local organisations and improvement in meeting the VNRC transaction costs in order improve further the gains from JFM arrangement. Introduction of Income generating activities that reduces dependency on forest resources and increase household incomes has to be promoted by the local governments and other stakeholders. It is also recommended that forestry related activities such as planting woodlots and plantations outside NDUFR be strengthened.

Conservation Research Grant in the Forests of the Eastern Arc Mountains and the Coastal Regions of Kenya and Tanzania

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Abstract

The study explored ecological change along the selected coastal forest focusing on genetic diversity and regeneration potentials of threatened plant species in the coastal area in relation to edaphic factors and the levels of ecological disturbance caused by human activities and the threats in which such species are faced. Standard-sampling methods were employed so as to get the representative sample for generalization of the characteristics of the ecosystem.

Willingness to Pay for Improved Irrigation Water Supply. A case study of Uluguru Downstream in Morogoro Tanzania.

Mpiri, A., Kadigi R.M.J & Abdallah, J.M

Abstract

The global food shortage has escalated demand for irrigation water; agriculture alone consumes over 80% of the total freshwater, and expansion of new areas for cultivation in the watersheds. Watersheds degradation in the upland, in turn, causes excess run-off and reduced flows in rivers/streams in wet and dry season respectively, known as externalities, and affect quantity and quality of water supplied to farmers' fields.

The degradation is attributed to market price failure to determine the actual value of water-related goods and services. Water is non-rival and non-exclusive resource whose values cannot be determined by perfect market. Therefore, the study on willingness to pay for improved irrigation water supply is an attempt to estimate the benefits of improved irrigation water supply, by use of hypothetical market, resulted from well protected watersheds carried out in Uluguru North and Uluguru south downstream in Morogoro rural and Mvomero districts by generating information on the type of crops irrigated and their values, estimating the mean willingness to pay (MWTP), determinants of WTP and institutions arrangement as the potential for water management and basis for payment for watersheds services and pricing policy.

A total of 230 households sampled for data collection, 108 and 122 randomly selected from Uluguru North and Uluguru South respectively at sampling intensity of 5%. The semi-structured questionnaire design based on Focus group discussions with key informants and pre-tests. And finally, the primary data survey was administered. Besides, secondary data were from literature search and government offices. Statistical Package for social Sciences (SPSS) computer programme was used for descriptive statistics and STATA (Version.10) for estimation of economic value of irrigation is done (through contingent valuation Methods, CVM)

The preliminary results showed that there are 17 types of crops which irrigated in the uluguru downstream. Of the crop irrigated, 37.1% of respondents mentioned paddy as the most grown crop, followed by tomatoes, 28.4% of respondents. 0.6% of respondents mentioned banana as the least irrigated crop in the area. Besides, the status of water availability and watersheds is well known by farmers, the (the estimation of mean WTP and model of determinants of WTP are on analysis process, will be presented)

Assessment of Carbon Storage in Agroforestry Systems and Farmers Capacity to Implement a Carbon Project at Matombo, Morogoro Rural, Tanzania

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Abstract

The reported here was conducted to evaluate carbon storage in agroforestry systems and farmers capacity to implement a carbon project at Matombo, o Rural District, Tanzania. For the purpose of comparing the amount of carbon stored into these systems, three blocks with a dimension of 10 m x 50 m in areas practising agroforestry were laid adjacent to three blocks of the same dimension in crop-fields. Carbon content was assessed in three pools in each system which included soils, aboveground biomass and belowground biomass. Procedures involved the development of allometric equations for both banana and herbs which provided the relationship

between biomass, RCD, and height for the case of banana and biomass and green weight for the case of herbs. These equations were used to estimate biomass of herb and banana in both systems. For the case of the trees, existing general volume equations were used to estimate biomass.

On social economical study, the capacity of the farmers to gain access to carbon payment via agro-forestry depends on fulfilment of the CDM project requirements. These requirements include additionality, Leakage (externalities), permanence, acceptability, management capability and certification. Farmers were assessed on their capacity to meet these requirements. The allometric model developed for estimation/prediction of biomass in banana plants in agroforestry setting was $B = \text{Exp} \{5.310 + 1.7688 \text{LN}(\text{HT}) + 0.4875 \text{LN}(\text{D})\}$ ($R^2 = 0.82$) while herbs, the equation was; $B = \text{Exp} \{0.92359 - 0.1611 \text{LN}(\text{G})\}$ ($R^2 = 0.80$). The amount of carbon in the soil did not differ significantly in the two systems ($p=0.18$). In the agroforestry system the amount of carbon ranged from 9.03 tC/ha to 114.95 tC/ha with an average value of 47.25 tC/ha while for the cropland dominated by herbs the amount of carbon in soil ranged from 12.87 tC/ha to 97.99 tC/ha with an average value of 40.71 tC/ha. There was no significant difference between the two systems in the amount of carbon stored in the litter ($p=0.28$). In the agroforestry system the carbon in the litter component ranged from 0.55 tC/ha to 1.66 tC/ha with an average value of 1.07 tC/ha while for the case of the crop field, carbon in litter ranged from 0.46 to 1.68 tC/ha with an average value of 0.95 tC/ha. There was no significant difference ($p=0.47$) between the two systems in carbon storage in the herbs layer. The amount of carbon in agroforestry systems for the herbs layer ranged from 0.55 tC/ha to 6.79 tC/ha with an average value of 2.41 tC/ha while in the crop fields the amount of carbon ranged from 0.57 tC/ha to 4.79 tC/ha with an average value of 2.73 tC/ha. In the case of banana and trees layer above ground carbon ranged from 1.26 tC/ha to 21.40 tC/ha. The tree species with the least amount of carbon stored was *Psidium guajava* followed by banana plants (0.61 tC/ha). *Cocos nusiifera* stored the highest amount of carbon (21.40 tC/ha) than the other components. Agroforestry stored significantly higher ($p=0.03$) amount of carbon (154.87 tC/ha) compared to crop fields system (121tC/ha).

Farmer capacity to implement carbon projects under CDM requirements was found to be insufficient. The major weakness fall on the side of financial, technological and human resource which are the key tools for success of these projects. Therefore, in that case it is obvious proactive capacity building to increase skills and knowledge is of argent need to broaden the ground for such projects to work out. Activities for baseline determination, investment financial, environmental and social impact and leakage analysis cannot be met under the current condition which is a general implication to most third world countries. People also should be given the occupancy certificate for their land as people are reluctant to plant trees due land ownership problems. Moreover, CDM has come under great criticism for not adequately delivering on the 'sustainable development' benefits. The market increasingly favours low cost, high volume projects such as HFC (hydro fluorocarbon) destruction or landfill to energy projects which have few benefits to local livelihoods. Free from stringent guideline, bureaucratic procedures and high transaction cost, project developer will have more freedom to invest in small scale community projects such as agroforestry.

Keywords: Agroforestry, carbon, sequestration, farmers, climate change

Vegetation response to climate change and human impacts in the Eastern Arc Mountains

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Abstract

East and West Usambara Mountain blocs are unique based on three characteristics. Firstly, they are sister or connected blocs separated by a narrow gap without much difference in forest types. Secondly, they are more oceanic-influenced climate compared to other mountains blocs within the Eastern Arc Mountains due to their close proximity to Indian. Thirdly, related to oceanic influence, in East Usambara and West Usambara the rain seasons are not easily discernable partly because of its close proximity to the Indian Ocean and also to equator while moving westwards and southwards to other mountain blocs rain seasonality is clear. In some forest areas of East and West Usambara Mountains, there are three rain seasons. Short rainy season occurs from October to December based on Northeast trade winds. Long rains occur from March to May mainly convectional and the third rain occurs from July to August based on Southeast trade winds. Sediment cores were collected from peat bogs in Derema (DRM) and Mbomole (MBML) within the East Usambara and Madumu (DUMU) within the West Usambara. The multi-proxy record provides an understanding on climate and vegetation changes across the interglacial-minor glacial periods. DRM and MBML cores results on radiocarbon ages and age-depth curve does not show an inversion. However they present a totally different problem; there is a loss of ages at depths 20 cm and 61 cm possibly due to contamination. The results of radiocarbon ages from DUMU core showed that the middle ages hugely invert the depth vs. time relationship at 57 cm. The tricky situation here is even on the difficulty in providing reasons for contamination. Period 5000-4000 ¹⁴C yr BP deals with DUMU core in which it is characterised with higher proportions of Montane forest and local vegetation which can be indicative of relatively moist conditions at the higher altitude areas of East and West Usambara. Period 3000-2000 ¹⁴C yr BP, the DUMU core demonstrates the recovery of the forest vegetation types with sharp reduction in herbaceous vegetation indicative of dominance of sub-montane and lowland forests. This has been explained by a temperature rise which caused the clouds to be formed at a higher altitude than at present. Period 2000-1000 ¹⁴C yr BP, the DUMU core showed a significant increase in coprophilous (dung) fungi indicative of increased human impacts in the forest, including forest fires, cultivation and grazing. Period 1000-200 ¹⁴C yr BP, the DUMU core showed a significant increase in coprophilous fungi indicative of increased human impacts in the forest. DRM core showed the local vegetation was influenced by stagnation of water on swampy floors resulting from fluctuating wet-dry episodes as this is also supported by fluctuating herbaceous pollen spectra. Period 200 ¹⁴C yr BP to Present, all cores demonstrate the stable recovery of the forest vegetation types with sharp reduction in herbaceous vegetation indicative of dominance of mid-latitude forest types (sub-montane and lowland forests). Abundance of coprophilous fungi is indicative of increased human impacts in the forest, including forest fires, cultivation and grazing.

Key words: Eastern Arc Mountains; East and West Usambara Mountains; vegetation response, climate change; human impact.

Bird species richness and inter-fragment dispersal in the three coastal forest fragments, Mombasa-Kenya

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Abstract:

The coastal forests in Kenya are refuges of diverse important biodiversity. However, human related activities are rapidly destroying the habitat quality of these forests. The goal of this project was to investigate bird species richness and inter-fragment dispersal in the three (Kaya Gandini, Kaya Mtswakara and Mwache Forest Reserve) adjacent fragmented forests. Three ringing sites marked 200-500m from each other, each with two net lines (60m (18m x 2, 12m x 2) and (54m (18m x 3) placed at 60m from one another were used to survey understorey birds in each forest. Canopy birds were surveyed using 22 Timed Species Counts (TSCs) in each forest. Vegetation data was collected within 10m² plots marked at intervals of 50m from one another and located at 10m perpendicularly from the footpath around the ringing sites and TSCs survey routes. 141 bird species were recorded in all sites, with 93, 88 and 91 species recorded in Gandini, Mtswakara and Mwache respectively. A total of 38 forest birds were recorded with 34 in Gandini and 25 in both Mtswakara and Mwache. Four globally threatened birds and 14 Kenya's coastal biome restricted species were recorded in all forests. There were no bird species observed dispersed from one forest to another even though the three sites were connected to each other. The overall habitat structure of three sites was similar even though Gandini and Mtswakara were more similar. Firewood collection and extraction of building poles (5-10cm dbh) for domestic and commercial use in all three forests as well as quarrying activities in Mwache were the greatest threat to the survival of birds. Compared to other two forests, Gandini was the most important site for avian conservation because it was richer in forest specialist, generalist, understorey, globally threatened birds and Kenya's coastal biome. The traditional management of Kayas (Gandini and Mtswakara) by the council of elders was on not effective because the locals were devaluing the Duruma culture. Mwache Forest was not well patrolled for illegal activities because only one guard was involved. Overall, the three forests were still very important sites for conservation of avifauna and other biodiversity but drastic actions were required to address firewood collection, poles and timber extraction, human encroachment and rock quarrying which were increasingly destroying the habitat quality of these fragmented forests.

Key Words: *coastal forests, Kayas, birds, fragments, habitat, degradation*

Molecular Characterization and Some Environmental Factors Influencing Distribution of the Endangered and Endemic *Gulella taitensis* in Taita Hills, Kenya

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Abstract

Gulella taitensis is a land snail of the family Streptaxidae and genus *Gulella*. It is endemic to Taita hills and categorized as endangered on the IUCN Red List. The species is threatened by habitat loss and disturbance due to human activities. Two people sampled snails at four sampling plots using standard timed direct search for one hour. Soil samples were collected from four different points within these sampling plots, and its pH, calcium and electrical conductivity obtained using standard soil chemical analysis methods. Litter depth, litter cover, canopy cover, log and tree density were assessed. Distribution of *G. taitensis* varied significantly between all the forest fragments at 95% confidence limit ($p=0.2827$, $t =1.142$, $df =9$). Most of the environmental variables investigated recorded a positive association with the *G. taitensis* densities. Calcium is significant for the snail's survival and has a significant correlation with litter cover, canopy cover and log density and these influences the distribution between the forest fragments. Polymerase Chain Reaction of DNA using microsattelites reveal that there is heterozygosity (the banding patterns using microsattelites varied within and between fragments). There is a possibility of the presence of a hybrid or sub-species within this species. In addition to *G. taitensis*, the forest has other endemic and endangered species. It is necessary therefore to sensitise the communities on the wealth contained within this forest and the need to conserve them.

Key words: *Gulella taitensis*, Taita hills, Distribution, Environmental variables, Heterozygosity

Simulating the impacts of two forest management scenarios in a multiple-use Kenyan coastal environment: the case of Kwale District

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Abstract

In tropical regions, forests suffer from rapid degradation due to different human land uses. These include agricultural expansion, commercial logging, plantation development, mining, industrialization and urbanization. The impacts to forests on tropical coastal regions are greater because of the popularity of coastal regions and sensitivity of the coastal ecosystems. The Kenyan coast boasts 95 forest patches, covering an area of 660 Km², some of which lie within Kwale District. These forests are however under severe threat from various land use activities, mainly agricultural expansion and human developments (tourism-based activities and settlement). This study will use a Geographical Cellular Automata (GCA) to analyze the effects of two forest management options (government agencies and community management) on forest connectivity between 1986 and 2003; and project forest conditions in 2020 based on conditions

in the previous temporal periods. The objectives of the study are to: (1) Determine land use/ land cover along the coast of Kwale District through classification of Landsat Imagery from two temporal periods (1986 and 2003) (2) Determine the effectiveness of different management scenarios on the state of the forests (3) Determine inter-patch forest connectivity in Kwale District and (4) Simulate future situations on the status of forest connectivity along the coastal strip of Kwale District. Landsat remote sensing imagery will be used (1986 and 2003) to determine land use/land cover change in the two temporal periods. Geographical Cellular Automata (GCA) will be used to simulate future land use cover. 'Cell states' and how they have changed over the two temporal periods will be determined by use of Torrens cell state rules. A number of scenarios will be generated from this output and 'transition rule probabilities' applied to simulate future cell state situations by incorporating past situations into the desired future time (2020). A distance criterion will be used to determine forest patch connectivity, using a connectance index. Finally, social surveys will be done by means of questionnaires to determine forest uses between forests managed by government agencies and those managed by communities. Results of this study will provide a glimpse into the future status of coastal forests of Kwale District if current management scenarios prevail, and inform decision makers on interventions required to sustainably conserve coastal forests.

The status of invasive plant species at Udzungwa Mountain National Park

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Abstract

A study was conducted in Udzungwa Mountains National Park. The study aimed to assess the altitudinal distribution, abundance and diversity of invasive plant species. The specific objectives were to document the most abundant invasive plant species, to determine the altitudinal distribution of these plant species and to assess ecological, and socio- economic impacts of invasive plant species. During data collection the park was divided into three strata and transects were constructed on Sonjo and Sanje Trails. Then rectangular plots of 20m by 50m were made. 80 plots were constructed. 4590 plant samples were collected, 3930 were native and 660 were invasive. 114 plant species were identified, 100 were native species and 14 were invasive. During data analysis Descriptive Statistics and ANOVA were computed. The results indicated that 85.6 % of the park was dominated by native plants and 14.4% were invasive plant species. Plants were more distributed in the lower altitude which accounted 68.6% and *Sorrindeia madagascariensis* being most abundant species followed by *Parinari excelsa*, *Sasparia thathiorata*, alpine bamboo, *Lantana camara* and *Harrisonia abyssinica*.

The results also identified 14 invasive plant species which are *Psidium guajava*, *Mangifera indica*, *Annona senegalensis*, *Lantana camara*, *Syzygium cuminii*, *Olyra latifolia* (bamboo spp), *Tectona grandis*, *Azardirachita indica*, *Oxytenanthera brawnii* (bamboo spp), *Telfaeria pedata*, *Pepper capensis*, *Pepper umbretum*, *Adansonia digitata*.and Palm tree and shown that *Lantana camara* was the major invasive plant species which has invaded the park followed *Olyra latifolia* (a bamboo species), *Syzygium cuminii*, *Tectona grandis* and *Annona senegalensis*. Invasive plant species caused forestry yield reduction, spread of disease and increase managerial

costs. On the other hand some invasive species are being used as food, firewood, timber and medicinal plants. Minimal human interaction to the park has been proposed as a means of reducing invasive species distribution.

The Distribution and Diversity of Terrestrial Snails in Shimba Hills National Reserve, Kenya

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Abstract

In the entire Kenyan coast, Arabuko Sokoke is the only forest that has been properly investigated for land snails. Other forests such as Shimba Hills, the second largest Kenyan coastal forest, remain to be properly investigated though some incidental collections have shown that the forest potentially supports many species. Molluscs were sampled using standardized direct search and litter sample methods in plots measuring 10m x10m in the different habitat types. Environmental parameters notably temperature, relative humidity, soil, vegetation were investigated. Temperature and relative humidity were obtained by use of a meteorological thermometer and a hygrometer respectively. Soil parameters analysed were soil pH, electro-conductivity, soil calcium and texture. For vegetation, sampling was done for trees, shrubs and herbs and the plant species identified.

A total of 1748 specimens belonging to twenty eight species were recorded during the study. The species belonged to eight families in which the family Streptaxidae was the most abundant and had the highest species richness representing eight species, followed by Subulinidae with six species. The families Maizaniidae, Pomatiasidae and Endodontidae had only one species each. Comparison of snail metrics in three different seasons showed that snail abundance was highest in the wet season with 703 individuals followed by the interphase between the dry and wet season with 579 individuals. The least number of individuals (466) was recorded in the dry season. According to Shannon Weiner diversity values, the indigenous forest recorded the highest diversity levels while the grasslands recorded the least diversity. Rainfall and other environmental variables like litter cover; relative humidity and canopy cover had a positive and significant influence on the snail richness while the temperature significantly affected the abundance and richness.

The findings ranked Shimba Hills as the richest coastal forest in terrestrial snails in Kenya. This was compared with studies done in Arabuko Sokoke where 25 species were recorded. These results are important in exposing the role the forest plays in conservation of land snails. Such information will provide basis for deriving sound conservation planning of the taxa and the ecosystem.

Ecological Assessment of Golden-rumped Elephant-shrew in North Coastal Forest in Kenya

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Abstract

The golden-rumped elephant-shrew is an endemic species, specific to the north coast of Kenya and is recognized as an endangered species because of decline in its habitat due to forest fragmentation and destruction by human activities. This research was conducted from November 2007 to March 2008 on two ecological aspects of the golden-rumped elephant-shrew (GRES) in forests along north coast of Kenya.

The first aspect was study of the extent of distribution range of the golden-rumped elephant-shrew from Arabuko-Sokoke forest and its environs, to further north Boni National Reserve and Dodori National Reserve. This research showed that the golden-rumped elephant-shrew is only found within the Arabuko-Sokoke forest and Gede National Monument forest areas. This was confirmed by capture of a specimen at Boni-Dodori area that has similar morphological features but different coloration and is undergoing further analysis at the Museum to confirm its taxonomic status.

Secondly, assessing the relative densities at Arabuko-Sokoke forest and Gede National Monument forest was done. The two forests were sub-divided into 4 main segments because of vegetation diversity that brought about distinct forest characteristics. These characteristics have been found to influence GRES density in previous studies. Therefore, the segments were Gede, mixed forest, *Brachystegia* and *Cynometra*.

Transects of different lengths but 6m wide were used to collect data relating GRES and the habitat. Nest distance from and along each transect were recorded and data analyzed using Distance 5.0 program to obtain relative GRES density in each segment and determine segments with the highest GRES density and hence most preferred habitat.

Attitudes of the indigenous people living around the forest towards conservation of GRES were obtained through questionnaire surveys.

Results indicated that the overall GRES density at Arabuko Sokoke forest had decreased by 8% over a period of 8 years from study done in 2000 by Cynthia Bauer. Specific trends in the forest show that population estimate of GRES at *Brachystegia* forest and *Cynometra* forest have increased by 3.6% and 11.7% respectively, while reducing by 50% in the mixed forest portion which is a dramatic decrease within the forest section. GRES density at Gede which had been thought to have been decimated by dogs in the early nineties by Clare Fitzgibbon had improved to be more than 20 individuals. This confirms that the installed fence kept the forest intact from human destruction and stray dogs thus becoming effective in promoting survival of GRES.

Observations of forest quality in Gede show that proper fencing and monitoring of a forest can support existence of an endangered species even with destruction of the surroundings. Addition of a buffer zone can decrease frequency of poaching in the forest by providing an area for safe extraction of firewood and herbs by the indigenous people. An observation from the indigenous people at ASF and GNMF also showed lack of knowledge of how to sustainably use resources present in the area, and this is one main factor why destruction of the forests was still a problem. Therefore education emphasizing on importance of conservation of resources especially endemic species is important in all age groups for conservation to be effective over many generations.

Distribution, diversity and population status of herpetofauna in lower Tana River forests, Kenya

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Abstract

A study of the herpetofauna of lower Tana River forests was conducted between September 2007 and May 2008, to determine the community structure and threats of the protected and unprotected forest patches, with a view to improving habitat conservation and management. Standardized methods (a time-limited search, traps with drift fences and night transects) as well as un-standardized opportunistic visual encounter survey were used for herpetofauna survey. A questionnaire was also used to assess the cultural significance and threats to the herpetofauna. Species richness (S) and Shannon-Wiener's diversity index (H') were used for comparison of abundance and species diversity. One sample t – test was used to test difference in the logarithm of mean numbers of habitat characteristics within sites in each forest. One way ANOVA was used to determine significant differences in the logarithm of mean of habitat characteristics and herpetofaunal species richness, abundance and diversity among three forests. Regression (ANOVA) analysis was used to assess relationship between habitat characteristics and herpetofaunal species richness, abundance and diversity. A total of 56 species were recorded of which 7 expected amphibian and 17 reptile species were recorded for the first time in this region. Habitat characteristics were determined and their measures differed significantly ($p < 0.05$) within the sites, except for percent canopy cover in Mchelelo West and Shakababo, tree density and forest disturbance in Mchelelo west and Mambo Sasa ($p > 0.05$). However, habitat characteristics did not differ significantly ($p > 0.05$) across the three forests, except for soil moisture content ($p < 0.05$).

Similarly, herpetofaunal species richness, abundance and diversity did not differ significantly ($p > 0.05$) across and within the three forests, except for amphibian species abundance and richness ($p > 0.05$). There was no significant relationship between habitat characteristics and herpetofaunal species richness, abundance and diversity ($p > 0.05$). However, there was significant relationship between forest size and species diversity ($p < 0.05$). The study confirmed that the lower Tana River forests surveyed supported a moderately rich herpetofauna characteristic of coastal forests and conservation efforts in the lower Tana River forests must work within the culture of the region if they are to be successful. The need for more herpetological work especially the community structure, behaviour and ecological processes that affect them in the riverine forest habitats is recommended.

Key words: Species richness, abundance and diversity, herpetofauna and lower Tana River forests.

Bee Diversity around the Arabuko Sokoke forest and their foraging preferences

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Abstract

Agricultural land currently occupies approximately 38% of the planet's land surface, or around half its habitable area, and is the largest cause of native habitat loss and fragmentation. Perhaps, the most important impact of destruction of natural habitat is the loss of natural ecosystem services, like pollination, through reduction in species richness and abundance of pollinator guilds, and the resulting reduction in the reproductive success of plants relying on pollination by these animals. Local habitat structure and resource configuration appear of great importance to the bee behaviour. To assess the impact of habitat conversion on biodiversity and ecosystem processes the study investigated (i) The diversity and abundance of bees found in the three major vegetation types found within the Arabuko Sokoke forest, (ii) The change in composition of the bees along a gradient away from the forest in each of the three forest blocks and (iii) the floral utilization and resource partitioning among the solitary and eusocial bees

These studies were conducted in and around the Arabuko Sokoke Forest, low coastal forest remnant and its surrounding structurally diverse agricultural area in coastal Kenya.

The species diversity and bee abundance in the three different habitat types mixed, *Brachystegia* and *Cynometra* differed highly with the mixed vegetation habitat having the highest number of species and abundance. The number of flowering species involved in interactions with bees in all three habitat types was highly asymmetric, with the five most involved plant species building 7% – 20% of the network. *Apis mellifera* was the most abundant bee species in all habitats, and was involved in 8% - 35% of the interactions in the pollination network. The floral resources were found to be the best explaining factors rather than other habitat parameters for bee abundance in this structurally rich and diverse landscape.

While highest species richness was found in the farmland, highest diversity (species richness + evenness) was found at the forest edge. Due to a high dominance of honeybees, the abundance of flower visitors outside the forest was extremely high. To conclude, the diverse agricultural land, rather than the natural forest, acted as a stable pollinator reservoir due to its large floral resources. Hence, the conservation of the whole countryside, not only the forest, is important to preserve the ecosystem service pollination for natural plants as well as crop plants in Arabuko Sokoke area.

Conservation status of threatened endemic birds in Gongoni coastal forest Reserve, Kenya

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Abstract

Gongoni forest reserve is a moist semi-deciduous tropical forest classified as a Key Biodiversity Area. Prior to this study, no comprehensive avian surveys had been conducted in this site that

could help promote science-based conservation initiatives. Between October 2007 and February 2008, an inventory of birds was carried out in the forest. Bird species composition, richness and abundance were assessed in relation to three habitat categories within Gongoni: high canopy forest, mixed forest and open vegetation. Two standard bird survey methods were used, i.e. transect counts and timed species counts. Vegetation was surveyed using the point centered quarter method while disturbance transects were used to assess human disturbances. A total of 2,190 individual birds comprising 140 species in 50 families were recorded. Two globally threatened species (Southern Banded Snake Eagle *Circaetus fasciolatus* and Fischer's Turaco *Turaco fischeri*), 14 East Africa coast biome species, 14 regionally threatened species and 10 forest specialist species were recorded. Bird species numbers showed higher distribution in high canopy and mixed forest habitats with low species numbers recorded in open vegetation habitat. Habitat categories differed in canopy height, canopy cover, shrub cover and forest disturbance. Overall, canopy height directly correlated with canopy cover amongst the habitat variables. The forest habitats were significantly disturbed. Present levels of natural forest exploitation, largely from human encroachment and selective logging, appear to be unsustainable in Gongoni and it seems likely that the forest may be lost if this trend is not controlled. The site merits more effective protection and management (probably as an Important Bird Area), through initiation of community conservation programmes, owing to the high conservation value of its species.

Land Use Dynamics and Impacts on Conservation of *Warburgia stuhlmannii* in Dakatcha and Marafa Forests in Malindi District

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Abstract

The vast coastal forests of Kenya are experiencing rapid environmental degradation due to climate change and population growth. Dakatcha Woodlands and Marafa forests have been documented as Critical Ecosystem Biodiversity Hotspots. These sites have no formal protection status and are highly threatened by anthropogenic factors. A study was carried out in 2007 using LANDSAT images over the past 25 years and baseline data collected to understand impacts of land cover changes on biodiversity. Data was obtained from LANDSAT thematic time series images (1975, 1987, and 2000). IDRISI, GEOVIS and Arc View 3.3 were used to process the raw data and in calculation of percentage change in the identified land use/land cover classes using the arithmetic model builder overlay process. Ecological and social studies were also conducted to establish the global conservation status of *Warburgia stuhlmannii*, which was found to be vulnerable (VU) based on the IUCN assessment criteria. Spatial data analyses conducted between 1975 and 2000 indicate an extensive depletion of the dense forest cover resource from 82.2% to 34.2% giving way to degraded woodland class and settlement mainly influenced by both human and climatic factors. Results from the social studies identified human interferences such as farming (51%), charcoal burning and timber logging (11.4%), and settlement (4.3%) among others as the major causes of land cover loss. Recommendations have been highlighted for the development of innovative solutions for long-term conservation of rapidly declining coastal biodiversity and development of a framework for decision makers who can promote conservation of such threatened and unprotected habitats.

Key words: Land use/land cover, land degradation, conservation, Dakatcha, Marafa

Impact of *Cedrela Odorata* on Plant Species Diversity in Kimboza Forest Reserve, Tanzania

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Abstract

Cedrela odorata L. is an invasive species threatening natural forest in Kimboza Forest Reserve. Based on the assumption that this species is spreading outwards from its introduced three stands, a study was carried out to determine impacts of *C. odorata* on native species composition and diversity in Kimboza Forest Reserve, Morogoro, Tanzania. Twelve Transects, each 1 km long, divided into ten (20 x 50m) plots were established from *C. odorata* stands towards forest interior. In each plot, trees, shrubs and herbs of all species were recorded. A total of 147 tree species in 52 families were recorded in the study area. The density of *C. odorata* trees ranged from 10-340 ha⁻¹ (Mean 41 and STD 22), saplings 0-1.1 m⁻² (Mean 3 and STD 5.1) and seedlings 0-13 m⁻² (Mean 2 and STD 1.2). *C. odorata* trees recorded a relative frequency (R.F) of 60% ranking second after *Sorindeia madagascariensis* (R.F 65%) in Block A, and ranked fifth (R.F 55%) in Block B and C. *C. odorata* seedlings were the most frequent in Blocks A and B with R.F 77.5 and 75% respectively. Overall, species diversity ranged from 1.03-2.95 for trees, 0.79-2.45 for shrubs and 0-2.14 for seedlings. There was no clear pattern of density of *C. odorata* with increasing distance from their stands, an indication that probably other factors such as canopy cover and soil play role in their regeneration and establishment. A reversed J-shaped diameter at breast height size class reflects an expanding population. Seed source removal and enrichment planting in disturbed parts of the reserve with indigenous species that show high regeneration and growth rates is recommended.

Key words: Invasive species, Species density, Trees, Shrubs/Seedlings, Seedlings.

Assessment of Rare Plant Species Composition and Restoration Potential through Seed Bank in Zaraninge Coastal Forest, Bagamoyo District Tanzania

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Abstract

The aim of the study was to assess rare plant species composition and its relation with soil seed bank as a basis for forest restoration through natural regeneration in the Zaraninge and Mbwebwe coastal forests in Bagamoyo District Tanzania. Eighteen sample plots of size 0.07 were established systematically along transect lines on each of the two forests to cover as much variations as possible. Soil samples were collected within each plot at 0-10cm, 10-20cm and 20-

30cm depths. Plant analysis was based on species importance values computed from the average of relative basal area, density and frequency. Soil samples were analyzed for seed density of different plant species at the different depths. A total of 62 and 50 plant species were identified in Zaraninge and Mbwebwe forest respectively. Out of the 62 vascular plants identified in Zaraninge three species were rare, 35 species common and seven endemic to coastal forests. Mbwebwe forest had three rare plant species, 26 common plant species and five endemic to coastal forest. The Shannon and Simpson diversity indices were 2.843, 0.093 and 2.5, 0.12 for Zaraninge and Mbwebwe forests respectively showing that the forests have high species diversity. The seed bank density for vascular plants was 2,782 seeds m⁻² and 1,170 seeds m⁻² for Zaraninge and Mbwebwe forest respectively. The seed bank density for rare plant species was 103 and 68 seeds m⁻² for Zaraninge and Mbwebwe forest respectively. A total of 71 seedlings belonging to 17 species and 10 families emerged from all samples of the two forests, most of them being herbs and grasses. One rare plant species (*Monanthera trichocarpa*) germinated from both forests. Majority 55% of the seedlings emerged from the 0-10 cm soil layer. The number of germinants significantly decreased with increasing soil depth in both forests (p<0.05). There was no close relationship between species composition of standing vegetation based on the number of germinated seeds and composition of seed banks. It is concluded that forest restoration through natural soil seed bank may greatly depend on the seed bank at the surface soil horizons. The soil seed bank may as well be a major repository of rare plant species. The study suggests a longer germination trial in order to capture the full soil seed bank potential especially for rare plants.

Species Composition and Diversity of Small Mammals in Saadani National Park, Tanzania

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Abstract

Species composition and diversity of small mammals were investigated in different habitats in Saadani National Park using wire cage and Sherman's live traps. Two hundred and ninety four individuals were captured out of 12600 trapping nights. Ten species belonging to the family Muridae, one species each of Myoxidae, Viverridae, Sciuridae and two species of the family Macroscelididae and the genus Crocidura belong to Soricidae were trapped. Two other species belonging to Sciuridae and Galagonidae were sighted only. The preliminary results of this study depict the general knowledge of the species lists and the distribution of small mammals in the park, where the composition and diversity of small mammals in the park are likely to be influenced by different habitat characteristics. The study also shows the presence of vulnerable species in the park which increase more protection to these species.

Key words: muridae, macroscelididae, distribution, habitat, vulnerable

The presence of a forest affects honey yields: one more reason to conserve forests

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Abstract

To conserve globally threatened tropical forest ecosystems, community-driven conservation projects including beekeeping have been undertaken. Bees, with their specific requirements for nutrition and nesting, are good indicators of landscape structure and overall biodiversity of a forest, provided the ecological and seasonal patterns are taken into consideration. Although some studies worldwide have been carried out on honey quality and pollination services of bees, with others in relation to forests, none has targeted this question; is honey quality and quantity enhanced by the presence of a forest? Beehives situated, 0-1 km, 1-2 km, and 2-3 km away from the forest was selected. Bees are known to forage for up to 5km (Hepburn and Radloff, 1998) and only go further if there is acute shortage of pollen and/or nectar. At each distance a fixed number of hives facing North, South, West and East of the forest was selected. The yield of honey, especially from top bar hives, decreases at a distance of more than 3km from the forest. The moisture content, pH, free acidity, HMF and proline content did not differ significantly among honey collected from various distances away from the forest. High species diversity and floral density provide a better food base for bees and naturally sustain a higher population per honeybee colony leading to higher honey yields. We suggest that a maintenance of a high Apiflora species diversity and floral density, which happens naturally inside the forest, can be emulated by farmers in order to ensure high yields away from the forest. A catalogue of such species has also been drawn as a result of this study

Potential and Constraints of Eco-Tourism in Improving Nature Conservation and Livelihoods

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Abstract

Amani Nature Reserve (ANR), which is within the Eastern Arc Mountains, is well known for its biological and ecological values. Eco-tourism is being practiced in the reserve. However, despite the fact that eco-tourism has been proposed as a viable economic activity that can minimize negative human impacts on wildlife habitat and provide an incentive to preserve natural areas, limited information has been reported on the potentials and constraints of the practice in the area. This study was conducted in the villages adjacent to ANR, to determine the potentials and constraints of eco-tourism in nature conservation and livelihoods improvement in and around ANR. Questionnaire survey, Participatory Rural Appraisal (PRA) and key informant interviews were the methods used in data collection. The results reveal that there is enormous natural (flora, fauna and sceneries) and cultural resources for development of productive eco-tourism in ANR. However, the existing potential is not fully exploited. Despite the importance of African violet (*Saintpaulia*) in eco-tourism, majority (73%) of residents were not aware of *Saintpaulia* at all. Only 27% recognized the existence of the flower in their area. This implies that people have got

little knowledge on resources in and around ANR. Results further show that eco-tourism contributed only 9.6% to total household income annually and only 22.7% of the surveyed households were engaged in eco-tourism-related activities. The study concludes that the existing level and type of involvement in eco-tourism is not effective enough to bring about significant impact, which comes into view that the potentials for eco-tourism in improving nature conservation and livelihoods is yet to be realized in the area. It is recommended that, there should be clear plan to identify tourists' attractions in the villages in collaboration with the local people living in the adjacent villages in order to recognize the tourism potential for each village. Furthermore, efforts are still needed to integrate the conservation of rare and endemic species such as *Saintpaulia* to eco-tourism development in collaboration with the local communities. This would be beneficial for the local people and for the conservation of the species and their habitats.

Bird-Habitat Relationships in Kenyan South Coast Forests

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Abstract

Bird habitat selection is influenced by the quality and characteristic of the habitat, which also influences the bird occupancy, use, abundance and distribution. This study on bird-habitat relationships in Kenyan south coast forests was carried out between September 2007 and February 2008. It aimed at providing information on bird species richness of the sites and on the influence of habitat characteristics on East African Coast Biome species (EACBs), with focus on the four forest bird species' (Sokoke pipit, Plain backed sunbird, Fischer's turaco and Sokoke scops owl) occupancy, habitat use, abundance and distribution. The study was carried out in five coastal forests of Kenya namely: Diani, Dzombo Hill, Kaya Waa, Mrima Hill and Marenje forests. The birds were surveyed using Point Counts and Timed Species Counts, with the use of transects aiding in point count placements. Habitat data were surveyed within Point Counts stations. Results showed that surveyed forests generally hold good proportion of forest dependent birds relative to none forest birds. Forest specialists species were relatively less while forest visitors and none forest birds were more when categories were considered. Species richness and abundance of true forest birds increased with increasing forest size. Sokoke pipit and Sokoke scops owl are probably not present within these forests. Distribution of Plain backed sunbird is currently restricted to only larger forests greater than 200 hectares where their abundance is fairly higher than for Fischer's turaco. The abundance of Fischer's turaco, though distributed in all patches, was lower in the smaller sized forests. There is high structural similarity among the forests than differences. Forest specialists of East African Coastal Biomes (EACB) are the most sensitive to forest structural changes while generalists are probably mainly affected by other factors. Forest bird visitors are benefiting more due to loss of forest structural components at the expense of forest specialists. Overall, coastal forest environment is proving challenging to EACB species forest specialists as compared to forest generalist. Finer forest

structural components are important for conservation of sensitive forest species and should be a focus in forest bird conservation.

Keywords: *Bird-Habitat relationship, Coastal forests, Forest structure, East Africa Coast Biome*

Plant inhabiting mites of the Eastern Arc Mountains and East African Coastal Forest Mosaic Hotspot with special reference to the family Tetranychidae

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Abstract

Tetranychid mites are among the phytophagous Acari with the most severe economic effect on agriculture. The road to effective control of a pest begins with its proper identification. This study aimed at determining the tetranychid fauna in Eastern Arc Mountains and Coastal Forests (EACF) of Kenya and Tanzania. In addition, other plant inhabiting mites that were encountered in the process of sampling were also identified and reported. Collections were carried out on cultivated crops and wild plants from natural ecosystems. Tetranychid mites from the genera *Brevinychus*, *Duplanychus*, *Eutetranychus*, *Mixonychus*, *Oligonychus* and *Tetranychus* were recorded with a total of five tetranychid species being recorded for the first time in Tanzania and two in Kenya. One new species to science was found in Tanzania and described. Mites belonging to the genera *Tetranychus* and *Eutetranychus* were found in abundance in agricultural systems in cultivated crops whereas the other genera were found in wild uncultivated habitats.

Non-tetranychid mites from the families Anystidae, Ascidae, Bdellidae, Camerobiidae, Cheyletidae, Cunaxidae, Eupalopsellidae, Eupodidae, Stigmaeidae, Tenuipalpidae, Tydeidae and Phytoseiidae were also collected.

Key words: Spider mites, Tetranychidae, Plant inhabiting mites

Way Forward

Before closing remarks by Lota Melamari (Coordinator/CEO – WCST), there was a brief session during which participants freely brainstormed on the way forward and gave general comments not only on this programme but also on conservation issues in the region.

1. All the grantees thanked CEPF, BirdLife International, Wildlife Conservation Society of Tanzania (WCST) and all CU members for offering and facilitating the research grants.
2. It was noted that the grants were timely and needed since it is particularly difficult to access grants for postgraduate research. The grants therefore made significant impact especially for grantees that had no alternative sources of resources for the research.
3. It was recommended that if possible the student grant programme should continue and indeed increase coverage, including taking up the landscape or ecosystem approach.
4. It was recommended that additional funding should be sought to undertake follow-up work arising from the research findings, e.g. further research on the re-discovered snake.
5. It was noted by a non-grantee participant that the ‘human factor’ was notably missing from most of the research undertaken under the programme. This needs to be emphasized in future.
6. As a next step, all the results of the various research projects funded by this programme should be tied together to contribute to biodiversity state and trend information reporting at global and national levels.
7. It was noted that the student grant programme offered great collaboration opportunities resulting into networking among grantees, supervisors, CU members, etc. The networking aspect needs follow-up.
8. All grantees were encouraged to disseminate their research results widely, especially through publications.
9. Dr Mwangi Githiru gave some technical tips and guidance on effective presentation skills useful to the audience if they have to give talks at conferences in future. The presenters were advised to scale down introduction and dedicate more time to the most important aspects of the methodologies, results, conclusions and recommendations and climax with endeavouring to leave their audience with a catchy take-home message (annex 3).

The abstracts from this conference can be accessed via <http://cepf.tfcg.org>.

To access grantees articles published in the exclusive edition of the Arc Journal, issue 22, download PDF version of the journal from <http://cepf.tfcg.org/downloads/arc-journal-22.pdf>

Annexes

Annex 1. CD-ROM Containing PDFs of all presentations and some Posters

(See CD attached to back cover)

Annex 2: List of Participants

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Annex 3: Ten potentially useful tips for students preparing PowerPoint presentations

By Mwangi Githiru

(NB: this is a long-term learning process, perhaps lifelong, so no need to try perfection immediately – but no harm in trying either! And there are really no hard rules: depends on various factors including the study/talk type, the audience, the time limit etc)

- i. Do not copy straight from Word to PowerPoint; try to prepare talk in PPoint as bulleted ‘prompts’ for what you intend to say
- ii. Generally,
 - a. Speak slowly
 - b. Do NOT read the slides – face the audience
 - c. Use large fonts and do not congest slides: this will ensure you do not have to point at the screen too much and you can use the dimming application in PPoint to help audience focus on what you want at any given time
- iii. Do not attempt to present the entire thesis – it is interesting, but limit yourself to a few key results that form the basis of the take-home message
- iv. Generally, avoid presenting Tables; as much as possible, arrange data into Figures which are much easier to take in
- v. Use graphics as much as possible to engage the audience: Figures, Maps, Graphs, Pictures etc
- vi. As far as possible, discuss your results as you present them such that you only have to conclude in the end; if you present results first, you often have to repeat the result in the discussion for the audience to follow
- vii. Similarly, explain the statistical method as you present the result; again presenting the results e.g., Anova: $F\text{-value} = 3.4$, $P = 0.05$, means you already say what test you use. I think the exception is when you use a specialised program for the analysis which is necessary to explain away from the standard statistical tests. You also do not often need to say you used SPSS etc..., again perhaps except for specialised programs
- viii. Limit the Introduction/Background and Study design to at most a third of your time; in the Introduction, limit this to your Problem Statement and be as specific to your study as possible. For the Study design/methods provide the pertinent information needed to understand your work (e.g., randomisation/systematic randomisation procedures, sampling intensity – period and effort and key methods) and leave out analysis issues that will become clear during results presentation
- ix. Conclude with key take-home messages
- x. Recommendations: when you include these, please make them very relevant and specific. I would avoid vague statements like ‘more research is needed’ which someone would make without having done your work!! You can separate research from conservation recommendations, but, either way, ensure that they are both derived directly from your study. In formulating them, start by thinking about your *study topic or study area, what is needed, what you did, what you found*, and then the recommendations are either:
 - a. What is still missing – research-wise
 - b. What you think needs to be done based on what you found out



Evaluation of Small Grants for Student Research in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania (EACF) Hotspot

(CEPF Grant Application Code 1113419264)

Evaluation Report

Submitted to:

BirdLife International

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About BirdLife Africa Partnership

BirdLife International is a global partnership of non-governmental organizations (NGOs) with a special focus on conservation of birds, their habitats and global biodiversity, working with people towards sustainability in the use of natural resources. Each NGO Partner represents a unique geographic territory.

Together the BirdLife Partnership forms the leading authority on the status of birds, their habitats and the issues and problems affecting birds. The Partners operate in over one hundred countries and territories worldwide, and collaborate on regional work programmes in every continent. In terms of organisation, BirdLife has eight regional programmes worldwide. These are: the Africa Programme, the Americas Programme, the Caribbean Programme, the Asia Programme, the Europe Programme, the Middle East and Central Asia Programme, the Pacific Programme, and the Antarctic Programme. Presently, the Caribbean programme is under the Americas region and there are no Partners yet in the Antarctic, except that work has been initiated to identify IBAs.

The Africa Partnership is a growing network that currently operates in 22 countries: Botswana, Burkina Faso, Burundi, Cameroon, Cote d'Ivoire, Egypt, Ethiopia, Ghana, Kenya, Liberia, Madagascar, Malawi, Nigeria, Rwanda, Seychelles, Sierra Leone, South Africa, Tanzania, Tunisia, Uganda, Zambia and Zimbabwe. A BirdLife country programme operates in Morocco. There are also collaborative Projects in Guinea (with Guinea Ecologie), Sudan (Sudanese Environmental Conservation Society), Eritrea, and Djibouti (Djibouti Nature). Partners are involved in research, conservation action, environmental education and sustainable development through a broad agenda focusing on birds, other fauna and flora, and socio-economic issues such as poverty alleviation.

An African Regional Committee serves as a decision-making body in between regional Africa Partnership meetings. The Africa Partnership has set up working groups and specialized committees to provide advice on and implement specific tasks within the BirdLife Africa Programme. The work of the BirdLife Africa Partnership is supported by a Secretariat located in Nairobi, Kenya and a Sub-regional office in Accra, Ghana.

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4. Letter of introduction
5. Evaluation questions and respondents
6. Questionnaires: A: Grantees, B: Academic supervisors, C: National Partners, D: CU members
7. Evaluation activities and work plan
8. Programme management procedures
9. Contract samples: A: BL-NK, B: Partner-Grantee
10. The call and application procedures
11. Scorecard for proposal review

12. Instructions for contributing information
13. Call to contribute to Arc journal
14. Request for funding to monitor grantee
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17. Record of materials in projects database
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22. Relevance of grantee project to programme objectives
23. Relevance of grantee projects to target KBA sites
24. External funding of grantee projects
25. Quality of academic supervision
26. Progress reporting by grantees
27. Graduation status of grantees
28. Grantee research findings with potential impacts

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The consultant responsible for this study and the report is grateful to BirdLife International and ICIPE for the appointment to carry out this exciting assignment.

The consultant is especially grateful to the Secretariat staff and the Coordination Committee members, who guided the work and maintained the tempo of the study. They include Ian Gordon of ICIPE – a member of the CEPF-EACF Coordination Unit, Julius Arinaitwe of BirdLife Senior Programme Manager, Science and IBA Conservation Programme; Paul Kariuki Ndang'ang'a - Species Programme Manager (programme data and information), and George Eshiamwata – Project Officer. Appreciation is equally extended to the focal persons of BirdLife's national Partners: Alex Ngari - Database Manager, Nature Kenya; and Paul Nnyiti - Senior Conservation Officer, Wildlife Conservation Society of Tanzania. Thanks also go to the respondents of the study protocols for their insight and generosity: all the 25 grantees, many of who came out of their stations in the forests to provide feedback to the questionnaires; and academic supervisors whose responses however few were very constructive.

This first phase of the CEPF small grants programme has raised hopes among biodiversity and conservational researchers and practitioners, both young and old alike. The high profile of the programme has raised expectations for enhanced support to research and capacity strengthening in the region. We all wish that the findings and recommendations from this evaluation would be valuable in future implementations of similar grant management programmes.

Vitalis Musewe, PhD

Acronyms and Abbreviations

ARPPIS	African Regional Postgraduate Project in Insect Science
BLI	BirdLife International
CEPF	Critical Ecosystem Partnership Fund
CMAAE	Collaborative Master of Science in Agricultural Economics
CU	Coordination Unit for CEPF support in the EACF
EACF	Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania
GEM	Grant Enterprise Management System
ICIPE	International Centre of Insect Physiology and Ecology
JEANHS	Journal of East African Natural History Society
KBAs	Key Biodiversity Areas
M&E	Project Monitoring and Evaluation
NGOs	Non-Governmental Organisations
NK	Nature Kenya
R&D	Research and Development
RUFORUM	Regional Universities Forum for Capacity Building in Agriculture
SFDs	Strategic Funding Directions
TFCG	Tanzania Forest Conservation Group
ToRs	Terms of Reference
WCST	Wildlife Conservation Society of Tanzania
WWF	World Wide Fund for Nature

Executive Summary

1 Background

The *Small grants for student research in the EACF Hotspot* project (hereafter also referred as to 'programme') was set up in late 2006 to support the research work of graduate and postgraduate students within the hotspot in Kenya and Tanzania. The prime criteria for funding such projects was that the research work should aim to contribute significantly to the conservation of critically threatened species, generate information that contributes to Red List Assessments, or increase connectivity between important sites. A coordinating committee, which brought together a number of partner organisations and had its Secretariat at BirdLife International in Nairobi, managed the implementation of the programme. The programme has been in operation for around two and a half years and is approaching its planned conclusion mid 2009. It is in the light of this that this end-term audit of the programme was sanctioned with a view to documenting programme achievements and impact and capturing tools and lessons and that could benefit management strategies for similar programmes in the future.

2 Methodology

The evaluation used desk study and questionnaire survey as the main monitoring and evaluation instruments. The stakeholder analysis was undertaken to identify individuals and institutions that should participate in the M&E exercise. They included the 25 (of 26¹) grantees and their 42 academic supervisors from participating universities and research institutions, BirdLife International and her national NGO Partners - Nature Kenya and Wildlife Conservation Society of Tanzania (WCST), and 3 other members of the programme Coordination Unit - ICIPE, Tanzania Forest Conservation Group (TFCG) and WWF-Eastern Africa Regional Programme Office (WWF-EARPO/TPO). Participation in the evaluation was 100% for grantees, 19% for academic supervisors, 100% for national NGO partners, and 50% for members of the Coordination Unit.

¹ One more grantee was approved for funding after the end of this evaluation.

3 Findings

Setup and implementation of the programme: The evaluation found that the programme-implementing partners had established a suitable institutional set-up to administer the programme. The set-up was established within the prescribed time and has worked satisfactorily since it was established. The Coordination Unit conducted its responsibilities in accordance to plan in managing the programme. Resource allocation and the terms of participation were satisfactory to the management partners and, largely, the grantees, notwithstanding grantee support issues that are effectively addressed in other sections of this report. The programme performed beyond expectation by awarding 26 grants within the stipulated period. This was 62% above the originally planned target of 16 grants. This achievement was also realised within the prescribed budget. As of end of 2008, the total committed allocation (of \$160,000 meant for sub-grants) to the grants had amounted to US\$ 158,634 (99%) of which US\$147,199 (89%) had been disbursed to the grantees.

Call for proposals: The call for proposals was well designed. It provided clear information to potential grantees on what the grants would or would not pay for. The call was communicated sufficiently and effectively to reach stakeholders in all kinds of locations and with various means of access to information and attracted large numbers of suitable proposals. Even though the call gave the full duration of availability of the grants, it gave no deadline for receipt of applications within each quarter. Applications were received continuously and sent for review in small batches. This later created some difficulty in efficiently tracking applications and giving feedback to applicants as the proposals went through the review process.

Proposal review process: Stakeholders have judged the review process favourably, except that in a few cases where repeat submissions were recommended, the review may have taken too long to the disappointment of the applicants. The review was extremely effective in terms of relevance of the funded projects to programme objectives and investment goals of CEPF. The scorecard used in the review of applications was well designed. The study found that usability of the scorecard could be improved by incorporating guidance on pass-mark score and tallying procedure, as well as provide for the possibility of other non-numerical considerations in

approving a project. The review team composed of respectable professionals in the relevant fields of work (research or otherwise). They were persons who had worked together on previous occasions and were conversant with the review tools and process. Scoring and decision making was generally fair. The evaluation detected only one or two few instances, which suggested that the reviewers might not have applied the review tools uniformly. Adequate safeguards had been put in place to counter any conflict of interest. These included prohibition of implementing organisations from sponsoring candidates, exclusion of review team members from decision-making on cases where they were likely to have interest and not revealing membership of the review team to the public.

Grantee support: Supervisory effort by academic supervisors was satisfactory. The supervisors had the necessary qualifications and expertise and each grantee received at least one supervisory field visit. The activity could have benefited from improved budgetary allocation to facilitate more supervisory visits. National partners offered appreciable management support, which enabled grantees to access the field sites and establish their field research. However, subsequent field visits by representatives of the Partners, which could have benefited and offered logistical support to grantees were not executed satisfactorily. Arrangements for grantee support to access and disseminate information were satisfactory. This was done mainly through an established electronic network and by facilitating publication in a regional scientific journal. Although no scientific meeting was held by the time of this evaluation, a scientific forum was planned for the grantees to meet and exchange their experiences in February 2009. Late submission of progress reports by grantees was one of the weakest points of this programme. Late reporting has been blamed mainly on slow progress of research work because of technical and logistical difficulties in the field and slow disbursement of the second tranche of research funds.

Programme achievements and impact: The overall finding of this evaluation is that BirdLife and her Partners have designed and effectively implemented an innovative and worthy programme that has achieved its short-term goal of strengthening human and institutional capacities to undertake research and implement development projects in biodiversity and conservation. Through the research findings of the grantees recorded to-date, the programme has

also demonstrated high potential for realising the long-term objective of contributing significantly to the conservation of threatened species and sites by generating biological information and enhancing connectivity capacity in the EACF hotspot.

By the time of programme close down in June 2009, 26 young researchers will have been trained at masters and doctoral levels. In addition to gaining research skills, the grantees have been introduced into an ever-expanding community of biodiversity and conservation researchers in the EACF hotspot, thereby making their future research work easy and contribution to the region more effective. The programme has strengthened the capacities of institutions in biodiversity and conservation research in four main ways: First, by supporting student research the programme enhanced the training capacities and trainee outputs of the host universities; secondly, the trained researchers will boost the capacities of their employing institutions in these areas of research, when they resume their duties; thirdly, residual equipment left with host universities when grantees complete their work will improve the research infrastructure of the relevant departments and, finally, the programme has contributed immensely to strengthening the region's scientific community through its networking activities.

Most grantees have yet to complete their research studies. However, there is mounting evidence that the research outputs of the funded projects have generated biological information that has enhanced knowledge and connectivity of (critical) sites or key biodiversity areas and endangered species. One such example is the re-discovery by a student of a snake species 80 years after it was first discovered. Although the impact of research on the wellbeing of communities cannot be realised or measured in such a short time, there is evidence that the outputs of some of the grantee projects have already demonstrated potential for practical application.

The programme has been generally cost-effective, notwithstanding the personal and university costs met by the grantees from other sources. The limited total budget of US\$ 200,000 was efficiently applied in training 26 researchers, with about 80% of the budget going towards direct research/fieldwork costs.

4 Recommendations

4.1 Reinstitute student research grants programme with some adjustments

The CEPF small grants for student research programme was introduced in late 2006 as a one-off two-year initiative. The programme was implemented successfully, and it made remarkable achievements in research capacity strengthening for individuals and institutions as well as in enhancing scientific knowledge in biodiversity and connectivity. In the short time of implementation, the programme has acquired a high profile within the region, and has raised high hopes among scientists and academic institutions as a source of partnership in postgraduate training in this specialised field. The demand for student research support through the programme was and remains high, as evidenced by the number of excellent applications that could not be funded due to limited resources. The few students that were lucky enough to win the grants still had some wishes for other forms of support that the programme could not provide, mainly on account of the design of the programme to provide only research support, but also because resources were not available.

In view of the above observations, this review concludes that a programme designed to offer small grants to support graduate students specialising in biodiversity and conservation is necessary, and that such a programme should be offered on a regular and long-term basis.

From lessons learnt during the pilot programme, the following improvements to programme implementation are recommended:

4.1.1 Streamline the proposal review process

Review quality: Although the review and selection of grantee projects was generally fair, there were cases where the scores awarded to reviewed proposals did not match the final recommendations. It is noted that this may have applied mainly to those proposals that were reviewed and resubmitted several times. However, it would also imply the need to institute mechanisms that give reviewers a uniform understanding of the review tools and process as well as improve the tallying process...

Feedback to grantees: A major complaint by the grantees was that the reviews took very long and that they did not receive timely feedback on the status of their applications. Receipt and processing of applications was widely spread out during the period of programme implementation and the review was at different stages for different proposals. It is possible this made it difficult to track each proposal efficiently. It is therefore necessary that the training calendar be streamlined to permit a more efficient review and admission of students. If a long-term programme is established as suggested above, it should adopt an annual or biannual admission of students instead of awarding grants on a quarterly basis. This approach could also enable the programme to schedule its activities in line with the calendars of partner universities.

4.1.2 Improve grantee support

Streamline disbursement of funds: Grantees complained of not receiving the second instalment on time and that the financial accounting they had to do themselves gave them a heavy administrative responsibility. The latter has been considered one of the strengths of this programme as it exposed grantees to self-discipline in funds utilisation and management. However, it is suggested that the system of remitting research funds to grantees be reviewed. Payment through many instalments has the effect of delaying access to funds and increasing administrative workload. Direct payment to the grantee also has security implications and gives the student administrative workload. This review recommends that formal arrangements be made with host universities, so that all the funds allocated to research in the grantee's contract are released in one instalment to the host institution to take care of disbursement and accounting.

Ease grantee reporting: There is need to create conditions that will encourage grantees to submit progress reports as required. First, there is need to review and clarify the statement in the grantee contract on reporting, to eliminate any misinterpretation on the format and frequency of reporting. Secondly, since reporting consumes valuable research time, grantees should be required to make only two reports, i.e., a mid-term progress report and a final report. The format of the reports should be that of the registering university and the final report should be the draft thesis.

Institutionalise student supervision: In the foregoing programme, management of academic supervision was in the hands of the student and the supervisors themselves. Experience has shown that this arrangement is too loose and may not work well, especially where the programme is not formally institutionalised at the university. In addition, management becomes complicated where a second supervisor is based elsewhere, perhaps at a research institute or at a university outside the country. It is suggested that management of field visits for supervision and provision of logistical support should be centralised at the programme Secretariat. The visits could be programmed in a manner that ensures opportune timing and submission of supervisory reports by the academic supervisor. As a joint activity, academic supervision should help bring the programme Secretariat to work in partnership with the hosting university.

Improve networking and information exchange: Networking and information exchange via the internet was one of the strengths of the CEPF small grants programme. In addition, the scientific meeting for grantees scheduled for February 2009 is commendable. However, future programmes of this type should incorporate meeting forums in the course of programme implementation. If re-established on a long-term basis, the programme will need to create forums where students meet on a predictable frequency, preferably annually, to exchange experiences.

4.1.3 Widen programme funding base

The high demand for student research support became obvious from the numbers of responses received after the first and second calls for proposals. Similarly, the demand by grantees for other forms of support, in addition to financing of research, was vividly expressed. It is for these two reasons that the funding base needs a boost. Three ways are suggested:

Increase core funding: The student grants programme has demonstrated its worthiness in the EACF. The core sponsors may now consider making a deliberate move to enhance the capacity of the programme to support more students and improve the content of each grant.

Build student grants into other programmes: In order to ensure the sustainability of technologies developed through research, it is important that capacity strengthening be considered a necessary component of research and development projects approved for implementation, especially in

developing countries. Many research projects implemented within the EACF region could benefit greatly from the talent and labour that graduate students can provide, while the contribution of the students is recognised through knowledge and qualifications earned through their participation. Through policy dialogue with donor partners, they can be enticed to boost human capacity strengthening through projects that they fund in the region. The EACF has many such projects in progress and under consideration.

Establish partnerships with scholarship providers: It is true that, even in its present form, the student grants programme was a partnership in postgraduate training because some other party took care of non-research costs of the students. However, such partnerships can be exploited better if formalised. Should the student research grants programme be established and run on a regular basis, then it should be possible for the programme to receive partial scholarships to support non-research training costs. There are several agencies, e.g. the German Academic Exchange Service (DAAD), that provide that kind of support. This approach would also require the establishment of formal linkages with universities and other regional scholarship programmes that are usually the only avenues the agencies use to disseminate partial scholarships.

4.2 Long-term programme development

As a long-term plan, the programme could develop into a regional partnership for postgraduate training in biodiversity and conservation. The partnership would be between selected universities and regional NGOs, especially those that have participated in this pilot phase, with BirdLife as the coordinating Secretariat. The aim would be to establish a fully-fledged, long-term, scholarship-awarding programme, with a regional Secretariat and a network management structure. Several examples of such networks are operational in Africa, specialising in different fields of science and technology, that could provide insight into the establishment and operations of such a regional training programme.

I. Background

1. Programme overview

The Eastern Arc Mountains and Coastal Forests Small Grants Programme is one of the programmes implemented by BirdLife International under the Capacity Building Initiative. The Critical Ecosystem Partnership Fund (CEPF) funded the programme, whose overall goal was to conserve the biodiversity of the Eastern Arc Mountains and Coastal Forests (EACF) of Kenya and Tanzania, with no further species extinctions, through a combination of sound conservation science and the active engagement of civil society. In 2006, BirdLife International obtained a US\$ 200,000 grant from CEPF to provide specific grant support to student research in Kenya and Tanzania. This was in parallel with the small grants for other activities that had already been processed from the overall 5-year Conservation Investment administered directly by CEPF.

The student research grants programme, known as *Small Grants for Student Research in the EACF Hotspot* (hereinafter shortened to Small Grants for Student Research Programme), focuses on (critically) endangered species and small-scale efforts to increase connectivity of biologically important habitat patches. The overall goal of the programme is to support postgraduate students to undertake research in the Eastern Arc Mountains and Coastal Forests (EACF) of Kenya and Tanzania. The programme is administered by the EACF Coordination Unit (CU) through the BirdLife Africa Partnership Secretariat based at ICIPE's Duduville Campus. The programme was designed to provide small grants to a minimum of 16 grantees with a ceiling of US\$ 10,000 each at a budget of US\$200,000 (with 20% of this budget covering administrative costs of the secretariat). The two-year programme, started in June 2006 was to conclude at the end of 2008, but a request was made for a further no-cost extension to 30 June 2009 to enable grantees complete their research projects and submit their final reports.

Details of the design and implementation strategies of the Small Grants for Student Research Programme, which spell out the programme objectives, strategies for implementation, activities and programme partners can be found in the main programme document which is provided as

Annex 1. The programme document presents all these attributes in the logframe format which has been a central tool in this monitoring and evaluation exercise.

2. Rationale

The Small Grants for Student Research Programme was set up to support the research work of graduate and postgraduate students within the hotspot in Kenya and Tanzania. The prime criteria for funding such projects was that the research work should aim to contribute significantly to the conservation of (critically) threatened species, generate information that contributes to Red List Assessments or increase connectivity between important Key Biodiversity Sites. The need for sound administration of the programme warranted the establishment of credible, impartial, efficient, and cost-effective and competitive schemes for granting and grant management, with processes and procedures for reviewing student applications for their suitability, feasibility, relevance, and potential contribution to the overall goal of the programme. It was planned for such processes to incorporate arrangements for closely monitoring and evaluating the programme in order to ensure that student researches achieve their objectives while they contribute positively to the overall goal of the mother programme.

After two years of implementation, which has seen 26 research grants awarded and most of the grantees progressing into advanced stages of their research training, the managers of the programme found it necessary to undertake an end-term evaluation of the programme. The aim was to document programme achievements and impact, and capture lessons that could benefit management strategies for similar programmes in the future. The evaluation also coincided with the reporting schedule of the Eastern Arc Small Grants Programme and its outcome would have exciting long-term implications, as it may lead to renewed effort in resource mobilization for a new version programme to support capacity strengthening in biodiversity conservation.

The output of this review should also be a repository of what transpired in the implementation of the programme. It is for this reason that tools and documents developed to guide the implementation process are captured and appended as Annexes.

3. Terms of reference

The goal of the consultancy was two-fold: to measure and document achievement and to capture lessons from programme implementation. The Terms of Reference for this assignment are shown in **Annex 2**. Briefly, the evaluation aimed to capture performance information on the following three areas: (i) the management of the small grants programme including advertising the grants, review of projects, contractual arrangements, monitoring and reporting; (ii) alignment of funded projects to the objectives of the programme and the overall impact; and (iii) lessons learned in the management of the small grants and possible future directions. The programme managers will analyze the information arising from the evaluation for incorporation into the final programme report.

The monitoring and evaluation consultancy was to undertake a critical analysis of programme implementation leading to a logical and fact-laden presentation, covering the following key results areas:

- Identification of the key success and constraint factors inherent upon the organisational and management procedures and processes, including their cost effectiveness, and how these have influenced the performance of the small grants for student research programme;
- Documentation of contributions (both realized and expected) of programme implementation, so far, towards the achievement of its long-term goal and short-term objectives as well as the targeted Conservation Outcomes and programme outputs;
- Identification and discussion of failures in achieving the planned objectives, along with possible causes of such shortcomings; and
- Critical analysis of status of the programme and documentation of lessons learnt and recommendations for better grant management in future.

For this study, BirdLife Africa Partnership Secretariat, in consultation with ICIPE (a member of the Coordination Unit), identified Vitalis Musewe, a consultant based in Nairobi, Kenya.

II. Methodology

1. The approach

The objectives-based logframe approach^{2,3} was used in developing the monitoring and evaluation instruments. The following key information groups were obtained by studying the programme logframe: targets that should have been achieved; performance indicators to be measured, relevant performance questions, the important assumptions on which the desired performance depended and the possible sources of such data and therefore, the pertinent methodologies for data collection. Performance was assessed in terms of *quality* (relevance and effectiveness, *efficiency*, and *impact* depending on which indicators these criteria suitably applied.

The monitoring and evaluation focussed on the following five performance sectors:

- **Set-up and management of the programme:** this addressed the institutional setup and management procedures; roles and responsibilities of stakeholders as per contractual agreement; resource allocation and transparency and stakeholder perceptions on performance.
- **Call for proposals:** this addressed the quality, timelines, and methods of dissemination of the call instrument; timeliness, quality, and stakeholder access to application guidelines.
- **Proposal review process:** this examined the review instrument and efficiency of review and feedback processes; conflict of interest in the review; effectiveness of the review process (fairness in selection and relevance of selected proposals to programme objectives and investment priorities).
- **Grantee support:** this addressed disbursements, reporting frequency and formats, field supervision and monitoring, support in publishing the results, linking to other researchers and contribution to the database.

² DAC Principles for Evaluation of Development Assistance, EOOD (1991)

³ Managing for Impact in Rural Development – A Guide fro Project Monitoring and Evaluation. IFAD

- **Programme achievements and impact:** this evaluated the actual and potential impacts of the programme, including achievements in capacity building and the potential impacts of grantee research.

2. Data collection and analysis

The first step to data collection was a thorough analysis of sources of information for verification of the performance indicators. A *stakeholder analysis* was conducted in consultation with the programme Secretariat to determine the institutional and individual stakeholders and which performance questions they could help to answer. Four categories of stakeholders were identified as shown in **Annex 3**. The Secretariat sent out a letter (**Annex 4**) introducing the consultant to the identified stakeholders. The second exercise was an analysis of documented sources of information and the indicators that they could help verify. The evaluation questions and sources of verification are tabulated in **Annex 5**.

The following methods were then used:

- *Desk study:* Programme documents, both physical and electronic, were scrutinised to extract information on achievement of set targets. Such documents included the following: the main programme proposal and log frame; financial budgets and reports; management procedures – roles of stakeholders and contractual agreements, rules and regulations, the call and proposal review processes, monitoring and grantee support plans, progress reports and follow up actions. Much of this information was contained in the programme database that was supplied by the Secretariat. Where the database was incomplete, the necessary information was sourced directly from the national Partners.
- *Questionnaire:* The outcome of stakeholder analysis guided the development of the questionnaire as the prime monitoring and evaluation instrument. The questionnaire was critical in the exercise because of the little time available, the distance to the location of stakeholders and the intervening holiday season that limited availability of stakeholders in their places of work. Four sets of questionnaires (**Annex 6A-D**) were developed to suit the four categories of stakeholders – the grantees, the academic supervisors, the Coordination

Unit, national Partner institutions and the Secretariat personnel. The questionnaires were circulated by email and the returns were received in the same manner. The questionnaire method was, however, limited to some extent by the location of some stakeholders in remote parts of Tanzania, with no access to the internet for long periods.

- *Interview:* This method was used as follow up to clarify issues after the questionnaires were received and analysed. Due to lack of time that made visits impractical, interview was limited to telephone contact. However, effectiveness of this approach was also suppressed by lack of current telephone contacts of many stakeholders and the holiday season that found many contacts away from their offices and sources of information.
- *Data analysis:* Due to the small number stakeholders involved, the use of sophisticated statistical methods was not found necessary. Responses to each of the questions were recorded manually onto Excel sheets and, where necessary, simple analysis of percentage response was performed.

3. Risks, assumptions and exclusions

In undertaking, this evaluation exercise the following important assumptions were made: 1) that the contact information on the relevant stakeholders as provided by the client were valid and that the stakeholders were available and willing to provide the necessary information and data, and 2) that the programme database provided by the client was appropriately up to date. The intervening long holiday season was a matter of concern in view of the tight time schedule for implementation of the assignment. Finally, the terms of reference (TORs) for the assignment did not include financial audit of the programme and, therefore this was not included in the study.

4. Stakeholder participation

Data on stakeholder participation in the evaluation exercise is summarised in **Table 1**. The four types of questionnaires were sent to 73 stakeholders. Participation was very strong among grantees, national Partners and the Secretariat and Coordination Unit categories. A remarkably small response was recorded among academic supervisors even after repeated contacts by email

and telephone. Whereas some grantees had listed more than one supervisor in their proposals and in their responses to the questionnaire, it would appear that only one of those listed was actively engaged in field supervision and, therefore, was able to respond effectively to the questionnaire for academic supervisors. The consultant decided that grantees and programme implementers were the critical category of stakeholders and their full participation as recorded here was more than adequate for this review.

Table 1: Stakeholder participation in the monitoring and evaluation process

Stakeholder category	Number contacted	Number responded	% response
a. Grantees (individual)	25	25	100
b. Academic supervisors (individual)	42	8	19
c. National NGO partners (institutional)	2	2	100
d. Coordination Unit (institutional)	4	2	50
Total / average response	73	37	51
<i>Note: The one grantee, who was awarded a late grant in the second phase of programme implementation, was not included in the survey.</i>			

5. Activities and work schedule

In order to facilitate implementation of the M&E assignment, all the activities necessary to accomplish the assignment were determined and a work schedule prepared. **Annex 7** shows the actual work schedule as dictated by the holiday season and slow returns of completed questionnaires.

III. Findings

1. Programme set-up and implementation

1.1 Documentation of the set up

The institutional set-up and management procedures for the Small Grants for Student Research Programme are spelt out in the management procedures document given in Annex 8. Contractual agreements between BirdLife and national Partners -Nature Kenya (NK) and Wildlife

Conservation Society of Tanzania (WCST), and between the national Partners and grantees are represented by the templates given in Annex 9A and 9B, respectively.

1.2 Understanding of roles by stakeholders

The programme management procedures spelt out in Annex 8 and the contractual agreements given in Annexes 9A and 9B provide adequate evidence of a well thought-out institutional set-up for implementing the programme. The set-up could be summarised in the following five components: 1) four implementing partners (BLI, NK, WCST and ICIPE); 2) supported by the other Coordination Unit Partners (TFCG and WWF-EARPO/TPO); 3) working under the oversight of the full membership of the Coordination Unit; 4) a three-tier arrangement linking (BLI-national Partner-grantee) for the management of individual grantee projects; and 5) with monitoring input by academic supervisors from universities and research institutes. Since the arrangements were agreed through consultations among the partners and concluded through signed documents, it is easy to conclude that partners were well informed of this implementation set-up and their roles in it.

1.3 Work of the Coordination Unit

Responses from at least two partner representatives confirm their participation in regularly convened Coordination Unit meetings. Members of the Unit effectively took charge of the proposal review process through their roles as reviewers and in meetings for tallying of the results.

1.4 Preparation of working documents

Programme management and monitoring tools included instruments for advertising the grants (Annex 10), the scorecard for proposal review (Annex 11), instructions for contributing information to the EACF Database (Annex 12), Call for contribution to Arc Journal (Annex 13), and Request for Funding to Monitor Grantees (Annex 14). Management adopted the format of the Journal of East African Natural History as guidelines for reporting and publication. The

documents were developed and available for use in time. Evaluation of the quality and use of these documents are dealt with in greater depth under the respective sections of this report

1.5 Processing and award of contracts

Details of grants awarded by the programme are listed in **Annex 15**. Records show that the full complement of 25 grants that the programme was designed to cater for had been awarded by the end of 2007, which exceeded by 56% the planned target by this date of 16 grants. This achievement was also realised within the provided budget allocation. As of end of 2008, the total committed allocation (of \$160,000 meant for sub-grants) to the grants had amounted to US\$ 158,634 (99%) of which US\$147,199 (89%) had been disbursed to the grantees. One more additional grant was awarded in 2009 after a special request, making the total number of grants to be 26.

From the “proposed start date” of the proposed grantee projects, it would appear that some applications took unduly long to process before they were finally approved. This is illustrated by the analysis shown in **Annex 16**. Approximately half of the grantees started their projects well after the time they had proposed to start, the most affected being 80 weeks. However, the delays in awarding the contracts are attributable to the time taken to review many of the proposals, some of which were recommended for resubmission more than once after correction. There are those grantees for whom records show that they started earlier than they had proposed. This category of grantees probably submitted their proposals well in advance, such that the time taken to review the proposals did not affect their foreseen starting time. Hence, a number of grantees had their contracts signed well ahead of the date they had proposed.

By the end of 2008, all contracts for approved projects had been signed and grantees were busy undertaking their research as is evidenced by the reports received by the national Partners and the programme Secretariat. An additional contract was signed in 2009 after a special request was made and one more grant awarded.

1.6 Programme monitoring by Secretariat

Two project monitoring and evaluation tools were put in place at the onset. At programme level, the Small Grants for Student Research Programme was prepared in the logframe format that identified the overall goal and desired outcomes as well as programme outputs and the associated performance indices, means of verifying them and important assumptions. There was also a provision for final evaluation, which is the basis for this report. At the grantee projects level a monitoring framework, based on Conservation International's grants enterprise management (GEM) system was put in place.

A record of the data available in the electronic version of the programme management database, which was availed in support of this evaluation exercise, is provided as **Annex 17**. The following observations were made:

- (i) Funds disbursement was efficiently recorded and accounts kept up to date
- (ii) The electronic database had signed contracts for five grantees. Consultations revealed that all records of contracts were available in hard copies.
- (iii) 14 grant applications with full proposal documents were available in the electronic database, although these were for unfunded projects. However, consultations revealed that all 67 applications were available in hard copies.
- (iv) Record of analysis of grantee projects' contribution to knowledge on globally threatened species and different taxa was available, covering 23 of the funded projects.
- (v) The expected reporting dates were entered for first grantee reports to facilitate report tracking. Information on subsequent reports could be calculated from the dates of signing the contracts, which was provided in the database.
- (vi) Sixteen records had been entered for first reporting and one record for second reporting. However, information from National Partners confirmed that all grantees had submitted their first reports.
- (vii) Review of applications received under this programme was equitably undertaken for all the 51 proposals reviewed under the first call and outputs of the exercise were carefully recorded.

- (viii) Communication of final decision of the reviews was available for all the applicants. Although communication of feedback during the review was not in the database for some grantees, further consultation revealed that most of this communication was done via email and sometimes by phone.
- (ix) The record had insufficient information on communications in general, such as minutes of meetings held by the Coordination Unit and publications by grantees. However, it should be noted that the small grant programme was discussed as one of the key agenda items during the quarterly Coordination Unit meetings, thus was minuted there.
- (x) Records have shown that the Secretariat submitted progress reports to CEPF as planned.

1.7 Perceptions on the terms of contractual agreement

Grantees and the two national BLI Partners (NK and WCST) were asked whether they were satisfied with the terms of their contractual agreements and management performance with respect communication and transparency. Both Nature Kenya and WCST were 100% satisfied with the terms of their participation in the programme. The response of grantees are summarised in **Table 2**.

Table 2. Perceptions of grantees' with respect to the terms of the contractual agreement with the national BLI partner and on management of the programme

<i>Contractual Clause</i>	<i>% of respondents</i>		
	<i>No comment</i>	<i>Unfair</i>	<i>Fair</i>
1. Duration of Agreement	0	12	88
2. Grant amount	0	4	96
3. Payment schedule (instalments)	0	36	64
4. Payment method (US# via bank a/c)	0	8	92
5. Reporting schedule (every 3 or 6 months)	0	8	92
6. Project conditions	0	0	100
7. Close up and recovery of funds	24	4	72
8. Insurance	20	36	44
9. Provisions for variation of the terms of	36	4	60

agreement			
10. Communication arrangements	0	4	96
11. Transparency in resource management	4	0	96
Total respondents			25

Grantees were generally satisfied with the contractual arrangements, with an overwhelming majority of them declaring that all the contractual clauses were satisfactory. However, significant concerns were recorded with respect to four main issues: 1) Funds payment schedule: Grantees felt constrained by payment in instalments, which they felt did not allow flexibility in their operations. For example, some grantees would have preferred a much larger first instalment to cater for purchase of equipment, which had to be bought at the start of the project. 2) Insurance: Many grantees, especially the unemployed ones wished the programme had included personal insurance cover within the agreement to give them peace of mind while they worked in remote field locations. 3) Exchange rates that affected their budgets in latter stages of project implementation. 4) The three-tier arrangement, with the national partner coming in between BLI and the grantee was considered a hindrance by some grantees as it delayed reporting and feedback and hence release of research funds (see evidence in the monitoring and reporting section of this report).

1.8 Conclusions

- (i) The evaluation found that the programme-implementing partners had established a suitable institutional set-up to administer the programme.
- (ii) The set-up was established within the prescribed time and has worked satisfactorily since it was established.
- (iii) The Coordination Unit conducted its responsibilities in accordance to plan in managing the programme.
- (iv) Resource allocation and the terms of participation were satisfactory to the management partners and, largely, the grantees, notwithstanding grantee support issues that are effectively addressed in other sections of this report.

- (v) The programme performed beyond expectation by awarding 26 grants within the stipulated period and within the prescribed budget. This was 62% above the originally planned target of 16 grants.
- (vi) This achievement was also realised within the provided budget allocation. As of end of 2008, the total committed allocation (of \$160,000 meant for sub-grants) to the grants had amounted to US\$ 158,634 (99%) of which US\$147,199 (89%) had been disbursed to the grantees”.

2. The call for proposals

2.1 Formats and modes of call dissemination

The call for proposals was prepared in a variety of formats to suit various methods of dissemination. These included texts for website posting, email transmission, electronic and hard copy newsletters, posters and cards for physical distribution to relevant institutions for posting on notice boards and power point slide sets for verbal presentation at seminars. The grants were also announced at professional meetings. Evidence from applications received indicated that the call was prepared within prescribed time and was out by October 2006.

Records show that web distribution sites included those of CEPF, WWF, TFCG, and BirdLife and the sites of a number of national and regional NGOs, many of which were hosted by CEPF website, e.g. BirdLife Africa Partnership Secretariat, Tanzania Forest Conservation Group (TFCG), Nature Kenya, WCST, ICIPE and a number of universities. Posters were widely distributed to 40 or so institutions (**Annex 18**), which included NGOs, research institutes, universities and government departments. The programme database shows that PowerPoint presentations announcing the availability of the grants, while at the same time reporting on progress of the programme, were delivered on various dates in 2007 and 2008.

A second call for applications was made on July 8, 2008, after CEPF through BirdLife International, committed some additional funds to support 5 to 7 post-graduate students mainly because of the successes observed with the first phase. The additional funds would have been

realised from what was seen as ‘remaining balance’ from the CEPF’s investment portfolio in the EACF. Unfortunately, it was later realised that an error had occurred in CEPF’s system, giving a wrong impression that there was such a balance. As a result, the commitment from CEPF to provide additional funds to the Post-graduate research grant programme has now been rescinded.

2.2 *Call quality*

A sample of the text of the call, together with the additional guidelines (see paste-up on the document) to clarify issues not covered in the first call, was given earlier as **Annex 10**. The call provided information on who could apply, what kind of research was eligible, nature (budget range and applicable duration) of the grants, application procedures and how the applications would be processed, duration of availability of the grants and the person and addresses (postal and email) to contact for further clarifications. The additional guidelines called for declaration of other sources of funding for proposed projects, and items that were not permitted for inclusion in the budget.

It is observed that the call allowed candidates to apply throughout the period 2006 to 2008 when the grants were available, with grants being awarded quarterly. This must have caused problems with application processing, as the applications flowed in throughout the programme implementation period, thereby constraining the ability of the Secretariat to cope with the necessary correspondence with applicants.

Table 3. Methods by which grantees and academic supervisors got to know about the availability of CEPF small grants for student research

<i>Method of access</i>	<i># of contacts</i>	<i>% of total</i>
Website or other mass media	8	13
E-mail circular	12	20
Poster on a notice board	15	25
Announcement at a professional public function	1	2
Advice from employers or superiors	8	13
Alerted by a friend, colleague or personal contact	16	27
Total number of contacts	60	100

2.3 *How stakeholders accessed the call*

Table 3 shows the number of stakeholders accessing the various formats of the call and the methods by which the call reached them. Clearly, some of the respondents had access to more than one format or method, but email circulars, posters and word of mouth had substantial impact in ensuring the call reached the targets.

2.4 *Response to the call*

The first call attracted 51 applicants of whom 25 were found suitable and awarded grants. A second call had been made when it had been anticipated that CEPF would provide an additional \$50,000 for the grant programme. Many of the 17 applicants who responded for the second call were also qualified but could not be funded due to resource limitation. However, one of these 17 applicants further made a special request of a US\$400. This was found affordable from the emergency reserve and granted, making the total number of grantees to be 26.

2.5 *Stakeholder perceptions on call quality*

Respondents were asked to assess the quality and timeliness of the call and to state if they actually used the application guidelines to prepare their proposals. The responses given in **Table 4** imply that stakeholders were overwhelmingly happy with the performance of the programme Secretariat in the design and delivery of the application guidelines.

Table 4. Perceptions of grantees and academic supervisors on the quality and timeliness and usability of guidelines for applying for the small grants for student research			
<i>Parameter</i>	<i>% of respondents</i>		
	<i>No response</i>	<i>Untrue</i>	<i>True</i>
Stakeholder received and used guidelines	88	9	6
Guidelines were sent to stakeholder in good time	88	6	9
Guidelines provided all information needed to apply	88	6	9
Total respondents			32

2.6 *Conclusions*

The call for proposals was well designed. It provided clear information to potential grantees what the grants would or would not pay for. The call was communicated sufficiently and effectively to reach stakeholders in all kinds of locations and with various means of access to information and attracted large numbers of suitable proposals. Even though the call gave the full duration of availability of the grants, it gave no deadline for receipt of applications within each quarter. Applications were received continuously and sent for review in small batches. This later created some difficulty in efficiently tracking applications and giving feedback to applicants as the proposals went through the review process.

3. Proposal review process

3.1 The scorecard

The proposal review instrument, the scorecard (Annex 10), was developed through the collaborative effort of members of the Coordination Unit as a key instrument in ensuring relevance and impact of the projects and transparency in project selection. It put emphasis on five factors that were important to CEPF investment. They include focus on connectivity and contribution to biological knowledge of threatened species; quality of project design as a measure of its feasibility and potential for successful implementation; focus on the research funding gaps based on the gaps that had been identified after the initial main CEPF grant making programme; the project budget and the added value of CEPF funding. Available data has shown that the review instrument was applied to all the 51 proposals received through the first call, and some of the 17 proposals received from the second call.

The following observations were made:

- (i) The weightings of the selection criteria put greater importance on the relevance and potential contribution of the projects to the achievement of programme goals and the promise of achieving impact based on the quality of the project proposal.

- (ii) The maximum possible score was 21, assuming that the maximum score of 3 (excellent) was awarded for all the five criteria with weights of 2, 1, 2, 1, 1 respectively.
- (iii) The system did not set a strict pass mark for recommending acceptance or rejection of projects, thereby allowing discretion of the reviewer in making a recommendation.
- (iv) The review system did not provide for a method of arriving at the final decision, but later consultations revealed that tallying was done at a meeting of Coordination Unit.
- (v) There were a couple of cases where a low-scoring project was selected in preference to others that had scored better. This implies that the reviewers also considered some non-numerical but useful criteria in awarding grants. The following example was put forward: a project targeting a less researched site could be granted in preference to a higher-scoring project targeting a site that had already been assigned a similar study.

3.2 *The review team*

A team selected from among members of the Coordination Unit conducted the review. Membership of the review team is given **Annex 19**. Identities of members of the team were kept secret to other stakeholders.

When examined together with the list of stakeholders in Annex 3, the record in Table 15 reveals that:

- (i) Each project was reviewed by at least three experts
- (ii) Some members of the review team were also members of national Partner institutions hosting the student projects.
- (iii) At least one member of the team was also the academic supervisor of a grantee.

3.3 *Scoring and decision making*

The reviewers operated individually, taking batches of 3-5 papers at a time and with deadlines for each batch. The reviewers fed back their assessments to the Secretariat for further decision and communication with the applicant. After final revision of the proposal as may have been recommended by preliminary reviews the final scores were eventually tallied. Tallying of the scores was done at a meeting of Coordination Unit members. The result of the review and tallying exercises is presented in Annex 20. The rejected proposals, along with those that could not be funded due to budget limitation, appear in the list shown in Annex 21.

The following observations were made:

- (i) Some scores were inexplicably above 21, which should have been the maximum possible score from the scorecard.
- (ii) The system applied useful flexibility in allowing promising but poorly presented projects to be re-written and resubmitted. For example, it is evident that other useful but non-numerical criteria were applied in accepting or rejecting projects despite the final score. Some projects with higher scores were rejected while others with lower scores were accepted and there are a few instances where the recommendation to fund a project was made in contradiction of the score awarded to the same project by a reviewer.
- (iii) There was evidence of reviewer fatigue in cases where a project had been the subject of several rewrites and resubmission. Some projects may have improved their scores substantially after several reviews but they were eventually rejected.

3.4 Quality of review process

Quality of the review process may be judged from a number of evaluation indicators. This evaluation looked at the following: (1) Schedule efficiency, (2) Transparency and fairness including handling of potential conflict of interest, and (3) Effectiveness in delivering the grantee projects that best fulfil CEPF's investment objectives. All three indicators can be evaluated through both perception and actual measurement. This section of the report presents stakeholder

perceptions on performance with respect to these indicators; the next section will present data that point to project relevance and impact.

Table 5 shows stakeholder ratings of quality of the review process while their perceptions on issues relating to management performance in the review are given in **Table 6**. Whereas the majority of stakeholders felt the review process was efficient, fair, and effective and that the Coordination Unit performed satisfactorily in implementing the review, a number of observations were made that clarify some of the perceptions.

Table 5. Stakeholders' rating of the review process with respect to quality

<i>Evaluation factor</i>	<i>% of total respondents</i>			
	<i>Poor</i>	<i>Good</i>	<i>Excellent</i>	<i>No answer</i>
Efficiency (prompt to review and release of results)	3	59	35	3
Effectiveness (accurate and results oriented)	0	49	46	5
Fairness (all decisions adequately justifiable)	3	32	54	3
Total respondents				37

The review process avoided conflict of interest in three ways: (1) Institutions that were closely linked with coordination of the programme were barred from sponsoring their staff for grants. (2) Members of the team were excused from participating in decision-making on issues in which they were likely to have institutional or personal interest. (3) Membership of the team was not revealed to the public. No complaint had been recorded based on conflict of interest.

Satisfactory attention and explanations were given to complaints, especially on review of project budget. However, delay in communicating results of proposal review to applicants seemed a universal concern to both grantees and supervisors.

3.4 *Relevance of funded projects to programme objectives*

Relevance of the funded projects was examined in two ways: (1) How well the project was focussed to contribute to the *main objectives* of the programme, i.e. enhancing connectivity and or enhancing biological knowledge of threatened and near-threatened species and their sites. The

other *subsidiary objectives* of the programme that were considered were mitigation of climate change, enhancing awareness and civil society participation in conservation and improving livelihoods. (2) This evaluation also considered the possible importance of the projects to other players in the field of biodiversity and conservation and the potential value addition by CEPF investment to the project by looking at how well the project attracted additional funding from other sources.

Annex 21 reflects the contribution of grantee projects to programme goals as confirmed by this evaluation. Twenty-four grantee projects contributed to at least one of the prime objectives of the CEPF small grants programme, with the majority of them contributing to several of the prime and subsidiary objectives at the same time. One project, Assessment of Carbon Sequestration in Agroforestry Systems for Improved Livelihood in Uluguru Mountains, did not seem to focus on any of the prime objectives of the programme. Its approval on the basis that it responds to limited knowledge and techniques for estimation of carbon in agroforestry systems satisfied the reviewers as being of prime importance to the newly emerging philosophy of carbon trading.

The relevance of grantee projects to the target KBA sites is analysed in **Annex 23**. All 25 grantee projects focused on important sites with investment gaps within the hotspot.

Table 6. Stakeholder perceptions and observations on the implementation of proposal review (all categories)

<i>Evaluation factor</i>	<i>Responses as % of total</i>		
	<i>Yes</i>	<i>No</i>	<i>No answer</i>
Was the review process developed as per schedule?	81	8	11
Was the review <i>procedure</i> communicated to you in time?	81	11	8
Were any complaints recorded regarding review?	14	73	11
Was there conflict of interest in the review process?	8	76	16
Were any projects approved unfairly?	0	84	16
Were any projects rejected unfairly?	0	84	16
Total respondents			37

Some of the grantee projects that have attracted additional funding from other sources are listed in **Annex 24**. Ability of a research project to attract additional funding is, probably, more dependent on the level of exposure and access of the researchers themselves (the grantee and the supervisors) to the donor environment. However, there remains the elements of potential impact and promise of success that must also be assured to safeguard investment. Nine projects under this programme attracted a total of US\$24,500 in external funding, which was a credit to the quality of the selected projects.

3.5 *Conclusions*

Stakeholders have judged the review process favourably, except that in a few cases where repeat submissions were recommended, the review may have taken too long to the disappointment of the applicants.

- (i) The review was extremely effective in terms of relevance of the funded projects to programme objectives and investment goals of CEPF.
- (ii) The scorecard used in the review of applications was well designed. The study found that usability of the scorecard could be improved by incorporating guidance on pass-mark score and tallying procedure, as well as provide for the possibility of other non-numerical considerations in approving a project.
- (iii) The review team composed of respectable professionals in the relevant fields of work (research or otherwise). They were persons who had worked together on previous occasions and were conversant with the review tools and process. Scoring and decision making was generally fair. The evaluation detected only one or two instances, which suggested that the reviewers might not have applied the review tools uniformly.
- (iv) Adequate safeguards had been put in place to counter any conflict of interest. These included prohibition of implementing organisations from sponsoring candidates, exclusion of review team members from decision-making on cases where they were likely to have interest and not revealing membership of the review team to the public.

4. Grantee support

4.1 Field supervision

Field supervision is of great importance to students working almost entirely in remote places, and especially in protected sites that are also infested with wildlife. The programme made provisions and contractual arrangements aimed at providing grantees with field support through supervision by academic supervisors and by focal persons from national Partner institutions. **Table 7** shows stakeholder reflections on the suitability of some of these contractual arrangements and the performance of those stakeholders charged with supervisory responsibilities.

Stakeholders were generally satisfied with most arrangements for and implementation of grantee support through field supervision. One significant observation was the limited field support from the national Partner institutions after the grantees had settled in their research sites. Stakeholders observe that the focal persons gave valuable assistance in introducing them to the research sites and connecting them to site management and facilitating the work of academic supervisors. However, they felt that field visits by the focal persons thereafter could have added value to the research and ease field problems. This evaluation takes into account that the budget allocation to Partner institutions for this particular activity was small but it has been argued that the resources could have been pooled to support one round of visits to covering several students in a given site at the same time.

Table 7. Stakeholder perceptions on suitability of arrangements and implementation of grantee support through field supervision

<i>Performance factor</i>	<i>% of respondents</i>			<i>No. of Respondents</i>
	<i>No comment</i>	<i>Unfair or unsatisfactory</i>	<i>Fair or satisfactory</i>	
1. Budget provision for supervisors	25	25	50	8
2. Time allowed for monitoring visits	38	25	38	8
3. Method of financing	8	8	83	36

supervisors				
4. University supervisor's field visits	4	11	86	28
5. BLI Partner's field visits	4	75	21	28
6. Management action on reports	0	11	89	28
7. Easing of policy regulations	4	11	86	28

Another important observation was that the budget available for academic supervisors for field visits was small and therefore constrained supervisory visits, especially by distantly placed supervisors. BLI has explained that it was under obligation to finance only one supervisory visit in accordance with the budget approved with the student proposal. It is therefore, argued that if the resources were inadequate then it was most likely the result of under-budgeting by the grantees themselves.

Management of academic supervision and field visits appears to have been left in the hands of the grantee and the supervisor but this evaluation feels it needed more coordination input by the Secretariat and the national focal persons. For example, in response to a question on the adequacy of field visits by academic supervisors, one focal person responded thus: "not very sure how well this was done". In addition, comments from some of the people listed in the database as being academic supervisors indicated they were not aware of their assignment. BLI explained that appointment of academic supervisors and managing the supervision was the responsibility of the host university and BLI was only responsible for financing the supervisory visit of one academic supervisor per grantee.

This evaluation attempted to confirm the quality of academic supervision by examining the suitability of the appointed supervisors, supervisory load per supervisor, adequacy of supervisors per student and their supervisory effort in terms of field visits. The findings are tabulated in **Annex 25**. It was observed that allocation of supervisors was adequate: Doctoral students had at least two supervisors whose specialisations adequately cover the research areas, while MSc students had at least one supervisor specialised in the core research area. Supervisory visits for masters students were adequate – at least one visit during the training period; the record for doctoral students was also satisfactory except for one grantee (SG044), whose university

supervisor had not made any visit, while the local supervisor originally based at ICIPE left employment and a new one only recently brought on board.

4.2 *Publication and information exchange*

On grantee reporting, the contractual agreement for grantees states as follows: “Grantee shall file **Progress Reports** as required herein. These reports shall include an update on progress made against objectives and shall be submitted in the format that will follow the *Journal of East Africa Natural History Society* format. The reports must be certified by the academic supervisor. Reports are due within 15 (fifteen) days following the close of each six month calendar (or three month calendar for projects not exceeding six months in duration) during the term of this agreement, (clause 1)”.

Table 8. Stakeholder perceptions on grantee support during and after research through promotion of publication of results and information exchange

<i>Evaluation factor</i>	<i>% response</i>			<i>Total respondents</i>
	<i>No comment</i>	<i>Unfavourable</i>	<i>Favourable</i>	
(a) Requirement of reporting in the JEANHS format	3	17	81	37
(b) Reports on who is working where were regularly released	7	18	75	28
(c) Updates on CEPF partnerships were made available	0	11	89	28
(d) Opportunity for info. exchange with peers were provided	11	25	64	28
(e) A network newsletter was available and useful	4	11	86	28
(f) Received support to publish research results	0	48	52	25
(g) Received support to deliver results at a conference	0	56	44	25
(h) Had access to avenues for contributing to the database	0	48	52	25

The perceptions recorded in **Table 8** show that all categories of respondents were happy with the encouragement of grantees to prepare their progress reports in the format of the Journal of East African Natural History Society (JEANHS). However, a small number of respondents expressed concern that the JEANHS was not ranked and not listed in the international Journal Index. They also felt that the format differed from that required by their universities and that it amounted to preparing two reports each time.

Stakeholders were happy with management performance in promoting information exchange in the network through various methods. Information exchange was promoted in various ways, including the existence of an effective EACF email discussion forum, updates on CEPF partners through distribution of a quarterly EACF electronic newsletter and distribution of publications and through e-mail circulars and websites. Special requests on technical issues were facilitated through professional contacts. The low rating on facilitation of attendance at conferences probably did not consider the scheduled grantee scientific meeting scheduled for February 2009, and the problems associated with organising conferences while students were busy with research in remote field situations.

4.3 Grantee reporting

The contractual agreement for grantees required them to submit technical and financial progress reports every three months for contracts whose duration was six months and below, and every six months for projects of longer durations. The schedule was based on the time of signing of the contract. Based on the short durations of their contracts most grantees were expected to submit a progress report and a final report; the latter was expected one month after expiry of the contract.

The project-monitoring database had some information on grantee reporting, but not all of it. Grantees were asked to provide this information through the questionnaires but their responses indicated that many of them were slow in compiling the reports. The schedule given in **Annex 26** summarises the information available on grantee reporting.

Table 9 illustrates the performance of grantees in submitting their progress reports. By the time of this evaluation, all grantees had submitted their first progress reports, while 14-second reports were still pending. Nine students had finalised their research and submitted the final report. The analysis indicates that some grantees with short contracts opted to finalise their research and submit final reports directly after the first report.

Table 9: Analysis of the schedule of report submission by grantees as at the time of this report

<i>Timing of submission</i>	<i>No. of grantee reports received</i>		
	<i>1st Report</i>	<i>2nd Report</i>	<i>3rd Report</i>
Submitted ahead of time	9	4	4
Submitted on time	1	3	1
Late submission	15	4	10
Pending / not submitted	-	14	9
Report not due	-	-	1
Total	25	25	25

Grantees have offered various reasons for delays in preparing their reports. Six most mentioned causes of delayed reporting, which are not due to natural exigencies and can be tackled through management are listed in **Box 1**.

Box 1

Prevalent causes of delayed reporting among grantees

- Delays in disbursement of the 2nd instalment of research funds
- Delays in execution of project for various reasons - delayed university approval of project; field logistics especially transport
- Delayed feedback after progress report was submitted
- Inadequate time for report writing at short intervals
- Communication problems due to remote working conditions

- Slow progress due to technical shortcomings especially inadequate expertise on grantee side, which required preparatory training

4.4 *Post training support*

Some grantees who had finished expressed satisfaction with the efforts of the programme managers in extending support to them beyond the bounds of their contracts. Such students constitute the small fraction that gave favourable responses recorded in **Table 8** above. They received support to publish their research results, attend conferences and access to contribute to the EACF database. Many of them expressed the need for post-training support in the form of specialised technical training (such as in statistics, GIS and mapping), funding for further research in their fields, field application of their findings through community projects and training for a higher degree.

4.5 *Conclusions*

- (i) Supervisory effort by academic supervisors was satisfactory. The supervisors had the necessary qualifications and expertise and each grantee received at least one supervisory field visit. The activity could have benefited from improved budgetary allocation to facilitate more supervisory visits.
- (ii) National Partners offered appreciable management support, which enabled grantees to access and the field sites and establish their filed research. However,

subsequent field visits by representatives of the Partners, which could have benefited and offered logistical support to grantees were not executed satisfactorily.

- (iii) Arrangements for grantee support to access and disseminate information were satisfactory. This was done mainly through an established electronic network and by facilitating publication in a regional scientific journal. Although no scientific meeting was held by the time of this evaluation, a scientific forum was planned for the grantees to meet and exchange their experiences in February 2009.
- (iv) Late submission of progress reports by grantees was one of the weakest points of this programme. Late reporting was blamed mainly on slow progress of research work because of technical and logistical difficulties in the field and slow disbursement of the second tranche of research funds.

5. Achievements and impact

Evaluation of achievement and impact of the programme would consider what should have been possible in the short term and the impact that might be projected in the long term. The short term achievements of the programme would be in the following categories: (1) that the project gave opportunities for students to compete favourably for participation in research in the hotspot (2) that the selected projects were relevant to the objectives of the Small Grants for Student Research Programme, and (3) that through activities of the programme, human and institutional capacities to undertake research and implement development projects in biodiversity and conservation have been strengthened. The long-term impact of the programme would be viewed in the light of the objectives and achievements of grantee projects, i.e. whether the research results have potential for enhancing information on biodiversity and connectivity on the EACF.

The project has recorded several tangible achievements in the short term and has demonstrated potential for long-term impact in several ways as described below:

5.1 Achievement in strengthening research capacities of students

The most pronounced achievement of the programme would be the output of trained researchers and technologists when the grantees finally graduate. Twenty-one professionals will have been trained at the MSc level and five at the doctoral level. Several of these grantees had submitted their theses and are awaiting graduation at university, while a few are at advanced stages of their thesis research. This achievement has been realised in a cost-effective manner in the light of a tight budget of only US\$ 200,000. It is recognised other players also made a significant contribution by supporting non-research costs of the trainees, while in a few instances external funds were also injected into the research activities.

A unique feature of the programme was its focus on supporting student research, which eliminated competition from more experienced researchers. Thus, all 26 awardees of the grants were students registered on graduate programmes at universities. An instant check with grantees on the status of their graduation at the university elicited 14 responses as shown in **Annex 27**. Of these, four had already graduated, six were expecting to graduate in 2009 and four others were still processing their theses.

Table 12. Capacity strengthening effort based on number of persons trained for different types of organisations and occupational roles in society

<i>Grantee employer</i>	<i>Total grantees</i>	<i>No. of grantees with the expertise or playing the role</i>						<i>Level of operation</i>	
		<i>Research</i>	<i>Education and training</i>	<i>Natural resource conservation</i>	<i>Policy development / implementation</i>	<i>Consultancy services</i>	<i>Advocacy</i>	<i>International and regional</i>	<i>National and community</i>
Research Institute	7	7	5	7	4	6	2	3	7
Academic institution	5	4	4			3		4	5
Government Department and Local Authority	2			2	2				2
NGO and Civil Society	3	1	1	2	1	1	2	2	2
Total	17	<i>Note: 8 other grantees were unemployed fresh university graduates</i>							

By the end of 2008, the grantees had not regularly met their colleagues and other researchers at professional forums, but they were linked-up through virtual means and by their inclusion in

distribution lists to receive technical materials. However, after the end of this evaluation, all the grantees were brought together in a scientific conference to present their work. These efforts have succeeded in introducing the grantees to a large community of biodiversity and conservation professionals that should facilitate the launching of their careers in this field. In addition, the participation of academic supervisors on projects of the grantees has helped widen the linkages thus created by the programme.

5.2 Achievements in institutional capacity strengthening

Table 12 summarises the distribution of grantees in terms of employment, and how they are likely to contribute to society.

Grantees that finish their training will obviously enhance their employers' capacity in various ways; even the presently unemployed grantees will eventually find institutional positions where they will be able to contribute. Equipment left with host institutions on completion of grantees' projects was also important for the development of research infrastructure for those institutions.

5.3 Impacts of grantee research outputs

All the grantee projects selected have generated or are in the process of generating information that will enhance knowledge of biodiversity and connectivity on the EACF region. **Table 13** summarises the objectives of 25 grantee projects and how they contribute to the overall objectives of the small grants programme. Most of the student projects have multiple objectives all of which impact on the overall programme goals. The three primary focuses of the projects are critical site conservation and connectivity, species conservation and enhancement of biological knowledge.

The impact of research outputs will be experienced only in the long term. However, this review examined indications of useful applications of some of the results projects that may have results amenable to immediate practical application. Evidence amounts to the effect that the findings of some of the student projects are already finding applications in natural resource management, such as the management of national parks and forests, and enhancing the wellbeing of

communities leaving around forests, e.g. enhancing honey production at the Kenya coast. A remarkable finding of one of these projects was the rediscovery of Ornate shovel snout snake, *Prosymna omatissima* in the Uluguru Mountains in Tanzania (Project Ref: SG007 by Elikana Kalumanga) after 80 years of its original discovery.

Table 13: Contribution of grantee projects towards achieving programme objectives

<i>Objective</i>	<i>Number of projects contributing</i>	<i>% of total projects</i>
Critical site conservation / connectivity	16	64
Species conservation	22	88
Advancing biological knowledge	19	76
Promoting civil society participation	4	16
Mitigating climate change	4	16
Improving livelihoods	4	16
Total projects	25*	100
*All the grantee projects covered multiple objectives		

Some examples of applications of the research findings from eleven grantee projects are summarised in Annex 28, and this is not exhaustive. It will be some time before behavioural change resulting from uptake and assimilation of the research results can be realised.

5.4 *Focus on critical sites*

Annex 23 shows the sites covered by the 25 research projects of grantees. This shows that all the selected projects targeted gaps in the current portfolio of projects qualifying for CEPF funding, i.e., sites not covered by on-going funded projects and fall within the recommended actions in the ecosystem profile.

5.5 *Conclusions*

- (i) The overall finding of this evaluation is that BirdLife and her Partners have designed and effectively implemented an innovative and worthy programme that has achieved its short-term goal of strengthening human and institutional capacities to undertake research and implement development projects in biodiversity and conservation. Through the research findings of the grantees recorded to-date, the programme has also demonstrated high potential for realising the long-term objective of contributing significantly to the

conservation of threatened species and sites by generating biological information and enhancing connectivity capacity in the EACF hotspot.

- (ii) By the time of programme close down in June 2009, 26 young researchers will have been trained at masters and doctoral levels. In addition to gaining research skills, the grantees have been introduced into an ever-expanding community of biodiversity and conservation researchers in the EACF hotspot, thereby making their future research work easy and contribution to the region more effective.
- (iii) The programme has strengthened the capacities of institutions in biodiversity and conservation research in four main ways: First, by supporting student research the programme enhanced the training capacities and trainee outputs of the host universities; secondly, the trained researchers will boost the capacities of their employing institutions in these areas of research, when they resume their duties; thirdly, residual equipment left with host universities when grantees complete their work will improve the research infrastructure of the relevant departments and, finally, the programme has contributed immensely to strengthening the region's scientific community through its networking mechanisms.
- (iv) Most grantees have yet to complete their research studies. However, there is mounting evidence that the research outputs of the funded projects have generated biological information that has enhanced knowledge and connectivity of (critical) sites or key biodiversity areas and endangered species. One such example is the re-discovery by a student of a snake species 80 years after it was first discovered. Although the impact of research on the wellbeing of communities cannot be realised or measured in such a short time, there is evidence that the outputs of some of the grantee projects have already demonstrated potential for practical application.
- (v) The programme has been generally cost-effective, notwithstanding the personal and university costs met by the grantees from other sources. The limited total budget of US\$ 200,000 was efficiently applied in supporting the research of 26 students.

IV. Situation Analysis

A SWOT analysis of the programme was undertaken as part of the review. The outcome of the analysis was analysed alongside consideration of the findings and conclusions reported above. The main strengths, weaknesses and threats and opportunities of the programme and the final recommendations arising from this analysis are presented here below.

1. Programme strengths

1.2 Programme focus on dissertation research

- (i) Focus on small projects that require little funds and time to execute enables the programme to respond promptly to short term issues with equally timely solutions
- (ii) Focus on capacity strengthening through financing research projects of postgraduate students whose funding sources are a major problem to local universities and producing young conservation scientists with futuristic value
- (iii) Focus on specific priority sites of conservation interest in the hotspot where little research had been done before and, therefore, increasing value on investment

1.2 Programme setup and approach

- (i) The structured approach to programme implementation with an institutionalised management of funds and programme information
- (ii) Consultative approach to programme implementation, involving renowned conservation specialists in the Coordination Unit and proposal review ensured good research priority setting for the hotspot and transparency in the review process
- (iii) The collaborative and networking approach where several institutions and individuals are involved in programme development and implementation
- (iv) Working with communities in research implementation with an inherent outreach effect for uptake of research results

1.3 *Grantee support*

- (i) Decentralised administration of grantee projects to national level enhanced the profile of the programme nationally and was expected to quicken budgetary decision and ease the transfer of funds to the grantees – even though the latter did not seem to work very well.
- (ii) Well-structured channels and support for communicating research results ensured prompt exchange of information with other knowledge workers and end-user access to research results for programme impact.
- (iii) Strategy of releasing funds to grantees in tranches and under their personal management had the effect of training grantees in aspects of programme management and accountability, although it made reporting very tedious and time consuming to the grantee.

2. Weaknesses, challenges and threats

2.1 *Proposal review process*

- The proposal review process entailed undue delay, even though management plans did state a maximum of three months for each review.

2.2 *Grantee support*

- (i) Delays in releasing research funds for the second instalment, and retention of the final 10% until after final report significantly constrained implementation of the last phases of research activity for some grantees. The national Partner as an agent between BLI and the grantee may have slowed down the delivery of support to grantees.
- (ii) Inadequate field supervision by the national grant coordinators may have constrained work of some grantees that needed logistical support and easement of relations with forest officials.

- (iii) Whereas encouraging students to prepare their reports in the JEAHS format was a good starting point to train them in scholarly publishing, which also enhanced the development of the journal, it raised a conflict with some universities, which have their own regulations regarding student publications.
- (iv) A scientific conference scheduled towards the end of programme implementation in 2009 will enhance exchange of field experiences among the grantees. However, incorporation of one such meeting in the middle of programme implementation would have been a useful training activity.
- (v) Whereas the programme played a critical role in financing the research of the grantees, which is usually a problem to the universities, it is felt that inclusion of some personal support to the grantee could ease their work and support their ability to meet university requirements for graduation.
- (vi) Links with universities hosting the students was weak and needed enhancing through formal arrangements. Similarly, the national NGOs required much more support and facilitation, which was beyond the scope of this programme, for them to participate effectively in the managing postgraduate training.
- (vii) Limited funding capacity – only a few projects received funding compared to the numerous applications made. Due to the limited resources, the programme could not fund some excellent projects even though a majority of them met all the selection criteria.

3. Opportunities

Continuation of the CEPF small grants programme for student research or establishing another programme on similar lines could benefit from a variety of opportunities: These include:

3.1 High demand for conservation research

- (i) Many sites in the EACF region have not been researched on and threats to their viability of sites and species remain a priority for research action. Even where

research has been conducted in the past, there is always an urgent need for most up-to-date information for conservation planning and interventions

- (ii) Food insecurity resulting from poor farming practices remains a major driving force for continued human pressure on exploitation of natural resources for livelihood. This threat to critical conservation sites resulting from destructive human activities and lack of appropriate government policies will continue to demand enhanced R&D that can lead to sustainable utilisation of these resources as well as improve farming methods among the communities.
- (iii) New technologies, such as satellite imaging, are emerging that should support detailed biodiversity and forest cover studies

3.2 *Opportunities for external collaboration*

- (i) Many academic and research institutions exist within the region, which have multi-disciplinary and interdisciplinary training programmes that could complement a similar small grants programme. Three such regional training programmes are Collaborative Master of Science in Agricultural Economics (CMAAE) based in Kenya; Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) based in Kampala; and African Regional Postgraduate Programme in Insect Science (ARPPIS) in Nairobi.
- (ii) Involving other relevant institutions, such as forests and wildlife institutes, would make conservation, awareness and dissemination of research findings easier
- (iii) The high alert on the need for environmental conservation and protection provides increasing opportunities for partnership with major partners in postgraduate training. Many such organisations provide university tuition and student stipend, which can combine well with research funding from CEPF to provide the full scholarship.
- (iv) There are many regional training programmes, which focus on specific areas of biological, physical, or social sciences, whose experiences in the Eastern Africa sub-region can be tapped.

3.3 *Opportunity arising from within the CEPF small grant programme*

- (i) Collaboration with universities outside Kenya and Tanzania would give access to a wider range of expertise and opportunities
- (ii) Ease of knowing who is where and the improved possibility of working together in the future have enhanced opportunities for networking within the programme
- (iii) The communities living around forests are very passionate about the importance of conserving the forests and are responsive to educational and action-oriented interventions
- (iv) The 26 grantees, who will be graduates of the programme, will provide greater opportunity for enhancing information for improving the programme implementation strategies, just as they will equally have a ripple effect on conservation efforts in the region.
- (v) The programme, whose profile has now been enhanced in the two countries, will attract more researchers and academics for collaborative work since they will be looking out for the CEPF calls for proposals.

V. Recommendations

1. **Reinstitute student research grants programme with some adjustments**

The CEPF small grants for student research programme was introduced in late 2006 as a one-off two-year initiative. The programme was implemented successfully, and it made remarkable achievements in research capacity strengthening for individuals and institutions as well as in enhancing scientific knowledge in biodiversity and connectivity. In the short time of implementation, the programme has acquired a high profile within the region, and has raised high hopes among scientists and academic institutions as a source of partnership in postgraduate training in this specialised field. The demand for student research support through the programme was and remains high, as evidenced by the number of excellent applications that could not be funded due to limited resources. The few students that were lucky enough to win the grants still had some wishes for other forms of support that the programme could not provide,

mainly on account of the design of the programme to provide only research support, but also because resources were not available.

In view of the above observations, this review concludes that a programme designed to offer small grants to support graduate students specialising in biodiversity and conservation is necessary, and that such a programme should be offered on a regular and long-term basis.

From lessons learnt during the pilot programme, the following improvements to programme implementation are recommended:

1.1 Streamline the proposal review process

1.1.1 Review quality

Although the review and selection of grantee projects was generally fair, there were cases where the scores awarded to reviewed proposals did not match the final recommendations. It is noted that this may have applied mainly to those proposals that were reviewed and resubmitted several times. However, it would also imply the need to institute mechanisms that give reviewers a uniform understanding of the review tools and process as well as improve the tallying process.

1.1.2 Feedback to grantees

A major complaint by the grantees was that the reviews took very long and that they did not receive timely feedback on the status of their applications. Receipt and processing of applications was widely spread out during the period of programme implementation and the review was at different stages for different proposals. It is possible this made it difficult to track each proposal efficiently. It is therefore necessary that the training calendar be streamlined to permit a more efficient review and admission of students. If a long-term programme is established as suggested above, it should adopt an annual or biannual admission of students instead of awarding grants on a quarterly basis. This approach could also enable the programme to schedule its activities in line with the calendars of partner universities.

1.2 Improve grantee support

1.2.1 Streamline disbursement of funds

Grantees complained of not receiving the second instalment on time and that the accounting they had to do themselves gave them a heavy administrative responsibility. The latter has been considered one of the strengths of this programme as it exposed grantees to self-discipline in funds utilisation and management. However, it is suggested that the system of remitting research to grantees be reviewed. Payment through too many instalments has the effect of delaying access to funds and increasing administrative workload. Direct payment to the grantee also has security implications and gives the student too much administrative workload. This review recommends that formal arrangements be made with host universities, so that all the funds allocated to research in the grantee's contract are released in one instalment to the host institution to take care of disbursement and accounting.

1.2.2 Ease grantee reporting

There is need to create conditions that will encourage grantees to submit progress reports as required. First, there is need to review and clarify the statement in the grantee contract on reporting, to eliminate any misinterpretation on the format and frequency of reporting. Secondly, since reporting consumes valuable research time, grantees should be required to make only two reports, i.e., a mid-term progress report and a final report. The format of the reports should be that of the registering university and the final report should be the draft thesis.

1.2.3 Institutionalise student supervision

In the foregoing programme, management of academic supervision was in the hands of the student and the supervisors themselves. Experience has shown that this arrangement is too loose and may not work well, especially where the programme is not formally institutionalised at the university. In addition, management becomes complicated where a second supervisor is based elsewhere, perhaps at a research institute or at a university outside the country. It is suggested that management of field visits for supervision and provision of logistical support should be

centralised at the programme Secretariat. The visits could be programmed in a manner that ensures opportune timing and submission of supervisory reports by the academic supervisor. As a joint activity, academic supervision should help bring the programme Secretariat to work in partnership with the hosting university.

1.2.4 Improve networking and information exchange

Networking and information exchange via the internet was one of the strengths of the CEPF small grants programme. In addition, the scientific meeting for grantees scheduled for February 2009 is commendable. However, future programmes of this type should incorporate meeting forums in the course of programme implementation. If re-established on a long-term basis, the programme will need to create forums where students meet on a predictable frequency, preferably annually, to exchange experiences.

1.3 Widen programme funding base

The high demand for student research support became obvious from the numbers of responses received after the first and second calls for proposals. Similarly, the demand by grantees for other forms of support, in addition to financing of research, was vividly expressed. It is for these two reasons that the funding base needs a boost. Three ways are suggested:

1.3.1 Increase core funding

The student grants programme has demonstrated its worthiness in the EACF. The core sponsors may now consider making a deliberate move to enhance the capacity of the programme to support more students and improve the content of each grant.

1.3.2 Build student grants into other programmes

In order to ensure the sustainability of technologies developed through research, it is important that capacity strengthening be considered a necessary component of research and development projects approved for implementation, especially in developing countries. Many research

projects implemented within the EACF region could benefit greatly from the talent and labour that graduate students can provide, while the contribution of the students is recognised through knowledge and qualifications earned through their participation. Through policy dialogue with donor partners, they can be enticed to boost human capacity strengthening through projects that they fund in the region. The EACF has many such projects in progress and under consideration.

1.3.3 Establish partnerships with scholarship providers

It is true that, even in its present form, the student grants programme was a partnership in postgraduate training because some other party took care of non-research costs of the students. However, such partnerships can be exploited better if formalised. Should the student research grants programme be established and run on a regular basis, then it should be possible for the programme to receive partial scholarships to support non-research training costs. There are several agencies, e.g. the German Academic Exchange Service (DAAD), that provide that kind of support. This approach would also require the establishment of formal linkages with universities and other regional scholarship programmes that are usually the only avenues the agencies use to disseminate partial scholarships.

2. Long-term programme development

As a long-term plan, the programme could develop into a regional partnership for postgraduate training in biodiversity and conservation. The partnership would be between selected universities and regional NGOs, especially those that have participated in this pilot phase, with BirdLife as the coordinating Secretariat. The aim would be to establish a fully-fledged, long-term, scholarship-awarding programme, with a regional Secretariat and a network management structure. Several examples of such networks are operational in Africa, specialising in different fields of science and technology, that could provide insight into the establishment and operations of such a regional training programme.

Annex 1**4.2.1 Project Proposal**

Project Title:	Small Grants for Student Research in the EACF Hotspot	
Organization:	Birdlife International	
Application Code:	1113419264	
Organization Information		
*Organization Legal Name Birdlife International		
Organization Alias Birdlife		
*Full Mailing Address -- include street, city and postal code 6 Wellbrook Court, Girton Road, Cambridge CB3 0NA United Kingdom		
*Country UK		
*Telephone +44 (0)1223 277318	Fax +44 (0)1223 277200	
*E-mail Address - Separate multiple addresses with semicolons. birdlife@birdlife.org.uk		
Project Information		
*Project Title Small Grants for Student Research in the EACF Hotspot		
*Total Project Budget (US \$): 200000.00	*Funding Request (US \$): 200000.00	
*Start Date: 2006-9-1	*End Date: 2008-12-31	
*Team Leader - Provide name, e-mail and contact information. Julius Arinaitwe		
*Is the Team Leader authorized to apply for funding on behalf of the institution?		

<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	
<p>If the Team Leader is not authorized, please provide contact information for the legal representative of the organization. Dr Mike Rands</p>	
<p>Key Project Staff - Include name, roles and responsibilities. Julius Arinaitwe, BirdLife International: Overall Coordination/Team Ian Gordon, ICIPE: Committee Advisor Hazell Thompson, BirdLife International: Coordination of screening of proposals</p> <p>The above are core members of the CEPF Coordination Unit for the hotspot:</p>	
<p>Project Overview - If you have submitted a Letter of Inquiry, this section is not necessary. Although a LoI has been submitted for this proposal, it has changed in emphasis. The original LoI was to cover the administration of all small grants. It was subsequently decided to split the funds for SFD4 into two: 1) Small grants administered centrally from CEPF; 2) Small grants to support research by Tanzanian and Kenyan students. There are 2 reasons for this split: 1) 14 small grants have already been processed through the CU and CEPF, accounting for almost half the funds available under SFD4; 2) student researchers are not adequately represented among the CEPF grantees. This proposal is focussed on the student grants.</p>	
<p>*Project Background In this proposal, the responsibilities for the coordination of the CEPF Small Grants Programme for student research are split amongst two institutions: ICIPE and BirdLife. Both these organisations are members of the Coordination Unit that has been assisting CEPF to manage grants in the Hotspot. Two of these institutions (BirdLife and WWF) have offices or national partners in both Tanzania and Kenya. The third (ICIPE) is a Kenya-based Inter-Governmental Organisation with standing Charter agreements with the Governments of Kenya and Tanzania. The TFCG is based in Dar-Es-Salaam. All four institutions have extensive experience of project administration and implementation within the Hotspot and have been running the Coordination Unit for the last year. For more information on project background, see section on relationship to the Ecosystem Profile.</p> <p>Additional Funding No additional funding is required or being sought for this project</p>	
<p>*Partners - List the full names of any partner organizations or agencies directly assisting in implementation. BirdLife Partners:</p>	

<p>Nature Kenya Wildlife Conservation Society of Tanzania WWF-EARPO Partner: World Wide Fund for Nature-Tanzanian Programme Office</p>	
<p>Strategic Direction Establish a small grants program in the hotspot (all 161 sites eligible) that focuses on critically endangered species and small-scale efforts to increase connectivity of biologically important habitat patches</p>	
<p>*Relationship to Ecosystem Profile This proposal directly answers to SFD4. In the Ecosystem Profile, SFD4 is a Small Grants programme with a ceiling of \$10,000. SD 4 has two Investment Priorities:</p> <p>4.1 Support targeted efforts to increase connectivity of biologically important habitat patches in the hotspot. 4.2 Support efforts to increase biological knowledge of the sites and efforts to conserve Critically Endangered Species in the hotspot.</p> <p>It was recognised that this SFD would incur high administration costs (per grant dollar) because of the burden of dealing with several small projects at once. Costs would also be incurred because the beneficiaries are usually less well established than those receiving large grants and require closer monitoring and guidance on the ground. For these reasons, CEPF was to evaluate the possibility of partnering with an in-region organization to host its small grants programme. Subsequent to the writing of the Profile, the Co-ordination Unit (CU) was established; this was not foreseen. In subsequent discussions within the CU and with CEPF it was decided that the CU had the capacity to deal with Small Grants within the range of \$5000 - \$10000, but that this would require additional funding to meet the extra costs. (LoIs for less than \$5000 would be considered as micro-grants and are the subject of a separate proposal).</p>	
<p>*Long-term Goal Statement The biodiversity of the EACF hotspot is conserved in perpetuity, with no further species extinctions, through a combination of sound conservation science and the active engagement of civil society.</p>	
<p>*Targeted Conservation Outcomes Critical sites and threatened species in the hotspot are conserved, and there is a measurable increase in the participation of civil society and local communities in conservation activities.</p>	
<p>*Project Purpose/Short-term Impact Targeted efforts to increase connectivity, biological knowledge, and the conservation of threatened species are supported through the Small Grants Programme for student</p>	

research.	
*Project Outputs	
<p>Output 1</p> <p>The EACF Co-ordination Unit administers the Small Grants Programme, including transparent reviewing, receipt and distribution of funds, issuing of contracts, local reporting and final evaluation, stakeholder awareness and reports to CEPF.</p>	
<p>Output 2</p> <p>A comprehensive and complementary suite of Small Grant projects is in place to address connectivity issues, biological knowledge of sites and the conservation of threatened species.</p>	
<p>*Environmental Aspects</p> <p><input type="checkbox"/> A: The proposed project is likely to have a significant adverse impact.</p> <p><input type="checkbox"/> B: The proposed project has potential adverse impacts.</p> <p><input checked="" type="checkbox"/> C: The proposed project is likely to have minimal or no adverse impacts.</p> <p>Justification I - Provide rationale for environmental impact if the category rating is A or B.</p>	
<p>*Human Health and Safety Aspects</p> <p><input type="checkbox"/> A: The proposed project is likely to have a significant adverse impact.</p> <p><input type="checkbox"/> B: The proposed project has potential adverse impacts.</p> <p><input checked="" type="checkbox"/> C: The proposed project is likely to have minimal or no adverse impacts.</p> <p>Justification II - Provide rationale for health and safety impact if the category rating is A or B.</p>	
<p>*Social Aspects</p> <p><input type="checkbox"/> A: The proposed project is likely to have a significant adverse impact.</p> <p><input type="checkbox"/> B: The proposed project has potential adverse impacts.</p> <p><input checked="" type="checkbox"/> C: The proposed project is likely to have minimal or no adverse impacts.</p> <p>Justification III - Provide rationale for social impact if the category rating is A or B.</p>	
*International Waterways and Disputed Areas Aspect	

<p>Will the proposed project involve activities within international waterways and/or disputed areas? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Justification IV - Provide rationale for your answer. The Small Grants Programme will not fund any activities within international waterways and/or disputed areas</p>
Additional Information
<p>Stakeholder Participation - Provide organizations and other participants, as well as time and place of participation. This proposal has been developed through email consultations and several CU meetings. Outputs and the logframe were agreed at a meeting in Dar on 4th April. At a subsequent CU meeting on the 24th February 2006, it was agreed that BirdLife would take over the administration of this programme.</p> <p>External Assumptions - Express the probability and importance of the assumptions and suggest what the project can do to help mitigate such risks. Fourteen external assumptions are shown in the logframe. They are mostly related to stakeholder/grantee commitment and performance and have a low probability of not being met. The project will mitigate risks by maintaining high integrity and transparency in the small grant process.</p>
<p>Long-term Sustainability - Describe the impacts that will continue after the initial CEPF funding period. The Small Grants programme will naturally come to an end with the end of CEPF funding for this hotspot. However, if the Resource Mobilisation Unit to be established under SFD 5 is successful more funds may be raised to continue with Small Grants. The impacts of the projects that are funded under this programme will continue through:</p> <ol style="list-style-type: none"> 1. Training and experience gained in project implementation. 2. Provision of baseline historical information for evaluating trends and the success of present and future interventions. 3. Improvements in forest connectivity reducing negative effects of fragmentation.
<p>Additional Comments</p>
4.2.2
4.2.3

4.2.4

4.2.5 Logical Framework

Project Title:	Small Grants for Student Research in the EACF Hotspot
Organization:	Birdlife International
Application Code:	1113419264

NARRATIVE SUMMARY	PERFORMANCE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Long-Term Goal Statement	Targeted Conservation Outcomes	Means of Verification	Important Assumptions
<p>Long-Term Goal The biodiversity of the EACF hotspot is conserved in perpetuity, with no further species extinctions, through a combination of sound conservation science and the active engagement of civil society.</p>	<p>Targeted Outcomes Critical sites and threatened species in the hotspot are conserved, and there is a measurable increase in the participation of civil society and local communities in conservation activities.</p>	<ol style="list-style-type: none"> 1. Investment portfolio 2. Annual CU report 3. CEPF grantee and conservation outcome data bases and tracking sheets. 4. Long term biodiversity monitoring reports 5. Realist updates 	<ol style="list-style-type: none"> 1. Stakeholders submit a sufficiently diverse range of proposals to adequately address the SFDs and IPs in the Ecosystem Profile. 2. Stakeholders actively participate in feeding information into M& E mechanism for the CU. 3. The institutional and policy environments of Tanzania and Kenya will maintain an avenue for the development of

			<p>CEPF and the CU as a civil society driver for biodiversity conservation in the EACF hotspot.</p> <p>4. Stakeholders can agree on standardized monitoring protocols; sufficient resources are available to support long term biodiversity monitoring.</p> <p>5. Sufficient resources are available for the updating of Redlists.</p>
Project Purpose (short-term impact)	Purpose Indicators	Means of Verification	Important Assumptions
<p>Purpose Targeted efforts to increase connectivity, biological knowledge, and the conservation of threatened species are supported through the Small Grants Programme for student research.</p>	<p>1. At least 20 Small Grants supported by 2007.</p> <p>2. At least ten projects show demonstrable impacts on connectivity and biological knowledge by 2008.</p>	<p>1.1. LoIs submitted and CU reports.</p> <p>2.1. CU reports, reports from Small Grant recipients, and trip reports from Scientific Advisor to the CU</p>	<p>1. A sufficient number of good-quality LoIs are submitted.</p> <p>2. Grantees are sufficiently committed and competent to achieve demonstrable impacts</p>

Project Outputs	Output Indicators	Means of Verification	Important Assumptions
<p>Output 1. The EACF Co-ordination Unit administers the Small Grants Programme, including transparent reviewing, receipt and distribution of funds, issuing of contracts, local reporting and final evaluation, stakeholder awareness and reports to CEPF.</p>	<p>1.1. At least 6 CU meetings monitor the small grants for student research programme by 2007</p> <p>1.2. Materials produced for awareness of the programme and distributed to at least 20 key stakeholders</p> <p>1.3. At least \$200,000 distributed to grantees to support Small Grant projects by end of 2006</p> <p>1.4. At least 20 contracts issued to grantees by end of 2007</p> <p>1.5. At least 20 reports received from grantees by 2008</p> <p>1.6. Process documented and forms developed for final evaluation of programme for student research</p>	<p>1.1.1. Minutes of meetings</p> <p>1.2.1. Material on Website, notices for universities and research institutions</p> <p>1.3.1. Bank statements and financial records including receipts from grantees</p> <p>1.4.1. Contracts</p> <p>1.5.1. Reports from Grantees</p> <p>1.6.1. Evaluation forms and document</p>	<p>1. A sufficient number of good proposals are received to justify distribution of \$200,000 to grantees</p> <p>2. Grantees comply with evaluation requirements in a timely fashion</p> <p>3. Criteria and procedures for dealing with conflicts of interest are widely accepted and reviewers submit their reviews in good time.</p> <p>4. Applicants are willing to work together in implementing CEPF activities.</p> <p>5. Applicants are able to implement successful projects within the</p>

	<p>Output 2. A comprehensive and complementary suite of Small Grant projects is in place to address connectivity issues, biological knowledge of sites and the conservation of threatened species.</p>	<p>projects by end 2006</p> <p>1.7. Information availed to CEPF on final evaluations of the small grant programme by end 2008</p> <p>2.1. Guidelines for application to the Small Grants programme in place by end Q2 of 2006 and made available widely</p> <p>2.2. Transparent, objective and timely review process in place, understood by other stakeholders and operational by end Q2 of 2006</p> <p>2.3. Successful applicants aware of potential collaborators and opportunities for linkages.</p> <p>2.4. At least 20 Small</p>	<p>1.7.1. CU reports containing final evaluations</p> <p>2.1.1. Application forms and guidelines.</p> <p>2.2.1. Review process document including clear criteria and procedures for dealing with conflicts of interest. Review process time tracker.</p> <p>2.3.1. Regular reports of who is working where and aspects covered. Records of partnerships established in CEPF process.</p> <p>2.4.1. Annual analysis</p>	<p>timeframe agreed.</p>	
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	<p>grant projects in place are monitored to maximise cost-effectiveness and impact of the CEPF investment by end 2008.</p> <p>2.5. .A summary of new biological knowledge of threatened species, key sites and connectivity produced by end 2008</p>	<p>reports of project portfolio</p> <p>2.5.1. Summary report</p>	
Activities		Important Assumptions	
<p>Project Output 1. Activity 1.1. Monitor small grants programme for research student s in the quarterly CU meetings.</p> <p>Activity 1.2. Raise awareness through a variety of media about the small grants for students research programme and how stakeholders can access grants.</p> <p>Activity 1.3. Receive, process and distribute funds for Small Grants Projects.</p> <p>Activity 1.4. Prepare and finalise contracts for successful applicants for Small Grants.</p> <p>Activity 1.5. Receive and process final reports from completed Small Grant</p>		<p>1. CEPF is willing to delegate distribution of funds, issuing of contracts and evaluation of projects to the CU.</p>	

<p>projects.</p> <p>Activity 1.6. Design and implement an internal evaluation process for Small Grants Projects.</p> <p>Activity 1.7. Liaise with CEPF to ensure that all reporting requirements are met.</p> <p>Project Output 2. Activity 2.1. Develop and document an application form, eligibility criteria and guidelines for applying to small grants.</p> <p>Activity 2.2. Develop and document a review process for small grants that is objective transparent and efficient.</p> <p>Activity 2.3. Implement the agreed review process in a timely and objective manner.</p> <p>Activity 2.4. Inform grantees of other ongoing projects in the region</p> <p>Activity 2.5. Engage expert reviewers to review applications to the small grants</p> <p>Activity 2.6. Develop formats for inputting data from these projects into the outcomes database and support grantees to provide this information.</p> <p>Activity 2.7. Review the reports of the EACF small grants and produce a final synthesis report on IPs 4.1, 4.2</p>	
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4.2.6 Summary Budget

Project Title:	Small Grants for Student Research in the EACF Hotspot
Organization:	Birdlife International
Application Code:	1113419264

This is a summary page of your budget. To complete your budget enter each individual output, by clicking on the appropriate link, where you will find a detailed budget worksheet. Complete each individual worksheet and the information entered will automatically populate the summary tables provided here.

Summary Budget by Output

Output	Description	2006	2007	2008	2009	2010	Total
Output 1	The EACF Co-ordination Unit administers the Small Grants Programme, including transparent reviewing, receipt and distribution of funds, issuing of contracts, local reporting and final evaluation, stakeholder awareness and reports to CEPF.	16100.00	10600.00	13300.00	0.00	0.00	40000.00
Output 2	A comprehensive and complementary suite of Small Grant projects is in place to address connectivity issues, biological knowledge of sites and the conservation of threatened species.	80000.00	80000.00	0.00	0.00	0.00	160000.00
SUBTOTAL:		96100.00	90600.00	13300.00	0.00	0.00	200000.00
Indirect Cost (cannot exceed 13% of subtotal):							0.00
Project Total:							200000.00

Summary Budget by Cost Category

Cost Category	2006	2007	2008	2009	2010	Total
Salaries/Benefits	7200.00	7200.00	7200.00	0.00	0.00	21600.00
Professional Services	5900.00	400.00	3100.00	0.00	0.00	9400.00
Rent and Storage	0.00	0.00	0.00	0.00	0.00	0.00
Telecommunications	0.00	0.00	0.00	0.00	0.00	0.00
Postage and Delivery	0.00	0.00	0.00	0.00	0.00	0.00
Supplies	0.00	0.00	0.00	0.00	0.00	0.00
Furniture and Equipment	0.00	0.00	0.00	0.00	0.00	0.00
Maintenance	0.00	0.00	0.00	0.00	0.00	0.00
Travel	0.00	0.00	0.00	0.00	0.00	0.00

Meetings and Special Events	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Grants	83000.00	83000.00	3000.00	0.00	0.00	169000.00
SUBTOTAL:	96100.00	90600.00	13300.00	0.00	0.00	200000.00
Indirect Cost (cannot exceed 13% of subtotal):						0.00
Project Total:						200000.00

Annex 2

Terms of Reference: Evaluation of the CEPF-funded Small Grants Programme for Students research

Introduction

Towards the end of 2006, CEPF approved to fund a project to enable the Coordination Unit (CU) to issue small grants to students undertaking research in the forests of Eastern Arc Mountains and the coastal region of Kenya and Tanzania. This project was developed and will be implemented by BirdLife (Partners in Kenya and Tanzania and the Secretariat) and ICIPE on behalf of the CU. The small grants for student research programme was set up to assist students at graduate and post graduate level planning to undertake research work within the hotspot, which either contributes significantly to the conservation of (critically) threatened species or increase connectivity. Projects which generate information that contributes to Red List Assessments also qualify.

Applications are submitted to the BirdLife Africa Partnership Secretariat, reviewed by the CU and decisions made on a tri-monthly basis. A scorecard for quickly checking suitability, feasibility and relevance of the applications is used in the review. Decisions to provide funding or otherwise are made by BirdLife and ICIPE based on the feedback from the CU assessment, and any controversial applications will be sent out to external reviewers or discussed at CU meetings.

It was planned that this programme will be closely monitored and evaluated in order to capture lessons that could be applied in future similar small grants programmes. These ToRs outline the requirements for this evaluation.

Objectives of the evaluation

The overall objective of the evaluation is to capture lessons in running small grants programmes that can be used by CU members and other institutions in the designing and implementation of similar programmes.

Specifically the consultant will address the following points:

1. The management of the small grants programme including advertising the grants, review of projects, contractual arrangements, monitoring and reporting.
2. Alignment of funded projects to the objectives of the programme and the overall impact.
3. Lessons learned in the management of small grants and possible future directions.

Products Expected from the evaluation

The output from this evaluation is 30 copies of a report capturing the lessons learnt through the implementation of this programme. This report should contain the following sections:

Executive Summary

1. **Introduction** (The introduction should contain the goals and purpose of the Small Grants for Student Research in the EACF Hotspot and summary of progress achieved).
2. **Methodology** (how the evaluation was carried out)
3. **Review of the setup and implementation of the project** (This should address the institutional setup to implement the small grants programme, roles and responsibilities of stakeholders, levels of engagement, resources allocation, transparency).
4. **The review process** (The evaluator will review the call, review and communications with grantees regarding their projects. This will include an evaluation of how well the grants that were funded are aligned to the relevant investment priorities for which the grants were set up).
5. **Grantee support** (This will address disbursements, reporting frequency and formats, field supervision and monitoring, support in publishing the results, linking to other researchers and contribution to the database).
6. **Conclusion and recommendations**
7. **References (if any)**
8. **Annexes (this will include documents used in the management of the small grants, titles of project that were funded, etc).**

Proposed milestones for the evaluation:

Date	Output
1 st December 2008	Contract signed
8 th December 2008	Formats for information collection and storage developed and distributed to the stakeholders (grantees and project managers) that will be supplying the information
8 th January 2009	Visits and interviews for collection and verification of information completed
20 th January 2009	An interim report based on preliminary review of the information collected is presented and recommendations for improvements obtained
31 January 2009	Final evaluation report is delivered

Budget for the consultancy

A total of up to USD 4,000 has been reserved for this consultancy. This will be paid to the consultant in two equal installments on signature of contracts and after delivery of the outputs.

Annex 3

Stakeholders and their roles in CEPF small grants programme for student research

A. STUDENT GRANTEES					
	Name of Grantee	Course	Address	Project Title	Quick contacts
1	Kenneth Njoroge Mwangi	MSc	P.O Box 409- 00202, Nairobi.	The proximity of the farms to Arabuko – Sokoke forest influences the diversity of insect pollinators and fruit set.	kenn_njoroge@yahoo.com Mobile: +254 721 807 669
2	Susan Sande Okoth	PhD	P.O.Box 30772, Nairobi, 00100, Kenya	Beekeeping for forest conservation: Filling a knowledge gap at Arabuko Sokoke Forest, Kenya	ssande@icipe.org or susansande@yahoo.com
3	Christopher Sabuni		Pest Management Centre Sokoine University of Agriculture P.O.Box 3110 Morogoro Tanzania	Assessment of Species Composition and Diversity of Small Mammals at Saadani National Park	Csabuni@Yahoo.Co.Uk
4	Simon Deus Lugandu	MSc	P. O. Box 811 Zanzibar +255 0754332 054	Effects of Joint Forest Management Institutional Arrangements on Forest Condition and Local Livelihood	slugandu@yahoo.com slugandu@hotmail.com
5	Elikana Kalumanga		P.O. Box 35097 Dar Es Salaam, Tanzania	Abundance and Diversity of Small Mammals in Disturbed and Undisturbed Forests at Uluguru Mountains	ekalumanga@yahoo.com
6	Charles Patrick	PhD	P. O. Box 35065, Department of Botany, Faculty of Science	<i>Cedrela mexicana</i> impacts on indigenous trees diversity in Kimboza Forest Reserve, Morogoro Tanzania	patricha6@yahoo.com or patricha6@hotmail.com Mobile: +255754441358
7	Ann Njeri Mwaura	MSc	Department of Invertebrate Zoology, National Museums of Kenya P.O. Box 40658 Nairobi	Molecular characterization and some environmental factors influencing distribution of the Endangered and Endemic <i>Gullella taitensis</i> in Taita Hills Kenya	mwauran@gmail.com
8	Simon Nganda Musila		Department of Ornithology, National Museums of Kenya, P. O Box 40658, GPO 00100 Nairobi-Kenya.	Density and Inter-fragment Dispersal of Bird Species in Three Coastal Forest Fragments, Kenya	burnbirds@gmail.com Mobile: 0735-675281. Tel. +254-020-3742131/61-64 ext 242/3

9	Bernard Cheruiyot Soi	MSc	Contacts: Moi University Department of Wildlife Management P.O. Box 1125, Eldoret, Kenya	Bird-habitat relationships of some Kenyan coastal forest bird species	bechesoi@yahoo.com Tel: +254 0723-765 668; +254 0735-968 558
10	Mligo, Cosmas	MSc	Botany Department UDSM P. O. Box 35060 Dar es salaam	Ecological Dynamics and Conservation Importance of the Eastern African Coastal Forests ecosystems in Tanzania.	mligo@uccmail.co.tz mligocoss@yahoo.co.uk
11	Julius K. Nguku		National Museums of Kenya P. O. Box 40658, 00100 Nairobi, Kenya	Distribution, diversity and population status of <i>Herpetofauna</i> in lower Tana River forests, Kenya.	julinguku@yahoo.com
12	Mercy Nelima Ndalila	MSc	University of Nairobi School of Biological sciences P.O.Box 5640-00100, Nairobi	The distribution, diversity and population status of Land snails from Shimba Hills National Reserve, Kenya.	merndal@yahoo.com
13	Grace Wambui Ngaruiya		P.O. BOX 8042-00300 NAIROBI, KENYA TEL: 0722-703263 / 045-41117	Ecological Survey Of The Golden Rumped Elephant Shrew (<i>Rhynchocyon Chrysopygus</i>) In The North Coastal Forests Of Kenya.	fp9910@yahoo.com
14	Hassan Senkondo Chikira	MPhil	Faculty of Forestry and Nature Conservation, P.O.Box3013, Morogoro: email:	Impact of Human Disturbance On Coastal Forests: The Case Study Of Tong'omba Forest Reserve In Kilwa District, Tanzania.	hchikira@yahoo.co.uk
15	Mercy Mwanikah		Moi University, School of Environmental Studies, Department of Environmental Information Systems, P. O Box 3900, ELDORET-Kenya.	Land use dynamics and human impacts on conservation status of <i>Warburgia stuhlmannii</i> in Dakatcha and Marafa forests	mercyjoyi@yahoo.com Tel. +254-721 277 806,
16	Wilson Ancelm Mugasha	PhD	Department of Forest Biology, Faculty of Forestry and Nature Conservation, Sokoine University of Agriculture, P.O. Box 3010, Chuo Kikuu Morogoro, Tanzania Fax: +255-23-2604648	Assessment of Carbon Sequestration in Agroforestry Systems for Improved Livelihood in Uluguru Mountains	wilmugasha@yahoo.co.uk Mobile:+255 713 328 780

17	Aloyce Mpiri	MSC	Department of Forest Economics, Faculty of Forestry and Nature Conservation, Sokoine University of Agriculture, P.O. Box 3011, Chuo Kikuu Morogoro, Tanzania Fax: +255-23-2604648	Willingness to pay for irrigation water: A case of Southern Uluguru Slopes, Tanzania	aloycempiri@yahoo.com Mobile:+255 784 619 765
18	Mzeru Deogratias Paul	MSC	Sokoine University of Agriculture;	The status of invasive plant species at Udzungwa Mountain National Parks	mzerudp2005@yahoo.com
19	Nancy Eliad Pima	MSc	Sokoine University of Agriculture PO Box 3010 Morogoro, Tanzania	Assessment of Rare Plants and Restoration Potential through Seed Bank in Zaraninge Coastal Forest, Bagamoyo District Tanzania	nancy_pima@yahoo.com
20	Rehema A.Shoo	MSc	Department Of Wildlife Management Sokoine University Of Agriculture P.O.Box 3073 Morogoro, Tanzania	Potential and Constraints Of Eco-Tourism In Improving Nature Conservation and Livelihoods	reyshoo2000@yahoo.com
21	Linda Stephen Kiluma	MSC	Sokoine University of Agriculture PO Box 3010 Morogoro, Tanzania	Quantifying the Abundance, Distribution and Local Use of Rare Plant Species in East Usambaras Tanzania	lin.lin14@yahoo.com
22	Kimuyu Duncan Maingi	MSc	P.O Box 1125, Eldoret.	Role of the Tana crested mangabey (<i>Cercocebus galeritus galeritus</i> Peters) in forest regeneration	maingi258@yahoo.com Tel: +254721543243
23	Maurice Ogoma	MSc	Department of Ornithology, National Museums of Kenya, P.O. Box 40658- 00100 GPO Nairobi-Kenya. Tel. +254-020-3742131/61-64 ext 242/3. Fax. 3741424	Conservation status of threatened endemic birds in Gongoni coastal forest reserve, Kenya	luleogoma@yahoo.com
24	Cassian T. Mumbi	PhD	Tanzania Wildlife Research Institute (TAWIRI), P.O. Box 661, Arusha, Tanzania. Tel.: +255 27 250 9871; Fax: +255 27 254 8240 Nationality: Tanzania	Vegetation response to climate change and human impacts in the Eastern Arc Mountains	tawiri@habari.co.tz cm569@york.ac.uk

25	Faith Jebet Toroitich	PhD	North-West University of South Africa; P.O Box 30772-00100, Nairobi. Kenya	Assessment of the biodiversity of tetranychid mites in the Eastern Arc Mountains and East African Coastal Forest Mosaic Hotspot	ftoroitich@icipe.org or f_jebet@yahoo.com
B. ACADEMIC ADVISORS					
	Name of student	Course	Research project title	Registering University and other Partners	Academic supervisors
1	Kenneth Njoroge Mwangi	MSc	The proximity of the farms to Arabuko – Sokoke forest influences the diversity of insect pollinators and fruit set.	University of Nairobi	1). Dr. Paul N Ndegwa pnndegwa@uonbi.ac.ke 2). Dr. Evans M. Mwangi emmwangi@uonbi.ac.ke
2	Susan Sande Okoth	PhD	Beekeeping for forest conservation: Filling a knowledge gap at Arabuko Sokoke Forest, Kenya	1) Department of Zoology and Entomology, University of Pretoria, Pretoria, South Africa, 002	1) Prof. Sue Nicolson swnicolson@zoology.up.ac.za
				2) <i>icipe</i> P.O.Box 30772, Nairobi, 00100, Kenya 1)	Dr. Ian Gordon igordon@icipe.org
3	Christopher Sabuni	MSc	Assessment of Species Composition and Diversity of Small Mammals at Saadani National Park	1) Forest Biology Department Faculty of Forestry and Nature Conservation SUA, P.O Box 3009, Morogoro	1) Prof. Munishi, P.K.T (Email: Munishi2002@yahoo.com)
				2) Pest Management Centre, SUA P.O Box 3110 Morogoro, Tanzania	2) Prof. Makundi, R.H Email: rmakundi@yahoo.com rmakundi@suanet.ac.tz
4	Simon Deus Lugandu	PhD	Effects of Joint Forest Management Institutional Arrangements on Forest Condition and Local Livelihood	Department Of Forest Mensuration And Management, Sokoine University Of Agriculture (SUA) P.O. Box 3013, Chuo Kikuu, Morogoro, Tanzania +255232604648 (Fax)	Professor Emmanuel J. Luoga, eluoga2000@yahoo.com eluoga2000@suanet.ac.tz Mobile +255754463037 Office+255232604865/ 4555
5	Elikana Kalumanga	MSc	Abundance and Diversity of Small Mammals in Disturbed and Undisturbed Forests at Uluguru Mountains	1) Zoology and Wildlife Conservation Department, Faculty of Science, UDSM. P.O. Box 35064, Dar Es Salaam, Tel: 255 022 2410462, Fax: 255 022 2410400	1) Prof. R.B.M. Senzota zoology@udsm.ac.tz Mobile: +255 291762
				2. Institute of Resource Assessment,	2) Catherine Massao

				UDSM. P.O. Box 35097 Dar Es Salaam, Tel: +255 022 2410144, Fax: +255 022 2410393	ira@ira.udsm.ac.tz
6	Charles Patrick	MSc	<i>Cedrela mexicana</i> impacts on indigenous trees diversity in Kimboza Forest Reserve, Morogoro Tanzania	Department of Botany Faculty of Science University of Dar es Salaam	Dr. H.J. Ndangalasi hjndangalasi@udsm.ac.tz
7	Ann Njeri Mwaura	MSc	Molecular characterization and some environmental factors influencing distribution of the Endangered and Endemic <i>Gullella taitensis</i> in Taita Hils Kenya	Department of Invertebrate Zoology, National Museums of Kenya P. O. Box 40658 Nairobi	Dr. Charles N. Lange Senior Research scientist/Head Invertebrate Section National Museums of Kenya P. O. Box 40658 - 00100 Nairobi - Kenya Nzavi2001@yahoo.com
				Department of plant and Microbial Science, Kenyatta University P. O. Box 43844, Nairobi	Prof. Douglas Ndiritu
8	Simon Nganda Musila	MSc	Density and Inter-fragment Dispersal of Bird Species in Three Coastal Forest Fragments, Kenya	1) Kenyatta University	1) Dr. Fuchaka Waswa fuchaka96@yahoo.com Mobile: 0723580126.
				2) Department of Ornithology National Museums f Kenya	2) Dr. Muchai Muchane mmuchaim@yahoo.com Mobile: 0722-286133.
9	Bernard Cheruiyot Soi	MPhil	Bird-habitat relationships of some Kenyan coastal forest bird species	1) Moi University Department of Wildlife Management P.O. Box 1125, Eldoret, Kenya	Mr. Jim K. Kairu jim_kairu_2002@yahoo.com
				Department of Ornithology National Museums of Kenya P.O.Box 40658, GPO 00100 Nairobi, Kenya	1. Dr. Muchai Muchane Email: mmuchaim@yahoo.com 2. Dr. Mwangi Githiru Email: mwangi_githiru@yahoo.co.uk
10	Mligo, Cosmas	PhD	Ecological Dynamics and Conservation Importance of the Eastern African Coastal Forests ecosystems in Tanzania.	Botany Department University of Dar es salaam UDSM P.O. Box 35060, Dar es Salaam	1) Dr. H.J.Ndangalasi hjndangalasi@yahoo.com 2) Dr. H.V.M. Lyaruu lyaruu@botany.udsm.ac.tz
11	Julius K. Nguku		Distribution, diversity and population	1) School of Biological Sciences	1) Dr. N. N. Gichuki

			status of herpetofauna in lower Tana River forests, Kenya.	University of Nairobi. P. O. Box 30197, Nairobi –Kenya.	ngichuki@uonbi.ac.ke
				2) National Museums of Kenya P. O. Box 40658, 00100 Nairobi, Kenya	2) Dr. Charles Lange Nzavi2001@yahoo.com
				3) Museums of Kenya) Herpetology Section P. O. Box 40658, 00100. Nairobi, Kenya	3) Patrick K. Malonza pkmalonza@yahoo.com
12	Mercy Nelima Ndalila	MSc	The distribution, diversity and populations status of Land snails from Shimba Hills National Reserve, Kenya.	1) School of Biological Sciences University of Nairobi P.O.Box 5640-00100, Nairobi	1) Dr. Paul Ndegwa pndegwa@uonbi.ac.ke
				2) Invertebrate Zoology Section National Museums of Kenya P. O. Box 40658 – 00100 Nairobi.	2) Dr. Charles Lange Nzavi2001@yahoo.com
13	Grace Wambui Ngaruiya		Ecological Survey Of The Golden Rumped Elephant Shrew (<i>Rhynchocyon Chrysopygus</i>) In The North Coastal Forests of Kenya.	University of Nairobi P.O. Box 30197-00100 Nairobi, Kenya	1) Dr. Evans Mwangi Tel- 0722-711422 emmwangi@uonbi.ac.ke 2) Dr. Robert Chira Tel: 0722-822795 rchira@uonbi.ac.ke
14	Hassan Senkondo Chikira	MSc	Impact of Human Disturbance On Coastal Forests: The Case Study Of Tong’omba Forest Reserve In Kilwa District, Tanzania.	Department of Forest Mensuration and Management, Faculty of Forestry and Nature Conservation, Sokoine University of Agriculture, P.O. Box 3009 Chuo Kikuu, Morogoro, Tanzania:	1. Prof. Malimbwi, R. E. malimbwi@suanet.ac.tz 2. Prof. Luoga, E. J. luoga2000@yahoo.com eluoga@suanet.ac.tz
15	Mercy Mwanikah		Land use dynamics and human impacts on conservation status of <i>Warburgia stuhlmannii</i> in Dakatcha	1) Moi University, School of Environmental Studies,	1) Dr. Elias Ucuwun ucuwun@hotmail.com 2) Dr. Ben Mwasi

			and Marafa forests.		ben_mwasi@yahoo.com
				2) East African Herbarium, Museum Hill	3) Dr. Geoffrey Mwachala, Senior research scientist Email: plants@africaonline.co.ke
16	Wilson Ancelm Mugasha	MSc	Assessment of Carbon Sequestration in Agroforestry Systems for Improved Livelihood in Uluguru Mountains	1) Department of Forest Biology, Faculty of Forestry and Nature Conservation, SUA, P.O. Box 3010, Chuo Kikuu Morogoro, Tanzania Fax: +255-23-260 4648	1) Prof. P.T.K. Munishi Mobile +255 754 591 849 pmunishi2001@yahoo.com
				2) Department of Forestry Management and Mensuration, Faculty of Forestry and Nature Conservation, SUA Box 3013 Morogoro, Tanzania Fax: +255-23-2604648	2) Mr. E. Zahabu zahabue@yahoo.com
17	Aloyce Mpiri	MSc	Willingness to pay for irrigation water: A case of Southern Uluguru Slopes, Tanzania	1) Department of agricultural economics & agribusiness, Sokoine University of Agriculture, P.O. Box 3005, Chuo Kikuu Morogoro, Tanzania	1) Dr. R.M.J. Kadigi Mobile: +255 754 591 849 rmjkadigi@yahoo.co.uk
				2) Department of Forestry Economics, Sokoine University of Agriculture Box 3011, Chuo Kikuu, Morogoro, Tanzania	2) Dr. J.M. Abdallah abdallah@suanet.co.tz Fax: +255-23-2604648
18	Mzeru Deogratias Paul	MSc	The status of invasive plant species at Udzungwa Mountain National Parks	Sokoine University of Agriculture	PROF. MADOFFE, S. S madoffe@suanet.ac.tz , madoffe@yahoo.co.uk
19	Nancy Eliad Pima	MSc	Assessment of Rare Plants and Restoration Potential through Seed Bank in Zaraninge Coastal Forest, Bagamoyo District Tanzania	Department of Forest Biology Sokoine University of Agriculture Po Box 3010, Morogoro Tanzania	Prof. PKT Munishi pmunishi2001@yahoo.com munishi@suanet.ac.tz

20	Rehema A.Shoo	MSc	Potential and Constraints Of Eco-Tourism In Improving Nature Conservation and Livelihoods	Sokoine University of Agriculture Department of Wildlife Management P.O. Box 3073MOROGORO. Tel: +255-23-2601376 Fax: +255-23-255 23 3718	SONGORWA, A.N (PhD) songorwa@suanet.ac.tz bhugoji@yahoo.com Mob: 0754-877019
21	Linda Stephen Kiluma	MSc	Quantifying the Abundance, Distribution and Local Use of Rare Plant Species in East Usambaras Tanzania	Department of Forest Biology Sokoine University of Agriculture Po Box 3010, Morogoro Tanzania	Prof. PKT Munishi pmunishi2001@yahoo.com or munishi@suanet.ac.tz
22	Kimuyu Duncan Maingi	MSc	Role of the Tana crested mangabey (<i>Cercocebus galeritus galeritus</i> Peters) in forest regeneration	Moi University P.O. Box 1125 Eldoret, Kenya	1. Dr. Geoffrey M. Wahungu gmwahungu@yahoo.com 2. Mr. Jim Kairu, jim_kairu2002@yahoo.com
23	Maurice Ogoma	MSc	Conservation status of threatened endemic birds in Gongoni coastal forest reserve, Kenya	1) Center for Tropical Marine Ecology, University of Bremen, Germany. Fahrenheitstr. 6, 28359 Bremen	1) Prof. Dr. Uta Berger,. E-mail: uberger@uni-bremen.de
				2) Zoology Department, National Museums of Kenya, P.O. Box 40658-00100 GPO Nairobi-Kenya. Tel. +254-020-3742131/61-64 ext 243	2) Dr. Samuel Muchai Muchane Fax. 3741424 mmuchaim@yahoo.com
24	Cassian T. Mumbi	PhD	Vegetation response to climate change and human impacts in the Eastern Arc Mountains	1) Environment Department University of York Heslington, York YO10 5DD, United Kingdom	1) Dr. Rob Marchant E-mail: rm524@york.ac.uk Tel: +44(0) 1904 434061 Fax: +44(0) 1904 432998 http://www.york.ac.uk/res/kite/
				2) Institute for Biodiversity and Ecosystem Dynamics (IBED) Palynology and Paleo/Actuo-ecology Faculty of Science, University of Amsterdam Kruislaan 318, 1098 SM Amsterdam, The Netherlands	2) Prof. dr. Henry Hooghiemstra Tel.: + 31 20 525 7857 Fax: + 31 20 525 7832 hooghiemstra@science.uva.nl
25	Faith Jebet Toroitich	PhD	Assessment of the biodiversity of tetranychid mites in the Eastern Arc	1) Plant Health Division, ICIPE, P.O. Box 30772-00100,	1) Dr. Markus Knapp, E-mail: mknapp@icipe.org

		Mountains and East African Coastal Forest Mosaic Hotspot	Nairobi. Kenya Phone: +254 (0)20 8632000 Fax: +254 (0)20 8632001 or 8632002	Later replaced by Dr. Fabian Haas fhaas@icipe.org Mobile +254 (0)728 132868
			2) School of Environmental Science and Development, North West University, Private Bag X6001, Potchefstroom. 2520, South Africa	2) Prof. Pieter D. Theron DRKPDT@puknet.puk.ac.za
			3) Plant Protection Research Institute, Private Bag 134, Queenswood Pretoria. 0121, South Africa	3) Dr. Eddie A. Ueckermann Ueckermann@arc.agric.za
			4) Institut National de la Recherche Agronomique CBGP. Campus International de Baillargét CS 30 016, 34988 Montpellier. France	4) Dr. Maria J. Navajas. navajas@ensam.inra.fr
C. NATIONAL BLI PARTNERS				
	Name of institution	Address	Role	Focal person
1	Nature Kenya	Nature Kenya P.O. Box 44486 GPO 00100 NAIROBI +254 20 3749957 office@naturekenya.org	<ul style="list-style-type: none"> • Birdlife partner • Issuance and management of grantee contracts for projects implemented in Kenya as per the terms agreed with Birdlife 	Paul Matiku Director_naturekenya@mitsuminnet.com office@naturekenya.org Mr Alex Ngari Database Manager office@naturekenya.org
2	Wildlife Conservation Society of Tanzania (WCST)	WCST Dar es Salaam , P.O. Box 70919, Dar es Salaam, TANZANIA Tel.. +255 (0)22 2112518 Email : wcst@africaonline.co.tz	<ul style="list-style-type: none"> • Birdlife partner • Issuance and management of grantee contracts for projects implemented in Tanzania as per the terms agreed with Birdlife 	Lota Melamari melamarilota@yahoo.co.uk Mr Paul Nnyiti Senior Conservation Officer, Wildlife Conservation Society of Tanzania Wcst@africaonline.co.tz or

				paul_mnyiti@yahoo.co.uk
D. SECRETARIAT AND COORDINATING UNIT				
	Name of Organisation	Location/Address	Role / contribution / type of benefit	Names of contacts/focal person(s)
1	BirdLife Africa Partnership Secretariat	ICIPE Campus, Kasarani P.O. Box 3502 – 00100 GPO Nairobi, Kenya	<ul style="list-style-type: none"> • Member of the EACF Coordination Unit • Programme initiation and proposal development • Issuance and management of contracts with partner organisations • Coordination of grantee recruitment • Overall project coordination 	<p>Dr Hazell Shokellu Thompson Head of BirdLife Africa Partnership Secretariat (screening of proposals) hazell.thompson@birdlife.or.ke</p> <p>Dr Julius Arinaitwe Regional Manager: Science and Conservation (team leader) julius.arinaitwe@birdlife.or.ke</p> <p>Mr Paul Kariuki Ndang'ang'a Species Programme Manager paul.ndanganga@birdlife.or.ke (project data and information) George.eshiamwata@brdlife.or.ke (Project Officer)</p>
2	International Centre of Insect Physiology and Ecology (<i>icipe</i>)	Duduville Kasarani P.O. Box 30772 Nairobi, Kenya	<ul style="list-style-type: none"> • Member of the EACF Coordination Unit • Management of programme monitoring and evaluation 	Dr. Ian Gordon, Committee Advisor igordon@icipe.org
3	WWF-Eastern Africa Regional Programme (EARPO)	Eastern Africa Coastal Forest Ecoregion Programme WWF Eastern Africa Regional Programme Office (EARPO) 5th Floor ACS Plaza, Lenana Road P.O Box 62440 00200 NAIROBI KENYA. Tel (+ 254 20 3877355, (+ 254 20 3872630 / 1 Fax (+ 254 20 3877389	<ul style="list-style-type: none"> • Member of the EACF Coordination Unit 	John Y. Salehe Ecoregion Leader JSalehe@wwfearpo.org

4	Tanzania Forest Conservation Group (TFCG)	PO Box 23410, Dar es Salaam Tel. 022 2669007	<ul style="list-style-type: none"> Member of the EACF Coordination Unit 	Nike Doggart, Senior Technical Advisor ndoggart@tfcg.or.tz Charles Meshack, Executive Officer
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5 Annex 4

BirdLife introductory message to key Partners and Grantees

Friends and Colleagues,

RE: Final Evaluation of the Small Grants Programme for Student Research in the Eastern Arc and Coastal Forests (EACF) of Kenya and Tanzania Region

You will recall that towards the end of 2006, the Critical Ecosystem Partnership Fund (CEPF) approved to fund a project to enable the Coordination Unit (CU⁴) to issue small grants to postgraduate students undertaking research in the forests of Eastern Arc Mountains and the coastal region of Kenya and Tanzania. The project has been administered by BirdLife International (Regional Secretariat and BirdLife Partners in Kenya and Tanzania) and ICIPE on behalf of the CU. The small grants for student research programme was set up to assist students at graduate and post graduate level planning to undertake research work within the hotspot, which either contributes significantly to the conservation of (critically) threatened species or increase connectivity. Projects that collect information that contributes to Red List Assessments also qualify.

The application and review process for research projects were discussed and agreed by the various partners. Detailed arrangements for implementation were also discussed and the process set out. The final stage of the implementation plan entails an internal evaluation of the small grants programme as a whole to be coordinated by ICIPE. The evaluation, which is to identify, capture and document, lessons learnt, share this experience, and successes for future similar programmes, involves the development of a process that outlines the information requirements and formats. It was planned that once these are approved, formats would be provided to the concerned stakeholders (the Secretariat, BirdLife Partners and grantees) to collect relevant information during the course of the project. The information would then be analysed and a report prepared for submission with the final project report in Dec 2008. We have now concluded the development of the information gathering mechanisms for the evaluation and have appointed an expert to undertake the evaluation.

The purpose of this communication is to introduce to you the consultant, Dr Vitalis Musewe, who will be working with us on this exercise. You will, therefore, be receiving the survey documents from him but you may expect to receive communication on the same matter from different channels.

Specifically the evaluation aims to capture performance information on the following three areas: (i) The management of the small grants program including: advertising the grants; review of projects; contractual arrangements; and monitoring and reporting; (ii) alignment of funded

⁴ The Coordination Unit comprises of International Centre for Insect Physiology and Ecology (ICIPE), WWF -East African Regional Programmes Office (WWF-EARPO) including the Tanzania Programmes Office (WWF-TPO), Tanzania Forest Conservation Group (TFCG) and BirdLife International including the Regional Secretariat and BirdLife Partners in Kenya (NatureKenya) and Tanzania (Wildlife Conservation Society of Tanzania)

projects to the objectives of the program including relevance of project objectives and overall impact; and (iii) lessons learned in the management of small grants and possible future directions.

Two major challenges for the evaluation are 1) the short time available to conclude the exercise in time for the preparation of the final programme report scheduled for early next year; the evaluation report must be available by 31st January 2009; and 2) the timing of the evaluation during the holiday season of December

You are welcome to participate fully in this important evaluation exercise and we trust that your suggestions will help us improve the quality of similar programmes in the future. Please feel free to communicate directly with the consultant, Dr Vitalis Musewe through vitmusewe@gmail.com once you receive the evaluation formats. You may also consult with the Secretariat through paul.ndanganga@birdlife.or.ke or George.eshiamwata@birdlife.or.ke on any issues relating to the evaluation.

Thank you in advance for any supported accorded to the consultant in the process of pursuing this goal.

Signed

Annex 5

Evaluation questions and respondents

Information Required	Method	Respondent
A. Meeting long term goals of the programme		
1. Critical sites and threatened species in the hotspot are conserved, and there is a measurable increase in the participation of civil society and local communities in conservation activities		
(i) To what extent are the objectives of student projects relevant to:		
• Conservation of threatened species?	Document review Questionnaire Interview	- Partners Partners
• Increasing participation of civil society and local communities in conservation activities?	Document review Questionnaire Interview	- Partners Partners
(ii) Are there any instances where the results (data, conclusions or the implementation process) of a student project have directly contributed to conservation or increased participation in conservation so far? If so, please list and explain the relevant examples.	Document review Questionnaire Interview	- Partners Partners
(iii) If information on the above is not sufficiently available, what could be the main reason(s), based on the foreseen assumptions on the left column?	Document review Questionnaire	- Partners
(iv) What are stakeholders' perceptions of the overall or long-term influence, value and impact of the project	Questionnaire Interview	CU Secretariat Partners
B. Meeting programme purpose		
1. At least 16 Small Grants supported by 2007;		
(i) Did the programme support at least 16 small grants?	Document review	
(ii) If fewer or more grants were supported, what could be the explanation?	Questionnaire Interview	CU Secretariat
2. At least ten projects show demonstrable impacts on connectivity and biological knowledge by 2008.		

(i) Have any projects shown demonstrable impacts on connectivity and biological knowledge so far?	Document review Questionnaire Interview	- CU Secretariat Partners
C. Meeting project objectives		
1. Meeting objective 1		
1.1 A suitable institutional setup is established for administering the small grants for student research programme		
(i) What is the institutional set up for programme implementation?	Document review Interview	- CU Secretariat
(ii) Are the roles and responsibilities of stakeholders well known to them?	Questionnaire	Partners Grantees
(iii) What are stakeholder perceptions regarding the suitability of these organisational arrangements?	Questionnaire Interview	Partners Grantees
(iv) What was the set up for communication and did it ensure operational efficiency?	Questionnaire Interview	CU Secretariat Partners
(v) Was resource allocation commensurate with roles and responsibilities expected of the institution?	Questionnaire Interview	Partners Grantees
(vi) Was there transparency in the way the Secretariat acted as broker to partners?	Questionnaire Interview	Partners
(vii) Was there transparency in the way the national partners dealt with grantees?	Questionnaire Interview	Grantees
1.2 At least 6 CU meetings monitor the small grants for student research programme by 2007		
(i) Did the CU hold meetings as planned?	Document review Questionnaire Interview	CU Secretariat
(ii) Was attendance at these CU meetings satisfactory? If not, why?	Document review Interview Questionnaire	CU Secretariat
1.3 At least \$160,000 distributed to grantees to support Small Grant projects by end of 2006		
(i) Were the grants disbursed as per schedule?	Document review	-
(ii) What was the level of satisfaction of partners	Questionnaire	Partners

and grantees regarding efficiency of grants disbursement by the Birdlife International?	Interview	Grantees
1.4 At least 16 contracts issued to grantees by end of 2007.		
(i) Were contracts issued as per schedule?	Document review	-
1.5 At least 16 reports received from grantees by 2008		
(i) Is the reporting process documented and understood by grantees and stakeholders?	Document review Interview Questionnaire	- CU Secretariat Partners
(ii) Were reports received as per schedule?	Document review	CU Secretariat
1.6 Process for review and forms for final evaluation of student research projects developed and documented by end 2006		
(i) Were the review process and evaluation forms documented in time as per schedule?	Document review Interview	- CU Secretariat
(ii) Were the evaluation process and forms effectively communicated to other stakeholders as per schedule?	Questionnaire Interview	Partners Grantees
(iii) Were the process and forms well understood by the stakeholders?	Questionnaire Interview	Partners Grantees
1.7 Information availed to CEPF on final evaluations of the small grant programme by end 2008.		
(i) Has the final report on evaluations of student research projects been compiled and submitted to CEPF?	Document review Questionnaire	- CU Secretariat CEPF in-charge
2. Meeting objective 2		
2.1 Guidelines for application to the Small Grants programme in place by end Q3 of 2006 and made available widely		
(i) Were the application guidelines and procedures in place as per schedule?	Document review Questionnaire	- Grantees
(ii) Were the guidelines and procedures effectively communicated to potential grantees and other stakeholders as per schedule?	Questionnaire Interview	Partners Grantees
(iii) Did the guidelines provide all the information needed to be able to prepare and submit the	Document review	- Partners

LoI	Questionnaire Interview	Grantees
(iv) Were any applications rejected for not having followed the guidelines and procedures?	Document review Questionnaire Interview	- CU Secretariat CU Secretariat
2.2 Transparent, objective and timely review process in place, understood by other stakeholders and operational by end Q3 of 2006		
(i) Was the review process in place as per schedule?	Document review Interview	- CU Secretariat
(ii) Was the review process communicated to and understood by other stakeholders as per schedule?	Document review Questionnaire Interview	- Partners
(iii) How would one rate the review process in terms of efficiency, effectiveness and fairness in selecting the best proposals?	Document review Questionnaire Interview	- Partners Grantees
(iv) Are all the funded grants aligned to the stated programme priorities?	Document review	-
(v) Were any applications rejected and for what reason(s)?	Document review Interview Questionnaire	- CU Secretariat Partners
(vi) Were there any complaints regarding the proposal review process	Interview Questionnaire	CU Secretariat Partners
(vii) What strategy was in place to deal with conflict of interest? Were any such cases encountered and resolved to the satisfaction of the complainants?	Document review Questionnaire Interview	- CU Secretariat Partners Grantees
2.3 Successful applicants aware of potential collaborators and opportunities for linkages.		
(i) Were reports on who is working where regularly released and accessible to grantees?	Document review Questionnaire Interview	- Partners & Grantees
(ii) Were updated records of CEPF partnerships available to grantees?	Document review Questionnaire Interview	- Partners & Grantees
(iii) Opportunities for information exchange with peers?	Questionnaire Interview	Partners & Grantees

(iv) A network newsletter?	Document review Questionnaire Interview	CU Secretariat Partners & Grantees
2.4 At least 16 Small grant projects in place are monitored to maximize cost-effectiveness and impact of the CEPF investment by end of 2008		
(i) Availability of regular and quality research supervision from the universities and their partners	Questionnaire Interview	Partners & Grantees
(ii) Monitoring of projects by national partners and other stakeholders	Questionnaire Interview	Partners & Grantees
(iii) Easement of policy regulations in support of students work	Questionnaire Interview	Partners & Grantees
2.5 At least 16 small grant projects contributing information to the sustainable biodiversity monitoring system in the hotspot 2008		
(i) Support in publishing of results	Document review Questionnaire Interview	CU Secretariat Partners & Grantees
(ii) Linking to other researchers, e.g. through conference support to conferences and meetings	Document review Questionnaire Interview	CU Secretariat Partners & Grantees
(iii) Availability and effective use of avenues for contributing research information to the database	Document review Questionnaire Interview	CU Secretariat Partners & Grantees
2.6 A summary of new biological knowledge of threatened species, key sites and connectivity produced by end 2008		
(i) Have the outputs of small grants for student research been summarised into a report?	Document review Questionnaire Interview	CU Secretariat Partners & Grantees
(ii) What were the key findings of each research project and what significant contributions have the research made towards (a) knowledge of threatened species (b) key bird sites and (3) connectivity?	Document review Questionnaire Interview	CU Secretariat Partners & Grantees
(iii) Are there any spill-over effects of the research projects realised so far?	Document review Questionnaire	CU Secretariat Partners & Grantees

	Interview	
(iv) What are stakeholders' perceptions of the influence, value and impact of the research projects with respect to the three objectives?	Document review Questionnaire Interview	CU Secretariat Partners & Grantees

Annex 6-A

Evaluation of the Small Grants Programme for Student Research in the Eastern Arc and Coastal Forests (EACF) of Kenya and Tanzania

6

7 A. Questionnaire for Grantees

Dear Colleague:

Between September 2006 and September 2008, the Critical Ecosystem partnership Fund (CEPF) funded a small grants programme to support postgraduate students in Kenya and Tanzania to undertake research in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania. As the programme comes to an end, an evaluation is being done.

The overall objective of this evaluation is to capture lessons learnt during the implementation of the small grants programme for student research, which can be used by the management team, BirdLife Partners and other institutions in the design and implementation of similar programmes.

Specifically the evaluation aims to capture performance information on the following three areas: (i) the management of the small grants programme including advertising the grants, review of projects, contractual arrangements, monitoring and reporting; (ii) alignment of funded projects to the objectives of the programme and the overall impact; and (iii) lessons learned in the management of small grants and possible future directions. The information will be analyzed and a report prepared for submission with the final project report.

Your reply helps us to improve the design and implementation of future grant management, capacity development and training programmes. Please complete all sections. If appropriate, you may choose multiple answers.

We prefer to conduct the questionnaire survey by e-mail. Do not worry if the questionnaire gets out of format when filling it in with your computer. Please return the questionnaire to vitmusewe@gmail.com but should you find it difficult to fill in the questionnaire with a computer, feel free to fill it in by hand and send it by ordinary mail to: **Dr. Vitalis Musewe, P.O. Box 62258 – 00200, Nairobi, Kenya.**

Thank you!

1. Contact information (please fill in)

Date:		
Surname:	Other names:	
Position:		
Organisation / Institution:		
Address:		
Telephone:	Mobile:	Fax:
E-mail:		
Website: www.		

2 Institutional details (Please mark the appropriate responses with "x" or similar)

2.1 Which of the following categories best describes your organisation?

<i>Type of organisation</i>					
Research institute		Private sector		NGO	
Academic Institution		Farmers organisation		Other? (specify)	
Government department		Local authority			

2.2 At what level does your organisation work?

<i>Level of organisation</i>					
International		Provincial		Other? (specify)	
Regional		District (or similar)			
National		Community			

2.3 What is/are the main activities of your organisation?

<i>Main activity</i>

Research		Education/Training		Natural resource mgt	
Outreach/extension		Trade/Industry		Conservation	
Policy/Regulation		Consultancy		Other (specify)	
Advocacy		Information services			

2.4 Please give a brief description of the area(s) of activity

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3 Advertising of the grants

3.1 How did you get to know about the availability of grants for student research from BirdLife International? (mark with "x" or similar)

<i>Method</i>	<i>Mark</i>
An advertisement appearing in the mass media (e.g. BidLife newsletters, other newsletters, E-Bulletins etc?)	
An E-mail circulation (group or individual)	
An advert from BirdLife posted on a notice board?	
Announcement at a professional public function?	
Advice from your employer/superiors?	
Alerted by a friend?	
Other? Please explain.	

3.2 Please indicate whether the following statements regarding guidelines and procedures for preparing your application for research grant are true or false? (mark with "x" or similar)

<i>Statement</i>	<i>True</i>	<i>False</i>
You received and used application guidelines from the Secretariat		
The application guidelines were communicated to you in good time		
The guidelines provided all the information you needed to apply		
Where the statement is untrue, please explain:		

4 Review of proposals

4.1 Please answer “Yes” or “No” in response to the following questions

<i>Question</i>	<i>Ye s</i>	<i>N o</i>
7.1 Was the review process developed as per schedule?		
7.4 Was the review process communicated to you in good time?		
7.7 Where your answer is No, please explain:		

4.2 Please rate the following factors regarding the quality of the review process

<i>Quality factor</i>	<i>Poor</i>	<i>Good</i>	<i>Excellent</i>
Efficiency (prompt to review and release of results)			
Effectiveness (accurate and results oriented)			
Fairness (all decisions adequately justifiable)			

4.3 Please list and explain any observations you may have made in respect of the following quality factors in respect of the review process

<i>Factor</i>	<i>Observation and explanation</i>
Complaints regarding review process	
Conflict of interest in review process	
Projects approved unfairly	
Projects rejected unfairly	
Others?	

5 Organisational and contractual arrangements

5.1 **Partner-Grantee agreement:** Please rate the fairness of and your level of satisfaction with, the suitability of the following clauses in the Grant Agreement between Grantee and BLI Partner and please explain where your rating is “Unfair”. Your response should consider both the terms of the agreement and performance of the Partner in fulfilling her obligations.

<i>Clause</i>	<i>Fair</i>	<i>Unfair</i>	<i>Major issues emerging from programme implementation</i>
Duration of Agreement			
Grant amount			
Payment schedule			
Payment method			
Reporting			
Project conditions			
Termination and recovery of funds			

Insurance			
Variation			

5.2 From your personal point of view please indicate your satisfaction with the following aspects of management by the Partner (mark "x" or similar)

<i>Procedure</i>	<i>Satisfactor y</i>	<i>Unsatisfactor y</i>	<i>Major issues emerging from programme implementation</i>
Communication arrangements			
Transparency in managing funds and disbursements			

6 Monitoring and reporting

6.1 As a Grantee, please comment on the suitability of the following procedures used in project monitoring and reporting.

<i>Procedure</i>	<i>Fair</i>	<i>Unfair</i>	<i>Major issues emerging from programme implementation</i>
Reporting to follow the Journal of East Africa Natural History Society format			
Reimbursement on case by case basis subject to Request for Funding to Monitor Grantees			

6.2 How would you rate stakeholders' commitment to monitoring the work and performance of the Grantee (mark with "x" or similar)?

<i>Commitment indicator</i>	<i>None</i>	<i>Inadequate</i>	<i>Adequate</i>	<i>Excellent</i>
University supervisor's monitoring visits				
BLI Partner's supervisory field visits				
Management action on progress reports				
Easing of policy regulations in support of Grantee research work				
Please suggest reasons where your rating is "None" or "Inadequate":				

6.3 What was the duration of your research project?

<i>Description</i>	<i>Start date</i>	<i>Completion date</i>	<i>Duration</i>
<i>Planned</i>			
<i>Actual</i>			
<i>Variance (in weeks)</i>			
Please explain reasons for variance (if any):			

6.4 What was the reporting schedule for your research project?

<i>Description</i>	<i>First report</i>	<i>Second report</i>	<i>Final report</i>
<i>Planned report date</i>			

<i>Actual report date</i>			
<i>Variance (in weeks)</i>			
Please explain reasons for variance (if any):			

- 6.5 Please list any issues that arose in your progress reports that needed management attention. You are requested to rate the issues on a scale of 1 (lowest importance) to 5 (highest importance) to indicate the extent to which they affected implementation of your project.

<i>Issues arising in progress reports</i>	<i>Rating</i>

- 6.6 Were there any deliberate attempts by programme managers to link the Grantee with potential collaborators? (mark with "x" or similar)

<i>Type of support</i>	<i>Yes</i>	<i>No</i>	<i>Please elaborate</i>
Reports on who is working where were regularly released			
Updates on CEPF partnerships were made available			
Opportunities for information exchange with peers were provided			
A network newsletter was available and useful			

- 6.7 Please give details of your university supervisors and his/her/their visits to assist you on your project.

<i>Name(s) of supervisor(s)</i>	<i>Highest academic qualification</i>	<i>Area of research specialisation</i>	<i>Dates of supervisor visit to your project</i>		

7 Project relevance and impact

7.1 Please indicate which of the following long term goals of the student research grants programme was / were targeted by your project: (a) Critical Site conservation / increasing connectivity, (b) Species conservation, (c) Increasing civil society participation, (d) increasing biological knowledge, (e) Mitigating climate change and (f) improving livelihood? (mark with “x” or similar)

<i>Grant No.</i>	<i>Project title</i>	<i>(a)</i>	<i>(b)</i>	<i>(c)</i>	<i>(d)</i>	<i>(e)</i>	<i>(f)</i>	<i>Other?</i>

7.2 The grantee’s budget allocation may have been limited, but a project that has promise for success and high impact would normally attract financial support from elsewhere. Please indicate if your project leveraged any additional funding to add onto CEPF awards. If so, please state the source and the amount.

<i>Grant No.</i>	<i>Project title</i>	<i>Source of additional funding</i>	<i>Amount (\$)</i>

7.3 What support have you received from programme managers to ensure that your research project is contributing information to the sustainable biodiversity monitoring system in the Hotspot? As a guide please consider the following types of support: (i) Publishing of research results; (ii) Support to conferences, meetings; (iii) Created avenues for contributing results to the database; and (iv). Any others? Please name them.

<i>Grant No.</i>	<i>Types of support given (mark with "x" or similar)</i>				<i>Details of support received, with dates</i>
	<i>(i)</i>	<i>(ii)</i>	<i>(iii)</i>	<i>(iv)</i>	

7.4 Please list the key findings of your research project and state the significant contribution the research has made towards the programme goals listed in Question No. 7.1 above.

<i>Key research findings</i>	<i>Contribution to programme objectives (a,b,c,d,e,f)</i>

7.5 Are there any post-research fieldworks done or planned in respect of your research findings? If so please give examples, with appropriate references where such information can be verified. As a starting point, please use the few examples listed in the Table below.

<i>Type of post-research activity</i>	<i>Yes</i>	<i>Explain and give reference source</i>
Effort to raise additional funding for follow up work		
Linkages created with other institutions or researchers		
Civil society mobilisation to internalise research results		
Efforts to influence policy change as a result		

Of the research findings		
Others? Please list.		

7.6 Do you know of examples where components of your research findings have been (or are likely to be) adopted for field application in biodiversity conservation? If so please give references where such information can be verified.

<i>Examples of research findings that have been adopted for use</i>	<i>Reference source</i>

7.7 Please suggest any post-training support that would ensure your continued productivity and contribution to biodiversity conservation in the Hotspot and explain what desired effects they would bring.

<i>Post training support needed</i>	<i>Desired effect/added value</i>

8 Lessons learnt and way forward

8.1 In your opinion, what have been the main strengths of the small grants for student research programme and how did they impact on programme implementation and output

<i>Main programme strength</i>	<i>Impact on implementation and output</i>

8.2 What were the main weaknesses, challenges and threats of the small grants for student research programme and how did they affect programme implementation and output?

<i>Main weakness, challenge or threat</i>	<i>Impact on implementation and output</i>

8.3 What opportunities existed during project implementation or are foreseen in the future which could have been or could be exploited to improve programme implementation and enhance its impact?

<i>Identified opportunities</i>	<i>How they could be exploited by the programme</i>

8.4 Please use the space below to offer any suggestions as to what could have been done better or other activities that could be incorporated into the programme to improve its implementation and impact.

<i>Suggestion for improvement, inclusion</i>	<i>Desired effect</i>

Annex 6-B

Evaluation of the Small Grants Programme for Student Research in the Eastern Arc and Coastal Forests (EACF) of Kenya and Tanzania

B. Questionnaire for Research Supervisors

Between September 2006 and September 2008, the Critical Ecosystem partnership Fund (CEPF) funded a small grants programme to support postgraduate students in Kenya and Tanzania to undertake research in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania. As the programme comes to an end, an evaluation is being done.

The overall objective of this evaluation is to capture lessons learnt during the implementation of the small grants programme for student research, which can be used by the management team, BirdLife Partners and other institutions in the design and implementation of similar programmes.

Specifically the evaluation aims to capture performance information on the following three areas: (i) the management of the small grants programme including advertising the grants, review of projects, contractual arrangements, monitoring and reporting; (ii) alignment of funded projects to the objectives of the programme and the overall impact; and (iii) lessons learned in the management of small grants and possible future directions. The information will be analyzed and a report prepared for submission with the final project report.

Your reply helps us to improve the design and implementation of future grant management, capacity development and training programmes. Please complete all sections. If appropriate, you may choose multiple answers.

We prefer to conduct the questionnaire survey by e-mail. Do not worry if the questionnaire gets out of format when filling it in with your computer. Please return the questionnaire to yitmusewe@gmail.com but should you find it difficult to fill in the questionnaire with a computer, feel free to fill it in by hand and send it by ordinary mail to: **Dr. Vitalis Musewe, P.O. Box 62258 – 00200, Nairobi, Kenya.**

Thank you!

1. Contact information (please fill in)

Date:		
Surname:	Other names:	
Position:		
Organisation / Institution:		
Address:		
Telephone:	Mobile:	Fax:
E-mail:		
Website: www.		

2 Institutional details (Please mark the appropriate responses with "x" or similar)

2.1 Which of the following categories best describes your organisation?

<i>Type of organisation</i>					
Research institute		Private sector		NGO	
Academic Institution		Farmers organisation		Other? (specify)	
Government department		Local authority			

2.2 At what level does your organisation work?

<i>Level of organisation</i>					
International		Provincial		Other? (specify)	
Regional		District (or similar)			
National		Community			

2.3 What is/are the main activities of your organisation?

<i>Main activity</i>

Research		Education/Training		Natural resource mgt	
Outreach/extension		Trade/Industry		Conservation	
Policy/Regulation		Consultancy		Other (specify)	
Advocacy		Information services			

2.4 Please give a brief description of the area(s) of activity

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3 Advertising of the grants

3.1 How did you get to know about the availability of grants for student research from BirdLife International? (mark with "x" or similar)

<i>Method</i>	<i>Mark</i>
An advertisement appearing in the mass media (e.g. BidLife newsletters, other newsletters, E-Bulletins etc?)	
An E-mail circulation (group or individual)	
An advert from BirdLife posted on a notice board?	
Announcement at a professional public function?	
Advice from your employer/supervisors?	
Alerted by a friend?	
Other? Please explain.	

3.2 Please indicate whether the following statements regarding guidelines and procedures for preparing the grant application for research grant are true or false? (mark with "x" or similar)

<i>Statement</i>	<i>True</i>	<i>False</i>
You received and used application guidelines from the Secretariat		
The application guidelines were communicated to you in good time		
The guidelines provided all the information you needed to apply		
Where the statement is untrue, please explain:		

4 Review of proposals

4.1 Please answer “Yes” or “No” in response to the following questions

<i>Question</i>	<i>Ye s</i>	<i>N o</i>
7.8 Was the review process developed as per schedule?		
7.11 Was the review process communicated to stakeholders in good time?		
7.14 Where your answer is No, please explain:		

4.2 Please rate the following factors regarding the quality of the review process

<i>Quality factor</i>	<i>Poor</i>	<i>Good</i>	<i>Excellent</i>
Efficiency (prompt to review and release of results)			
Effectiveness (accurate and results oriented)			

Fairness (all decisions adequately justifiable)			
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4.3 Please list and explain any observations you may have made in respect of the following quality factors in respect of the review process

<i>Factor</i>	<i>Observation and explanation</i>
Complaints regarding review process	
Conflict of interest in review process	
Projects approved unfairly	
Projects rejected unfairly	
Others?	

6 Monitoring and reporting

6.1 As a research supervisor, please comment on the suitability of the following procedures used in project monitoring and reporting.

<i>Procedure</i>	<i>Fair</i>	<i>Unfair</i>	<i>Major issues emerging from programme implementation</i>
Reporting to follow the Journal of East Africa Natural History Society format			
Reimbursement on case by case basis subject to Request for Funding to Monitor Grantees			
Budgetary provision for supervisors			

Time allowed for the monitoring visits			
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6.2 Please list any issues that arose in the Grantees' progress reports that needed management attention. You are requested to rate the issues on a scale of 1 (lowest importance) to 5 (highest importance) to indicate the extent to which they affected implementation of the projects

<i>Issues arising in progress reports</i>	<i>Rating</i>

7 Project(s) relevance and impact

7.1 Please indicate which of the following long term goals of the student research grants programme were targeted by the projects you supervised: (a) Critical Site conservation / increasing connectivity, (b) Species conservation, (c) Increasing civil society participation, (d) increasing biological knowledge, (e) Mitigating climate change and (f) improving livelihood? (mark with "x" or similar)

<i>Grant No.</i>	<i>Project title</i>	<i>(a)</i>	<i>(b)</i>	<i>(c)</i>	<i>(d)</i>	<i>(e)</i>	<i>(f)</i>	<i>Other?</i>

7.2 The grantees' budget allocation may have been limited, but a project that has promise for success and high impact would normally attract additional financial support from elsewhere. Please indicate if the projects you supervised leveraged any additional funding to add onto CEPF awards. If so, please state the source and the amount.

<i>Grant No.</i>	<i>Project title</i>	<i>Source of additional funding</i>	<i>Amount (\$)</i>

7.3 Have any efforts been made to ensure that the grantees' research projects are contributing information to the sustainable biodiversity monitoring system in the Hotspot? As a guide please consider the following types of support: (i) Publishing of research results; (ii) Support to conferences, meetings; (iii) Created avenues for contributing results to the database; and (iv). Any others? Please name them.

<i>Grant No.</i>	<i>Types of support given (mark with "x" or similar)</i>				<i>Details of support given, with dates</i>
	<i>(i)</i>	<i>(ii)</i>	<i>(iii)</i>	<i>(iv)</i>	

7.4 Please list the key findings of the grantees research projects and state the significant contribution the research has made towards the programme goals listed in Question No. 7.1 above.

<i>Grant No.</i>	<i>Key research findings</i>	<i>Contribution to programme objectives (a,b,c,d,e,f)</i>

7.5 Are there any post-research fieldworks done or planned in respect of grantee's research findings, e.g. extra efforts to raise additional funding for follow up work, linkages created with other institutions or researcher as a result of this programme? If so please give examples, with appropriate references where such information can be verified.

<i>Type of post-research activity</i>	<i>Yes</i>	<i>Explain and give reference</i>
Effort to raise additional funding for follow up work		
Linkages created with other institutions or researchers		
Civil society mobilisation to internalise research results		
Efforts to influence policy change as a result of the research findings		
Others? Please list.		

7.6 Do you know of examples where components of the grantee's research findings have been adopted for field application in biodiversity conservation? If so please give references where such information can be verified.

<i>Grant No.</i>	<i>Examples of research findings that have been adopted for use</i>	<i>Reference source</i>

7.7 Please suggest any post-training support that would ensure continued productivity and contribution of the Grantees to biodiversity conservation in the Hotspot and explain what desired effects they would bring.

<i>Post training support needed</i>	<i>Desired effect/added value</i>

8 Lessons learnt and way forward

8.1 In your opinion, what have been the main strengths of the small grants for student research programme and how did they impact on programme implementation and output

<i>Main programme strength</i>	<i>Impact on implementation and output</i>

8.2 What were the main weaknesses, challenges and threats of the small grants for student research programme and how did they impact on programme implementation and output?

<i>Main weakness, challenge or threat</i>	<i>Impact on implementation and output</i>

8.3 What opportunities existed during project implementation or are foreseen in the future which could have been or could be exploited to improve programme implementation and enhance its impact?

<i>Identified opportunities</i>	<i>How they could be exploited by the programme</i>

8.4 Please use the space below to offer any suggestions as to what could have been done better or other activities that could be incorporated into the programme to improve its implementation and impact.

<i>Suggestion for improvement, inclusion</i>	<i>Desired effect</i>

Annex 6-C

Evaluation of the Small Grants Programme for Student Research in the Eastern Arc and Coastal Forests (EACF) of Kenya and Tanzania

C. Questionnaire for BirdLife Partners

Between September 2006 and September 2008, the Critical Ecosystem partnership Fund (CEPF) funded a small grants programme to support postgraduate students in Kenya and Tanzania to undertake research in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania. As the programme comes to an end, an evaluation is being done.

The overall objective of this evaluation is to capture lessons learnt during the implementation of the small grants programme for student research, which can be used by the management team, BirdLife Partners and other institutions in the design and implementation of similar programmes.

Specifically the evaluation aims to capture performance information on the following three areas: (i) the management of the small grants programme including advertising the grants, review of projects, contractual arrangements, monitoring and reporting; (ii) alignment of funded projects to the objectives of the programme and the overall impact; and (iii) lessons learned in the management of small grants and possible future directions. The information will be analyzed and a report prepared for submission with the final project report.

Your reply helps us to improve the design and implementation of future grant management, capacity development and training programmes. Please complete all sections. If appropriate, you may choose multiple answers.

We prefer to conduct the questionnaire survey by e-mail. Do not worry if the questionnaire gets out of format when filling it in with your computer. Please return the questionnaire to yitmusewe@gmail.com but should you find it difficult to fill in the questionnaire with a computer, feel free to fill it in by hand and send it by ordinary mail to: **Dr. Vitalis Musewe, P.O. Box 62258 – 00200, Nairobi, Kenya.**

Thank you!

1. Contact information (please fill in)

Date:		
Surname:	Other names:	
Position:		
Organisation / Institution:		
Address:		
Telephone:	Mobile:	Fax:
E-mail:		
Website: www.		

2 Institutional details (Please mark the appropriate responses with "x" or similar)

2.1 Which of the following categories best describes your organisation?

<i>Type of organisation</i>					
Research institute		Private sector		NGO	
Academic Institution		Farmers organisation		Other? (specify)	
Government department		Local authority			

2.2 At what level does your organisation work?

<i>Level of organisation</i>					
International		Provincial		Other? (specify)	
Regional		District (or similar)			
National		Community			

2.3 What is/are the main activities of your organisation?

<i>Main activity</i>

Research		Education/Training		Natural resource mgt	
Outreach/extension		Trade/Industry		Conservation	
Policy/Regulation		Consultancy		Other (specify)	
Advocacy		Information services			

2.4 Please give a brief description of the area(s) of activity

--

3 Advertising of the grants

3.1 How did you get to know about the availability of grants for student research from BirdLife International? (mark with "x" or similar)

<i>Method</i>	<i>Mark</i>
An advertisement appearing in the mass media (e.g. BidLife newsletters, other newsletters, E-Bulletins etc?)	
An E-mail circulation (group or individual)	
An advert from BirdLife posted on a notice board?	
Announcement at a professional public function?	
Advice from your employer/superiors?	
Alerted by a friend?	
Other? Please explain.	

3.2 Please indicate whether the following statements regarding guidelines and procedures for preparing the grant application for research grant are true or false? (mark with "x" or similar)

<i>Statement</i>	<i>True</i>	<i>False</i>
Your grantee received and used application guidelines from the Secretariat		
The application guidelines were communicated to your grantee in good time		
The guidelines provided all the information needed to apply		
Where the statement is False, please explain:		

4 Review of proposals

4.1 Please answer “Yes” or “No” in response to the following questions

<i>Question</i>	<i>Ye s</i>	<i>N o</i>
7.15 Was the review process developed as per schedule?		
7.18 Was the review process communicated to stakeholders in good time?		
7.21 Where your answer is No, please explain:		

4.2 Please rate the following factors regarding the quality of the review process

<i>Quality factor</i>	<i>Poor</i>	<i>Good</i>	<i>Excellent</i>
Efficiency (prompt to review and release of results)			
Effectiveness (accurate and results oriented)			

Fairness (all decisions adequately justifiable)			
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4.3 Please list and explain any observations you may have made in respect of the following quality factors in respect of the review process

<i>Factor</i>	<i>Observation and explanation</i>
Complaints regarding review process	
Conflict of interest in review process	
Projects approved unfairly	
Projects rejected unfairly	
Others?	

5 Organisational and contractual arrangements

5.1 **BLI-Partner agreement:** Please rate the fairness of and your level of satisfaction with, the following clauses in the Grant Agreement between BLI and Partner and please explain the major emerging issues during programme implementation. Your response should consider both the terms of the agreement and performance of BLI in fulfilling her obligations.

<i>Clause</i>	<i>Fair</i>	<i>Unfair</i>	<i>Major issues emerging from programme implementation</i>
Duration of Agreement			
Tasks to be performed by Partner			
Tasks to be performed by BLI			

Budget and payment method – whether commensurate with responsibilities			
Progress reporting format and schedule			
Financial reporting format and schedule			
Project conditions			
Termination and recovery of funds			
Insurance			
Variation			

5.2 From your personal point of view please indicate your satisfaction with the following aspects of management (mark “x” or similar)

<i>Procedure</i>	<i>Satisfactory</i>	<i>Unsatisfactory</i>	<i>Major issues emerging from programme implementation</i>
Communication arrangements			
Transparency in managing funds and disbursements			

6 Monitoring and reporting

6.1 Did your institution fully participate in meetings of the Coordination Unit (CU) to monitor and administer the programme? If so, please give details as requested here below (mark with “x” or similar):

<i>Question</i>	<i>Ye</i>	<i>N</i>
	<i>s</i>	<i>o</i>

7.22 Was your institution invited to all the CU meetings scheduled during programme implementation?		
7.23 Was your institution represented in most of the CU meetings that were scheduled throughout the life of the project?		
7.24 Were the CU meetings conducted professionally and were decisions implemented accordingly		
7.25 Where your answer is No, please explain:		

6.2 As a Partner focal-person, please comment on the suitability of the following procedures used in project monitoring and reporting.

<i>Procedure</i>	<i>Fair</i>	<i>Unfair</i>	<i>Major issues emerging from programme implementation</i>
Reporting to follow the Journal of East Africa Natural History Society format			
Reimbursement on case by case basis subject to Request for Funding to Monitor Grantees			

6.3 How would you rate the Grant Agreement's provisions for monitoring the work and performance of the Grantee and management actions in response to arising issues (mark with "x" or similar)?

<i>Commitment indicator</i>	<i>Inadequate</i>	<i>Adequate</i>
University supervisor's monitoring visits		
BLI Partner's supervisory field visits		
Easing of policy regulations in support of Grantee research work		
Management action on progress reports		

6.4 Please list any issues that arose in the Grantees' progress reports that needed management attention. You are requested to rate the issues on a scale of 1 (lowest importance) to 5 (highest importance) to indicate the extent to which they affected implementation of the projects.

<i>Issues arising in progress reports</i>	<i>Rating</i>

6.5 Were there any deliberate attempts by programme managers to link the Grantee with potential collaborators? (mark with "x" or similar)

<i>Type of support</i>	<i>Yes</i>	<i>No</i>	<i>Please elaborate</i>
Reports on who is working where were regularly released			
Updates on CEPF partnerships were made available			
Opportunities for information exchange with peers were provided			
A network newsletter was available and useful			

7 Project(s) relevance and impact

- 7.1 Please indicate which of the following long term goals of the student research grants programme were targeted by the research projects contracted to your organisation: (a) Critical Site conservation / increasing connectivity, (b) Species conservation, (c) Increasing civil society participation, (d) increasing biological knowledge, (e) Mitigating climate change and (f) improving livelihood? (mark with “x” or similar)

<i>Grant No.</i>	<i>Project title</i>	<i>(a)</i>	<i>(b)</i>	<i>(c)</i>	<i>(d)</i>	<i>(e)</i>	<i>(f)</i>	<i>Other?</i>

- 7.2 The grantees’ budget allocation may have been limited, but a project that has promise for success and high impact would normally attract additional financial support from elsewhere. Please indicate if the projects you contracted to your organisation leveraged any additional funding to add onto CEPF awards. If so, please state the source and the amount.

<i>Grant No.</i>	<i>Project title</i>	<i>Source of additional funding</i>	<i>Amount (\$)</i>

- 7.3 Have any efforts been made to ensure that the grantees’ research projects are contributing information to the sustainable biodiversity monitoring system in the Hotspot? As a guide please consider the following types of support: (i) Publishing of research results; (ii) Support to conferences, meetings; (iii) Created avenues for contributing results to the database; and (iv). Any others? Please name them.

<i>Grant No.</i>	<i>Types of support given (mark with "x" or similar)</i>				<i>Details of support given, with dates</i>
	<i>(i)</i>	<i>(ii)</i>	<i>(iii)</i>	<i>(iv)</i>	

7.4 Please list the key findings of the research projects contracted to your organisation and state the significant contribution the research has made towards the programme goals listed in Question No. 7.1 above.

<i>Grant No.</i>	<i>Key research findings</i>	<i>Contribution to programme objectives (a,b,c,d,e,f)</i>

7.5 Are there any post-research fieldworks done or planned in respect of grantee's research findings, e.g. extra efforts to raise additional funding for follow up work, linkages created with other institutions or researcher as a result of this programme? If so please give examples, with appropriate references where such information can be verified.

<i>Type of post-research activity</i>	<i>Yes</i>	<i>Explain and give reference source</i>
Effort to raise additional funding for follow up work		

Linkages created with other institutions or researchers		
Civil society mobilisation to internalise research results		
Efforts to influence policy change as a result Of the research findings		
Others? Please list.		

7.6 Do you know of examples where any components of the grantees' research findings have been adopted for field application in biodiversity conservation? If so please give references where such information can be verified.

<i>Grant No.</i>	<i>Examples of research findings that have been adopted for use</i>	<i>Reference source</i>

7.7 Please suggest any post-training support that would ensure continued productivity and contribution of the Grantees to biodiversity conservation in the Hotspot and explain what desired effects they would bring.

<i>Post training support needed</i>	<i>Desired effect/added value</i>

8 Lessons learnt and way forward

8.1 In your opinion, what have been the main strengths of the small grants for student research programme and how did they impact on programme implementation and output

<i>Main programme strength</i>	<i>Impact on implementation and output</i>

8.2 What were the main weaknesses, challenges and threats of the small grants for student research programme and how did they impact on programme implementation and output?

<i>Main weakness, challenge or threat</i>	<i>Impact on implementation and output</i>

8.3 What opportunities existed during project implementation or are foreseen in the future which could have been or could be exploited to improve programme implementation and enhance its impact?

<i>Identified opportunities</i>	<i>How they could be exploited by the programme</i>

8.4 Please use the space below to offer any suggestions as to what could have been done better or other activities that could be incorporated into the programme to improve its implementation and impact.

<i>Suggestion for improvement, inclusion</i>	<i>Desired effect</i>

Annex 6-D

Evaluation of the Small Grants Programme for Student Research in the Eastern Arc and Coastal Forests (EACF) of Kenya and Tanzania

D. Questionnaire for CU and Secretariat Staff

Between September 2006 and September 2008, the Critical Ecosystem partnership Fund (CEPF) funded a small grants programme to support postgraduate students in Kenya and Tanzania to undertake research in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania. As the programme comes to an end, an evaluation is being done.

The overall objective of this evaluation is to capture lessons learnt during the implementation of the small grants programme for student research, which can be used by the management team, BirdLife Partners and other institutions in the design and implementation of similar programmes.

Specifically the evaluation aims to capture performance information on the following three areas: (i) the management of the small grants programme including advertising the grants, review of projects, contractual arrangements, monitoring and reporting; (ii) alignment of funded projects to the objectives of the programme and the overall impact; and (iii) lessons learned in the management of small grants and possible future directions. The information will be analyzed and a report prepared for submission with the final project report.

Your reply helps us to improve the design and implementation of future grant management, capacity development and training programmes. Please complete all sections. If appropriate, you may choose multiple answers.

We prefer to conduct the questionnaire survey by e-mail. Do not worry if the questionnaire gets out of format when filling it in with your computer. Please return the questionnaire to yitmusewe@gmail.com but should you find it difficult to fill in the questionnaire with a computer, feel free to fill it in by hand and send it by ordinary mail to: **Dr. Vitalis Musewe, P.O. Box 62258 – 00200, Nairobi, Kenya.**

Thank you!

1. Contact information (please fill in)

Date:		
Surname:	Other names:	
Position:		
Organisation / Institution:		
Address:		
Telephone:	Mobile:	Fax:
E-mail:		
Website: www.		

2 Institutional details (Please mark the appropriate responses with "x" or similar)

2.1 Which of the following categories best describes your organisation?

<i>Type of organisation</i>					
Research institute		Private sector		NGO	
Academic Institution		Farmers organisation		Other? (specify)	
Government department		Local authority			

2.2 At what level does your organisation work?

<i>Level of organisation</i>					
International		Provincial		Other? (specify)	
Regional		District (or similar)			
National		Community			

2.3 What is/are the main activities of your organisation?

<i>Main activity</i>

Research		Education/Training		Natural resource mgt	
Outreach/extension		Trade/Industry		Conservation	
Policy/Regulation		Consultancy		Other (specify)	
Advocacy		Information services			

2.4 Please give a brief description of the area(s) of activity

--

3 Advertising of the grants

3.1 What channels did your organisation use to advertise the availability of grants for student research under this programme? (mark with "x" or similar)

<i>Method</i>	<i>Mark</i>
Mass media (e.g. BidLife newsletters, other newsletters, E-Bulletins etc?)	
E-mail circulation (group or individual)	
An adverts posted on a notice boards of stakeholder organisations?	
Announcement at professional public functions?	
Other? Please explain.	

3.2 Please indicate whether the following statements regarding guidelines and procedures for preparing the grant application for research grant are true or false? (mark with "x" or similar)

<i>Statement</i>	<i>Yes</i>	<i>No</i>

All potential grantees received and used application guidelines from the Secretariat		
The application guidelines were communicated to grantees in good time		
There were complaints about guidelines not providing all the information needed to apply		
There were applicants who obviously did not use the guidelines in their applications		
Please explain any unfavourable answers:		

4 Review of proposals

4.1 Please answer “Yes” or “No” in response to the following questions

<i>Question</i>	<i>Yes</i>	<i>No</i>
Was the review process developed as per schedule?		
Was the review process communicated to stakeholders in good time?		
Where your answer is No, please explain:		

4.2 Please rate the following factors regarding the quality of the review process

<i>Quality factor</i>	<i>Poor</i>	<i>Good</i>	<i>Excellent</i>
Efficiency (prompt to review and release of results)			
Effectiveness (accurate and results oriented)			
Fairness (all decisions adequately justifiable)			

4.3 Please list and explain any observations you may have made in respect of the following quality factors in respect of the review process

<i>Factor</i>	<i>Observation and explanation</i>
Complaints regarding review process	
Conflict of interest in review process	
Projects approved unfairly	
Projects rejected unfairly	
Others?	

5 Organisational and contractual arrangements

5.1 **CEPF-BLI agreement:** Please rate the fairness of and your level of satisfaction with, the following clauses in the Grant Agreement between CEPF and BLI and please explain where your rating is “Unfair”. Your response should consider both the terms of the agreement and performance of BLI in fulfilling her obligations.

<i>Clause</i>	<i>Fair</i>	<i>Unfair</i>	<i>Major issues emerging from programme implementation</i>
The grant amount			
Grant term			
Payment schedule			
Reporting: types and schedules			

5.2 **BLI-Partner agreement:** Please rate the performance of BLI Partners with respect to the various clauses of the Grant Agreement between BLI and Partners and please explain where your rating is “Poor”.

<i>Clause</i>	<i>Satisfactory</i>	<i>Unsatisfactory</i>	<i>Major issues emerging from programme implementation</i>
Keeping to agreed programme duration			
Performance of allocated tasks			
Budget performance			
Progress reporting			
Financial reporting			

5.2 From your personal point of view please indicate your satisfaction with the performance of your partners in the following aspects of programme management (mark “x” or similar)

<i>Procedure</i>	<i>Satisfactory</i>	<i>Unsatisfactory</i>	<i>Major issues emerging from programme implementation</i>
Communication arrangements			
Transparency in managing funds and disbursements			

6 Monitoring and reporting

6.1 Did your institution fully participate in meetings of the Coordination Unit (CU) to monitor and administer the programme? If so, please give details as requested here below (mark with “x” or similar):

<i>Question</i>	<i>Yes</i>	<i>No</i>
7.26 Was your institution invited to all		

	the CU meetings scheduled during programme implementation?		
7.29	Was your institution represented in most of the CU meetings that were scheduled throughout the life of the project?		
7.32	Were the CU meetings conducted professionally and were decisions implemented accordingly		
7.35	Where your answer is No, please explain:		

6.2 As the coordinating agency for programme implementation, please comment on the suitability of the following procedures used in project monitoring and reporting.

<i>Procedure</i>	<i>Fair</i>	<i>Unfair</i>	<i>Major issues emerging from programme implementation</i>
Reporting to follow the Journal of East Africa Natural History Society format			
Reimbursement on case by case basis subject to Request for Funding to Monitor Grantees			

6.3 From the reports you have received, how would you rate stakeholders' performance in monitoring the work of the Grantees (mark with "x" or similar)?

<i>Commitment indicator</i>	<i>Inadequate</i>	<i>Adequate</i>
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University supervisor's monitoring visits		
BLI Partner's supervisory field visits		
Easing of policy regulations in support of Grantee research work		
Management action on progress reports		

Please elaborate your observations where the rating is "Inadequate":
--

6.4 Please list the main issues that arose in the Grantees' progress reports that needed management attention. You are requested to rate the issues on a scale of 1 (lowest importance) to 5 (highest importance) to indicate the extent to which they affected implementation of the projects.

<i>Issues arising in progress reports</i>	<i>Rating</i>

6.5 Were there any deliberate attempts by programme managers to link the Grantees with potential collaborators? (mark with "x" or similar)

<i>Type of support</i>	<i>Yes</i>	<i>No</i>	<i>Please elaborate by giving specific examples</i>
Reports on who is working where were regularly released			
Updates on CEPF partnerships were made available			

Opportunities for information exchange with peers were provided			
A network newsletter was available and useful			

7 Projects relevance and impact

7.1 Please indicate which of the following long term goals of the student research grants programme were targeted by the funded research projects: (a) Critical Site conservation / increasing connectivity, (b) Species conservation, (c) Increasing civil society participation, (d) increasing biological knowledge, (e) Mitigating climate change and (f) improving livelihood? (mark with “x” or similar)

<i>Grant No.</i>	<i>Project title</i>	<i>(a)</i>	<i>(b)</i>	<i>(c)</i>	<i>(d)</i>	<i>(e)</i>	<i>(f)</i>	<i>Other?</i>

7.3 Have any efforts been made to ensure that the grantees’ research projects are contributing information to the sustainable biodiversity monitoring system in the Hotspot? As a guide please consider the following types of support: (i) Publishing of research results; (ii) Support to conferences, meetings; (iii) Created avenues for contributing results to the database; and (iv). Any others? Please name them.

<i>Grant No.</i>	<i>Types of support given (mark with “x” or similar)</i>				<i>Details of support given, with dates</i>
	<i>(i)</i>	<i>(ii)</i>	<i>(iii)</i>	<i>(iv)</i>	

7.4 Please list the key findings of the research projects contracted to your organisation and state the significant contribution the research has made towards the programme goals listed in Question No. 7.1 above.

<i>Grant No.</i>	<i>Key research findings</i>	<i>Contribution to programme objectives (a,b,c,d,e,f)</i>

7.5 Are there any post-research fieldworks done or planned in respect of grantee's research findings, e.g. extra efforts to raise additional funding for follow up work, linkages created with other institutions or researcher as a result of this programme? If so please give examples, with appropriate references where such information can be verified.

<i>Type of post-research activity</i>	<i>Yes</i>	<i>Explain and give reference source</i>
Effort to raise additional funding for follow up work		
Linkages created with other institutions or researchers		
Civil society mobilisation to internalise research results		

Efforts to influence policy change as a result Of the research findings		
Others? Please list.		

7.7 Do you know of examples where any components of the grantees' research findings have been adopted for field application in biodiversity conservation? If so please give references where such information can be verified.

<i>Grant No.</i>	<i>Examples of research findings that have been adopted for use</i>	<i>Reference source</i>

7.7 Please suggest any post-training support that would ensure continued productivity and contribution of the Grantees to biodiversity conservation in the Hotspot and explain what desired effects they would bring.

<i>Post training support needed</i>	<i>Desired effect/added value</i>

8 Lessons learnt and way forward

8.1 In your opinion, what have been the main strengths of the small grants for student research programme and how did they impact on programme implementation and output

<i>Main programme strength</i>	<i>Impact on implementation and output</i>

8.2 What were the main weaknesses, challenges and threats of the small grants for student research programme and how did they impact on programme implementation and output?

<i>Main weakness, challenge or threat</i>	<i>Impact on implementation and output</i>

8.3 What opportunities existed during project implementation or are foreseen in the future which could have been or could be exploited to improve programme implementation and enhance its impact?

<i>Identified opportunities</i>	<i>How they could be exploited by the programme</i>

8.4 Please use the space below to offer any suggestions as to what could have been done better or other activities that could be incorporated into the programme to improve its implementation and impact.

<i>Suggestion for improvement, inclusion</i>	<i>Desired effect</i>

Annex 7

Evaluation activities and work schedule

<i>Date</i>	<i>Activity or output</i>
1 st Dec 2008	<ul style="list-style-type: none"> • Work started
1 st - 8 th Dec 2008	<ul style="list-style-type: none"> • Review of project documents to identify stakeholders and their contact information and assemble programme documents • Study programme documents to identify performance indicators and develop performance questions • Develop and dispatch review instruments
9 th Dec 08-15 th Jan 08	<ul style="list-style-type: none"> • Study programme documents and database for data and information • Follow up on receipt of questionnaires by stakeholders by phone and email contacts, resend where necessary • Receive filled questionnaires from stakeholders • Conduct follow up interviews to verify data and information
16 th – 25 th Jan 09	<ul style="list-style-type: none"> • Collate responses and analyse data and information
26 th Jan – 9 th Feb 09	<ul style="list-style-type: none"> • Prepare and submit interim report
15 th Feb 09 2009	<ul style="list-style-type: none"> • Final evaluation report is delivered

Annex 8

Set up and management and procedures of CEPF Small Grants for Student Research

Background

Towards the end of 2006, CEPF approved to fund a project to enable the Coordination Unit (CU) to issue small grants to students undertaking research in the forests of Eastern Arc Mountains and the coastal region of Kenya and Tanzania. This project was developed and will be implemented by BirdLife (Partners in Kenya and Tanzania and the Secretariat) and ICIPE on behalf of the CU. The small grants for student research programme was set up to assist students at graduate and post graduate level planning to undertake research work within the hotspot, which either contributes significantly to the conservation of (critically) threatened species or increase connectivity. Projects that collect information that contributes to Red List Assessments also qualify.

Applications are submitted to the BirdLife Africa Partnership Secretariat, reviewed by the CU and decisions made on a tri-monthly basis. A scorecard for quickly checking suitability, feasibility and relevance of the applications is used in the review. Decisions to provide funding or otherwise are made by BirdLife and ICIPE based on the feedback from the CU assessment, and any controversial applications will be sent out to external reviewers or discussed at CU meetings.

Whereas the application and review process for research projects were discussed agreed and are already being implemented, detailed implementation arrangements have not received similar attention yet. This note outlines the envisaged process and is aimed to serve as a basis for internal discussions within BirdLife on how the project will be implemented.

Proposed management arrangements

Main activities

Briefly, the project has four main components as follows:

1. Advertising, seeking and reviewing of applications and communications with applicants regarding their applications: Led by Secretariat
2. Issuing contracts, authorizing payments, monitoring research project implementation, ensuring reporting by grantees: Led by the BirdLife Partners
3. Project coordination, disbursements to BirdLife Partners, grantees and ICIPE, reporting to CEPF on technical and financial issues and production of the synthesis report: Led by Secretariat.
4. Evaluation of the Small Grants Programme: Led by ICIPE

Finances

Funding for the project implementation is managed as follows:

1. Each Partner will receive USD 5,000 over the two years to cover staff time spent in issuing contracts, authorizing payments, monitoring grantees and reporting.
2. BirdLife secretariat will receive USD 11,250 over the two years to cover staff time spent in developing the project, developing adverts, calling for and reviewing applications, communications with applicants, reporting to CEPF and producing a synthesis report.
3. ICIPE will receive USD 4,000 towards an internal evaluation of the programme and capturing of lessons for future programmes.
4. A pool containing USD 2,250 will be available to BirdLife Partners (and other CU members) to facilitate monitoring activities. This will be managed in such a way that the maximum amount spent on any one student is USD 150.
5. A pool of USD 160,000 will be available for students, and this money will be made available in such a way that no project is awarded more than USD 10,000.
6. USD 1,000 was available for producing and disseminating adverts (has already been used).
7. USD 1,500 will be available for production of a glossy synthesis report and disseminating it widely to targeted audiences.
8. USD 10,000 will be available for financial and other management input by BirdLife Global Secretariat

Coordination

1. The project will be coordinated by the secretariat (PKN and GE) who will be responsible for timely delivery of outputs with adequate involvement of the BirdLife Partners and other CU members.
2. Each Partner will appoint a focal point for supporting the implementation of this project – Paul Nnyiti for WCST and Alex Ngari for Nature Kenya.
3. Implementation will be guided by discussions at the CU, which will act as the project steering committee, with this project included as a rolling agenda item – first meeting scheduled for 9 March 2007.
4. Coordination within BirdLife (Partners and secretariat) will be tagged to the existing BirdLife Coordination Committee established for supporting the Sustainable Biodiversity Monitoring project.
5. Evaluation will be coordinated by ICIPE in liaison with the secretariat and CU.

Implementation plan

1. Contracts will be issued by BirdLife Secretariat and awarded to Partners and to ICIPE to implement their roles. Disbursement schedules, accounting and auditing requirements will be highlighted.
2. Contracts will be issued by BirdLife Partners in Kenya and Tanzania to grant recipients working in the respective countries. These contracts will be based on the contracts between the secretariat and the BirdLife Partners and templates will be provided by the secretariat. The contracts will specify three disbursement steps (at signature, on delivery of progress report, and on delivery of final report) reporting schedules and formats to be used as well as guidance on contributing to the Sustainable Biodiversity Monitoring system. Reporting formats will follow the Journal of East Africa Natural History Society guidelines, where grantees will be encouraged to submit articles for publication.
3. Authorisations to pay grantees will be issued by the BirdLife Partners to the secretariat based on successful signing of contracts or delivery of satisfactory progress and final project reports.
4. Grantees will report to the BirdLife Partners (both technical and financial reports) and once the reports are approved, they will be submitted to the secretariat for reporting to CEPF, developing the final synthesis report and for evaluation purposes.
5. Funding for monitoring grantees will be requested on a case by case basis using a form that will be prepared by the secretariat.
6. An internal evaluation of the small grants programme as a whole will be undertaken coordinated by ICIPE to provide lessons for future similar endeavors. This will involve the development of a process that outlines the information requirements and formats. Once these are approved, formats will be provided to the concerned stakeholders (the secretariat, BirdLife Partners and grantees) to collect relevant information during the course of the project. Beginning in September 2008, the information will be analysed and a report prepared for submission with the final project report in Dec 2008.

Terms of reference for the project partners

BIRDLIFE AFRICA PARTNERSHIP SECRETARIAT

BirdLife Africa Partnership Secretariat plays the role of overall co-ordination of the project and ensuring that all project outputs are delivered in an efficient and timely manner. The secretariat also ensures that project partners are provided with required inputs in a timely manner and with logistic and technical support as necessary.

In addition to this co-ordination role, the secretariat will be directly responsible for leading the implementation of the following activities:

Activity	Timing/Milestones	Deliverable
Activity 1.1. Monitor small grants programme for research students in the quarterly CU meetings.	Quarterly Starting Mar 2007	Output 1. The EACF Co-ordination Unit administers the Small Grants Programme, including transparent reviewing, receipt and distribution of funds, issuing of contracts, local reporting and final evaluation, stakeholder awareness and reports to CEPF.
Activity 1.2. Raise awareness through a variety of media about the small grants for students research programme and how stakeholders can access grants.	Already started and to continue till Sept 2007	
Activity 1.3. Receive, process and distribute funds for Small Grants Projects.	Commit USD 50,000 by Dec 2006	
Activity 2.5. Engage expert reviewers to review applications to the small grants	Already started and to continue till Sept 2007	
Activity 1.7. Liaise with CEPF to ensure that all reporting requirements are met.	Quarterly financial reports starting 31 Jan 2007 Bi-annual technical reports starting 31 Jan 2007	
Activity 2.1. Develop and document an application form, eligibility criteria and guidelines for applying for the small grants.	Done	Output 2. A comprehensive and complementary suite of Small Grant projects is in place to address connectivity issues, biological knowledge of sites and the conservation of threatened species.
Activity 2.2. Develop and document a review process for small grants that is objective transparent and efficient.	Partially Done. The document was due by end of 2006	
Activity 2.3. Implement the agreed review process in a timely and objective manner.	Started and will continue till Sept 2007	
Activity 2.4. Inform grantees of other ongoing projects in the region	Lists of who is working where distributed together with the contracts. Grantees to added to 'who is working where' mailing lists	
Activity 2.7. Develop formats for inputting data from these projects into the outcomes database and support grantees to provide this information.	Formats provided together with contracts to grantees and used throughout the project	
Activity 2.8. Review the reports of the EACF small grants and produce a final synthesis report on IPs 4.1 and 4.2	Dec 2008	

TERMS OF REFERENCE

NATIONAL BIRDLIFE PARTNER INSTITUTIONS (Nature Kenya and WCST)

Some of the tasks of the project will be carried out by the staff of the national Partner institutions. Furthermore, the national BirdLife Partners will have responsibility for the implementation of the following activities:

Activity	Timing/Milestone	Output
Activity 1.4. Issue and manage contracts for successful applicants for Small Grants.	Four contracts (should have been) issued by Dec 2006	Output 1. The EACF Co-ordination Unit administers the Small Grants Programme, including transparent reviewing, receipt and distribution of funds, issuing of contracts, local reporting and final evaluation, stakeholder awareness and reports to CEPF.
Activity 1.5. Receive and process progress and final reports from Small Grant projects.	Throughout the project and all final reports received by September 2008	
Activity 2.6. Engage members of the CU to monitor and support grantees in the implementation of their projects.	Throughout the project	

TERMS OF REFERENCE

ICIPE

To develop a process for the evaluation of the of small grants programme and apply it in order to capture lessons.

Activity	Timing/Milestone	Output
Activity 1.4. Design and implement an internal evaluation process for Small Grants Programme.	Process was to be presented to CU by Dec 2006 Formats to be included in contracts to grantees starting Jan 2007 Evaluation report available by Dec 2008	Process for review and forms developed for final evaluation of student research projects documented by end 2006

Annex 8a

BLI/Partner Agreement for Project Implementation

This Agreement, dated.....2007, is made between:

BirdLife International, Wellbrook Court, Girton Road, Cambridge CB3 0NA, U.K., acting through their Africa Division whose registered office is at the ICIPE Campus, Kasarani Road, Nairobi, Kenya, PO BOX 3502 00100 (hereinafter referred to as 'BirdLife')

and

Nature Kenya, PO Box 44486, 00100 - Nairobi, Kenya (hereinafter referred to as 'Nature Kenya').

WHEREAS:

A. BirdLife has entered into a Funding Agreement with the Critical Ecosystem Partnership Fund ("CEPF") to fund a project entitled: **'Small Grants for Student Research in the EACF Hotspot'** over a period of two (2) years.

B. Nature Kenya is willing to participate in the project and to provide the project outputs on the terms stated;

THEREFORE BirdLife and Nature Kenya have agreed as follows.

1. Duration of Agreement

This Agreement will cover the period **1 September 2006 to 31 August 2008**.

2. Tasks to be performed

The Conservation International has approved a Work plan, and Monitoring and Evaluation plan for the project (attached hereto as **Annex 1**). Nature Kenya agrees to carry out all tasks allocated to them within the scope of the approved Work plan.

In addition, Nature Kenya agrees to:

1. Issue and manage contracts to grantees implementing their work in Kenya. These contracts will be based on this contract (between BirdLife and Nature Kenya) and

templates will be provided by BirdLife. The contracts will specify three disbursement steps (at signature, on delivery of progress report, and on delivery of final report) reporting schedules and formats to be used as well as guidance on contributing to the Sustainable Biodiversity Monitoring system. Reporting formats will follow the Journal of East Africa Natural History Society guidelines, where grantees will be encouraged to submit articles for publication.

2. Issue timely authorisation to BirdLife to pay grantees based on successful signing of contracts or delivery of satisfactory progress and final project reports.
3. Monitor research project implementation, ensuring reporting by grantees. Funding for monitoring grantees will be requested from BirdLife on a case by case basis using a form prepared by BirdLife and will not exceed USD 150 per student.
4. Engage members of the Coordination Unit (CU) to monitor and support grantees in the implementation of their projects.
5. Appoint a focal point for supporting the implementation of this project.
6. Bring out general project coordination issues for discussion in the existing BirdLife Coordination Committee established for supporting the Sustainable Biodiversity Monitoring project
7. Receive both technical and financial reports from grantees. Once the reports are approved, submit them to BirdLife for reporting to CEPF, developing the final synthesis report and for evaluation purposes.

BirdLife agrees to:

1. Advertise, seek and review applications and communicate with applicants regarding their applications
2. Do the overall project coordination and be responsible for timely delivery of outputs with adequate involvement of the Nature Kenya and other project partners.
3. Disburse allocated funds to Nature Kenya and the grantees
4. Reporting to CEPF on technical and financial issues and produce a synthesis report
5. Facilitate Nature Kenya to monitor research activities of the grantees.

3. Financial and Progress Reporting

(a) Financial reporting

BirdLife is required to submit Financial Progress Reports within thirty (30) days following the close of each calendar quarter in a format specified by CEPF along with any receipts or specified attachments. BirdLife is also required to submit requests to Conservation International for payments on a quarterly basis.

(b) Project progress reporting

BirdLife is required to submit all progress reports which shall include an update on progress made against **outputs one and two**, and shall be submitted in a format specified by CI. Technical reports will be due within thirty (30) days following the close of each calendar semester (six-months) with the first semester ending 31 December 2006. BirdLife will also submit a **final report** within sixty (60) days following the termination of the grant agreement. This document shall include a comprehensive, detailed report of activities undertaken and an evaluation of accomplishments/successes under the grant agreement and will be submitted in a format specified by CI as administrator of CEPF.

Nature Kenya therefore agrees:

(i) to retain copies of all vouchers, receipts and other financial records (including computer records) relating to expenditure of project funds, to keep all such records for a minimum period of three years after the end of the project, and to provide these to BirdLife or to Conservation International if required;

(ii) to provide a report to BirdLife on the progress of the project measured against the tasks allocated to Nature Kenya in the Workplan over the preceding period, on the following timetable:

For second semester: report for the period 1 January 2007 to 30 June 2007, by 7 July 2007.

For third semester: report for the period 1 July 2007 to 31 December 2007, by 7 January 2008.

For fourth semester: report for the period 1 January 2008 to 30 June 2008, by 7 July 2008.

For fifth semester: report for the period 1 July 2007 to 31 August 2008, by 7 January 2009.

For the Final project report covering the full duration of the project, by 31 January 2009.

BirdLife will provide guidance to Nature Kenya as necessary on what information these reports should contain, in the light of Conservation International's Reporting Guidelines on CEPF Grants (see also Clause 5 below).

4. Budget and payment

The budget for the funds allocated to Nature Kenya within the main project is a total of US\$ 5,000 spread over the 2 years: US\$ 2,500 in 2007 and US\$ 2,500 in 2008. This budget will be used to cover staff time spent in issuing contracts, authorizing payments, monitoring grantees and reporting. An additional pool containing USD 2,250 will be available to Nature Kenya, Wildlife Conservation Society of Tanzania and other CU members to facilitate monitoring activities. This will be managed in such a way that the maximum amount spent on any one student is USD 150.

The first payment will be for US\$ 2,500, representing the full amount of the budget for the period ending 31 December 2007. This payment will be made immediately on receipt of a copy of this Agreement duly signed by Nature Kenya. The other payment will be made to Nature Kenya following receipt of progress report for period ending 31 December 2007.

[BirdLife reserves the right to delay or withhold payment, or to reduce the amount of future installments, if Nature Kenya fails to provide reports as set out in Clause 3 above or if Nature Kenya has not expended the funds already provided in previous installments. BirdLife must seek approval from the Conservation International to carry forward unspent funds to the next financial year, and Nature Kenya must therefore keep BirdLife informed if any under-expenditure is likely to occur.]

5. Project Conditions

Nature Kenya agrees to observe all the conditions of the Funding Agreement between BirdLife and Conservation International (attached hereto as **Annex 3**) and the Reporting Guidelines on CEPF Grants insofar as they are applicable to Nature Kenya.

6. Termination and recovery of funds

(i) BirdLife reserves the right to suspend or terminate this Agreement immediately and without further payment, and to seek the repayment of all or part of the funds already paid, in the event that the Conservation International grant to BirdLife is suspended or terminated under any terms. BirdLife and Nature Kenya will endeavour to ensure that the circumstances that would lead to termination or repayment of grant by the Conservation International as set out in that clause are avoided.

(ii) Either party may terminate this Agreement by giving not less than three months' notice in writing to the other party if it becomes clear that no further purpose would be served by continuing the project or if difficulties arise which cannot be overcome within a reasonable period. In the event of such termination, any unspent funds remaining after all costs and unavoidable commitments have been met shall be returned to BirdLife.

7. Insurance

Nature Kenya is responsible for its own insurance against all eventualities arising from the project howsoever caused. BirdLife accepts no responsibility for liability or personal injury, loss of goods or articles, or any other accident.

8. Contact Points

For: BirdLife International
Name: Paul K. Ndang'ang'a

Tel +254 20 8562246
Fax +254 20 85622459
Email paul.ndanganga@birdlife.or.ke

For Nature Kenya:
Name: Alex Ngari
Tel: +254 20 3746090
Fax: +254 20 3741049
Email: office@naturekenya.org

9. Bank Details

Name of bank to which payments should be made:
Address of bank branch:

Account number.....
Account name.....
Sort code.....

10. Acknowledgements

Nature Kenya agrees to acknowledge the Critical Ecosystem Partnership Fund (CEPF) funding in any public material relating to the project. CEPF must be consulted before its name or logo is used in any fundraising or marketing material.

11. Variations

This Agreement can be varied only by the written consent of the parties.

12. Acceptance

Confirmation of acceptance of the above terms and conditions:

For and on behalf of BirdLife International:

Name

Position

Signature

Date

For and on behalf of Nature Kenya:

Name

Position

Signature

Date

Project ref:

Annex 8b

Partner/Grantee contract template

This Grant Agreement (“Agreement”) datedis made between: Nature Kenya, PO Box 44486, 00100 - Nairobi, Kenya (hereinafter referred to as ‘WCST’), and

Name and address:
(hereinafter referred to as “Grantee”),

For the Project:

WHEREAS:

- A. Nature Kenya (the BirdLife Partner in Kenya) has entered into a Project Implementation Agreement with CEPF on behalf of the Coordination Unit to manage the project grants in Kenya funded by CEPF through a project entitled: “**Small Grants for Building Research Capacity among Tanzanian and Kenyan students**“.
- B. Grantee is willing to participate in the project and provide outputs on the terms stated;

THEREFORE Nature Kenya and Grantee have agreed as follows:

1. Duration of Agreement:

This Agreement will cover the period [day month year] to [day month year] unless otherwise modified or terminated. All expenses must be incurred within the duration of the Grant.

2. The Grant:

Nature Kenya agrees to grant funds to the grantee not to exceed a total amount of [XXXX - words (US\$ XXX)] (The “Grant”) for the purpose and on the terms and conditions set forth in this Agreement.

3. Purpose of the Grant:

The Grant is provided to support the project described in **Attachment 1** to this Agreement (the “project”). The grant shall be used solely for the purpose and activities described therein.

4. Payment Schedule:

Subject to the terms and conditions contained herein, the Grant will be available to the Grantee in three installments as follows:

- a) An initial payment of \$XXX will be made after execution of this agreement
- b) A second payment will be made, on the basis of an acceptable progress report. The initial and second payments shall not exceed 90% of the total Agreement value.
- c) A final payment will be made upon receipt and approval of a Final Project Report and a Final Financial Report.

The payments described above shall be made to the following account:

Name of Bank:

Bank Address:

Account Name:

Account Number:

SWIFT code:

No other funds shall be provided under this Grant.

5. Reporting

Project Reports. The Grantee shall submit the following project reports to Nature Kenya:

- a) Grantee shall file **Progress Reports** as required herein. These reports shall include an update on progress made against objectives and shall be submitted in the format that will follow the *Journal of East Africa Natural History Society* format. The reports must be certified by the academic supervisor. Reports are due within 15 (fifteen) days following the close of each six month calendar (or three month calendar for projects not exceeding six months in duration) during the term of this agreement, (clause 1).
- b) **Final Report.** The grantee shall file a final report within 30 (thirty) days following the expiration or termination of this Grant Agreement. This document shall include comprehensive, detailed report of activities undertaken and an evaluation of accomplishments/ success under this Agreement. This report shall be submitted in the *Journal of East Africa Natural History Society* format.

Financial Reports. The Grantee shall submit financial reports as follows:

- a) Financial Progress Report. Grantee shall file the first financial Progress Report within 30 (thirty) days following the close of each six month calendar (or three month calendar for projects not exceeding six months in duration) during the term of this agreement (clause 1).
- b) Final Report. The Grantee shall file a final financial report within 30 (sixty) days following the expiration or termination of this Grant Agreement.
- c) Both the progress and final financial reports will be submitted along with copies of vouchers, receipts and other financial records (including computer records) relating to expenditure of project funds.

6. Project Conditions

In addition, the Grantee agrees to observe the following conditions:

- a) To contribute to the Sustainable Biodiversity Monitoring system and the Conservation Outcomes Database for the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania following guidelines provided by Nature Kenya (**Attachment 2**).
- b) At the end of the project to handover the following list of equipment acquired through this grant to (Host University Department or National Research Institution):
Equipment list (and quantity):
 1. —
 2. -
 3. -
 4. -
- c) To seek to submit research articles arising from the work undertaken under this grant for publication in the *Journal of East Africa Natural History Society*. The research article will have to be cleared by the Academic Supervisor before final submission.

7. Termination and recovery of funds

Either party may terminate this Agreement by giving not less than three months' notice in writing to the other party if it becomes clear that no further purpose would be served by continuing the project or if difficulties arise which cannot be overcome within a reasonable period. In the event of such termination, any unspent funds remaining after all costs and unavoidable commitments have been met shall be returned to Nature Kenya.

8. Insurance

The Grantee is responsible for his/her own insurance against all eventualities arising from the project howsoever caused. Nature Kenya accepts no responsibility for liability or personal injury, loss of goods or articles, or any other accident.

9. Project Contact:

For Nature Kenya:

Name: Alex Ngari

Tel: +254 20 3746090
Fax: +254 20 3741049
Email: office@naturekenya.org

All Administrative notices, program requests, and deliverables relating to this Grant shall be addressed to this contact person.

10. Acknowledgements

The Grantee agrees to acknowledge the Critical Ecosystem Partnership Fund (CEPF) funding and the support provided by Nature Kenya and BirdLife International in any public material relating to the project. CEPF must be consulted before its name or logo is used in any fundraising or marketing material.

11. Variations

This Agreement can be varied only by the written consent of the parties.

12. Acceptance

Confirmation of acceptance of the above terms and conditions:

For and on behalf of Nature Kenya:

Name

Position

Signature

Date

Grantee:

Name:

University:

Signature:

Date:

Academic Supervisor:

Name:

University:

Signature:

Date:

Project ref:

Attachment 1: Project proposal and Budget

Attachment 2: Guidelines for contribution of information to Sustainable Biodiversity Monitoring System and Conservation Outcomes Database

Annex 10

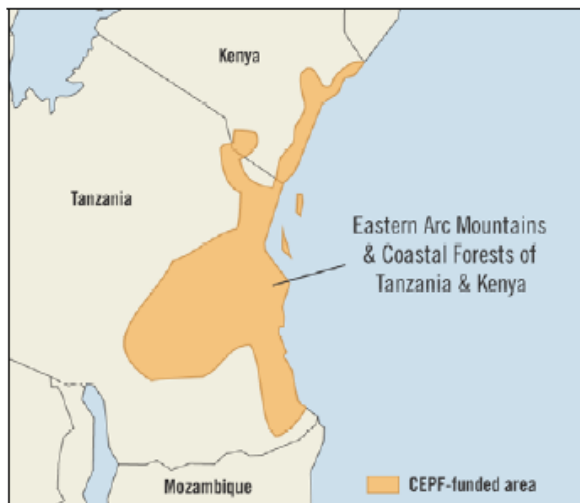
Call for proposals for CEPF small grants for student research



CONSERVATION RESEARCH GRANTS IN THE FORESTS OF THE EASTERN ARC AND COASTAL REGION OF KENYA AND TANZANIA

Call for applications

The Critical Ecosystem Partnership Fund (CEPF)⁵ through its Coordination Unit⁶ in the Eastern Africa Region invites proposals for conservation research projects from upcoming scientists in Kenya and Tanzania.



Who can apply for grants?

The purpose of the grants is to provide opportunities for 16 post-graduate students to contribute to the generation of scientific knowledge relevant to the conservation of the over 333 globally threatened species found in the 160 Key Biodiversity Areas in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania (refer to the Ecosystem Profile/strategy at www.cepf.net). The applicants for this grant must be resident in Kenya or Tanzania and registered at a local college or university. Staff of the Coordination Unit member institutions are not eligible to apply for grants.

What kind of research is eligible?

Eligible research must contribute to at least one of the two **themes of the grant**, namely :

1. Targeted efforts to increase connectivity of biologically important habitat patches
2. Efforts to increase the biological knowledge of the sites and to conserve globally threatened species.

Nature of grants.

The size of the grants will vary between USD 5,000 and 10,000 but preference will be given to requests for smaller amounts.

The projects under this grant are expected to run within the period January 2007 and September 2008.

⁵ The Critical Ecosystem Partnership Fund (CEPF) is a joint initiative of Conservation International, The Global Environment Facility (GEF), the Government of Japan, the John D. and Catherine T. MacArthur Foundation and the World Bank. A fundamental CEPF goal is to ensure that civil society is engaged in conserving the hotspots (www.cepf.net).

⁶ The co-ordination Unit is composed of a consortium of four institutions (BirdLife International, International Centre of Insect Physiology and Ecology, WWF-East Africa Regional Programme Office and the Tanzania Forest Conservation Group).

The grants will not cover salaries and stipends but can include subsistence during fieldwork.

Application procedure

A proposal structured in the format below is required:

1. Name and addresses of applicant (including email) and nationality
2. Project title: not more than 13 words
3. Academic programme (e.g. M.SC, Ph.D, Diploma) and institution where registered
4. Academic supervisors and their contacts
5. Start and end dates (duration) of the project
6. Study site (s) and / or focal species
7. A 50 word summary of the proposed project
8. A brief project description covering:
 - a. background information and how the proposal contributes to the theme(s) of this grant (up to one page)
 - b. statement of the research problem and objectives of the research (up to one page), and
 - c. expected results and deliverables (0.5 pages)
9. A detailed description of the methodology, proposed analysis of data and workplan (up to 4 pages)
10. Detailed budget (if in local currency, please indicate the USD equivalent)
11. References

What happens to your application?

Once submitted, your proposal will be reviewed through a transparent, objective and timely review process. All applicants will be informed of the results of the review within one month. In exceptional cases, further consultation may be needed in which case decisions will be made within three months.

Deadline: The grants are available in the period 2006 -2008. Contracts are issued once every quarter.

Send any queries and completed proposals (preferably by email) to:

The Project Manager, CEPF Small grants

BirdLife Africa Partnership Secretariat

P. O. Box 3502-00100 Nairobi.

Email: birdlife@birdlife.or.ke

ADDITIONAL GUIDELINES (issued later to clarify issues to prospective applicants)

Availability of other funding:

It is a requirement for all applicants to clearly state where they are receiving other funds for their studies and clarify how much is already available for the research work. This will help to show the gap that this particular grant is meant to fill.

Budget:

Allowances: This grant is not able to provide salaries and per diems. However, modest field subsistence allowances can be provided (covering only actual field days). This applies not only to the principal researcher, but also to the supervisors and field assistants who may be required to be out in the field. Supervisory field visit costs will only be covered for a maximum of three days in the field. The total cost of these allowances should not exceed 50% of the total grant amount requested.

Equipment: Unless in special justifiable circumstances, the grant will not cover the costs of purchasing the following equipment: computers, cameras, GPS and any other equipment whose price is more than US\$ 300 per unit. It is assumed that such equipment will be provided (for free or at a reasonable fee) by the host universities or local institutions where the applicants are affiliated. The applicant will be expected to return all equipment acquired using this grant to the host university or research institution at the end of the research. The equipment will be returned through Wildlife Conservation Society of Tanzania (WCST) in Tanzania or Nature Kenya in Kenya, who will confirm delivery as per contract. Applicants should be ready to co-share equipment with other grantees from the same university or working at the same sites if required.



Annex 11
Final scorecard for small grants review

Name of Applicant:						
Project Title:						
Amount Requested:						
Name of Reviewer:						
Date Reviewed:						
Score card for small grants review	Scores				Final Score	
Selection Criteria*	Poor (= 0)	Good (= 2)	Excellent (= 3)	Weight*	(Score* weight)	Reasons for rank / remarks
How well is the project focussed on either efforts to enhance connectivity or enhance biological knowledge of threatened and near-threatened species and their sites?				2		
How well is the project targeting GAPS in the current portfolio of projects (see attached list of sites not covered by current projects) and recommended actions in the ecosystem profile?				1		
Quality of the project proposal (Design, coherence, analysis methods, feasibility)				2		
How realistic and responsible is the budget?				1		
Added value of CEPF funding (level of need). NB: Information on other sources of funding for studies to be provided by each applicant.				1		
TOTAL						
	Reject	Resubmit	Fund			
Reviewers conclusion and recommendation (Please tick one):						
Any additional remarks:						
*The criteria have been weighted based on their importance (normal=1; high=2). Final score for each of the criteria will thus be obtained by multiplying the initial score by the weight. (see example in next sheet)						

Annex 12

Instituting Standardized Sustainable Biodiversity Monitoring in the Eastern Arc Mountains and Coastal forests region of Kenya and Tanzania.

Instructions for contributing information to the EACF Database

Introduction - What is happening?

Since February 2005, BirdLife International and its Partners in Kenya and Tanzania, (Nature Kenya and Wildlife Conservation Society of Tanzania respectively), have been coordinating a project that aims to institute a standardized sustainable biodiversity monitoring system in the Eastern Arc Mountains and Coastal forests (EACF) region of Kenya and Tanzania. This initiative is funded by the Critical Ecosystems Partnership Fund (CEPF) and is meant to steer a coordinated approach to biodiversity monitoring at species (i.e. over 340 globally threatened species and others), sites (over 160 sites), and habitats/landscape levels within the region. Besides just monitoring species, sites and habitats, it is envisioned that the project will provide a mechanism to evaluate the impact of conservation activities arising from the five-year CEPF investment within the region and how the conservation outcomes will have been achieved (i.e. avoiding extinction, protecting sites and creating corridors where necessary). The ultimate and long-term goal is to ensure that actual biodiversity monitoring is embedded into future core and routine conservation and research activities/programmes by governments, other conservation agencies and community based organizations operating across the region both within and beyond the auspices of the CEPF/EACF project.

As a first step, through a stakeholder workshop, consensus was reached between the key stakeholders in the region on: (1) the need for a collaborative and coordinated approach to biodiversity monitoring within the region which is based on the globally applied pressure-state-response model (2) a list of indicators for monitoring at species, sites, habitat/landscape level and the appropriate monitoring tools/frameworks and (3) the need for a spirit of partnership among all stakeholders in data gathering, management, sharing and dissemination.

At this stage, BirdLife International through its Partners is striving to enhance coordinated acquisition, storage, handling and sharing of biodiversity monitoring data across the EACF region. This is achieved through developing continuous linkages with ongoing initiatives and the main repositories of biodiversity data in the EACF region to develop capacity in monitoring, enhance information sharing and dissemination and minimize duplication. You are invited to contribute to this by **informing us what work you are doing in the region and sharing relevant information/data with us.**

Agreed indicators for monitoring biodiversity in the EACF

It is imperative that standard and practical biodiversity monitoring indicators are implemented to measure conservation outcomes in the EACF hotspot. A set of 19 indicators (Table 1) were agreed upon by stakeholders in the EACF. This first set is useful especially for collating information at the site, species or local level and it gives the user flexibility in choosing from a variety (though sometimes repetitive) of indicators and tools.

To aggregate information at the regional level, a second set of fewer (nine) indicators (Table 2) has been derived by further revising, prioritizing and aggregating the first set of indicators. This will help in systematic collection of data to generate aggregated information to report at the EACF hotspot scale. In fact four of these regional-level indicators are being used to monitor biodiversity conservation outcomes at a regional scale in other hotspots (e.g. Madagascar).

Why is the data needed (and how is it going to be used)?

The data contributed will contribute to a coordinated monitoring of the conservation status and threats of key taxa, sites and ecosystem processes in the EACF region. Information arising from the monitoring will be used to:

- influence effective site management and conservation action and re-direction of investment as required
- facilitate Red Lists Assessments and re-assessments
- Publicize existing information to minimize duplication of effort and ensure sharing of information is enhanced.
- update information on literature and contacts relating to species and sites outcomes

What will happen to the data once received?

Once data and monitoring information have been captured, they will be refined into high quality information. The information will then be fed quickly and directly into mainstream government Protected Area planning and information systems as well as the EACF region Conservation Outcomes database and reporting mechanism. Nature Kenya and WCST working with BirdLife International Africa Secretariat and Conservation International in collaboration with other stakeholders will manage and maintain the EACF region Conservation Outcomes database, and make information widely available to key institutions within the hotspot and on the web. They will also continue to collate, compile, refine and populate the database with information on species and sites outcomes, ground-truth, update information on literature and contacts relating to species and sites outcomes.

The information will at the end be refined for, among others:

- contribution to achievement of the CBD 2010 Biodiversity Target, focusing on reducing the rate of loss of the components of biodiversity (indicator: status and trends of the components of biological diversity)
- making available to governments for conservation planning and policy formulation
- use as reference in making Red-listing decisions for species in the EACF
- contribution to various relevant conventions to help in decision making
- contribution towards achievement of Millennium Development Goals, especially, Goal 7 (Ensure Environmental Sustainability)

How will the data be accessed?

Based on information already collated and synthesized, regular reports on the biodiversity status and trends (State-Pressure), and actions (Response) to address them will be produced and disseminated widely over the duration of the project. This project seeks to stimulate networking among researchers, conservationists and policy makers. There exists a stakeholders' contacts database, which is being regularly updated and circulated and based on which stakeholders can communicate directly amongst themselves and consult those harbouring supplementary information and data not captured in this database.

What are the benefits of contributing to this initiative?

- Linkage to a wider partnership of stakeholders and access to information on 'who is working where and on what' within the region. This will facilitate sharing of information and experiences as well as accessing relevant contacts.
- The information contributed will become part of more detailed and accessible information resource which will be disseminated widely. Participants will have access to up-to-date and refined information on other taxa and sites of interest.
- Through dissemination to relevant authorities the information captured by this initiative will make a significant impact on biodiversity conservation in the region.

Your contribution is invited

This initiative depends on your contribution, which you can make through sharing information that may add value to biodiversity monitoring in the EACF region. Some guidelines for submitting data/information are listed below.

- A. Identify the specific indicators (Table 1) for which you have information. For each of the indicators that you have information, please provide the following:
 1. **The indicator assessed**
 2. **Name of site/species/landscape assessed**
 3. **Dates of assessment**
 4. **Tools/Methods used to obtain information**
 5. **Overall conclusions (e.g. the inference from Management Effectiveness Tracking Tool or any other tool used to tell whether threats at the site area increasing/decreasing or effective interventions are on at the site). NB: For this part you may provide three types of results for each data point (after the baseline): (i).Actual level of indicator (ii) Change since baseline, and (iii) Change since last monitored**
 6. **Author(s), reference(s) or link(s) to follow if more details are needed.**
 7. **The name of the authority to be acknowledged for the information provided**

- B. If you are undertaking other research or conservation action on a species in the region, please provide information on the species name, the kind of research or action, and whether the work is ongoing.
- C. If you are working at one of the protected sites in the region, strive to have a Management Effectiveness Tracking Tool (METT) filled for the site and returned to the contacts below.

Send the information to the following contact persons:

In Kenya through Nature Kenya: Alex Ngari (office@naturekenya.org)

In Tanzania through Wildlife Conservation Society of Tanzania (WCST): Jasson John or Saidi Mbwana (wcst@africaonline.co.tz)

Information can also be submitted to BirdLife Africa Partnership Secretariat through: Paul K. Ndang'ang'a (paul.ndanganga@birdlife.orke) or George Eshiamwata (george.eshiamwata@birdlife.or.ke)

NB: The source of data will be credited within the database through full referencing and quoting of the sources of data. All reports produced and circulated from this work will include full references and acknowledgement of the sources of data.

Table 1: List of monitoring indicators and tools agreed by stakeholders in the EACF

8 Indicator	9 Level at which it is applied	10 Main tools/methods for obtaining information	
STATE INDICATORS	Forest quality and forest health	Site/habitat	<ul style="list-style-type: none"> - Disturbance Transects - IBA Monitoring Framework - Remote Sensing (Aerial Surveys; Satellite Image Analysis)
	Area of different types of forest and degree of fragmentation	Site/habitat	<ul style="list-style-type: none"> - Remote Sensing (Aerial surveys; Satellite Image Analysis) - Habitat characterization and ground-truthing - Patch analysis
	Presence of endemic and globally threatened species and where possible abundance for selected species (e.g. threatened, endemic or other 'flagship' species)	Site/habitat	<ul style="list-style-type: none"> - Methods will vary with the taxa selected
	Change in species IUCN Red List Category (Vulnerable, Endangered, Critically Endangered, etc.)	Species	<ul style="list-style-type: none"> - IUCN / SSC Red List - Data Analysis
	Change in species abundance for a few key species (e.g. endemics, threatened, migratory)	Species	<ul style="list-style-type: none"> - Field Surveys - IBA Monitoring Framework
	Forest Cover Change	Landscape Site/habitat	<ul style="list-style-type: none"> - Remote Sensing (Aerial surveys; Satellite image analysis) - Forest Health Monitoring Framework
	Gaps in a) national legal recognition; b) international acceptance of nationally legislated reserves; c) making biodiversity conservation an official goal of key biodiversity areas.	Site/habitat	<ul style="list-style-type: none"> - GIS - Evaluating gazettelement list - Questionnaire with site managers - IBA Monitoring Framework - Site Surveys
	Percentage area within Protected Areas	Landscape Site/habitat	<ul style="list-style-type: none"> - Maps - GIS - World Database on Protected Areas
	Environmental (ecological and economic) services from the site e.g. quality and quantity of water flowing from the site, soil erosion, non-timber forest products, pollination	Site/habitat	<p>May include:</p> <ul style="list-style-type: none"> - Hydrological surveys - Soil erosion measurements - Economic valuation and PRA
PRESSURE INDICATOR			<ul style="list-style-type: none"> - - Market Survey (timber, bush meat etc) - Disturbance Transects/ surveys - CITES - Changes in density - Geographic distribution - Hunting levels/Cartridge frequency

8 Indicator	9 Level at which it is applied	10 Main tools/methods for obtaining information
Changes in human population density in wards/divisions containing Eastern Arc or Coastal Forests	Landscape	<ul style="list-style-type: none"> - National Statistics - GIS
Fire Frequency	Landscape Site/habitat	<ul style="list-style-type: none"> - Remote Sensing (MODIS fire points), - Direct Observation - Disturbance Transects
		-
RESPONSE INDICATORS	Changes in forest management effectiveness	<ul style="list-style-type: none"> - METT (Management Effectiveness Tracking Tools) Indices
	Presence and use of management plan to protect the residential threatened species	<ul style="list-style-type: none"> - Management Plans - IBA Monitoring Framework
	Actions and research targeting key (threatened/ endemic/migratory) species	<ul style="list-style-type: none"> - IBA Monitoring Framework - Survey of research initiatives, by looking at: <ul style="list-style-type: none"> ▪ Number of research projects per year ▪ Number of publications per year ▪ Amount of funding allocated for research per year
	Policy development (include site, species focused issues)	<ul style="list-style-type: none"> - Legal Notices - Revised policies, laws, regulations
	Number of sites from which benefits accrue to local communities	<ul style="list-style-type: none"> - Household Questionnaires - PRA - RRA
	Change in policies/rules to reduce tourist practices with negate impact on threatened/endemic species	<ul style="list-style-type: none"> - Surveys/assessment of tourism related policy change - IBA Monitoring Framework
	Increase in ecotourism projects protecting species threatened by tourism	<ul style="list-style-type: none"> - Survey/assess ecotourism projects in EACF

Table 2: List of a collapsed set of monitoring indicators and tools for aggregating information at the regional level

	Indicator	Level	Tool/Method
STATE INDICATORS	Change in status of threatened species	Species	Assessment of the relative rate at which the number of species in each IUCN Red List category changes (Red List Index)
	Change in habitat extent in Key Biodiversity Areas (KBAs)	Landscape	Analysing satellite data to track habitat change in KBAs over years
	Change in fragmentation in biodiversity conservation corridors	Landscape	Analysing satellite data to track changes in the proportion of habitat far (> 1 km) from non-habitat edge, and the proportion of habitat not in small (<100 km ²) isolated patches
PRESSURE INDICATORS	Change in extraction intensity of globally threatened species for commercial use	Species	Data derived from TRAFFIC database and Disturbance transects
	Change in human population density in administrative districts contained in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania	Landscape	Review of National Bureaus of Statistics Reports in Kenya and Tanzania
RESPONSE INDICATORS	Change in protection status of Key Biodiversity Areas (KBAs)	Site/Landscape	Tracking the change in percentage of KBAs with official protection status using e.g. the World Database on Protected Areas (WDPA) database and requesting for information elsewhere.
	Change in Management Effectiveness of Protected Areas/KBAs.	Site/Landscape	The World Bank/WWF Management Effectiveness Tracking Tool (METT). METT will be used to assess the % of sites being managed effectively and the mean % change in scores across sites between assessments.
	Change in number of threatened species with research and monitoring in place	Species	Assessment of species-related data collected using a species data request form
	Change in number and percentage of globally threatened species that have national protection status	Species	Review of relevant acts, policies, legal notices in Kenya and Tanzania

More information?

For more information on this initiative, please contact:

Paul Kariuki Ndang'ang'a

BirdLife Africa Partnership Secretariat

P O Box 3502 - 00100 Nairobi, Kenya

Tel +254 (0)20 8562490/8562246; Fax +254 (0)20 8562259

Email: paul.ndanganga@birdlife.or.ke

Annex 13.

Call for contribution to Arc Journal

Dear xx

Congratulations on being awarded a CEPF Student Grant.

As part of the CEPF Coordination Unit's efforts to share the experiences and lessons learnt from its investment in the Eastern Arc and Coastal Forests, we are planning to publish an edition of the Arc Journal dedicated to the CEPF Student Grants.

I am kindly requesting that you contribute a short account of the research supported by CEPF to the Arc Journal. The Arc Journal is a newsletter dedicated to forest conservation issues relevant to the Eastern Arc and Coastal Forests. The Arc Journal aims to keep stakeholders involved in forest conservation up-to-date with the latest issues and initiatives relevant to the area. It is widely distributed in Tanzania and Kenya to practitioners, academics, government staff and NGOs. It is also published on the internet. This represents an opportunity to publish an account of your research in a well-known local publication.

Articles should include an introduction outlining the background, rationale and objectives of the research; a brief description of the methods; a summary of the results and any conclusions that can be drawn from the research. As the Arc Journal is not an academic journal, articles should avoid using technical jargon and should be written as clearly as possible. Results may be presented in a fairly general way to avoid jeopardising publication in academic journals. In the event that your research is not yet completed, we would welcome articles outlining the progress so far including any immediate results that are available. Articles must be accompanied by photographs or maps. Articles should be prepared in Word and should be between 1000 and 1600 words in length. Articles and photos should be submitted directly to the Editor of the Arc Journal, Nike Doggart at ndoggart@tfcg.or.tz. The deadline for receiving articles is June 30th.

Please do not hesitate to contact me or the Editor should you have any queries regarding this request.

Yours truly,

Annex 14

Request for Funding to Monitor Grantees

Project Title: Small Grants for Student Research in the EACF Hotspot
Organization: BirdLife International
Application Code: 1113419264

Objective

The CEPF Small Grants for Student Research grant programme has been running since October 2006. As a requirement, it is incumbent upon the Programme Coordination and Implementation Team to put in place a mechanism to ensure satisfactory progress with the project goals including effective and timely implementation of the student projects. The purpose is to track all major project variables – cost, time, scope, and quality of deliverables. The overall objectives of the process are to track and review actual project accomplishments and results. The visibility on the ground of Project Implementation Team is crucial in ensuring keeping track, submission of timely progress reports, identify risks, problems, and issues, updates on progress against work plan and reflect actual progress and therefore the scope of this visit.

Grant Recipient to Complete The Following

Name: _____
Organization & Address: _____
Telephone: _____
Date the Expense has been or will be incurred: _____
E-mail Address: _____
Names of Grantee (s) to Visit: _____
Name of the Project (s): _____
Project Start Date (s): _____
Current Phase: _____

Date: _____
Project Start Date:
Amount Requested: _____ Cash/Cheque _____
Signature of Claimant Individual: _____
Approved by: _____

As part of this exercise, kindly report on current issues/action for the significant items that need management attention and intervention, whether the project scope of work changed, and upcoming target dates be missed, grantee experiences, resource constraints, key milestones, accomplishments and challenges encountered (if any).

Annex 15

List of grants awarded by the CEPF small grants for student research project

<i>Grant No.</i>	<i>Project</i>	<i>Student name</i>	<i>Nationality</i>	<i>Degree</i>	<i>Date of award</i>	<i>Start of contract</i>	<i>End of contract</i>	<i>Approved Budget</i>
SG001	The proximity of the farms to Arabuko – Sokoke forest influences the diversity of insect pollinators and fruit set.	Kenneth Njoroge Mwangi	Kenyan	M.Sc.	1 Feb 07	1 Feb 07	30 Sep 08	\$7,750.00
SG004	Beekeeping for forest conservation: Filling a knowledge gap at Arabuko Sokoke Forest, Kenya	Susan Sande Okoth	Kenyan	PhD	1 Feb 07	1 Sep 07	31 Sep 08	\$9,182.00
SG005	Effects of Joint Forest Management Institutional Arrangements on Forest Condition and Local Livelihood	Simon Deus Lugandu	Tanzanian	PhD	7 Mar-07	15 Mar 07	14 Sep 08	\$8,025.00
SG007	Abundance and Diversity of Small Mammals in Disturbed and Undisturbed Forests at Uluguru Mountains	Elikana Kalumanga	Tanzanian	M.Sc.	7 Mar-07	1 Feb 07	30 Sep 07	\$8,326.00
SG012	Ecological Dynamics and Conservation Importance of the Eastern African Coastal Forests ecosystems in Tanzania.	Mligo, Cosmas	Tanzanian	PhD	28 May 07	1 Jun 07	30 Sep 08	\$8,020.38
SG014	Density and Inter-fragment Dispersal of Bird Species in Three Coastal Forest Fragments, Kenya	Simon Nganda Musila	Kenyan	M.Sc.	3 May 07	1 Sep 07	30 Sep 08	\$9,108.32
SG015	Assessment of Species Composition and Diversity of Small Mammals at Saadani National Park	Christopher Sabuni	Tanzanian	M.Sc.	23 Feb 07	1 Mar 07	31 Oct 07	\$5,044.00
SG016	<i>Cedrela mexicana</i> impacts on indigenous trees diversity in Kimboza Forest Reserve, Morogoro Tanzania	Charles Patrick	Tanzanian	M.Sc.	8 Mar 07	1 Mar 07	30 Nov 07	\$3,985.14
SG019	Bird-habitat relationships of some Kenyan coastal forest bird species	Bernard Cheruiyot Soi	Kenyan	M.Phil.	15 May 07	1 Jun 07	30 Sep 08	5,487. 43
SG020	The ecology and molecular characterisation of the endangered	Ann Njeri Mwaura	Kenyan	M.Sc.	4 Apr 07	1 Apr 07	30 Sep 08	\$9,388.85

	and endemic <i>G. taitensis</i> (land snail) of the Taita Hills, Kenya.							
SG023	Distribution, diversity and population status of herpetofauna in lower Tana River forests, Kenya.	Julius K. Nguku	Kenyan	M.Sc.	15 Jun 07	1 Jul 07	30 Sep 08	\$7,839.28
SG024	Impact of Human Disturbance On Coastal Forests: The Case Study Of Tong'omba Forest Reserve In Kilwa District, Tanzania.	Hassan Senkondo Chikira	Tanzanian	M.Sc.	13 Jul 07	1 Jul 07	31 Jul 08	\$4,920.00
SG025	Ecological Survey Of The Golden Rumped Elephant Shrew (<i>Rhynchocyon Chrysopygus</i>) In The North Coastal Forests Of Kenya.	Grace Wambui Ngaruiya	Kenyan	M.Sc.	11 Jul 07	1 Feb 07	30 Sep 08	\$6,833.00
SG026	The distribution, diversity and populations status of Land snails from Shimba Hills National Reserve, Kenya.	Mercy Nelima Ndalila	Kenyan	M.Sc.	11 Jul 07	1 Feb 07	30 Sep 08	\$6,712.12
SG027	Conservation status of threatened endemic birds in fragmented Boni coastal forest, Kenya	Maurice Ogoma	Kenyan	M.Sc.	24 Oct 07	1 Feb 07	31 Sep 08	\$7,627.75
SG028	Land use dynamics and human impacts on conservation status of <i>Warburgia stuhlmannii</i> in Dakatcha and Marafa forests	Mercy Mwanikah	Kenyan	M.Sc.	3 Sep 07	1 Sep 07	31 Sep 08	\$5,458.35
SG031	The status of invasive plant species at Udzungwa Mountain National Parks	Mzeru Deogratias Paul	Tanzanian	MSc	6 Oct-07	1 Jul 07	31 Jul 08	\$4,900.00
SG033	Quantifying the Abundance, Distribution and Local Use of Rare Plant Species in East Usambaras Tanzania	Linda Stephen Kiluma	Tanzanian	M.Sc.	15 Oct 07	1 Jul 07	31 Jul 08	\$5,920.00
SG034	Potential and Constraints Of Eco-Tourism In Improving Nature Conservation and Livelihoods	Rehema A.Shoo	Tanzanian	M.Sc.	15 Oct 07	1 Oct 07	30 Sep 08	\$5,980.00
SG037	Role of the Tana crested mangabey (<i>Cercocebus galeritus galeritus</i>)	Kimuyu Duncan	Kenyan	M.Sc.	15 Oct 07	1 Sep 07	31 Sep 08	\$5,739.00

	Peters) in forest regeneration	Maingi						
SG039	Assessment of Rare Plants and Restoration Potential through Seed Bank in Zaraninge Coastal Forest, Bagamoyo District Tanzania	Nancy Eliad Pima	Tanzanian	M.Sc.	13 Oct 07	1 Aug 07	30 Sep 08	\$7,080.00
SG043	Vegetation response to climate change and human impacts in the Eastern Arc Mountains	Cassian T. Mumbi	Tanzanian	PhD	31 Oct 07	1 Nov 07	31 Jul 08	\$5,640.00
SG044	Assessment of the biodiversity of tetranychid mites in the Eastern Arc Mountains and East African Coastal Forest Mosaic Hotspot	Faith Jebet Toroitich	Kenyan	PhD	1 Nov 07	1-Sep-07	31-Sep-08	\$3,375.00
SG49	Assessment of Carbon Sequestration in Agroforestry Systems for Improved Livelihood in Uluguru Mountains	Wilson Ancelm Mugasha	Tanzanian	M.Sc.	13 Sep 07	1 Mar 08	30 Nov 08	\$3,713.18
SG51	Willingness to pay for irrigation water: A case of Southern Uluguru Slopes, Tanzania	Aloyce Mpiri	Tanzanian	M.Sc.	13 Sep 07	1 Mar 08	28 Feb 09	\$3,929.00

Annex 16

Timing of contract awards and variances in the durations of projects requested and those awarded

Grant No.	Grantee	Degree Level	Proposed project period			Actual project period			Date contract signed	Late (+) or early (-) start date	Project duration variance
			Start	End	Duration	Start	End	Duration		weeks	months
SG001	Mwangi, Kenneth N.	MSc	Nov 06	Oct 07	12	1 Feb 07	30 Sep 08	20	1 Feb 07	+11	+8
SG004	Okoth, Susan Sande	PhD	Jan 06	Dec 08	36	1 Sep 07	31 Sep 08	13	1 Feb 07	+80	-23
SG005	Lugandu, Simon Deus	PhD	Mar 07	Sep 08	18	15 Mar 07	14 Sep 08	18	7 Mar-07	0	0
SG007	Kalumanga, Elikana	MSc	Mar 06	Jul 07	17	1 Feb 07	30 Sep 07	8	7 Mar-07	+48	-9
SG012	Mligo, Cosmas	PhD	Oct 06	Sep 09	36	1 Jun 07	30 Sep 08	16	28 May 07	+31	-20
SG014	Simon Nganda Musila	MSc	Sep 06	Sep 08	37	1 Sep 07	30 Sep 08	11	3 May 07	+48	-26
SG015	Sabuni, Christopher	MSc	Oct 06	Aug 07	11	1 Mar 07	31 Oct 07	7	23 Feb 07	+19	-4
SG016	Patrick, Charles	MSc	Jan 07	May 07	5	1 Mar 07	30 Nov 07	8	8 Mar 07	+8	+3
SG019	Bernard Cheruiyot Soi	MPhil	Apr 07	May 08	14	1 Jun 07	30 Sep 08	16	15 May 07	+7	+2
SG020	Ann Njeri Mwaura	MSc	Jun 07	Mar 08	10	1 Apr 07	30 Sep 08	18	4 Apr 07	-8	+8
SG023	Julius K. Nguku	MSc	Jul 07	Mar 08	9	1 Jul 07	30 Sep 08	15	15 Jun 07	0	+6
SG024	Chikira, Hassan S.	MSc	Aug 07	Jul 08	12	1 Jul 07	31 Jul 08	11	13 Jul 07	-4	-1
SG025	Ngaruiya, Grace W.	MSc	Feb 07	Sep 08	19	1 Feb 07	30 Sep 08	20	11 Jul 07	+36	+1
SG026	Mercy Nelima Ndalila	MSc	Jul 07	Mar 08	9	1 Feb 07	30 Sep 08	20	11 Jul 07	-20	+11
SG027	Maurice Ogoma	MSc	Oct 07	Apr 08	7	1 Feb 07	31 Sep 08	20	24 Oct 07	-32	+13
SG028	Mercy Mwanikah	MSc	Sep 07	Aug 08	12	1 Sep 07	31 Sep 08	13	3 Sep 07	0	+1
SG031	Mzeru, Deogratias P	MSc	Oct 07	Sep 09	24	1 Jul 07	31 Jul 08	13	6 Oct-07	-11	-11
SG033	Kiluma, Linda Stephen	MSc	Oct 07	Sep 08	12	1 Jul 07	31 Jul 08	13	15 Oct 07	-11	+1
SG034	Shoo, Rehema A.	MSc	Sep 07	Jun 08	10	1 Oct 07	30 Sep 08	12	15 Oct 07	+4	+2
SG037	Kimuyu Duncan Maingi	MSc	Oct 07	Sep 08	12	1 Sep 07	31 Sep 08	13	15 Oct 07	-4	+1
SG039	Pima, Nancy Eliad	MSc	Oct 07	May 08	8	1 Aug 07	30 Sep 08	14	13 Oct 07	-8	+6
SG043	Mumbi, Cassian T.	PhD	Aug 07	Oct 08	14	1 Nov 07	31 Jul 08	9	31 Oct 07	+11	-5
SG044	Faith Jebet Toroitich	PhD	Nov 07	Aug 08	10	1-Sep-07	31-Sep-08	13	1 Nov 07	-8	+3
SG049	Mugasha, Wilson A.	MSc	Dec 07	Aug 08	9	1 Mar 08	30 Nov 08	9	13 Sep 07	+11	0
SG051	Mpiri, Aloyce	MSc	Nov 07	Oct 08	12	1 Mar 08	28 Feb 09	12	13 Sep 07	+15	0

Annex 17

List of materials in the project monitoring database

1. Project proposal
 - 1.1 The full proposal for the CEPF small grants for student research programme in logframe format.
 - 1.2 Output indicators.
2. No content
3. Financial management
 - 3.1 The programme budget
 - 3.2 Accounts - well kept and properly updated to current.
4. MOUs
 - 4.1 CEPF-BLI
 - Main contract signed in January 2007
 - Amendment signed June 2008.
 - 4.2 BLI-Partner:
 - Templates and signed contracts for NK and WCST
 - M&E programme review for ICIPE
 - Management procedures (document)
 - 4.3 Partner-grantee contracts: Scans of signed pages only available for 5 grantees, with Instructions for contributing to Database
5. Projects database
 - 5.1 Grant applications:
 - Entries - 14 proposals (none of which was in the funded category).
 - None of the proposals by the grantees was available in this database.
 - 5.2 Grantee emails
 - Emails for all 25 grantees
 - 5.3 Spreadsheets
 - 5.4.1 Analysis of contributions to GTS and Sites
 - Analysis covers projects of 23 grantees only; the last two projects awarded were not entered.

- Gaps column is empty
- 5.4.2 Gap analysis KBA sites
 - List of 96 priority sites, which were either not mentioned in any of the proposals received by end of 2005 or mentioned but not funded.
- 5.4.3 Grantee list summary as of 27 Feb 2008
 - Short project descriptions for 22 grantee projects funded as at that time
 - CEPF contribution to each of the projects in US\$
- 5.4 Spreadsheet - Project Database (Overall)
 - Project reporting and tracking (Column entries):
 - Record of amounts paid to grantees for instalments 1 and 2 – entry for all grantees
 - Date of contract signing – entry for all grantees
 - Dates progress reports expected: 1st report – entries for all grantees; 2nd report – empty; 3rd report – empty
 - Date actual reports received: 1st report – entry for 16 grantees; 2nd report – 1 grantee; final report - empty
 - Database: 51 projects considered through the review process
 - Details recorded under following columns: Project title; Name of applicant; Academic level; Nationality; University and Address; Supervisors and Contacts; Proposed project (start date and end date); Proposed budget; Area (academic) of research; Review records (interim recommendations); Final decision. 25 projects were accepted and the rest rejected
 - Feedback to candidates
- 6. Progress reports
 - 6.1 Birdlife to CEPF
 - Jul-Dec 06

- Jan-Jun 07
 - Jul-Dec 07
 - Jan-Jun 08
- 6.2 Grantee to Birdlife:
- 1st report – 15 entries of 1st reports (few others reported received after evaluation started)
- 6.3 Project tracking – same as in 5.2 above
- 1st report - 12 entries
 - 2nd report – 3 entries
 - Final report – 1 entry
7. Review process
- 7.1 Tools for reviewers
- Scorecard
 - Gap analysis – list of sites without CEPF funding
 - Gap analysis of new sites for project extension to June 08
- 7.2 Feedback from reviewers – entries available for all projects reviewed
8. Communications
- 8.1 Articles for Arc Journal
- Submissions by only 11 grantees were recorded
- 8.2 Communications
- The Call – samples of the advertisement in the form of txt, posters, web entries and press release
 - Contracts addresses
 - PowerPoint presentation of the programme
- 8.3 Meetings and workshops
- GEM files containing Project M&E guidelines
 - Training in database management
9. Monitoring and evaluation (Files)

- 9.1 Management procedures
- 9.2 Format for Request for funds to monitor grantees
- 9.3 TORs for final programme review (ICIPE)
- 10. No content
- 11. Publications (Files)
 - 11.1 Call to contribute to Arc Journal (Mar 08)

Annex 18

Distribution list for posters announcing student grants under the small grants project

#	Name of institution	Country	Contact person	Contact e-mail address
1	A Rocha Kenya, Mwamba Bird Observatory and Field Study Centre, Watamu	Kenya	Colin Jackson	mwamba@arocha.org; colin.jackson@arocha.org
2	African Wildlife Foundation Centre, Nairobi	Kenya (Regional)	Hellen Gichohi, Vice President for Programmes,	hgichohi@awfke.org
3	Albertine Rift Programme c/o WWF Eastern Africa Regional Programme Office, Nairobi	Kenya	Marc Languy, Programme Coordinator	mlanguy@wwfearpo.org
4	Centre for Biodiversity, National Museums of Kenya, Nairobi	Kenya	Dr. Helida Oyieke, Director	cbd@museums.or.ke
5	Coastal Forest Conservation Unit, National Museums of Kenya, Nairobi	Kenya	Quinten Luke	quentin.luke@swiftkenya.com
6	Conservation and Management of the Eastern Arc Mountains Forests, Morogoro	Tanzania	Neil Burgess	easternarc@easternarc.or.tz, neil.burgess@wwfus.org
7	Department of Biological Sciences, Kenyatta University, Nairobi	Kenya	Head of Department	biology@ku.ac.ke
8	Department of Forest Biology Sokoine University of Agriculture, Morogoro	Tanzania	Pantaleo T Munishi, Head of the Department	pmunishi2001@yahoo.com
90	Department of Zoology, Jomo Kenyatta University of Science and Technology, Nairobi	Kenya	Head of Department	
10	Department of Zoology, University of Dar Es Salaam, Dar es Salaam	Tanzania	Kim Howell	khowell@udsm.ac.tz
11	East African Wildlife Society, Wundanyi	Kenya	James Mwang'ombe	crossborder@wananchi.com, mwangombejames@yahoo.com
12	Eastern Arc Mountains Conservation Endowment Fund Morogoro	Tanzania	Francis Sabuni Executive Director	eamcef@morogoro.net ; fansabuni@yahoo.com
13	Faculty of Forestry and Nature Conservation, Sokoine University of Agriculture, Morogoro	Tanzania	Seif Madoffe	madoffe@suanet.ac.tz , madoffe@yahoo.co.uk
14	Faculty of Natural Resources,	Kenya	Dean of Faculty	

	Egerton University, Njoro			
15	Faculty of Science, Maseno University, Maseno	Kenya	Dean of Faculty	dsci@maseno.ac.ke , baps@maseno.ac.ke (HOD, Botany), zoo@maseno.ac.ke (HOD, Zoology)
16	Fauna and Flora International, c/o East Africa Wildlife Society, Nairobi	Kenya (Regional)	Arthur Mugisha Country Director,	arthur.mugisha@fauna-flora.org ; Arthur.mugisha@eawildlife.org
17	Forest and Bee-keeping Division, Ministry of Natural Resources and Tourism, Dar Es Salaam	Tanzania	Director, Forest and Bee-keeping Division,	fordev@africaonline.co.tz
18	Forest Department Headquarters, Ministry of Environment and Natural Resources, Nairobi	Kenya	D.K Mbugua, Chief Conservator of Forests	ccf@wananchi.com
19	ICIPE, Duderuville, Nairobi	Kenya	Ian Gordon, Leader, Environmental Health Programme	igordon@icipe.org
20	IUCN Regional Office for Eastern Africa Nairobi	Kenya (Regional)	Edmund Barrow	edmund.barrow@iucn.org ; egb@iucnearo.org
21	KENVO c/o Nature Kenya	Kenya	David Kuria	davekenvo@hotmail.com
22	Kenya Forest Research Institute, Gede Regional Research Centre, Malindi	Kenya	Doris Mutta,	doris_mutta@yahoo.com , kefrigede@africaonline.co.ke
23	Kenya Wildlife Service Training Institute, Naivasha	Kenya	The Principal	kwsti@kenyaweb.com
24	Kenya Wildlife Service, Nairobi	Kenya	Director, KWS	kipngetch@kws.org
25	Mweka College of African Wildlife Management, Moshi	Tanzania	The Principal	mweka@mwekawildlife.org
26	Nature Kenya	Kenya	Paul Matiku, Director	Director_naturekenya@mitsu.uminet.com / office@naturekenya.org
27	Peregrine Fund, Kenya office, c/o Ornithology Department, NMK Nairobi	Kenya	Munir Virani	munir.virani@bigfoot.com , Munir Virani [tpf@africaonline.co.ke]
28	School of Biological Studies, University of Nairobi	Kenya	Prof. Ndiba Muchemi, Director	
29	Society for Environmental Exploration/Frontier-Tanzania, Dar es Salaam	Tanzania	Jennifer Birch, Country Co-ordinator	frontier@africaonline.co.tz
30	TAFORI, Morogoro	Tanzania	Ladislaus Nshubemuki Director General,	tafori@morogoro.net , NASCO <a href="mailto:<nasco@morogoro.net"><nasco@morogoro.net
31	Tanzania Bird Atlas, Iringa	Tanzania	Neil & Liz Baker	tzbirdatlas@yahoo.co.uk
32	Tanzania Forest Conservation	Tanzania	Charles	cmeshack@tfcg.or.tz

	Group, Dar es Salaam		Meshack/Nike Doggart Executive Officer,	
33	Tanzania National Parks, Arusha Tanzania	Tanzania	Director General, TANAPA	info@tanzaniaparks.com
34	Tropical Biology Association c/o Nature Kenya	Kenya	Antony Kuria, Project Manager	office@naturekenya.org
35	Western University College of Science and Technology, Kakamega	Kenya	The Principal	wucst@africaonline.co.ke
36	Wildlife Conservation Society of Tanzania, Dar Es Salaam	Tanzania	Lota Melamari	wcst@africaonline.co.tz ; melamarilota@yahoo.co.uk
37	Wildlife Department, Moi University, Eldoret	Kenya	Jimmy Kairu	Jim_kairu2002@yahoo.com
38	World Wide Fund for Nature – Tanzania Programme Office, Dar es Salaam	Tanzania	Hermann Mwangeni	hmwangeni@wwftz.org, tzrep@wwftz.org
39	WWF Eastern Africa Regional Programme Office, Nairobi,	Kenya (Regional)	John Salehe	JSalehe@wwfearpo.org

Annex 19

List of persons who reviewed project proposals of the CEPF small grants for student research project

Grant No.	Academic Programme	Recipient's nationality	Grant host institution	Project reviewers and institutions they represented				
				BirdLife and Partners	ICIPE	TFCG	WWF-EARPO	Independent
SG001	M.Sc	Kenyan	NK	Alex Ngari & Paul Matiku(NK)	Ina Gordon	Charles Meshack		
SG004	PhD	Kenyan	NK	George Eshiamwata (BLI) Paul Nnyiti (WCST)	Ian Gordon	Charles Meshack		Neil Burgess
SG005	PhD	Tanzanian	WCST		Ian Gordon	Charles Meshak		Neil Burgess
SG007	M.Sc	Tanzanian	WCST		Ian Gordon	Charles Meshack		Neil Burgess
SG012	PhD	Tanzanian	WCST	Paul Nnyiti (WCST)	Ian Gordon	Charles Meshak		
SG014	M.Sc	Kenyan	NK	Paul Nnyiti (WCST)	Ian Gordon	Charles Meshak	Kiunga Keriko	
SG015	M.Sc	Tanzanian	WCST	Paul Nnyiti (WCST)	Ian Gordon	Charles Meshack		Neil Burgess
SG016	M.Sc	Tanzanian	WCST	Paul Nnyiti (WCST)	Ian Gordon	Charles Meshack		Neil Burgess
SG019	M.Phil	Kenyan	NK	Paul Nnyiti (WCST) Paul Ndang'anga (BLI)		Charles Meshack	James Mwangi Kiunga Kareko	Neil Burgess
SG020	M.Sc	Kenyan	NK	Paul Ndang'anga (BLI)		Charles Meshack		Neil Burgess
SG023	M.Sc	Kenyan	NK	Paul Nnyiti (WCST) Alex Ngari (NK)	Ian Gordon	Charles Meshak		Neil Burgess
SG024	M.Sc	Tanzanian	WCST	Paul Nnyiti (WCST) Alex Ngari (NK)	Ian Gordon	Charles Meshak		Neil Burgess
SG025	M.Sc	Kenyan	NK		Ian Gordon	Charles Meshak	John Salehe	Neil Burgess
SG026	M.Sc	Kenyan	NK	Alex Ngari (NK)	Ian Gordon	Charles Meshack		Neil Burgess
SG027	M.Sc	Kenyan	NK	Alex Ngari (NK) Paul Nnyiti (WCST)			John Salehe	Neil Gurgess
GD028	M.Sc	Kenyan	NK	Paul Nnyiti (WCST)		Nike Goggart		Neil Burgess
SG031	MSc	Tanzanian	WCST	Alex Ngari (NK) Paul Nnyiti (WCST)		Nike Doggart	John Salehe	Neil Burgess

Grant No.	Academic Programme	Recipient's nationality	Grant host institution	Project reviewers and institutions they represented				
				BirdLife and Partners	ICIPE	TFCG	WWF-EARPO	Independent
SG033	M.Sc	Tanzanian	WCST	Alex Ngari (NK) Paul Nnyiti (WCST)		Nike Doggart		Neil Burgess
SG034	M.Sc	Tanzanian	WCST				Kiunga Kareko	Neil Burgess
SG037	M.Sc	Kenyan	NK	Alex Ngari (NK) Paul Nnyiti (WCST)		Nike Doggart		Neil Burgess
SG039	M.Sc	Tanzanian	WCST	Alex Ngari (NK) Paul Nnyiti (WCST)			Kiunga Kareko	Neil Burgess
SG043	PhD	Tanzanian	WCST	Alex Ngari (NK) Paul Nnyiti (WST)		Nike Doggart		
SG044	PhD	Kenyan	NK	Alex Ngari (NK) Paul Nnyiti (WCST)		Nike Doggart	Kiunga Kareko	
SG049	M.Sc	Tanzanian	WCST	Alex Ngari (NK) Paul Nnyiti (WCST)		Nike Doggart		
SG051	M.Sc	Tanzanian	WCST	Alex Ngari (NK) Paul Nnyiti (WCST)				Neil Burgess

Annex 20

**Scoring of reviewed proposals and final award of student research grants of
the CEPF small grants project**

Grant Number	Scores awarded and recommendations made by reviewers from various partner institutions										Mean score (%) and final decision	
	BirdLife/Partners		ICIPE		TFCG		WWF		Neil Burgess			
	Score	Decision	Score	Decision	Score	Decision	Score	Decision	Score	Decision	Score	Decision
SG001	18	Fund	16	Fund	22	Fund	-	-	10	Review	63	Accepted
SG002	12	Reject	11	Reject	0	Reject	-	-	0	Reject	22	Rejected
SG003	Out of EACF		Out of EACF		Out of EACF		Out of EACF		Out of EACF		-	Rejected
SG004	19	Fund	18	Fund	24	Fund	-	-	11	Review	67	Accepted
SG005	11	Review	16	Review	11	Review	-	-	8	Review	44	Accepted
SG006	5	Reject	13	Review	19	Review	-	-	0	Reject	33	Rejected
SG007	19	Fund	20	Fund	16	Review	-	-	16	Fund	67	Accepted
SG008	Proposal from Tanzania Wattle Company - rejected outright for irrelevance to programme objectives										-	Rejected
SG009	1	Reject	3	Reject	11	Review	-	-	-	-	19	Rejected
SG010	Out of EACF		-	-	-	-	-	-	-	-	-	Rejected
SG011	12	Reject	1	Reject	18	Review	-	-	-	-	37	Rejected
SG012	14	Review	12	Review	11	Review	-	-	13	Review	48	Accepted
SG013	Outside CEPF funding		-	-	-	-	-	-	-	-	-	Rejected
SG014	-	Fund	26	Fund	30	Fund	-	-	18	Fund	70	Accepted
SG015	15	Fund	21	Fund	30	Fund	-	-	14	Fund	74	Accepted
SG016	16	Review	15	Review	24	Review	-	-	12	Fund	63	Accepted
SG017	12,9,16	Species not classified as threatened			26	Fund	21	Fund	13	Review	56	Rejected
SG018	11,5	Review	-	-	30	Fund	16	Review	9	Reject	52	Rejected
SG019	-	Mixed	-	-	28	Fund	20	Fund	17	Fund	81	Accepted

Grant Number	Scores awarded and recommendations made by reviewers from various partner institutions										Mean score (%) and final decision	
	BirdLife/Partners		ICIPE		TFCG		WWF		Neil Burgess			
SG020	24,70	Fund	23	Fund	27	Fund	-	-	21	Fund	67	Accepted
SG021	11,19	Review	7	Reject			10	Review	11	Reject	44	Rejected
SG022	Out of EACF		-	-	-	-	-	-	-	-	-	Rejected
SG023	16	Fund	23	Fund	26	Fund	-	-	18	Fund	78	Accepted
SG024	8	Review	19	Fund	5	Reject	-	-	11	Fund	41	Accepted
SG025			18	Review	23	Fund	12	Reject	23	Fund	70	Accepted
SG026	19	Fund	19	Fund	17	Fund	-	-	21	Fund	70	Accepted
SG027	-	Fund	-	-			24	Fund	21	Fund	56	Accepted
SG028	-	Unclear	-	-	7	Fund	-	-	14	Fund	41	Accepted
SG029	16	Review	-	-	11	Review	13	Review	9	Review	44	Rejected
SG030	19	Fund	-	-	15	Review	Outside CEPF funding		10	Review	56	Rejected
SG031	12	Fund	-	-	7	Reject	14	Review	14	Fund	44	Accepted
SG032	13	Review	-	-			-	-	8	Review	41	Rejected
SG033	12	Fund	-	-	9	Review	-	-	7	Reject	33	Accepted
SG034			-	-			11	Fund	13	Review	44	Accepted
SG035	6,9	Review	Project replicates other		13	Fund	-	-	16	Fund	41	Rejected
SG036	7	Reject	-	-	10	-	-	-	11	Review	33	Rejected
SG037	15	Fund	-	-	18	-	-	-	15	Fund	59	Accepted
SG038	3	Reject	-	-	3	Reject	Outside CEPF funding		4	Reject	11	Rejected
SG039	15,13	Fund	-	-	-	-	24	Fund	14	Fund	63	Accepted
SG040	3,15	Mixed	-	-	-	-	16	Fund	10	Review	41	Rejected
SG041	7,13	Review	-	-	-	-	17	Fund	11	Review	44	Rejected
SG042	6	Reject	-	-	-	-	-	-	-	-	22	Rejected
SG043	7	Reject	-	-	15	Fund	-	-	-	-	41	Accepted
SG044	16,8	Mixed	-	-	-	-	-	-	-	-	44	Accepted

<i>Grant Number</i>	<i>Scores awarded and recommendations made by reviewers from various partner institutions</i>										<i>Mean score (%) and final decision</i>		
	<i>BirdLife/Partners</i>		<i>ICIPE</i>		<i>TFCG</i>		<i>WWF</i>		<i>Neil Burgess</i>				
SG045	-	Review	-	-	-	-	-	-	-	-	-	-	Rejected
SG046	-	Reject	-	-	-	-	-	-	-	-	-	-	Rejected
SG047			-	-	-	-	-	-	-	-	-	-	Rejected
SG048	8,9	Review	-	-	-	-	-	-	2	Reject	22	Rejected	
SG049	8,9	Review	-	-	15	Fund	-	-	-	-	41	Accepted	
SG050	9	Reject	-	-			-	-	9	Review	33	Rejected	
SG051	12	Fund	-	-	-	-	-	-	12	Fund	44	Accepted	

Annex 21

List of 43 unfunded proposals

Grant No	Project title	Name of applicant	Degree	Nationality	University	Proposed academic supervisors	Proposed period	Requested budget	Approved Budget	Decision
SG002	Change detection of mangrove forest area and associated impact on livelihoods of the local communities: A case study of Rufiji delta, South East-Coast of Tanzania.	Marco, A. Njana	M.Sc	Tanzanian	Sokoine University of Agriculture	1) Prof. Augustino O. Onkware (aonkware@yahoo.com) 2) Dr. Donald F. Otieno	January 2007 – December 2008	\$7,735.00	N/A	Rejected
SG003	Status of Conservation, Production and Ethnobotany of Selected Swamps in Uasin Gishu District, Kenya.	Josephine Mumbi Mulei	PhD	Kenyan	Moi University	1) Dr. Ian Gordon (igordon@icipe.org) 2) Prof. Sue Nicolson (swnicolson@zoology.up.ac.za)) Department of Zoology and Entomology, University of Pretoria, Pretoria, South Africa, 002	January 2006-December 2008	\$6,226.70	N/A	Rejected
SG006	Crop Production practices and their impacts on Plant diversity In Taita Taveta District	Joseph K. Chirchir	M.A	Kenyan	University of Nairobi	1) Prof. R.B.M. Senzota (zoology@udsm.ac.tz) Zoology and Wildlife Conservation Department, Faculty of Science, UDSM P.O. Box 35064, Dar Es Salaam, Tel: 255 022 2410462, Fax: 255 022 2410400 Mobile: +255 291762 2) Catherine Massao (ira@ira.udsm.ac.tz) Institute of Resource Assessment, UDSM P.O. Box 35097 Dar Es	November 2006-July 2007	\$3,969.00	N/A	Rejected

						Salaam, Tel: +255 022 2410144, Fax: +255 022 2410393				
SG008	Funding conservation activities for the Tanganyika Wattle Company	T.A Mtui	-	Tanzanian	Kenyatta University	1) Dr. G. Monda Kenyatta University P.O Box 43844 Nairobi Tel: 810901-19 2) Prof. D. Njaghi Kenyatta University P.O Box 43844 Nairobi Tel: 810901-19	April 2007- March 2008		N/A	Rejected
SG009	Conserving Biodiversity through the Integrated Conservation and Development Project Approach: Taita Hills, Kenya	Anunda Henry N.	M.Sc	Kenyan	Kenyatta University	1) Prof .J.C.Onyango Department of Botany and Horticulture, Maseno University P.O.Box 333 Maseno-Kenya 2) Dr.G.W. Netondo Department of Botany and Horticulture, Maseno University P.O.Box 333 Maseno-Kenya	January 2007- December 2008	\$6,822.00	N/A	Rejected
SG010	The endangered biodiversity of Kit Mikayi and its environs: Evaluation and taxonomic Documentation.	Arwa Saroni Phaniel	PhD	Kenyan	Maseno University	1) Dr. Otieno Dennis Ochuodho (denotieno@yahoo.com) Department of Botany & Hort. Maseno University, Private Bag, Maseno. Tel. +254733921086. 2) Dr.Netondo Godfrey (godfreynetondo@yahoo.co.uk) Department of Botany & Hort. Maseno University, Private Bag, Maseno. Tel. +254722538943	April 2007- April 2008	\$5,357.00	N/A	Rejected
SG011	Resource Utilization, Gas Flux And Contribution Of Understory To The	Nyongesah .W. John Maina,	M.Sc	Kenyan	Maseno University	1) Dr. H.J.NDANGALASI (hjndangalasi@yahoo.com) P.O. Box 35060, Botany Department-University of Dar	October, 2006- September, 2009	\$11,678.00	N/A	Rejected

	Overall Ecosystem Functioning					es salaam 2) Dr. H.V.M. LYARUU (lyaruu@botany.udsm.ac.tz) P.O. Box 35060, Botany Department-University of Dar es salaam				
SG013	Sustainable Management Plan of Mangrove Forest Ecosystem in Kenya	Donald Muigai Ng'iru	M.Sc	Kenyan	Kenyatta University	1) Dr. Fuchaka Waswa (as above for Kenyatta University): (fuchaka96@yahoo.com), Mobile: 0723580126. 2) Dr. Muchai Muchane (as above for Department of Ornithology), (mmuchaim@yahoo.com) , Mobile: 0722-286133.	September 2006 to September 2008	\$7,224.72	N/A	Rejected
SG017	Investigation on Genetic Diversity of Dalbergia melanoxylon in Tanzania Coastal Forests	Ezekiel Amri	PhD	Tanzanian	Dar es Salaam University	1) Prof. E. J. Luoga (PhD), Department of Forest Mensuration and Management, Faculty of Forestry and Nature Conservation, Sokoine University of Agriculture, P.O. Box 3009 Chuo Kikuu, Morogoro, Tanzania: Email: luoga2000@yahoo.com, eluoga@suanet.ac.tz 2) Prof. P.K.T Munishi (PhD), Department of Forest Biology, Faculty of Forestry and Nature Conservation, Sokoine University of Agriculture, P.O. Box 3009 Chuo Kikuu, Morogoro, Tanzania : Email: pmunishi@suanet.ac.tz, pmunishi@yahoo.com	July 2006- July 2008	\$6,559.00	N/A	Rejected
SG018	Ecological and Socio-economic Importance of Remnants of Rainforests along Mahenge Escarpments,	Emanuel Emilian Chingonika ya,	PhD	Tanzanian	Sokoine University of Agriculture	Mr. Jim K. Kairu Moi University Department of Wildlife Management P.O. Box 1125, Eldoret, Kenya	April 2007- September 2007	\$9,874.00	N/A	Rejected

	Tanzania					Email:jim_kairu_2002@yahoo.com Dr. Muchai Muchane National Museums of Kenya Department of Ornithology P.O.Box 40658, GPO 00100 Nairobi, Kenya Email: mmuchaim@yahoo.com Dr. Mwangi Githiru National Museums of Kenya Department of Ornithology PO Box 40658, GPO 00100 airobi, Kenya Email: mwangi_githiru@yahoo.co.uk				
SG021	The use of indigenous knowledge in conservation of Aders's duiker(<i>Cephalophus adersi</i>) in Arabuko Sokoke forest	Daniel Maghanjo Mwamidi	M.Phil	Kenyan	Moi University	1. MR. BENJAMIN K. LAGAT Lecturer, Department of Wildlife Management, Moi University, P.O Box 1125, ELDORET, KENYA. Tel: Mobile: +254721 – 216951 / Landline: 0202048783 Email: benjaminlagat2000@yahoo.com 2. MR. PAUL OKELLO ODIWUORI Lecturer, Moi University, P.O Box 1125, ELDORET, KENYA. Tel: +254725752684 Email: odiwuoripo@mu.ac.ke	1st June-20th December 2007	\$7,482.00	N/A	Rejected
SG022	Impact of human activities on wetlands and distribution of sitatunga (<i>tragelaphus spekii</i>) in the winam gulf	George Oraro	B.Sc	Kenyan	Moi University	1. Dr. N. N. Gichuki (School of Biological Sciences -UoN) University of Nairobi. P. O. Box 30197, Nairobi –Kenya. Email:ngichuki@uonbi.ac.ke 2. Dr. Charles Lange.	1st July 2007-30th March 2008	\$3,572.64	N/A	Rejected

						National Museums of Kenya P. O. Box 40658, 00100 Nairobi, Kenya Email: Nzavi2001@yahoo.com 3. Patrick K. Malonza (National Museums of Kenya) Herpetology Section P. O. Box 40658, 00100. Nairobi, Kenya Email pkmalonza@yahoo.com				
SG029	Intensity of subsistence hunting and its impacts in Boni forest, Kenya	Peter Kingori Mbata	MSc	Kenyan	University of Nairobi	1. Dr. Nelson Mango, Lecturer School of Environment and Human Sciences, Kenyatta University, P.O BOX 43844 Nairobi-Kenya. Email: narmango@hotmail.com ; 2. Dr. Fuchaka Waswa, School of Environment and Human Sciences, Kenyatta University, P.O BOX 43844 Nairobi-Kenya. Email: fuchaka96@yahoo.com	September 2007 - September 2008	\$8,555.00	N/A	Rejected
SG030	Role of Community Conservation Approaches in Enhancing Connectivity of Three Coastal Forests, Kenya	Kuloba John Damascene Mabala	MSc	Kenyan	Kenyatta University	PROF. MADOFFE, S. S	September 2007- August 2008	\$8,614.39	\$4,603.89	Rejected
SG032	Biodiversity along the Eastern Arc Mountains of Tanzania: Environmental Gradients & Climate change Implications.	Alfred Chitiki	PhD	Tanzanian	Sokoine University of Agriculture	Prof. PKT Munishi Department of Forest Biology Sokoine University of Agriculture Po Box 3010, Morogoro Tanzania pmunishi2001@yahoo.com or munishi@suanet.ac.tz	October 2007 To September 2009	\$9,000.00	N/A	RESUBMITT
SG035	Frugivory by Sykes monkeys at Gede forest: implications for seed dispersal and forest regeneration.	Lucy Kirigo Mureu	M.Sc	Kenyan	Moi University	Prof. Eric C. Mwachiro Email: mwachiroec@yahoo.com Tel. +254 726542095	January 2008 to December 2010	\$8,200.00		Rejected

						Dr. Abel Kamweya Email: abelkamweya@yahoo.com Tel: +254 723985228				
SG036	The Effect Of Forest Use On Plant Vegetation Structure And Avian Community Structure In Boni National Reserve, Kenya.	Teresia Njeri	PhD	Kenyan	Jomo Kenya University of Agriculture	Dr. Geoffrey M. Wahungu P.O Box 1125, Eldoret. Email: gmwahungu@yahoo.com Mr. Jim Kairu, P.O Box 1125, Eldoret. Email: jim_kairu2002@yahoo.com	September 2007-June 2008	\$9,957.00	N/A	Reject
SG038	Development of a Risk Map For Mosquito Borne Diseases in Coast Using Remote Sensing and GIS	Atieno Benter Obare	B.Ed	Kenyan	University of Nairobi	Prof. PKT Munishi Department of Forest Biology Sokoine University of Agriculture Po Box 3010, Morogoro Tanzania pmunishi2001@yahoo.com or munishi@suanet.ac.tz	October 2007 to September 2008	\$8,208.96	N/A	Rejected
SG040	Assessing the Nature and Trend of Degradation of Arabuko-Sokoke Forest and Effects on Bird Species Diversity and Richness: (Use Of Remote Sensing and Geographic Information Systems.)	Caroline Jepchumba	M.Phil	Kenyan	Moi University	Dr. Kimaro, Tumaini Anderson Lecturer Water Resources Engineering Department University Of Dar Es Salaam P.O. Box 35131 Tel/Fax. +255-22-2410029 Email: Kimaro@Wrep.Udsm.Ac.Tz Dr. Henry Ndingalasi Lecturer Department Of Botany, University Of Dar Es Salaam P.O.Box 35060 Tel +255 022 2410764 Email:	September 2007 to June 2008	\$6,376.47	N/A	Reject.

						Hjundangalasi@Udsm.Ac.Tz				
SG041	Assessing Land Cover Changes In Ruvu Catchment Forest Reserve Using Remotely Sensed Images.	Lilian Ibengwe	M.Sc	Tanzanian	University of Dar es Salaam	Prof. Maganga.S.L.S (Department Of Wildlife Management)	October 2007-September 2007	\$5,917.95	N/A	Reject
SG042	Impact Of Tourist Hunting On Local Communities Around The Western Sector Of Selous Game Reserve, Ulanga District, Tanzania	Twaha Twaibu	M.Sc	Tanzanian	Sokoine University of Agriculture	a). Dr. Rob Marchant Environment Department University of York Heslington, York YO10 5DD, UNITED KINGDOM E-mail: rm524@york.ac.uk Tel: +44(0) 1904 434061 Fax: +44(0) 1904 432998 http://www.york.ac.uk/res/kite/ b). Prof. dr. Henry Hooghiemstra Institute for Biodiversity and Ecosystem Dynamics (IBED) Palynology and Paleo/Actuocology Faculty of Science, University of Amsterdam Kruislaan 318, 1098 SM AMSTERDAM, The Netherlands Tel.: + 31 20 525 7857 Fax: + 31 20 525 7832 Email: hooghiemstra@science.uva.nl	October, 2007-May 2008	\$2,400.00	N/A	Rejected
SG45	The abundance and distribution of puku (<i>Kobus vardoni</i>) in Kilombero Game Controlled Area.	Gerald Martin Kauki	M.Sc	Tanzanian	Sokoine University of Agriculture	1. Dr. Abdrazak Nunow(Lecturer Department of Applied Environmental social Sciences, Moi University). Mobile No(s).+254721250059, +254728178718	September, 2007 to January, 2008.	\$4,280.00	N/A	Rejected

						<p>Email address- anunow@yahoo.com 2. Dr. Shem Mwasi (Lecturer Department of Environmental Biology and Health, Moi University). Mobile No. +254722662148. Email address- smwasi@africaonline.co.ke</p>				
SG46	Investigating the Current Status of Indigenous Knowledge of Local Communities in Shimba hills on wildlife: The case of the endangered (Rhynchocyon petersi).	Daniel Maghanjo Mwamidi	M.Phil	Kenyan	Moi University	<p>Dr. Abdallah, J. E-mail: abdallah@suanet.ac.tz Dr. Ndangarasi, H. E-mail</p>	Sept 2007. End April. 2008	\$5,147.00	N/A	Rejected
SG47	Assessment of the impact of deadwood collection in Udzungwa Mountains National Park.	Kinana B. Mussa	M.Sc	Tanzanian	University of Dar es Salaam	<p>Department of research and publications HoD, Mr. George N. Shumbusho P.O. Box 63, Mzumbe</p> <p>Department of Post graduate studies HoD, Mr. Philbert C. Ndunguru P. O. Box 63, Mzumbe</p>	July 2008 to June 2009	\$4,300.00	N/A	Rejected
SG48	Assessing Impacts Of Participatory Forest Management Policies On Species Conservation In The Eastern Arc - Nguru South	Janeth Isdory Zemba	M.Sc	Tanzanian	Development Policy At Mzumbe University Tanzania.	<p>Prof. P.T.K. Munishi Department of Forest Biology, Faculty of Forestry and Nature Conservation, Sokoine University of Agriculture, P.O. Box 3010, Chuo Kikuu Morogoro, Tanzania Fax: +255-23-260 4648 Mobile: +255 754 591 849 E-mail: pmunishi2001@yahoo.com</p>	25th November 2007 and end on 12th August 2008	\$4,182.54	N/A	Rejected

						Mr. E. Zahabu, Department of Forestry Management and Mensuration, Faculty of Forestry and Nature Conservation, Box 3013 Morogoro, Tanzania Fax: +255-23-2604648 E-mail: zahabue@yahoo.com				
SG50	Implications of bushmeat hunting on environment in Uluguru Mountains, Tanzania	Regina M. Maunde	M.Sc	Tanzanian	Sokoine University of Agriculture	Dr. R.M.J. Kadigi Department of agricultural economics & agribusiness, Sokoine University of Agriculture, P.O. Box 3005, Chuo Kikuu Morogoro, Tanzania Mobile: +255 754 591 849 E-mail: rmjkadigi@yahoo.co.uk Dr. J.M. Abdallah, Department of Forestry Economics, Sokoine University of Agriculture Box 3011, Chuo Kikuu Morogoro, Tanzania Fax: +255-23-2604648 E-mail: abdallah@suanet.co.tz	30th November 2007- 12th August 2008	\$3,618.90	N/A	Rejected
SG52	Understanding Local Livelihood Strategies As Key Drivers of Deforestation in Taita Hills	Pamella Mupa Dio	B.Sc	Kenyan	Moi University	Simiyu Wandibba, Institute of African Studies, University of Nairobi, P.O. Box 30197, Nairobi, Kenya. E mail: swandibba@yahoo.com	September 2008 February 2009	\$3,083.00	N/A	No funds. Rejected on the basis of lack of funds
SG53	Factors contributing to the destruction of sacred sites in the Taita Hills of coastal Kenya	Jacob Muhandu	M.A	Kenyan	University of Nairobi	Prof. Said .Seif. Madoffe, Sokoine University of Agriculture (SUA), Faculty of Forestry & Nature Conservation, Department of Forest Biology,	September 2008 to August 2009	\$6,587.50	N/A	No funds. Rejected on the basis of lack of

						P.O.BOX 3015 SUA MOROGORO Email: Madoffe@suanet.ac.tz Mobile phone:+255(754)362337				funds
SG54	Human exploitation of Silver Oak (<i>Brachyleana huillensis</i>) and its implication to regeneration of woody plants in Bombo-west Forest Reserve, Korogwe.	Damas Mkon da Mum wi	M.SC	Tanzanian	Sokoine University of Agriculture	DR. GEOFFREY M. WAHUNGU Moi University Department of Wildlife P.O BOX 1125, ELDORET-30100 Tel +254 (0) 720 140 349 gmwahungu@yahoo.com DR. GEOFFREY G. KARANJA Moi University, Department Of Wildlife Management, P.O BOX 1125, ELDORET-30100 Tel +254 (0) 721 457 080 geoffreykaranja@hotmail.com	1st of August 2008 up to 1st February 2009	\$6,503.00	N/A	No funds. Rejected on the basis of lack of funds
SG55	Frugivory by Sykes monkeys at Gede forest: implications for dispersal of Invasive species and forest fragment connectivity.	Lucy Kirigo Mureu	M.Phil	Kenyan	Moi University	Prof. P. K. T. Munishi; Sokoine University of Agriculture, Faculty of Forestry and Nature Conservation, Department of Forest Biology, P.O Box 3010, Morogoro, Tanzania; E-mail: munishi@suanet.ac.tz OR pmunishi2001@yahoo.com; phone: +255 23 2604648	September 2008 – August 2009 (12 months).	\$8,200.00	N/A	No funds. Rejected on the basis of lack of funds
SG56	Tree and shrub species diversity, stocking and the extent of vegetation cover change.	Marco A. Njana	M.Sc	Tanzanian	Sokoine University of Agriculture	Dr. NDANGALASI, H.J. Department of Botany, University of Dar es Salaam P.O.BOX 35060, DAR ES SALAAM	August, 2008- March 2009	\$7,687.00	N/A	No funds. Rejected on the basis of

						<p>hjdangalasi@yahoo.com</p> <p>2: Dr. NYUNDO, B.A. Department of Zoology and Wildlife Conservation, University of Dar es Salaam P.O.BOX 35064, DAR ES SALAAM, bnyundo@uccmail.co.tz</p>				lack of funds
SG57	An investigation on pollination biology of mesogyne insignis in fragmented forests of the east usambara mountains	Olotu Moses	M.Sc	Tanzanian	University of Dar es Salaam	<p>Prof. Jones M. Mueke Kenyatta University Zoological Sciences Mobile: +254 – 724-367766</p> <p>Prof. Suresh K. Raina icipe African Insects Science for Food and Health Principal Research Scientist and Programme Leader, Commercial Insects, Environmental Health Division Email: sraina@icipe.org Mobile: +254-722-488844</p> <p>Dr. Esther N. Kioko icipe African Insects Science for Food and Health Scientist Email: ekioko@icipe.org Mobile: +254-722-617508</p>	September 2006 – August 2009	\$3,676.00	N/A	No funds. Rejected on the basis of lack of funds
SG58	Relative abundance of the wild silkmoth, Argema mimosae on different host plants and host selection behaviour by parasitoids	Boniface Mutua Ngoka	PhD	Kenyan	Kenyatta University	<p>Dr. Thomas Struhsaker, Department of Evolutionary Anthropology, Duke University, Duke Lemur Center, 04 Getty Building, 3705 Erwin Road, Durham, NC 27705, (919) 490-6286; Dr. Kenneth Glander, Department of Evolutionary Anthropology, Duke</p>	January 2009-May 2009	\$9,600.00	N/A	No funds. Rejected on the basis of lack of funds

						University, 011 Biological Sciences Building, Science Dr., Box 90383, Durham, NC 27708, (919) 668-0267				
SG59	Duke University, Department of Evolutionary Anthropology (formerly Dept. of Biological Anthropology and Anatomy), 01 Biological Sciences, Box 90383, Science Drive, Durham, NC 27708 USA	Ruth Steel	PhD	American	Duke University	Prof : Mlekwa, V. M. Head of Adult Education Department and Extension Services University of Dar es Salaam Faculty of Education P.O.BOX 35048 Dar es Salaam- Tanzania Mobile: +255 754380417 Dr. Kangalawe, R.Y.M. Research Fellow Institute of Resource Assessment University of Dar es Salaam P. O. Box 35097 Dar es Salaam- Tanzania kangalawe@ira.udsm.ac.tz, +255 713 430028 Tel:+255 22 2410144, Fax: +255 22 241039	August 2008 – March 2009	\$6,769.00	N/A	No funds. Rejected on the basis of lack of funds
SG60	Adult education and biodiversity conservation: a case study of east Usambara Mountains - Tanzania	Mabu ba, Kisena . M.	M.A (Educ)	Tanzanian	University of Dar es Salaam	Dr. Simon Onywere, Senior Lecturer, Kenyatta University, Department of Environmental Planning and Management, PO Box 43844, 00100, Nairobi. Email: onyweres@yahoo.com	August 2008- March 2009	\$4,038.30	N/A	No funds. Rejected on the basis of lack of funds
SG61	Simulating the impacts of two forest management scenarios in a multiple-use coastal environment	Wambu gu Geoffrey Mwan gi	M.Sc	Kenyan	Kenyatta University	Prof. R.E Malimbwi, Department of Forest Mensuration and Management, Sokoine University of Agriculture, Po Box 3013, Morogoro Tanzania.	October 2008- October 2009	\$3,331.90	N/A	No funds. Rejected on the basis of lack of funds

SG62	Illegal timber harvested in protected forests: Nyanganje forest reserve	Joseph S. Maker o	M.Sc	Tanzanian	Sokoine University of Agriculture	malimbwi@suanet.ac.tz 1. Prof. G.E. Kajembe Department of Forest Mensuration and Management Faculty of Forestry and Nature Conservation Sokoine University of Agriculture P.O. Box 3013, Chuo Kikuu Morogoro, Tanzania E-mail: kajembe@suanet.ac.tz 2. Prof. J.O. Ngana Institute of Resource Assessment University of Dar es Salaam P.O.Box 35097 Dar es Salaam, Tanzania Fax: 255-22 - 410393, E-mail: jngana@ira.udsm.ac.tz	15th November, 2008 to 15th March 2009	\$4,838.80	N/A	No funds. Rejected on the basis of lack of funds
SG63	Towards Effective Institutional Framework for Improved Watershed Management in Eastern Arc Catchment Forests of Pangani Basin, Tanzania	Tuli Salum Msuya	PhD	Tanzanian	Sokoine University of Agriculture	Supervisors: Prof. P.K.T. Munishi & Prof. S.S. Madoffe, pmunishi2001@yahoo.com madoffe@suanet.ac.tz Department of Forest Biology, P.O. Box 3010, Morogoro, Tanzania	November 2008 - March 2009	\$9,000.00	N/A	No funds. Rejected on the basis of lack of funds
SG64	Forest status and biodiversity survey along the Mahenge blocks of EAMs	Alfred Chitiki	PhD	Tanzanian	Sokoine University of Agriculture	Prof. Y.M. Ngaga, PhD Department of Forest Economics, Sokoine University of Agriculture, P.O.Box 3011, Chuo Kikuu, Morogoro, Tanzania Tel: +255 23 - 2603511- 4 (Ext.4603/4604) Tel: +255 23 - 2601451 (Residence)	2009-2011	\$9,440.00	N/A	No funds. Rejected on the basis of lack of funds

						Handset: +255 754 483 935 Fax: +255 23-2604648/2603718/2604562 Email: yngaga@yahoo.co.uk or ngaga@suannet.ac.tz				
SG65	Payment for Environmental Services for Watershed and Biodiversity Conservation in Pare Mountains, Tanzania	Makarius C.S. Lalika	PhD	Tanzanian	Sokoine University of Agriculture	Prof. Manohar Shyam Department Of Environmental Sciences, Kenyatta University. BOX 43844-00100 +254722267289. Prof. Kungu James Department Of Environment And Agroforestry, Kenyatta University. BOX 43844-00100 +254722740718	October 2008 to March 2009	\$9,750.00	N/A	No funds. Rejected on the basis of lack of funds
SG66	Conservation and Management of East African Sandalwood (<i>Osyris Lanceolata</i>) In Chyullu Hills, Kenya	Valentine Ochan da Khase nye	M.Sc	Kenyan	Kenyatta University	ALEX W. KISINGO E-mail: akisingo@mwekawildlife.org OR kisingoalex@yahoo.com CALL +255 784 328 469	Nov 2008- March 2009	\$6,078.70	N/A	No funds. Rejected on the basis of lack of funds
SG67	ASSESSMENT OF SUSTAINABILITY OF COMMUNITY FORESTRY USING FIELD AND SOCIO-ECONOMIC INDICATORS: (A case of Chome forest).	Peter e. Megir oo.	Postgraduate Diploma In Wildlife Management	Tanzanian	<i>College Of African Wildlife Management -Mweka</i>	Prof. G. C. Kajembe Department of Forest Mensuration and Management Sokoine University of Agriculture Po Box 3013, Morogoro Tanzania Kajembe@suanet.ac.tz	Sept 2008- Sept 2009	\$7,678.00	N/A	No funds. Rejected on the basis of lack of funds
SG68	The role of local governance structures in the regulation of forest benefits in Nyanganje Forest Reserve	Christina Mohamed	M.Sc	Tanzanian	Sokoine University of Agriculture	1). Dr. Paul N Ndegwa (pnndegwa@uonbi.ac.ke) 2). Dr. Evans M. Mwangi (emmwangi@uonbi.ac.ke)	November 2006 to October 2007	\$3,949.00	N/A	No funds. Rejected on the basis of lack of funds

Annex 22

Relevance and contribution of grantee projects to programme goals as perceived by student grantee (✓) and by the coordinating national partner (X)

Grant No.	Project title	Number of Objectives contributed	Critical Site conservation / connectivity	Species conservation	Advancing biological knowledge	Civil society participation	Mitigating climate change	Improving livelihoods
SG001	The proximity of the farms to Arabuko – Sokoke forest influences the diversity of insect pollinators and fruit set.	4	✓	✓	✓			✓
SG004	Beekeeping for forest conservation: Filling a knowledge gap at Arabuko Sokoke Forest, Kenya	2	✓		✓			
SG005	Effects of Joint Forest Management Institutional Arrangements on Forest Condition and Local Livelihood	3	✓			✓		✓
SG007	Abundance and Diversity of Small Mammals in Disturbed and Undisturbed Forests at Uluguru Mountains	1			✓			
SG012	Ecological Dynamics and Conservation Importance of the Eastern African Coastal Forests ecosystems in Tanzania.	2		✓	✓			
SG014	Density and Inter-fragment Dispersal of Bird Species in Three Coastal Forest Fragments, Kenya	4	✓	✓	✓	✓		
SG015	Assessment of Species Composition and Diversity of Small Mammals at Saadani National Park	3	✓	✓	✓			
SG016	<i>Cedrela mexicana</i> impacts on indigenous trees diversity in Kimboza Forest Reserve, Morogoro Tanzania	2		✓	✓			
SG019	Bird-habitat relationships of some Kenyan coastal forest bird species	3	✓	✓	✓			

SG020	The ecology and molecular characterisation of the endangered and endemic <i>G. taitensis</i> (land snail) of the Taita Hills, Kenya.	3	√	√	√			
SG023	Distribution, diversity and population status of herpetofauna in lower Tana River forests, Kenya.	4	√	√	√	√		
SG024	Impact of Human Disturbance On Coastal Forests: The Case Study Of Tong'omba Forest Reserve In Kilwa District, Tanzania.	2		√	√			
SG025	Ecological Survey Of The Golden Rumped Elephant Shrew (<i>Rhynchocyon Chrysopygus</i>) In The North Coastal Forests Of Kenya.	2	√	√				
SG026	The distribution, diversity and populations status of Land snails from Shimba Hills National Reserve, Kenya.	3	√	√	√			
SG027	Conservation status of threatened endemic birds in fragmented Boni coastal forest, Kenya	4	√	√	√		√	
SG028	Land use dynamics and human impacts on conservation status of <i>Warburgia stuhlmannii</i> in Dakatcha and Marafa forests	2	√	√				
SG031	The status of invasive plant species at Udzungwa Mountain National Parks	2		√	√			
SG033	Quantifying the Abundance, Distribution and Local Use of Rare Plant Species in East Usambaras Tanzania	2		√	√			
SG034	Potential and Constraints Of Eco-Tourism In Improving Nature Conservation and Livelihoods	1		√				
SG037	Role of the Tana crested mangabey (<i>Cercocebus galeritus galeritus</i> Peters) in forest regeneration	3	√	√	√			
SG039	Assessment of Rare Plants and Restoration Potential through Seed Bank in Zaraninge Coastal Forest, Bagamoyo District Tanzania	2		√	√			
SG043	Vegetation response to climate change and human impacts in the Eastern Arc Mountains	4	√	√	√		√	

SG044	Assessment of the biodiversity of tetranychid mites in the Eastern Arc Mountains and East African Coastal Forest Mosaic Hotspot	3	√	√	√			
SG049	Assessment of Carbon Sequestration in Agroforestry Systems for Improved Livelihood in Uluguru Mountains	2					√	√
SG051	Willingness to pay for irrigation water: A case of Southern Uluguru Slopes, Tanzania	5	√			√	√	√
Total projects contributing to each programme objective			16	22	19	4	4	4

Annex 23

Project relevance to target KBA sites

Grant No.	Project title	KBA Sites covered by project	Site No.
SG001	The proximity of the farms to Arabuko – Sokoke forest influences the diversity of insect pollinators and fruit set.	Arabuko Sokoke Forest	1
SG004	Beekeeping for forest conservation: Filling a knowledge gap at Arabuko Sokoke Forest, Kenya	Arabuko Sokoke Forest	1
SG005	Effects of Joint Forest Management Institutional Arrangements on Forest Condition and Local Livelihood	New Dabaga / Ulongambi (NDU) Forest Reserve	1
SG007	Abundance and Diversity of Small Mammals in Disturbed and Undisturbed Forests at Uluguru Mountains	Ulunguru Mountains	1
SG012	Ecological Dynamics and Conservation Importance of the Eastern African Coastal Forests ecosystems in Tanzania.	Pande and Dodwe Coastal Forests Bagamoyo District Coastal Forest	3
SG014	Density and Inter-fragment Dispersal of Bird Species in Three Coastal Forest Fragments, Kenya	Kaya Gandini, Mwache Forest Reserve Kaya Mtswakara	3
SG015	Assessment of Species Composition and Diversity of Small Mammals at Saadani National Park	Sadaani National Park	1
SG016	<i>Cedrela mexicana</i> impacts on indigenous trees diversity in Kimboza Forest Reserve, Morogoro Tanzania	Uluguru Mountains (Kimboza Forest Reserve)	1
SG019	Bird-habitat relationships of some Kenyan coastal forest bird species	Diani, Mrima Hill, Kaya Gandini and Marenje in the South Coast Gede Ruins and Arabuko Sokoke in the North coast	4
SG020	The ecology and molecular characterization of the endangered and endemic <i>G. taitensis</i> (land snail) of the Taita Hills, Kenya.	Taita Hills	1
SG023	Distribution, diversity and population status of herpetofauna in lower Tana River forests, Kenya.	Lower Tana River forests	1
SG024	Impact of Human Disturbance On Coastal Forests: The Case Study Of Tong'omba Forest Reserve In Kilwa District, Tanzania.	Tong'omba (Kilwa District Forests)	1

SG025	Ecological Survey Of The Golden Rumped Elephant Shrew (<i>Rhynchocyon Chrysopygus</i>) In The North Coastal Forests Of Kenya.	Boni, Dodori and Tana River	2
SG026	The distribution, diversity and populations status of Land snails from Shimba Hills National Reserve, Kenya.	Shimba Hills	1
SG027	Conservation status of threatened endemic birds in fragmented Boni coastal forest, Kenya	Boni Forest	1
SG028	Land use dynamics and human impacts on conservation status of <i>Warburgia stuhlmannii</i> in Dakatcha and Marafa forests	Dakatcha and Marafa Forests	2
SG031	The status of invasive plant species at Udzungwa Mountain National Parks	Udzungwa Mountain NPs	1
SG033	Quantifying the Abundance, Distribution and Local Use of Rare Plant Species in East Usambaras Tanzania	East Usambara)	1
SG034	Potential and Constraints Of Eco-Tourism In Improving Nature Conservation and Livelihoods	East Usambara (Amani Nature Reserve	1
SG037	Role of the Tana crested mangabey (<i>Cercocebus galeritus galeritus</i> Peters) in forest regeneration	Lower Tana River forests	1
SG039	Assessment of Rare Plants and Restoration Potential through Seed Bank in Zaraninge Coastal Forest, Bagamoyo District Tanzania	Zaraninge_Bagamoyo District Forests	1
SG043	Vegetation response to climate change and human impacts in the Eastern Arc Mountains	East Usambara Mountains (Derema), West Usambara Mountains (Vugiri plateau), Udzungwa (Kigogo Catchment Forest Reserve in Mufindi Scarp East)	3
SG044	Assessment of the biodiversity of tetranychid mites in the Eastern Arc Mountains and East African Coastal Forest Mosaic Hotspot	Entire region, Kenya and Tanzania	2
SG49	Assessment of Carbon Sequestration in Agroforestry Systems for Improved Livelihood in Uluguru Mountains	Matombo village, Uluguru Mountains	1
SG51	Willingness to pay for irrigation water: A case of Southern Uluguru Slopes, Tanzania	Uluguru Mountains	1

Annex 24

Attraction of additional funding by grantee projects

<i>Grant No.</i>	<i>Project title</i>	<i>Source of additional funding</i>	<i>Amount (\$)</i>
SG007	Diversity and abundance of small mammals in disturbed and undisturbed forests in Uluguru mountains, Tanzania	KITE Project; York University/IRA-University of Dar es Salaam	600
SG012	Ecological Dynamics and Conservation Importance of the Eastern African Coastal Forests ecosystems in Tanzania.	SIDA-SAREC University of Dar es Salaam	5,384 3,496
SG014	Density and inter-fragment dispersal of bird species in three coastal forest fragments, Kenya	Darwin Initiative	1,857
SG016	Impact of invasive species (<i>Cedrela odorata</i>) on indigenous species diversity and composition in Kimboza forest reserve – Morogoro	Own funds	1,600
SG025	Assessment of golden-romped elephant-shrew in north coastal forests of Kenya	Zoological Society of London-Edge Program	4,000
SG034	Potentials and constraints of eco-tourism in improving nature conservation and livelihoods	PANTIL	2,021
SG039	ITCB-PANTIL programme – SUA	PANTIL SUA Project	2,000
SG044	Training in taxonomy of plant associated mites in Kenya	Acarology Development Foundation	500
SG051	Willingness To Pay For Improved Irrigation Water Supply. A Case Study Of Uluguru Landscape In Morogoro Tanzania	Ministry of Natural Resource and Tourism under World Bank	3,000
Total	9 student projects	11 instances of external support	24,458

Annex 25

Quality of academic supervision as determined by the qualification and research specialisations of the supervisors and their effort in supervisory visits

Grant No.	Project Title	Level	Supervisor Details			Supervisory Visits		
			Name and order of responsibility	Highest Degree	Areas of Specialisation	1 st	2 nd	3 rd
SG001	The proximity of the farms to Arabuko – Sokoke forest influences the diversity of insect pollinators and fruit set.	MSc	1. Ndegwa, Dr. P. N. 2. Mwangi, Dr. E. M.	PhD PhD	Ecology Conservation	May 07 May 07	- -	- -
SG004	Beekeeping for forest conservation: Filling a knowledge gap at Arabuko Sokoke Forest, Kenya	PhD	1. Nicolson, Prof. Sue 2. Gordon, Dr. Ian	PhD PhD	Insect Physiology Conservation and Evolution	Jul 08 Various	- Various	- -
SG005	Effects of Joint Forest Management Institutional Arrangements on Forest Condition and Local Livelihood	MSc	1. Luoga, Prof. E. J.	PhD	Forest management	Jun 07	Oct 08	-
SG007	Abundance and Diversity of Small Mammals in Disturbed and Undisturbed Forests at Uluguru Mountains	MSc	1. Senzota, Prof. RBM 2. Mbago, Frank	PhD Adv. Dip.	Wildlife Ecology Plant taxonomy	Mar 07	- Sep 07	- -
SG012	Ecological Dynamics and Conservation Importance of the Eastern African Coastal Forests ecosystems in Tanzania.	PhD	1. Lyaruu, Dr. H.V.M. 2. Ndangalasi, Dr. H.J. 3. Marchant, Dr. R. E.	PhD PhD PhD	Ecology Ethnobotany Ecology	Sep 07 Sep 07 -	Jan 08 Jan 08 -	Jun 08 Jun 08 Jun 08
SG014	Density and Inter-fragment Dispersal of Bird Species in Three Coastal Forest Fragments, Kenya	MSc	1. Muchai, Dr Muchane 2. Githiru, Dr. Mwangi 3. Shyam, Manohar	PhD PhD PhD	Ornithology Avian ecology and conservation Environ. studies	Jan 08	- -	- -
SG015	Assessment of Species Composition and Diversity of Small Mammals at Saadani National Park	MSc	1. Munishi, Prof. P.K.T 2. Makundi, Prof. R.H	PhD PhD	Forest biology / wet land conservation Entomology / pest management	Mar 07 -	- Apr 07	- -
SG016	<i>Cedrela mexicana</i> impacts on indigenous trees diversity in Kimboza Forest Reserve, Morogoro Tanzania	MSc	1. Ndangalasi, Dr. H.J.	PhD	Ethnobotany	Apr 07	Jan 08	Oct 08
SG019	Bird-habitat relationships of some Kenyan coastal forest bird species	MPhil	1. Githiru, Dr. Mwangi	PhD	Avian ecology and conservation	Sep 07	Nov 07	-

Grant No.	Project Title	Level	Supervisor Details			Supervisory Visits		
			Name and order of responsibility	Highest Degree	Areas of Specialisation	1 st	2 nd	3 rd
			2. Muchai, Dr. Muchane 3. Kairu, Mr. Jim K.	PhD MSc	Ornithology Ecology	- Sep 07	- -	- -
SG020	The ecology and molecular characterization of the endangered and endemic <i>G. taitensis</i> (land snail) of the Taita Hills, Kenya.	MSc	1. Ndiritu, Prof. D. 2. Lange, Dr. C.N. 3. Githui, K	PhD PhD PhD	Genetics Malacology Cell biology	Oct 07 Oct 07 Daily in laboratory	Dec 07 Dec 07 -	- - -
SG023	Distribution, diversity and population status of herpetofauna in lower Tana River forests, Kenya.	MSc	1. Gichuki, Dr. N. N. 2. Kiboi, Dr. S 3. Malonza, Patrick K.	PhD PhD MSc	Conservation Conservation Herpetology	- - Sep 08	Feb 08 Feb 08 -	- - -
SG024	Impact of Human Disturbance On Coastal Forests: The Case Study Of Tong'omba Forest Reserve In Kilwa District, Tanzania.	MSc	1. Malimbwi, Prof. R. E.	PhD	Forest resource management and mensuration	Jan 08	-	-
SG025	Ecological Survey Of The Golden Rumped Elephant Shrew (<i>Rhynchocyon Chrysopygus</i>) In The North Coastal Forests Of Kenya.	MSc	1. Mwangi, Dr. E. M. 2. Gichuki, Dr. N. N.	PhD PhD	Conservation Conservation	Feb 08 Feb 08	- -	- -
SG026	The distribution, diversity and populations status of Land snails from Shimba Hills National Reserve, Kenya.	MSc	1. Githaiga, Dr. John 2. Okoola, Dr Raphael 3. Lange, Dr. C. N.	PhD PhD PhD	Conservation biology Meteorology Malacology	- - Dec 07	Apr 08 Apr 08 -	- - -
SG027	Conservation status of threatened endemic birds in fragmented Boni coastal forest, Kenya	PhD	1. Githiru, Dr. Mwangi 2. Muchai, Dr. Muchane	PhD PhD	Avian ecology and conservation Ornithology	Nov 07 -	- -	- -
SG028	Land use dynamics and human impacts on conservation status of <i>Warburgia stuhlmannii</i> in Dakatcha and Marafa forests	MSc	1. Ucakuwun, Dr. Elias 2. Mwachala, Dr. G.	PhD PhD	Remote sensing Botany	Yes, No date Yes, No date	Yes, No date Yes, No date	- -
SG031	The status of invasive plant species at Udzungwa Mountain National Parks	MSc	1. Madoffe, Prof. S. S	PhD	Forest ecology	Feb 08	Jul 08	-
SG033	Quantifying the Abundance,	MSc	1. Munishi, Prof. P.K.T	PhD	Forest biology / wet	Dec 07	-	-

Grant No.	Project Title	Level	Supervisor Details			Supervisory Visits		
			Name and order of responsibility	Highest Degree	Areas of Specialisation	1 st	2 nd	3 rd
	Distribution and Local Use of Rare Plant Species in East Usambaras Tanzania				land conservation			
SG034	Potential and Constraints Of Eco-Tourism In Improving Nature Conservation and Livelihoods	MSc	1. Songorwa, Dr A.	PhD	Natural resource conservation and policies	Nov 07	-	-
SG037	Role of the Tana crested mangabey (<i>Cercocebus galeritus galeritus</i> Peters) in forest regeneration	MSc	1. Wahungu, Dr. G. M. 2. Kairu, Mr. Jim K.	PhD MSc	Ecology Ecology	Feb 08 -	- Apr 08	- -
SG039	Assessment of Rare Plants and Restoration Potential through Seed Bank in Zaraninge Coastal Forest, Bagamoyo District Tanzania	MSc	1. Munishi, Prof. P.K.T 2. Madoffe, Prof. S. S	PhD PhD	Forest biology / wet land conservation Forest ecology	Works with grantee all the time Works with grantee all the time		
SG043	Vegetation response to climate change and human impacts in the Eastern Arc Mountains	PhD	1. Marchant, Dr. R.E 2. Hooghiemstra, Prof. dr. H.	PhD PhD	Ecosystem dynamics & climate change Palaeoecology and landscape ecology	Nov 21 Jul 04	Jan 08 -	Oct 08 -
SG044	Assessment of the biodiversity of tetranychid mites in the Eastern Arc Mountains and East African Coastal Forest Mosaic Hotspot	PhD	1. Haas, Dr. Fabian 2. Theron, Prof. P. D.	PhD PhD	Zoology	- -	Working with grantee in lab all the time -	- -
SG049	Assessment of Carbon Sequestration in Agroforestry Systems for Improved Livelihood in Uluguru Mountains	MSc	1. Munishi, Prof. P.K.T 2. Zahabu, Dr. E.	PhD PhD	Forest biology / conservation Forest mensuration and management	- May 08	- -	- -
SG051	Willingness to pay for irrigation water: A case of Southern Uluguru Slopes, Tanzania	MSc	1. Kadigi, R.M.J. 2. Abdallah, J.M.	PhD PhD	Agriculture and natural resource economics Forestry and natural resource economics	May 08 -	- -	- -

Annex 26

Schedule of submission of progress and financial reports by grantees

Note: Reporting was required quarterly for projects under six months and every six months for longer contract (D is the duration of the contract awarded. The variance (V) between the scheduled and actual reporting time is given in weeks (wks, where (-) mans early reporting and (+) is late reporting

Grant No.	Geree	Date contract signed	End of Contract	D	1 st progress report			2 nd progress report			Final report		
					Due Date	Actual Date	V wks	Due Date	Actual Date	V wks	Due Date	Actual Date	V wks
SG001	MSc	1 Feb 07	30 Sep 08	20	16-Aug-07	29-Jun-07	-6	16-Feb-08	-	+46	31-Oct-08	-	+12
SG004	PhD	1 Feb 07	30 Sep 08	13	16-Aug-07	19-Jul-07	-5	9-Jan-08	Jan-08	0	31-Oct-08	Oct-08	0
SG005	PhD	7 Mar-07	14 Sep 08	18	22-Sep-07	18-Oct-07	+4	14-Apr-08	-	+38	14-Oct-08	-	+12
SG007	MSc	7 Mar-07	30 Sep 07	8	22-Sep-07	10-Sep-07	-2	30-Sep-08	-	+16	30-Oct-07	Jan-09	+8
SG012	PhD	28 May 07	30 Sep 08	16	13-Dec-07	-	+58	13-May-08	-	+30	31-Oct-08	-	+12
SG014	MSc	3 May 07	30 Sep 08	11	18-Nov-07	7-June -08	+28	30-Sep-08	-	+16	31-Oct-08	Nov-08	+4
SG015	MSc	23 Feb 07	31 Oct 07	7	8-Sep-07	7-May-07	-16	30-Oct-08	-	+12	30-Nov-07	Aug-07	-12
SG016	MSc	8 Mar 07	30 Nov 07	8	23-Sep-07	8-May-08	-13	30-Nov-08	Aug-08	-15	31-Dec-07	-	+44
SG019	MPhil	15 May 07	30 Sep 08	16	30-Nov-07	29-Jan-08	+8	31-May-08	-	+28	31-Oct-08	Dec-08	+8
SG020	MSc	4 Apr 07	30 Sep 08	18	19-Nov-07	25-Jan-08	+7	19-Apr 08	-	+30	19-Oct-08	Dec 08	+8
SG023	MSc	15 Jun 07	30 Sep 08	15	30-Dec-07	23-Jan-08	+4	31-Jun-08	-	+24	30-Dec-08	Sep-08	-12
SG024	MSc	13 Jul 07	31 Jul 08	11	28-Jan-08	Dec-07	-4	28-Jul-08	Aug-08	+1	31-Aug-08	Dec-08	+16
SG025	MSc	11 Jul 07	30 Sep 08	20	26-Jan-08	19-May-08	+7	26-Jul-08	Jul 08	0	31-Oct-08	Jan-09	+8
SG026	MSc	11 Jul 07	30 Sep 08	20	26-Jan-08	14-Mar-08	+6	26-Jul-08	Mar 08	-16	31-Oct-08	Jan-09	+12
SG027	MSc	24 Oct 07	31 Sep 08	20	9-May-08	29-Jan-08	-13	9-Nov-08	-	+11	31-Oct-08	Dec-08	+8
SG028	MSc	3 Sep 07	31 Sep 08	13	18-Mar-08	Nov-07	-17	18-Sep-08	Jan-08	+11	31-Oct-08	Sep-08	-4
SG031	MSc	6 Oct-07	31 Jul 08	13	21-Apr-08	Sep-08	+20	31-Jul-08	-	+24	31-Aug-08	-	+20
SG033	MSc	15 Oct 07	31 Jul 08	13	30-Apr-08	30-Apr-08	0	31-Jul-08	Oct-08	+12	31-Aug-08	-	+20

Grant No.	Geree	Date contract signed	End of Contract	D	1 st progress report			2 nd progress report			Final report		
					Due Date	Actual Date	V wks	Due Date	Actual Date	V wks	Due Date	Actual Date	V wks
SG034	MSc	15 Oct 07	30 Sep 08	12	30-Apr-08	Jan--08	-8	30-Sep-08	May-08	-16	31-Oct-08	Sep-08	-4
SG037	MSc	15 Oct 07	31 Sep 08	13	30-Apr-08	24-Apr-08	-1	30-Sep-08	-	+16	31-Oct-08	Jan-09	+12
SG039	MSc	13 Oct 07	30 Sep 08	14	28-Apr-08	Jun-08	+4	28-Oct-08	Jan-09	+12	31-Oct-08	-	+12
SG043	PhD	31 Oct 07	31 Jul 08	9	15-May-08	Aug 08	+12	31-Jul-08	Jan 09	+21	31-Aug-08	-	+20
SG044	PhD	1 Nov 07	31-Sep-08	13	16-May-08	30-Jun-08	+6	31-Dec-08	-	+4	31-Oct-08	Jan-09	+12
SG049	MSc	13 Sep 07	30 Nov 08	9	28-Mar-08	19-Jun-08	+10	28-Sep-08	Aug-08	-6	31-Dec-08	-	+4
SG051	MSc	13 Sep 07	28 Feb 09	12	28-Mar-08	-	+40	28-Sep-08	-	+16	31-Mar-09	-	N/A

Annex 26

Schedule of submission of progress and financial reports by grantees

Note: Reporting was required quarterly for projects under six months and every six months for longer contract (D is the duration of the contract awarded. The variance (V) between the scheduled and actual reporting time is given in weeks (wks, where (-) means early reporting and (+) is late reporting

Grant No.	Geree	Date contract signed	End of Contract	D	1 st progress report			2 nd progress report			Final report		
					Due Date	Actual Date	V wks	Due Date	Actual Date	V wks	Due Date	Actual Date	V wks
SG001	MSc	1 Feb 07	30 Sep 08	20	16-Aug-07	29-Jun-07	-6	16-Feb-08	-	+46	31-Oct-08	-	+12
SG004	PhD	1 Feb 07	30 Sep 08	13	16-Aug-07	19-Jul-07	-5	9-Jan-08	Jan-08	0	31-Oct-08	Oct-08	0
SG005	PhD	7 Mar-07	14 Sep 08	18	22-Sep-07	18-Oct-07	+4	14-Apr-08	-	+38	14-Oct-08	-	+12
SG007	MSc	7 Mar-07	30 Sep 07	8	22-Sep-07	10-Sep-07	-2	30-Sep-08	-	+16	30-Oct-07	Jan-09	+8
SG012	PhD	28 May 07	30 Sep 08	16	13-Dec-07	31-oct-08-	+58	13-May-08	-	+30	31-Oct-08	-	+12
SG014	MSc	3 May 07	30 Sep 08	11	18-Nov-07	7-June -08	+28	30-Sep-08	-	+16	31-Oct-08	Nov-08	+4
SG015	MSc	23 Feb 07	31 Oct 07	7	8-Sep-07	7-May-07	-16	30-Oct-08	-	+12	30-Nov-07	Aug-07	-12
SG016	MSc	8 Mar 07	30 Nov 07	8	23-Sep-07	8-May-08	-13	30-Nov-08	Aug-08	-15	31-Dec-07	-	+44
SG019	MPhil	15 May 07	30 Sep 08	16	30-Nov-07	29-Jan-08	+8	31-May-08	-	+28	31-Oct-08	Dec-08	+8
SG020	MSc	4 Apr 07	30 Sep 08	18	19-Nov-07	25-Jan-08	+7	19-Apr 08	-	+30	19-Oct-08	Dec 08	+8
SG023	MSc	15 Jun 07	30 Sep 08	15	30-Dec-07	23-Jan-08	+4	31-Jun-08	-	+24	30-Dec-08	Sep-08	-12
SG024	MSc	13 Jul 07	31 Jul 08	11	28-Jan-08	Dec-07	-4	28-Jul-08	Aug-08	+1	31-Aug-08	Dec-08	+16
SG025	MSc	11 Jul 07	30 Sep 08	20	26-Jan-08	19-May-08	+7	26-Jul-08	Jul 08	0	31-Oct-08	Jan-09	+8
SG026	MSc	11 Jul 07	30 Sep 08	20	26-Jan-08	14-Mar-08	+6	26-Jul-08	Mar 08	-16	31-Oct-08	Jan-09	+12
SG027	MSc	24 Oct 07	31 Sep 08	20	9-May-08	29-Jan-08	-13	9-Nov-08	-	+11	31-Oct-08	Dec-08	+8
SG028	MSc	3 Sep 07	31 Sep 08	13	18-Mar-08	Nov-07	-17	18-Sep-08	Jan-08	+11	31-Oct-08	Sep-08	-4
SG031	MSc	6 Oct-07	31 Jul 08	13	21-Apr-08	Sep-08	+20	31-Jul-08	-	+24	31-Aug-08	-	+20
SG033	MSc	15 Oct 07	31 Jul 08	13	30-Apr-08	30-Apr-08	0	31-Jul-08	Oct-08	+12	31-Aug-08	-	+20

Grant No.	Geree	Date contract signed	End of Contract	D	1 st progress report			2 nd progress report			Final report		
					Due Date	Actual Date	V wks	Due Date	Actual Date	V wks	Due Date	Actual Date	V wks
SG034	MSc	15 Oct 07	30 Sep 08	12	30-Apr-08	Jan--08	-8	30-Sep-08	May-08	-16	31-Oct-08	Sep-08	-4
SG037	MSc	15 Oct 07	31 Sep 08	13	30-Apr-08	24-Apr-08	-1	30-Sep-08	-	+16	31-Oct-08	Jan-09	+12
SG039	MSc	13 Oct 07	30 Sep 08	14	28-Apr-08	Jun-08	+4	28-Oct-08	Jan-09	+12	31-Oct-08	-	+12
SG043	PhD	31 Oct 07	31 Jul 08	9	15-May-08	Aug 08	+12	31-Jul-08	Jan 09	+21	31-Aug-08	-	+20
SG044	PhD	1 Nov 07	31-Sep-08	13	16-May-08	30-Jun-08	+6	31-Dec-08	-	+4	31-Oct-08	Jan-09	+12
SG049	MSc	13 Sep 07	30 Nov 08	9	28-Mar-08	19-Jun-08	+10	28-Sep-08	Aug-08	-6	31-Dec-08	-	+4
SG051	MSc	13 Sep 07	28 Feb 09	12	28-Mar-08	31-oct-08-	+40	28-Sep-08	-	+16	31-Mar-09	-	N/A

Annex 27

Graduation status of some of the grantees of the CEPF small grants for student research in the EACF Hotspot programme

<i>Grant No</i>	<i>Grantee name</i>	<i>Thesis title</i>	<i>Thesis submission</i>	<i>Graduation</i>
SG004	Susan Okoth	Beekeeping and forest conservation: a case study of Arabuko Sokoke Forest, Kenya	Don't know	Don't know
SG014	Simon N. Musila	Impacts of habitat degradation on bird species richness in three fragmented coastal forests, Mombasa-Kenya	April-May 2009	Expected 09
SG015	Christopher, A. Sabuni	Species Composition and Diversity of Small Mammals in the Saadani National Park	Dec-2007	Nov-2008
SG016	Charles Patrick	An impact of invasive species <i>cedrela odorata</i> l on native plant species composition and diversity in Kimboza Forest Reserve; Morogoro, Tanzania	Non-2008	Ded-08
SG019	Bernard Soi	Bird-habitat relationships of some Kenyan coastal forest bird species	Don't know	Don't know
SG020	Ann Mwaura	Molecular characterization and some environmental factors influencing distribution of the endangered and endemic <i>Gulella taitensis</i> in Taita Hills, Kenya	Submitted	Expected 09
SG024	Hassan Chikira	Distribution and diversity of land snails in Shimba Hills National Reserve, Kenya		Nov-2008
SG028	Mercy Mwanikah	Land Use Dynamics and Impacts on conservation of coastal forests; Dakatcha and Marafa	Jun-2008	Dec-2008
SG028	Mercy Ndalila	Land use dynamics and human impacts on conservation status of <i>Warburgia stuhlmannii</i> in Dakatcha and Marafa forests	Feb-2009	Expected 09
SG031	Simon Lugandu	The status of invasive plant species at Udzungwa Mountain National Parks	Don't know	Don't know
SG034	Rehema Shoo	Potentials and constraints of eco-tourism in improving nature conservation and livelihoods: The case of Amani Nature Reserve Tanzania	June 2009	Expected 09
SG037	Duncan M.	Ranging behaviour and seed	Jan-2009	Expected 09

	Kimuyu	dispersal by the Tana crested mangabey (Cercocebus galeritus galeritus Peters 1879)		
SG039	Nancy Pima	Rare plant species composition and restoration potential through seed bank in Zaraninge and Mbwebwe Coastal Forests, Bagamoyo District, Tanzania	Sep- 2008	Expected 09
SG044	Faith Toroitich	Assessment of the biodiversity of tetranychid mites in East Africa using conventional taxonomy and molecular methods.	Don't know	Don't know

Annex 28

Some grantee projects whose research findings had demonstrated actual or potential application

<i>Grant No.</i>	<i>Research outputs</i>	<i>Application</i>	<i>Reference</i>
SG001	Existence of feral honey bees in farmlands	Has given incentive for the expansion of bee farming projects onto farmlands	The Kipepeo project
SG004	Floral calendar for bee keepers Conserving vegetation ensures better honey yield	ICIPE's commercial insects programme has incorporated some of the findings of this study to improve bee husbandry in Arabuko Sokoke Forest and neighbouring woodlands	ICIPE's commercial insects programme
SG005	JFM improves vegetation cover and conservation by strengthening good governance practices although revenues collected are inadequate to meet transaction costs	Use of institutions in the management of New Dabaga Ulongambi forest reserve	Reports from Bee Keeping Division of Ministry of Natural Resources, Tanzania
SG007	Differences in diversity and abundance of small mammals in disturbed and undisturbed forests in Uluguru Mountains and rediscovery of <i>Prosymna omatissima</i> after 80 years of discovery	Management of national Parks	Promotion of the forest reserve into a nature/conservation site
SG014	Threats to sites by logging and firewood collection at Mwache Forest Reserve	Formation in July 2008 of Mwache Forest Reserve Community Conservation Organisation to patrol the forest and control illegal logging	Musila (200). Final Report. CEPF
SG019	Loss or reduction of critical species of birds as a result of disturbance or loss of critical forest features of conservation sites	Biological knowledge for park management – Creation of forest connectivity and enhancement of forest cover conservation in East Usambara Mountain	Newman, W (1991) in Conservation Biology Vol. 5, No. 1
SG028	Poor conservation status of <i>Warbugia sthlmanni</i> as a result of forest degradation is established and possible role of community participation in	Knowledge being applied in UNDP implementation work collaborated by Barasa Murefu	

	conservation of forests defined		
SG033	15 threatened plant species under vulnerable category of IUCN red list 2007 described in Derema and Tongwe forests	Fast tracking of the gazzettelement of the proposed Derema as a forest reserve	Ministry of Natural Resources
SG037	Established the potential role of mangabeys to contribute to forest connectivity and regeneration in Tana River forest parches	Guidelines on potential trees for planting in tree nurseries already in the site	KWS
SG049	Has established a methodology for determining amount of carbon stored in different pools in agroforestry and farmer's capacity to implement carbon project	Carbon trading could reduce the pressure to the adjacent forest reserve such as Kimboza Forest Reserve and hence conservation of biodiversity	Kyoto protocol
		Through tree domestication to increase carbon capture on farm, farmers are expected to enhance their standard of living through carbon market	(Zahabu, 2007)
SG051	<p>Cereal crop (paddy) is highly cultivated mostly for food, rather than high value horticultural crops</p> <p>Factors affecting willingness to pay for improved supply irrigation water while promoting nature conservation were identified</p> <p>Determined that farmers prefer formation of water user association (WUA) to Centralized governance and uncoordinated institutional arrangement in the management of water</p>	<p>Farmers encouraged to shift from more to less cereal and vice versa for high value crops are needed.</p> <p>Through policy reforms the Government is putting value to rural irrigation water as an economic incentive to efficiency use of water resource contrary to what was before this research</p> <ol style="list-style-type: none"> 1. Encouraging farmers to form water user associations (WUA) as an attempt to devolve water management power at the local level 	<p>Farmers in the Uluguru area (UMADEP) and CARE Tanzania</p> <p>Tanzania water policy reforms</p> <ol style="list-style-type: none"> 2. WAMI-RUVU Basin office in Morogoro.

