

Co-ordination of Critical Ecosystem Partnership Fund Investment in the Eastern Arc Mountains and Coastal Forests Region of Kenya and Tanzania

Annual Analysis of the Project Portfolio

31<sup>st</sup> March 2007



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*Charaxes cithaeron*



Compiled by BirdLife Africa Partnership Secretariat

Output 4: To make sure that a comprehensive and complimentary suite of CEPF Projects (within budget) is in place to fully address the Strategic Directions

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## 1. Introduction

Biodiversity is the variety and variability of living organisms broadly including a wide diversity of plant and animal species, communities and ecosystems (USAid, 2005). There is growing evidence now than before that we are on the verge of a biodiversity crisis (Pimm & Raven 2000). Current documentation is replete with empirical data and statistics on land use land cover changes manifested in the form of deforestation and habitat fragmentation (Achard *et al.*, 2002), expansion and intensification of agriculture, fires and alien invasive species (FAO 2001). These negative trends in habitats have a far reaching ramifications on species with the most likely one being triggering species extinction cascades. The current rates of extinction, mainly due to human activities, is up to 1000 times greater than background rates typical over the planet's history, and according to the Millenium Ecosystem Assessment report, the projected future extinction rate is more than 10 times higher than the current rate (<http://www.millenumassesment.org/en/products.aspx>). This emerging development has been of major concern to conservationists. Therefore, in order to conserve biodiversity, most efforts have remarkably focussed on reversing and preventing the extinction of species.

However, there has been significant concerted efforts and various approaches at international, regional and local levels by donors, governments, conservation organizations and the civil society in biodiversity conservation and particularly opting for an integrated approach, which links conservation, sustainable development and economic growth. In order to conserve biodiversity, organizations have been identifying and focussing conservation efforts on highly biodiverse regions and this entails each organization developing their own means of setting priorities. Biodiversity hotspots, ecoregions, Important Bird Areas, Important Plant Areas, Alliance for Zero Extinction sites are a few examples of priority areas that have been identified on the basis of their exceptionally high level of endemism and threats and are currently being used as areas of focus for conservation interventions. Protecting these discrete sites is currently the most effective way of conserving biodiversity.

Biodiversity hotspots are earth's biologically richest places, with high number with high levels of endemism, and are under immediate threat of species extinctions and habitat destruction. Conservation International (CI) took a lead in identifying and documenting these areas. Thirty four of these areas have been identified globally and documented and nine of them are found in Africa (Mittermeier *et al.*, 2004). Conservation International through the Critical Ecosystem Partnership Fund (CEPF) is currently mobilizing and providing financial and technical assistance towards the conservation of biodiversity hotspots.

The Critical Ecosystem Partnership Fund (CEPF) is a joint initiative of Conservation International, the Global Environment Facility, the Government of Japan, the MacArthur Foundation and the World Bank. The Partnership aims to dramatically advance conservation of the earth's biodiversity hotspots-the biologically richest and most threatened areas. A fundamental goal is to ensure that the civil society is engaged in biodiversity conservation. CEPF is now in its fourth year of a comprehensive conservation programme in the Eastern Arc Mountains and Coastal Forests of Kenya and Tanzania region (EACF). This is part of CEPF's five-year conservation programme in the EACF, which started in 2003 with the initial

compilation of the Ecosystem Profile<sup>1</sup> and the actual disbursement of project implementation funds in 2004. The EACF was initially one hotspot until 2005 when the hotspots were reviewed and assessed globally. This led to the EACF being divided into two hotspots namely the Coastal Forests of Eastern Africa Hotspot and the Eastern Afromontane Hotspot. The conservation programme in the EACF region is guided by a Coordination Unit comprising of four organizations with immense experience in biodiversity conservation with the EACF.

The conservation efforts by CEPF within this region continue to be guided by a Coordination Unit (CU) comprising of International Centre for Insect Physiology and Ecology (ICIPE), WWF-East African Regional Programmes Office (WWF-EARPO), Tanzania Forest Conservation Group (TFCG), BirdLife International and a co-opted member. BirdLife International is represented by BirdLife Africa Partnership Secretariat (BLAPS) and its Partners in Kenya and Tanzania - Nature Kenya (NK) and the 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 / Coastal Forest Biodiversity region of Kenya and Tanzania. Each member organizations have continued to strive to fulfill their roles.

The responsibilities for each member organizations are stipulated below:

#### *ICIPE*

Output 1: An EACF Coordination Unit exists with appropriate mechanisms to facilitate achievement of the Investment Priorities identified in the CEPF Ecosystem Profile

#### *TFCG*

Output 2: Stakeholders within civil society and government are aware of the CEPF process, goals and achievements and are sharing experiences

#### *WWF-EARPO*

Output 3: Civil society stakeholders supported to design effective conservation projects in line with the CEPF EP and submit proposals to CEPF

#### *BirdLife International (BLAPS, NK, WCST)*

Output 4: A comprehensive and complementary suite of CEPF projects (within budget) is in place to fully address the SFDs/IPs identified in the EP

This report is the third in a series of annual syntheses of the CEPF projects portfolio. It reviews the coverage of projects with respect to taxa, sites and activities. It is based on the analysis for the period ending March 31<sup>st</sup> 2007. At the end of the report, potential gaps in taxa and sites are identified and highlighted. These gaps are targets for future conservation and research efforts within the region both under the auspices of current and future CEPF funding or that of any potential donors. The report targets diverse audiences including CU members, donors, researchers, conservationists, development agencies and government institutions.

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<sup>1</sup> 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.

## 2.0. An overview of 2006

### 2.1. Activities of the CU

Most of 2006 was characterized by a significant shift from review of the grant applications to actual implementation of approved projects. Funds were depleted and hence for all of the Strategic Funding Directions, any additional subscription was closed. As part of the ensuring an “effective, efficient and coordinated approach amongst stakeholders is established to achieve the CEPF conservation outcomes for the Eastern Arc / Coastal Forest Biodiversity Hotspot”, in 2006 the CU, was involved directly or indirectly in various activities, forums and meetings including among others:

- Routine consultative meetings
- Signing of a landmark Memorandum of Understanding between CEPF and the Forest and Bee Keeping Division (FBKD), Tanzania. The signing ceremony was officiated and graced by Jorgen Thomsen, CEPF Executive Director and Senior Vice President for Conservation Funding at Conservation International and the Acting FBKD Director, Dominic Kiwele.
- A sensitization workshop for Kenya Forest Department (currently Kenya Forest Service) personnel
- Taita Hills Connectivity consultative workshop to chart the way forward on connectivity issues within the fragmented ecosystem of Taita Hills
- Strategic Directions 2 and 3 CEPF grantees Lessons Learnt workshops

As the majority of projects are in the implementation stage, the focus of the work has shifted from processing applications to monitoring and capturing the results. In terms of processing the applications, the review by the CU members drastically reduced in 2006. During this reporting period, less than 20 applications were reviewed. In this regard, the external database reviewers have also remained the same with no additional entries being made in the course of 2006. External reviewers were not engaged at all during 2006 and the zero growth in their contacts database can be attributed to this (Fig 1).

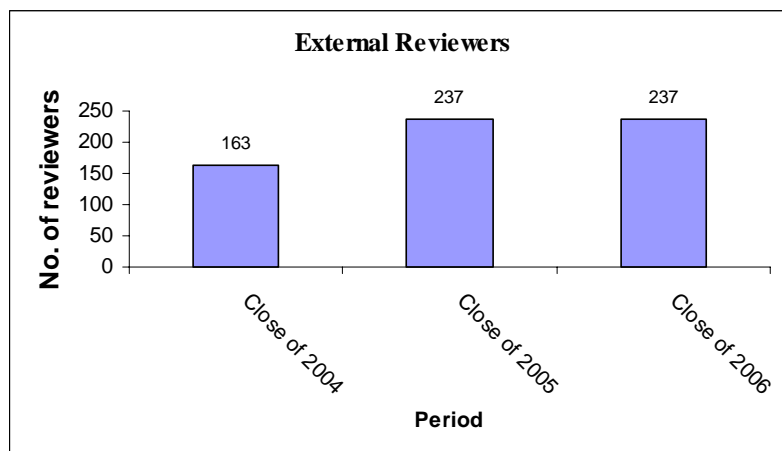


Figure 1: Expert reviewers' database by end of March 2007

In terms of species, there was a review of IUCN Red Listing in 2006. Initially, at the start of the CEPF investment in EACF, the region had 333 globally threatened species.

However, with this recent reassessment, the region has 343 globally threatened species. This could be attributed to increased biological knowledge and information of the region's biodiversity. These patterns are very true for Tanzania where several species have been discovered in the recent past, some of which are in fact of global conservation concern.

## **2.2. Project portfolio**

Overall, out of the more than 338 project proposals submitted, 84 have already been funded at USD 6,688,758 or 95.6% of the USD 7 million CEPF's investment into the EACF.

However, this also includes the USD600,000, which has been dedicated as special grants for community-based groups and post-graduate student (USD400,000 and 200,000 respectively). Based on the current state of the projects portfolio (allocations vs. available funds), no more applications are being accepted by CEPF for funding under the strategic directions apart from two CU run small grants as described below.

## **2.3. Small grants**

Two small grants scheme administered locally on behalf of CEPF were launched; the roles and responsibilities of the Coordination Unit members have slightly changed. WWFEARPO (including WWF-Tanzania Programmes Office), TFCG, NatureKenya and WCST are responsible on behalf of the CU for the administration of community micro grants scheme. This scheme worth USD400,000 aims to provide funding to Community-Based Organisations up to a maximum of USD5,000 each for conservation and sustainable livelihood activities. This grant scheme seeks to embrace the concept of community-based conservation and integrate biodiversity conservation and improved livelihood. This approach will greatly build local capacity and stimulate local communities into taking responsibility to safeguard and take ownership of biodiversity conservation process. This is one mechanism to ensure sustainability and buy-in by communities living adjacent the KBAs.

In 2006, 63 applications were received and reviewed of which have been approved for funding. A total of 13 community grants have been awarded in Kenya (annex 1), while those received for Tanzania are still under review and final decisions are to be reached soon.

BirdLife International and ICIPE have on the other hand taken up the role of administering the small grants for postgraduate student research on behalf of CEPF but with significant support from the entire CU, which specifically reviews the student grant application. The scheme worth USD 200,000 has been lauded as a very prudent way to build local capacity, fill gaps identified in the current portfolio and provide small-scale efforts to conserve endangered species and contribute to connectivity initiatives. The goal of this grant scheme is to provide postgraduate students with research grants for their thesis work. The maximum awarded under this scheme is USD10,000. Efforts are being made to publicize this funding opportunity.

A gap analysis was conducted to establish the investment priorities (IPs), species, and sites that have received little or no attention by the CEPF-funded projects. This information has since been circulated to the entire Coordination team for use in reviewing small grants for postgraduate student applications, as well as the community grants and ensure that as many as possible are aware and are submitting their project proposals.

## 2.4. Sustainable Financing

Sustainability is one area that the Coordination Unit and CEPF focused great attention during 2006. Plans to establish a Resource Mobilization Unit (RMU) are therefore at an advanced stage. In addition to projects to mainstream biodiversity monitoring into institutional routines, Terms of Reference for a consultancy to develop recommendations for putting in place a Resource Mobilization Unit were developed and circulated. A total of 11 highly qualified firms submitted their bids; three were short listed for this consultancy and a successful bidder (Karl Morrison and Greg Love) subsequently awarded the consultancy. This consultancy will provide the much-needed options for the sustainability of conservation funds within the region. The RMU will ensure the sustainability of activities (conservation and sustainable livelihood) initiated under the auspices of the CEPF funded initiative within the region.

## 3.0 Analysis of the CEPF Project Portfolio as of 31st March 2007

This section will provide an overview of the project portfolio for entire CEPF grants administered directly from CEPF and also grants administered by the CU or on behalf of CEPF (hereafter referred to as community micro grants and small grants for student research).

### 3.1. CEPF administered grants: Distribution of applications according to the Strategic Funding Directions

There was a drastic reduction in the number of applications submitted to CEPF during 2006 especially after CEPF placed a notice on the website alerting people that proposals were no longer being accepted under all SFDs. A total of 338 grant applications have been submitted to CEPF for work in the EACF since its inception in early 2004. This represents an increase of only 3.4% compared to the portfolio at the end of 2005.

A summary of projects that have so far been approved and work either in progress or already completed can be accessed online at:

[http://www.cepf.net/xp/cepf/project\\_database/eastern\\_arc\\_mountains.xml](http://www.cepf.net/xp/cepf/project_database/eastern_arc_mountains.xml). Details of these project proposals have been regularly updated in the project database hosted by BirdLife but periodically shared with all CU the members. The distribution of grant applications by Strategic Funding Directions and their status is shown in Table 1 and Figures 2 and 3 below.

Table 1. Strategic Funding Directions and respective Letters of Inquiries submitted as of 15<sup>th</sup> January 2007.

SFD	Accepted	Full proposal	Pending	Community grants	Rejected	Total
SFD1	29	2	4	9	108	152
SFD2	17	0	1	2	29	49
SFD3	24	0	1	2	67	94
SFD4	15	0	2	0	12	29
SFD5	0	0	0	0	3	3
Multi-SFD	0	0	0	3	8	11
Total						338



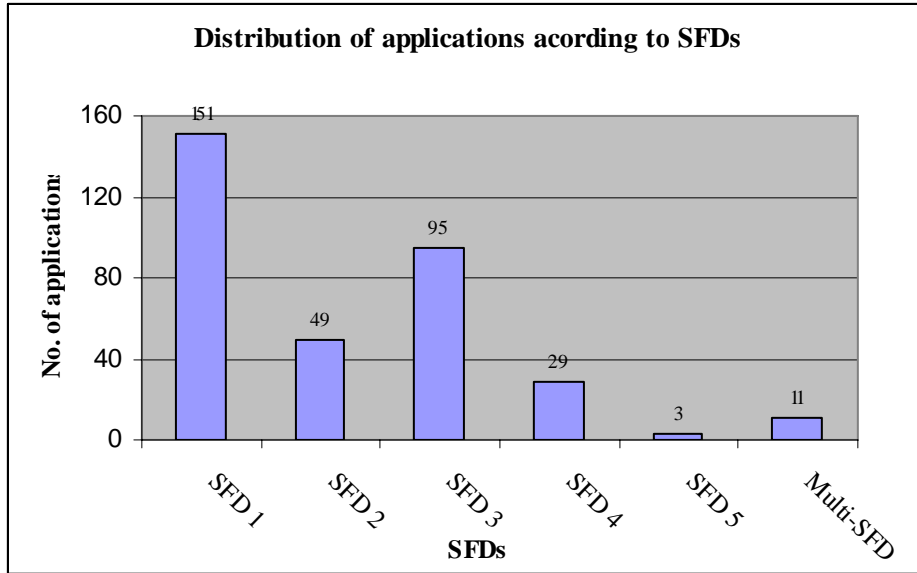


Figure 2: A graph showing the current project portfolio showing distribution according to SFDs

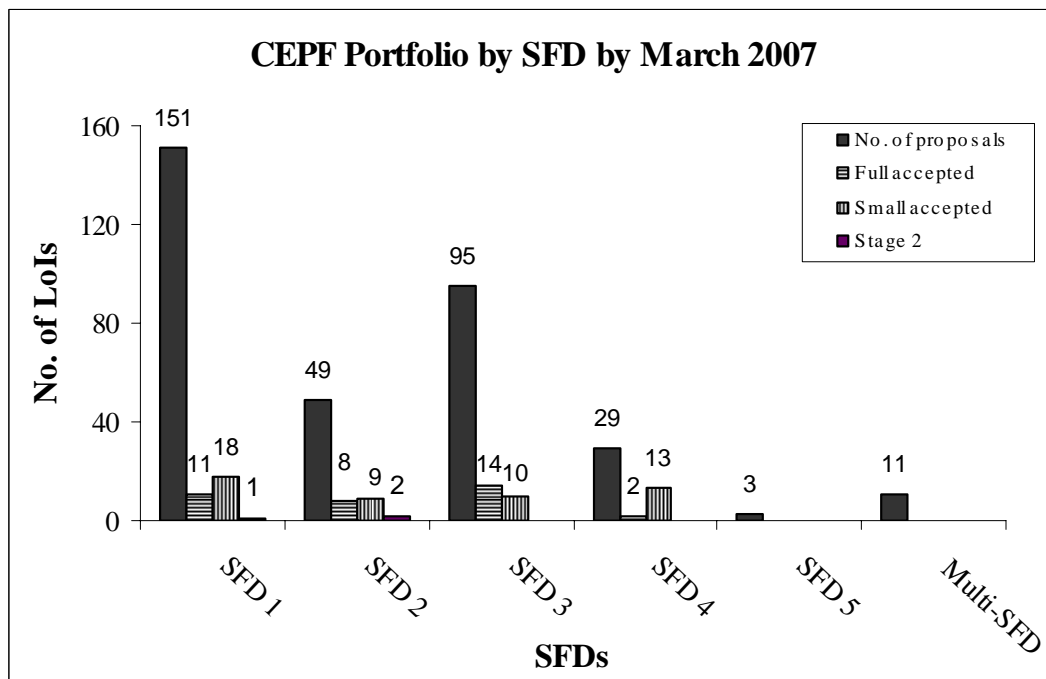


Figure 3: A graph showing the number CEPF Portfolio by end of March according to SFDs

1. In the course of 2006, because of reduced subscriptions, the CU addressed not more than 20 applications through the internal review process. Even then, this was mainly done during the first quarter of the year. However, the CU continued with its coordination activities through both consultative meetings and regular correspondence.

2. By the end of March 2007, a total of 84 LoIs<sup>2</sup> had been accepted for funding either as small grants (50) or full grants (34). Compared to the project portfolio by the end of 2005, this represents an increase of over 29% in the number of approved grant applications. Since the project commenced, the total number of applications rejected to date stands at 227 proposals.
3. Ten LoIs were still pending, two of which are still in the full proposal development stage and eight are either waiting the final decision by CEPF. Final approval will be subject to availability of funds.
4. Due to the considerable decline in the number of applications and their review, only two proponents were requested to merge proposals in 2006. This was after it was recommended that the two respective applications were complimentary to each other and there was a great potential of the project to benefit from a blend of local and international technical and programmatic expertise.

### ***3.2. Site coverage***

The focus of the CEPF investment is the 160 Key Biodiversity Areas found within the Eastern Arc and Coastal Forests of Kenya and Tanzania. The target of the CEPF investment within the region is to cover as many site outcomes as possible. However, given the financial limitations, it may not be feasible to comprehensively cover all the 160 focal sites. The purpose of this section is to provide an overview of CEPF achievement in terms of site coverage.

Not much has changed since 2005. The number of sites already mentioned in the proposals submitted still remains at 84 out of the total 160 outcome definition sites. Already, projects have been or are being implemented at a total of about 50 outcome definition sites where about 310 of the 333 outcome definition species are found. However, it is worth noting that there are some projects focusing on the entire region and whose activities are targeting all the 160 sites. These projects if successfully implemented have the potential to substantially benefit all the over 333 outcome definition species. A site-by-site analysis was conducted and the project details for respective sites are outlined below.

#### ***Entire EACF region***

A total of 16 projects focusing on the entire region have been approved and funded. As keystone projects, it is anticipated that the outputs from the activities will directly or indirectly benefit a majority of outcomes definition species if not all. The activities range from actual focal species research and conservation, monitoring and monitoring databases, awareness raising (including distribution of books and publications) and initiating of sustainable nature based income-generating activities. The projects and their descriptions are listed in Annex 2. These are excluded from the analysis of sites coverage.

#### ***Udzungwas***

The whole of **Udzungwa Mountains** National Park harbours 69 outcome species. Fifty project proposals were submitted for work at Udzungwas, of which 14 proposals have been

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<sup>2</sup> This figure includes the funding by CEPF to other global (multiregional) projects namely Small grants for Global Conservation of Amphibian Diversity within the hotspots (awarded to Arizona State University) and Pilot phase of equator ventures (awarded to Equator ventures)

accepted and one more is likely to be approved in the near future. Project that are being implemented in the Udzungwas are listed in Annex 3.

### ***Taita Hill Forests***

Based on the Ecosystem profile, **Taita hill forests** hosts 32 outcomes definition species. Taita Hill Forests still leads in terms of the total number of applications made so far. The site has been mentioned in 59 proposals cutting across all Strategic Funding Directions. Of the 59 proposals, 48 were focused on Taita Hill forests alone whereas for 11, Taita Hill forests only constituted a subset of the focal sites. A total of 12 projects targeting this site were funded. Some of the projects only confined to Taita Hill forests or its constituent fragments are listed in Annex 4:

### ***East Usambara Mountains***

**East Usambaras Mountains** is home to 111 outcome species and this diversity of threatened species underscores its high conservation value. Forty-four project proposals have so far been submitted for work at the site. Of these, ten have been approved for funding and work is either underway or complete. These excludes successful applications focusing on the entire region and also quite a number of projects that are only confined on the Tanzanian side of the hotspots and which will add value to the conservation of these sites (Annex 5).

### ***Lower Tana River Forests***

**Lower Tana River Forests** is home to ten outcome species including the endemic Tana River mangabey (*Cercocebus galeritus*) and Tana River Cisticola (*Cisticola restrictus*). However, this site definitely benefit from projects that have been considered for funding under the coastal forests of Kenya category of which it is part. Projects focusing on conservation issues of this site are list in Annex 6.

### ***Arabuko Sokoke Forest***

**Arabuko Sokoke Forest** harbours 19 conservation outcome species and is famous for the ‘small seven’, which comprises of six endangered bird species and the golden-rumped Elephant shrew. To date, 14 project proposals have been submitted to CEPF for funding under the CEPF administered funds. Of these, five have been funded either focusing entirely on the site or as part of a multiple site projects. The projects are listed in Annex 7:

### ***Uluguru Mountains***

The **Uluguru Mountains** hosts a total of 81 outcome definition species. A total of 18 project proposals have been submitted focusing their proposed activities at Uluguru Mountains. Out of these, six proposals have so far been accepted and funded.

This site has a long history of conservation investments. Some of the projects funded under the CEPF administered funds are listed in Annex 8.

### ***Rubeho Mountains***

The lesser-known **Rubeho Mountains** has **six** conservation outcomes species. Of the nine proposals submitted to CEPF to further conservation work at this site, **five** have been funded. A list of the funded projects focusing on Rubeho Mountains is listed in annex 9.

### ***Entire Tanzania***

The Tanzanian component of the EACF is composed of a remarkable number of globally threatened species. This is attributed to the relatively large size of the Tanzanian portion compared to the Kenyan one and the associated threat of sites in Tanzania. Of the 333 conservation outcome species, 307 are found in Tanzania compared to the Kenya's 105 species. Of the 11 proposals that proposed to work in the entire Tanzanian portion of the hotspot, five were approved and therefore either being implemented or project is complete. The projects are listed in Annex 10.

### ***Lindi District coastal forests***

A Key Biodiversity Area harboring **forty-five** of the outcomes definition species. Six proposals targeting this site were submitted out of which five have been funded. The list of approved grants is shown in annex 11.

### ***Jozani Forest Reserve***

Jozani Forest Reserve hosts eight conservation outcomes definition species. The site has been mentioned nine times out of which four proposals have been approved for funding (annex 12).

### ***Mt. Kasigau,***

Mt. Kasigau is home to four outcomes definition species. The site was mentioned in nine grant applications out of which four were successfully considered for funding and work is either in progress or complete. The successful ones are listed in annex 13.

### ***North Pare Mountains***

The site hosts a total of 11 outcomes definition species. Through the CEPF initiative, six project proposals covering this site have been submitted of which four have already been approved for funding. During the past one year, no additional proposals were submitted or approved for this site. See annex 14 for list of respective funded projects.

Table 2 provides a list of sites where three or less projects have been approved for funding under the CEPF programme.

Table 2. An analysis of sites for which three or less projects were approved.

<b>Conservation Outcome site</b>	<b>Conservation Outcome species</b>	<b>No. of times mentioned in proposals</b>	<b>Proposals approved</b>
Boni forest	7	8	3
Dodori forest	1	7	3
Coastal Forests of Tanzania	---	4	3
Jozani Forest Reserve	8	9	4
Mt. Kasigau	4	9	4
Nguru Mountains	42	13	3
Tanga	1	30	3
Coastal Forests of Kenya	---	4	2
Dakatcha	2	3	1
Handeni D.C forests	9	1	1
Nguu Mountains	2	11	2
Pemba Island	4	4	2
Rufiji Coastal Forests	22	6	2
Ukaguru Mountains	9	8	2
Mafia Island	12	2	2
Chuna Forest	1	1	1
Kayas Gonja	1	1	1
Kaya Kinondo	3	2	1
Kaya Miungoni	2	1	2
Kaya Muhaka	7	1	1
Kaya Rabai	8	1	1
Kaya Segwa	1	1	2
Kilombero Valley	10	3	1
Kilwa District Forests	12	3	2
Kisarawe District Coastal Forests	30	5	1
Lindi	2	5	1
Pande & Dodwe C. forests	8	2	1
Magombera forest	3	2	1
Lughi	1	1	2
Chale Islands	4	3	2
Mahenge	1	2	1
Mikumi National Park	1	2	1
Mrima Hill	10	5	2
Mtwara Coastal Forests	1	1	1
Tana River Delta	0	4	1
Tumbatu Island	1	1	1

Conservation Outcome site	Conservation Outcome species	No. of times mentioned in proposals	Proposals approved
Uvivunda Mountains	2	1	1
West Usambara	66	3	1
Witu	9	2	3
Zanzibar (Kituani)	1	1	1
Zanzibar (Muyuni)	1	2	1
Zanzibar Island-East Coast & Zanzibar Island-South Coast	0	1	1

### 3.3 Characteristics of applicants to CEPF

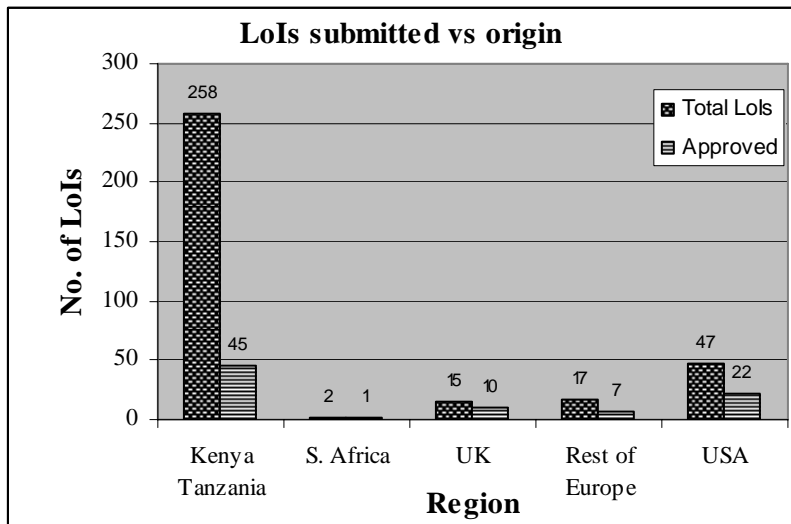


Figure 3. The number of applicants who applied for CEPF grants in 2004 and their countries of origin

### 3.4 Projects thematic focus

The list of Strategic Directions and the corresponding Investment Priorities (IPs) are listed below.

1. Increase the ability of local populations to benefit from and contribute to biodiversity conservation, especially in and around Lower Tana River Forests; Taita Hills; East Usambaras/Tanga; Udzungwas; and Jozani Forest

1.1 Evaluate community-based forest management initiatives in the hotspot to determine best practices

1.2 Promote nature-based, sustainable businesses that benefit local populations in the hotspot

1.3 Explore possibilities for direct payments and easements (Conservation Concessions) for biodiversity conservation in the hotspot and support where appropriate

1.4 Build the capacity of community-based organizations in the hotspot for advocacy in support of biodiversity conservation at all levels

1.5 Support cultural practices that benefit biodiversity in the hotspot

### 1.6 Research and promote eco-agricultural options for the local populations of the hotspot

2. Restore and increase connectivity among fragmented forest patches in the hotspot, especially in Lower Tana River Forests; Taita Hills; East Usambaras/Tanga; and Udzungwas
  - 2.1 Assess potential sites in the hotspot for connectivity interventions
  - 2.2 Support initiatives that maintain or restore connectivity in the hotspot
  - 2.3 Monitor and evaluate initiatives that maintain or restore connectivity in the hotspot
  - 2.4 Support best practices for restoring connectivity in ways that also benefit people
3. Improve biological knowledge in the hotspot (all 160 sites eligible)
  - 3.1 Refine and implement a standardized monitoring program across the 160 eligible sites
  - 3.2 Support research in the less studied of the 161 eligible sites in the hotspot
  - 3.3. Monitor populations of the Critically Endangered and Endangered Species in the hotspot
  - 3.4 Support research in the hotspot to facilitate Red List assessments and re-assessments for plants, reptiles, invertebrates and other taxa
  - 3.5 Compile and document indigenous knowledge on hotspot sites and species
  - 3.6 Support awareness programs that increase public knowledge of biodiversity values of the hotspot
4. Establish a small grants program in the hotspot (all 160 sites eligible) that focuses on critically endangered species and small-scale efforts to increase connectivity of biologically important habitat patches
  - 4.1 Support targeted efforts to increase connectivity of biologically important habitat patches
  - 4.2 Support efforts to increase biological knowledge of the sites and to conserve critically endangered species
5. Develop and support efforts for further fundraising for the hotspot
  - 5.1 Establish a professional resource mobilization unit, within an appropriate local partner institution, for raising long-term funds and resources for the hotspot
  - 5.2 Utilize high-level corporate contacts to secure funding from the private sector for the hotspot
  - 5.3 Train local NGOs and community-based organizations in fundraising and proposal writing

### ***3.5 Allocation of CEPF funds***

#### *Funds committed versus the funds allocated to different SFDs*

Over the two years that the CEPF Programme has been active, funds have been allocated to successful projects. Figure 4 represents these allocations with respect to the initial allocation to SFDs.

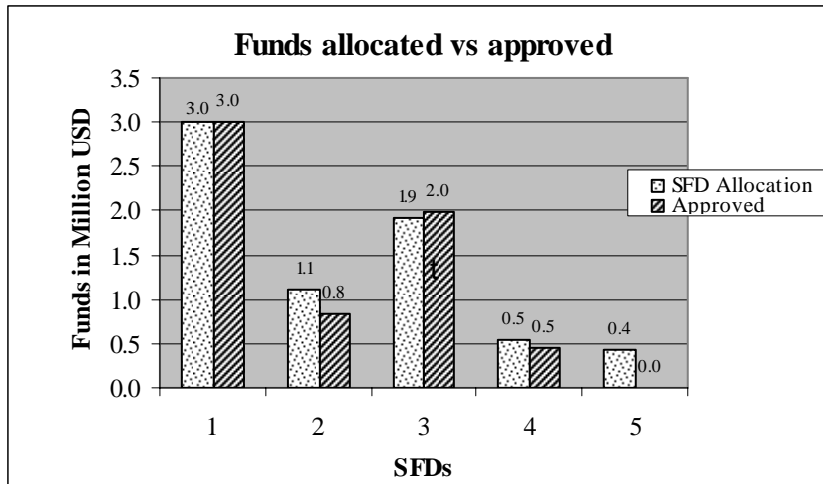


Figure 4. The current project portfolio in terms of funds allocated to specific SFDs versus funds committed in 2006.

### 3.6. Role of governments

Marshalling government support and involvement is a very vital ingredient if biodiversity conservation has to be achieved. The signing of a Memorandum of Understanding between CEPF and the Forest and Beekeeping Division of the Ministry of Natural Resources and Tourism of Tanzania in early 2006 was a major milestone in establishing and strengthening the relationships between donors, conservation organizations and governments. This kind of arrangement will go a long way in ensuring sustainability of conservation efforts within the region thus maximizing and capitalizing on existing synergies. The Forest Department of Kenya's Ministry of Environment and Natural Resources was also engaged in CEPF activities through convening of a sensitization workshop, which was held at the Forest Department Headquarters in Nairobi.

### 3.7. Involvement of other stakeholders

CEPF stakeholders have also been engaged through regular communication including periodical circulation of stakeholders' contact database (a database containing CEPF grantees, their project details and contacts). This makes it easier for grantees to familiarize themselves with what fellow grantees are doing and facilitate sharing of experiences. The contacts of project implementing teams are included in the Sustainable Biodiversity Monitoring project stakeholders' contacts and are regularly made available through circulars. This is meant to ensure that stakeholders communicate among themselves and share information of conservation concern in the eastern arc and coastal forests of Kenya and Tanzania. Websites have been an avenue for disseminating relevant information. In this regard, the CEPF (<http://www.cepf.net>) and CU (<http://cepf.tfcg.org>) websites have been very instrumental in updating and making accessible to stakeholders all the relevant information and documentation.

CEPF grantees were brought together in two separate SFD2 and 3 Lessons Learnt workshops. During these meetings, participants made presentations about their projects and also identified lessons learnt during implementation of their project activities. This was a good opportunity to



exchange ideas, share challenges, experiences, and network with one another and forge future collaborations.

University academic staff who have previously been engaged as reviewers of project proposals are currently involved as supervisors for postgraduate students and research grants funded by CEPF.

#### **4.0. Some innovations**

The introduction of two categories of locally administered small grants (Community micro grants for CBOs in EACF Region of Kenya and Tanzania and Small Grants for Building Research Capacity among Tanzanian and Kenyan Students) is a major innovative approach to enhance small-scale efforts to promote conservation and development within the region.

##### ***4.1 Filling gaps through the small grants for Student Research***

This grant scheme was introduced on the premise that student researchers were not adequately represented among the CEPF grantees. The focus of this grant are students at graduate and post graduate level planning to undertake research work within the hotspot that either contributes significantly to the conservation of (critically) threatened species or increase connectivity as well as activities that will generate information that can feed into the Red List Assessments process. It was felt that however small scale the efforts, this work by students is not only crucial for generation of information *per se* but will in the long-term harness, nurture and develop high calibre of skills from the students while also supporting the student to access the much needed funding for research work. Furthermore, this kind of involvement has the potential to ensure capacity strengthening for the relevant institutions from which the grantees are drawn.

The small grants for post graduate students scheme was rolled out in October 2006 and as of March 2007, a total of 20 proposals had been submitted and reviewed by the Coordination Unit. Out of these, eight had been considered for funding and 2 have to be resubmitted for funding. The eight include four each from Kenya and Tanzania respectively and are worth USD61, 211 (38.2% of the USD160, 000 funds available to be disbursed to successful applicants). It is anticipated that the funds available under this programme could cater for over 20 students and efforts are being made through a rigorous review process to ensure that as many students as possible benefit from this grants. As the profile of this programme continues to be raised and more potential applications become aware of it, it is expected that more students will apply in future. Already several measures have been taken to publicise it including posters, featuring articles in newsletters and E-bulletins, websites and email circulations. It is also anticipated that a lot of emphasis will continue to be placed on least studied species, critically endangered species and sites with less investments small scale efforts to increase connectivity of biologically important habitat patches. Recommendations have been made by the CU on the need to consider more applications from the Tanzania side of the hotspot where more KBAs are found (91) compare to the 59 found on the Kenyan side.

The following are the projects that have already been approved:

1. The proximity of the farms to Arabuko – Sokoke forest influences the diversity of insect pollinators and fruit set.
2. Beekeeping for forest conservation: Filling a knowledge gap at Arabuko Sokoke Forest, Kenya

3. Abundance and Diversity of Small Mammals in Disturbed and Undisturbed Forests at Uluguru Mountains
4. Effects of Joint Forest Management Institutional Arrangements on Forest Condition and Local Livelihood
5. Density and Inter-fragment Dispersal of Bird Species in Three Coastal Forest Fragments, Kenya
6. Assessment of Species Composition and Diversity of Small Mammals at Saadani National Park
7. *Cedrela mexicana* impacts on indigenous trees diversity in Kimboza Forest Reserve, Morogoro Tanzania
8. The ecology and molecular characterization of the endangered and endemic *Gulella taitensis* (land snail) of the Taita Hills, Kenya.

Some sites that had not specifically received attention from previous CEPF projects have gotten funding through the small grants for student research. These sites include Kaya Waa, Kaya Mtswakara, Kaya Gandini, New Dabaga, and Ulagambi Forest Reserve (least known forest patches for Udzungwa Mountains), Mwache forest reserve and Sadaani National Park. In terms of species, students are now giving focus to new and deserving taxonomic groups such as gastropods (land snails in Taita) and other thematic areas such as invasive species and dynamic ecological processes.

#### ***4.2 Filling gaps in the CEPF portfolio through Community micro grants***

Community based natural resource management is a unique opportunity to showcase the link between conservation and development for effective management of key biodiversity areas. It is assumed that diversifying local livelihood options will reduce human pressure on biodiversity, leading to improved conservation. Recognising the emerging need to engage the communities in conservation and livelihood initiatives, CEPF launched the community micro grants scheme. Administered through the CU members (WWF-EARPO, WW-FTPO, Nature Kenya, WCST and TFCG) this scheme was launched in 2006 and a grant management structure has been put in place. As of March 2007, 63 applications have been submitted comprising of 36 from Kenya and 27 submitted by Tanzanian CBOs. The review process is complete for the 36 applications from Kenya, and already 13 have been considered for funding amounting to Kshs 1,872,600 (USD26,374.65). See Annex 1 for more details. The 27 applications for Tanzania worth Tshs66,397,050 (USD 51,074.65) are still under review.

### **5.0 Major Gaps Identified in the Project Portfolio and way forward**

#### ***5.1 Gaps in site coverage***

A full list of sites that have not been specifically targeted in any of the projects proposals submitted so far is presented in table 3.

Table 3. List of 96 priority sites either not mentioned in any of the proposals received by end of 2005 or mentioned but not funded. In the brackets is the number of the respective outcomes definition species at the sites.

1. Bagamoyo (2)	33. Lango la Simba (2)	68. Ngozi crater (1)
2. Bagamoyo (Kikoka FR) (1)	34. Latham Island (0)	69. Nyumburuni forest reserve (2)
<b>3. Bagamoyo District Coastal Forests* (21)</b>	35. Lindi (Kengedi) (1)	70. Nzovuni River (1)
4. Baricho near Arabuko Sokoke (1)	36. Lindi (Ras Rungi) (1)	71. Pangani (Bushiri) (1)
5. Bungu (1)	37. Lindi (Tendaguru) (1)	72. Pangani (Hale-Hale-Makinjumbe) (1)
6. Cha Simba (3)	38. Lindi Creek (1)	73. Pangani District Coastal Forests (10)
7. Dar es Salaam Coast (1)	39. Lindi (Mikindani) (1)	74. Pangani (Mauri) (1)
8. Diani Forest (11)	40. Lindi (Ngongo) (1)	75. Pangani Dam (1)
9. Dzitzoni (1)	41. Lindi (Nondora) (1)	76. Panza Island (1)
10. Gede Ruins National Monument (2)	42. Lindi (Nyangao River) (2)	77. Ras Kituani (1)
11. Gongoni Forest Reserve (11)	43. Lukoga forest reserve (1)	78. River Wami(2)
12. Kambe Rocks (1)	44. Mafia Island (12)	79. Rufiji Delta (1)
13. Kaya Bombo (1)	45. Mangea Hill (9)	80. Sabaki River Mouth (1)
14. Kaya Chonyi (2)	46. Makongwe Island (1)	81. Sangerawe (1)
15. Kaya Fungo (1)	47. Marafa (1)	82. Semdoe (2)
16. Kaya Jibana (8)	48. Masasi (1)	83. Shikurufumi forest reserve (1)
17. Kaya Kambe (3)	49. Masasi (Nyagendi) (1)	<b>84. Shimba Hills* (56)</b>
18. Kaya Kauma (3)	50. Masasi East (1)	<b>85. Shimoni Forests (2)</b>
19. Kaya Kivara (4)	51. Mahenge (Kwiro forest) (1)	86. Sinza River-near Univ. of Dar (1)
20. Kaya Lunguma (3)	52. Mahenge (Liondo) (1)	<b>87. South Pare Mountains* (33)</b>
21. Kaya Mtswakara (4)	53. Mahenge (Lipindi) (1)	88. Tanga North Kibo Salt Pans (0)
22. Kaya Mwarakaya (1)	54. Mikindani (Mnima) (1)	89. Tanga South (0)
23. Kaya Puma (1)	55. Mikindani (Mtwara Inland) (1)	90. Ukunda (3)
24. Kaya Ribe (1)	56. Mikindani District (Mtwara-Mikindani) (1)	91. Ukwama forest reserve (1)
25. Kaya Teleza (1)	57. Mkomazi Game Reserve (4)	92. Utete (Kibiti) (2)
26. Kaya Tiwi (2)	58. Mnazi bay (0)	93. Uzaramo (Dar to Morogoro) (1)
27. Kaya Ukunda (2)	59. Mpanga village forest reserve (1)	94. Uzaramo (Msua) (1)
28. Kaya Waa (2)	60. Msambweni (1)	95. Verani South West (1)
<b>29. Kisarawe District forests* (30)</b>	61. Mtanza Forest reserve (2)	96. Vigola (1)
30. Kisiju (1)	62. Mwache Forest Reserve (5)	
31. Kisimani wa Ngoa (2)	63. Near Buda forest reserve (1)	
32. Korogwe (1)	64. Newala (Kitama) (1)	
	65. Newala (Kitangari) (1)	
	66. Newala (Mahuta) (1)	
	67. Newala District coastal forests (13)	

\*These are some of the priority sites in terms of biodiversity value and which have not been captured in previous grant applications.

## ***5.2 Gaps in Activities***

There has been a significant coverage of research on flora and fauna such as mammals (primates and small mammals including microchiropteran bats), insects (butterflies, army ants, ground-dwelling ants/beetles, spider diversity), birds (threatened birds East Usambara Mountains, Uluguru Bush shrike, Spotted Ground thrush, Udzungwa Forest Partridge), amphibians (assessment of amphibians in Taitas, chytrid distribution & pathogenicity in frogs), plants (Plant conservation assessment). There have also been comprehensive surveys at hitherto biologically unknown sites (Mtwara KBA). It is therefore evident that even though there might be project that could have captured fish, no CEPF funded project has proposed specifically to focus on this taxonomic group.

The IPs identified as major gaps include 1.3, 1.5, 1.6, 2.3, and 3.5 (refer back to section 3.5). It is therefore imperative to explore ways of filling these gaps.

WWF and other CU members administering the CEPF micro grants have also been actively involved in mentoring and guiding the local CBOs and supporting them in proposal writing.

## ***5.3 Gaps in terms of proponents***

Two gaps i.e. the involvement of stakeholders were identified in 2005, namely the local communities and students. It was agreed that the CEPF application process was too sophisticated for these groups of stakeholders and a decision was taken to develop locally administered grants. These are explained in detail in section 2.3.

## **6. Sustainability**

Sustainability issues are being addressed mainly through a consultancy to develop a strategic and innovative way to mobilize necessary resources when the CEPF programme ends. The strategy will guide stakeholders to mobilize funds from various sources, as a way of ensuring that there is sufficient work going on at the site level and building on the first phase of the CEPF programme in the region. Achieving sustainability is a long-term goal that requires concerted efforts and team work from all stakeholders and requires a long-term commitment from all concerned. Diversifying ways of securing funds and allocating future funds based on gaps identified will be useful in ensuring that scarce resources are effectively allocated and used. It will also be important for strategic partnerships to continue being developed, nurtured and safeguarded.

## **7. Lessons Learnt**

Lessons Learnt workshops for CEPF grantees was brought project implementers together in a forum to get feedback on their projects and for them to share their experiences. It is anticipated that more lessons will be documented especially during the closing workshop being planned for at the end of the first phase of CEPF programme in the EACF region.

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## Annexes

### *Annex 1: First allocation of CEPF Community Grants as of 22<sup>nd</sup> August 2006*

	<b>Name of CBO</b>	<b>District</b>	<b>Project focus</b>	<b>Award in Kshs</b>	<b>Affiliated Institution</b>
1	Kaya Jorore Conservation Committee	Kilifi	Bee Keeping Viragoni	150,000	Coastal Forest Conservation Unit (CFCU)-Kilifi
2	Safina akiba na Mkopo	Kilifi	Tree planting along steep slopes on the beach	140,000	CFCU - Kilifi
3	Msabaha Neem and Mango Growers Association	Malindi	Production of Mango Seedlings for on-farm planting	140,000	CFCU - Kilifi
4	Guides Association	Malindi	Eco-tourism – Renovation of camp site	143,000	Nature Kenya
5	Marafa Group	Malindi	Tree planting	140,000	CFCU - Kilifi
6	Kaya Likunda Drama Group	Kwale	Conservation of Kaya Ukunda Forest through Drama	140,000	WWF-Kwale
7	Kwale Wildlife Clubs Patrons Action Group	Kwale	Enhancing School environmental education	250,000	WWF-Kwale
8	Gogoni conservation Initiative	Kwale	Reduced Energy Needs through improved Energy Saving Cookers	130,000	WWF-Kwale
9	Kilwala Nature Group	Taita Taveta	Bee keeping and tree nursery	140,000	EAWLS - Taita
10	Mwachambi Tree Nursery	Taita Taveta	Production of seedlings and tree planting	99,200	EAWLS - Taita
11	Nyuki Youth Group	Taita Taveta	Bee Keeping	137,900	EAWLS - Taita
12	Shikaadabu Union Development Programme	Mombasa	Establishment of Tree nursery	125,000	WWF- Mombasa
13	Miritini Environmental Development Group	Mombasa	Bee Keeping	137,500	WWF-Mombasa
			<b>TOTAL</b>	<b>1,872,600</b>	

## ***Annex 2. Funded projects targeting the entire EACF region***

1. Standardizing Forest Change Methodologies between Sokoine University and Centre for Biodiversity Science (CABS) to assist in identifying connectivity priorities across the Eastern Arc and Coastal Forests:
  - *Demonstrate the methodology developed to detect forest change and assess how similar this is to methodologies being used to detect forest change by Sokoine University and the WWF approach, and ideally develop a standardized method for this analysis so that the individual parts can be compiled as a region-wide forest cover change map.*
2. CEPF Investment Coordination and Sustainability in the Eastern Arc / Coastal Forests Hotspot
  - *Coordinate CEPF's investments in this hotspot to ensure they are complementary with on-going activities, engage a wide array of nongovernmental organizations and achieve the greatest impact. The ICIPE leading a consortium of the WWF Eastern Africa Regional Programme Office, the Tanzania Forest Conservation Group and BirdLife Africa as the eyes and ears of CEPF in the region to promote the conservation of biological diversity at all levels of civil society.*
3. Instituting a Standardized Sustainable Biodiversity Monitoring System in the Eastern Arc / Coastal Forests of Tanzania and Kenya
  - *Monitor conservation outcomes as a result of all investments undertaken at species, site and landscape scales. In addition, provide a mechanism for all data accrued from projects to be available to address the most urgent priorities that can be compared against an analysis of forest change throughout the region.*
4. Small Grants for Building Research Capacity among Tanzanian and Kenyan Students
  - *Provide bursaries for students to undertake research at the species, site, and landscape levels.*
5. Documenting Four Thematic Issues of the Journal of East African Natural History
  - *Provide a natural home for peer-reviewed papers, research findings, and short notes in the field of natural history that contribute to knowledge, status, and conservation within the region. In addition, all relevant papers published in the journal since 1910 will be made available for open access as portable document format files on the Web.*
6. Plant Conservation Assessment in the Eastern Arc Mountains and Coastal Forests Mosaic of Kenya and Tanzania
  - *Survey important sites and species with limited distributions to update the conservation status of forest plants and broaden the network of East African plant specialists. Species new to science will be published and type specimens deposited in collections as well as being available online through the Missouri Botanical Garden's Web site. This information will contribute to the Red Listing of plant species.*
7. Plant Conservation Assessment in the Eastern Arc Mountains and Coastal Forests Mosaic of Kenya and Tanzania
  - *Survey important sites and species with limited distributions to update the conservation status of forest plants and broaden the network of East African plant specialists. Species new to science will be published and type specimens deposited in collections as well as being available online through the Missouri Botanical*

- Garden's Web site. This information will contribute to the Red Listing of plant species.*
8. Instituting a Standardized Sustainable Biodiversity Monitoring System in the Eastern Arc / Coastal Forests of Tanzania and Kenya
    - *Monitor conservation outcomes as a result of all investments undertaken at species, site, and landscape scales. In addition, provide a mechanism for all data accrued from projects to be available to address the most urgent priorities that can be compared against an analysis of forest change throughout the region.*
  9. Managing CEPF's Outcomes Database for the Eastern Arc Mountains and Coastal Forests Of Tanzania and Kenya Hotspot
    - *Maintain and expand the conservation outcomes database for this hotspot pending the development of a comprehensive monitoring system for the duration of the CEPF investment period. Ultimately, this will improve the Red Listing of species and benefit conservation action in the region.*
  10. Biodiversity Assessment and Monitoring of the Insect Fauna in the Eastern Arc Mountains and Coastal Forests Using Ground-Dwelling Ants and Beetles as Indicator Groups
    - *Complete a thorough field sample program across the Eastern Arc Mountains and Coastal Forests of Tanzania and Kenya to assess the composition and abundance of these important invertebrate groups. This will provide baseline data for future monitoring as well as contribute to the red listing of these often-neglected groups.*
  11. TALK (Training, Awareness, Learning, and Knowledge) about the Eastern Arc and Coastal Forests of Kenya and Tanzania
    - *Raise awareness about the importance of these forests, the biodiversity they contain, the services they provide, and the threats confronting their long-term conservation through a variety of media including drama and music competitions, publications, radio, and TV programs to be broadcast in BBC's Earth Report.*
  12. Community Biodiversity Conservation Micro-Grants in the Eastern Arc and Coastal Forests of Kenya and Tanzania
    - *Support community-based organizations reliant upon the forest resources with funds to undertake small-scale activities that serve to improve livelihoods and contribute to the conservation of the forests. Grants will include activities at individual sites as well as actions that have indirect conservation benefits including training and exchange visits.*
  13. Technical Advisor – Conservation Corridors: Eastern Arc and Coastal Forests of Tanzania and Kenya
    - *Establish position for scientific advisor, who will provide up-to-date advice on the research priorities within the region and ensure that data are collected in a standard and comparable manner, thus ensuring that a cohesive set of research projects are implemented.*
  14. "Scientific Advisor" for the Eastern Arc Mountains and Coastal Forests of Tanzania and Kenya Hotspot
    - *Providing up-to-date advice on the research priorities within the hotspot the scientific advisor will also ensure that data are collected in a standard and comparable manner, thus ensuring that a cohesive set of research projects are implemented throughout the hotspot.*



15. Overview of Butterfly Faunas of Eastern Arc Mountains and Coastal Forests: Biodiversity, Endemism, Conservation

- *Collate existing data on all butterfly species, especially endemic butterfly species, throughout the region from existing collections (the grant recipient has the largest collection of African butterflies in existence), as well as identify gaps in the current knowledge and undertake field surveys to provide a complete a record.*

16. Equator Ventures

- *Support the pilot phase of Equator Ventures, a partnership initiative with UNDP's Equator Initiative. Implement loan and technical assistance packages to small- to medium-sized enterprises benefiting biodiversity and local communities, and monitor biodiversity results.*

17. Small Grants for Global Conservation of Amphibian Diversity Within Hotspots

- *Develop and implement the Amphibian Action Fund aimed at the long-term conservation of amphibian species, and their habitats, within biodiversity hotspots around the globe. This fund will make available small grants of up to \$10,000 to be awarded to individuals and groups working within the hotspots on targeted amphibian conservation activities.*

### **Annex 3. Funded projects targeting the Udzungwa Mountains KBA**

1. Population density estimates and threats evaluation of the highly endangered Udzungwa Forest Partridge, in the Udzungwa Mountains of Tanzania
  - *Survey the known and potential range of the Udzungwa forest partridge *Xenoperdix udzungwensis* to determine the population size, density, and abundance to update the status in the IUCN Red List. Document the population structure and obtain genetic material for analysis as well as gain an idea of the food preferences of this threatened species.*
2. Assessing the potential for restoring connectivity and evaluating options for improved management of the Udzungwa Scarp, Iyondo, Matundu and Nyanganje Forest Reserves in the Udzungwa Mountains of Tanzania
  - *Assess the condition of the forests, ecosystem integrity, and human impacts between the Udzungwa Mountains National Park and the Udzungwa Scarp Forest Reserve to identify and map potential corridors between these critical conservation areas. Explore options for improving the management and conservation status of these areas.*
3. Protecting Biological Diversity on Unilever's Mufindi Tea Estate
  - *Analyze the causes of forest degradation around the Mufindi Tea estate. Based upon this, and in conjunction with select user communities, develop projects to promote alternative sources of energy and agroforestry practices to supply fuel wood, building materials, and medicinal plants as a means to conserve these forests.*
4. Manage Educational Tourism Project in the Udzungwa Mountains, Tanzania: Phase 1
  - *Complete the habituation of a troop of Endangered Sanje mangabeys (*Cercocebus galeritus sanjei*) around the Udzungwa Mountains National Park headquarters at Mang'ula to enhance educational tourism for both local and international visitors. In so doing, train and build the skills of rangers and local guides to ultimately increase revenue for the park and local community.*
5. Socioeconomic Study of the Udzungwa Scarp Area: A Potential Wildlife Corridor
  - *Undertake a socioeconomic study of villages between the Udzungwa Mountains National Park and the Udzungwa Scarp Forest Reserve. These data will be used to evaluate the most effective approaches required to improve conservation and reconnect these important forest blocks*
6. Restoring Forest Connectivity in the Udzungwa Mountains
  - *Identify biodiversity corridors combining both biological imperative and community use between existing forest fragments. In consultation with the local communities, the appropriate mechanisms to establish forest corridors will be put in place and the corridors will be replanted and tended to ensure the seedlings survive*
7. Facilitating the Process of Establishing Conservation and Connectivity Interventions in the Udzungwa Mountains Area
  - *Determine, through a stakeholders' workshop, a cohesive set of conservation priorities in the areas surrounding Udzungwa National Park that face demands from the local communities and commercial enterprise, as well as the need to protect the ecological services of the catchment forests that provide habitat for several endemic species.*
8. Conservation Ecology of the Endangered Endemic Sanje Mangabey (*Cercocebus sanjei*) of the Udzungwa Mountains, Tanzania
  - *Complete a study that will define, for the first time, the ecological requirements, behavior and demographics of the Sanje mangabey *Cercocebus sanjei* in the Udzungwa Mountains*

*National Park. These data are vital in determining the conservation needs of this highly endangered endemic primate.*

9. Assessment of the conservation status of the newly-discovered mangabey *Lophocebus* sp. in the Udzungwa Mountains of Tanzania
  - *Contribute to the Red List assessment of this newly discovered primate in the Udzungwa Mountains by undertaking surveys of the range, abundance and ecological data in wet and dry seasons. These data will serve to recommend appropriate conservation actions. In addition, a Tanzanian graduate ecologist and local fieldworkers will be trained in primate survey techniques.*
10. Chytrid distribution and pathogenicity among frogs of the Udzungwas.
  - *Conduct a study to improve understanding of the level of infection and the threat posed by the Chytrid fungus among endemic amphibian species in the Udzungwa Mountains.*
11. Taxonomy and Conservation Genetics of the threatened Mangabey Taxa of the Eastern Arc Mountains and Coastal Forests of Tanzania and Kenya Biodiversity Hotspot
  - *Collect genetic samples and record vocalizations from the major populations of mangabeys through out Tanzania and Kenya. These data will be analyzed to determine the degree of speciation of the respective populations and the extent of reproductive isolation and potential threats to survival due to loss of genetic variability.*
12. Filling the Knowledge Gap: Surveys of Poorly Known Sites and Species in the Eastern Arc and Coastal Forests
  - *Understand the vertebrate biodiversity of three isolated, lesser-known sites Rubeho (within Dodoma Region), Udzungwa and North Pare Mountains. In addition, on a wider geographical scope, complete species-specific surveys of endangered nocturnal and diurnal primates, duikers, elephant-shrews, hyraxes, amphibians, and reptiles in Tanzania's Eastern Arc Mountains.*
13. Overview of Butterfly Faunas of Eastern Arc Mountains and Coastal Forests: Biodiversity, Endemism, Conservation
  - *Collate existing data on all butterfly species, especially endemic butterfly species, throughout the region from existing collections (the grant recipient has the largest collection of African butterflies in existence), as well as identify gaps in the current knowledge and undertake field surveys to provide a complete a record.*
14. Managing the interface between forest product extraction and rural livelihoods in the Eastern Arc Mountains and Coastal Forests (EAMCF) hotspot.
  - *Mitigate threats to the long-term conservation of Tanzania's forests from unsustainable timber trade and extraction through a combination of strengthening civil society and improved community management of forest reserves that will provide the tools necessary to prevent unsustainable trade.*

#### **Annex 4: Funded projects targeting the Taita Hill forests KBA**

##### 1. Rehabilitation and Restoration of Mwambirwa Forest

- *Rehabilitate 318 hectares of Mwambirwa forest that burned down in 2001, replacing exotic plantation species with a mix of indigenous trees. In so doing, reestablish connectivity with the larger Mbololo forest to improve the long-term survival of the Critically Endangered Taita thrush (*Turdus helleri*).*

##### 2. Rehabilitation of Chawia Forest for the Conservation of Its Flora and Fauna

- *Conserve the Critically Endangered Taita thrush (*Turdus helleri*) through restoring the understorey vegetation within Chawia forest, while providing alternative sources to many of the forest products required by the local communities. Activities also include advocating for change in community use of the forest to improve the breeding success of this ground-dwelling species.*

##### 3. Resource Centre for the Provision of Information and Technical Advice to Local Stakeholders in Forest Restoration Work in Taita Hills

- *Provide relevant, appropriate information and internet links that describe conservation, livelihoods and farming practices to improve land-use and conservation priorities to the communities living throughout the Taita Hills through a resource center based in Wundanyi. Raise awareness of the activities of researchers within the area and opportunities to exchange information and ideas.*

##### 4. Restoration and Increase of Connectivity in Taita Hills Forests: Survey and Suitability Assessment of Exotic Plantations

- *Map and describe the plantations of exotic tree species within the Taita Taveta District and study opportunities and limitations to increasing connectivity between the fragments of remaining indigenous forests through “enrichment planting” within these plantations. These data will contribute to the connectivity model being undertaken by the University of Ghent.*

##### 5. Restoration and Increase of Connectivity among Fragmented Forest Patches in the Taita Hills, Southeast Kenya

- *Model the opportunities to increase connectivity between the forest fragments that comprise the Taita Hills to ensure the long-term conservation of threatened species. These data will then guide future conservation investments within the Taita Hills to address priority areas, including promoting alternative nature-based livelihoods to reduce the pressure on the natural resources.*

##### 6. Assessment of the Amphibian Species Diversity, Population Status and Trends within the Forest Fragments of the Taita Hills, Kenya

- *Survey and consolidate information on amphibian populations, their range, and abundance within the forest fragments comprising the Taita Hills and Mount Kasigau as a barometer of environmental health. Working thorough local counterparts, this project will train local field assistants with a view to developing a sustainable long-term monitoring program.*

##### 7. Assessment of Overall Spider Diversity and Establishment of the Status and Ecology of Two New Species of Spiders *Toxoniella taitensis* and *Toxoniella rogoae* From Taita Hills

- *Establish a full checklist of the spider fauna of the Taita Hills and also carry out a detailed ecological survey of two recently described endemic species of spiders *Toxoniella taitensis* and *Toxoniella rogoae* to assess their conservation status*

8. Facilitating a Process of Stakeholders Consultations on the interventions required to restore and increase the connectivity of forest patches in Taita Hills

- *By bringing stakeholders in a consultative meeting, this was meant to leverage stakeholders' understanding of the threats, challenges and opportunities for the conservation and sustainable use of forests resources in Taita Hills, provide an opportunity for stakeholders to share experiences and learn from each other, identify and prioritize interventions for restoration and increased connectivity, learn and appreciate the respective capacities and limitations of various stakeholders involved with the conservation of Taita Hills Forests.*

Additional multiple sites projects, which will contribute significantly to the conservation and livelihoods and for which the Taita Hill forests are included under multiple sites category (excluding regional-wide projects) are:

9. Trends in the Health of Selected Forests in the Eastern Arc and Coastal Forest

- *Re-measure a series of forests plots five years after they were established in priority areas throughout the region to assess the trends in forest health. These data will provide a solid indication of the impacts that specific levels of threat have on the forests to assist with forest management*

10. Promotion of Nature-Based, Sustainable Businesses for Forest-adjacent Communities in the East-Usambara-Tanga, Taita Hills, and Lower Tana River Forests

- *Develop nature-based alternative livelihood opportunities for communities in and around three priority areas. These opportunities include production and marketing of commercial insects, honey production, silk farming, and medicinal plants that will shift the paradigm of community use natural resources from unsustainable to contributing to their local protection and increase connectivity between forest fragments.*

11. Army Ants in the Fragmented Forests of Taita Hills and Lower Tana River

- *Survey army ant (*Dorylus molestus*) populations, a keystone species, in forest patches of different sizes to determine how forest patch size and time since isolation influence army ant occurrence and abundance. The minimum patch size supporting viable populations will assist in planning connectivity interventions in other highly fragmented forest environments in both semi-arid and humid regions.*

12. Overview of Butterfly Faunas of Eastern Arc Mountains and Coastal Forests: Biodiversity, Endemism, Conservation

- *Collate existing data on all butterfly species, especially endemic butterfly species, throughout the region from existing collections (the grant recipient has the largest collection of African butterflies in existence), as well as identify gaps in the current knowledge and undertake field surveys to provide a complete a record.*

## ***Annex 5: Funded projects targeting the East Usambara Mountains KBA***

1. The Amani Butterfly Project
  - *Expand the current operations of the Amani butterfly project to enable more communities to engage in butterfly farming as an income generating activity, in so doing defining the link between livelihoods and maintaining healthy, intact forest cover.*
2. Conservation Biology of Ecological Indicators to Enhance Connectivity in the East Usambara Mountains, Tanzania
  - *Examine the influence of forest land-use practices on bird species movement, survivorship, and natality to define land--use practices within corridors that promote bird movement and survivorship. The recommendations from this study will provide guidelines that would be applicable to other corridor sites throughout the Eastern Arc Mountains.*
3. Facilitating the Compensation Payments for the Derema Forest Reserve, East Usambara Mountains
  - *Secure one of the most important biodiversity sites in Africa, the Derema corridor, linking the Amani Nature Reserve in the East Usambara Mountains to several other forest reserves. This grant will establish the working mechanisms for a compensation scheme capitalized by the governments of Tanzania and Finland, the Global Conservation Fund, and other donors.*
4. Population estimates of threatened birds in the East Usambara Mountains, Tanzania
  - *Calculate the population density of several highly threatened bird species occurring in the East Usambara Mountains. These data will contribute to assessing the 2003 gold rush that affected this area as well as contribute to the long-term monitoring of conservation investments of this key biodiversity forest area.*
5. Business-Oriented Conservation and Agroforestry Initiatives in Muheza District, Tanzania
  - *Establish a demonstration farm neighboring the East Usambaras, a priority area within the region, to show the potential of agroforestry techniques to generate short-term economic benefits. Activities will also raise awareness of the threats to *Brachylaena huliensis*, a tree with high export value on the Kenya wood carving market.*
6. Biodiversity of a landscape: examining forest heterogeneity and ecological change in the East Usambaras since 1975.
  - *Assess long-term ecological change, species diversity, and vegetation architecture to determine how these affect the ability of any area to be an effective biological corridor. Data on species composition and structure will be incorporated into a landscape-scale predictive model by integrating detailed biological surveys with high-resolution satellite images since 1975.*
7. Managing the interface between forest product extraction and rural livelihoods in the Eastern Arc Mountains and Coastal Forests (EAMCF) hotspot.
  - *Mitigate threats to the long-term conservation of Tanzania's forests from unsustainable timber trade and extraction through a combination of strengthening civil society and improved community management of forest reserves that will provide the tools necessary to prevent unsustainable trade.*
8. Trends in the Health of Selected Forests in the Eastern Arc & Coastal Forest Hotspot

- *Re-measure a series of forests plots five years after they were established in priority areas throughout the region to assess the trends in forest health. These data will provide a solid indication of the impacts that specific levels of threat have on the forests to assist with forest management.*
9. Promotion of nature-based, sustainable businesses for forest adjacent communities in the East Usambara-Tanga, Taita Hills, Arabuko Sokoke and Lower Tana River Forests
- *Develop nature-based alternative livelihood opportunities for communities in and around three priority areas. These opportunities include production and marketing of commercial insects, honey production, silk farming, and medicinal plants that will shift the paradigm of community use natural resources from unsustainable to contributing to their local protection and increase connectivity between forest fragments.*
10. Overview of butterfly faunas of Eastern Arc Mountains and Coastal Forests: biodiversity, endemism, conservation
- *Collate existing data on all butterfly species, especially endemic butterfly species, throughout the region from existing collections (the grant recipient has the largest collection of African butterflies in existence), as well as identify gaps in the current knowledge and undertake field surveys to provide a complete a record.*

***Annex 6: Funded projects targeting the Lower Tana River Forests KBA***

1. Rapid Environmental Impact Assessment of the Rehabilitation of the Tana Delta Irrigation Project with Design of Critical Primate Habitat Improvement, Increased Indigenous Forest Connectivity and Community Woodlots.

- *Review previous research and documentation of the Lower Tana River Forest area, update both the biological and socioeconomic baseline and use this information to design an environmental component of a planned rehabilitation with the focus of enhancing conservation management while also engaging local residents in discussion and action regarding the long-term benefits of forest connectivity.*

2. Baseline Carbon Storage Assessment of Kenya's Coastal Forests

- *Assess the carbon storage potential of East Africa's coastal forests as a prelude to establishing compensation schemes to community-managed forests from greenhouse gas emitting industries under the Kyoto Protocol.*

3. Assessment of the Diversity and Conservation Status of Primates in the Coastal Forests of Kenya

- *Resolve important questions pertaining to the taxonomy, distribution, abundance, and conservation status for the nine endemic species and five endemic/near-endemic subspecies of primates in the region. These data will produce recommendations for long-term conservation actions and contribute to improving the IUCN Red List status of these primates.*

4. Primates on Mt. Kasigau, Kaya Rabai and along Tana River, Kenya: Preparing for the Red List assessment and conservation action.

- *Conduct research on primate species in important sites in Kenya to fill knowledge gaps on population and distribution data and enable adequate assessment of extinction risks and conservation action.*

5. Taxonomy and Conservation Genetics of the Threatened Mangabey Taxa of the Eastern Arc Mountains and Coastal Forests of Tanzania and Kenya

- *Collect genetic samples and record vocalizations from the major populations of mangabeys through out Tanzania and Kenya. These data will be analyzed to determine the degree of speciation of the respective populations and the extent of reproductive isolation and potential threats to survival due to loss of genetic variability.*



## ***Annex 7: Funded projects targeting the Arabuko Sokoke Forest KBA***

1. Agroforestry Activities Around Arabuko Sokoke
  - *Scale up agroforestry practices of this community-based organization through increased propagation and planting of indigenous and commercial species that have important cultural and economic uses, reducing the pressure on the natural resources on the 41,600-hectare Arabuko Sokoke coastal forest, the largest remaining fragment of coastal forest in East Africa.*
2. Promotion of Nature-Based, Sustainable Businesses for Forest-adjacent Communities in the East-Usambara-Tanga, Taita Hills, and Lower Tana River Forests
  - *Develop nature-based alternative livelihood opportunities for communities in and around three priority areas. These opportunities include production and marketing of commercial insects, honey production, silk farming, and medicinal plants that will shift the paradigm of community use natural resources from unsustainable to contributing to their local protection and increase connectivity between forest fragments.*
3. Baseline Carbon Storage Assessment of Kenya's Coastal Forests
  - *Assess the carbon storage potential of East Africa's coastal forests as a prelude to establishing compensation schemes to community-managed forests from greenhouse gas emitting industries under the Kyoto Protocol.*
4. Army Ants in the Fragmented Forests of Taita Hills and Lower Tana River
  - *Survey army ant (*Dorylus molestus*) populations, a keystone species, in forest patches of different sizes to determine how forest patch size and time since isolation influence army ant occurrence and abundance. The minimum patch size supporting viable populations will assist in planning connectivity interventions in other highly fragmented forest environments in both semi-arid and humid regions.*
5. Coordinated monitoring of the endangered Spotted Ground Thrush *Zoothera guttata* in the East African breeding and non-breeding grounds

## ***Annex 8: Funded projects targeting the Uluguru Mountains KBA***

1. Do payments for environmental services offer the potential for long term sustainable financing?

- *Knowing the value of watershed services provided by forests is vital in defining the link between urban populations that rely on these ecological functions, this study will assess the contribution made by the forests of the Uluguru Mountains. These forests are the source of the Ruvu River that supplies Morogoro and Dar es Salaam with water and generates hydroelectric power.*

2. Assessment of Baseline Ecological and Socio-Economic Factors for Forest Restoration Planning in the Bunduki Gap of the Uluguru Mountain Forests of Tanzania

- *Assess baseline ecological and socioeconomic factors for forest restoration planning in the Bunduki Gap in order to increase forest connectivity between the Uluguru North and South forest reserves and enhance biodiversity conservation.*

3. A Second Population Assessment of the Uluguru Bush Shrike *Malaconotus alius*, Uluguru Mountains

- *Complete a second population census of the Uluguru bush shrike *Malaconotus alius*, an Alliance for Zero Extinction species within the Eastern Afromontane Hotspot. Combined with the data from the 2000 census, these data will be used to measure the status and trends of this Critically Endangered species.*

4. Investigating the benefits of Participatory Forest Management in Uluguru Forest Reserves

- *Extrapolate the relationships between community livelihoods and forest cover in six locations within the Uluguru Mountains to identify the best practices and constraints to forest management approaches and assist in refining these approaches accordingly.*

5. Overview of butterfly faunas of Eastern Arc Mountains and Coastal Forests: biodiversity, endemism, conservation

- *Collate existing data on all butterfly species, especially endemic butterfly species, throughout the region from existing collections (the grant recipient has the largest collection of African butterflies in existence), as well as identify gaps in the current knowledge and undertake field surveys to provide a complete a record.*

6. Trends in the Health of Selected Forests in the Eastern Arc & Coastal Forest Hotspot

- *Re-measure a series of forests plots five years after they were established in priority areas throughout the region to assess the trends in forest health. These data will provide a solid indication of the impacts that specific levels of threat have on the forests to assist with forest management.*

***Annex 9: Funded projects targeting the Rubeho Mountains KBA***

1. Biodiversity assessment and monitoring of the insect fauna in the Eastern Arc Mountains and Coastal Forests hotspot using ground-dwelling ants and beetles as indicator groups.
2. Biodiversity Research and Awareness in the Lesser Known Eastern Arc Mountains: Mahenge, Rubeho, Ukaguru and Nguru
3. Filling the knowledge gap: surveys of poorly known sites, species in the Eastern Arc Coastal Forests.
4. Small mammal studies in three important Eastern Arc Mountains for the creation of innovative educational, scientific and conservation tools.
5. Rubeho Environmental Action Plan (REAP) Project – Phase I

***Annex 10: Funded projects targeting the Entire Tanzania part of the EACF Region***

1. Field Guide to the Moist Forest Trees of Tanzania  
*Publish the completed text of a Field Guide to Moist Forest Trees of Tanzania.*
2. Making Data Available on the Species and Sites of the Eastern Arc and Coastal Forest Hotspot in Tanzania
  - *Develop the Tanzanian National Biodiversity Database to include all existing specimens as well as incorporating site and species records from biodiversity surveys. These data will be available to identify gaps in knowledge as well as enhance the monitoring of conservation investments through the conservation outcomes database of Red List species.*

***Annex 11: Funded projects targeting the Lindi District Forests KBA***

1. Managing the interface between forest product extraction and rural livelihoods in the Eastern Arc Mountains and Coastal Forests (EAMCF) hotspot.
2. Biodiversity assessment and monitoring of the insect fauna in the Eastern Arc Mountains and Coastal Forests hotspot using ground-dwelling ants and beetles as indicator groups.
3. Overview of butterfly faunas of Eastern Arc Mountains and Coastal Forests: biodiversity, endemism, conservation
4. Preventing unsustainable timber trade from the coastal forests of southeast Tanzania following completion of the Mkapa Bridge.
5. Coordinated monitoring of the endangered Spotted Ground Thrush *Zoothera guttata* in the East African breeding and non-breeding grounds
  - *The project will gather baseline data for Spotted Ground Thrush population, habitat and threats status in East Africa and implement a monitoring system for the East African sub-population of Spotted Ground Thrush to cover the breeding, passage and non-breeding grounds and seasons of the species. The information gathered will increase useful knowledge about the species which then feeds back to the stakeholders for actual conservation actions*

***Annex 12: Funded projects targeting the Jozani Forest Reserve IBA***

1. Managing the interface between forest product extraction and rural livelihoods in the Eastern Arc Mountains and Coastal Forests (EAMCF) hotspot.
2. Biodiversity assessment and monitoring of the insect fauna in the Eastern Arc Mountains and Coastal Forests hotspot using ground-dwelling ants and beetles as indicator groups.
3. Conservation of Zanzibar's unique flora and fauna via community based forest management and socioeconomic development around Jozani-Chwaka Bay National Park

4. Overview of butterfly faunas of Eastern Arc Mountains and Coastal Forests: biodiversity, endemism, conservation

***Annex 13: Funded projects targeting the Mt. Kasigau KBA***

1. Ethnobotanical Knowledge for Adaptive Collaborative Management at Mt. Kasigau, Kenya
2. The Wildlife Works/Verde Ventures Kasigau Reforestation Project
3. Capacity Building to empower community conservation
4. Primates on Mt. Kasigau, Kaya Rabai and along Tana River, Kenya: Preparing for the Red List assessment and conservation action.

***Annex 14: Funded projects targeting the North Pare Mountains KBA***

1. Biodiversity assessment and monitoring of the insect fauna in the Eastern Arc Mountains and Coastal Forests hotspot using ground-dwelling ants and beetles as indicator groups
2. Filling the knowledge gap: surveys of poorly known sites, species in the Eastern Arc Coastal Forests.
3. Small mammal studies in three important Eastern Arc Mountains for the creation of innovative educational, scientific and conservation tools.
4. Overview of butterfly faunas of Eastern Arc Mountains and Coastal Forests: biodiversity, endemism, conservation