CEPF FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	TAITA TAVETA WILDLIFE FORUM
Project Title:	Consolidating indigenous forest connectivity in the Taita Hills for biodiversity conservation
Date of Report:	3rd September 2013
Report Author and Contact Information	James Mwang'ombe Mwamodenyi mwangombejames@yahoo.co.uk or mwangombe@ttwforum.org

CEPF Region: Eastern Arc Mountains and Coastal Forests

Strategic Direction: 2 (Restore and increase connectivity among fragmented forest patches in the hotspot) in the Ecosystem Profile, and to Investment Priority 2 of the EACF Consolidation Program: Consolidate the gains in increasing forest connectivity in critical parts of the EACF.

Grant Amount: US$100,000

Project Dates: 1 August, 2011 to 31 July, 2013

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

- The Kenya Forest Service has been one of the key partners in activity implementation since it is in-charge of forest conservation and management. The staff were involved in assisting the local community nurseries by providing technical support in nursery management, tree seedling handling and planting.
- Taita Environmental Research and Resource Arc - a local NGO that manages the Taita Research Station established by the University of Helsinki has also provided some logistical support.
- Nature Kenya has been a close partner in providing organisational development support and also staff working side-by-side with TTWF staff. In addition, NK has been helpful in building biodiversity monitoring skills of the staff and also member groups of TTWF who also form the Site Support Group for Taita hills. This includes Dawida Biodiversity Conservation Group (DaBiCo) a local umbrella group championing conservation at the very local level. TTWF with NK were central to the formation of this group.
- Certain individuals such as Dr. Mwangi Githiru have also been close partners in providing valuable technical support and information.
- The Provincial Administration through the Chiefs, Assistant Chiefs and village headmen were very crucial in organising public meetings and public tree planting activities.
- The Zoological Society of London, the DICE (Durrell Institute of Conservation & Ecology) of the University of Kent have been close partners in assisting to raise more funds to continue the work. A concept was submitted to the Darwin Initiative and we hope for a favourable consideration.

Conservation Impacts

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

Please summarize the overall results/impact of your project.

The following are the main results/impact;

1. More awareness and sensitization created among government officials and local community members on biodiversity conservation in Taita hills.
2. *Least-cost connectivity paths* identified on the ground and the farms, totaling over 897acres (399.821ha).
3. Over 150,000 trees planted both in the forest fragments and on the farms, with over 64% survival observed for those over 1 year old.
4. Draft PFM plans for Susu/Ndiwenyi/Fururu and Wesu/Iyale/Mbili.
5. CFA formed for Susu/Ndiwenyi/Fururu and for Wesu/Mbili/Iyale.
6. Farmers participating in raising/planting indigenous trees on their farms linked to CAAC/TIST in order to inculcate sustainability and to increase benefits through carbon credits trading.
7. Farmers engaging in handicrafts linked to the Mombasa Butterfly House for support in marketing and quality production.
8. Community centre being set up in Ngangao to act as a base for the operation and support of the Site Support Group with funding jointly sourced by TTWF and NK.

Planned Long-term Impacts - 3+ years (as stated in the approved proposal):

1. Increased indigenous tree cover is anticipated to facilitate or enable wider dispersal of individual organisms across the landscape thus facilitating genetic exchange and reducing inbreeding.
2. Increased indigenous tree cover is also anticipated to facilitate creation of meta-populations of the endemic and endangered bird species in the rehabilitated forest patches - especially in central Dawida.
3. Increased indigenous tree cover across the landscape is anticipated to increase the water catchment function thus resulting in increased and sustained water flows in rivers and streams and thus benefiting other dependent biodiversity downstream.
4. There will be improved food security as more farmers adopt agro-forestry that would result in reduced soil erosion, reduced soil fertility loss and thus reduced land degradation. Increase in on-farm tree cover is anticipated to result in reduced pressure on the forests for provision of tree products thus leading to forest habitat restoration.
5. As the forest conditions improve due to reduced pressure from humans and tree planting efforts, the habitat for forest dependent birds also improves resulting in reduced threat status.
6. Valuable lessons will emerge on the suitability of "least-cost connectivity modeling" in conservation of critically endangered forest-dependent species in a forest fragmented landscape.

Actual Progress Toward Long-term Impacts at Completion:

Although it is too early for the impact of the activities to start being felt, much progress was made towards putting in place what would lead towards the impacts. This was through awareness creation and sensitisation through public meetings, and particularly the use of PGIS in explaining the concept of "*Least-cost forest connectivity model*" of the Taita hills. This enabled easier comprehension by farmers, identification of farms and increased willingness by farmers to participate in creating the "paths/corridors" by planting indigenous tree seedlings on their farms and in the forest fragments.

Planned Short-term Impacts - 1 to 3 years (as stated in the approved proposal):

1. Raised awareness levels on forest and biodiversity conservation.
2. Improved forest management through the introduction/initiation and promotion of participatory forest management.
3. Income generation by community members through participation in raising of tree seedlings and their planting and maintenance.
4. Capacity building of local institutions in forest management, tree seedlings raising and care and in on-farm production of tree and other products through agro-forestry/farm forestry.
5. Creation of ownership of conservation activities by the local community members participating in the activities thus inculcating sustainability.
6. Capacity of TTWF to undertake projects and access bigger grants increased. A crucial element to sustainability.

Actual Progress Toward Short-term Impacts at Completion:

1. Awareness levels were increased within the areas falling within the target area. This also included schools both primary and secondary schools through their environment clubs that participated in the construction of the geo-referenced physical models, and a sponsored trip to Tsavo East National Park. Government officials including the County forest officers were involved and the local community through public meetings.
2. The physical models were used in sensitization of the people living around these forest fragments by explaining the "*Least-cost forest connectivity model of Taita hills*" and what it is aimed at solving – conservation of the critically endangered bird species by enabling their dispersal/movement across the forest landscape. This made it easier for comprehension by farmers falling within the "paths/corridors" and their volunteering to participate.
3. Following awareness creation, the local people were informed of the opportunities provided by the Forest Act 2005 of their participation in forest management. This led to the formation of Community Forest Associations covering all the forest patches/fragments targeted. The CFAs are in various stages in the process of registration. Further, the CFAs embarked on the process of participatory forest management plans formulation as required by the Forest Act 2005. Draft PFM plans have been completed and handed over to the Forest Manager Taita forest station for review and onward transmission to the KFS Headquarters for technical review and approval.
4. All the seedlings planted except for a few raised by the TTWF tree nursery, were raised and planted by community groups and paid. All the groups also happen to be members of TTWF thus strengthening the forum by getting its members more committed on realizing direct benefits.
5. Capacity of the community members and groups (7 tree nursery groups, 4CFAs) was enhanced through training in various aspects such as tree nursery management, group organisation and dynamics. The farmers have also been linked to TIST (The International Small Group Tree Planting Programme – www.tist.org) that is a programme of CAAC (Clean Air Action Corporation - a US institution). TIST in addition to assisting the farmers enter the carbon credits market, will also train the farmers in appropriate agriculture techniques and also in energy-saving domestic cook-stoves. This linkage is an effort towards ensuring continuity in indigenous tree planting and care and thus sustainability, with some income generation.
6. Awareness creation and sensitization on biodiversity conservation and the role that farmers can play in achieving this has been undertaken extensively. This also included schools around the area through talks, support to school tree nurseries and tree planting, participation in the construction of the physical models (PGIS) of the "least-*cost connectivity model of Taita Hills*" and their visit to the Tsavo East National Park impressed upon them the connection between the hills and the lowlands and their interdependence. Further, public meetings were used to create general awareness and focused-group discussions (such as in CFAs, tree nursery for groups, PFM planning teams, "connectivity" farmers/farm owners) delivering more precise awareness and sensitization and knowledge based on the groups' activity(ies) and how it links up to the whole idea of enhancing indigenous forest connectivity to deliver the ultimate goal of biodiversity conservation and livelihood improvement.
7. Capacity of TTWF enhanced through mentoring by Nature Kenya and the preparation of the Strategic plan and organisational set up aimed at streamlining and increasing efficiency. Further, TTWF has created partnerships with the Zoological Society of London, and DICE - University of Kent that is anticipated to enable TTWF be able to access and manage larger grants successfully.

Please provide the following information where relevant:

Hectares Protected:
Species Conserved:
Corridors Created: 4

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

Successes

1. More community members (youth/students and adults) including government officials sensitized on biodiversity conservation and the need for habitat rehabilitation and enhanced indigenous forest connectivity.
2. Community-owned tree nurseries capacity enhanced.
3. 74,109 seedlings planted both in the forest patches and on farms with direct support of CEPF funds and 81,253 tree seedlings planted by collaborating institutions through the support and intervention of TTWF.
4. Draft PFM plans developed for the forest patches.
5. CFAs formed.
6. Geo-referenced landscape models built for the area and successfully used to explain the *Least-cost forest connectivity model* and applied successfully in identification of farms (245) falling within the "paths" whose total land area is about 987.99acres (399.8ha). It is anticipated that, more than 10% (99acres/40ha) of this will be covered by trees within the next few years.
7. TTWF staff and members of a member group (the Site Support Group) able to undertake biodiversity monitoring using the IBA (Important Bird Area) protocol.

Were there any unexpected impacts (positive or negative)?

1. The unexpected impact is the linking of the eco-crafts/handicrafts groups with the Mombasa Butterfly House that will provide an outlet for their products and also provide some support in improving the quality of their products.
2. The successful application of the Participatory GIS methodology in biodiversity conservation.
3. Community centre being set up in Ngangao to act as a base for the operation and support of the Site Support Group with funding jointly sourced by TTWF and NK.

Project Components

Project Components*: Please report on results by project component. Reporting should reference specific products/deliverables from the approved project design and other relevant information.*

Component 1 Planned:
Awareness on biodiversity conservation created in the Taita hills.

Component 1 Actual at Completion:

- Total of 30 public meetings and 1 inception workshop held. Also all the 245 farms identified within the "connectivity paths" visited and discussions held with the owners.

Component 2 Planned:
Habitat restored through indigenous tree planting and replacement of exotic trees in forest reserves (Total 103.9 ha).

Component 2 Actual at Completion:

-About 115ha rehabilitated using 74,109 indigenous tree seedlings (about 640 tree seedlings per hectare). Removal of exotic trees could not be done as expected but authority to do so obtained

towards the end of the project which will begin in Ngangao forest.

Component 3 Planned:
Increased indigenous tree cover in between the forest patches on private farms (Total 89 ha).

Component 3 Actual at Completion:

-245 farms identified within the "forest connectivity paths" totaling 987.98acre (399.8ha)
81,253 indigenous tree seedlings planted.

Component 4 Planned:
Administrative, financial management and biodiversity monitoring capacity of TTWF built.

Component 4 Actual at Completion:

1. Manuals (Personnel and Financial) reviewed.
2. Organisational capacity assessment and mentoring undertaken by Nature Kenya.
3. Strategic plan for TTWF developed and awaiting the AGM adoption**.**

Component 5 Planned:
Management of forest reserves improved (Total 318.78 ha, includes all the forest targeted - Ngangao 135.9ha, Wesu bigrock 19.3ha, Mbili 10.23ha, Wenimwana 3.4ha, Iyale 22.33ha, Fururu 14.12ha, Susu 14.3ha, Ndiwenyi 5.6ha, and Chawia 93.6ha).

Component 5 Actual at Completion:

1. Community members around these forest patches sensitized on forest conservation.
2. Site Support Group formed (based in Ngangao) with the support of Nature Kenya to undertake biodiversity monitoring together with TTWF.
3. Draft PFM plan for Susu/Ndiwenyi/Fururu and for PFM plan for Wesu/Mbili/Wenimwana reviewed to include Iyale.
4. CFA formed for Susu/Ndiwenyi/Fururu and CFA for Wesu/Mbili/Wenimwana restructured to incorporate Iyale.
5. Training of existing CFAs for Ngangao, Wesu/Mbili/Iyale, Chawia.

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

The removal of the exotic trees could not be undertaken within the project period since the authority to do so from KFS HQ took long to be given and was obtained towards the end of the project. However, this will be carried out in a piloting phase in Ngangao forest as part of a research activity undertaken jointly with Dr. Mwangi Githiru and Luca Borghesio**.** This delay has had minimal impact since indigenous tree planting continued in areas sparsely covered by the exotic trees and in degraded areas.

Please describe and submit (electronically if possible) any tools, products, or methodologies that resulted from this project or contributed to the results.

1. The Participatory GIS approach was successfully used in creating awareness on biodiversity conservation and in explaining the "*Least-cost forest connectivity model of Taita hills*" and in the identification of farms/farmers falling within the "paths/corridors".
2. The PGIS will also be used in future as a monitoring tool towards the achievement of the ""paths/corridors".

Lessons Learned

Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building. Consider lessons that would inform projects designed or implemented by your organization or others, as well as lessons that might be considered by the global conservation community.

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

The project's design was based on past undertaking and experiences in the area and backed by sound scientific data/information largely contributed the positive achievements. Thorough knowledge of the area and confidence built by the Project Leader (Technical Advisor of TTWF) and TTWF presented a sound base of trust and confidence by the local community to participate voluntarily.
The main shortcoming is the short duration of the project. The work of getting the community to comprehend the concept and to identify the farms along the “paths/corridors” and to raise indigenous tree seedlings took quite some period of time.

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

Activity implementation was quite successful due to the visits made by the CEPF staff (Grants Director – twice; and the Auditors - once). This ensured that the implementers were kept on toes and benefitted a lot from the technical advise received. In addition, the positive comments on work well done were a significant boost to the moral of the team. Internally, the close supervision by the Team Leader ensured delivery of activities within the time period and his link with government institutions ensured some hurdles were smoothed quickly.
The only problem encountered but which has been resolved was the removal of exotic trees in the reserves whose permission took long to be obtained due to the prevailing policy/legal issues surrounding tree cutting in forest reserves in Kenya.

Other lessons learned relevant to conservation community:

1. Trust, transparency and confidence with the local community and also government agencies is crucial to successful implementation of activities.
2. Application of various approaches simplifying scientific concepts for ease of understanding and comprehension by the local communities is crucial for community buy-in and adoption.
3. Conservation projects with components supporting local nature-based livelihoods is important to gain maximum community support. The incorporation of a handicrafts activity (supported by a EU/Danida/GoK Community Development Trust Fund – Community Environment Facility grant) and the linking of the indigenous tree planting activity to Carbon credits earning (through CAAC/TIST), in addition to purchase of seedlings raised by tree nurseries owned by the community to obtain enthusiastic community participation further contributed to this success.

Additional Funding

Provide details of any additional funding that supported this project and any funding secured for the project, organization, or the region, as a result of the CEPF investment in this project.

Donor	Type of Funding*	Amount (USD)	Notes

TTWF	In-Kind	57,654	Composed of time used by the community in meetings, tree planting, tree nursery management, use of motorcycles and vehicles in undertaking activities not paid for in commercial/hire terms etc.
National Geographic Trust Fund	Cash grant	19,453	Amount used in applying the Participatory GIS methodology.
Taita Environmental Research and Resource Arc/University of Helsinki	In-Kind	?	Provision of a motor vehicle during the visits by the Grants Director at non-commercial rates.
EU/Danida/GoK Community Development Trust Fund – Community Environment Facility	Grant	71,428	Amount allocated to continue with the connectivity tree planting upto end of 2014, on the basis of the work already undertaken by TTWF with CEPF support.

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

- ***A*** *Project co-financing (Other donors or your organization contribute to the direct costs of this project)*
- ***B*** *Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF funded project.)*
- ***C*** *Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)*

Sustainability/Replicability

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

Success in achieving sustainability is highly expected due to the link established with CAAC/TIST and the opportunity for farmers to earn from carbon credits from the planted indigenous tree seedlings. The only challenge envisaged is if the carbon trading opportunity fails to materialize due to the uncertainties in the whole carbon trading business.

Summarize any unplanned sustainability or replicability achieved.

Safeguard Policy Assessment

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

Additional Comments/Recommendations

This grant enabled major strides made in realizing the aim of enhancing indigenous forest connectivity in Taita hills. It also made it possible for TTWF to champion conservation within its region of operation and raised its profile in terms of capacity in managing grants.
It also made TTWF be among the first institutions to test the applicability of use of Participatory GIS in enhancing forest connectivity in a highly fragmented forest landscape under intense pressure.
TTWF looks forward to more support from other donors to carry forward this endeavor. TTWF wishes to highly appreciate the confidence exhibited by CEPF in entrusting it to undertake this project.

Information Sharing and CEPF Policy

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our Web site, www.cepf.net, and publicized in our newsletter and other communications.

Please include your full contact details below:

Name: James Mwangómbe Mwamodenyi
Organization name: Taita Taveta Willdlife Forum
Mailing address:P. O. Box 527 80300, VOI - Kenya.
Tel:254 722 266446/733 849103
Fax:
E-mail:mwangombe@ttwforum.org/mwangombejames@yahoo.co.uk

*****If your grant has an end date other than JUNE 30, please complete the tables on the following pages*****

Performance Tracking Report Addendum

CEPF Global Targets

(Enter Grant Term)

Provide a numerical amount and brief description of the results achieved by your grant.
Please respond to only those questions that are relevant to your project.

Project Results	Is this question relevant?	If yes, provide your numerical response for results achieved during the annual period.	Provide your numerical response for project from inception of CEPF support to date.	Describe the principal results achieved from July 1, 2012 to June 1, 2013. (Attach annexes if necessary)
1. Did your project strengthen management of a protected area guided by a sustainable management plan? Please indicate number of hectares improved.				Please also include name of the protected area(s). If more than one, please include the number of hectares strengthened for each one.
2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?				Please also include name of the protected area. If more than one, please include the number of hectares strengthened for each one.
3. Did your project strengthen biodiversity conservation and/or natural resources management inside a key biodiversity area identified in the CEPF ecosystem profile? If so, please indicate how many hectares.	Yes	Atleast 10% of 987.98ha		Farmers agree to plant indigenous trees that will form “paths/corridors” between forest patches thus enhancing connectivity.
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.	Yes	Indigenous tree planting on farms that fall in the connectivity paths.		245 farms identified/volunteered to participate in planting of indigenous trees to enhance connectivity.
5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1below.				

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

Table 1. Socioeconomic Benefits to Target Con

Please complete this table if your project provided concrete socioeconomic benefits to local communities. List the name of each community ir Socioeconomic Benefit, place an X in all relevant boxes. In the bottom row, provide the

Name of Community Small landowners Subsistence economy Indigenous/ ethnic peoples Pastoralists/nomadic peoples Recent migrants Urban communities munities falling below the poverty rate Other	**Community Characteristics**								**Nature of Socioec**			
							Com**Increased**			IMImprRMIIMO		resource s manage ment pract adoption of sustaina ble resource s manage ment pract adoption of sustaina ble resource s manage ment prac adoption of sustaina ble resource s manage ment prac adoption of sustaina ble
Total												

If you marked “Other”, please provide detail on the nature of the Community Characteristic and Socioeconomic Benefi