

The Rufford Small Grants Foundation

Final Report

Congratulations on the completion of your project that was supported by The Rufford Small Grants Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other format. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. Please note that the information may be edited for clarity. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to jane@rufford.org.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	James Mwang'ombe Mwamodenyi
Project title	"Promoting/enhancing biodiversity conservation through enhanced indigenous forest connectivity in Taita hills: Phase 2 (Kinyeshamvua/Ngangao segment)".
RSG reference	12835-B
Reporting period	April 2013 to March 2014
Amount of grant	£11,993
Your email address	mwangombejames@yahoo.co.uk
Date of this report	31 st March 2014

1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
<u>Overall Objective</u> Contribute towards the long-term conservation of endemic bird species by promoting indigenous forest connectivity across the landscape of hills.		Partially achieved		This is a long-term objective that requires several years of investment considering the fact that trees (especially native species) take long to grow. This may be considered partially achieved because tree seedlings have been planted on the farms around Kinyeshamvua and in between Kinyeshamvua and Ngangao forests.
Increased awareness on biodiversity conservation among the schools, participating farmers and other local residents.			Fully achieved	All the planned awareness creation activities were undertaken through school visits, and participation of Mghambonyi primary school in the construction of the PGIS model for the area, and also through public meetings. However, further awareness creation will always be needed because people need to be told/sensitised on something again and again for assimilation.
Enhanced indigenous forest cover on-farm.		Partially achieved		While tree seedlings have been planted on farms around Kinyeshamvua and in between Kinyeshamvua and Ngangao forests, it will take at least 7-10 years before the impact/presence is felt. In addition, more seedlings are planned for planting this rainy season to complete the target of 4000.
Reduced soil erosion on farms due to increased tree cover.	Not achieved			This objective will only be achieved once the seedling planted attain trees size (i.e. 2 m and above) and their influence starts being manifested.
Improved catchment function in the area due to increased tree cover.	Not achieved			This objective will only be achieved once the seedling planted attain trees size (i.e. 2 m and above) and more crown cover before this aspect of ecosystem service starts being experienced.
Improved income generation among the farmers through linkages with CAAC/TIST for carbon credits		Partially achieved		While the participating farmers (105 households) have been linked with CAAC/TIST has been achieved and may start receiving some little payments (incentive) on every seedlings that survives per year at Ksh 1.80 a year from

				now, tangible earnings will be realised once the trees attain/accumulate merchantable carbon which may be at least in 7 years.
Firewood provision from the pruning of branches of the trees.	Not achieved			This will be achieved once the planted tree seedlings attain a good size which would be at least 6 years.
Enhanced protection and management of Kinyeshamvua forest through community participation in forest management.			Fully achieved	A Community Forest Association was formed (Kinyeshamvua Community Forest Association - KCFA) and application for registration made. It is expected that a certificate of registration will be obtained before 2014 ends. The KCFA members received some training on forest management and are currently working closely with KFS (Kenya Forest Service) personnel in protecting the forest. A draft participatory forest management (PFM) plan was prepared and has been submitted to the KFS for review and approval. Once this is approved, KCFA will be assisted to apply and sign a FMA (Forest Management Agreement) with KFS.

2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

Although there were no major difficulties during the project period, there was a little delay in onset of ground activities since 2013 was an election year, and this project was kicking off immediately after the elections which brought in a new constitutional dimension that included the coming into being of County Governments. This brought in some level of confusion as to which government institutions to deal with i.e. national government or county government, with the officers (especially national government officials) being unsure of their roles and mandates. This also contributed to delays on the CFA formation and registration. This hurdle was overcome by constant reference and feedback to the national government officers with close observation of the guidelines constantly provided by the Transition Authority.

Another challenge was the below average rainfall received in the short rains season (October-December). This challenge was overcome by encouraging the farmers to plant the seedlings close to areas where watering if need arose can be done easily using water from the kitchen or bathroom. A few more tree seedlings will be planted this season to replace losses (<1000 seedlings).

3. Briefly describe the three most important outcomes of your project.

- Awareness creation on the link between biodiversity conservation and livelihood status was relatively well done through various approaches – public/village meetings organised through the local administrators (Chief and Assistant Chiefs and village elders), wildlife/4k clubs in schools, and school talks among others. The messages included the ecosystem functions of biodiversity, the biodiversity of Taita hills including endemic species and the threats facing them and the activities to reduce threats. The application of Participatory GIS to explain “*least-cost forest connectivity model*” of Taita hills and how the farmers would participate in achieving it.
- Enhanced protection of the Kinyeshamvua forest through the formation of Kinyeshamvua Community Forest Association that would work with the staff of Kenya Forest Service in managing and protecting the forest in line with the PFM plan prepared.
- The planting of over 3600 tree seedlings in the October-December 2013 short rains season (1000 more seedlings to be planted in this long rains season March-May 2014). This was a major achievement because it took quite some education and awareness to convince farmer’s plant indigenous/native tree seedlings. Usually, farmers prefer planting exotics that grow faster and have a higher chance of harvesting them in their lifetime. This achievement may partly be attributed to the sensitisation on biodiversity conservation together with the approach used – PGIS, linking/demonstrating the link between ecosystem health (thus biodiversity) and livelihood generation and on-farm productivity, and also the inclusion of an incentive of carbon credits that would enable a farmer reap some benefits during his/her lifetime.

4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

The local communities were the central focus of this project. This is because, the land around Kinyeshamvua and the matrix in-between Kinyeshamvua and Ngangao belong to the community members. The project personnel attempted to involve the whole spectrum of the local community – from school-going children at primary to secondary school level through school talks and tree planting day, participation of wildlife/4K clubs in PGIS model construction and the adults through public/village meetings and local leaders. The local communities were also involved in tree planting days that were held in their local schools, in tree planting on their farms, in raising some of the tree seedlings and in the formation of the KCFA (awareness creation meetings on PFM and the election of interim officials of KCFA, election of community representative of the PFM plan preparation team, and in the validation of the draft PFM plan).

5. Are there any plans to continue this work?

Yes. This grant assisted in breaking the ground in this area and further work is required for several years more to keep the momentum. Follow up on the registration of the KCFA with the Registrar of Societies (it usually takes not less than 6 months), the approval of the PFM plan by KFS and thereafter, the signing of a FMA with KFS. The 4000 or more native tree seedlings planted by the local community cannot be said to be adequate. Efforts will be made to raise more funds to support tree planting with an ultimate target of at least 100,000 trees in order to achieve reasonable connectivity. Awareness creation and sensitisation will be an ongoing activity with the aim of getting

the local community assimilating biodiversity conservation as a priority. More farmers will be recruited into the activity with the aim of having 300 households if not more participating in native tree planting. In order to further reduce pressure on the forest, I would like to initiate some nature-based enterprises such as bee-keeping that would discourage the use of fire in land preparation thus reducing forest fire risk/occurrences, and also to have farmers trained in conservation farming including soil and water conservation techniques to reduce soil erosion and soil fertility loss thus enhancing on-farm productivity. An important activity is the monitoring of the extent of achievement of the overall goal of enhanced native forest connectivity and the utilisation of the “corridors/paths” thus created by individuals of the endemic/critically endangered birds in dispersal across the landscape.

6. How do you plan to share the results of your work with others?

I intend to place a report on this project on the TTWF website that can be accessed easily. I also intend to make a write up on the application of PGIS in biodiversity conservation that will share experiences/lessons learnt in this project and other areas within the Taita hills landscape. This write up will be submitted to local magazines on forestry such as the Twigs newsletter or the Forester.

7. Timescale: Over what period was the RSG used? How does this compare to the anticipated or actual length of the project?

This grant was used over a 1-year period. In order to realise the impact of the activities, a 10-year period would be required because native trees take time to grow and within which the impact of the trees may be observed through their influence on the micro-climate, movement of individuals of the endemic/critically endangered birds and other ecosystem services. However, this grant made the very first and crucial step of starting the “ball-rolling” in this area.

8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Awareness creation through public meetings	107	105	2	
Construction of physical models of the area and the superimposition of the “Least-Cost Forest Connectivity Model” for the area	2100	2005	95	Some savings were achieved because some materials leftover from a different project were utilised thus reducing the quantity of materials purchased.
Participatory selection of tree species	119	135	-16	An over expenditure occurred here due to the unanticipated need to involve County government officials.

Purchase/raising and planting of seedlings of the selected indigenous tree species in the forest	842	866	-24	An over expenditure occurred due to the increase in prices of inputs especially tree raising materials such as tubes.
Training of the participating farmers on tree planting and care	574	590	-16	Over expenditure occurred due to increase in transport costs and rise in prices of stationery items.
Linking of the farmers to CAAC/TIST so as to provide incentives from sale of carbon credits	888	900	-12	Over expenditure due to increase in transport costs.
Supply of tree seedlings to farmers and their planting on-farm	400	422	-22	Over expenditure due to increased transport costs.
Follow-up on the performance of the planted tree seedlings under Phase I	261	262	-1	
Initiation of Participatory Forest Management	3132	3135	-3	
Salaries and wages	2500	2500		
Administrative cost	1070	1075	-5	
Total	11993	11,995	-2	

9. Looking ahead, what do you feel are the important next steps?

The next important steps are as follows;

- Follow up on the registration of KCFA with the office of the Registrar of Societies, thereafter signing of a Forest Management Agreement between KCFA with KFS on approval of the PFM plan.
- Continued awareness creation and more tree planting with subsequent recruitment of more farmers.
- Introduction of supportive nature-based enterprises aimed at reducing pressure on the forest while providing incentives for the farmers to participate in forest protection.

10. Did you use the RSGF logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?

RSGF received publicity on the ground among the local community and local leaders where it was always pointed out that the project has been supported by RSG. Further publicity will be created once the final project report is uploaded onto the TTWF website.

11. Any other comments?

My team, the entire TTWF family and I, wish to acknowledge the valuable support provided by RSG through this grant that made it possible not only to initiate work on forest connectivity and

biodiversity conservation in this area (Kinyeshamvua), but also contribute towards the completion of a greater work started several years ago. RSG supported an important phase in a five phase programme aimed at enhancing native forest connectivity that would enable movement across the landscape thus allowing gene-mixing and reduced in-breeding and ultimately – reduced extinction risk of the critically endangered endemic species in this biodiversity hotspot.



Left: physical model of of Iyale forest (part of the PGIS used in explaining the “Forest connectivity model” to community members and also used as a tool for farmer identification and as a participatory monitoring tool. Right: A physical model with details on forest in green and connectivity paths in yellow.