

## 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. 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. 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](mailto:jane@rufford.org).

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
<b>Your name</b>	Flora Njeri Namu
<b>Project title</b>	To enhance integrated community conservation of biodiversity in agro- ecosystems adjacent to the eastern side of Mount Kenya Forest
<b>RSG reference</b>	44.08.09
<b>Reporting period</b>	12 months
<b>Amount of grant</b>	£6000
<b>Your email address</b>	<a href="mailto:fnnamu@yahoo.com">fnnamu@yahoo.com</a>
<b>Date of this report</b>	29.08.2011

**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
To document key indicator species		√		Though we have baseline data on the current trends in the project area, we need to accumulate more data on key biodiversity indicators which is important not only for knowing the current status but also for future comparisons, especially in the area of climate change
To educate the local community about conservation in agro ecosystems		√		Although many members of the local community now know the relationship between their environment, the weather and their daily life, they still have hopes and expectations of earning some income through conservation. If there is no stable source of income (incentive for conservation), chances of a do not care attitude towards conservation is high and loss of the gains so far achieved
To collect data and to improve bee keeping practices among the local farmers		√		Data on bee keeping practices among the local people has been collected and has been used as a guide in training and provision of modern hives, Majority of the people still do not have hives and they still have hopes of getting them through the project. We therefore need to work together with them so that they can acquire hives and have a source of income. We are yet to establish a market chain for honey.
To initiate tree nurseries for tree planting purposes (indigenous and multipurpose trees)		√		Tree planting has picked up well but we need to continue with this drive till a sizeable number of people have multipurpose indigenous trees in their farms and fences and adopts tree planting as part of their way of life. This way we will contribute to the restoration of the environment and better livelihoods in the region.
To collect data on indigenous and drought resistant crops farming in the region		√		We collected data on indigenous and drought resistant crops in the area. We found that farmers are aware about the crops and some do grow them, but challenges are many. We need to encourage more farmers to plant the crops

				to diversify habitats for bees and other organisms. We need to encourage value addition to have a wider market for the indigenous crops.
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**2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).**

1. We had intended to provide hives to farmers on a cost sharing basis but it was not possible due to the difficult economic situation during the project period. The cost of fuel was very high and everything else became expensive. Farmers could not afford hives as they had wished. To cater for this difficulty, we provided hives to the farmers free of charge; however we could not provide enough for everybody. Nevertheless, one of the Community Based Organization (CBO) - Gichera Environmental Programme, they were able to sell seedlings and with the money they bought hives. We intend to work with the other groups to come up with more innovative ways of selling seedlings to governmental and nongovernmental institutions, where they pay for the seedlings but members of the local community plant and take care of the seedlings. We also intend to have buy a tree campaign for those who want to become friends of the CBOs or want their name tag written on the trees once planted.

2. During the start of the project there were insufficient rains. As a result we could not transplant the seedlings from the nurseries till the next rainy season. We had to hire more assistants to water and take care of the seedlings during the dry period.

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

A checklist of butterflies, bees and birds in the project area. It's remarkable that we have baseline data on indicator species. This is a step in the right direction towards the production of a local checklist which will assist scientists into making area specific decisions depending on facts on the ground.

Bee keeping - the enthusiasm with which farmers took up bee keeping was so overwhelming, especially now that some farmers have started honey harvesting. We now have role models for the other farmers. Acquiring two stingless bee colonies was a milestone towards their conservation and domestication for honey production and pollination.

Tree planting - members of the local community have taken tree planting seriously. They now understand the relationship between trees, the weather and their livelihoods

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

The local community has been part and parcel of the project from the start. Before the project started we discussed with the members of the local community about the project through a village meeting and from then hence forth we have worked together in establishing tree nurseries, planting the seedlings in their farms, along roads, in degraded areas and in public lands. In addition some farmers have acquired multipurpose indigenous and hardy trees which will provide nectar and pollen for bees, provide food to the family members and also be a source of fuel wood and fodder

for the cattle. We have also been working together in documenting community knowledge on bee keeping; started bee keeping together and now several members are beneficiaries of bee hives. Indeed, the farmers who got their hives during the first RSG have started honey harvesting.

#### 5. Are there any plans to continue this work?

Yes we plan to continue with the work to build on the gains we have achieved so far. If we continue with this drive, we will contribute to restoration of the environment and better livelihoods in the region.

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

First we share our result with community members to ensure that they are the first beneficiary. However since conservation is a concerted effort and to reach a wider audience, we will share our result and work together with Karatina University College (a constituent college of Moi University Kenya). We have agreed to work together to continue with conservation work on the Eastern side of Mt. Kenya forest. Karatina University College is located about 5 km from the base of Mt. Kenya. They were impressed with our work and have offered me a position as a lecturer in the School of Natural Resources and Environmental Studies. We will continue with stingless bee research, honey bee keeping, indicator species monitoring, tree planting and working with the members of the community to ensure we achieve what this project set to do.

#### 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	Quantity	Unit cost	Budgeted Amount	Actual cost	Difference	Comment
1. Global positioning system (GPS), hire days	10	1.6	16	16	0	
2. Sweep nets	1	8	8	7.5	-0.5	The buying price was less by 0.5
3. Hand magnifying glass	1	3	3	2.99	-0.01	The buying price was less by 0.01
4. Entomological forceps	1	1.6	1.6	1.65	+0.05	The buying price was higher by 0.05
5. Insect envelopes, packets	3	4	12	11.55	-0.05	The buying price was less by 0.05
6. Killing jar	1	1.6	1.6	1.59	-0.01	The buying price was less by 0.01
7. Alcohol	1	16	16	16.49	+0.49	The buying price was higher by 0.49
8. Insect storage boxes	1	9.6	9.6	9.6	0	
9. Insect pins, packets	2	4	8	7.99	-0.01	The buying price was less by 0.01
10. Miscellaneous (Phone	1	160	160	150	-10	We were able to

calls, notebooks, flashlights etc)	email, pens,						save 10 pounds
11. Field person days	assistance,	200	4	800	920	+120	Due to insufficient rain, we could not transplant the seedlings from the nurseries, we hired field assistants to water and tend the seedlings till the rainy season
12. Automobile hire once in field, days		40	32	1280	1216	-64	Reduced the number of days the automobile was hired
13. Fuel cost		1	1152	1152	1598.5	+446.5	Increased fuel cost in the market
14. Transport from Nairobi to field and back		20	12	240	120	-120	Due to increased cost of transport we reduced transport from Nairobi to field by spending more days in the field
15. P1 subsistence, days		20	20	400	400	0	
16. Lodging costs in the field		40	9.6	384	284	-100	Sometimes we stayed with farmers or camped in their homes to cut on cost, as the cost of living had increased
17. Hives construction		50	20	1000	1000	0	
18. Polythene tubes (10000 pieces)		2	32	64	49.9	-14.10	Reduced on the number of pieces bought, to cut on expenses
19. Supporting poles, Nails etc		1	40	40	38.9	-0.10	The buying price was less by 0.10
20. Watering cans		1	6	6	5.45	-0.55	The buying price was less by 0.55

21. Labor	1	120	120	120	0	
22. Seeds	2	16	32	28.90	-2.10	The buying price was less by 2.10
23. Contingency			287.69	0	0	
Total			6041.49	6007.01	256.06	

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

As there is good will from the local community and increased enthusiasm by neighbouring communities, we intend to continue with the project in the current project area and also extend to the neighbouring communities.

- Monitoring programme.

We plan to continue with the monitoring programme to accumulate data which will be useful for future comparisons and to monitor effects of climate change on biodiversity.

- Provision of hives to farmers and tree planting

We have plans to supply hives to interested farmers at subsidized prices which can be done through co-financing bee keeping. We plan to take farmers from other groups to learn from Gichera Environmental programme (GEP), the strategy of selling seedlings and buying hives with the proceeds. We want to start a campaign for selling seedling not only to farmers but also to governmental and non-governmental institutions for rehabilitating deforested public lands and forests. We also intend to start owning a tree campaign where those who can afford pay a certain amount of money, and the local member's plant a tree for them in public land, and their name get embedded on the tree. In this way, farmers will increase their sources of income and at the same time involve more people on climate change adaptation and mitigation measures.

- Make the project self sustaining

To make the project self sustaining and for the farmers to fully own it and continue with environmental conservation even after the grant period is over, we intend to help farmers to form a cooperative to market their honey and other bee products. Also we intend to help them acquire a honey processor so that they can produce clean honey. As a cooperative they will be able to establish a market chain and also add value to their fruits and other indigenous crops. For example they could make fruit jam or sell fruit juice or dried fruits. They could also add value to cassavas, sorghum and millet hence creating a market for indigenous crops. A wider market for these crops will encourage more farmers to plant them hence habitat diversification and a climate adaptation strategy.

- Furthering stingless bee research

Furthering stingless bee research with a view to domesticating them for honey production and pollination purposes is an important step, since if we succeed in multiplying the colonies, the knowledge will be passed on to farmers so that they can start keeping the bees. Stingless bees produce highly medicinal honey and this benefit coupled with their pollination potential provides an incentive for farmers especially those with extremely small pieces of land or those with phobia for honey bees.

- Collaboration with Karatina University College (A constituent college of Moi University)

Finally together with Karatina University College (A constituent college of Moi University) have agreed to work together to continue with conservation work on the Eastern side of Mt. Kenya forest. Karatina University College is located about 5 km from the base of Mt. Kenya. They were impressed with our work and have offered me a position as a lecturer in the School of Natural Resources and Environmental Studies. We will continue with stingless bee research, honey bee keeping, indicator species monitoring and working with the members of the community to ensure we achieve what this project set to do

**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?**

Yes. As we planted the trees in public land e.g. schools, Chiefs camps, churches, along the roads and deforested areas, we explained to the leaders in these areas about RSGF, its funding criteria and involvement in conservation work.

We have also directed many graduate students interested in conservation work to the RSGF website. Universities (Karatina University College- Moi University and The University of Nairobi), have also come to know about RSGF through our interaction with the lecturers in the field of conservation and explaining to them about our project

**11. Any other comments?**

We would like to thank RSGF for providing us with the grant which is changing the lives of thousands of Kenyans everyday. Through RSGF understanding of climate change, adaptation and mitigation measures is being implemented at grass root level.