

## The Rufford Small Grants Foundation

### Final Report

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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**

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Grant Recipient Details	
<b>Your name</b>	Romulus Abila
<b>Project title</b>	Biodiversity and the role of 'dryland wetlands' in semi arid Mikuyuni – Mwitasyano river catchment in South Eastern Kenya as a source of livelihood.
<b>RSG reference</b>	9878 – 1
<b>Reporting period</b>	June 2011 – June 2012
<b>Amount of grant</b>	£6,000
<b>Your email address</b>	<a href="mailto:Romulus.abila@seuco.ac.ke">Romulus.abila@seuco.ac.ke</a> , <a href="mailto:Romulus.abila@yahoo.co.uk">Romulus.abila@yahoo.co.uk</a> ,
<b>Date of this report</b>	4 <sup>th</sup> July 2012

**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
Determine the limnological status and identify the existing flora and fauna within the wetlands, their density and diversity and any threats facing them.		x		During the research we were able to determine the limnological characteristics of the wetlands as well as the diversity of invertebrates, fish, birds and plants in the wetlands. We were not able to determine absolute densities thus qualitative data was collected (what is present).
Assess the utilisation of the wetlands by the community and their impacts on the ecosystem and identify alternative sustainable wetlands uses.			X	We successfully administered questionnaires, undertook field visits and held focus group discussions and obtained information on community perception on land ownership, access to the wetlands, economic dependence of the local communities on the wetlands, knowledge of local community on impacts of these activities on the wetlands, sources of conflicts in resource access and utilisation, conflict management strategies and possible alternative environmentally compliant livelihood activities.
Create awareness among local community including school children on the importance of wetlands			X	Through the project posters and leaflets have been produced which will be used as educational materials to continually sensitise the local community and school children on the ecological and socio-economic significance of the Mikuyuni – Mwitasyano wetlands.
Build the capacity at the local community level and disseminate information on the role of 'dryland wetlands' as a source of alternative livelihood in poverty alleviation			x	The project has successfully sensitised and mobilised members of the local community to form a Community Based Organisation (CBO) Neema Community Organisation whose principal goal are: <ul style="list-style-type: none"> <li>To be involved in livelihood improvement activities through environmentally sustainable activities especially operating a tree nursery, horticulture, beekeeping and aquaculture.</li> <li>Educate members of the local community on environmental management and conservation.</li> </ul>

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

This year was especially dry and the wetlands, especially the 'dams' did not get as wet as we had anticipated. Biodiversity data was therefore only taken from the rivers. This may have contributed

to low numbers of birds observed in the wetlands. Some bird species previously observed in the ponds (also called dams by the local residents) were not observed during the research period. Secondly, we were unable to obtain quantitative estimates of invertebrate, fish, plant and birds.

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

- i) The wetlands play an important role as source of livelihood to the surrounding communities. Nine main direct economic gains from the wetland were identified: vegetable growing, bee keeping, fishing in the 'dams' during rainy season, sand harvesting, source of water for domestic and livestock, grazing land, brick making, source of building stone, source of trees for charcoal burning, and source of grass for thatching. The local community is highly dependent on this wetland and this often creates conflicts between various stakeholders.
- ii) There is a high degree of awareness by the community on economic activities that are detrimental to the ecological integrity of the wetlands. The following five activities were identified: grazing, sand harvesting, tree cutting for charcoal, stone breaking and poor farming methods along the rivers.
- iii) The project has strengthened the capacity of local individuals and communities to identify and implement sustainable conservation initiatives. The project has resulted in the formation of a Community Based Organisation (CBO) and contacts and linkages being made with government departments (forestry and environment departments) and other organisations such as the local administration, the National Environment Management Authority (NEMA), Kenya Forest Working Group, in Kitui and its environs. The community now have a stronger sense of ownership and stewardship of the resources.

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

The local community was involved in the project through its inception to implementation. There was a lot of interest and support from the local community. The local community was involved mainly as administrators and respondents of the questionnaires and also took part in educational seminars held during the project. The main benefit the community has gained is that through this project their awareness on the need to manage and conserve the wetlands has increased. They have come together and proposed formation of a Community Based Organisation (CBO) to spearhead promotion of environmentally sustainable livelihood activities within the wetlands like beekeeping, aquaculture, horticulture and tree planting.

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

Yes, the CBO will spearhead environmental management and implementation of the proposed livelihood improvement activities within the wetland. The CBO will work closely and in partnership with other national environmental management bodies within the country e.g. the Kenya Forest Service (KFS) and National Environment Management Authority (NEMA) as well as South Eastern University College to implement the proposed activities. Initial funding will be sought from the Kenya government Youth Enterprise Programme initiative. Further funding will be sought through other potential international grants.

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

- i. Popularising the results of our work with similar environmental management CBOs within the country and regionally.
- ii. Presenting results of our work in seminars and workshops.
- iii. Organise for members of the local community to highlight this project through local FM radio stations.
- iv. Through a scientific publication.

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

I actively began this work in August 2011 (mobilising members of the community, designing the questionnaires). The delay and poor rains during the project period meant that we could not undertake biodiversity studies as scheduled. Overall, however, the project was successfully executed within the 1-year period.

## 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.

\* The exchange of the pound to the shillings fluctuated during the project. A mean exchange rate of £1 = Ksh. 130 has been used.

Item	Budgeted Amount	Actual Amount	Difference	Comments
2 Environmental kits and Nutrient analysis reagents	1000	1000		
Sediment sieves of various mesh sizes and corer	115	115.3	-0.3	2 sets were purchased
Aquatic invertebrates and plants Identification books	100		+100	We used various sources e.g. publications and internet to obtain identification keys.
Waders, sorting tray, dissecting kit, specimen jars, 90% ethanol	113	75	+38	
Experimental gill net, angling lines, binoculars, manila string, quadrats	155	107	+48	2 experimental gill nets purchased.
Payments to 2 research assistants recruited for the project	300	500	-200	Payment for the research assistants was negotiated at 250 per person. The assistants were engaged in the project throughout the project period.
Costs of travelling to the field during the research	800	800		
Training of 5 interviewers	150	200	-50	4 interviewers were engaged during the project.

Time compensation for 5 interviewers	417	400	+17	4 interviewers were engaged during the project and their payment was negotiated at 100 per person.
Communication	50	100	-50	Mainly cost of mobile phone airtime.
Time compensation for 150 interviewees	1250	1200	+50	Time compensation to interviewees was negotiated at about 8 per interviewees.
Training materials	50	75	-25	-
Workshop organization for 30 trainees	90	85	+5	-
Time compensation for 30 workshops trainees	210	200	+10	-
2 principal trainers' allowance for two training sessions	400	480	-80	3 training session were held. Each principal trainer was paid 80 facilitation fees per training session.
Printing and distribution of leaflets, brochures, posters, bulletins etc	1600	1600	-	This is still ongoing and will be a continuous activity.
<b>TOTAL</b>	6800	6937.3	-137.3	Costs offset through an ongoing research by the university on promotion of water harvesting in the Mikuyuni catchment.

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

- Fully implement the CBO, i.e. get the CBO working. The local community expressed a lot of interest and enthusiasm about what they want to do next. We would like to at least implement some of the proposed alternative livelihood activities within the next year. The next step will therefore aggressively market the CBO and obtain funds to implement the proposed activities.
- Bring together the main stakeholders (local community, catholic diocese, Nyumbani Children's Home, schools, local government authorities) to create a forum to address the identified sources and courses of conflict in regard to the utilisation of the resources.

### 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, we used the logo in the questionnaires and also in the poster (Below).

### 11. Any other comments?

The project has been an eye opener on the pressure's natural resources in arid and semi arid areas face in light of very limited alternative livelihood options. These pressures are likely to escalate as populations increase and changing climatic conditions result in prolonged periods of drought. Access to the resources is a major source of conflict among the different stakeholders. However, the community is very receptive to new ideas and are willing to be part of life changing activities. The potential of these wetlands in aquaculture should especially be exploited.

# Mikuyuni – Our wetland, our livelihood, our future .



NEEMA COMMUNITY ENVIRONMENTAL  
ACTION FORUM



The Mikuyuni and Mwitasyano wetlands play an important role in our lives. We have always depended on the wetland as a source of livelihood.....

The wetland supports ourselves and our livestock in the following ways....

## How we benefit from the wetlands.....

- Vegetable growing along the river banks
- Beekeeping
- Fishing in the rivers and dams
- Sand harvesting
- Water for irrigation
- Water for domestic use
- Water for grazing our cattle
- Livestock grazing
- Brick making
- Source of building stones
- Source of grass for thatching



## But some of these activities are destructive to the wetlands.....

- Brick making
- Overgrazing
- Sand harvesting
- Tree cutting for charcoal burning
- Stone breaking

## Negative impacts.....

- ❖ SOIL EROSION
- ❖ SILTATION AND DRYING UP OF RIVERS
- ❖ DESERTIFICATION



The members of the Mikuyuni and Mwitasyano communities have come together to protect and conserve this important source of livelihood from further degradation so that we continue enjoying these ecosystem services. The NEEMA COMMUNITY ENVIRONMENTAL ACTION FORUM has been formed by members of the Mikuyuni and Mwitasyano communities. Our goals are to sensitise, educate and mobilise members of the community to be involved in conservation and environmental management activities for improvement of living standards.

So far we have identified the following activities to be initiated:

- ☐ Tree nursery
- ☐ Fish farming
- ☐ Vegetable farming
- ☐ Beekeeping



## HOW CAN YOU BE PART OF THIS?

- Join the group and share your ideas
- Participate in educational seminars
- Speak to other members of the community about NEEMA activities
- Donate land for the above activities



For further information please contact:

Benjamin ... 0717 639 563

ACKNOWLEDGEMENT: This poster has been made through a Rufford Small Grant