

The Rufford Foundation Final Report

Congratulations on the completion of your project that was supported by The Rufford 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	Margaret Awuor Owuor
Project title	Enhancing Community Awareness, Participation And Education In Environment Conservation And Management Of Akara Hills, Kenya
RSG reference	15141-2
Reporting period	January 2016 To January 2017
Amount of grant	£4998
Your email address	Awuorowuor@Yahoo.Com
Date of this report	18/01/2017

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
<p>Training of schools (primary and secondary) on general environment problems facing the world, then narrow down to Kenya and Akara hills</p>				<p>Schools were trained on global, national and local environmental problems facing Akara Hills. A total of 15 schools took part in the training namely: Mbagu Girls Boarding, Pap-Kakan Primary School, Osoro Primary School, Uyiko Primary School, Segere Primary School, Boro Primary School, Aduwa Primary School, Mulaha, Kalenjuok, Kochieng'. For Secondary Schools we had Boro, Mwer, Kalkada, Malomba and Hawinga. We visited schools and identified environment club members whom we trained. Where there were no clubs, we met with the teachers and discussed the need to have such clubs.</p> <p>Training was participatory and was facilitated by Mr Aaron Green and myself (Margaret). With the schools we had sessions on environment conservation, threats facing our environment and how the students can come up with measures to help manage some of the problems. It involved asking the students the different environment problems they are aware of. The students also watched a video entitled "How Green is your school" This is a video that narrates a story on how a school turned their ones very bare and dry school compound into a beautiful green environment. It was shot in Langa Primary School in Naivasha by Earthwatch, United Kingdom. The video was meant to educate and motivate</p>

				the students/pupils to embrace the culture of tree planting. Students were also shown pictures and posters on the different problems facing Akara area like erosion and cutting of tree for charcoal burning.
Formation of environment clubs in schools				The project aimed at working with environment clubs in schools, however, in those schools which did not have existing environment clubs, we encouraged them to form. It is important to report here that the majority of the schools had environment clubs. However, we facilitated the formation of clubs in Mbagha girls Boarding, and Uyiko Primary School with the help of the head teacher.
Establishment of Nursery with schools.				<p>Tree nurseries were established in the schools visited. One tree nursery was established in each school. For primary schools eight out of the 10 primary schools were successful in managing their tree nurseries.</p> <p>Each school had to identify the piece of land where the nursery was to be established. Mr Rogers Oteng'o from the Forestry Department then trained the club members on the process of establishing a tree nursery. The project donated watering cans, seeds of different tree species <i>Marhamia lutea</i>, <i>Albizia coriara</i>, <i>Eucalyptus grandis</i>, <i>Casuarina</i>, fruit trees i.e. paw paw and passion, and potting bags to help in transplanting the seedlings from the nursery.</p> <p>Mr Rogers continues to monitor the seedlings progress and ensures watering is done appropriately.</p>
Training community groups on				A total of eight community groups were trained on environment issues facing

<p>environment problems facing Akara Hills and Establishment of Tree nurseries</p>			<p>Akara Hills. These included. Lower NYARUAS, Bar-Kanyango Horticulture, Kamwayi Moyie, Yala Weavers, Friends of Yala Swamp, Kombo beach, Yala Swamp Community Conservancy Organisation (YASCO) and Yala Eco-system biodiversity and Conservancy Network. The training was participatory involving discussion and illustrating issues facing Akara Hills. We used pictures and poster for audio-visual materials.</p> <p>On establishment of tree nurseries, one tree nursery was established per group. Like with the schools, community group members identified a piece of land where the nursery was to be established. Mr Rogers from the Forest Department then demonstrated to the group's members how to establish a tree nursery. The project donated seeds (<i>Marhamia lutea</i>, <i>Albizia coriara</i>, <i>Eucalyptus grandis</i>, <i>Casuarina</i>, fruit trees i.e. paw-paw and passion, and watering cans to the groups. When the seedling had sprouted, we donated potting bags.</p>
<p>Training community members on alternative sources of energy</p>			<p>The project with the assistance of Mr. Simon Ogutu of Community Action Environment and Development (CAED), trained community group members on how to make charcoal briquettes, solar lamps, energy saving stoves and how to install them. This was a very interesting session to the community groups since the majority of the community members use firewood for cooking, therefore they were interested in finding ways on how they can save the firewood. Mr Simon demonstrated how energy saving stoves work. They group members were also taught on ways of cooking that will help minimise the use of firewood i.e. covering food while cooking, soaking</p>

				maize and beans before cooking. The green energy package is important since it will help improve people's livelihood for example they will sell charcoal briquettes in the nearby peri-urban areas and earn some income. Using solar lamps will allow women to stay late in the market and also enable school going children to study with ease.
Organising tree planting and labelling in schools				Some of the schools with water available within the school compound like Osoro and Aduwa primary school are planting. In most schools we have the seedlings ready but due to lack of water (some schools have to go for water from the nearby rivers and streams that are drying off). We have to wait for the rains to fall to make planting and watering easy. Once we plant, then the trees will be labelled.
Organising a community tree planting day on Akara Hills				We were not able to plant trees on Akara Hills since the rains have not come as it was expected. This has led to a great water shortage. However, the seedlings are kept with the community groups who are nurturing them as we wait for the rains to come so that it will be easy to plant the trees. As for now the ground is so dry that if we plant, most of the seedlings may wither. The rains are expected to come in February or April 2017.

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

We faced some unexpected challenges.

The rains have failed to come as we expected in September, October, November and December 2016 and up to now it is still very dry in most parts of Kenya, this made it difficult for us to carry out the planned tree planting exercise in Akara hills. The lack of rains also interfered with the nursery management process (watering of

seedlings) for schools and the community. Therefore, we had to transport water with the help of the school administration to help nurture the trees;

Schools closed early for December 2016 holidays following a change in the management at the Ministry of Education, this interfered with our programme of visiting secondary schools in November, 2016. Therefore we had to visit the secondary schools in January, 2017.

We hoped to plant and label trees. However, the trees have to take time to grow for labelling to be done. We have to wait for the seedlings to mature so more time is needed for the project to ensure we achieve this.

Some schools faced security problems and some of their seedlings were stolen by the neighbouring villages in the night. To solve this, the school heads had to hire night guards. One of the schools affected was Pap-Kakan Primary School.

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

a. We have managed to establish nurseries with the community and schools and from these nurseries, we have raised approximately 50,000 seedlings of different species of trees namely (*Makhamia lutea* (locally known as Siala), *Albizia coriaria* (locally known as ober) *Eucalyptus grandis* (locally known as bao), and *Casuarina* and fruit trees i.e. paw-paw. Schools and the communities embraced this section of the project on nursery establishment. The students were full of excitement when they saw the seeds germinate. Some of the teachers said the project offered a good science lesson on seed germination for their students.

b. We mobilised those schools that did not have environment clubs to form them. The majority of the schoolchildren were excited about the formation of the clubs and most of them wanted to take part. This will in future create a culture of tree planting among the community members since the children will be our ambassadors.

c. We participated in a sports day with the community living around Akara-Hills and Lake Kanyaboli, and planted 300 trees at the foot of Akara Hills on 20th August 2016. The students who took part in the project in schools went home and told their parents to come for the sports activity. The majority of the people who came wanted to plant and adopt a tree. We could see a culture of tree planting being embraced by the people who participated.

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

The community have been part of the project from its inception. We worked with community groups who established and maintained tree nurseries. Some of the groups have been able to sell some of their seedlings, and income from these have been used to buy more seeds for planting. The fruit trees like paw-paw when fully grown, the fruits will be sold. Some of the groups said they will be buying solar lamps for each member. In addition, the communities living around Akara Hills also took part in the sport day organised by the Seeds of Peace Africa in Lake Kanyaboli where our project team was invited to talk about tree planting and environment conservation. Each member of the community present, planted a tree and promised took the responsibility of watering their trees.

5. Are there any plans to continue this work?

Yes, we plan to continue with this work and to reach to the wider community living around Akara Hills and its environs. This is for purposes of ensuring best practice when it comes to matters environment management and conservation. Through the project, it is our hope that the communities' mindset will change and that they will embrace the culture of tree planting like the Late Prof Wangari Mathai, the Nobel Peace Prize winner wished for our country and the world. Our plan is to restore the hills, but this calls for collective involvement by both the community and the government, if a section of the community is trained and well engaged in conservation, the section left out might continue degrading the system for lack of knowledge and involvement. Since we work with selected groups, those whom we have not yet involved have approached us to involve them in future. The Ministry of Environment in Siaya County, Kenya also wishes to have the project as one of the models for conservation for the county.

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

Through the project, we developed a video of the various activities we have been doing. We aim to use this to highlight the importance of Akara Hills, Lake Kanyaboli ecosystem, the threats facing this beautiful ecosystem and what is being done and can be done to restore the degraded ecosystems. The Video link is <https://www.youtube.com/watch?v=52cJM5ZwOc4>

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

The RSG grant was used between January 2016 and January 2017. This was within the period the project planned to carry out its proposed activities. However, due to challenges mentioned in above (number two on unforeseen difficulties), some of the activities will be ongoing. The community groups for example Yala Swamp Community conservancy organisation have been able to sell part of the seedlings they produced to purchase more seeds which we are using to establish more nurseries to enable us produce more seedlings. Therefore, the project will go on for the next minimum 5 years.

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
Transport to visit schools and community (Hired) estimated at 75 km per day for 63 days @ 30 pence/km	1417	1417	0	The project was within the planned schedule and so the funds were enough for the planned activities.
Training materials (posters, marker pens, flip charts, pens and books)	559	559	0	We bought training materials which included marker pens, flip charts and pens and books which were given to the participants to take notes.
Subsistence in the field for 4 people during the 63 days of field activities with schools and community groups @ 9pounds/day/person	2268	2268	0	We worked as a team and the allocated stipend was enough.
Purchase of nursery establishment and management equipment	130	160	-30	The project bought potting bags, watering cans and spade. The watering cans took more money since designing the logo on the metal cans was time consuming

				and took more colour ink to produce hence increasing the charges. More seeds sprouted so we also had to increase the number of potting bags we purchased. We used the money from the miscellaneous expenses to pay for the additional expenses
Purchase of seeds 6.5kg @ 20 pounds/kg	130	130	0	We purchased the exact quantity of seeds and distributed to schools and community groups.
Planning and organisation of training workshop to the community groups on alternative livelihood sources	250	250	0	The money was used to organise training community groups on alternative sources of We used the money to get the materials for demonstration i.e. materials for making charcoal briquettes, solar lamps and energy saving stoves and buy some refreshments during the training.
Communication (internet services, telephone, postal) @ 12 pounds per month for 12 months	144	144	0	This was used as planned more so for internet and telephone services to contact schools and community groups while finding out on the progress of the project and during the mobilisation exercise
Miscellaneous expenses	100	100	0	Part of this money 30 pounds was used to buy nursery preparation and management materials for example we bought more potting bags because more seeds sprouted. The remaining 70 pounds was used to assist schools with water problems purchase water for watering the seedlings in the nurseries, this was mainly in the month of November and December when the rains failed to come.
Total	4998	4998	0	

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

The next steps will be to restore Akara Hills and involve more groups and schools in the project.

We have shown our video to the Governor of Siaya County who has introduced us to the County Secretary with whom we have been working on how to have the video watched by the various leaders from the Akara Hills region in order to highlight the key issues they need to come out and address more so on conservation. Therefore, our next steps will be to engage with the policy and decision makers to encourage them to include matter conservation of our forests in the national budgets to ensure Kenya becomes a leading champion of green economy.

10. Did you use The Rufford Foundation 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 RSG logo in preparing the training materials and also we put the logo on the watering cans that we donated to the schools and community groups.

11. Please provide a full list of all the members of your team and briefly what was their role in the project.

12. Any other comments?

The Rufford Small Grants has provided seed money for this project and we hope the project will continue to make impact to people lives around Akara Hills.