

## The Rufford Foundation

### Final Report

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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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

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Grant Recipient Details	
Your name	Erick Otieno Odhiambo
Project title	Integrated Village Agroforestry and Energy efficient cook stoves installation for Restoration and Conservation of Aduwa Hills Forest Catchment, Siaya-Kenya.
RSG reference	21309-2
Reporting period	April 017-May 2018
Amount of grant	£4998
Your email address	<a href="mailto:Odhiambo2009@gmail.com">Odhiambo2009@gmail.com</a>
Date of this report	30 June 2018

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
Establishment of 3 Village Agroforestry Centres				<p>Successfully established for the three SSGs (Kaugagi, Sudo and Liera) with over 15,000 indigenous tree seedlings raised and nurtured. (9,126)60% of these seedlings were planted in the forest, donated to individuals home and to plant in their farms while 40% left for the SSG's for income generation and initiative's sustainability.</p> <p>They were also equipped with indigenous tree seeds, watering cans and pesticides.</p> <p>Eight individuals have started their own self led nurseries after the training we conducted in these SSGs showing that the initiative is viable and shall be replicated in better parts of the forest.</p>
Training and equipping 3 adjacent schools with proper waste management skills and installation of waste bins				<p>Three primary schools (Kaugagi, Kochieng and Rapudo) were trained on sustainable forest management practices, roles of agroforestry in forest regeneration and ecosystem services, waste types, separation and proper disposal. We also took them through relationships between the materials recycle.</p> <p>A total of 126 pupils were directly reached through their respectively environmental clubs.</p> <p>Three metallic waste separation bins with artwork for easy demonstrations were installed in the three schools.</p>
Installation of 240 energy efficient cook stoves in the households in western section of the forest				<p>320 energy efficient cook stoves have been constructed (more than planned) because we realised constructing the demonstrative poultry house for rock miners was challenging since some conflict of interest had been noted on ownership and where the structure would be</p>

			<p>installed at. So its cost was transferred to additional stoves for individuals. Because now the knowledge of the construction is with the locals (artisans), we anticipate more stoves to be constructed out of self-led interests from the locals.</p>
Recruitment and Training of 12 local artisans			<p>We recruited fresh 12 new artisans (eight men and four women), who were taken through 9 days intensive hands-on training on how the stove is constructed and capacity building on the roles of the stove in reducing carbon emission, improving ecosystem health and reducing respiratory diseases cases in comparison to the three-stone traditional cooking stoves. The energy efficient cook stoves greatly reduces firewood consumption, improves indoor air quality and greatly contributes to good taste in the food due to reduced smoke while preparing meals. It also stores heat for a long period of time (up to 6 hours) due to the inner brick lining hence the users find it more efficient. It is also raised above the ground hence reducing burns amongst children and users.</p>
Training rock miners on indigenous poultry keeping as an alternative for livelihoods improvement			<p>53 rock miners were trained on indigenous poultry keeping skills (introduction to indigenous poultry, site selection and positioning of poultry houses, feeds preparation and feeding, birds selection, disease and vaccination, when to quarantine the birds and poultry products handling (such as eggs). This training was also linked to climate smart agriculture where the participants were taken through organic manure preparation and use of poultry waste in kitchen gardening to promote vegetable farming amongst the users without use of industrial fertilisers. This training aimed at providing alternative livelihood earning options</p>

			<p>which the rock miners would practice so that the pressure on the overreliance on forest products is reduced hence revitalisation of its ecological functions. To improve the livelihoods of the target groups, they will be selling eggs and poultry in the local markets to not only earn income, but also contribute to good nutrition within the area.</p>
<p>Schools and Community capacity building on sustainable forest management practices, agroforestry and alternative livelihoods in the Aduwa Hills forest</p>			<p>12 monthly community outreaches have been undertake with additional three public forum talks/speeches on world environment day, world wetlands day and world migratory birds celebration days. In each of the forums, we sensitised the forest community on the ecological roles of the forest, advocate for sustainable harvesting of forest products, forest management policies and initiatives that should be undertaken to help in its protection such as tree planting and control of products extraction. Three stakeholder reviews were also conducted (during the start of the project, mid and last month for project completion), to evaluate the performance of the planned objectives and activities. eight monthly school outreaches conducted on the same objectives</p>
<p>Promotion of birds conservation through integrated community bird walks</p>			<p>Through these weekly Saturday bird walks, the locals have had great attitudinal change towards bird's conservation as opposed to before. The elderly people have been able to share with the team during these sessions about the difference between now and long time ago about what species of birds inhabited the forest and their roles. 44 bird walks have been conducted. 32 locals have also been taken through birdwatching skills, use of binoculars, guide books and how to keep proper checklists during each bird walk session.</p>

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

We largely were faced with over 3 months of post-election violence that led to migration of people and destruction some properties and our area saw lots of vandalism like in schools. Some of the seedlings were also lost during this period amongst other things. However, when calm restored, we reworked the beds, procured more seeds and raised over 5,300 fresh seedlings enabling us to have over 15,000 seedlings to help meet the project objectives.

Over-expectations from the community members on items we had not factored in our project and this brought difficulties as some people even wanted us to buy for them wheelbarrows, crop seeds amongst others. We calmed them by indicating to them that their requests would be considered in the next phase.

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

Improved community knowledge and skills (capacity) on the values of the Aduwa Hills forest, their roles in its conservation and viable alternative livelihoods that can be promoted within the ecosystem.

Reduced rate of cutting down trees and use of fuel wood due to adoption of the use of energy efficient cook stoves, this resulted in increased forest vegetation cover and rainfall catchment.

Promotion of agroforestry in the project has led to establishment of several tree nurseries by individuals hence increase in seedlings for forest regeneration and income from sales as alternative livelihood (promoted self-employment).

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

Twelve artisans were recruited from within the local community and were compensated for stoves constructed hence acted as form of employment.

Over 320 households have directly benefitted from the energy efficient cook stoves being installed in their houses hence improved indoor air quality, reduced respiratory diseases amongst others.

Communities also received conservation knowledge and stoves, seedlings to plant, immensely benefited with skills of alternative livelihoods that can be practiced in the forest ecosystem for improved livelihoods and ecosystem health.

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

We would like to take some time as we monitor the uptake of the initiatives that have been undertaken in the two phases just to ensure that the projects have long term impacts on both the ecosystem and locals. After this, plans of continuity will be clarified to the RSG.

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

The project outcomes has continued to be shared through our evaluation forums, meetings and now being available on RSG website, it will be accessible to the global community. We also have brochures that we continue to give out to the locals and other interested parties.

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

Due to several activities proposed in the project which were capital intensive, funds were used over a period of 10 months spread across the project period. This is more like it was planned.

**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
3 pieces of Brunton binoculars 8x25	63	81	+22	We budgeted for TOMO Aoney 30x60 but it was out of stock hence opted for Brunton 8x 25
3 copies of Birds guide of Kenya	54	54		
20 rolls of flip charts	43	48	+5	Rise in item costs due to change on costs
20 felt pens	4	4		
500 pieces of brochures	195	195		
300 pieces of writing materials	108	108		Rise in item costs due to change on costs
3 Village Agroforestry Centres	480	540	+60	Rise in the cost of seeds and pesticides
9 days non-residential training for 10 artisans	291	291		
Construction of 320 stoves	1760	1940	+180	Carried from item of construction indigenous poultry house
3 day non-residential training for rock miners on indigenous poultry keeping skills	420	220	-200	Poultry house not constructed so the item cost used for additional stoves. Only trainings done.
Fabrication and installation of 3 metallic	255	235		Free transportation and delivery.

waste bins				
Stakeholder reviews	330	330		
Community tree plantings	371	314	-57	Three planned planting sessions were not conducted since some seedlings were donated for planting on individual farms around the Aduwa Forest.
Monthly community outreaches	257	257		
Monthly school outreaches	214	184	-30	One school outreach not conducted due to schools being closed during the post-election skirmishes.
Weekly bird walks	132	132		
TOTAL	4998	4933	65	Transactions charges

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

Evaluate the impacts and uptake of the already initiatives implemented in the RSG 1 and 2 phases to provide room for designing next activities. There are several ideas being fronted by the locals so providing time for their analysis is ideal for ensured success in the next steps or phases.

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

We used RF logo on the training slides, brochures, stickers and mostly during our presentations. We didn't publish outcome of the work since we felt it could feature in the next phase if granted due to budget constraints.

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

**Erick Odhiambo-** Project team leader. Ensured that all proposed project activities and objectives are timely conducted and in the ideal methodologies.

**Evelyne Awuor-** Spearheaded the trainings/outreaches in indigenous poultry, agroforestry and alternative livelihoods.

**Kelvin Ochieng-** Community mobilization and also led the bird walk activities.

**Lucy Ouma-** Preparation of activity plans, budgets and compilation of project documents (more administrative).

## 12. Any other comments?

The project implementation was effective and we thank Rufford for the support that has enabled us to implement the activities. The challenges we faced while carrying out the activities, we tried to address most of them.



Left: Potted indigenous seedlings at Liera SSG. Right: Tree nursery at Kaugagi SSG.



Left: Community tree planting during World Environmental Day at the foot of the Forest. Right: Wet earth preparation for constructing energy efficient cook stoves during new artisans training sessions.



Left: Community outreach at Kochieng. Right: Environmental club members of Rapudo Primary with seedlings during school outreach.





Left: A section of artisans on successful completion of energy efficient cook stoves training. Right: Completed efficient cook stoves in household.