

Final Evaluation Report

Your Details	
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Project Title	Environmental Management through Tree Growing for Climate Change Mitigation as a Platform for Public Education and Community Outreach Programme in Narok County
Application ID	29784-2
Date of this Report	29-06-2022

1. 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 establish of a tree nursery together with the concomitant building of a Nursery Shade at Enenkeshui Primary School.				<p>Both Enenkeshui Primary and Shartuka Boys Secondary School are community owned in the same locality. In consultation with the local area Chief, both School Board Representatives, it was agreed that Shartuka Secondary had the best infrastructure to sustain a tree nursery establishment. It is through such consultations that we established a tree nursery at Shartuka Boys Secondary School.</p> <p>The tree nursery supported at least 10,000 seedlings most of which were distributed to the local primary schools and the community in Kilgoris sub county, Narok County.</p>
To buy and plant seeds of indigenous tree species at the two nurseries (including the main one at Maasai Mara University) to generate seedlings to be used for the reforestation of degraded sites within Narok County.				<p>More than 10,000 and 20,000 seedlings were generated from tree nurseries established at Shartuka Boys High school and at the Maasai Mara University Botanical Garden (earlier), respectively, underpinned this project. Some of the indigenous tree species generated included, among others.</p> <ul style="list-style-type: none"> • <i>Croton megalocarpus</i> • <i>Ficus capensis</i> • <i>Acacia species</i> • <i>Prunus africana</i> • <i>Olea Africana</i> • <i>Tipuana tipu</i> • <i>Warburgia ugadensis</i> • <i>Murkhamia lutea</i> • <i>Podocarpus gracilor</i> • <i>Juniperus pocera</i>
To massively but systematically distribute seedlings for planting at selected degraded sites in Narok County.				<p>Over 30,000 seedlings were distributed and planted at selected degraded sites in Narok County. This included different primary schools, secondary schools, County commissioner's office at Nairegie Enkare, Norok East sub-</p>

			<p>county, Donation to the public and individual farmers who expressed strong interest in planting trees.</p> <p>Additionally, 3,000 seedlings were planted within Maasai Mara University hence helping the University in achieving its pre-set annual performance contract target.</p> <p>We would like to report that this objective was only partially achieved partially given the unprecedented degradation in the expansive Narok County. This is also in line with Kenya's policy achieving of at least 10% forest cover.</p> <p>We generated at least 30,000 seedlings as per the goal/target of the project, which were planted across Narok County. However, we still have 5,000 additional seedlings in our nursery shade at Maasai Mara University awaiting planting. We are currently using voluntary workforce of Wildlife and Environmental student club members to maintain the nursery.</p> <p>Alongside other projected activities, these seedlings will be planted during the third phase of the Booster Grant support from The Rufford Foundation.</p>
To train students, youth, women groups, and other selected community members on the need for environmental conservation.			<p>To cut on cost, we concurrently held meetings with youth groups and women groups near primary and/or secondary schools where we had planting sessions.</p> <p>As we informed them about the importance of environmental conservation and how it is intertwined with their livelihoods, we also offered them free seedlings for planting to mitigate the negative effects of climate change. While we covered many areas and schools, much more are targeted in the next phase of RF funding</p>
To monitor and write report on project activities.			<p>Monitoring is essential to gauge the success of established clubs and planted seedlings and make appropriate recommendations to sustain environmental restoration</p>

			<p>efforts. We are glad to report a massive success rate of the tree seedlings we planted since we were mostly donating seedlings during wet seasons. Occasionally, we could donate seedlings to individual farmers with a surety and evidence of water availability to grow the seedlings. We believe this goal is achieved partially since monitoring is a continuous activity.</p>
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2. Describe the three most important outcomes of your project.

a). A massive tree nursery was established at Shartuka Boys Secondary School in Kilgoris, this nursery was and will continue to be used as a model in training the locals to combat climate change through tree planting and reforestation programmes. Moreover, the locals have been urged to embrace fruit growing trees to make tree growing culture a more rewarding venture.

b). Additionally, our tree nursery at Maasai Mara University was renovated, and university staff of the botanical garden trained on the establishment of a tree nursery. Through our efforts and justification of sustainability of tree nurseries, the School of Natural Resources, Tourism and Hospitality, Maasai Mara University has also established a tree nursery. We will continue to offer free advice to such establishments and use them to encourage more governmental and non-governmental organisations to mimic such a project. See Annex: 1 of pictorials

c). We were involved in robust and massive tree planting/growing, and distribution of seedlings for planting at selected degraded sites in Narok County. This is one of the major outputs of our project. We continued with the mentorship programme of the primary and secondary school students especially on matters conservation. The trained students, youths and women groups took the lead, with our supervision, in the robust tree planting sessions and other seedlings donated to the community members. See Annex: 2 of pictorials

We established strong links and rapport with the local administration in different sub-counties of Narok, i.e., deputy county commissioners and local chiefs and their assistants. This goes a long way in ensuring project sustainability. For instance, the local deputy county commissioners were willing to provide labour from their employees who do community services to tree planting. This great milestone made it easy to plant more and more seedlings in dedicated public land. We believe we will only strengthen such links as we continue greening degraded sections of Narok County. See Annex: 3 of pictorials.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

The COVID-19 pandemic and sporadic local surges of Covid cases delayed our planned project activities, especially occasioned by government bans on group meetings.

Moreover, the COVID-19 pandemic disrupted school calendar this meant that project activities had to be delayed for a couple of months while final national examinations were being undertaken.

Tree planting was also delayed in several places due to unpredictability of rainfall patterns, with droughts happening regularly probably because of the changing climate.

4. Describe the involvement of local communities and how they have benefited from the project.

Free tree seedlings donations. Members of the local community around different schools we visited were invited, and sessions were held to train and advise them on environmental conservation benefits. They also benefited from free donations of indigenous tree seedlings for planting. We also massively lobbied members of the public to come up with Community Forest Associations and Conservation CBOs for a possible partnership on conservation issues. After such sessions, tree seedlings of indigenous species were planted and other donated to the community. See Annex: 4 of pictorials

Livelihood sustenance. Narok is predominantly occupied by the Maasai community, known for pastoralism and farming. Some of the members benefited from our plenary sessions since they were not aware of the inalienable link between the unpredictable weather patterns negatively affecting their farming output and climate change, and that tree growing culture could be an antidote mitigating against climate change.

Free training. The members of the community and high school students in and around Shartuka Secondary School were practically trained on all the steps of establishing tree nurseries. Such an undertaking goes a long way and is inherently passed on to successive generations and the wider community. Training also took place in all Schools visited prior to planting sessions. In all these cases, Environmental Clubs were formed. See Annex: 5 of pictorials

5. Are there any plans to continue this work?

Narok County is approximately 17 921.2 km², this makes it one of the largest counties in Kenya. Narok County is also known for conservation since it hosts Maasai Mara Game Reserve and Kenya's largest water tower, Mau Forest Complex.

We believe more concerted efforts should be geared towards community sensitisation about the need to conserve the environment, including tree planting

and afforestation programmes, for the duality of mitigating against climate change and enhancing local livelihoods. These efforts should/must be continuous since they are slowly but surely creating a difference in regions we already visited.

Whilst the public are more receptive and willing to dedicate more of their land to tree growing, including community land, there is a serious scarcity of individuals or groups generating seedlings of indigenous species and distributing to the public. In cases where the seedlings are available, they are sold expensively beyond the locals' financial capability to buy more.

With the generous support from The Rufford Foundation, our project will continue to advise and lobby the public to establish nurseries and apply the training we offer to utilise locally available seedlings. These efforts should be sustained across Narok County and beyond.

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

The work was presented at the Rufford Conference held at the Oak Place, Nairobi Kenya on 22nd February 2022.

We are currently developing a manual for tree nursery establishment that will be shared with the members of the public.

We are also planning to share our information on combating climate change with the general public through local radio stations and to showcase our project activities at climate change meetings in Kenya to reach out to a bigger audience in Kenya.

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

Despite only visiting a few schools per sub-county in Narok, we believe there is more to be done to triple our conservation efforts. Initially (1st RSG), we established a tree nursery at Maasai Mara University, and later (2nd RSG) we established another tree nursery at Shartuka Boys High School in Kilgoris (far Western side of Narok). Moving forward, we believe we can lobby the community and establish a community owned tree nursery in Narok east whilst maintaining the already existing two. When successful, we believe the three nurseries will be accessible to any section of Narok depending on nearness distance.

We also look forward to leveraging upon national and international celebrations, such as the UNFCCC day, World Wildlife Days, Wetlands Day and the National Tree Planting week. In so doing, it will be possible to help and re-establish the upstream degraded trans-boundary water catchment and rangeland areas of the Mau that serves not only the country but the East African community and beyond. These afforestation exercises, also increases green cover whilst contributing to the achievement of Kenya's 10% forest cover.

Interestingly, it is instructive that the community has begun understanding the rationale behind growing of indigenous trees suitable for the agro-ecological zones,

as guided by the Rufford Foundation. Ultimately, collective afforestation exercises will complement ecosystem restoration activities, in line with the UN Decade of the Ecosystem Restoration, contribute to a resilience environmental and food security.

Finally, we believe in establishing an alternative source of energy to thwart overreliance on fuelwood that leads to illegal logging of natural forest like the Mau. In so doing, we are looking forward to establishing a charcoal briquette production centre that converts waste papers, grasses and other organic field waste (twigs and broken furniture) into more sustainable energy.

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

Yes, the Rufford logo featured prominently in all materials that were used in the project i.e., on the t-shirts, water tank for the nursery, training programmes for the climate sensitisation of the community and students on ways of mitigating climate change. See Annex: 6 of pictorials

9. Provide a full list of all the members of your team and their role in the project.

Member	Position	Role
Evance Ouya	Principal Investigator (PI)/Team leader	Organize all project activities and timelines including; <ul style="list-style-type: none"> • Lobbied Wildlife and Environmental Club at Maasai Mara University to embed habitual tree planting in their calendar of events. • Led sensitizing high school students, primary school pupils from selected schools to come out in numbers for tree planting days • Organized sensitization workshops. • Spearhead the monitoring process and coordinate.
Prof. Francis Mburu	Lead Trainer	Currently the Dean, School of Natural Resource, Tourism and Hospitality, Maasai Mara University, he took the lead role in organizing all Logistical Facilitation from the University. He was the chief speaker at a workshop held within the University concerning the project with environmental stewards drawn from each sub-county of Narok.
Alex Nkulet	Outreach consultant	Coordinating.

		<p>A local from Narok County, Mr. Nkulet, together with the PI helped in the coordination of different community heads, chiefs, and Secondary School Principals and Primary School head teachers before any visitation to different school.</p> <p>Made frequent visits to Shartuka Boys High school to ensure the established tree nursery was a success.</p>
Amon Kipkirui	Casual Staff	<p>The head responsible for the maintenance of the seedbeds and transferring the seedlings to the seedling bags until they attain appropriate growth for the distribution.</p> <p>He also led in recruiting other casual workers for who could be hired for at most one week to assist in potting seedlings from the nursery when the available casual workers were overwhelmed.</p>
Alphonse Otieno	Casual Staff	<p>A casual staff who was in charge and responsible of nursery shade maintenance and sorting of the different indigenous tree species in the shade.</p>
Ministry of Education and School Head Teachers	Organising activities	<p>Different school heads assisted in organising the students to undertake training, support environmental clubs' forms as well as contact the PI from time to time for consultation.</p>
County Commissioner's Office-Deputy County Commissioner, Local Chiefs and Assistant Chiefs	Organising community activities	<p>They organised community members, Women and Youth group to come out during sensitization programmes.</p> <p>They also lobbied and assisted in creating goodwill with the community since the project will be undertaken in their local community land.</p> <p>They took the lead in mobilizing people to come out and plant trees and acted as the contact persons at the grassroots and sensitize their members about the project.</p>

10. Any other comments?

We, the project team and the community we visited (through their feedback) are sincerely grateful to The Rufford Foundation for funding the 1st and now the 2nd phase of restoration project that will go a long way in mitigating climate change impacts.

A mission of this magnitude would be challenging to achieve without the support from The Rufford Foundation. As we move forward, we would wish to be instrumental and recognisable in aggressively afforesting the once pristine Mau Forest Ecosystem.

ANNEX 1- A tree Nursery was established at Shartuka Boys Secondary School in Kilgoris



ANNEX: 2- Robust and massive tree planting/growing



ANNEX: 3- Establishment of strong links with Local Administration in different sub counties of Narok.



ANNEX: 4- Free tree seedlings donation.



ANNEX: 5- Free training acquisition



ANNEX: 6- The use of Rufford Foundation logo in materials in relation to this project

