

Final Project Evaluation Report

Your Details	
Full Name	Dickson Boateng
Project Title	Conserving the Mangroves of Anomabo, Egya, Abandze and Saltpond to promote coastal biodiversity, livelihood and increased adaptation to climate change
Application ID	25246-1
Grant Amount	£5000
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Date of this Report	24/05/2019

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
Assess the extent of degradation of the mangrove ecosystem in the selected communities and prepare baseline-scenario data and information for the management of the sites.				This objective was fully achieved with a database created to that effect.
Mobilize local institutions and reinforce chieftaincy and institutional framework at local, national and sub-regional levels for their effective participation and ownership of the project.				People were very responsive and thus making this objective achievable.
Carry out site cleaning exercise and grassroots tree planting actions of predominant mangrove species (Rhizophora and Avicennia) and coastal species (Fegimanra Africana, Annona glabra, etc.) in degraded areas for replenishing loss mangrove woods.				Clean up exercises and tree planting was very successful. Although the heavy downpours affected some of the planted seedlings, replacement was done.
Share findings, achievements and lessons to other coastal communities having mangrove ecosystems to stimulate the wise use of mangrove sites along the coast through workshops/seminars.				Communities were made aware of the achievements and lessons learnt and advised to use natural resources judiciously.

<p>Be a useful instrument for environmental organizations and activists whose objective is to help contribute to biodiversity through conservation. It will further help the country to adopt strategies so as to contribute her quota in tackling the global challenge of 'sustaining the projected 9 billion people in 2050 while maintaining a habitable environment '.</p>				<p>This work has not yet been published and hence, still remains a local action to promote conservation and biodiversity. We plan to publish our findings in an environmental journal.</p> <p>Also, efforts to include it in the curriculum of schools is proving futile although we are still doing our very best.</p>
<p>Add to the available knowledge and support future research and policy formulation in the context of biodiversity conservation. It would therefore improve researchers' understanding on the subject matter</p>				<p>The team really learnt a lot from this study. We also identified gaps that need to be bridged in conservation and biodiversity.</p>

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

Seedlings were planted in months that are known to be dry period in Ghana. Unfortunately, these months recorded heavy downpours which really affected the growth of some seedlings. However, seedling replacement was done.

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

The mangrove areas now have a GIS database which contains the various land cover types, maps showing extent of degradation or encroachment, the conditions of species, socio-economic status of community and land use map. With this it is very easy to identify the extent of loss of mangrove vegetation in the study region. Hitherto, there was no data to monitor the rate of degradation but through this project, the extent of mangrove degradation is known and future loss can be monitored.

Interestingly, people living in the region had limited or no knowledge on the environmental services the mangroves provided for them. They were just aware of the economic benefits of the mangroves. It is therefore not surprising that they did not pay necessary attention to the mangrove degradation. The project that educated people in the area on the environmental services the mangroves

provided and stressed on the need to conserve them. They were very responsive and this was evident in the number of people who came out to support in the cleaning of the site and planting of seedlings.

A sense of ownership was imbibed in the people and key stakeholders and thus, they saw the project we have done as their own. Chiefs in the area assured us that they were going to monitor illegal lumbering on the sites and advised community members not to pollute the restored mangrove sites or face prosecution for doing otherwise. People of the community having understood what the presence of mangrove meant also pledged to protect the sites and expose anyone who polluted the place.

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

This project adopted the community based approach. Hence, local communities were involved at various stages of the project. Apparently, the people in the community were very much worried about the amount of waste that had been disposed of in the mangrove sites. Following this, they (especially the youths) were very much happy to see such a project and thus, willingly involved themselves throughout the project.

Local communities have indeed benefitted from the project since they now have a clean mangrove site; have knowledge on how to conserve mangrove, have knowledge on the environmental services provided by mangroves. Although we believe this project will affect livelihoods by making fishing— the dominant occupation dweller— more lucrative, this has not yet been assessed.

5. Are there any plans to continue this work?

We found gaps which we believe can be worked on in further projects. It was realised that the lack of knowledge on 'mangrove-environment-human'—how mangroves affect the environment and humans— is the cause of mangrove degradation in most local areas. Because indigenes lack such knowledge, they are not expected to conserve mangroves. Indigenes consider mangroves as a gift of nature to provide people with money. Hence, all they care about is felling mangrove trees for trade.

More so, in the absence of clean fuels, people use firewood for cooking and thus, making the charcoal business very lucrative. Food is a basic need of life so when provided with no other options aside firewood, local communities will have to resort to it. Following this, there is the need to provide indigenes with clean fuels and vocational skills after making them environmentally conscious so they do not return to their previous activities (using firewood and charcoal) which enhanced deforestation

To this end, efforts to protect and conserve mangroves should also involve the provision of knowledge on 'mangrove-environment-human' relationship and

alternative sources of fuel and income to local communities. We will therefore appreciate it if Rufford can help in filling these gaps.

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

Environmental issues are global and thus need to be tackled as such. We therefore, plan to publish our findings in an international journal so others can replicate.

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

This grant was used for a period of 1 year as was planned in the project proposal

8. Budget: 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. It is important that you retain the management accounts and all paid invoices relating to the project for at least 2 years as these may be required for inspection at our discretion.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Administrative cost	300	400	+100	
Cost of publication and organizing workshops with other coastal communities to inspire protection of mangroves	250	250		
Cost of living expenses during field work	200	300	+100	Things were not that cheap as we thought it would be
Cost of mounting bill boards and banners at mangrove sites	100	100		
Cost of general public awareness in the media	500	250	-250	Some media houses discounted cost for us
Cost of hiring labourers for planting mangrove seedlings	350	500	+150	The team decided to increase the number of people involved in this process to make the community more involved
Cost of obtaining and raising mangrove seedlings	600	750	+150	We had to replace some of the seedlings following the heavy downpour
Cost of training providing training to Friends of Mangrove in mangrove	400	300	-100	

restoration activities				
Cost of establishing " Friends of Mangrove" community based organization	600	500	-100	
Cost of organizing clean up exercise of the mangrove sites	500	500		
Cost of organizing community based education	700	600	-100	
Cost of organizing stakeholders meeting	250	300	+50	
Cost of obtaining past and current aerial images of the mangrove sites	150	150		
Cost of hiring equipment (GNSS) for mapping	100	95	-5	
TOTAL	5000	4995	-5	

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

I believe conservation efforts should concentrate on provision of knowledge. This is very much necessary as the planting of trees and marking of areas as protected. Once the people appreciate the presence of natural resources, they are less likely to pollute or degrade them.

Also, there is the need to identify the main reason behind the environmental pollution. At times, people have no other option to pick from rather than destroy the environment. Going ahead, conservation actions must begin with the provision of alternatives especially if pollution or degradation is the only source of livelihood.

10. 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?

The Rufford Logo was used in all presentations made and the Foundation was acknowledged and we plan to recognise the foundation in our final article publication.

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

The project team leader was **Mr. Dickson Boateng**. He was responsible for overseeing the entire project and organising seminars and educating communities on mangrove management.

The project team also had a nature conservation professional – **Mr. Evans Amoako Amoah**. He was responsible for the organising the field work aspect of the project and also participated in the capacity building exercises.

Another team member on the project was a Geographic Information System Analyst in the person of **Mr. Richmond Kofi Addo**. He was in charge of the GIS aspect of the project and thus, handled the creation of the geodatabase for managing the mangrove.

Miss Naomi Aryeetey was also a member of the team and was responsible for of all public education and advocacy campaigns.

The M&E officer was **Miss Ivy Badu**, she was responsible for ensuring that all the set objectives were met, gaps identified and recommendations made for further studies/projects.

12. Any other comments?

We are very much thankful to the Rufford Foundation for giving us this opportunity to contribute to conservation of nature. We are very much optimistic that this opportunity is a foregleam of grandeur things to happen in our quest to conserving the environment. We will forever be grateful to Rufford Foundation.



Mangrove area before the project



An encroached mangrove



Mangrove area after the completion of the project