

The Rufford Small Grants Foundation

Final Report

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.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Iveren Abiem
Project title	Vegetation Patterns and Species diversity of Naraguta Mountains in Jos, North-Central Nigeria
RSG reference	14900-1
Reporting period	12months
Amount of grant	£4992
Your email address	abiem.iveren@yahoo.com
Date of this report	15 th June, 2016

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
Assess the plant species composition and diversity of the Naraguta Mountains.			Yes	
Assess the threats/disturbance to the vegetation of the mountains.			Yes	
Using satellite images to measure changes in vegetation cover covering a period of 19 years.			Yes	
To carry out a conservation education programme in the Naraguta community to improve the levels of conservation awareness of the Naraguta mountains			Yes	

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

N/A

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

1. Contributing to the baseline data of plant diversity in Nigeria: Approximately 160 plant species were identified from the study. Samples of these plants were collected and deposited in the herbarium of the University of Jos and A.P. Leventis Ornithological Research Institute. We identified one IUCN red listed species, *Dombeya ledermannii*, which has been described to be found only on the Jos and Mambilla Plateau in Nigeria. This has formed a background for a future research study.

2. Identification of threats to the vegetation of the Naraguta Mountains: We were able to identify the current threats to the vegetation of the Naraguta Mountains and assess their intensity. We are making these known to stakeholders for further action and this has provided the background needed to advocate for the protection of the mountains.

3. Capacity building for local community: Working with the local community who are direct stakeholders is an effective conservation approach. We were able to

work with the Naraguta community to get them to appreciate the importance of the natural resources around them and thus, work towards the mountains conservation. The project was welcomed by the Community Head who gave us full support and ensured we had no problems. He provided us with guides who also served as our field assistants. These assistants were trained in field skills such as plant collection, identification, pressing and measurement. Conservation education was carried at the Agape Baptist High School where the students were taught the benefits of plant resources and the importance conserving the environment. Students were taken on an excursion to the mountains where they were shown the different benefits derived from the vegetation like the streams which are the source of water for irrigation farming. Teachers and other community members were also educated on the need to conserve the forest. A Christian Conservation Organisation EDEN was invited by the team for the conservation education programme and it was very successful. Customised t-shirts and exercise books were distributed during the conservation awareness programme.

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

Before the commencement of the project, we met with the community head, Ugomo Yakubu Bala Shishok, who gave us the assurance of the support of the community and was very interested in the work. He has assured us of the community's backing towards securing a protection status for a portion of the mountain. He took the team on a tour of the mountain introducing us to ancestral sites and a small portion of the mountain that has been protected by the community as a form of worship. Our two field assistants were from the community and were very helpful with directions. These assistants were paid an allowance on a weekly basis which was a source of income for them.

5. Are there any plans to continue this work?

This is the first biodiversity study conducted on the Naraguta Mountains. Having collected this baseline data, we hope to be able carry out other biodiversity projects in the area. Also, we are currently working with members of village in documenting the ethno-uses of the various plants in the study area. We hope to carry out inventory on other biodiversity – mammals, avifauna, reptiles and amphibians found on the mountains.

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

The report from this work will be made available to the local government area office of Jos North where the Naraguta Mountains is located. We will also give copies of

the report to the Nigeria Conservation Foundation, The state Ministries of Environment and Forestry. We also hope to publish findings from this work in an open access peer reviewed journal.

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

The grant was used for a period of 12 months (June 2015-June 2016), the same time scale anticipated for the project.

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
ASUS TP300L SERIES 4GB RAM 1TB HDD Corei5	588	543	45	
NIKON-D3200 DIGITAL SLR CAMERA WITH 18-55mm LENS	336	406	-70	
GARMIN 64s GPS	217	211.44	5.56	
Clinometer:Hypsometer, Laser,Insight 400lh	190	176.17	13.83	
Batteries For Gps And Hypsometer And Aa Battery Charger	40	50	-10	
Rainboots	40	40		
Rain Coats	30	30		
Field Note Books	5	2	3	
Purchase Of Herbarium Materials	180	150	30	
Silva 15dtcl Compass, Measuring Tapes And Diameter Tapes, Flagging Tapes	144	110	34	
TRANSPORTATION (Fuelling And Vehicle Maintenance)	890	800	90	
Field Assistant Allowance	432	480	-48	
Landsat Etm+ Scenes	100	110	-10	
Subsistence Allowance	720	720		
Production Of Customized T-Shirts And Exercise Books For Capacity Building	850	880	-30	
Communication Of Results	230	220	10	

Freight Charges	0	63.39	-63.39	
Total	4992	4992	0	

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

The next steps after submitting the project report are:

1. Submit the full report to the Ministries of Environment and Forestry and follow up to propose for the conservation of the Naraguta Mountains by giving it a protection status.
2. We will continue to work with the community to encourage sustainable use of the biodiversity resources. We will encourage tree planting in the homes and farmlands of the villagers and in the school premises. We hope to encourage the villagers to keep nurseries of native plant species that are economical and which will be an additional source of income.
3. We are currently inventorying the different uses of the plants encountered on the mountains, documenting their vernacular names and conservation status. This information we hope to provide to the community to continue in conservation awareness and to be used in learning processes in schools in the community.

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?

The RSGF logo was used on the customised t-shirts and exercise books produced for the conservation education programme carried out in the community. Also, the full report is carrying the logo on its cover page. In all our communication to the community head and schools, we introduced RSGF as the sole funder of the project and we plan to acknowledge the RSGF in all our publications resulting from this project.



Left to right: Field Assistants; Firewood collection by a woman from the village; Part of protected part of the mountain for traditional purposes & Tantalus Monkey shot by hunter.