

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	Rahila Meribah Yilangai
Project title	Plant species diversity, abundance and structure of Tula mountains in north east Nigeria
RSG reference	15188-1
Reporting period	12 months
Amount of grant	£5980
Your email address	Rahila.meriba@yahoo.com
Date of this report	29th May 2015

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
To determine woody plant species diversity and composition of Tula mountains			Yes	
To determine the vegetation structure and woody species density			Yes	
To determine the conservation status of plant species			Yes	
To build capacity through conservation awareness programme			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. Capacity building for local community

An effective conservation approach involves working with local communities who are direct stakeholders of the woodland to appreciate the importance of the natural resources around them and thus, work towards their conservation. At the commencement of this project, a meeting was held with the village head, some community members, APLORI director and the research team where the content of the project was explained to them. The project was welcomed by the village head and community members and a local field guard was assigned to the research team who participated in the project and was trained in some of the field skills such as plant identification, plant pressing, measuring DBH and height of plants. Conservation education was carried out in Tula Yiri community Secondary School on sustainable use of tree resources. Students were taught the importance of trees for food and medicinal uses, capturing pollutants in the air, as home to wild animals as well as the dangers of deforestation in shortening the supply of these services to them. Afterwards, students were taken out to the field to practically identify some plant species in their environment and their local uses. For example, students mentioned *Prosopis africana* uses in

making their local soup seasoning. Customised t-shirts and posters were used to aid conservation awareness.

2. Herbarium specimens

A total of 50 plant species were pressed and preserved in the APLORI as herbarium specimens for further plant identification.

3. Sharing of data with Global plant databases and government agencies

Findings from this study will be used to approach stakeholders (government agencies and local communities) in order to evaluate the possibility of granting the area a status of protection from intensive human use. Results obtained from this survey will be used as a tool to propose conservation strategies to the Gombe State Government so that illegal activities such as grazing, farming and logging currently going on in the woodland are stopped or are done sustainably. Our data can be used for information so that activities such as road construction can be carried out with minimal impact on cover and biodiversity. Data will be shared with Global Plant Database and West African Plants Database. Results will also be published in open access peer-reviewed journals.

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

Before the commencement of the project, a meeting was held with the village head of Yiri, Mr Yerima Doma. The village head who was keen on the project as the first of its kind in their community provided the research team with a local guard who assisted the team for the period of the research. He also served as a mediator between the research team and the community, the secondary school and the local government office for communication purposes. The field guard employed during the period of the research was paid some allowance which was a source of some green income for him.

5. Are there any plans to continue this work?

The just concluded project is the first biodiversity conservation project conducted in Tula Mountains. Having collected this baseline data, more research on biodiversity and capacity building projects is very crucial for sustainability and conservation of the woodland resources. Having collected data on plant diversity and structure of the woodland, studies on other biodiversity elements such as avifauna and mammals diversity of the woodland will be studied extensively to provide basis for linking animal diversity to plant species diversity, vegetation structure, land use types, landscape patterns and climatic conditions.

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

The results of this work will be submitted to the local government area office of Kaltungo, where Tula is located. This result is intended to be forwarded to the state government along with a proposal in designating Tula Mountains as a nature reserve. The plant species recorded will be updated on the Global Plant Database website for access to other scientist as well as IUCN list of which very little record has been provided from savannah zone of Nigeria. We also intend to publish the findings of this research in open access peer reviewed journals for access to other scientists.

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 grant was used for the period of 12 months (May, 2014 - May 2015), 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
HP 15 LAPTOP: Intel dual CORE (PENTIUM), 500GB Hard Disk, 2GB RAM.; Techno P9 Tablet	560	346	214	
Canon PowerShot SX500 IS Digital Camera	323	360	-37	
GPSMAP 64s	180	234	-54	
Clinometers: Opti-Logic Precision Laser range finder and Hypsometer	288	334	-46	
Plant identification guide: Trees, Shrubs and Lianas of West African dry zones by Michael Abornnier	0	64	-64	
Litres of fuel	1697	1393	304	
Vehicle maintenance	360	769	-409	
Accommodation for 3 staff	432	546	-114	
Feeding for 3 staff	360	400	-40	

Field guard	864	783	81	
AA Batteries for GPS and 9V batteries for Clinometers	40	20	20	
Rain boots	32	29	3	
Field notes	4	2	2	
Herbarium materials	160	100	60	
Posters and T shirts for capacity building	680	600	80	
	560	346	214	
Total	5980	5980		

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

The next steps after submission of this report are as follows:

1. Sharing of data with international databases such as the Global Plant Database and West African Plants Database.
2. Submission of results and follow up to propose a conservation management strategy to government agencies towards giving Tula mountains a status of protection.
3. Further project will focus on capacity building to encourage sustainable use of the tree resources especially firewood collection. The project will involve two major target groups of the community: women and schoolchildren. Women will be taught the use of fuel-efficient stoves to reduce firewood consumption while conservation awareness programmes will focus on establishing green clubs in schools to educate children and create conservation awareness in children at an early age.

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, the Rufford Foundation logo was used on the customised t-shirts and posters used for conservation awareness programme during which the students were told about Rufford Foundation as the sponsors of the project and other similar projects in Nigeria. Rufford also received publicity at the community level during meeting with the village head where we mentioned that the project was sponsored by The Rufford Foundation in London.