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. 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	Tenekwetche Sop
Project title	Population dynamics and conservation status of some key multipurpose woody plant's species in the Sub-Sahelian area of Burkina Faso
RSG reference	10500-2
Reporting period	December 2011 – February 2013
Amount of grant	£ 6000
Your email address	tenesop@gmail.com/tene.kwetche.sop@botanik.uni-hamburg.de
Date of this report	20 March 2013

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
Dendrometric measures on 10 targeted tree populations			XX	Data was collected for the following species*: Adansonia digitata, Vitellaria paradoxa, Tamarindus indica, Acacia seyal, Parkia biglobosa, Acacia nilotica, Balanites aegyptiaca, Lannea microcarpa, sclerocarya birea* and *securidaca longepedunculata*
Plant inventory /botanical investigations in the vicinity of selected villages			XX	Completely conducted as planned.
Germination trials on seeds of selected species: *Adansonia digitata, Vitellaria paradoxa, Tamarindus indica Acacia seyal, Parkia biglobosa, Acacia nilotica, Balanites aegyptiaca, Lannea microcarpa, sclerocarya birea*		XX		The germination trials were limited to the laboratory. It was not possible to do field experiments
Determination of the ecological status of targeted species			XX	This was deducted from the size class distribution of each targeted species

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

With the experience gathered during the first phase, we efficiently got round some minor technical and communication problems that arose in the implementation of the project.

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

a) The ecological status of the targeted species perfectly matches the perception of local people on these plants. Most of the species that were perceived by locals to be declining showed unstable size class distribution (SCD), while other species (*Acacia seyal* and *Balanites aegytiaca*) that were mentioned as increasing in abundance depicted very stable populations with a very high regeneration potential evidenced by numerous seedlings.

b) Plant inventory in the study area led to the identification of 120 trees and shrubs species from 41 families and 65 Genera. Ethnobotanical surveys that were conducted during the first grant identified 91 species that are valued by local people in different use-categories.

c) Tree species such as *Vitellaria paradoxa* (Shea butter tree), *Adansonia digitata , Parkia biglobosa* and *Tamarindus indica*, which were reported during interviews carried out in the first phase, as the most important species supporting local livelihoods, showed a bell shape or a J-shape size-class distributions. Such distributions are characteristic of threatened and declining species. These species lacked regeneration in the field, probably because the seeds are most valuable part of these plants, used for food and for breweries. *Securidaca longepedunculata* appears to be one of the most threatened species in the study area. The plant is credited with magic and medicinal properties and is therefore very sought-after by traditional healers. The roots are the most harvested part and it is very current to come across individuals of *Securidaca longepedunculata* that have been completely uprooted by traditional healers.

The study has come to the conclusion that unsustainable harvesting practices play an important role in the decline of several multipurpose species in the Sahelian area of Burkina Faso.

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

As during the first phase, local populations have been involved in data collection. To achieve this result, we had discussions with communities' leaders in order to explain the objective of our work and its importance for local communities and resource conservation. Field assistants who help us in data collection were recruited in the villages or areas where the investigations took place. This strategy considerably facilitated our work. Local people also contributed by providing us with data on distribution and abundance of the targeted species.

5. Are there any plans to continue this work?

Yes, we are planning to apply for a third phase that will focus on the use of a participatory mapping approach to assess the vegetation dynamics and the driving factors where satellite images show an increasing biomass production.

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

As for the first grant, we are planning two publications with the results of this study in local and international journals in order to make the results available to the scientific community as well as to decisions makers and land-users.

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

With our experience of the first grant, we try to expand the grant within the most important phase of the project. Most of the grant was used from May to December 2012.

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
Field equipment (Dendrometer (LTI Criterion RD 1000 BAF-scope)	580	0	+580	We did not by a dendrometer as planned because, a few months after we obtain the grant, the research group of the main researcher, at the University of Hamburg, ordered this Device that we could use for our project.
Office equipment and communication (Printer, Paper, Internet, Telephone...)	290	328	-38	Inflation rate
Allowances, Salaries and allocations for local workers and guides	1470	1655	-185	Difference due to a higher number of individuals sampled and therefore more working days for the guides and local workers
Car location and local travels	1650	1930	-280	More data needs more field work and a higher number of days in the field.
Fuel for the hired car and the motorbike	550	665	-115	More fuel was needed for the increased number of days for the fieldwork.
Purchasing a new motorbike	600	675	-75	The motorbike chosen was a bit expensive that planned.
Material for Germination trials in the Laboratory	650	580	+ 70	
2 Return fly tickets for the main researcher Hamburg-Ouagadougou - Hamburg	0	0	[-1950]	The main researcher travels twice and the tickets were supported by the researcher's working group, as contribution to the project.
Unforeseen (Small reparations on the motorbike, external hard drive for data storage)	210	190	+30	It appears necessary to acquire an external disk to save the whole data collected in phase 1 and Phase 2
Total	6000	6023	-23	

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

As earlier mentioned, the next steps will include a production of a species distribution map for the study area and the dissemination of the knowledge gained from this study, by preparing publications for national and international journals.

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?

Yes, we used the RSGF logo on posters and for Power Point presentations.

11. Any other comments?

We thank the RSGF for this second grant that has allow us to collect large quantity of data on species distribution and abundance across the sub-Sahelian area of Burkina Faso.