

## The Rufford Foundation Final Report

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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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

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Grant Recipient Details	
Your name	Padonou Elie Antoine
Project title	Promoting Best Practice for Combating Bowalization in West Africa
RSG reference	17649-1
Reporting period	21 May 2015 to 21 May 2016
Amount of grant	£4990
Your email address	<a href="mailto:padonouelie@gmail.com">padonouelie@gmail.com</a>
Date of this report	21 May 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
<p>1. Produce fact sheets, practical manual and posters on the best practice for combating bowalization and adoption of conservation strategies of biodiversity to politicians, technicians working in ministries, land use departments, institutions in charge of environmental policies, local NGOs, local training institutions, local decision makers, local associations and local communities on the basis of the scientific publications on bowé</p>			X	<p>I have successfully produced the factsheets, posters and practical manuals on the best practice for combating bowalization and adoption of conservation strategies of biodiversity. The materials have been distributed to technicians working in ministries (Ministère de l'Environnement Chargé de la Gestion des Changements Climatiques du Reboisement de la Protection des Ressources Naturelles et Forestières, Ministère de l'Agriculture, de l'Élevage et de la Pêche), institutions in charge of environmental policies (Direction des Forêts et Ressources Naturelles), local NGOs (CAPES-NGO, CLIMA-NGO, and GOERT-NGO). The information focused on the restoration strategies of bowé using the line stone and the standard plantation technique associated with the plant species adapted on bowé (<i>Asparagus africanus</i>, <i>Andropogon pseudapricus</i>, <i>Combretum nigricans</i>, <i>Detarium microcarpum</i> and <i>Lannea microcarpa</i>).</p>
<p>2. Use the support materials during fieldwork, training workshops and meetings with local communities, associations, NGOs, local and regional authorities.</p>			X	<p>The support materials have been used during training workshops and meetings with local communities, associations, NGOs, local and regional authorities.</p>
<p>3. Assess the observation and farmers' field school for the degree to which they restore bowé and conserve biodiversity.</p>			X	<p>The results of the observation and farmers' field school have been presented during training workshops and meetings towards farmers and local institution. Exchange experiences with the farmers and</p>

				local institution allow building the framework of observed restoration strategies of bowé. This helps the participants to jointly develop priorities for management, conservation and future research.
4. Education awareness, sensitisation and lobbying		X		<p>The outputs of the workshops help to develop and implement several sensitisations on best practices for restoration strategies of bowé. However I still doing the lobbying based on the results to facilitate the inclusion of certain indigenous soil restoration.</p> <p>As future research, I found out that around termite mounds observed on bowé in Banikoara, we have apparently more soil and biodiversity. However the termite mounds are threatened mainly by fire in the dry season. Thus my next research is to evaluate the role of termite on soil and biodiversity conservation on bowé and involve local community in conservation of termite on bowé.</p>

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

I have conducted my research during the presidential election period in Benin where several meetings are organised in the districts. This has affected the meeting time I planned with local communities. I have then often met with local communities in the morning instead of the afternoon usually planned.

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

- a) The dissemination of the best practice for combating bowalization gives an overview on the importance for combating land degradation and conservation of biodiversity.
- b) Fieldwork, training workshops and meetings gives new ways to learn from nature and build conservation actions on biological process
- c) I increased awareness of 2400 farmers in 4 districts in Benin where bowé occur.

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

Local communities were closely involved in the project activities in several ways:

- a) They have been trained on the restoration strategies of bowé using the line stone and the standard plantation technique associated with the plant species adapted on bowé.
- b) I involved local communities in field school and their results have been presented during training workshops and meetings.
- c) Exchange experiences with local communities allow building the framework of observed restoration strategies of bowé.
- d) Several sensitizations on best practices for restoration strategies of bowé have been developed and implemented towards local communities.

#### **5. Are there any plans to continue this work?**

While promoting the best practice for combating bowalization in West Africa, I found many termite mounds on bowé acting as habitats of important biodiversity and soil restoration on bowé sites. However these termite mounds are intensively degraded by local communities in the dry season by fire and hunting of rodents inside the mounds. Little attention is given to enhance the conservation of the termite mounds on bowé sites. Therefore, these termite mounds may be at higher risk of degradation. To mitigate the impacts of fire and hunting of the termite and ensure the ecological restoration of bowé, it is urgent to involve local communities in the conservation of termite mounds on bowé sites. Effective communication with local communities towards conservation of termite mounds on bowé could offer promising perspectives for ecological restoration of bowé sites.

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

I am currently writing two manuscripts that will be published to share this experience of using conservation science to solve conservation problems in developing countries. I will continue the dissemination of the fact sheets, practical manual and posters on the best practice for combating bowalization and adoption of conservation strategies of biodiversity to institutions involved in conservation of natural resources at national, regional and international level.

#### **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 RSG was used from May 2015 to May 2016 and this period was almost as anticipated.

#### **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
Fact sheets	100	90	10	I have negotiated the printing of fact sheets at 0.09 per unit with 1000 as total printed
Posters	50	50	0	
Practical manual	200	198	2	I have negotiated the printing of practical manual at 0. 198 per unit with 1000 as total printed
Internet	100	300	-200	The internet has become expensive in Benin with the 4G. Thus budgeted amount was not enough
Radio and public crier communication	300	300	0	
Phone communication	180	600	-420	I made several phone communication with local communities due to the perturbation of the meeting associate with presidential election period
Travel to sites	1,200	1000	200	I made 2,500km during travel to sites (£0.4×2,500km)
Research assistance and local workers	600	600	0	
Hiring room for training workshops	300	300	0	
Transport per diem for participants	600	600	0	
Foods (£3×12×10)	360	360	0	
Education awareness, sensitization and lobbying	1000	592	408	I still doing the lobbying but I have no money left. I will continue with new project
<b>Total</b>	4990	4990	0	

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

Bowal (plural bowé) is a particular form of degraded land on hardened ferruginous soils (ferricrete) found in tropical regions with unimodal precipitation. Bowalization leads to loss of biodiversity and changes in vegetation structure. The vegetation on bowé is characterised by annual herbaceous plants and trees with impeded roots growth and structural adaptations. Bowalization is predicted to persist and increase in extent in the future. The promote of the best practice for combating bowalization and adoption of conservation strategies of biodiversity help to design appropriate land degradation management on bowé. The results need to be reinforced by low.

Thus I will still doing the lobbying to facilitate the inclusion of indigenous soil restoration practices in laws, decision making on soil conservation strategies and policies in Benin as many of the official documents are still in revision. Moreover bowé cover some termite mounds that act as habitats of important biodiversity and soil restoration on bowé sites. However these termite mounds are intensively degraded by local communities in the dry season by fire and hunting of rodents inside the mounds. Therefore it is urgent to involved local communities in conservation of termite mounds on bowé sites in order to mitigate the impacts of fire and hunting on the termite and ensure the ecological restoration of bowé.

**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?**

I used the The Rufford Foundation logo on the factsheets, posters and practical manuals on the best practice for combating bowalization and adoption of conservation strategies of biodiversity. I also acknowledge The Rufford Foundation in the manuscripts in preparation for publication in peer review.

**11. Any other comments?**

I am indebted to the local communities involved in this project who share graciously their knowledge and make this project possible. I thank The Rufford Foundation for financial support.