

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	Cossi Aristide Adomou
Project title	Targeting globally threatened plant species to set conservation priorities for rain forest remnant in Benin
RSG reference	9715-1
Reporting period	April 2012
Amount of grant	£5998
Your email address	Adomou.a@gmail.com
Date of this report	16/04/12

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
Distribution patterns of globally threatened tree species in Benin			X	<ul style="list-style-type: none"> - 46 sites of rain forest remnants were surveyed - Herbarium sheets were browsed - Flora of Benin and database were consulted - I was supported by my botanist fellows in data collecting - 60% of these forest sites host globally threatened species and are not protected
Ecological and floristic characteristics of habitats of globally threatened tree species in Benin			X	<ul style="list-style-type: none"> - 250 vegetation relevés within plots of 30 x 30 m were carried out - Forest conservation status was described - Climatic and soil data were gathered
Tree population demography			X	<ul style="list-style-type: none"> - Rarity of regeneration in species such as <i>Pierreodendron kerstingii</i> - Rarity of reproductive individuals in Species such as <i>Milicia excels</i> - No individual of <i>Antrocaryon micraster</i> was recorded. - Species like <i>Dennetia tripetala</i> only occur in two forest remnants, but has been vanishing for ritual purposes - Species like <i>Entandrophragma angolense</i> represented by few individuals
Patterns of flowering and fruiting		x		Only tree like <i>Azelia africana</i> , <i>Nauclea diderrichii</i> , and <i>Pierreodendron kerstingii</i> flowered in course of the period covered by the project
Assessment of the use patterns	X			<ul style="list-style-type: none"> - Use categories include timber, roofing poles, medicinal (bark), and chewing stick. - No uses was recorded for species like <i>Pierreodendron kerstingii</i> and <i>Entandrophragma angolense</i>
Set conservation priorities for rain forest remnants			X	Four forest patches were keyed out as the most important for the conservation of threatened plant species: Pobè,

				Itchèdè, Niaouli, Bassila, and Ewè-Adakplamè. The endangered plant <i>Mansonia altissima</i> is restricted to Ewè-Adakplamè
Raise public awareness			X	Topic including importance of plant diversity, need to conserve it, sustainable use of plant resources, raising awareness on rare plants. We closely work with the population with the involvement of municipalities, NGOs, foresters, secondary and primary schools

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

The study period was too short for the assessment of flowering and fruiting patterns of forest tree species.

Seeds were not available for some species for regeneration trials. We then tried to look for seedlings in the forest for ex-situ conservation (botanical garden, sanctuary, farmlands).

Forest inventory is a huge and time consuming task. Time was not sufficient to survey the 250 forest plots of the 46 forest sites. I was helped by two fellow botanists to be able to achieve this goal.

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

- The distribution patterns of threatened plant species is assessed;
- The conservation priorities were set for rain forest remnants,
- The public awareness on threatened species conservation was raised followed by their ex-situ conservation.

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

The project effectively employed the input of the local population in threatened plant conservation effort from the beginning and at every step. They were involved in botanical survey of threatened species, forest inventories, seed collection, regeneration trials and nursery, transplantation activities etc. The involvement was more active in forest sites where there were local forest management committees: swamp forest of Lokoli, littoral forest of Pahou, Semi-evergreen forest of Niaouli and Ewè-Adakplamè, Riparian forest of Akpadanou. Seedlings were provided to people who expressed the will to plant them in their farms, home or neighbourhood. In the communal forest of Ewè-Adakplamè, attention was focussed on *Mansonia altissima*, an endangered tree species, which is restricted to that forest remnant in Benin. The surrounding degraded area was afforested using seedling of this useful tree species. The forest was preserved in the perspective to protect this species. Moreover, we also contributed to thrashing out the conflicts that exists between the two villages that exploit survive on the resources of that forest. We also established touristic and ecological circuits and arboretum in forests of Pahou, Akpadanou, and Niaouli.

5. Are there any plans to continue this work?

I am in negotiation with the department of Genetic of the University of Abomey-Calavi and the department of plant physiology of the University of Lomé to set up a project on the conservation of rare and threatened plants using *In vitro* method. The project will focus on micro-propagation threatened plants that are difficult to propagate by conventional horticultural techniques.

We will continue with raising awareness of the forest department on the need to conserve communal rain forest remnants particularly those providing habitat to globally threatened plant in Benin. We have already got some tangible achievement including participating management and protection of three forest relics: Pahou (littoral forest), Akpadanou (in Adjohoun, riparian forest), Lokoli (Zogbodomè, swamp forest), which are unique forest type in their species composition.

We will continue contributing to the enrichment of the seed bank of the University of Abomey-Calavi embedded in the Laboratory of Applied Ecology.

From now onwards, with the collaboration of the Botanical Garden of the University of Abomey-Calavi, we will provide seedlings from threatened and rare plants to be planted during the "National Day of Tree".

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

The results will be share through scientific publications, colloquium, conferences, workshops (next AETFAT congress in South Africa, Scientific days of National University of Abomey-Calavi), posters, and pamphlets.

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

The expected timescale of the project is March 2011-April 2012. But, we actually started in April.

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
2 etrex Summit GPS	300	300	-	-
2 Suunto tandem Compass/Clinometer	280	280	-	-
4 Model 283D/SM Diameter tape	128	128	-	-
2 Digmatic caliper	180	180	-	-
2 boxes of tags	90	90	-	-
1 digital camera Olympus SP-310	270	270	-	-
Stipend for 5 students	750	750	-	-
Assistant fee for local farmers	300	300	-	-
Assistant fee for local pupils	300	300	-	-
Awareness raising	200	200	-	-
Mini-seminar	500	500	-	-
Edition of 50 pamphlets	600	600	-	-

Printing plasticisation of 50 posters	600	600	-	-
Local transportation	1500	1500	-	-
Total	5998	5998		

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

Assess the role of the remnant forests hosting threatened plants in conserving medicinal plants, since local people seems to be more interested in preserving them than globally threatened plants of no use to them.

Use the micro-propagation technique, which is a useful approach for the conservation of rare, threatened, and endangered plant species.

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 in many instances: PowerPoint presentation, pamphlets, posters etc.

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Yes, the RSGF received publicity directed to students, NGOs, foresters, teachers etc.

11. Any other comments?

During the botanical survey we came across a number of plant species which are new to the flora of Benin: *Uvariadendron angustifolium*, *Friesodielsia gracilis*, *Cleistanthus polystachyus*, *Rothmannia munsae*.

The RSGF grant allowed me to do research and contribute to the conservation of plants and forest.