

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	Samuel Kwadwo Nsiah
Project title	Preservation of Sacred Forests and Indigenous Cultural Heritage for Biodiversity and Socio-Cultural Wellbeing in Rural Ghana
RSG reference	17142-1
Reporting period	Final Reporting
Amount of grant	£5000
Your email address	samuelkwadwonsiah@yahoo.com
Date of this report	April 20, 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
Spatially map sacred forests and cultural heritage sites and inventory medicinal plants species within the forests			Fully achieved	Rufford support was targeted for three sacred forests located in three communities (Traa, Oforikrom and Techiman) but the project extended to other 42 communities through financial contributions from Forest without Borders and individual fundraising. A total number of 42 sacred forests and cultural heritage sites were mapped and inventoried by the end of phase 1.
Encourage sustainable harvesting of medicinal plants species and other NTFPS within sacred forests			Fully achieved	Ten local herbal medicinal practitioners were selected for training on sustainable harvesting of medicinal herbs and plants species. Training included knowledge on seasons for harvesting, methods for harvesting, harvesting quantity and restoration practices
Document indigenous conservation knowledge used for forests protection			Fully achieved	Through interactive dialogue and focus group meetings, local conservation knowledge was documented.

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

Unforeseen difficulties:

Some communities were demanding financial compensations before they would allow access to map their sacred forests. Other communities were also requesting financial support to raise nursery stocks to establish buffer around their forests to prevent encroachment, fire and other illegal activities. Because of spiritual and cultural sensitivity attached to sacred forests, initial access to sacred forests were denied.

Solution:

I conducted community awareness and educational campaigns on the biological wealth of the sacred forests and the local communities' collective involvement in the forest's protection. The awareness and educational campaigns provided well informed knowledge that allow the communities to grant access to their forests for mapping. In addition, I facilitated for support from Forest without Borders, Canada and the Global Environment Facility, Small Grants programme in Ghana to support communities that requested for buffer establishment. So far, one community has been supported in the establishment of tree nurseries for planting.

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

Outcome 1: Local Capacity Development for Biodiversity Conservation.

Local capacity building was essential for this project. Trainings were done at community level in order to encourage participation. In each community a Local Biodiversity Advisory Group was formed while taking gender into consideration. The group consists of the local Chief and Elders, two local women and two men. The Local Biodiversity Advisory Group provided day-to-day oversight of the project activities. The group has enabled the communities to have a formal association to engage policy makers in matters concerning forest conservation within their communities and also access to government support. Overall, 42 Local Biodiversity Groups were formed and trained on the following activities:

- Biodiversity conservation;
- GPS mapping and forest inventory skills;
- Fire prevention and management;
- Sustainable harvesting of medicinal herbs and other non-timber forest products
- Nursery establishment, management and sales, and record keeping; and
- Restoration practices.

Outcome 2: Forest inventory and GIS database

The study combined participatory approach and ground truthing with GPS technology, Geographic Information System (GIS) and traditional ecological knowledge to map and document the spatial extent, historical background and medicinal plants species composition within the 42 sacred forests. The results showed that a total forest area of 510.38 ha were mapped. A total of 114 different plants species composition were surveyed. Forty plant species were identified for medicinal uses, and 24 plants species were considered endemic (confined only in those forests they were surveyed). Furthermore, the study showed that sacred forests support local economy and provide wild meat, fruits, spices, fodder and woodfuel to the local households. In addition, the forests and heritage sites contain interesting geological, cultural, historical and ecological features potential for ecotourism and environmental education. Some sacred forests exclusively protect headwaters of the communities' sources of drinking water. Predominant threats to sacred forests included: farming, wildfires, settlement and unsustainable harvesting. Taboos, fines and local beliefs are some examples of indigenous conservation practices.

GIS database

The inventory information were uploaded to GIS system to create a GIS database for the 42 mapped sacred forests and cultural heritage sites. The database will be periodically updated when new information becomes available. The database included: name of the forest/heritage, geographic location, conservation importance of the sites (this describes the economic, ecological, cultural,

historical and geological significant features), medicinal plants compositions and threats to the area. In addition, spatial maps displaying sacred forests and the heritage sites layers, and their attributes included. The GIS database will be shared with the national government. In this way the local communities will have access to government conservation programs. The GIS database will provide useful information to guide national policy formulation to improve socio-economic and cultural wellbeing of the rural people as well as help in the conservation of biological resources within sacred forests.

Outcome 3: Collaborative partnership and policy development.

The project has generated a national interest among government institutions and other civil society organisation. A national stakeholder's workshop was organised and policy directions and strategies for conservation of sacred forests in Ghana were presented. The workshop attracted participants from the World Bank, UNDP, Global Environment Facility, Small Grants Programme, UNESCO, University of Ghana and government institutions (Forestry Commission, Environmental Protection Agency and Ministry of Local Government). The policy document provides recommendations for strategies and directives that will be required for the protection, development, and sustainable management of sacred forests to improve biodiversity conservation and socio-cultural wellbeing of forest dependent communities. Overall, the study has prompted the formation of partnerships at multiple scales and led to a coordinated response from state agencies and other development partners (Forest without Borders, Canada and the Global Environment Facility, Small Grants Programme) in support of sacred forests conservation in Ghana.

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

The sacred forests conservation project was determined and designed through participatory meetings involving the communities. This project was selected as a top priority because of the numerous benefits the communities generate from the forests. Sustainable management of sacred forests will enhance ecological integrity and allow forests to continue to protect water sources, serve as depositories of biodiversity, contribute to local and national economies, and support local peoples' cultural wellbeing. The communities were involved from the project design-stage, through implementation to ensure long-term sustainability.

Benefits to the communities:

- The sensitisation campaigns educated the communities on the biological wealth of sacred forests and the communities' collective involvement for their protection;
- Skill development trainings have enabled some communities to explore ecotourism opportunities within their sacred forests and cultural heritage sites to generate income and employment.
- Sustainable harvesting of medicinal herbs and plants and other non-timber forest products have greatly enhanced conservation of medicinal plants (mahogany species) and other herbs within the sacred forests.
- Capacity building in nursery establishment, marketing and development of other NTFPs is creating employment and generating income for the local youth and preventing youth out-migration from their communities.
- The project has enabled the communities to access government conservation programs and support from other development partners.

5. Are there any plans to continue this work?

The overall goal of this project is to encourage preservation of sacred forests and indigenous cultural heritage sites for biodiversity and socio-cultural wellbeing by reducing communities over dependency on these forests. The next phase of the project is to develop and promote rural tourism with sacred forests and indigenous cultural heritage sites. This will generate income and employment to prevent the overexploitation of forest resources. The inventory data generated from the phase 1 will be used to develop a book. The book will describe the history, unique features, medicinal herbs and plants and indigenous knowledge used for forests conservation. Furthermore, a website will be created to host the sacred forests and cultural heritage sites to promote rural tourism in Ghana. Forest without Borders and Business Department at Nipissing University in North Bay, Canada have indicated their support in scaling-up this project. An aspect of phase 2 will also include local tour guides and customer services training for selected local people in the communities. There remain a number of sacred forests in Ghana that have not been mapped. The next phase of the project will seek to map other communities' forests.

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

So far, results of this project have been presented at workshops. The first workshop was organised at stakeholders meeting in UNDP conference room, Accra, Ghana. Workshop participants were from academia, civil society organisations, government agencies, traditional and local government institutions. Furthermore, preliminary results were presented at the Canadian Institute of Forestry, E-lecture Series, Canada on July 15, 2015. The project results and policy brief document produced from the project were submitted to UNDP Global Environment Facility, Small Grants Programme Ghana's office in a form of technical report to be presented to the government of Ghana. The results are also expected to be presented in relevant academic and international conferences as appropriate.

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

Rufford Foundation grant was a useful startup fund for this project. The funds allowed us to achieve our initially proposed objectives. Other funding sources were obtained to scale-up the project to additional communities seeking support for their sacred forests conservation. Local fundraising from individuals and financial contribution from the Forest without Borders, Canada, helped accomplish 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
Field Data Collection				
Food and water for field inventory: <i>3 local persons engaged 90mandays for 3study sites (30days/site) @</i>	1620	1620	0.00	

£6/day				
Travel: <i>Transport to and from field sites for 3 field crews for 90mandays @ £ 3.26/day</i>	880	945	65	The actual transportation cost (£3.5/day) was a bit higher than the budgeted cost (£3.26/day). Forest without Borders covered for the excess amount of £64.80
Training/Education				
3days GPS mapping and forest inventory training for field crew: <i>Snacks for 3 trainees for 3days @ £5/day</i> <i>Office space and equipment for 3days training @ £ 265 flat rate for 3days</i>	45	45	0.00	Forest without Borders covered for the excess expenditure of £1
	265	265	0.00	
12days sustainable harvesting of NTFPS and medicinal plants training for 3 communities (4days/community): <i>Snacks for 30 participants for 12days @ £4/day</i>	1440 (<i>proposed project budget</i>) 890(<i>requested from RSF</i>)	1440	550	An amount of £1440 was proposed for the project. RSF covered part of £890 , and the excess expenditure of £550 was covered by Forest without Borders
9days nursery establishment, marketing and restoration practices for 3 communities (3days/community): <i>Snacks for 30 participants for 9days @ £5/day</i>	1350 (<i>proposed project budget</i>) 800(<i>requested from RSF</i>)	1350	550	An amount of £1350 was proposed for the project. RSF covered an amount of £890 , and the excess expenditure of £550 was covered by Forest without Borders
Dissemination of Project Reports				
<i>4 printed hard copies @ £15/copy</i>	60	60	0.00	
<i>3days workshop presentations of results at 3 communities @ £</i>	240	240	0.00	

80/workshop				
1day National stakeholder meeting. (Expected attendees, 20 @ £5/person	100	200	100	Attendees exceeded by 20 persons (40 people attended). Forest without Borders covered the excess expenditure of £200
Journal publication	100	100	0.00	No journal publication was completed. Due to the sensitivity of local cultural information, results were only published in the form of technical report.
Total	5000	6265	1265	Forest without Borders covered the excess amount of £1265

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

The next important step is to provide economic opportunities in the rural communities to reduce local dependence on their sacred forests. This may be achieved through cautious efforts of promoting rural eco-tourism with sacred forests and cultural heritages; developing and marketing of medicinal herbs and plants and other non-timber forest products; and encouraging other livelihood activities.

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?

Rufford Foundation logo was used in the Canadian Institute of Forestry, E-lecture Series presentation, July 15, 2015. The Rufford Foundation contribution is also acknowledged at any forum where the results of this project are presented.

11. Any other comments?

Funding from Rufford Foundation provided credibility to this locally initiated project. The project is receiving attention and support from government agencies and other development partners. Many communities have requested for support in the conservation of their sacred forests and cultural heritage sites.

1: Community engagement



Left: Consultation with local Chief and Elders. Middle: Project Planning with Local Biodiversity Advisory Group. Right: Samuel Nsiah in middle with yellow shirt and hat with Advisory Group

2: Field-based training



Forestry official (resource person) educating and answering questions on sustainable harvesting of medicinal herbs and NTFPS

3: GPS mapping training



Left: Samuel Nsiah training selected local people on GPS mapping; Right: Samuel Nsiah (in hat) training a local person on GPS use

4: Forest inventory and GPS mapping



Local persons mapping sacred forest boundary



Left: Samuel Nsiah conducting species inventory; Right: Local person assisting in tree identification

5: Traditional method of harvesting medicinal herbs and plants



Left: Bark of medicinal plant (*khaya* spp.) removed for local medicine. Middle: Medicinal plant coppicing after whole cutting of shoot. Right: Samuel Nsiah (in hat and yellow shirt) inspecting herbal medicine from local traditional herbal practitioner (blue shirt)

7: National stakeholders meeting for sacred forests conservation



Left: Samuel Nsiah (standing) presenting. Middle: Participants watching my presentation. Right: Section of the participants