

## 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. 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. 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**

Grant Recipient Details	
<b>Your name</b>	Tuyeni Heita Mwampamba
<b>Project title</b>	Evaluating community readiness to participate in payment for ecosystems services programs in South Nguru Mountains, Tanzania: Who will participate and how will it work?
<b>RSG reference</b>	7854-B
<b>Reporting period</b>	1 August 2010 – 31 July 2011
<b>Amount of grant</b>	£6000
<b>Your email address</b>	<a href="mailto:thmwampamba@gmail.com">thmwampamba@gmail.com</a>
<b>Date of this report</b>	15 August 2011

**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
A desk studies			Fully achieved	This consisted of literature review of existing PES modalities, specifically REDD, CDM, existing standards for Voluntary Carbon and Biodiversity markets, and existing direct partnerships between private companies and communities
Socio-economic survey			Fully achieved	The survey has been conducted in 11 villages; 300+ household interviewed. Data entered.
Institutional analysis		60%		We identified formal and informal institutes that manage natural resources but were not able to assess them. We have a partial survey instrument for institutions but want to include local participants in improving the questionnaire. The exercise requires a new block of fieldwork and resources.
Formulate and develop PES programmes that are feasible in the study area		30%		Data analysis of socio-economic survey is ongoing and necessary to identify the most appropriate PES programme for the area. Identification of potential ES buyers is mostly complete but discussions with buyers are awaiting a better understanding of opportunity costs and local institutions which require more fieldwork.

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

A) When I had sketched out a research design for this study, I had anticipated that the household survey, a community assessment of readiness, and an institutional analysis could be conducted as part of the work programme for one block of fieldwork. I found out quickly that this would not be possible: the time was limited and having not secured additional grants, I would not be able to fund a larger research team to achieve all the objectives. Consequently, I focused on conducting and completing the household survey and could only begin identifying local institutions without interviewing any.

B) Having been away from the study area for 2.5 years, I realised that I ran the risk of losing some of the people who had been my best field assistants during the biophysical study. They had expected that my return to the area implied jobs for them, something I had not foreseen. In the interest of

maintaining relations, I knew it was important that I employ them in some form or another but their ability to conduct household surveys was limited by low or non-existent reading and writing skills. On my way into the study area I had observed a drastic increase in earth brick production, and I wanted to investigate this. Housing improvement consisted of replacing a mud house with a fire cured earth brick house, improvements which at large scale should have an effect on local availability of wood for firing the kilns. Four former assistants and I together designed a study to quantify the amount and type of wood used in kilns, and to determine the source of the wood. After measuring one kiln together, the field assistants continued with this work long after I had left the study area; they only recently submitted their data. I think that keeping the assistants linked to the project in this way has been necessary to maintain trust between us; it has also generated interest in not just the financial reward of conducting research, but in the research process itself.

C) Moments after completing interviews and hiring my third field assistant, Fatma, I found out that she was pregnant and into her third trimester. I had planned out an intense eight-week work programme that consisted of daily hiking in mountainous terrain with little to no breaks. I was worried that her participation would slow our progress and dampen the possibilities of reaching my fieldwork objectives. Unsure what to do, I retained Fatma on the team because she had come with very high recommendations. In the field, I found that there were plenty of opportunities to redistribute responsibilities so that the programme could continue without putting a strain on Fatma. Moreover, the other field assistants were understanding and accommodating of the situation.

Fatma interviewed households that were closest to village centres and which she could reach with minimal exertion. In some cases, she remained in one place in the village centre while heads of households came to her to be interviewed and seemed willing to comply! When field work entailed several days of hiking and camping in upland areas, Fatma stayed behind at the research base and entered data while the others were gone. This meant that data entry and fieldwork were done almost simultaneously, something I had not originally planned for and had certainly not expected. Fatma has subsequently given birth to a beautiful baby girl (Munira), who is a wonderful addition to the research team. Fatma is ready to return back to work, and Munira will hopefully be joining us on more fieldwork in the Nguru Mountains!

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

Firstly, the barriers to **community participation in research** were crossed and local communities now have a much better understanding of what my study is about, how it relates to them, and the motivation behind it. The welfare ranking exercises we conducted in every village as part of this study was key for project design and highly participatory. On the one hand, it was important for determining sampling protocol for the study work and obtaining a welfare ranking system based on local perceptions of wealth. Its effect, however, was to improve transparency and trust between the research team and communities through participation in the research process. Village councillors consistently said to me that they were glad to have been involved and that having done so meant they could confidently explain to communities the basis for selecting households for the survey. During the biophysical study community involvement was limited to hiring local botanical experts as field assistants. Not surprisingly, rumours developed as to the real motives behind the research I was conducting. The participatory research approach produced a platform on which apprehension and rumours on the motives behind the research study could be openly dispelled and replaced with better **understanding of research methods** and **support for the study**.

The second outcome of this study has been the **thorough training of three university science graduates on social research methods** for ecological studies. It has been my intention all along that the Nguru Mountains study area becomes a field-based classroom for training students in social and natural sciences, and I think I can safely pronounce that Fatma, Esau and John were my first graduates! We spent 1 week in which I gave a crash course in social research methods and the overall objectives of my study. We then worked together to develop the questionnaire for the household survey, tested it, and provided feed back to one another for improving the questionnaire and each other's interviewing skills. The effect was that each field assistant understood the objective of every question that was asked, and – if need be – could elaborate on the question without derailing from the intended purpose of the question. For the rest of the fieldwork, they took turns facilitating the welfare ranking workshops conducted with village councils and could undertake all aspects of the research process without me.

Important outcome number three is yet to be realised because it requires me to complete the data analysis. The analysis will help me identify the proportion of households that can participate in PES schemes by virtue of three characteristics: the size of their landholdings, their access to credit, and their experience with contracts. More specifically, I will be able to assess whether households can spare putting land out of production for ecosystem services; whether they have access to credit that is needed to adopt sustainable landuse practices; and whether they have any experience with formal or informal contracts. This information will allow me to partially assess the feasibility of PES in the study area, and start identifying groups that could potentially be marginalised by PES schemes. This information is pertinent for **developing PES modules that are realistic and viable** given local limitations.

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

Local community involvement was an intended part of project design. Community involvement occurred at two levels, with village councils and during household interviews. In each village we held a 3 – 4-hour village government meeting in which the entire council was present, which ensured representation of the lowest level of village governance. Through a mini-workshop, the 15 – 25 members identified five welfare classes appropriate for their communities, grouped all households into the welfare classes, and then – through a process of random selection – identified which households would participate in the household survey. The exercise ensured a participatory and transparent selection process for the survey, and that the welfare ranking system reflected local perceptions of wellbeing. All councils that we worked with said the exercise was very useful for their governance work and asked to keep the data that they had jointly produced. When asked what they would use the data for, they said that if they conducted the exercise more often, it was a good way to keep track of changes in household welfare over time.

To some extent, community members that were interviewed also participated in the research, albeit in a less participatory manner. All interviewees were informed about the research and asked for their consent to participate. Only those that gave their consent were interviewed. After the questionnaire session, participants were asked if there were any questions that they wanted answered. Often times, the questions referred to clarification on the purpose of the survey and how the study would benefit them.

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

Yes. There are important components required to complete the formulation of an appropriate PES scheme for the area that are currently missing, namely, (a) conducting a thorough opportunity costs analysis, (b) assessing the capacity of existing institutions (e.g., cooperatives, village community banks, village crop banks, community loaning schemes, natural resource committees, etc.) to participate in PES schemes; (c) introducing the concept of PES to communities, (d) developing a participatory plan for entering PES markets, and (e) executing the plan.

I have recently gotten in touch with coordinators of the Kenya-based Pro-poor rewards for environmental services in Africa (PRESA) Project and the Alternatives to Slash and Burn Agriculture (ASB) partnership for tropical forest margins to share insights on a way forward for PES in South Nguru Mountains. I hope that this will result in collaborative work and sharing of lessons learned.

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

To some extent, some data has already been shared. For example, village councils specifically asked for the data produced during the welfare ranking workshops. Flip charts with the workshop outputs remained with village Councils and were exhibited in village government offices.

After data analysis of the household survey, I will also provide a summary report to the village council, including a poster for each village that shows village statistics obtained from the household interviews for each welfare class. This will be done before the next set of fieldwork begins and has already been budgeted for from this RSG.

All my data and findings are going to be shared with the local NGO – Tanzania Forest Conservation Group, with whom we will jointly apply for grants to continue the work towards a PES programme for the area.

The findings will be also used in an undergraduate university courses that I will be teaching next year at my institution; in social impact assessment workshops I have been conducting in East Africa for staff of land-based carbon projects; and in the Tanzania Natural Resource Forum where PES-type information is disseminated among researchers and project proponents. Finally, I will submit an article on the findings of the household survey to a relevant journal academic journal.

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

The RSG was used primarily for fieldwork conducted between September - December 2010, but some remaining funds were used to conduct a rapid appraisal on wood use for local earth brick production. This study was conducted in my absence, from December 2010 – March 2011. Summaries of research findings and individualised posters showing village-level statistics obtained from the study are also budgeted for under this RSG but will not be compiled until November 2011. The plan had been to start fieldwork sooner, in June 2010, but this was not possible due to other obligations that prevented me from travelling to the study area. Once there, I prioritised completion of the socio-economic survey over assessment of institutions, and I used the survey as a way to identify existing institutions that we would subsequently need to survey. The household survey was conducted in the course of eight consecutive weeks with no breaks (late Sep. – early Dec. 2010).

The study was planned to end in August 2011 with the submission of an article to a peer-reviewed journal, but this has not been the case. I had underestimated the workload and time needed for other work commitments unrelated to this study. After completing the socio-economic survey in Dec. 2010 and until 30 Jun. 2011, I was completely unable to dedicate any time to this study.

**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
Travel	£1532	£1532	£0	All went as planned
Preparation and Planning for social survey (including TFCG motorbike servicing)	£160	£190	-£30	Had to contribute to several motorbike repairs to be able to use the bike to disseminate letters to village councils
Testing and training of field assistants	£144	£144	£0	Went exactly as planned
Field assistants (total of 4 including Benny)	£2861	£2020	£841	Fewer field days and did not conduct surveys in West upland villages
Per diem for village councils	£0.00	£200	-£200	Participants in welfare ranking workshop were compensated £1.20 per person – minimum wage
Accommodation (including bedding, mosquito nets, medication)	£256.00	£100	£156	TFCG (local NGO) was already paying rent for the office that we used for accommodation.
Food (including cooking and cleaning services)	£769	£330	£439	Days spent in field reduced from 79 to 56; we also hired someone to cook for us instead of eating at local food stalls
Transportation	£1313	£940	£373	TFCG vehicles were not available. Had to rent a car at £19/day for 51 days
Dissemination of research findings	£0	£100	-£100	Pending
Printing and photocopying	£64	£120	-£56	Due to consistent power cuts only stationary shops using a generator could be used. They charged double for all printing and photocopying.

Internet access and electricity	£0	£50	-£50	For data entry and communication. Had agreed with local CBO using the office to contribute to electricity bills in lieu of rent.
Supplies (stationery)	£0	£50	-£50	Flip chart sheets, folders, writing pads, pens, etc for interviews and workshops
Contingency	£641	£0	£641	This was not necessary
Rapid assessment of wood use in brick production	£0	£300	£300	Previously unplanned form: it was an opportunity to assess implications to forests of housing improvements while keeping under employment former field assistants
<b>TOTAL</b>	<b>£7741</b>	<b>£6076</b>	<b>£1664</b>	Extra £76 was obtained from my stipend.

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

Data analysis and dissemination of the findings are the next step for this study. Immediately after data analysis, however, I will launch a strong campaign to secure more funds to complete the institutional analysis and to conduct an assessment of the opportunity costs of introducing PES in the study area. The last year's experience has shown that keeping field assistants in part time employment in as much as is possible is an important aspect of ensuring long-term commitment to the study. I am increasingly considering setting up a permanent field station in Turiani or Mhonda, but this may have to wait until I can secure funds for establishing permanent sampling plots among the farms and fallows that I surveyed in the biophysical study in 2006 - 2007.

Once institutions have been assessed and a thorough understanding of the opportunity costs has been established, I will begin discussing with communities the various PES schemes possible for them and, to plan out a common way forward for introducing PES in the area.

### 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?

I did not produce any materials related to this project that would have carried a logo. Instead, I acknowledged RSGF funding in a recently published article (Feb. 2011) on the biophysical studies that were conducted between 2006 – 2007:

Mwampamba TH and Schwartz MW, 2011. The effects of cultivation history on forest recovery in fallows in the Eastern Arc Mountain, Tanzania. *Journal of Forest Ecology & Management*, 261 (2011) 1042–1052

**11. Any other comments?**

I would have liked to have a large sticker of the RSG logo to place on the door of the car I was renting, and the door of the house/office we were occupying during the last block of fieldwork. Given the strong support given to this project by RSG, it would also be nice to own an RSG shirt for myself and my field assistants.