

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.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Ugyen Tshering
Project title	Distribution and abundance of ungulates along altitudinal gradient in Royal Manas National Park
RSG reference	14682-1
Reporting period	March 2014 to February 2015
Amount of grant	£6000
Your email address	tsheringugay@yahoo.com
Date of this report	20 th February 2015

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
Document distribution and abundance of ungulates in relation to different habitat types along altitudinal gradient			Achieved	Five species of ungulates that have been studied were abundantly distributed in tropical monsoon forest below the altitude of 1000 m. Sambar showed the highest relative abundance index followed by gaur. The abundance of ungulate decreased with increase in the altitude.
Assess effect of human disturbance on ungulates distribution and abundance			Achieved	Wild pig and barking deer were found to inhabit forest near human settlement indicating that their distribution is not affected by the presence of human. Gaur kept away from human disturbance.
Generate maps pertaining to ungulates distribution in the park			Achieved	Distribution maps have been produced for all species studied. The maps were already in use by the park management for its management planning
Share research findings			Achieved	Research findings were shared to the park management and the college through presentations.
Publish scientific paper		Partially Achieved		Paper from the study was written and submitted to the journal. I will submit a copy to Rufford Foundation after it gets published. However, the thesis has been submitted to the college and approved.
Education and awareness campaign		Partially Achieved		All 15 schools could not be involved for awareness campaign as school got closed for winter vacation. The remaining five schools will be involved during this academic session starting March 2015

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

Local people were not willing to involve as porters especially when the survey site was far from the settlement and along the Indian border. Locals asked extra daily wage, and few accompanied us upon payment of additional wage. I had to request park management to spare me more numbers of their staff to carry out the work.

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

- i) Documented baseline data on the distribution and abundance of ungulates (major tiger prey) in relation to varying habitats in the park. The study was the first of its kind in the park.
- ii) In the process of habitat study, floristic composition was able to assess and relate to ungulate distribution.
- iii) The most important outcome was the use of the finding of this study in preparation of 5-year (2015-2020) management plan for the park which is under progress.

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

Local people were benefited from the project directly by earning cash income against the wage paid for assisting research in the field. About 120 people were involved as porters, field guides and helpers. The maps were provided to the eco-camps managed by local communities to be used for interpretation to the visitors.

5. Are there any plans to continue this work?

It has been found significantly necessary to continue the same work along the corridors that connect this park to Phibsoo Wildlife Sanctuary. Because tigers are recorded more in numbers along this landscape and assessment of its prey is important in order to initiate management intervention along the corridors. I am in the process of collecting preliminary information so as to develop research proposal after which funding source will be explored.

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

The findings of this research have been shared to wide audience such as the students of the College of Natural Resources, Frontline staff and management of Royal Manas National Park, local communities and students. I will try to get publish research paper in any of the journals which I hope to disseminate findings to wider people including international audiences.

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

The Fund was used from March 2014 to February 2015 as planned during the formulation of this 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
Printing of data collection format	120	120	0	Budget was sufficient as estimated
Rent and maintenance of field vehicle	1100	1300	-200	Hiring charge of vehicle increased due to the sudden increase in fuel price. Budget adjusted from

				cautionary signage
Daily allowance and meals for field assistant	1600	1600	0	Paid within the budget limit
Printing of poster and banners for education and awareness campaign	300	300	0	Procured within the budget limit
Cautionary signage at road crossing	200	0	0	Fund adjusted to vehicle hiring charge
Education and awareness program in schools	600	600	0	All education materials were produced within the budget limit
Awareness campaign to local communities	900	900	0	About 600 people which is 80 people more than estimated were able to involve
Travel and logistic expenditure	400	400	0	Budget was sufficient
Pamphlet and map production	430	430	0	Produced with the budget available
Dissemination of study findings to Community-based Ecotourism groups	110	100	+10	Had to adjust for unforeseen charges from the bank
Printing cost of research report	240	205	+35	Had to adjust for unforeseen charges from the bank
Bank transfer charge	0	45	+45	Charges deducted by Bank
TOTAL	6000	6000		Local exchange rate £1= 103.61

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

In the same study area, it is important to study the dietary habits of ungulates. Consequently, park management can initiate habitat management of ungulates based on the dietary habit.

The other important next step would be to study the distribution of ungulates along the corridors that connect Royal Manas National Park and Phibsoo Wildlife Sanctuary. Tigers have been recorded to use the corridors but there is lack of information about use of corridors by ungulates. Since tiger is a landscape animal, its prey must also study at the landscape level to succeed in tiger conservation.

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?

Definitely, I used RSGF logo in all my presentations, pamphlets, banners and paper. The logo will be used while sharing the findings of this study in any communication format in future.

11. Any other comments?

The study was successful and commendable where the credit is borne with RSGF. I topped thesis with score of 81.31% which revealed the good outcome of this project and consequently benefiting directly to my future career. My interest and urge for research in conservation will go a long way



contributing to conservation activities in the country. Future support from RSGF in conservation research will be explored in the years to come.