

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	Abishek Harihar
Project title	Assessing human-tiger conflict in the north-western Terai Arc Landscape, India: developing management strategies to secure viable tiger populations
RSG reference	10691-2
Reporting period	28 November 2011 to 27 November 2012
Amount of grant	£6000
Your email address	harihar.abishek@gmail.com
Date of this report	20 November 2012

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
Assess the extent of livestock depredation and diet profile of tigers			√	This objective was completed during the period of the study. Combining field collected data from carnivore scats, extensive interviews with forest dwelling communities across a 7000 km ² landscape and conflict records collated from field offices of local forest departments and agencies providing compensation we have comprehensively documented spatio-temporal trends in livestock depredation in the western Terai Arc Landscape.
Develop linkages between <i>Gujjars</i> and relevant local bodies providing compensation			√	Based on prior information and data gathered during this field session, we confirmed that <i>Gujjars</i> (being illiterate) required additional help in filing compensation claims. Through this project, we provided information to <i>Gujjars</i> about various NGOs working in the landscape to receive Interim Relief and file for compensation.
Identify feasible strategies to minimise livestock-mediated disturbances as well as conflict owing to livestock depredation in non-protected forests		√		This objective is partially complete. Owing to delays in designing and test conducting the questionnaires, project activities were delayed. All proposed activities will be completed in December.

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

Owing to delays in designing and test running the questionnaires required to carry out the study, we faced delays in the collection of data towards identifying feasible management strategies to minimise livestock-mediated disturbances and conflict within the study area. The design has now been reworked and data collection has been completed within the project time. A few consultative meetings to formalise the management strategies will be conducted in December.

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

- i. Livestock losses to predators (tiger and leopard) are high across the landscape, with a yearly reported average (based on our data and long term data collated from forest departments and NGOs's) amounting to 620 cases. In particular, *Gujjars* (with buffalo holdings) were

more affected by tigers (67.5% losses) than leopards (32.5%) and conflict cases peaked during the monsoons.

- ii. At the level of the landscape, our results indicate that livestock depredation seems to be a consequence of loss of wild prey i.e. in places where livestock numbers are high and wild prey is depressed, incidences of livestock depredation increase.
- iii. Payment of compensation by governmental agencies was typically slow and interim relief provided by some non-governmental agencies are localised.

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

The information generated through this project is greatly helping the respective forest departments and non-governmental organisations aiding conservation in the region. In particular, the affected communities (*Gujjars* and non-*Gujjars*) will benefit from the understanding on livestock predation gained through this study towards management of livestock. Increased livestock vigilance during the monsoon and setting up of no-grazing zones are some of the direct management strategies that can be adopted by communities to effectively minimise livestock depredation in the landscape.

5. Are there any plans to continue this work?

Yes. This work will be continued in the landscape. Collating and summarising conflict information shall remain an important activity that I personally wish to undertake. I wish to work more closely with the NGOs and forest departments to ensure that coverage of compensation payments is extended across the landscape and proposed management decisions are incorporated into the policy. In addition, intensive monitoring sites will be established across the landscape to monitor outcomes of proposed management strategies.

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

The results of this work will be shared with the larger scientific community through scholarly publications. Based on the work carried out in the first phase of this project and this continuation grant, a manuscript is currently being written and shall soon be communicated to a journal. Additionally, a second collaborative manuscript with local NGOs is being prepared for submission which overlays spatially-explicit tiger occupancy and population estimates as well as incidences of livestock depredation on the spatial distribution of existing compensation mechanisms. The results of this work have been already communicated with respective forest departments through interim reports. These short reports have primarily focused on the activities carried out and action points towards the establishment of an effective management strategy. Through our long term engagement with the *Gujjars*, the results of this work have been communicated and the management strategies being developed are in consultation with their requirements.

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

The project was conducted within the proposed project period (December 2011 to November 2012). However the third objective (involving the formulation of management strategies) was delayed as data collection, required to inform management decisions, was delayed.

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
Research scholar stipend (1 @ £220 pm)	2640	2500	140	
Assistance@ UK£ 38 per month for 12 months (2 people)	810	840	-30	
Vehicle hiring@ c. UK£ 458 per month for 9 months	225	235	-10	
Base camp expenses	300	410	-110	
Provisions/rations	200	200	0	
Chemicals for scat analysis	250	240	10	
Publishing reports, booklets, pamphlets	200	200	0	
Organizing stakeholder workshops for spreading	1357	1375	0	
Total	6000			

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

This study combines field collected data on the food habits of tigers and leopards as well as secondary information on conflict to assess the extent and nature of conflict caused by predators within the landscape. Through this work, I propose a formal method in which conflict data and interest of the *Gujjars* are effectively used to formulate socially just management strategies. However, an important next step in the process is the implementation of the proposed strategies and monitoring of the outcomes.

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?

Yes