

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	Gandhiv Kafle
Project title	Otter research and conservation project in wetlands of high hills region
RSG reference	16.08.09
Reporting period	November 2009 – May 2011
Amount of grant	£11768
Your email address	ottersnepal@msn.com
Date of this report	June 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
Identify wetland sites important for otter conservation in high-hills by survey in at least 25 wetlands			√	It was performed by presence/absence survey in 28 wetland sites in two watersheds of Gorkha district, and setting up of camera traps in positive sites.
Raise awareness on existence of otters, their habitats and conservation importance among general public in wetlands of high hills			√	It was performed among the indigenous people in two watersheds affiliated with local clubs and groups with help of individual and group methods of sensitisation. Local people living adjacent to the water resources and dependent more on these water resources were given more priority.
Identify the pattern of conflict between otters and human beings			√	Human-otter conflict and threats to otters were documented using a questionnaire form and key informant survey. In both watersheds, 95% elder people (n=80) informed that otters were commonly seen in the local streams amidst the deciduous forests around 20-25 years before but nowadays one can hardly and opportunistically see otters. According to them, some persons of local ethnic communities used to kill otters for meat and skin but not for commercial purpose. Opportunistically seen otters were chased and, if possible, killed. Loss of habitat, particularly from human disturbance and drying up of water sources are the major causes of otter decline in these watersheds. The drying of water sources, in the context of a changing climate, has affected fish population and their migration due to lowering water level and availability, subsequently affecting otter habitat and diet.
Create a functional network for otter conservation in high-hills		√		Scanty presence of otters and their opportunistic visibility in watersheds of Gorkha district was found to lower the tendency, interest and motivation for local community groups/community development groups to work directly for

				conservation of otters (as hidden assets), as found in this survey. This situation had adverse effects on our proposed local otter research and conservation committees and a network for their formation and functioning. In this context, a core committee with experts and key local people has been formed, which will continue to aware and convince local people for local initiative for community based research and conservation of otters.
Develop recommendations for future research and conservation of otters in Nepal			√	Based on the survey results, expert judgement and community views, some recommendations have been provided for future research and conservation of otters in Nepal.

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

Most of the local persons especially youths and mid-aged individuals showed ignorance of existence of otters in Nepal. The elder individuals were able to comment on the otters, recalling the historical incidents on otters. As most of the people did not see otters directly on their localities, it was very difficult to raise interest among them on conservation of otters, because otters were as hidden virtual assets for them if present there. I realised it was very difficult to raise awareness on the species which is rarely seen in local ecosystem either by their few population or by their genetic or inherent nocturnal nature. It caused effect on one of our objectives: network establishment as described above in section 1.

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

- Three positive wetland sites were identified from 28 wetland sites surveyed in two watersheds of Gorkha district. In Pyaudikhola watershed of Chyangling hills of Gorkha district, *Aarukharka stream* – a streamlet to Pyaudi stream and *Pandel stream* – a streamlet heading to Kamaltar Bazaar hold potential for presence of Eurasian Otters. In Kapringkhola watershed of Gaikhur hills of Gorkha district, *Kapring streamside* joining the Marsyangdi stream nearby Dhikure Bagaar and inlet of *Kapring stream near Tiwaritaar village* amidst the Thulapakha community forest hold potential for presence of Eurasian otters. Camera trapping did not record the otter images which can be referred to the scanty presence of otters and rotational installation of the equipment in different sites. Otter positive sties have been indicated in the figures below:



Figure 1: Aarukharka stream, Chyangling VDC of Gorkha district

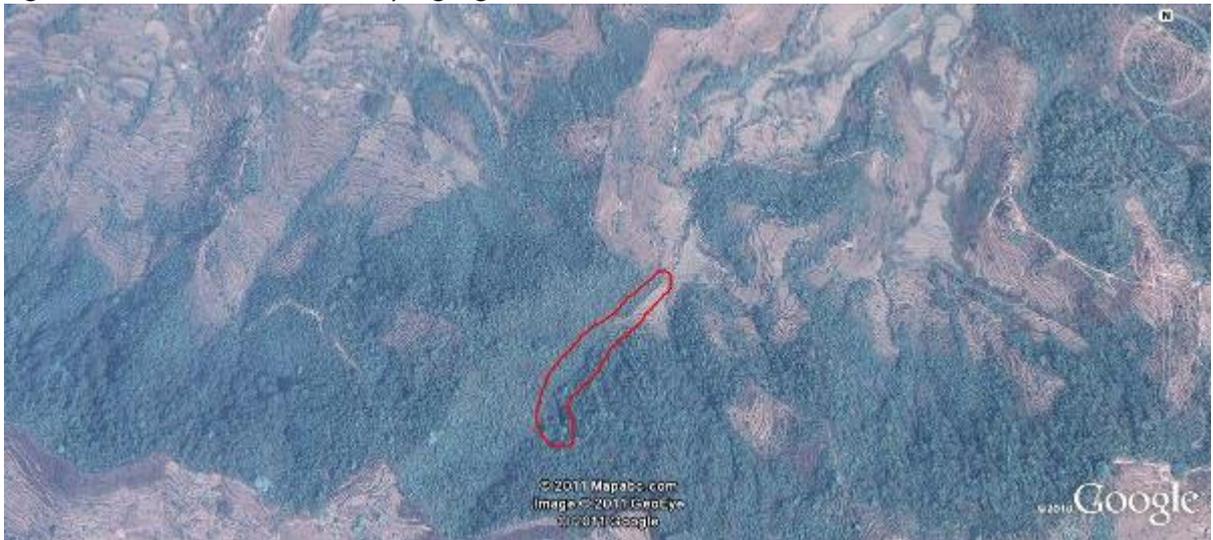


Figure 2: Pandel stream, Chyangling VDC of Gorkha district

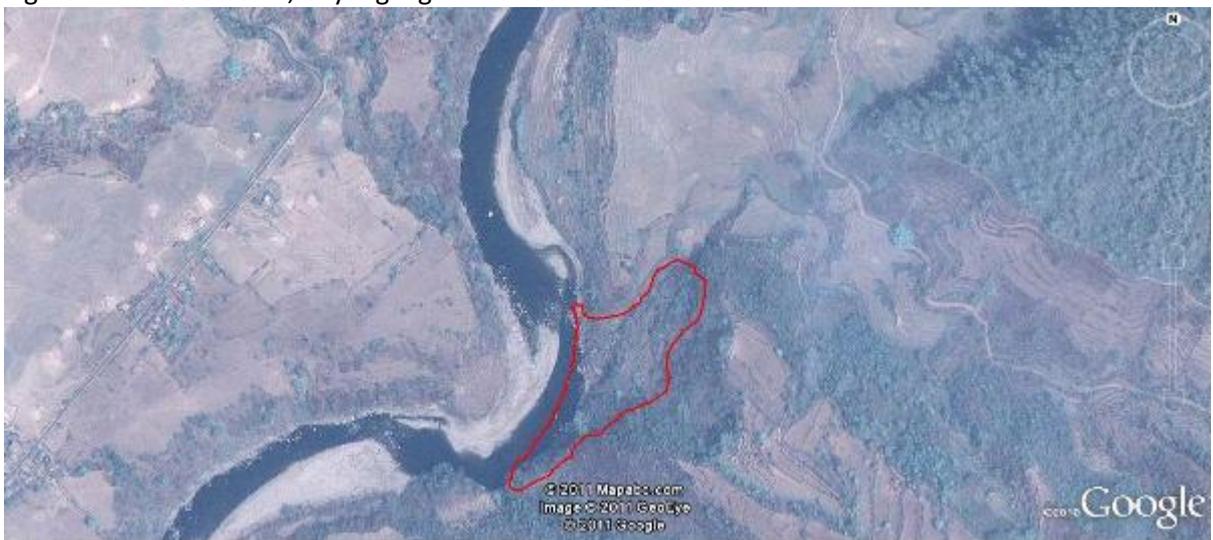


Figure 3: Kapring stream section joining Marsyangdi river, Gaikhur VDC of Gorkha district



Figure 4: Tiwaritar stream joining Kapring stream, Gaikhur VDC of Gorkha district

- Continuity of publication of peer-reviewed *Journal of Wetlands Ecology (JOWE)* with immediate open access of the articles. Third and fourth volumes of the *Journal of Wetlands Ecology* have been published in collaboration with International Network for the Availability of Scientific Publication (INASP). All the articles are available in full text (PDF) in journal website www.nepjol.info/index.php/jowe - a service of Nepal Journals Online (NepJOL) – a project of INASP.
- Raised understanding and awareness among general public on the existence of otter and need for its conservation in local watersheds and sub watersheds, hence raising knowledge on otter's importance to ecosystem health. Fostered interest and involvement of undergraduate and graduate students in research related to otters in their theses and project works.
- Establishment of a core otter research and conservation committee to continue research, conservation and educational activities on otter related issues.
- Capacity building of the principal investigator in otter research; nominated by IUCN Otter Specialist Group as Country Representative from Nepal.

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

The field project activities were conducted in participatory manner, particularly the presence/absence survey and the awareness raising activities. The involvement of local resource persons in field surveys was useful to spread the conservation message to other local people through multiplier or diffusion effect. The poster and bilingual educational kit together with discussion and presentation on otters were useful for local people to realise the presence and importance of otters in their localities, hence raising their knowledge and interest for otter conservation through habitat conservation and threat reduction. The core otter research and conservation committee included local persons as major representatives together with researcher, which I hope will be useful for local initiatives on participatory research and awareness in future.

As found in this survey, elder people and those engaging in wetlands for subsistence are somewhat familiar with otters but younger individuals are completely ignorant of the existence of otters. It makes the project team difficult to find right volunteers to help in survey in the community. Some

elder people were mistakenly confused marten and mongoose with otters, as the external physical outline of these species are somewhat similar and poor knowledge of these people on the morphological features of otters fuelled up this. In this context, around 165 community people obtained knowledge on otters, useful for enhancing their understanding and value of the otters.

5. Are there any plans to continue this work?

This project is a piloting project in hilly area of Nepal focussed on otter research and conservation. It has been able to reveal that participation of local people in species research is key to raise their knowledge and understanding on presence, importance and conservation of wildlife, while generating species information. So next plan is to continue participatory research, coupled with community awareness in more hilly areas of Nepal.

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

Sharing of the research results and project experience is key for sustainability of the conservation efforts through successors. The results of this project will be shared on newspapers, research articles and short communications in relevant journal, website (www.ottersnepal.org), online discussion forum, presentations in appropriate seminar/conference and sharing reports to libraries. Some of these have already been in place.

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 for 18 months as indicated in project document. There was not any modification in time period.

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
Supervision fees	240	240	0	
Travel	2060	2450	-390	Fluctuations in travel cost and additional travel of project members; covered this from budget allocated in contingency, equipment/supplies and secretarial expenses components of the budget
Food and accommodation	4200	4200	0	
Equipment/supplies	2344	2250	94	
Secretarial expenses	580	540	40	
Publication, networking and communication expenses	1784	1800	-16	Internet and telephone cost increased; covered this from budget allocated from equipment and supplies
Contingency	560.4	288.4	272	
TOTAL	11768.4	11768.4	0	

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

Otters, shy and mostly nocturnal, are difficult wildlife for research in areas having few abundance. Government research and conservation programmes have priority on mega wildlife, with inadequate focus on such types of mammals including otters. Generation wise gap in awareness on existence of otters among general public has been a great challenge to initiate conservation programmes in Nepal. Baseline information is the priority aspect to have data sets on the otters in the country. So next step is the further research/pilot studies in different parts of the country to find the otter presence sites, coupled with public awareness.

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?

RSGF logo was used in all the publications (brochure, educational kit, and website) and events.

11. Any other comments?

I want to continue otter research and conservation works in Nepal.