

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	Virat Jolli
Project title	Impacts of hydro-electric development project on the critical habitats for montane birds, Western Himalayas
RSG reference	9971-1
Reporting period	2011-2012
Amount of grant	£5160
Your email address	jollivirat@gmail.com
Date of this report	14 th May 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
Monitoring biodiversity of Sainj valley			Yes	We have efficiently monitored biodiversity of Sainj valley using bird as a surrogate for overall biodiversity assessment. We have recorded approximately 90 species out of which two were rare and threatened.
Assessment of HEP on avian species richness, abundance and community structure			Yes	We have shown in our study that HEP development has affected the critical habitats for montane birds. The details will be soon published in International peer reviewed journal.
Development of baseline data for montane birds			Yes	We have developed a baseline data which can be used in future studies on montane birds.
Data sharing with GHNP			Yes	We have shared the results with Great Himalayan National Park, Himachal Pradesh, India. Protected areas of Sainj valley is under the governance of GHNP and sharing our study results with them, will expect to yield best possible outcomes.

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

The roads are not in a good condition in the Sainj Valley and in certain sites due to landslides, we have to cover several kilometres on foot, which incurred lot of time and energy. We managed to overcome this difficulty with the help of experienced local driver, though it put extra burden on our budget. Apart from this, at certain sampling sites (forest sites) we often came across water shortage and we had to rely on natural stream water, which once caused stomach infection. Unfortunately, a health centre was far away, and it was a bad experience. So, from that day we keep first aid box containing necessary medicines.

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

The first most important outcome of our project is the training of three local field assistant for future bird monitoring surveys. They have been involved in extensive field surveys in the Sainj Valley. At the end of the project they were expert in the use of GPS, call counting, point counting of birds and habitat data collection, which is an important outcome for future monitoring of the montane birds.

The second most important outcome is the development of base line data for montane birds. This can be quite useful for future studies on birds.

Third, the study revealed that montane birds are affected by the HEP development in the valley. This is the first comprehensive study conducted on montane birds to evaluate impacts of HEP development. This study is useful for wildlife managers, researchers and policy makers.

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

As we draw field assistants from local community and also included some local people during various field surveys, it not only gave them employment but also given them opportunity to understand the importance of forest, environment and biodiversity. In this way it serves the twin goal of conservation and community participation.

5. Are there any plans to continue this work?

In India, long term monitoring is largely ignored, which has resulted in limited information about natural systems. We are planning to establish permanent monitoring field station in Sainj or Jiwa valley. This will help us in understanding the response of montane birds to post Environment Impact Assessment, moreover it will give us good insight about the detailed community structure and distribution of birds in the valley.

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

Results will be shared in with major stakeholders which will be in the form of detail final report and scientific publications.

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

Funds were utilized from April 2011 to May 2012

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.

Items	Budgeted amount	Actual amount	Difference	Comments
Road transportation	500	556	+56	Actual amount was higher than budgeted amount, as during the field surveys the prices of fuel increased and the taxi operators charged higher amount.
Meeting with stakeholders	200	200	0	1). Meeting with Director of Great Himalayan National Park (GHNP), Shamsi Kullu, to discuss the conservation measure taken by National parks and to know the present status of Himalayan pheasants.
				2). Meeting with Rail Panchayat Secreatary, to collect information related with population.
				3). Meeting with Rail Panchayat elected member, to know the effect of PHEP on

				people life
				4). Meeting with Director of GHNP to discuss the human activity in side ECOZONE.
				5). Meeting with people of project affected families in village Sharan, Raila, and Khanyari and Pashi.
				6). Visiting Manali Zoo, to know the status of ex situ conservation efforts of GHNP.
Salary for three field assistants (Based on average monthly salary of £55)	1980	1980	0	
GPS	150	153	+3	There is fluctuation in currency conversion rate and resulted in the difference between actual and budgeted amount.
Rangefinder	300	305.5	+5.5	
GRS Densitometer	100	75	-25	
Clinometer	30	40	+10	
Light measuring foot candle meter	100	90	-10	
Remote sensing maps	150	98	-48	Remote sensing images were purchased from National Remote Sensing Agency (NRSA), Hyderabad, India.
Accommodation for field work	400	400	0	
Food	1000	1080	+80	Inflation had caused increase in prices of food (e.g. pulses, sugar, milk, rice and wheat prices increased sharply in India)
Miscellaneous	200	265	+65	Instruments were purchased from USA firm Forestry suppliers, and I have to paid for freight charges
				Purchase of stationary for field work
				Printing of documents during field work
				Purchased field handbook guides and distributed among field assistants
				Purchased medicines for first aid
				Purchased bags, shoes, caps, t-shirts for field assistants for tracking
Total	5160	5242.5	+82.5	

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

The Parvati River, Sainj khad, and Tirthan River are three major upper tributaries of the Beas River. A number of small and medium size dams are either built up or under construction in these valleys. We have conducted research in Sainj valley; similar studies need to be carried out in Parvati and Tirthan valleys to fully decipher the impact of HEP development. Hence need evaluation at much larger scale using theoretical modeling and ordination analysis.

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?

The RSGF logo was used during oral presentation at the 25th International Conference for Conservation Biology, Auckland.

11. Any other comments?

Monatne birds are sensitive bird species. They are true representative of Himalayan fauna. They should be used in habitat quality monitoring and measuring biodiversity. International conservation agencies should divert more funds for the conservation of these magnificent creatures.