

### 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	Dhan B. Gurung (PhD)
Project title	Diversity, distribution, and ecology of fishes of Bhutan
RSG reference	9607-1
Reporting period	March 2011 – March 2012
Amount of grant	£6000
Your email address	dbg2006@gmail.com
Date of this report	13 <sup>th</sup> April, 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	Partially	Fully	Comments
	achieved	achieved	achieved	
Generation of			Achieved	With this survey, Bhutan has 83 species
baseline				of fishes from which 25 species are new
information				records for Bhutan. This number exceeds
				the existing list of 53 species known to
				occur in Bhutan.
Collection of			Achieved	A total of 135 voucher specimens were
voucher/museum				collected, processed, and catalogued
specimens				using accepted scientific norms. The
				specimens will help teaching several
				modules related to fishery in the college.
Scientific paper			Achieved	A scientific paper is completed and
				submitted to the Journal of Threatened
				Taxa.
Guide book		Partially		A pictorial guide book is being drafted
		achieved		but requires funding for its publication
				and additional photography.

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

In absence of a colleague who left for his PhD, two senior in-service Forestry Officials undergoing BSc course in the college had to be engaged for data collection.

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

In this study, 83 species of fishes were enumerated as found in Bhutan. This figure exceeds the number of 53 species that is be being maintained for Bhutan. From the enumerated taxa, 27 species are new records for Bhutan. Therefore, this study has helped in generating enough scientific baseline information on the ichthyofauna diversity of Bhutan.

Voucher specimens for 45 species, comprising of 135 specimens in total, were prepared using standard protocols and catalogue system. These specimens will assist the college in delivery of modules related to freshwater ecology and fishery development.

During the survey, the project trained two Forestry Officials undergoing BSc in the ichthyological studies who are now working in the conservation field.

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

About 10 local community members from different regions have benefited from the project. The local people engaged in providing porter pony services during field trips and those engaged in collection of materials were paid daily allowances and service charges.



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

Yes, the project will continue. Funding is being explored. The study has to be continued at least for two more years to cover wider areas and increase seasonal-search efforts.

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

A scientific paper has been submitted to the Journal of Threatened Taxa for wider publicity. Also, a 'Field Guide Book' is being written. The field guide should be complete after the continuation of study over the next two years. The materials will also be available for seminar presentation, as required.

### 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 2011 to March 2012, for about 12 months.

### 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	Actual	Difference	Comments
	Amount	Amount		
Transportation and mobility	1900	2000	+100	2 researchers planned initially, engaged 3 later
Daily subsistence cost	2300	2300	0	
Camp shifting	300	300	0	
Equipments	1000	800	-200	Waders could not be procured
Chemicals	250	300	+50	Increase chemical costs
Stationeries	250	250	0	
Bank transfer charges	0	65	+65	Unforeseen expenditure
Total	6000	6015	+215-200 =+15	Budget short by £15 (met from institutional budget)

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

Continue the study for over next 2 years. Extend the survey to cover wider areas. Sensitisation activities through publication of paper, book, and seminars will be pursued. Media may be engaged at some point of time, especially discussion in national newspaper and TV programmes. Breeding and stoking programmes are long term strategies which will become unavoidable as the hydropower projects will fragment the river habitats.



# 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, the RSGF logo along with the institutional logos had been sent to the Journal. RSGF logo will be used in presentation of a seminar paper that is scheduled in 1<sup>st</sup> week of May in Bhutan.

#### 11. Any other comments?

Overall, the study was very successful and the study will continue further. Further fund support will be explored, also with RSG in future to continue the study.

Collaboration with other organisation was not possible in this phase.