

The Rufford Foundation

Final Report

Congratulations on the completion of your project that was supported by The Rufford 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	Tandin Wangchuk
Project title	Assessment of Gamri chhu freshwater ecology within six county under Trashigang District through using freshwater fish diversity and its habitats as bioindicator
RSG reference	19733 - 1
Reporting period	7 th July, 2016
Amount of grant	£5000
Your email address	tandinwangs2010@gmail.com
Date of this report	28 th July, 2017

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
1. Assess the baseline status of fish diversity and distribution.				
2. Assess fluctuation of fish species as per the changes in seasons and altitudinal range.				Data was collected for two seasons winter and summer
3. Create awareness on fish diversity, and its ecology, and the importance of conserving and protecting the freshwater fish for sustainable harvesting approaches among all stakeholders.				

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

Timing of catch of fishes were found to be different for different season as activeness of fishes was different. For example, during winter season most of the fishes (snow trout) were active during the night. To gather the realistic information, data was collected during the night.

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

- Produced baseline information for the freshwater fishes along Gamri river, project site.
- Produced list of freshwater fishes of Gamri river along with the reporting of first albino fish species which was encountered recently.
- Created awareness training about the importance of freshwater fishes as per the findings.

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

- During the data collection five experienced fisherman were involved, even ex-military who was supposed to be royal fisherman was involved
- All the communities residing within the Gamri watershed were given the awareness training and main findings were presented to them.
- Moreover, final presentation was done in CNR (College of Natural Resources) where two lecturers from CNR along with students and Dr Jigme Tenzin from WMD (Watershed Management Division) had attended

5. Are there any plans to continue this work?

Since I was able to collect data for two seasons, I might have missed some more fish species along the river. Moreover during the future project I will focus on its major tributaries

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

I have already submitted the journal article to publish in BJNRD (Bhutan Journal for Natural Resource Development). Likewise, very soon I am again writing article on the first albino fish species and it will be published in one of the international journal

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

I have fully used during 1 year and for the amount of grant provided, length of the project period of one year is more than enough.

8. Budget: Please provide 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
Cast net (10 nos.)	496	700	204	Cast net was main techniques used. Moreover, low exchange rate
Spoon hook (6 nos.)	180	180		
Single head hook (6 nos.)	120	120		
Rope and thread	24	24	0	
Printing forms and survey stationaries	180	180	0	
Sample collection jars 128	50	229	179	low exchange rate and water sample collected was collected from each sample stretch for two seasons
Formaldehyde for specimen preservation 40 litres	80	100	20	Cost underestimated
Ethanol for specimen preservation	0	76	76	Not included in the estimate
Digital camera	180	180	0	

Garmin ETREX GPS	110	180	70	low exchange rate
Field survey tents (5)	390	390		
Gumboots 18 pairs	10.5	36	25.5	Procured more Gumboots
Hand gloves (60 pairs)	42	120	78	Procured more hand gloves
Raingears (10)	126	200	74	Procured more raingears
Rucksack (15)	28	45	17	Procured more rucksack
Torch (10)3329	43.5	100	56.5	Procured more torch
T shirt (260)	300	520	220	More participants during awareness training
DSA for data collection and field survey	300	300	0	
Vehicle hiring charge during awareness training	400	400	0	
Vehicle hiring charge during data collection and camp shifting	200	200		
Food and refreshment for surveyors	300	300		
Food and refreshment during awareness training and presentation	300	300		
Published book on freshwater fishes of Gamri river	240	120	-120	

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

It is always important to continue research along Gamri River and its tributaries in all the seasons as migratory nature of fishes affects the diversity and abundance. Moreover, tributaries were not studied or explored during present project.

10. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did The Rufford Foundation receive any publicity during the course of your work?

Yes, Rufford Foundation logo was used in every presentation and awareness training. Most of the participants were hearing about the foundation for the first time and they were really pleased with the Rufford Foundation support.

11. Please provide a full list of all the members of your team and briefly what was their role in the project.

Team Members	Role
Mr. Tandin Wangchuk (Forest Ranger)	Overall coordinator including presentation
Mrs. Sushila Rai (CNR, Lecturer)	Data collection and editor of Journal article

Mr. Ugyen Lhendup (Forest ranger)	Lab work, data collection
Dr D. B Gurung (Associate professor)	Taxonomy of data collected
Mr. Ugyen Tenzin (Forest Ranger)	Laboratory activities, data collection
Mr. Ugyen Dorji (CNR, Lecturer)	Taxonomy of collected data
Mr. Gyem Tshewang (Forest Officer)	Data collection and awareness training
Mr. Lekay Khandu (Forest Ranger)	Data collection and awareness training
Mr. Karma Jamtsho (Forester)	Data collection and awareness training

12. Any other comments?

Such funding for the young researchers like me was so helpful. With your funding support I have gained valuable knowledge on freshwater fishes and really triggered my interest in studying aquatic life. After my publication of articles I will always glad to send my copy of my article to your address.