

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	Md Nurul Islam
Project title	Capacity building for bat conservation and research in Bangladesh through community involvement
RSG reference	13131-1
Reporting period	October 2015 to October 2016
Amount of grant	£5000
Your email address	Nurul.dvm@gmail.com
Date of this report	31/12/2015

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
Bat Centre development in Bangladesh				The prime objective of the project was to develop a bat research and conservation support centre in Bangladesh to ensure sustainable bat research activity in Bangladesh. With the help of the fund we have successfully established an open access research centre in Chittagong Veterinary and Animal Sciences University (CVASU). These instruments are available to students and independent researchers interested to conduct their study on bat conservation and research theme. Detail of methods and conditions are attached along this report. So far, we have supported two undergraduate students' projects with the resource materials.
Capacity building workshop				Capacity building among the young professionals is necessary to enhance the research movement in a community. Therefore, we have arranged a capacity building and hands on training workshop lead by Dr Neil Furey, Flora and Fauna International. The capacity building workshop was three phases which arranged at Bangabandhu Sheikh Mujib Safari Park, Cox's Bazar and Chittagong Veterinary and Animal Sciences University and trained 25 participants from various government, non-government and university of Bangladesh.
Field Survey for bat taxonomy				A total of six field surveys after bat research training workshop was conducted in different landscape of study area to explore the bat diversity as well as to strengthen the learning of volunteers. A total number of seven species of bats identified during our field survey with One new country record was

				described in Bangladesh.
Community education program				Community education programme in both school and community level was conducted in the study area by the volunteer. The outreach materials was developed and distributed among the participants and their valuable comments was taken.
Publishing and reporting				A new genus and species record for fruit bat in Bangladesh was published in Journal of Threatened Taxa, the workshop news was covered by local journals and newspaper, the dissemination of project activity in South East Asian Bat Research Conference got award and coverage in international journals too.
Education materials development				A general brochure of bats and their role in nature, bat and common myths, bats and Nipah booklet was developed and printed in Bangla and English. We have circulated these materials among the participants and local stakeholders as part of the outreach materials development. T-shirts, cap and bags was developed for the volunteer during the project implementation phase for inspiring the volunteers.
Website development				The website at http://www.gcrbbd.org/ is developed and equipped with the electronics outreach and resource materials. However, the initially developed website was not administration friendly. Therefore, we are working to transfer the website in easier WordPress platform to admin and update regularly. Hopefully we will able to launch the website soon.

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

a) The capacity building workshop was proposed to arrange in summer season by the resource person. But due to some political instability in Bangladesh, the workshop was postponed for 2 months during the winter season. Due to cold weather, bats activity was less, and we were unable to capture any bats in first 2

days of our workshop. However, we have tackled this problem by switching and capturing the fruit bats in Chittagong metropolitan city.

b) Availability of the instruments and field gear is another challenge we face during the project due to lengthy shipment procedure of mist nets and other equipment's. Finally, we got a supplier in Malaysia which is more reliable and faster for mist net.

c) Due to Nipah encephalitis outbreak in Bangladesh and other bat-borne diseases, participants were more concern regarding their health and safety. We have used proper personnel safety equipment (PPE) and biosafety protocol under the guideline of veterinary public health experts.

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

a) A new (country record) genus and species was recorded and described for Bangladesh under the family *Megaerops* by the project. The paper has been published in Journal of Threatened Taxa and funding agency is acknowledged (attached manuscript). The new country record will contribute to IUCN Red List updating of Bangladesh.

b) Development of bat research centre in Chittagong Veterinary and Animal Sciences University was another key outcome of the project. The bat center now has 10 mist nets, two bat detectors, eight mist netting poles and 30 colony counters as logistic support. We have developed and printed one protocol for safety measures and one protocol for flying fox population monitoring (mostly adopted from SEABRCU). These all materials along with some outreach and education materials are kept in Anatomy Museum of CVASU which is open for visitors and students. The students and independent researchers can borrow the equipment for their own field work by acknowledging the funding agencies.

c) A total 25 volunteer participants from different background (biology, environment and veterinary science) was trained on bat capturing and handling during the hands-on training at Coxsbazar and Chittagong. A total 9-day workshop was divided in three segments: a) hands on training for bat capturing and handling; b) Laboratory techniques for bat sample preservation and museum development; and c) data recording, management and preparation of manuscript for publication.

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

The project was aimed to community capacity building and ensuring the involvement of community people to protect the bat. The community people in the study area got chance to participate in the free outreach education programme on bat conservation as well as way to protect them from bat borne diseases. The farmers were taught to use some non-destructive pest control method to protect their orchards. However, the majority of farmers only thought bats are pest and

having no role in their cash crops. We have distributed the brochures and other outreach materials to them for aware about role of bats to the ecology.

5. Are there any plans to continue this work?

Our project has covered a very limited part of the country. Bats are facing multiple threats throughout the country. We have a plan to continue the work with the volunteer network by preparing a priority agenda. We will continue to develop the bat centre capacity and volunteers and undergraduate student's research project to continue the work.

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

We have published a journal article with new record of fruits bat in Bangladesh in international journal. We have shared the findings among the peers for IUCN Red List assessment forum and other interested party. As a member of IUCN Bat Specialist Group, I have shared the information among the members of the network. We have a good collaboration with CCINSA of South Asia and a manuscript on overall bat conservation activity of the project under preparation to publish in Small Mammals Magazine.

With the fund of Author Aid, I have attended in South East Asian Bat Research Conference where I have presented the finding and our capacity building program. Even the presentation was awarded for best presentation in conference.

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 planned to use for a period of October 2014 to October 2015 in the proposal. However, the project actually uses the budget from January 2015 to January 2016 for convenience timing of the workshop and delayed in purchasing the logistics. We have asked for 2-month extension of project and the project was fitted in the amended timeline.

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
Purchasing 8 Mist net	200	320	120	We have increased the number of mist net from 8 to 10 for our field works
Handheld GPS navigator	150	132	8	
Personnel protective equipment (PPE) & other field gears	140	200	60	For increased number of participants in the workshop

General brochure (Bangla)	200	200		
Printing of 100 project T-shirts and workshop stationary	400	340	40	The T-shirt was partially supported by Food and Agricultural Organization (FAO), Bangladesh
Website development	100	100		
Workshop venue rent for 7 days	100	100		
Round Trip travel cost of trainer	455	547		
Lodging and associated cost of trainer	245	245		
Travel for participants	600	780		We have reduced the amount of travel cost and increased the number of participants
Vehicle rent for field trip	125	125		
Daily allowance	500	500		We have distributed the allowance equally among the increased number of participants
Subsequent 5 field trip cost including food, lodging and per diem	1035	1050		
Vehicle rent for subsequent 5 field trip	450	450		
Community education program	200	200		
TOTAL	5000	5000		

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

I think the next most important steps in to understand the causes of mortality of bats due to net uses by farmers and developing an effective bat control method in fruits orchard. During our community education programme, some places we have failed to convince the farmers not to kill the bats by netting to protect their cash crops. Because they are asking some solution for their crops. Without looking for a best solution, I think community education among the farmers will not be effective.

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 in every printed and produced materials of the project. The RSGF was acknowledged in scientific publication and local media news coverage (attached copy). The RSGF got special publicity and acknowledgment for the contribution in bat conservation project and research during SEABCO conference presentation.

11. Any other comments?

On behalf of Group for conservation and research of Bat Bangladesh we would like to thank RSGF for providing the funding support to us. Due to limited number of participant provision in workshop, we were unable to accommodate large number of interested students in the workshop. The participants requested to organise the hands-on training regularly throughout the country.