

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 | Kiran Rai |
| Project title | "Winter survey of Critically Endangered Baer's Pochard (<i>Aythya baeri</i>) in lowlands of Bhutan to contribute towards its conservation" |
| RSG reference | Application ID: 21211-1 |
| Reporting period | 2017-2018 |
| Amount of grant | £5000 |
| Your email address | kirankiran2017@gmail.com |
| Date of this report | 01/03/2018 |

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 |
|---|--------------|--------------------|----------------|---|
| <p>Study the presence or absence, and determine the distribution pattern of the Critically Endangered Baer's Pochard (<i>Aythya baeri</i>) in the wintering grounds in lowlands of Bhutan (study area).</p> | | | | <p>The exploration to determine the "presence and absence" of the target species was conducted as per the plan. Digital camera-Nikon D5300 of 300mm lens, binoculars, and photographic guide book were used to make the photographic exploration of the species. However, despite been reported by the riparian communities spotting the bird in the project area, photographic recording could not be made through this project. In fact, the study needs to be carried out for the longer period than this project. Through the social information gathered; the target species is reported to be spotted by the riparian communities and forestry officials along the basin of Toorsa (Amo chhu) River in Samtse, Punatshang Chhu River in Wangdue Phodrang and in the project area. The distribution pattern of the target species was determined using the semi-structured interview to interview the riparian communities and individuals linked with the environmental conservation works.</p> |

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|--|--|--|--|--|
| <p>Identify the conservation threats of the Critically Endangered Baer's Pochard (<i>Aythya baeri</i>) and its potential habitat, and recommend for formulation of proper conservation strategies.</p> | | | | <p>a) The conservation threats of the target species were identified by interacting with the riparian communities and environmentalists like local forestry officials of the respective areas where the spotting of the target species were reported. The main threats in the three sites (as reflected in the objective I) are the rampant surface collection of the sand and boulder and hunting.</p> <p>b) The potential habitats of the target species were also determined through the social information, gathered by using the set of questionnaire and literature review.</p> <p>c) The local government and the parliament representative of the respective areas-Member of Parliament (MP) were also informed on the unchecked extraction of the river basin materials like sand and boulder from the potential habitat of the target species. It was also reported to restrict the collection of the sand and boulder from the identified potential habitats of the Baer's Pochard.</p> |
|--|--|--|--|--|

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

- a) **Communities' involvement in the project:** almost all the riparian communities and the local forestry officials of the project areas were not aware of the species. Hence, they were suspicious of the project at the initial stage. Local government too denied to be the part of the project. However, after the several public advocacies, they agreed and contributed a lot in the successful completion of the project.
- b) **Support of the Local Forestry Department:** It could be due to the limited knowledge and explorations made in the previous by the local forestry officials in the study areas on the target species, it was difficult to convince them about the species and the project. However, they too, after the creation of the awareness, came forward and supported the project.

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

- a) Identification of potential habitats of the Baer's pochard: The efforts were made to determine the potential habitats of the target species in the low lands of Bhutan. The major rivers of Bhutan like Amo Chhu, and Punatshang Chhu are found to be the areas where the species were spotted by the local communities and few other forestry officials. Authenticating the information by the reviewing of literatures, these areas are recognised as the potential habitats of the target species.
- b) Determination of the conservation threats of the species: The two main threats of the target species were identified-rampant collection of the sand and boulder in the potential habitats of the species, and hunting.
- c) Dissemination of the information: The wider group of societies like riparian communities, local government, Member of Parliament, and local government were allowed to be the part of the project. Initially, no individuals were aware about the species. However, during the due course of the project implementation, every individuals involved in the study gained the knowledge on the species and promised to make the continued conservation effort of the Baer's Pochard.

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

The riparian communities at the study area were involved during the entire course of the project implementation. They were present during the awareness training and/or public advocacies, granted unwavering cooperation during the data collection in the field, and served as the field guide to the applicant during the field visits. Communities were also proactively involved during the site visit to identify the potential habitat and conservation threats of the target species. The local communities benefitted through receiving the incentives when the relevant officials made visit to the field related to the project. Moreover, the knowledge gained on the species during the project is one form of benefit which cannot be measured.

5. Are there any plans to continue this work?

Yes. The time period of the project is quite limited considering the rarity of the species visit in the country. Several years must be spent to authenticate the presence and absence of the species. Moreover, similar study needs to be replicated to the areas which were not covered by this project.

Hence, I would like to take up the similar study on the species to other areas for longer period of time as the species is already threatened in the wild.

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

The results and the reports of the project were shared with various individuals and organisations like local government, divisional forest offices of the project area, local forestry officials, and the MP. The final report would also be submitted to the Department of the Forest and Park Services (DoFPS), Thimphu, Bhutan.

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

1. Literature review and identifying methodologies, research techniques, and designing samples: 15th February, 2017.
2. Approval to conduct the study from Department of Forest and Park Services and developing the questionnaires to carry out field interview: March, 2017.
3. Giving training to the stakeholders participating in the study to conduct the interview using formats and questionnaires developed: April and May 2017.

Stage I: Data collection on the Distribution Pattern of the Critically Endangered Baer's Pochard (*Aythya baeri*), and photographic explorations

4. Conduct of reconnaissance survey to determine the potential wintering habitats of Baer's pochard: October, 2017.
5. Field survey to determine the distribution pattern of the target species in the determined habitats and photographic explorations: October, 2017.
6. Conduct of awareness campaign on the status and conservation importance of Critically Endangered Baer's pochard (*Aythya baeri*) to local communities, local leaders, forestry officials, and policy makers: October, 2017.
7. Advocacies on the importance of protection of the natural habitat of Critically Endangered Baer's pochard (*Aythya baeri*): November, 2017.
8. Submit 1st quarterly progress report to the funding agency, Rufford: November, 2017.

Stage II: Determination of the Threats of Critically Endangered Baer's Pochard (*Aythya baeri*)

9. Conduct of social survey using pre-designed semi-structured questionnaire; interview with the local communities, local forestry officials, and other relevant stakeholders on the threats of conservation of target species: December, 2017.
10. Submission of 2nd quarterly progress report to the funding agency, Rufford: January, 2018.

11. Final data analysis and result interpretation using appropriate statistical analysis tools: January, 2018.

12. Final report submission to funding agencies, Rufford, and applying paper for publications in various Journals and Media: February, 2018.

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 |
|--|------------------------|---------------|------------|----------|
| Purchase of tents, gumboots, knives, torches, and kitchen utensils for field camp | 300 | 300 | Nil | |
| Purchase of Over Head Project for conduct of advocacies and training programs. And Purchase of field survey materials and field gears. | 350 | 350 | Nil | |
| Purchase of GPS, camera, guide books, and camera lens (400mm) | 400 | 400 | Nil | |
| Buying printer (HP LaserJet P1007) for Printing of survey forms/questionnaires, and pamphlets, and Other advocacy/training materials | 149 | 149 | Nil | |
| Potential habitat assessment survey and conservation awareness program (3 days X 5 staffs X £5.37) | 81 | 81 | Nil | |
| Data collection, and field observations while assessing the factors degrading the natural habitat (15 days X 10staffs X £5.37) | 806 | 806 | Nil | |
| Potters and ponies charge while shifting camps and stations in study area in absence of roads | 250 | 250 | Nil | |
| Training of field staffs | 250 | 250 | Nil | |
| Purchase of materials like chart papers, White Boards, Markers, and other materials, if required | 250 | 250 | Nil | |
| Catering of lunch and refreshment during the field survey and advocacies/awareness creating programs (10 days x 20 heads x £ 3.95) | 790 | 790 | Nil | |
| Vehicle rental and hiring charge | 500 | 500 | Nil | |
| Posters/Banners on Baer's Pochard information to be displayed and distributed to the stakeholders and participants (7 nos. X £ 30) | 210 | 210 | Nil | |
| printing of pamphlets, badges, brochures and stickers for awareness creating programs | 200 | 200 | Nil | |
| Charge for airing/publication in media or journals | 100 | 100 | Nil | |
| Data compilation/analysis, report writing, and presentation (Working Lunch and refreshment for a day) | 201 | 201 | Nil | |
| Payment for report publication(10 copies X £ 16.3) for distribution to relevant institutions/organizations and individuals | 163 | 163 | Nil | |
| Grand Total Expenditure: | 5000 £ sterling | | | |

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

The next important step could be the study of the presence of the target species through more extensive photographic and camera trapping explorations along all the potential habitats in the country.

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. The Rufford Foundation logo was used during the correspondences made with the various parties involved in the project. The logo was also used for the information sharing of the project on the district website of the project site.

Yes. The Rufford Foundation did receive the publicity at the Dzongkhag (District) and National (DoFPS) level during the course of conducting the study.

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

Rebecca Pradhan (Mrs.), **Bhakta Shangson** (Mr.), and **Tshewang Dorji** (Mr.): assisted during the entire course of the project by providing guidance and necessary technical supports

Field Divisional Forest Officers of Samtse, Wangduephodrang, and Sarpang Districts: granted the permission to commence the project and provided the forestry officials for field guidance and support

Foresters: forestry officials of Dagana, Samtse Forest Range Office, and Gelephu Range Office assisted in making logistics arrangements and advocacies

Ran Bdr. Rai (Mr): assisted me in commencement of the project at the proposed site

12. Any other comments?

To take up such exploration study on an endangered wildlife was a blessing in disguise. I gained profound knowledge on the species and I lay down the entire credit to the Rufford Foundation for extending financial support.

However, I realised after the completion of the project, that single season is not quite enough to determine presence or absence of such a rare species like Baer's pochard. Hence, continued effort to explore the species should be maintained.