

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	Sonam Phuntsho
Project title	Wildlife Conservation in Community Forest Management in Bhutan: Current Realities and Future Potentials
RSG reference	21257-1
Reporting period	January 1 to December 25, 2017
Amount of grant	£4994
Your email address	sphuntsho@uwice.gov.bt
Date of this report	December 21, 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
The perception of people towards wildlife conservation in rural areas				The perception study in two identified CFs were accomplished as planned. People perceptions towards wildlife conservation is very strong (90% of the respondents) despite of tremendous pressure from wildlife on field crops. Interviews of non-CF members could not be carried out since every villages in Bumthang is involved as part of CF management group which is in fact encouraging to note. However, similar study needs to be replicated in other districts of Bhutan.
The realities of wildlife presence and composition in CFs				Wildlife presence and composition study was carried out through setting up of camera traps in CFs and GRF. Due to some technical issues of cameras including some disturbances by people, like damaging and removing of cameras, there were some constraints in data recovery from some cameras. However, in general the results are informative and exciting. Further, frequency of monitoring and data retrieving as stipulated in project plan was bit tiresome, but accomplished. A total of 13 species were captured - eight mammal and five bird species.
The current system of planning and implementing conservation activities in CFs				Both Shambayung and Siptangzur CFs are now 14 years old and revised their CF management plan after 10 years. It was found that both CFs have some kind of wildlife conservation objectives reflected in both old and revised management plans. There are also various activities reflected in management plans which directly or indirectly contribute to wildlife conservation.

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

A few minor difficulties were faced during the implementation of the project activities, but they weren't too difficult to overcome. Some technical issues with camera traps such as malfunction of cameras and memory cards including battery life were some minor issues that we tried to fix during the monitoring and data retrieving time. One unexpected difficulty was disturbance and removing of cameras by people (mostly by young children) although we had local persons appointed to take care of the cameras. Creating awareness and requesting people to inform their children about the cameras had helped solve this problem to certain extent. Shortage of camera traps was another issue and borrowing cameras from other research colleagues for a longer duration was challenging, but could materialise without impacting much on the project activities.

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

Three main important outcomes of the project are:

i. Strong Local People's support to Conservation Efforts: Despite huge human-wildlife conflicts existing in both the study areas, it was found that local people still strongly support wildlife conservation. It was found out that an average crop lost due to wildlife is about 33% in both the studied sites. This indicates that people have high resistant and willingness to support conservation efforts despite huge pressure from wildlife on their field crops. This is primarily due to religious sentiment that harming of animals is sin as per Buddhism. Second reason is due to country's strong conservation laws. CF management groups as the established local institution in rural areas, they could play vital roles in supporting the conservation efforts in which the government could strategise to use local people (CF management groups) as key stakeholder to implement conservation programmes in rural areas.

ii. CFs have rich Wildlife Diversity: Second interesting outcome of the research is that both CFs have rich composition of wildlife species. Both the CFs are comparatively small CFs in terms of both area and population. However, wildlife composition and abundance are impressive in both the CFs. A total of 13 wildlife species were captured in Siptangzur CF while 11 species were captured in Shambayung CF. It was found that there is not much difference in wildlife composition between CFs and non-CF areas nearby the settlements. Both the CFs have similar species of wildlife such as leopard cats, red fox, Himalayan black bear, and sambar and bird species of tragopan and blood pheasant. One of the main interesting findings of the camera traps is domestic dogs getting into forests which is something to concern about and need more in-depth study.

iii. CF Management Plans include Wildlife Conservation Objectives and Activities: The third important outcome of the research is that it is encouraging to note that both CFs have a mention of some objectives that contribute to wildlife conservation. For instance one of the main management objectives of both CFs is to 'maintain the forest for its ecological and environment functions' which contributes towards wildlife

conservation. Further, some activities such as plantation in degraded or barren land and protection of forest from fire are some crucial activities that directly or indirectly contribute to wildlife conservation. As the local communities are aware of importance of wildlife conservation, it will be easier and convenient for the Government to convince CF management groups to incorporate wildlife conservation activities in CF management plan wherever necessary. However, it is also noted that conservation objectives and activities in CFs are rather broad. Such camera trap study in CFs might capture some endangered wildlife species which will help and encourage communities to focus their conservation objectives in the long run.

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

By nature of the research, involvement of local communities and working closely with local people were indispensable for this research. One of the aims of the research is to create awareness on the importance of wildlife conservation and strengthen conservation activities in CF. Right from the initiation of the research in two identified CFs, CF management members were gathered and informed about the purpose of research and importance of their support and involvement throughout the process. The CF management plans were reviewed and discussed with the involvement of CF chairpersons and other executive members. Camera traps were set up with the involvement of local people with appropriate training including appointing of people from local area to monitor the cameras. Fortnightly or monthly monitoring and data retrieving exercises were carried out jointly with local people. Ms. Yeshe who was fully involved in the research activities is a young school dropout woman serving as the Secretary for the Shambayung CF.

The project has benefited local people of the studied sites in terms of technical capacity development through awareness and training programmes. Since local people were directly involved in the research activities both in social survey and biophysical works, people felt that the research conducted in their area is not only beneficial in generating information on wildlife and other biodiversity, but also shared the ownership of the research. Showing and sharing wildlife photographs captured in cameras to local people helped to excite and ensure local people's participation and support in the project activities. Mr Lhendup, Chairperson of Siptangzur CF and Ms Yeshe, Secretary of the Shambayung CF both expressed their appreciation about the research project in their CFs. The project has not only benefited them to learn about conducting research but also able to know the status of their CF and importance of wildlife conservation efforts, and to think of future potential research to strengthen their CFs.

5. Are there any plans to continue this work?

I feel that this case study research is important to generate useful information on conservation efforts of CFMGs and future potentials, but the findings from this research cannot draw conclusion that can represent conservation efforts of entire CFs of Bhutan. Replication of similar study in other parts of the country is crucial

considering different landscapes, climate condition, human population, and forest types. Depending on the availability of fund support, same study will be carried out in the western parts of Bhutan where more modern developments and rural to urban migration are prominent. As more and more CFs are on commercialisation mood, it will be interesting to study how this economic intervention in CFs have impacts on wildlife conservation efforts. Further, findings from this research have provided some further research avenues, particularly on the domestic dog's population and their impacts on wildlife conservation in rural areas. A small research carried out by one of our the School for Field Studies (SFS) students on dog population in Paro valley shows that dog population with rabies vaccination in rural areas is much lower than urban dog population which is crucial to study as more and more dogs in rural areas become threats to wildlife.

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

A policy brief from this research findings will be developed and submitted to the Department of Forests and Park Services for appropriate policy interventions particularly on strengthening conservation efforts in community forests in Bhutan.

Preliminary research findings were presented to the researchers colleagues at the Institute. Presentation of research findings will be made to relevant stakeholders including the CF management groups of Shambayung and Siptangzur. Further, we aim to publish report in one of the peer reviewed international journals, if not in one of the national journals.

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

The project was proposed and planned for a year. Accordingly the project activities were accomplished and objective met as planned and expected.

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
Stakeholders consultative meeting	139	120	19	Not much difference in expenses
Consultative meeting with community forest management group members and non members	495	520	-25	Expense exceeded but not much. We had to conduct two times meetings - one with CF executive members and then one with CF members.

Community forest management group and non community forest member questionnaire interview	396	410	-14	Expense exceeded but not much.
Purchase of research equipment	1188	1368	-180	Purchase of cameras was important component of the research. So we had to save from other heads such as vehicle rental. Budgeted amount was not adequate to purchase camera traps, so had to borrow some cameras from other researchers
Daily subsistence allowance to research assistants	594	590	4	
Daily subsistence allowance for CF member assistants for biophysical surveys	297	300	-3	
Vehicle rental charge	495	300	195	Tried to save from this head to add on to purchase field equipment.
Stationery and printing of reports	400	350	50	Tried to save from this head to add on to other crucial activities.
Awareness and training of CF management group members	990	1040	-50	Saving from other heads was spent on this since the awareness and training of CF members are essential.
	4994	4998		

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

As briefly mentioned above, replication of the same study in other parts of the country is essential to generate more reliable data and information. I will keep trying to source funding from donor agencies to replicate the same study in other areas since it is necessary considering the difference in landscape, forest types, and human population.

Another important step for the future is to conduct research on how increase of domestic dog population and their encroachments in forests in rural areas impact wildlife habitats. This future study topic is one of the most exciting outcomes of the project as the domestic dog population in Bhutan is rapidly increasing and the camera traps from the study showed maximum capture/sighting of dogs in forests.

This study in the two identified CFs shows that local people have strong religious sentiment toward harming wild animals despite of tremendous pressure by wildlife on people's field crops. It is encouraging that it will be easier for the Government to

work closely with rural communities to achieve overall conservation efforts in the country.

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

I haven't used The Rufford Foundation logo much in the past materials. However, I have always acknowledged The Rufford Foundation for the grant support during the stakeholder workshop, and community forest management group members meeting and training. I will use the logo in the upcoming policy brief and other reports.

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

1. **Mr Tenzin Dhendup**, Forest Ranger and **Mr Tashi, Sr.** Forest Ranger are the main team members representing the Territorial Forest Division of Bumthang. Since they work as forestry extension agents, they helped organizing CF members for meetings, interviews, and for training programme. They also helped identifying key informants for interview and also helped moderating the workshops and training in local dialects.

2. **Mr Lhendup**, Chairperson of Siptangzur CF and **Ms Yeshi**, Secretary of the Shambayung CF were main representatives from the two CFs assisting the project team in mobilizing CF members to participate in the interviews and other project activities including helping setting up cameras in forests and monitoring.

3. **Mr Rinchen Singye**, Research Assistant and **Mr Kinga Thinley**, Research Assistant of my Institute (UWICE) helped to set up cameras and for monitoring and data retrieving.

4. **Dr Purna Bdr. Chhetri**, Resident Lecturer of the School for Field Studies (SFS) programme helped in mobilizing his undergraduate students in social interviews with CF management group members.

5. **Dr Tshering Tempa**, Tiger Biologist of the Regional Tiger Center, Gelephu, Bhutan helped in advising on the technical aspects of camera trap setting in forests.

12. Any other comments?

The funding support from Rufford Foundation was extremely helpful to carry out this research project successfully. The Rufford Foundation grant should be continued to support to generate and share knowledge by researchers and conservationists for strengthening conservation efforts in the World.

The project has not only helped to understand people's perception towards wildlife conservation, status of wildlife compositions in CFs and non-CFs, and current practices by CF management groups towards wildlife conservation, it has also

helped to generate future research needs. Domestic dog population has not only become concerns in urban areas, but also increasingly becoming concerns in rural areas since they have threats and impacts on wildlife. The identified research on threats and impacts of domestic dogs on wildlife should be carried out at the earliest as possible and this research could be a community based research in order to involve local people in research and also to generate reliable data.

All sectors right from the park and Territorial Forest Division staff and local government heads to local people are positive about wildlife conservation initiatives in CF management. Therefore, I take this opportunity to express my gratitude to the Rufford Foundation and it team for the grant support. It is my sincere hope that in future the Foundation will continue to support research which are critical to conservation and people's livelihoods.

