The Rufford Foundation
Final Report

Congratulations on the completion of your project that was supported by The Rufford Foundation.

I 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. I 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. I 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	Tenzing Lama
Project title	Building local capacities for wildlife conservation in Namkha region, Humla district, Nepal
RSG reference	26480-1
Reporting period	September 2018 – October 2019
Amount of grant	£4,880
Your email address	tenzingrlama017@gmail.com
Date of this report	22 October 2019

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
To aware and educate local communities for wildlife conservation			�	
Household interviews to assess livestock depredation patterns to carnivores		▪		Because of early snow fall and prolonged winter, I couldn't complete all the questionnaires.
Wildlife conservation outreach poster distribution and establishment of awareness education hoarding boards			▪	
Wildlife conservation awareness and capacity building training			▪	
To build friendly relationship with the local municipality and establish long term collaboration for wildlife conservation in the region			▪	

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

Namkha Rural Municipality is the most remote and the largest municipality in Humla district. There is no road as Ill as communication access to majority of the settlements in Namkha region, because of which on time project implementation become difficult. In addition, the winter of 2018 was very harsh in terms of early snowfall and prolonged winter which blocked the access and soon followed the rainy season. That is why project implementation was delayed. Because of which all the project activities were affected and subsequently delayed.

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

A. Wildlife conservation awareness and capacity building workshop
Wildlife conservation and capacity building workshop was organised in Yalbang, the capital of Namkha Rural Municipality, Humla from August 24th-25th 2019, in presence of Namkha Rural Municipality mayor Mr Bishnu Bahadur Lama. The workshop was targeted at the elected leaders of rural municipality, schoolteachers, security body, social workers and local youths in the region to educate, train and promote them as a conservation leaders. The workshop focused on different dimensions of wildlife conservation through local participation and creating bases

for conservation financing from the rural municipality. In total, 32 participants were present in the workshop. The major topics covered in the workshop were:

- Introduction to the wildlife diversity of Namkha region.
- Wildlife species identification: participants exercise.
- Wildlife research needs and assessment techniques.
- Camera trapping survey: theory and demonstration.
- Livestock mortality: participatory problem ranking.
- Human-wildlife conflict and mitigation measures.
- Livestock insurance and immediate financial relief scheme: assessing feasibility in Namkha Rural Municipality.
- Wildlife conservation threats, issues and challenges.
- Legal issues related to illegal wildlife hunting, poaching and trade.
- A way forward for initiating conservation at local level.
- Installing conservation education hoarding board for awareness raising.

Key workshop outcomes:

I.   Livestock mortality: participatory problem ranking
Namkha rural municipality is divided into six administrative units called ward. I used ward as basis for formation of groups for participatory ranking of livestock mortality causes. Since participants from ward 1 were not able to attend the workshop, the group work was based on the remaining five groups. All the possible livestock mortality causes were identified during the pilot visit from October to November 2018. Participants were asked to compare between each of the problems in their respective groups and identify the most problematic livestock mortality causes using the cross-comparison of the mortality causes. Based on this, I used the average score of respective causes assigned by participants to rank the most as well as the least problematic causes as shown in Figure 1. The most problematic causes are the one with the highest score and the least with the lowest score.

Overall in Namkha region, disease was reported to be the most serious mortality causes and red fox to be the least (see Figure 1). Among the predatory causes, snow leopard was the most problematic cause followed by Himalayan black bear. For each of the ward, livestock mortality causes are varying; for example, in ward 3, Himalayan black bear is the most problematic whereas in ward 6, it's the least problematic cause. The ranking of the livestock mortality causes for each of the ward are presented in Table 1.
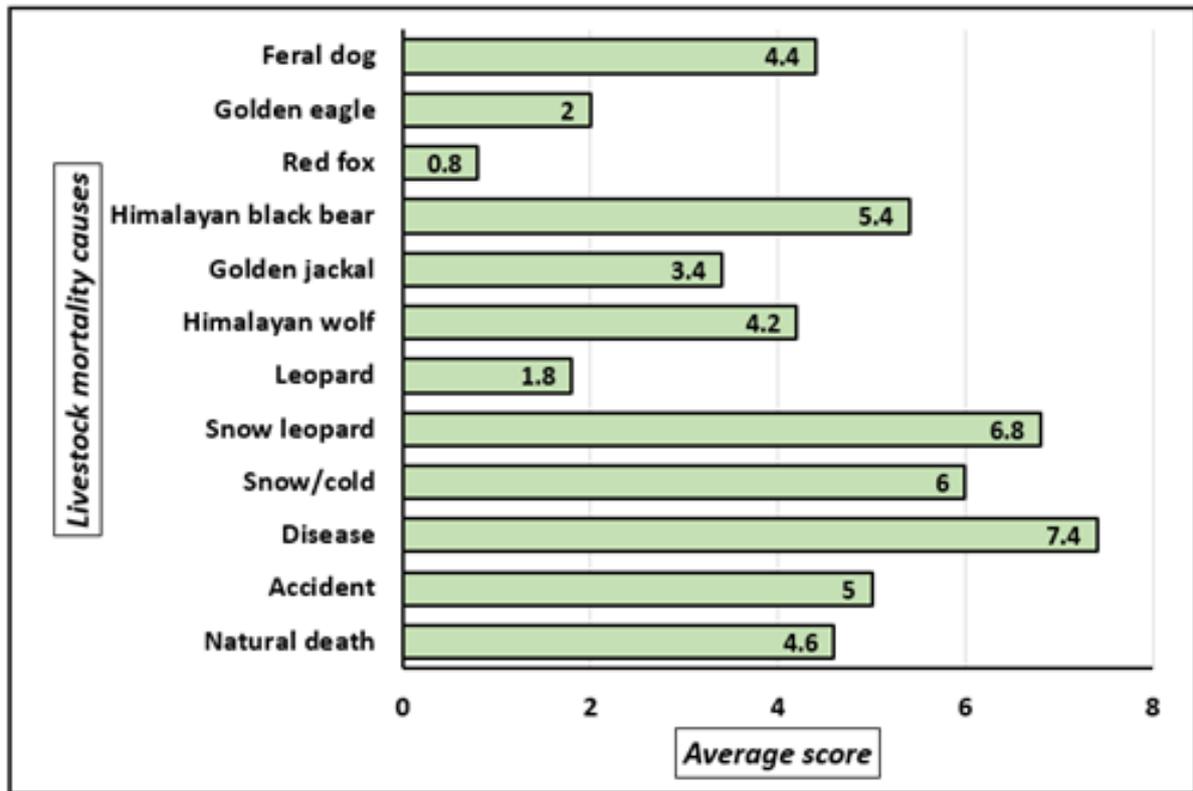
Figure 1: Livestock mortality causes and their ranking values

Table 1: Ward level livestock mortality causes ranking

Livestock mortality causes	Ward number					Average score
	2	3	4	5	6	
Natural death	4	3	5	6	5	4.6
Accident	7	6	4	5	3	5
Disease	11	8	7	7	4	7.4
Snow/cold	4	6	6	10	4	6
Snow leopard	4	9	3	7	11	6.8
Leopard	2	1	2	4	0	1.8
Himalayan wolf	5	0	0	7	9	4.2
Golden jackal	5	4	6	2	0	3.4
Himalayan black bear	6	10	5	6	0	5.4
Red fox	0	3	1	0	0	0.8
Golden eagle	1	2	4	3	0	2
Feral dog	6	0	10	6	0	4.4

II. Wildlife conservation threats and ways forward

In Namkha region, participants reported possible occurrence of illegal hunting and poaching of wildlife as the major conservation threats. Some species are hunted for meat such as blue sheep, Himalayan tahr; some for trading valuable parts such as musk deer, Himalayan black bear; some in retribution to livestock loss like snow leopard, Himalayan wolf, and some because of crop damage such as Himalayan langur and porcupine. However, there is no reliable baseline information on the extent of illegal hunting and poaching except the anecdotal evidences and possible occurrence. Therefore, there is need to assess the extent of illegal hunting and poaching of wildlife species in Namkha region which would be vital in designing effective conservation action.

B. Installing wildlife conservation awareness hoarding board

I established conservation hoarding board in five key locations including the Humla district's only airport in Simikot (see Table 2). The installation locations were selected strategically from conservation point of view and the possible spectator frequency. The hoarding board were printed in three languages; Tibetan, Nepali and English to make easy reading to wide range of visitor. By the end of 2019, including all the five locations, our conservation hoarding board will receive at least 5000 spectators, which I believe would increase to ca. 20,000 by the end of 2020.

Table 2: Board installation location and print language

Location name	Print language
Simikot airport	English
Yalbang	Nepali and Tibetan
Yari	Nepali
Hilsa (Nepal-China border)	English
Halji	Nepali and Tibetan

C. Human-wildlife conflict assessment

I. Respondent characteristics

In total, 100 households were interviewed from lower Namkha region using semi-structured questionnaire to assess the status of human-wildlife conflict and their conservation attitudes. The questionnaires were conducted with the head of the household and in their absence, available second person was selected. The average age of the respondent was 41.05 years (range 16-73 years), where, 86% were male and 14% were female. Of the total, higher proportions of the respondents were illiterate (46%), followed by primary education (27%), higher education (15%) and 12% have attended secondary level education.

II. Livestock holding and losses

The average livestock holding per household was 15.08 animals. The proportion of the dzo (cattle-yak hybrid) was highest (32.16%) among the livestock category,

followed by cattle (28.25%), horse (17.84%), goat/sheep (13.93%) and yak (7.82%) respectively.

A total of 222 livestock were reported lost to different causes, of which 89.64% were non-predatory losses and only 10.36% were predatory losses. Among the cause's disease is responsible for 48.65% of the total livestock loss, the detail of the losses is presented in Table 3.

Table 3: Livestock losses to different causes

Livestock category	Livestock mortality causes						Total
	Accident/ Natural death	Disease	Snow leopard	Leopard	Wolf	Himalayan black bear	
Cattle	23	21	1		1	7	53
Dzo	19	15				6	40
Yak	6	9					15
Horse	24	29					53
Goat	7	24		3	1		35
Sheep	12	10			4		26
Total	91	108	1	3	6	13	222
Proportions	40.99	48.65	0.45	1.35	2.70	5.86	100

III.   Local's attitude towards wildlife species

Majority of the respondent in lower Namkha region showed positive attitude to non-conflicting species such as blue sheep and musk deer where they expressed negative attitude towards problem species such as porcupine (Table 4).

Table 4: Respondents attitude towards wildlife species

Wildlife species	Response in (%)				
	Strongly like	Like	Neutral	Dislike	Strongly dislike
Blue sheep	81	18	1		
Musk deer	87	11	2		
Himalayan langur		10	25	35	30
Porcupine		2	13	37	48
Snow leopard	3	28	39	18	12
Himalayan wolf	1	19	31	31	18
Leopard	1	20	42	24	13
Black bear		4	24	28	37
Golden jackal		11	24	28	37
Red fox	12	47	22	11	8

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

I developed and implemented the project in collaboration with the Namkha Rural Municipality; the main elected local government. Upon the funding approval, I held project inception meeting with participants from all the settlement in Namkha region and wildlife researchers who have worked in Namkha region before, which provided important guidance for project implementation. I made pilot visit to all the settlement in Namkha region to assess conflict domains and conservation needs, which helped me in designing specific project activities. I involved local people in all our project activities such as participatory conservation awareness hoarding board installation, household questionnaire survey, informal visits to herders and information sharing, focus group meeting and discussion and so on. Our conservation education and capacity building workshop involved local resource person to train local elected leaders, teachers, social workers and trained them in different aspect of wildlife conservation. In addition to conservation education and awareness raising, I used local manpower to prepare frame for our conservation hoarding board and required timber were purchased locally. Therefore, the project involved good level of community participation and help them benefit in the best way possible either through information sharing, education and awareness raising, capacity building training or providing short-term employment.

5. Are there any plans to continue this work?

Yes, I want to continue the conservation work focusing more on school education and village level conservation work. This time I involved more of rural municipality's elected leader, social workers, teachers and security body who can be used as local resource person for the next phase project. In the next phase, I want to focus on more in-depth training on wildlife research techniques to the interested school children and local youths who can be used in the future wildlife survey and monitoring activities. In addition to conservation awareness and capacity building training, there is need to assess wildlife diversity, their status and conservation needs at the ward level so that ward level conservation priority can be determined, which can make strong basis for long-term conservation planning ultimately contributing to the regional conservation.

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

I have submitted preliminary report to Namkha Rural Municipality. I have shared our project activities at the local journalist meet which was broadcasted through local FM. I will be submitting final report to Namkha rural municipality and its six wards; district forest office-Humla; ministry of forest, Karnali Province. I hope to publish one article which will be shared with concerned government as lll as non-government conservation authorities in Nepal.

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 Rufford Foundation grant was used over a period of 12 months, between September 2018 to August 2019. In 2018 snowfall started very early and remained till late spring of 2019, because of which the questionnaire survey and training workshop lre subsequently delayed. I am grateful to the Rufford Foundation for approving our deadline extension request.

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
Transportation (Kathmandu to Simikot-round air fare)		500	-500	PI and a resource person round trip including cargo fare for the hoarding boards and other workshop materials.
Local transportation in Humla		300	-300	Due to the poor weather flight from Nepalgunj to Simikot was delayed for several days. To catch up with the workshop date, I have to use horse from Simikot-Yalbang (workshop venue) for carrying the equipment's.
Project inception meeting		200	-200	Inception meeting was completed in Kathmandu to design the project activities and outreach targets.
Food and accommodation	2880	2030	+850	Field work didn't go long as planned because of the early snow fall and prolonged winter.
Conservation education and capacity building workshop training	500	500		
Allowance to field assistant	1200	850	+350	I hired field assistant to conduct household survey, support in local level conservation workshop and distributing conservation outreach materials at local level. Because of the early snow fall, planned field work was not able to undertake.
Stationary, workshop	300	300		

materials and reporting				
Resource person fee		200	-200	I used local expert as resource person, since the training was more focused on Namkha rural municipality elected leaders, teacher, social worker and youths.
Total		4880	4880	

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

First of all, there is a need for biodiversity assessment and species distribution hotspots mapping at the regional as well as local level for conservation prioritising. At second, there is need to assess the population status of major wildlife such as snow leopard, blue sheep, Himalayan wolf, musk deer etc. The species such as Himalayan black bear, snow leopard and wolf are more threatened because of recurring conflict with the local herder's man over livestock predation, while Himalayan langur and porcupine because of crop damage and globally threatened musk deer for its musk pod. Therefore, conservation activities need to be implemented in a holistic approach which not only educates and creates awareness but also creates future basis for conflict mitigation such as establishing community-based conservation institutions. In addition, conservation education and capacity building training need to be extended in schools through the formation of school level conservation clubs which will help in improving students' knowledge about wildlife conservation and eventually increase their interest in the field of environment conservation.

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?

I have acknowledged and used the Rufford Foundation logo in all the materials such as conservation posters, conservation awareness hoarding boards and training workshop certificate. I shared about our programme through local journalist meet, which was broadcasted through a local FM. A copy of final report will be submitted to the ministry of forestry, Karnali province, Nepal. I am planning to publish at least one research article and for funding Rufford will be acknowledged.

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

Tenzing Lama *(Principle Investigator:* Leading the project in the field

Rinzin Phunjok Lama: Supervising project activities in the field and key resource person in the training workshop

Ganga Ram Regmi: Project advisor

Bishnu Prasad Shrestha: Project advisor

Bishnu Bahadur Lama: Local support and key stakeholder from Namkha Rural Municipality

12. Any other comments?

I am grateful to the Rufford Foundation for supporting our work in Namkha region. I hope Rufford Foundation will continue its support in continuing the wildlife conservation collaboration.

Photo 1: Glimpse of conservation education and capacity building training

Photo 2: Participant's engagement in group activities

Photo 3: Namkha Rural Municipality Mayor distributing certificate to the workshop participants

Photo 4: Workshop participants helping out in installing the conservation board in Yalbang, Humla

Photo 5: PI with the workshop participants after the installation of the board

Photo 6: Conservation board in Tibetan language in Yalbang, Humla

Photo 7: Conservation board in Nepali language in Halji-Limi, Humla

Photo 8: English language board installed at Simikot airport, Humla