Project Update: May 2023

#### **Major Activities**

### Activity 1: Consultations and discussions with CNP and BNP park officials and buffer zone users' committee members

After obtaining the research permit from the Department of National Parks and Wildlife Conservation Office (DNPWC), Babarmahal, Kathmandu, Nepal, I visited the headquarter offices of Chitwan National Park (CNP) and Bardia National Park (BNP) to obtain the park specific research permits. Then, I conducted consultations and discussions with both park officials and buffer zone users' committee members of CNP and BNP. First, I shared my research objectives, data collection plans and procedures with those main local stakeholders. Then, I discussed the present situation of different incidents of human-wildlife conflict (HWC), adopted mitigation measures by the park authorities and local inhabitants and approaches for wildlife conservation in my study sites. Finally, I requested the respective national park wardens (with required applications) for providing the registered cases of HWC incidents of past 10 years period (2013 to 2022) for detail review and analysis.

## Activity 2: Review of victims' relief money claim files (human attacks, livestock depredation, crop raiding, structural property damages) of 10 years period (2013-2022) from the headquarter offices of CNP and BNP

I thoroughly reviewed the registered cases of different incidents of HWC (human attacks, livestock depredation, crop damage and structural property damage) in the past 10 years (2013-2022) from the central/headquarter offices of CNP and BNP. I extracted the information from the pre-designed Excel data sheet. The information included name of victim, district, municipality/rural municipality, ward no., name of buffer zone users' committee (BZUC), incident occurred date, time of day, human injury, human casualty, name of damaged crop species, land area of crop damage, type of depredated livestock, no. of depredated livestock individuals, type of damaged structural property, name of attacking/damaging wildlife species, complain file date, amount (relief money) claimed and amount (relief money) received.

# Activity 3: Review of victims' relief money claim files (human attacks and livestock depredation) of three years period (2020-2022) of all Terai districts located within TAL region of Nepal

I reviewed the registered information of victims (human attacks and livestock depredation) located both inside and outside the buffer zones of protected areas within the 14 lowland (Terai) districts of the entire Terai Arc Landscape (TAL) of Nepal that had occurred during the past 3 years (2020 to 2022) from the headquarter offices of the five protected areas. The victims' relief claim files of outside buffer zone areas also finally goes to the associated protected areas through the respective divisional forest offices (DFO) for relief money disbursement. Though the required information of CNP and BNP buffer zones was collected during the Activity 2, while the information outside buffer zones of CNP and BNP as well as other three protected (Parsa National Park (PNP), Banke National Park (BNP) and Shukla Phanta National Park (ShNP)) was collected after obtaining the park specific research permits with the help of prior permit of DNPWC, Nepal.

### Activity 4: Household questionnaire survey and recording of GPS coordinates for each livestock depredation households of last three years (2020-2022) in the buffer zones of CNP and BNP

After obtaining the addresses of victims of livestock depredation (2020 to 2022) from activity 1, I visited the buffer zone settlements of CNP and BNP for the livestock depredation locations caused mainly by tiger and common leopard. From the past publications and official records, they were the major two species causing about 90% of total livestock depredation incidents in my study area. I focused on the depredation events that have occurred in the livestock shed as most of the incidents had occurred in the shed reported from recent studies and official records. Then, I recorded different landscape variables (socio-economic, bio-physical and type of livestock sheds) associated with each depredation event from each victims' households. In addition, I randomly selected the equal number of households located within 1 km (but greater than 250 m distance) from each depredation household who have not experienced livestock depredation from 2020-2022 and recorded the same landscape variables like for the depredation victims' households.

#### Overview of Collected Data

1. Number of HWC incidents based on victims' relief money claim files (2013 to 2022) (Total incidents= 14862)

S.N.	HWC incidents	Chitwan National (CNP)	Bardia Park National Park (BNP)
1	Human causalties and injuries	389	117
2	Livestock depredation	834	3648
3	Structural property damage	362	1381
4	Crop raiding	3880	4251
Total		5465	9397

2. Household questionnaire survey with livestock depredation victims and nonvictims and recording of GPS locations of livestock depredation and nondepredation households (Total no. of households surveyed: 1222)

S.N.	Respondents	Chitwan National (CNP)	Bardia Park National Park (BNP)
1	Victims	218	411
2	Non-victims	215	378
Total		433	789

NB: The number of non-victims' households were found to be less than victims' households because in some villages both study sites, there were not any non-victims' households located from the victims' households according to our pre-defined distance criteria.

### **Further Project Plans**

- 1. Data arrangements and checking for errors (till the end of May 2023).
- 2. Data analysis and results interpretations of three data sets (June-September 2023).
- 3. Submission of the project updates for The Rufford Foundation- highlighting the major results (October 2023).
- 4. Design and preparation of community outreach activities' materials (October 2023).
- 5. Community outreach activities and conservation education programmes in the most affected local communities/villages of both study sites (10 in each site) (November and December 2023).
- 6. Submission of the project updates for The Rufford Foundation with community outreach materials and field photos (December 2023).
- 7. Final report submission (End of December 2023).



Photo 1. Unprotected/open livestock shed for buffalo (for day and night).



Photo 2: Unprotected/open livestock shed for goat (for day.)



Photo 3: Closed and unprotected livestock shed for pig (for day and night.)



Photo 4: Protected and closed rigid livestock shed for pig (for day and night.)



Photo 5: Household questionnaire survey.



Photo 6: Household questionnaire survey.



Photo 7: Group discussion with buffer zone users' committee members



Photo 8 (a-left, b-right): Review of victims' paper claim files in CNP headquarter office.



Photo 9: Observing and recording the information of the improved livestock shed.



Photo 10: Observing and receiving information of the livestock shed.



Photo 11: Wall of house damaged by wild elephant. All photo credits: Bijaya Neupane, Durga Nanda Yadav, Kamal Kafle and Nishan KC.