

## Project Update: December 2019

### General updates:

Tiger (*Panthera tigris*) is a globally endangered species and, despite deploying extensive conservation efforts on the ground, populations continue to decline in most of its global distribution range. Chitwan National Park (CNP) is home to 93 adult breeding tigers (DNPWC 2019) and is where human-tiger conflict (HTC) has become one of the most critical issues resulting in loss of livestock and even human lives. There were frequent incidences of tiger deaths reported in a different part of CNP since the last tiger survey in 2018. A tiger was found dead in water at Jarnelighat on the bank of the Rapti River in CNP on February 8th, 2019. The male royal Bengal tiger of around 13 years old was found with injuries all over the body and is suspected to have died in an attack by another tiger in the park, according to CNP officials. Another tiger was found dead at nearby Seyarighat on the bank of the Narayani River (western sector) in CNP on February 22nd, 2019. Similarly, another royal Bengal tiger was found dead in a Bedghari Community Forest in Thori Rural Municipality-3 in CNP in Parsa district on December 26th, 2019. This is the fourth death of a tiger since the last census in 2018. "The tiger had bruises across its body", CNP officials said, adding that it might have been killed in fighting with another tiger. So, those frequent natural deaths of tigers are alarming to conservationists and scientific communities and further research regarding assessing the carrying capacity of CNP in terms of royal Bengal tiger and other sympatric carnivores and their prey species is needed.



## Project activity completion updates:

- We have successfully assessed adaptation and mitigation practices initiated at a community level to cope with the problem of HTC. For this, consultation meetings and field observations were undertaken in the entire buffer zone of CNP, covering each sector office for a deeper understanding of the existing problems and opportunistically witnessing the event of interest.

During field observation, HTC-affected households were identified and key informant interviews (KIIs) and household surveys were conducted to further examine the problem, mitigation and adaptation practices adopted by local community people for solving the problems.





- Key stakeholders were identified through an open consultation process with BZUC and the national park authority, whose participation is essential to resolving the conflict. Based on consensus, we have identified 22 stakeholders from each buffer zone user group of CNP.

Based on the conflict analysis, we organised 3 days of interest-based negotiation and dialogue training cum workshop so that they can play a critical role while resolving such conflict in their community.



- We have also organised a 1-day exposure visit for key stakeholders and conflict-affected households to learn about the best practices of community based-conflict management, economic and NRM initiatives by the community groups at Baghmara Buffer Zone Community Forest User Group and Sauraha area of CNP.



- We have organised a mini project workshop to share the project achievements to the national park authority and other key stakeholders shared the project findings and other learning among them.



- Furthermore, we had also organised joint monitoring visits involving project advisory committee members at the project sites. We had also conducted preliminary research work on stress monitoring of tiger in relation to anthropogenic disturbances. Though this activity was not directly mentioned in the original proposal, it seems very relevant to understand the human-tiger interactions in the study area. We analysed the fresh scat (24 hr old) of tiger using non-invasive technique (ELISA test) in a molecular lab and found the mean concentration of faecal glucocorticoid metabolites (FGMs) is 30.16 ng/ g. This preliminary research concludes that there was stress in tiger and there is great scope of to assess the root causes of it. We believe that such information is of key importance for the park management as it could provide quantitative data on stress identification and further management and conservation of the species in CNP and other PAs too.