

Progress Report I (January 2025):

**Project Title: Niche overlap and awareness initiatives for the conservation of Smooth-coated otters and Fishing cats in the low-land region of Far-western, Nepal.**

This report provides a first update on the activities conducted regarding the project “Niche Overlap and Awareness Initiatives for the Conservation of Smooth-coated Otters and Fishing Cats in the low-land Region of Far-western Nepal”. In the first phase of the fieldwork, we particularly conducted research-based activities and completed the following activities:

**a) Preliminary field visit, meeting with park staff, and sharing of project objectives**

Before starting a field survey, we held a small meeting with the warden and other staff of Suklaphanta National Park (ShNP) and shared our project objectives with them. We submitted the permit letter obtained from the Department of National Park and Wildlife Conservation to the ShNP officials and following this, officials gave us an entry permit to conduct the research work inside the national park. The preliminary visit to the field site was made before conducting a field survey.



Picture 1: Team leader (Pravin Giri) sharing project objectivities and activities with the warden of Suklaphanta National Park.



Picture 2: Major lake of Suklaphanta National Park, Rani Tal (Lake) covered by invasive species and other grasses.

**a) Sign survey of Smooth-coated otters (SCO) and Fishing cats (FC), and collection of samples**

The sign survey was conducted in the lakes and rivers of ShNP and Ghodaghodi Lake in Kanchanpur and Kailali Districts respectively. In the river, we walked along the bank of the river for the sign survey. The direct and indirect signs were searched intensively and if detected their GPS locations were recorded. Transects of 400m length by 15m width were laid along the river bank with a gap of 250m between each transect for the documentation of habitat variables. In case of lakes, we walked around it to search for the secondary signs. The tall and dense grass and marshy area in some lakes precludes us from walking around the lake, and such places were skipped. No secondary signs of Smooth-coated otters and Fishing cats were documented in Ghodaghodi Lake.

The fresh scat of a Smooth-coated otter and Fishing cats were collected in a plastic tube and preserved by pouring silica gel into it.





*Picture 3: Sprainting site of Smooth-coated otter captured in Suklaphanta National Park.*

Table 1: The surveyed lakes and rivers in Suklaphanta National Park (ShNP) and Ghodaghodi Lake

S.N	Name of surveyed lakes and rivers	Secondary sign recorded of		Types of signs detected	Remarks
		Smooth-coated otter	Fishing cats		
1.	Chaudhar River	Yes	No	Sprainting site, spraint, and otter track	ShNP
2.	Bahuni River	yes	No	Spraint and pugmark	ShNP
3.	Swami Tal (Lake)	Yes	No	Live sighting, and otter track	
4.	Batania Tal (Lake)	Yes	No	Otter track	ShNP
5.	Baba Tal (Lake)	Yes	No	Pugmark	ShNP
6.	Salgaudi Tal (Lake)	Yes	No	Latrine site	ShNP
7.	Rani Tal (Lake)	No	No		ShNP
8.	Rajapur Tal (Lake)	No	No		ShNP
9.	Radhapur Tal (Lake)	Yes	Yes	Pugmarks and sprainting site of Smooth-coated otters and scat of Fishing cats	ShNP
10.	Hatti Kunda	No	No		ShNP
11.	Gohi Kunda	No	No		ShNP
12.	Kalikich Tal (Lake)	No	No		ShNP
13.	Captionghat River	Yes	No	Sprainting site and otter track	ShNP
14.	Ghodaghodi Lake	No	No		Kailali District
15.	Nakrauri Lake	No	No		Kailali District





*Picture 4: Team member (Shree Krishna Devkota) measuring the width of the river using a range finder in Caudhar River, Suklaphanta National Park.*

### **c) Camera trapping survey**

Following the sign survey, key informant interview, expert suggestions, and literature review, twelve camera trap stations across the Suklaphanta National Park were established strategically. The camera traps were placed in those strategic locations. It was installed at a height of 10-25cm above the ground level, which is considered optimal for the otter and fishing cat survey. The camera traps were set up in a hybrid mode so that they could capture both images and videos of the animals. Eight cameras were deployed at the same location continuously for 22 days. The locations of the other two camera traps were changed midway, with each being placed at two different locations for 11 days each. In Ghodaghodi Lake, we deployed five camera traps in the field for seven days. Camera traps were active on a site for 24 hours.





*Picture 4: Our team setting up a camera trap for Smooth-coated otters and Fishing cats survey in Captionghat River in Suklaphanta National Park.*





Picture 5: Picture of a Smooth-coated otter captured in our camera trap in Captionghat River, Suklaphanta National Park.

#### **d) Questionnaire survey**



Picture 7: Team leader taking a questionnaire survey with the local people in buffer zone area (Jhilmila) of Suklaphanta National Park.

The questionnaire survey was conducted with the local people residing around the buffer zone area of ShNP. We showed pictures of Smooth-coated otters and Fishing cats and described their characteristics and only the local people who had seen or knew at least one species were included in the survey. The 30 local people were interviewed living in the Buffer zone of the National Park. In addition, the 7 nature guides, and 12 park staff (Rangers, and Game Scouts) were also interviewed. In total, we interviewed, 49 people who have information or knowledge about the species. Most of the local people interviewed were unaware of the fishing cats and they couldn't recognize the species. While the majority were knowledgeable about the presence of Smooth-coated otters in Suklaphanta National Park and their ecological characteristics.

#### **e) Focus group discussion**

We conducted two focus group discussions (FGD), one was conducted in Beldandi, located in the Buffer zone area of ShNP, and the other was conducted in Ghodaghodi Lake. The main purpose of the FGD was to understand the local people's perspective, their knowledge, and threats towards the SCO and FC conservation. Collectively, 42 people have participated in the focus group discussion. People felt reluctant to share about the human-induced threats in Suklaphanta National Park since fishing and entering a national park is prohibited and is against the law. However, we observed shrinkage of lakes, reduced water level, and invasive species in many lakes of the National Park for eg; Rani tal (Lake), Salgaudital (Lake), and Kalikich Lake (Lake) posing threats to the habitat of Smooth-coated otters and Fishing cats and their prey species.

Similarly, human intrusion for fodder, wood, picnic, and fishing were reported as the major threats to species in Ghodaghodi Lake. Illegal fishing was strictly banned in Ghodaghodi Lake as well as it is a Ramsar site and Bird Sanctuary. The local biodiversity conservation committees e.g. local branch of BCN, community forestry users group, and anti-poaching unit together are active in biodiversity conservation and controlling illegal wildlife hunting in Ghodaghodi Lake.





Picture 6: Our team and local people discussing about the Smooth-coated otter and Fishing cats in Sukkhad, Kailali (Ghodaghodi Lake).

Planned activities for the second phase of the fieldwork:

In the next phase of the fieldwork, we will conduct the following activities:

- a) Camera trapping survey
- b) Preparation and printing of awareness materials
- c) School awareness programs
- d) Community outreach programs