

## Project Update I: October 2025 - March 2026

**Name of project:**

Assessing Baseline Information, Enhancing Local Capacity and Awareness for Softshell Turtle Conservation in Chitwan National Park, Nepal.

**Project ID:** 46911-1

**Principle Investigator:** Sumana Chhetri

**Project site:** Narayani river and buffer zone of Chitwan National Park

**Project period:** September 2025 to February 2027

**Project objectives:**

- a. To assess the baseline information on distribution, species richness, and occupancy of softshell turtles in the Narayani River.
- b. To assess anthropogenic threats to softshell turtles and their habitat.
- c. To enhance capacity of buffer zone communities on turtle conservation and habitat management.
- d. To enhance awareness of fishermen and school students on turtle conservation.

**Update on key activities conducted:**

- ◆ **Project permission:** We received permission for fieldwork from the Department of National Park and Wildlife Conservation and Chitwan National Park.
- ◆ **Project planning and preparation:** Prior to field surveys, we conducted a preliminary survey in the Narayani river sections and with targeted communities to build rapport. We prepared field data sheets, survey questionnaires, and pre-tested it during preliminary survey. We identified potential survey locations, coordinated project timelines with the team, finalized the fieldwork logistics, and arranged field equipment.



*Project Leader conducting preliminary survey in Narayani river*

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*Talked to cattle herders in Tamaspur area during preliminary survey*  
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- ◆ **Coordination meetings:** We conducted coordination meetings with officials from Chitwan National Park, members from nature guide association, representatives of buffer zone user committee and buffer zone community forest users group. During these meetings, we discussed on planned project activities, noted stakeholder's input, and talked on future collaboration and turtle conservation planning.



*Coordination meeting with community leaders (including representatives from buffer zone user committee and community forest users group) in Tribeni area*  
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*Coordination meeting with nature guide in Amaltari*

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◆ **Awareness material preparation and printing**

We prepared and printed one flex banner and 1000 turtle-related awareness posters/leaflet as targeted. So far, we distributed 119 poster/leaflets to local communities.



*Women reading turtle awareness posters*

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*Placing a turtle conservation awareness poster in a community hall* © Sanisara Somai

#### ◆ **Preparation of Turtle Identification Guidebook and printing**

There is a turtle conservation group in the project site actively working on turtle awareness, species rescue and release, and habitat management in support from national park authorities.

To support local turtle conservation and to strengthen knowledge of local stakeholders on turtle species found in and around Chitwan National Park, I personally authored, prepared, and printed 200 copies of ‘Turtle Identification Guidebook.’

The guidebook provides an introduction to turtles and techniques for identifying species, focusing on those found in and around Chitwan National Park.

It also covers:

- ✓ The ecological importance of turtles
- ✓ Major threats to their survival
- ✓ Conservation status of turtle species
- ✓ Legal penalties for hunting or trading turtles
- ✓ Do’s and don’ts when encountering turtles
- ✓ Information on turtle species rescue and release

Turtle Identification Guidebook is an additional awareness material, including 50 other awareness-focused T-shirts. For this, we raised additional funds locally.



*Turtle Identification Guidebook published and printed*

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So far, we distributed 33 turtle identification guidebook to the members of turtle conservation group (nature guides and representatives of community-based organizations) and key stakeholders such as NGO and INGO working in the project site.



*Identification Guidebook distribution to nature guides of Chitwan National Park*

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*Turtle awareness focused T-shirts*

*©Sumana Chhetri*

## ◆ Field surveys

### 1. Visual encounter survey

We conducted visual encounter survey along 101.4 km stretch of the Narayani river. We divided Narayani river into three sections for easier documentation and used a wooden boat and equipments (binocular, spotting scope, camera, and GPS) to assess softshell turtle distribution, species richness, and threats in every sections of Narayani river.

We recorded both direct signs (softshell species, behavior such as basking in riverbank and logs, and associated habitat), and indirect signs (trails and resting pits) along the Narayani river sections. We also documented threats such as use of illegal gillnet fishing and river pollution in most of the surveyed sites.



*Visual encounter survey in Narayani river*

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*A turtle resting pit observed along the bank of Narayani river*

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## **2. Occupancy survey**

At first, we divided Narayani river stretch of 101.4 km into 100 meter segments and systematically selected 70 segments for occupancy assessment. We recorded softshell turtle species presence/absence at every selected segments for two times till date. We recorded covariates (environmental, habitat, and disturbance) to model occupancy at the end. This included measurement of river temperature, flow velocity, river width and depth, presence of sandbanks and logs, substrate type, vegetation, and observed threats at every selected segments. Waste disposal in the river and surrounding areas was observed in multiple segments. Use of gillnet fishing was observed in a few segments of Narayani river.



*Team Leader taking river depth measurement (one of the habitat covariates) necessary for occupancy modeling*

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*Softshell turtle trail mark recorded on the Narayani riverbank*

©Sumana Chhetri



*A fisherman setting up an illegal gillnet for fishing across the Narayani river*  
©Sumana Chhetri

### **3. Social survey**

So far, we conducted semi-structured interviews with 26 individuals of river-dependent communities and assessed information on turtle hunting, consumption and ethnozoological uses.

We conducted market survey in Tribeni (a site near Nepal-India border). We surveyed with 12 fish sellers, shops, hotels and restaurants and assessed information on turtle exploitation and trade.



*Survey with a woman living near Narayani river*

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*Interview with fishermen from Bote community in Tribeni area ©Prakash Basnet*

#### **4. Capacity-building workshops**

We conducted one-day capacity-building workshops in the Paanbari and Madarbaba buffer zone community forest as targeted. A total of 30 participants attended the workshop in Paanbari (67% women participation) and 25 participants in Madarbaba (70% women participation) community forests. Participants included members from buffer zone user committee, community forest users group, licensed fishermen, cattle grazers, local youths, women, and staff from Chitwan National Park.

The training focused on ecological importance of softshell turtles, species identification, threats, habitat management, and legal provisions regarding turtle conservation. To measure the success of workshop event, we used a pre-test and post-test method. The results showed a 94% (in Paanbari) and 89% (in Madarbaba community forest) increase of participant's knowledge on turtle conservation and habitat management.



Turtle awareness workshop in Paanbari buffer zone community forest ©Kapil Amgai



Turtle awareness workshop in Madarbaba buffer zone community forest ©Kapil Amgai

## **Awareness & capacity-building workshop in Tribeni (additional activity)**

During the questionnaire and market surveys in Tribeni, we observed ongoing turtle exploitation. Although awareness sessions in Tribeni were not part of the original project plan, we saw the need to engage local stakeholders. As a result, an additional capacity-building workshop was organized for key stakeholders in the area.

A total of 20 participants attended the workshop, including members from community-based anti-poaching unit, buffer zone user committee, buffer zone community forest users group, and national park authorities. The workshop focused on enhancing participants' understanding of turtles' ecological importance, major threats and its impacts on turtle survival, species identification skills, monitoring techniques, turtle-friendly conservation planning, and buffer zone management.

It was possible to organize this event through the support from locally raised funds and collaboration with community-based organizations and NGO/INGO working in the project site such as Zoological Society of London and Himalayan Nature.



*Turtle awareness and capacity-building workshop in Tribeni, Nepal*

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### **Key take away:**

Findings from the social survey conducted so far suggest that, despite being highly threatened, softshell turtles are widely consumed for food. In some areas adjacent to the jurisdiction of Chitwan National Park, respondents confirmed open selling of turtles in local markets, without secrecy or fear of authorities. Most turtles are captured accidentally in fishing hooks; however, when captured, turtles are rarely released back into the water but instead taken home for consumption. In a few surveyed areas, turtles are intentionally targeted using illegal fishing method such as electric current at night. Many respondents were unaware about turtle's ecological importance, their conservation needs, and the legal provision regarding turtle exploitation in Nepal.