Conservation of Ganges River Dolphin through the Involvement of Local Youths as Citizen Scientist in Koshi River, Eastern, Nepal

FIRST QUARTERLY REPORT JANUARY 2022



QUARTERLY UPATES

ACTIVITIES COMPLETED

- 1. Project Approval
- 2. Initial field visit
- 3. Initial community consultation
- 4. Questionnaire development:



The River Dolphin Conservation project funded by The Rufford Foundation is scheduled to be conducted in the Koshi Tappu Wildlife Reserve particularly in the Koshi barrage area. The main objective of the project is; to aware the communities for the conservation of the river dolphin in their natural habitat. For this, the project will conduct a series of activities such as baseline survey to assess perception of local people on river dolphin and existing threat, train local people as citizen scientist, community and school awareness programs.

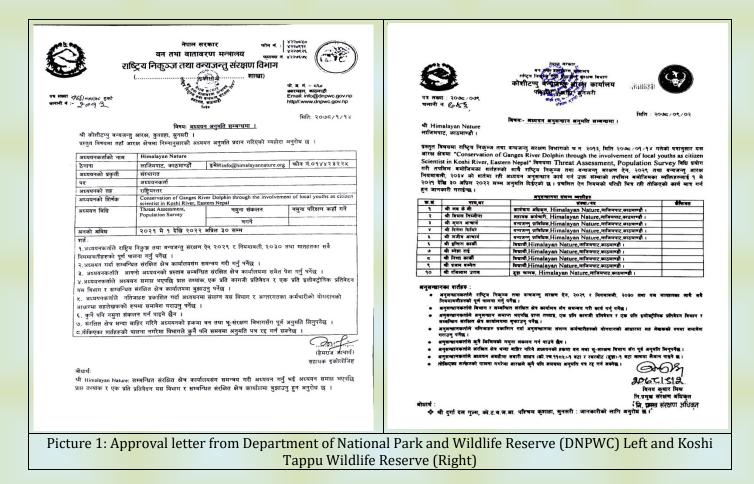
Due to the unprecedented COVID-19 worldwide and the nationwide lockdown, the project could not stat in the pre-scheduled date. However, considering the COVID scenario, the following activities have been accomplished so far in order to meet the goals of the project.

1. Project Approval

Before initiating any project activities, it is important that the concerned authority approves them. Since our project site lies within the wildlife reserve and importantly river dolphin has been listed as protected species under National Park and Wildlife Conservation Act 1973, it is obligatory to have the permission of Department of National Park and Wildlife Conservation (DNPWC); government oversighting agency to monitor any research or conservation activities conducted in protected areas of high values species.

So, we have applied for the approval to conduct the research at Koshi River at Department of National Park and Wildlife Conservation (DNPWC), Babarmahal and the department has provided approval letter for the project. Adding to this, we have also applied for the research permission from local government (Barahakshetra Municipality) and Koshi Tappu Wildlife Reserve (KTWR). Both the entities have granted permission for the project.





2. Initial field visit

An initial field visit was conducted in the project sites in order to identify the river dependent or fishing communities and access information on underling factors possessing threats to the aquatic ecosystem and to river dolphin, local people perception on dolphin, necessities and measures of conservation and witnessed conservation activities; if any. During the field visit, 6 river dependent and fishing communities; *Kushaha, Haripur, Bhantabaari, Barrage, Prakshapur* and *Pundegaide* were identified. Community outreach program will be focused on the identified communities. However, other potential nearby Village of Koshi River will also be consider. Furthermore, the existing primary threats to dolphin and to the aquatic ecosystem were also assessed. All those collected information will be useful in later stage of project particularly in questionnaire survey and community awareness program.



Picture 2: Principal Investigator during initial field visit at Koshi Barrage (Left) and observed River Dolphin (Right)



Picture 3: Identification of river dependent communities; Kushaha (Left) and Haripur, (Right)

3. Initial community consultation

An initial community consultation was performed with the key stakeholders and local people. We took this platform to inform the participants about the project, its goals, objective and activities. Not limiting to this, we also took the opportunities to access information particularly dolphin distribution both in upper and lower section of Koshi barrage, level of knowledge regarding dolphin and its ecological importance, underlying threats, conservation work, etc. Information access from the program will be crucial and beneficial later in designing the community and school awareness program as well as during questionnaire survey. As per the accessed information, river dolphin has not been recorded in the upper section of Koshi barrage since 2007 massive flood and is believed to be sweep away down to the barrage. Hence is loss permanently from the upper section. Further confirmation from the project site will be done during the population and threats assessment. However, many activities having negative impacts on dolphin and other aquatic organism has been easily witnessed in the upper section of river like direct discharge of pollutant (industrial effluents, point and non-point source of pollutant), fishing and dredging activities. Hence for the threat mapping, we will survey both the upper and lower section of the Koshi River. Meanwhile, for the population survey, we will focus on the downstream or lower section of the Koshi River.

Simultaneously, for the citizen scientist program, an initial 20 young, enthusiastic local people were identified. All of them have keen interest on conservation sectors and have been engaged in research, conservation activities in the project site and have understood the importance of their existence. The selected people will be further trained and capacitate to become citizen scientist in the coming quarter. The objective of the program is to involve the youths from the communities in the conservation program.



Picture 4: Initial community consultation with the key stakeholders at the project site; Jabdi (Left) and Koshi (Right)



Picture 5 : Primary threats to River Dolphin at Koshi River is Illegal fishing



Picture 6: Fish from Koshi river selling at nearby market

4. Questionnaire development:

Discussion among the team members have been done in order to develop a set of questionnaires for the baseline survey. The questionnaire survey will be conducted with the community members particularly with the river dependent and fishing communities to access relevant information from then targeted communities. As soon the questionnaire will be finalized, the research team will head to the project site to conduct the questionnaire survey.

5. Future plans

With the unsought situation the new variant of Covid-19 has caused in Nepal, it might hinder the scheduled activities in coming days as Nepal government have instigated travel restriction and strictly rule out not to conduct any program with more than 25 participants. Considering how the situation develops over time, we will prioritize our activities accordingly. As soon as the situation gets normal, we will conduct the baseline survey in the community. This will be followed by the citizen scientist training and several awareness programs will be conducted in the communities and schools.

