

# 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 UPDATES

## 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.





**नेपाल सरकार**  
**वन तथा वातावरण मन्त्रालय**  
**राष्ट्रिय निकुञ्ज तथा वन्यजन्तु संरक्षण विभाग**  
(.....) शाखा)

फोन नं. : ४२०८६०  
४२०८६१  
४२०८६२  
फ्याक्स नं. ४२०८६३

वी.ब.नं. - ६६०  
अवस्थान, काठमाडौं  
Email: info@dnpwc.gov.np  
http://www.dnpwc.gov.np

मिति: २०७८/११/१४

पत्र संख्या: १६६/२०१८/३६०  
चलानी नं.: २०१२

**विषय: अध्ययन अनुमति प्रदानपत्रमा ।**

श्री कोशीटप्पु वन्यजन्तु आरक्ष, कुशाहा, बुधसरी ।  
प्रस्तुत विषयमा तहाँ आरक्ष क्षेत्रमा निम्नानुसारको अध्ययन अनुमति प्रदान गरिएको व्यहोरा अनुरोध छ ।

अध्ययनकर्ताको नाम	Himalayan Nature		
ठेगाना	साजिमापट, काठमाडौं	इमेल: info@himalayannature.org	फोन नं. ०१४४२३२२४
अध्ययनको प्रकृती	संरक्षण		
पद	अध्ययनकर्ता		
अध्ययनको तह	राष्ट्रियस्तर		
अध्ययनको शिर्षक	Conservation of Ganges River Dolphin through the involvement of local youths as citizen scientist in Koshi River, Eastern Nepal		
अध्ययन विधि	Threat Assessment, Population Survey	नमुना संकलन	नमुना परिशालन कहाँ गर्ने
		नगरी	
अनको अविधि	२०२१ मे १ देखि २०२२ अप्रिल ३० सम्म		

मार्तः

१. अध्ययनकर्ताले राष्ट्रिय निकुञ्ज तथा वन्यजन्तु संरक्षण ऐन, २०२९ र नियमावली, २०३० तथा मातहतका सबै नियमावलीहरूको पूर्ण पालना गर्नु पर्नेछ ।
२. अध्ययन गर्दा सम्बन्धित संरक्षित क्षेत्र कार्यालयसंग समन्वय गरी गर्नु पर्नेछ ।
३. अध्ययनकर्ताले आफ्नो अध्ययनको प्रस्ताव सम्बन्धित संरक्षित क्षेत्र कार्यालयमा समेल पेश गर्नु पर्नेछ ।
४. अध्ययनकर्ताले अध्ययन समाप्त भएपछि प्राप्त तथ्यांक, एक प्रति कागजी प्रतिवेदन र एक प्रति इलेक्ट्रोनिक प्रतिवेदन मम विभाग र सम्बन्धित संरक्षित क्षेत्र कार्यालयमा बुझाउनु पर्नेछ ।
५. अध्ययनकर्ताले नतिजाहरू प्रकाशित गर्दा अध्ययनमा संलग्न यस विभाग र अन्तरगतका कर्मचारीको योगदानको आधारमा सहलेखकको रूपमा समावेश गराउनु पर्नेछ ।
६. कुनै पनि नमुना संकलन गर्न चाहने छैन ।
७. संरक्षित क्षेत्र भन्दा बाहिर गरिने अध्ययनको हकमा वन तथा भू-संरक्षण विभागसँग पूर्व अनुमति लिनुपर्नेछ ।
८. तोकिएको गर्तहरूको पालना नगरेमा विभागले कुनै पनि समयमा अनुमति पत्र रद्द गर्न सक्नेछ ।

(हेमराज त्रिपाठी)  
सहायक इकोलोजिस्ट

बोधार्थः  
श्री Himalayan Nature: सम्बन्धित संरक्षित क्षेत्र कार्यालयसंग समन्वय गरी अध्ययन गर्नु भई अध्ययन समाप्त भएपछि प्राप्त तथ्यांक र एक प्रति प्रतिवेदन यस विभाग र सम्बन्धित संरक्षित क्षेत्र कार्यालयमा बुझाउनु हुन अनुरोध छ ।



**नेपाल सरकार**  
**वन तथा वातावरण मन्त्रालय**  
**कोशीटप्पु वन्यजन्तु आरक्ष कार्यालय**  
(.....) बुधसरी

पत्र संख्या: २०७८/०९  
चलानी नं. २०६३

मिति: २०७८/०९/०२

**विषय: अध्ययन अनुमति प्रदानपत्रमा ।**

श्री Himalayan Nature  
साजिमापट, काठमाडौं ।

प्रस्तुत विषयमा राष्ट्रिय निकुञ्ज तथा वन्यजन्तु संरक्षण विभागको वन २०१३, मिति २०७८/०९/१४ गतेको पत्रानुसार यस आरक्ष क्षेत्रमा "Conservation of Ganges River Dolphin through the involvement of local youths as citizen Scientist in Koshi River, Eastern Nepal" विषयमा Threat Assessment, Population Survey विधि प्रयोग गरी तथ्यांक बर्णनात्मक गर्तहरूको साथै राष्ट्रिय निकुञ्ज तथा वन्यजन्तु संरक्षण ऐन, २०२९ तथा वन्यजन्तु आरक्ष नियमावली, २०३० को शर्तमा रही अध्ययन अनुमति प्रदान गर्न उक्त सन्ध्याको तपस्विन बर्णनात्मक व्यक्तिको नाम १ मे २०२१ देखि ३० अप्रिल २०२२ सम्म अनुमति दिइएको छ । प्रकृतित ऐन विषयको परिधी विषय रही तोकिएको कार्य माघ गर्न हुन जानकारी गराइन्छ ।

क्र.सं	नाम/वर्ग	संस्था/वर्ग	ईमेल/फोन
१	श्री लक्ष्मी शर्मा	कार्यक्षेत्र संरक्षण, Himalayan Nature, साजिमापट, काठमाडौं ।	
२	श्री विष्णु शर्मा	सहायक कार्यक्षेत्र, Himalayan Nature, साजिमापट, काठमाडौं ।	
३	श्री सुभाष शर्मा	बन्यजन्तु संरक्षण, Himalayan Nature, साजिमापट, काठमाडौं ।	
४	श्री विष्णु शर्मा	बन्यजन्तु संरक्षण, Himalayan Nature, साजिमापट, काठमाडौं ।	
५	श्री सुभाष शर्मा	बन्यजन्तु संरक्षण, Himalayan Nature, साजिमापट, काठमाडौं ।	
६	श्री सुभाष शर्मा	बन्यजन्तु संरक्षण, Himalayan Nature, साजिमापट, काठमाडौं ।	
७	श्री सुभाष शर्मा	बन्यजन्तु संरक्षण, Himalayan Nature, साजिमापट, काठमाडौं ।	
८	श्री सुभाष शर्मा	बन्यजन्तु संरक्षण, Himalayan Nature, साजिमापट, काठमाडौं ।	
९	श्री सुभाष शर्मा	बन्यजन्तु संरक्षण, Himalayan Nature, साजिमापट, काठमाडौं ।	
१०	श्री सुभाष शर्मा	बन्यजन्तु संरक्षण, Himalayan Nature, साजिमापट, काठमाडौं ।	

**अनुमतिपत्रको शर्तहरू:**

- अध्ययनकर्ताले राष्ट्रिय निकुञ्ज तथा वन्यजन्तु संरक्षण ऐन, २०२९ र नियमावली, २०३० तथा यस मातहतका सबै नियमावलीहरूको पूर्ण पालना गर्नु पर्नेछ ।
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- कुनै पनि नमुना संकलन गर्न चाहने छैन ।
- संरक्षित क्षेत्र भन्दा बाहिर गरिने अध्ययनको हकमा वन तथा भू-संरक्षण विभागसँग पूर्व अनुमति लिनुपर्नेछ ।
- तोकिएको गर्तहरूको पालना नगरेमा विभागले कुनै पनि समयमा अनुमति पत्र रद्द गर्न सक्नेछ ।

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सहायक इकोलोजिस्ट

बोधार्थः  
श्री दुर्गा दल गुन्ज, को.ट.व.ज.आ. परिषद कुशाहा, बुधसरी : जानकारीको लागि अनुरोध छ ।

Picture 1: Approval letter from Department of National Park and Wildlife Reserve (DNPWC) Left and Koshi Tappu Wildlife Reserve (Right)

## 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 underlying 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, Bhandabari, 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 the 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.

