



**Darwin Initiative/D+ Project
Half Year Report
(due 31st October 2019)**

Project reference	24-015
Project title	Community conservation of Chitwan National Park's freshwater ecosystems and gharials
Country(ies)/territory(ies)	Nepal
Lead organisation	Zoological Society of London
Partner(s)	Department of National Parks and Wildlife Conservation (DNPWC), National Trust for Nature Conservation (NTNC) and Himalayan Nature (HN)
Project leader	<i>Hem Sagar Baral (Nepal lead)</i>
Report date and number (e.g. HYR3)	<i>31 October 2019, HYR3</i>
Project website/blog/social media etc.	https://www.zsl.org/community-conservation-of-chitwan-national-park%E2%80%99s-freshwater-ecosystems-and-gharials https://www.zsl.org/blogs/asia-conservation-programme/community-crocodilian-coexistence https://www.himalayannature.org/project/community-conservation-of-chitwan-national-parks-freshwater-ecosystems-and-gharials

1. Outline progress over the last 6 months (April – Sept) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up to end September).

Gharials play an ecological role of top predators in the river ecosystem of Chitwan National Park (CNP) and can be a key indicator of a healthy freshwater ecosystem upon which the socio-economic wellbeing of local communities depends. The indigenous *Bote*, *Musahar* and *Tharu* communities along the Rapti and Narayani rivers rely heavily on these wetlands for food and income. This project is instrumental to enhance the food security of these wetland dependent communities as well as provide new income streams through developing capacity in sustainable aquaculture livelihoods.

ZSL, along with all the project partners, maintains a close and participatory working relationship with the local communities; ensuring the sustainability of the project outcome. A Project Coordination Committee (PCC) chaired by the Deputy Director General of DNPWC, with section heads of DNPWC and the Project Manager from ZSL as members, is the main governing entity providing guidance for effective implementation of the project activities and conducting regular monitoring. A Project Management Unit (PMU) formed in CNP for project implementation is chaired by the Chief Conservation Officer of CNP with representatives from NTNC, HN and ZSL as members. The PMU is responsible for coordination among all the stakeholders. Representation is ensured in decision-making and project implementation from community members, representatives of buffer zone user committees and local government and protection units. The project has involved the Fishery Development Centre and other relevant government institutions to promote and develop sustainable fisheries within the project area.

This project aims to reverse the current rate of decline in the gharial population by restoring the ecosystem health of the Narayani and Rapti rivers as well as strengthening community based anti-poaching operations, the Gharial Guard Groups (3Gs). The 3Gs conduct patrols to monitor

the river ecosystem and gharials once a month. During this reporting period they have rescued and rehabilitated 4 mugger crocodiles from community fishponds with support from the park authorities.

The activities conducted during this reporting period are presented below in brief under respective outputs.

Output 1: Improved river ecosystem management delivered through improved management plans and environmental policy based on a robust Gharial and riverine ecosystem monitoring programme.

Under this output two activities had been planned during this reporting period. Publication of at least 2 peer reviewed papers (Act. 1.10) is underway. Two papers have been drafted and are under review. The outcomes of the submission will be notified in next reporting period.

Secondly, the river ecosystem management workshop (Act. 1.4) for the park staff and buffer zone community planned in this reporting period has been rescheduled for the next period to ensure the optimum conditions for field observation and river monitoring outside the monsoon period.

Output 2: Threats to fish stocks and gharials are reduced through protection provided by 10 Community Based Anti-Poaching Units (CBAPUs) patrolling sensitive riverine zones in the Narayani and Rapti watersheds to protect the area from unsustainable fishing, poaching and other damaging and unsustainable uses of the river.

Supporting the 3Gs in their annual monitoring programmes and ensuring collaboration with park authorities to control illegal activities in the river (Act. 2.4) continued during this period. Under this yearly monitoring activity, 24 nests, hatchlings and crocodiles were monitored on 4 occasions. Additionally, new gharial hatchling recruitment sites were identified. Of the 24 nests, 16 nests were in the Rapti river and 8 nests in the Narayani river. Fourteen nests were left *in situ* whereas eggs from 10 nests located in lower banks of the two rivers were transported to Gharial Conservation Breeding Centre (GCBC) for ex-situ hatching to avoid pre-monsoon flood wash.

Output 3: Increased post-release survival of Gharials from the Chitwan Gharial Conservation Breeding Centre (GCBC) delivered through implementing improved husbandry and release protocols, and post-release monitoring.

Post-release monitoring of gharials with state-of-the art methods (Act. 3.6) continued in this period. More than 100 gharials were released in March 2019 out of which 20 tagged gharials are being regularly monitored. Likewise, 3Gs are actively patrolling as part of their routine monitoring of gharials providing an additional source of data on post-release gharials. Previously tagged and released gharials continue to be regularly monitored in coordination with Chitwan National Park, and with the technical support of the project PhD student.

Output 4: Food security of local communities improved through implementing sustainable fishing and reducing the dependence of local communities on fishing through generating sustainable aquaculture livelihoods.

Five community conservation engagement centres have been established in upstream settlements on the Narayani and Rapti rivers (Act 4.7). Through these centres, 3000 brochures and 1000 posters carrying information on the benefits of and need for gharial and freshwater conservation have been distributed. Likewise, 50 mounted posters have been distributed to the national park office, BZUC offices, schools, and other local community-based organisations and crossroads tea shops. An average of 140 people per day have been visiting the five community conservation engagement centres. Visitors can learn about sustainable fishing techniques, and how their agricultural and lifestyle choices upstream impact water and food security all along the river system. They also learn about the negative impact of declining fish population on river health and how they can help reverse this trend to ensure that the rivers are restocked with fish.

Community workshops on sustainable fishing and gharial conservation (Act. 4.8) and aquaculture training workshops and exposure visits for community leaders (Act. 4.6) have been rescheduled to the next reporting period to ensure optimum attendance from community members by aligning with a low-activity period in the annual agricultural calendar.

2a. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

No such notable problems were encountered during this reporting period, but some activities have been rescheduled to align optimally with the monsoon fluctuations in these fast-changing riverine systems and their effects on the communities living alongside them.

2b. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?

Discussed with LTS: No

Formal change request submitted: No

Received confirmation of change acceptance No

3a. Do you currently expect to have any significant (e.g., more than £5,000) underspend in your budget for this year?

Yes No Estimated underspend: £

3b. If yes, then you need to consider your project budget needs carefully. Please remember that any funds agreed for this financial year are only available to the project in this financial year.

If you anticipate a significant underspend because of justifiable changes within the project, please submit a rebudget Change Request as soon as possible. There is no guarantee that Defra will agree a rebudget so please ensure you have enough time to make appropriate changes if necessary.

4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?

None.

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document. Additionally, if you were funded under R25 and asked to provide further information by your first half year report, please attach your response as a separate document.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but **should also** be raised with LTS International through a Change Request. **Please DO NOT send these in the same email.**

Please send your **completed report** by email to Darwin-Projects@ltsi.co.uk. The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message e.g. Subject: 25-035 Darwin Half Year Report**