



Darwin Initiative Main/Post/D+ Project Half Year Report (due 31st October 2018)

Project reference	23-013
Project title	Living with Tigers in Nepal: poverty reduction for human-wildlife coexistence
Country(ies)/territory(ies)	Nepal/ Terai Arc Landscape (TAL)
Lead organisation	North of England Zoological Society (Chester Zoo)
Partner(s)	Green Governance Nepal Wildlife Conservation Research Unit, Oxford University Department of National Parks and Wildlife Conservation (DNPWC), Government of Nepal Buffer Zone Management Committee, Chitwan National Park Buffer Zone Management Committee, Bardia National Park Swarnim Academy of Community Development National Trust for Nature Conservation
Project leader	Alexandra Zimmermann
Report date and number	1 st April-30 th September, 2018/ HYR3
Project website/blog/social media etc.	https://www.chesterzoo.org/conservation-and-science/where-we-work/south-asia/living-with-tigers

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).

Output 1: Safe working practices in the buffer zone and community forests established, and predator-safe livestock husbandry methods adopted by project villages.

Growing more food to provide for families' needs was identified as a priority activity. As such project communities received the first horticultural training workshops in year two, and subsequent workshops were run again for neighbouring communities (Act 1.8) as well as follow-up sessions for project communities in year three. **Horticulture workshops** were conducted in Patabhar, Kareliya, Ayodhyapuri and Kalabajar User Committees in May 2018 by Chester Zoo horticulture experts. 120 people attended (89 men and 31 women) from along the Bardia National Park (BNP) area, and 130 people (68 men and 62 women) from near Chitwan National Park (CNP). Mushroom growing, vermicomposting, organic pesticide making, and seedbed and paper pot making were taught to local communities.

Felid attacks on livestock kept in open or rickety enclosures were viewed as a priority to address to curb communities' economic loss. Therefore a key project activity was to support communities in building strong predator-proof pens for goats and sheep. The monitoring and adaptation of safe working practices and **predator-proof pens** (Act 1.7) identified one pen in Bardia as below build specification standard, thus the team supported the local farmer by providing technical assistance to strengthen the structure. **Goat farming** follow-up training (Act 1.7) was conducted in Kalabajar UC of CNP on 2nd of September. The training was attended by local farmers (15 women and 8 men). The goat farmers were trained in local treatment methods for common diseases. Last year **Goat breeding centres** were created, one breeding centre each in Ayodhyapuri and Kalabajar in CNP, and Patabhar UC in BNP. Each breeding centre was provided with an improved genetic billy-goat by the LWT project which is managed by a local farmers group. This year the groups were provided with feeding and care guidelines, regular goat health check-ups and medications (Act 1.7). The centre provides the low-cost service to farmers who pay a one-off NRs 150 fee (the fee differs per site) which goes towards medicines, vitamins, feed, etc. Fifty households in CNP were the primary beneficiaries in year three raising NRs 7,500. In BNP, inside Janaknagar, Pathabhar 61 households benefited from the breeding programme, the rate they paid was NRs 100, outside Janaknagar 12 households benefited, and they paid a rate of NRs 200. Through the breeding centres, as a result of the service fee, the farmer groups have been able to generate a total income of NRs 8,500. These funds will be re-invested in future improved genetic goat stock, and veterinary services. Goat farming has increased since the start of the project leading to increased demand for veterinary camps. The expected outcome is greater value for livestock as a result of more investment on the part of community

members to care and look after their stocks. Also goats are providing a higher return in terms of milk and meat as a result of improved genetic breeding. To date project site communities have started to move away from free-range grazing to pen-fed.

Interaction programmes on livelihoods and safe working practices were organised in different locations in Ayodhyapuri and Kalabajar UC of CNP supported by LWT in June and July 2018. Altogether 156 individuals participated in three different events of which 70 women attended. **Interaction on Wildlife Conflict Management and Livelihoods** (Act 1.8) was organised by LWT in collaboration with Ayodhyapuri UC of CNP in April 2018 which was attended by 164 individuals (99 male and 65 females) from local communities and stakeholders. This event was organised to raise locals awareness on such issues as differentiated livelihoods, wildlife management and conflict prevention, to promote the adoption of new livelihoods, and to understand the ecosystem services wildlife provide.

Output 2: Household consumption of natural resources reduced by identifying, and building capacity for the uptake of, resource alternatives or more efficient use of practices.

As a result of improved livestock husbandry practices there has been an increase in farm animal numbers leading to a greater demand for animal feed. As a consequence the project invested in fodder plant seedlings to build capacity (Act 2.6) and provide livestock feed. Seedlings were provided at the end of year two and a further batch were distributed at the beginning of year three. Six hundred seedlings comprising of Tanki (*Bauhinia purpurea*), Badahar (*Artocarpus lacucha*), and Tejpat (*Cinnamomum Tamala*), and 650 seedlings of Tanki, Badahar, Bakaino (*Melia Azedarach*), and Ipil Ipil (*Leucaena leucocephala*) were distributed across Ayodhyapuri and Kalabajar on the 5th of June and 29th of July, 2018 respectively. Altogether 110 households received 1250 fodder species seedlings provided by LWT. In BNP, Patabhar received 1600 seedlings comprised of Amala (*Embllica officinalis*), Bakaino, Arjun (*Terminalia arjuna*), Ipil Ipil and Tanki plant species, and in Kareliya UC 1100 seedlings comprising Amala, Koiralo (*Bauhinia variegata L.*), Badahar, Arjun and Bakaino. Overall two thousand seven hundred seedlings of fodder trees were distributed to 263 households for plantation on private land. The project team will continue to monitor the plantation and health of the fodder plants and record the decreased use of natural resources. The intended outcomes are for communities to reduce the dependency on natural resources, increase livestock protection, and community adoption of safe-working practices.

On the 24th and 27th of August an **Awareness of alternative resources** event was organised jointly with both Kareliya and Pathabhar UCs, to draw community attention to alternative energy resources (such as biogas, solar, and LPG) and promote their use. Presentations were given to reduce forest fuelwood use and highlight the health risks involved with firewood use (e.g. respiratory issues caused by smoke, the risk of HWC when collecting fuelwood, CO² emissions leading to global warming, risk of burns, etc.) 113 local people attended the event. The project has witnessed a very positive response to the uptake of biogas plants. However, as mentioned in last year's final report, the growing trend is demand for LPG, hence this year we have not supported to date any building of biogas plants but instead have highlighted the available alternative resources at a variety of awareness raising and capacity building events.

Output 3: Capacity for, and new sources of, alternative livelihoods and income generation established in project villages.

Fishery training (Act 3.7) was held in Ayodhyapuri UC of CNP on the 8th of September which was attended by 44 local farmers (of which 14 were women). The farmers were taught commercial fishery operations. A previous project had provided fishery training but the local community did not feel confident in farming fish, therefore LWT provided further training to boost their confidence. Items covered were local species use for high income and high productivity, training on the selection of a fishery site, preparation of the water body, selection of good species, diet, possible diseases, issues and local level solutions. The Madi municipality representative shared their institution's fishery policy with the participants. The project will continue to monitor the communities' development of their fishery ponds.

Carrying on from last year's sewing and tailoring workshops, an **Advanced tailoring** (Act 3.8) course was provided over a three month period from June-September to 30 women from Kalabajar UC of CNP. The training was for women who already had basic tailoring knowledge but who wanted to earn a livelihood from it but were lacking the confidence and advanced skills. The training was jointly organised by the LWT project and the Kalabajar UC.

Additionally, **Handicraft making training** (Act 3.8) was conducted in Patabhar UC, BNP from 29th of September to the 1st of October, 2018. During the four-day training 16 female participants attended. In the workshop they learned to make toys, woven baskets and other artisanal ornaments to sell in local markets and to the tourism industry. An **Observation tour for homestay management** (Act 3.8) was supported by the LWT project in collaboration with Kalabajar UC. Altogether, 16 individuals took part in the four days observation tour to visit and learn from successful homestays in western Nepal. There is a significant demand for homestay management training to cover topics such as hospitality, business management, cooking, and tourism.

Output 4: Social and ecological conditions favourable to continued or increasing tiger presence in project area are achieved in project focal areas.

As part of Activity 4.6 some initial data analysis on Activities 1.3, 2.3, 3.3 and 4.3 of the baseline surveys completed in years one and two have been done by our PhD student. By comparing the same data from 2016 and 2017 for the number of households that owned livestock and the number of these livestock households that report predation, we can see a decrease in livestock predations for all LWT communities except for Dangpur (control site) and Rammapur (treat site), however the increase in these two sites is not significant. In the 2016 baseline questionnaires, 19.1% of households stated predation occurred, yet only 14.9% reported predation in the 2017 questionnaires. Second-year camera trapping in BNP (Act 4.7) and its buffer zone area were completed in April, 2018 and its preliminary report has been produced and shared with BNP and the DNPWC. The second camera trapping field season and transect surveys (Activities 4.6 & 4.7) in CNP started in September 2018 and is scheduled to complete in December 2018.

Output 5: Social marketing campaign

A social marketing campaign was broadcasted through local FM radio stations in both CNP and BNP which mainly focused on the behavioural change of natural resource use and collection practices in order to minimise human-tiger conflict (Act 5.7). Results of the social marketing campaign will be shared in the final report. During the Wildlife Week celebration held from the 13-19 of April, activities were organised focusing on changing behaviours regarding traditional livestock farming practices and forest harvesting from the core area. Also, the message shared with locals is that wildlife attracts tourism and thus supports multiple livelihood options.

The project team has regularly conducted project **Activities monitoring** (Activities 1.7, 2.7, 3.9.1 and 5.8), and joint monitoring was also conducted by UCs, LWT team and other local stakeholders. Field monitoring and activity profiling were conducted by LWT field team on 20th and 21st of April. PPP (Act 1.7) uptake has been excellent, with locals starting to build pens under their own initiative and resources. Similarly, joint monitoring was conducted in Ayodhyapuri UC by LWT team, Ayodhyapuri UC members, and municipality representatives on the 8th of May particularly on the goat management programme (Act 3.7). Recommendations to improve the management programme were made and adopted, resulting in the future sustainability of the programme. Goat farmers have accepted the programme and taken ownership of it. Joint monitoring in Kalabanjar UC by LWT team and UC members was conducted on the 24th of July. LWT team in BNP have also conducted regular monitoring of project interventions in Pathabhar on the 21st of August and 24th of August in Kareliya and joint monitoring has been planned in the next half of the year.

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.

The CNP Chief Warden has announced that they plan on conducting another tiger census in Chitwan this year. This could have repercussions on research data analysis and collection as the project would again not be able to collect data within the park. This will not affect the budget but it may affect delivery of the final results of the ecological research.

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: Yes/No

Formal change request submitted: Yes/No

Received confirmation of change acceptance Yes/No N/A

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.

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

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 R24 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 send your **completed report by email** to Eilidh Young at 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: 22-035 Darwin Half Year Report**