Darwin Initiative Main & Extra: Final Report

To be completed with reference to the "Project Reporting Information Note": (https://www.darwininitiative.org.uk/resources/information-notes/).

It is expected that this report will be a **maximum of 20 pages** in length, excluding annexes.

Submission Deadline: no later than 3 months after agreed end date.

Submit to: BCF-Reports@niras.com including your project ref in the subject line.

Darwin Initiative Project Information

Scheme (Main or Extra)	Main
Project reference	29-011
Project title	Terai Arc: Community stewardship to secure wildlife corridors and livelihoods
Country(ies)	Nepal
Lead Organisation	Zoological Society of London
Project partner(s)	Department of National Parks and Wildlife Conservation (DNPWC), Parsa National Park (PNP) and Mithila Wildlife Trust (MWT)
Darwin Initiative grant value	GBP 467,282
Start/end dates of project	1 June 2022 – 31 March 2025
Project Leader name	Ms. Monica Wrobel/Mr. Bishnu Prasad Thapaliya
Project website/blog/social media	
Report author(s) and date	**Maheshwor Basnet (ZSL),** Prachanda Maharjan **(ZSL),** Asmita Pandey **(ZSL),** Pratik Saduala **(MWT)**

1 Project Summary

The Terai Arc Landscape (TAL) in Nepal is home to globally significant wildlife, including tigers and rhinos. However, protected areas within TAL particularly Parsa National Park (PNP) are increasingly fragmented (Annex 5.1.1, 5.1.2 & 5.1.3), pushing recovering wildlife populations into surrounding buffer zones and nearby human settlements. This movement has escalated human-wildlife conflict (HWC), posing risks not only to biodiversity but also to the safety, wellbeing, and livelihoods of local communities (Annex 5.1.4). These impacts are especially severe for women and Indigenous groups who are disproportionately dependent on forest resources (Annex 5.1.4). This phenomenon was evident in FY2020 Human-Wildlife Conflict (HWC) data, which showed 72% of those suffering from HWC in PNP were from Indigenous and disadvantaged communities (*Annex 5.1.5)*. Interactions with leopards, deer and ungulates now account for most of the HWC in these zones. In FY2020, of the 70 HWC incidents reported, 70% were caused by leopards (*Panthera pardus*) (*Annex 5.1.5*). In response, this project was designed to secure ecological connectivity between PNP, the northern Shivalik Hills, and the eastern Terai forests ensuring safer wildlife movement while simultaneously improving human wellbeing. The intervention targeted 20 buffer zone community forests (BZCFs) and three vulnerable communities within PNP's northern buffer zone: Amleshwor, Lokhit, and Manahari Buffer Zone User Committees (BZUCs). These communities face acute poverty, with an average wellbeing index below. To address these challenges and achieve its objectives, the project was structured around four key thematic areas: (1) community forest corridor conservation, (2) sustainable livelihood enhancement, (3) human-wildlife conflict mitigation, and (4) promotion of agroforestry.

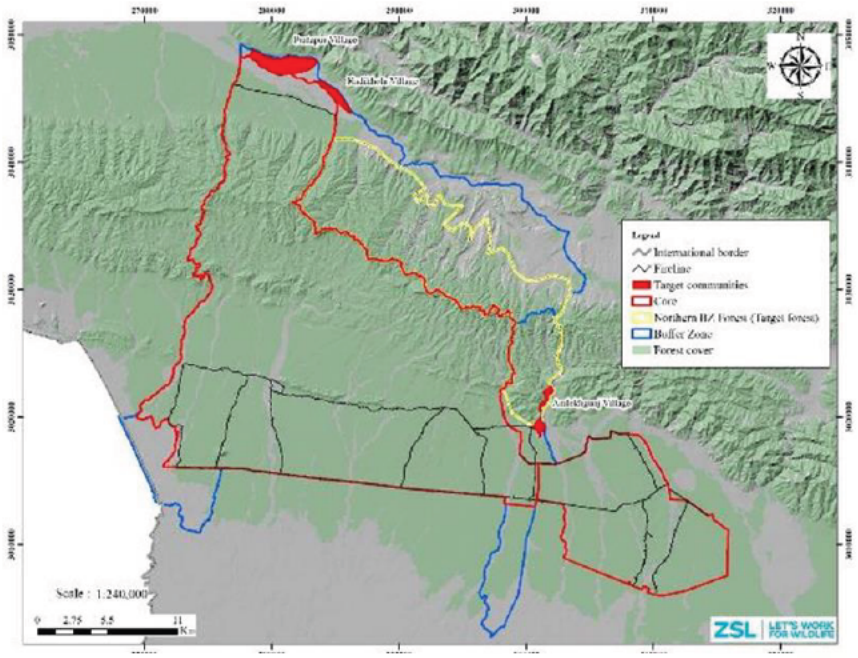

Figure 1: Map of Project Site

2 Project Partnerships

To ensure effective coordination and implementation of project activities, ZSL Nepal established a two-tiered institutional structure comprising a Project Coordination Committee (PCC) at the central level and a Project Management Unit (PMU) at the park/field level. The PCC, chaired by the Deputy Director General of the Department of National Parks and Wildlife Conservation (DNPWC), includes section heads from DNPWC and senior representatives from ZSL Nepal, while the PMU is chaired by the Senior Conservation Officer of PNP, with representatives from ZSL Nepal, Mithila Wildlife Trust (MWT), implementing partner, and local government as invitees. This created a platform and opportunities for ZSL to share any issues related to the project, for smooth implementation and instant decision making *(Annex 5.2.1, 5.2.2, 5.2.9)*. Partners were selected based on the organizations' government-authorized roles in different aspects of conservation (DNPWC for overall protected area (PA) management and Parsa National Park (PNP) for management of PNP and its buffer zone area, and on field presence and experience, MWT.

Once project funding was secured, the finalized project proposal was shared with the PCC *(Annex 5.2.1)* and PMU *(Annex 5.2.2 and 5.2.3),* and approval was received to formally start project implementation. Additionally, the project concept (mainly logical framework, targets, deliverables, and evidence documentation requirements) was shared with MWT (the implementing partner) *(Annex 5.2.4 and 5.2.5)*. MWT, then further shared the project with local governments at project sites (Jitpur Simara Sub-Metropolitan City and Manahari Rural Municipality offices) to obtain approval to start implementation and request support that may be required during implementation *(Annex 5.2.6 and 5.2.7)*. MWT, implemented community engagement activities across all outputs, and PNP supported the implementation of all activities inside the core area and requiring technical inputs. Similarly, implementing partners like MWT with a strong field presence, have helped the project have a positive influence on the communities, CFUGs and decision makers (local and provincial government bodies) *(Annex 5.2.6, 5.2.7 5.2.11, 5.2.12)*. Having strong partners at both the central and local level, enabled the project to engage government bodies and their line agencies at federal and local level *(Annex 5.2.1, 5.2.2, 5.2.6, 5.2.7, 5.2.12)*.

In addition, ZSL Nepal briefed the British Embassy (Development Director and Head of Governance Politics and Services) and Foreign Commonwealth Development Office (FCDO) (Team leader-Project coherence Unit of Bagmati Province and Head of Office-Project Coherence Unit of Madhesh Province) on the project during their field visit to the Chitwan-Parsa complex in Year 1 (*Annex 5.2.10a*). The project also disseminated project information, funded by the FCDO, regarding an initiative launched by the British Embassy Kathmandu-Project Coherence Unit (BEK-PCU) known as the activity mapping tool (5W). This tool aimed to enhance BEK's capacity to synchronize the efforts of implementing partners at the delivery level *(Annex 5.2.10b)*. Further, a tripartite agreement for the operation of homestays and the establishment of a nursery to produce seedlings for plantation was held engaging Amleshwor BZUC and Lokhit BZUC respectively *(Annex 5.35a, 5.5.39b)*.

3 Project Achievements

3.1 Outputs

Output 1: Joint participatory management framework for North-East Parsa community-forest corridor is established.

Output 1 focused on strengthening ecological connectivity and promoting inclusive, community-led forest management within the northern community forest corridor of Parsa National Park PNP, with all activities strategically aligned to achieve the specified output indicators and substantiated through detailed documentation in the annexes. Across the three-year implementation period, the project delivered targeted, measurable results contributing to the conservation and sustainable management of buffer zone forests. In Year 1, foundational activities such as ecological assessments, stakeholder engagement, and a participatory corridor mapping and planning workshop involving 20 representatives from Buffer Zone Community Forest User Groups (BZCFUGs), over 55% of whom were women and individuals from marginalized backgrounds laid the groundwork for integrated planning and local ownership *(Ind 1.1, Annex 5.2.13, 5.4).* These early efforts established a platform for knowledge-sharing and consensus-building, leading to the development of an inclusive corridor charter endorsed by PNP providing a strategic, long-term framework for sustaining ecological connectivity across fragmented habitats, which delineates ecological priority zones, formalizes inclusive governance structures, and outlines shared conservation and benefit-sharing principles *(Ind 1.4, Annex 5.3).*

Over the course of the project, 20 Buffer Zone Community Forest Operational Plans (BZCFOPs) were revised (Y1: 5; Y2: 10; Y3: 5), collectively covering 2,184.93 hectares of forest and directly benefiting over 3,347 households (~18,639 individuals, 48% women). The revisions institutionalized sustainable and equitable forest governance, incorporating critical elements such as human-wildlife conflict mitigation, climate resilience, and benefit-sharing mechanisms *(Ind 1.2, Annex 5.4).* Guided by Year 1 ecological assessments *(Annex 5.2.13)*, the project implemented key habitat restoration activities, including the restoration of 3 wetlands (Y1:1, Y2:2) in three BZUC namely, Amleshwor, Manahari and Ujjawal Bhabisya of Northern Corridor, management of 100 hectares of grassland in Manahari and Amleshwor BZUC (Y1:8 ha, Y2:40ha, Y3:52ha), and regeneration of 50 hectares of degraded forest *(Ind 1.3, Annex 5.5, 5.6, 5.7)*. The plantation program was implemented in four strategically chosen locations within the Northern Buffer Zone Corridor of Parsa National Park. These sites were selected to restore the degraded forest corridor, which connects Parsa National Park with the Northern Siwaliks and Eastern Terai Forest. A total of 10,300 native seedlings and saplings were planted, aiming to reestablish the forest corridor, promoting safe wildlife movement, enhancing biodiversity, and improving ecosystem services *(Annex 5.8)*. The initiative successfully restored 30 hectares of degraded forest in Y3, focusing on enhancing corridor functionality by establishing connectivity that support sustainable forest management. Likewise, in Y1 (5ha) and Y2 (15 ha) were restored with fencing and plantation of 7500 seedlings of various native species and constructing 325meter of mesh fencing to restore degraded land *(Annex 5.7)*. Restoration of these habitats has significantly improved ecological functionality and wildlife movement within the corridor, directly supporting the conservation of key species such as the leopard, dhole, and spotted deer. The comparative analysis of the baseline (2022) and endline (2025) camera trap surveys *(Annex 5.9)* in the northern buffer zone of Parsa National Park demonstrates clear evidence of positive wildlife movement and distribution. The total number of species recorded increased with six new species including the Greater One-horned Rhino and Striped Hyena captured for the first time, bringing the combined total to 31 species. Apex predators such as tigers and leopards expanded their range, with tigers appearing in new areas like Chakari village *(Annex 5.9c)* and leopards increasing their presence from 7 to 18 stations *(Annex 5.9d)*. Prey species, including barking deer (0.528), jungle cat (0.359), and wild boars (0.412), also showed marked increases in detection rate and occupancy. Occupancy modelling revealed higher naïve and modelled estimates for key species *(Annex 5.9f)*, indicating improved habitat use and reduced detection bias. Despite the absence of a few species in 2025, the overall data supports a strong positive trend in wildlife movement, suggesting that conservation interventions have effectively enhanced ecological connectivity and species resilience in the region *(Ind 1.2, Annex 5.9)*.

In line with the project's contribution to species-specific conservation, a field-based survey on *Cuon alpinus* (dhole) was conducted in Y2 *(Annex 5.10b, 5.10c, 5.10d)*. Drawing on this research, the Dhole Conservation Action Plan (DCAP) was developed and endorsed by the Department of National Parks and Wildlife Conservation as a national 10-year plan for 2025-2035 *(Annex 5.10)*. This DCAP not only aligns with the corridor conservation efforts with species recovery priorities but also reinforces Nepal's leadership in carnivore conservation. Significantly, Nepal became the first among all dhole range countries to adopt and endorse a national conservation action plan for the species, positioning the country at the forefront for dhole conservation.

These achievements were measured using a combination of GIS data and ecological baseline assessments, wildlife monitoring tools such as endline camera trap and occupancy surveys (including dhole presence), records of stakeholder meetings and resolutions, and the official endorsements of the

Dhole Conservation Action Plan and the Parsa National Park Corridor Management Plan by the Government of Nepal. These achievement under the output 1 has established the northern PNP corridor as a critical habitat for the long-term survival of this globally threatened species.

Output 2: Reduced short-term costs from HWC, and long-term plan to manage future HWC pressures in corridors, enable communities to receive net benefits from their community-forest corridor.

Under Output 2, the project achieved robust and well-documented progress in reducing human-wildlife conflict and fostering community resilience. In line with *Indicator 2.1*, a total of 76 Human-Wildlife Coexistence (HWCx) champions (M: 45, F: 31) were recruited across all 20 Buffer Zone Community Forest User Groups (BZCFUGs), surpassing the target of 75 *(Annexes 5.11)*. These individuals received intensive orientation and hands-on training, emerging as community-based focal points for leading and facilitating HWCx interventions. For *Indicator 2.2*, a comprehensive HWC status assessment was conducted in Year 1 *(Annex 5.12)* using both ecological and community-reported data. This included population trend projections for key wildlife species and baseline HWC impact analysis. The study found a total of 13,106 HWC cases including 8,053 cases of farm crop loss, 122 cases of crop storage raids, 109 human deaths, 250 human injury, 3,935 livestock depredation and 637 cases of property damage were recorded in the TAL over the last five years. The data directly informed adaptive conflict mitigation strategies and contributed to the scientific manuscript *"**Bridging Conservation and Human-Wildlife Conflict for Coexistence**"* (*Ind 2.2)* and submitted to journal *Evolution and Ecology* compiling findings on the frequency, causes, and impacts of HWC in PNP, as well as community and wildlife responses. This manuscript captures key lessons from ongoing monitoring and management efforts and will support evidence-based conservation strategies *(Annex 5.12c)*. By contributing to the scientific literature, the project not only advances academic understanding but support policy advocacy and promote evidence-based conservation approaches within PNP and similar contexts.

Building on these insights, and fulfilling *Indicator 2.3*, participatory co-developed HWCx plans was endorsed by the respective BZUC in Y2 *(Annex 5.13)*. These plans were collaboratively designed with HWCx champions and community stakeholders, integrating findings from the ecological and social assessments to tailor locally appropriate mitigation strategies. Under *Indicator 2.4*, more than 80% of HWCx champions led or actively supported HWC drills and interventions by the end of Year 3. Community-led efforts resulted in the deployment of over 11 km of solar fencing, 325 meters of mesh wire, six solar-powered streetlights, and 200 predator-proof livestock corrals. These efforts effectively safeguarded a total of 1,660 HHs and 919 ha. of agricultural crop land from 200 PPC (200 HHs) for reduction of livestock depredation *(Annex 5.14),* maintenance of 11 km solar fence (950 HHs; 410 ha agricultural land) *(Annex 5.15)*, maintenance of three existing and installation of three new electric lights (210 HHs) *(Annex 5.15c)* and installation of mesh wire (300 HHs; 509 ha agricultural land) significantly reducing exposure to wildlife threats.

This was evident and validated through a rigorous endline household survey, comparing data across a three-year period. The survey highlighted the decrease in HWC cases with a total 39 cases were reported within 3 years in the project intervened community ***(Ind 2.5)***. In average 13 HHs faced livestock (goat, cow and pig) killed cases per year out of which only three cases occurred in the home. This shows 69% overall reduction in livestock killed by tiger and leopard cases however the rate of livestock kill in the periphery of house is reduced by 85%. Although this fell short of the 80% reduction target *(Ind 2.5)*, the number of households affected decreased by 80.85%, indicating a substantial decline in the distribution and frequency of incidents among previously impacted families. For crop raiding, 34.19% decline was recorded, exceeding the 25% target *(Ind 2.5)*. However, the total cropland area affected increased by 28.53%, primarily due to intensification of conflict in specific hotspots like Hadikhola. Additionally, a quick relief fund mechanism was also established in two BZUCs, Amleshwor and Manahari, each receiving NPR 560,000 (£3,200) *(Annex 5.16)* to provide immediate assistance to conflict affected households and foster positive community perceptions of conservation. Six instances of QRF disbursement were recorded, with NPR 125,000 (£714) disbursed in total. Given its proven effectiveness in similar landscapes, the project envisions expanding the fund through contributions from PNP and the respective BZUCs.

Overall, the results under Output 2, grounded in both community-driven action and rigorous endline data underscore the project's success in reducing HWC impacts and strengthening coexistence frameworks. Systematic identification and documentation of priority area not only informed immediate interventions for the project but also established a comprehensive knowledge repository for PNP *(Annex 5.2.13)*. This repository represents a critical asset for the PNP's long-term management, enabling data-driven decision-making, strategic planning, and targeted investment.

Output 3: Diversified livelihoods for the most marginalized community members provide a direct revenue stream from the protected area, ensuring that precarious households equitably benefit from the corridor and are not forced into the overuse of natural resources

Throughout the project implementation period, significant progress was made under Output 3 by enhancing sustainable livelihood opportunities, especially for women, Indigenous, and marginalized groups living in the buffer zones of PNP. The interventions strategically built upon foundational studies and participatory planning to support long-term socio-economic resilience.

Knowledge development was prioritized at the outset, with two studies conducted to inform intervention design: (i) documentation of indigenous knowledge and best practices on diversified livelihoods *(Annex 5.17),* and (ii) a market chain analysis to assess feasibility and demand for livelihood options identified through a socio-economic survey *(Ind 3.2.1; Annex 5.18)*. Additionally, three community-level livelihood improvement plans were prepared in consultation with 31 community members (41% women; 76% Indigenous and marginalized groups) across three community workshops *(Annex 5.19).*

In a project effort for the gender equality, community-led financial empowerment, three women-led livelihood community banks namely Surakshya, Janahit, and Makhamali Women Income Generation Committees (SWIGC, JWIGC, MWIGC) were successfully established, bringing together a total of 145 members (SWIGC: 48, JWIGC: 52, MWIGC: 45) to support the income generating activities. This achievement surpassed the Year 3 target of 40 members per bank while also significantly exceeding inclusion targets, with 99% of members being women and 82% belonging to Indigenous and marginalized communities, against the benchmark of 70% for disadvantaged and vulnerable groups *(Ind 3.1; Annex 5.20).* Each committee received an initial seed fund of NPR 10,95,000 (£6,257) *(Annex 5.20g)*, and through consistent savings and interest generation, the combined capital of the three community banks increased by 27%, reaching NPR 45,20,321 (£25,830) by the end of the project *(Source: Community bank register*). This financial growth ensures a sustainable funding mechanism that remains available to beneficiaries even after the project's completion, reinforcing long-term economic resilience and supporting continued access to finance for women-led income generation activities in the community.

This effort was made possible by the beneficiaries' increased confidence as they engaged with the operationalization of their respective community banks, supported by the project through frequent capacity-building events, including trainings, refreshers, on-site coaching, and equipment support. A total of 82 members (all women, 84% Indigenous/marginalized) received community bank management training through structured training events, enhancing their financial literacy and institutional governance capacity *(Annex 5.21).*

Table no.:1: Information of Community Bank

WIGC	Total Members	Members Accessed Loan	Members with Repeat Loans	Total Loan Instances	Amount Mobilized (NPR)	Amount Mobilized (£) *£1=NPR 175
JWIGC (Janahit)	52	49	28	86	34,85,000	£19,914*
SWIGC (Surakhsya)	48	38	21	65	29,32,000	£16,754*
MWIGC (Mahila)	45	44	34	87	36,74,000	£20,994*
Total	**145**	**131**	**83**	**238**	**1,00,91,000**	**£57,662***

Source: Community Bank record

By the end of the project, a total of 238 instances of loan being disbursed to 131 (90%) individual members out of 145 total members were recorded by these three women income generation committees (WGIC) *(Ind 3.2.2, Table no.1)*, meaning that 90% of the members of WGIC are practicing livelihood alternatives for the income generation surpassing the indicator. Among these instances, goat farming (38%) was the most preferred income generating activities (IGA) chosen by the beneficiaries while cow/buffalo farming (33%) remained second most preferred IGA followed by off farm activities (15%) like shop keeping, furniture, handicraft) and farm-based activities (7%) such mushroom farming, vegetable farming respectively for which NPR 1,00,91,000 (*£57,662) was mobilized *(Table no.1, (Annex5.22a)*. While goat was most preferred among all the WGIC, Cow farming (48%) was highly practiced in MWGIC at Manahari This engagement has demonstrated a clear and positive impact on household income, with the endline household survey indicating a substantial 33.94% increase from the baseline average of NRs 28,111.11

per month *(Ind 3.2.3, Source: Endline Household Survey)*. The Wilcoxon rank sum test with continuity correction validated this significant change in income distribution from baseline to endline value ($W = 15318$, $p < 0.01$). This significant growth serves as strong evidence of the project's effectiveness in enhancing household economic well-being *(Box 1)*. To backstop this achievement, capacity building efforts were also centered around their chosen livelihoods option to enhance their understanding and current practices. Hence, a total of 140 individuals benefited from five livelihood training events *(Ind 3.2, Annex5.22, 5.23, 5.24)*. The trainings included sessions on livestock rearing, mushroom farming, goat rearing, and two events on off-farm vegetable farming on integrated pest management (IPM) strategies and disease prevention methods tailored for off-season crops, knowledge in crop selection, cultivation techniques, and management practices specific to off-seasonal conditions. Across all trainings, participation was predominantly female 88%, with 80% of attendees belonging to Indigenous and disadvantaged groups. Analysis of pre-test and post-test results revealed a significant increase in knowledge, with improvements ranging from 22% to 89% across different trainings. On average, participants demonstrated a 41% to 45% gain in knowledge, highlighting the effectiveness of the training interventions *(Annex5.22e, 5.22i, 5.23e, 5.24d)*. Similarly, 64 youths (41% Female, 75% indigenous and marginalized group) were benefitted with skills-based vocational training such as nature guide and hospitality with 48% average knowledge gain *(Annex 5.25, 5.26, 5.27)*. Most of the participants at the event in Amlekhgunj on Hospitality were the members from the homestay that was supported by the project in Year 2. As a result of the program, participants are actively pursuing official nature guide licenses from PNP, signifying their advancement towards formal roles in tourism services. Additionally, all hospitality training participants have received certificates, qualifying them for employment in the hospitality sector. These achievements contribute directly to *Indicator 3.2.4* and are expected to support not only individual livelihoods but also household resilience through potential employment, including dignified foreign labor markets.

Supporting further to promote sustainable eco-tourism, key tourism-related activities were implemented during the project period. These included the integration of public consultation into PNP's management plan through the Initial Environmental Examination (IEE) process *(Annex 5.28)*. Feedback from stakeholders including BZUCs, CFUGs, CBAPU, hoteliers, and local authorities emphasized the need for enhanced tourism infrastructure, wetland site development, and homestay promotion, which were incorporated into the park management plan *(Ind 3.3, Annex 5.28b)*. A documentary was prepared highlighting the major attractions within PNP, including jungle safaris, prominent wildlife species, tourist spots, and religious sites. This documentary broadcasted on the PNP YouTube channel, that has reached 5.4K views *(Annex 5.29)*. The project team also leveraged the platform of a major local fair in Jitpur Simara Municipality, engaging over 47,300 attendees *(Source: Jitpur Simara Municipality based on the ticket sold)* and contributing to Indicator 3.4 *(Annex 5.30)*. Physical promotional assets such as hoarding boards near the Nepal–India border and digital displays at Simara Airport in Nepal, and collaboration with Janakpur Metropolitan City led to the installation of promotional materials at Janaki Temple, extended PNP's visibility *(Annex 5.31)*, supporting to achieve Indicator 3.4. Further, the project also harnessed the power of digital media to expand outreach. A Human-Wildlife Conflict awareness video—broadcast through platforms such as TV Birgunj *(26.2k views)* and Dhukka *(59.2k views)* pulled together wide public engagement. Recognizing its relevance and impact, the National Disaster Risk Reduction and Management Authority (NDRRMA) officially shared the video on its Facebook page, signifying a major policy shift in acknowledging HWC within the national disaster risk discourse. The video reached an exceptional 444,000 views, marking a pivotal shift in framing HWC as a national disaster risk issue, amplifying national awareness and reinforcing the urgency and relevance of HWC within public and policy spheres.

Box 1.: Sita's Story

Sita is also the chairperson of the Makhamali WIGC since its establishment. Selected as a project beneficiary through a well-being ranking process, her story highlights the impact of targeted interventions aimed at empowering marginalized communities. She has taken vegetable farming and the livestock farming training provided by the project which she has skilfully utilized the knowledge and resources to build a better future for herself and her family. Initially, Sita took a loan of NPR 50,000 from her group and leased 10 Kattha of land to start vegetable farming. Her dedication and hard work paid off as she successfully managed her farming venture, repaid the loan, and gained the confidence to expand her livelihood activities. Encouraged by her success, she secured another loan of NPR 70,000 to venture into cow farming. Through this initiative, she now produces and sells 7-8 liters of milk daily, earning a stable monthly income of around NPR 15,000. This income has not only enabled her to support to meet household expenses and provide better care for her family but has also inspired other group members to pursue similar ventures with dedication. Her journey highlights the tangible impact of the project and underscores the importance of continued support for such initiatives.

Similarly, to enhance the visitor experience at Parsa National Park, the Elephant Information Centre was established at Hattisar in Amlekhgunj, offering engaging educational content on elephant ecology and conservation *(Annex 5.32).* The visitors who visit the Elephant captivity center will have the unique opportunity to deepen their understanding of these majestic creatures fostering a connection between the public and wildlife, while promoting responsible tourism and conservation efforts within the park. Complementing this initiative, a watch tower *(Annex 5.32d)* has also been constructed at the Hattisar at PNP. While the Information Centre enriches knowledge and awareness *(Annex 5.32c)*, the watch tower adds to the sense of adventure and fulfilment, allowing visitors to observe wildlife in their natural habitat. Together, these not only deepens visitor engagement and satisfaction but also promotes stronger support for wildlife protection and conservation efforts. Additionally, another watch tower has been constructed near 'Kamini Daha' in the buffer zone forest of Amleshwor BZUC *(Annex 5.32e).* This site, characterized by the presence of both wetland and grassland habitats, is a frequent wildlife sighting area ideal for grazing, and water access. Located just 3.5 km from the elephant breeding centre in Amleshwor BZUC, this location offers potential for integrated tour packages. As such, both PNP and the BZUC are prioritizing tourism development at this site to further expand sustainable and nature-based tourism opportunities in the region. Besides, to ensure coordinated tourism planning, local-level workshops were held, bringing together 160 stakeholders from the PNP region *(Annex 5.33)*. These discussions generated actionable recommendations for cultural events, infrastructure development, transport improvements, and packaged tourism experiences. Further, the project also supported the installation of directional signage inside the park to assist visitors in navigating to key attractions *(Annex 5.34)*.

These collective efforts led to a substantial increase in tourism, with 1,786 visitors recorded during the project period (1,605 national and 181 SAARC/international), far surpassing the baseline of 152 tourists and fulfilling Indicator 3.5 *(Source: Parsa National Park report)*. This growth, alongside strengthened local capacity in tourism services, indicates strong future potential for income diversification in buffer zone communities. The rise in tourism also contributed to Indicator 3.6, which tracks increases in tourism-related income. A project-supported homestay generated NPR 99,050 (approx. £566) through accommodation and local product sales, providing tangible evidence of the benefits of eco-tourism development *(Annex 5.35b)*. These integrated, community-driven efforts underscore the project's lasting impact on local livelihoods, economic resilience, and sustainable tourism in and around Parsa National Park.

Output 4: Enhanced agroforestry practices adopted throughout the community-forest corridor, laying foundations for long-term forestry revenues and sustainable corridor connectivity across Parsa National Park.

Under this output, the project surpassed multiple key targets, demonstrating strong progress in building climate- and conservation-resilient livelihoods. A total of 286 (Y1:65, Y2:140, Y3:81) community members from targeted buffer zone communities were trained in enhanced agroforestry practices, exceeding the original target of 200 *(Annex 5.36)*. These capacity-building efforts were designed to be inclusive and equitable, with 72% women and 77% participants representing indigenous, marginalized, and disadvantaged groups surpassing the minimum requirement of 50% participation from women and low-income groups *(Ind 4.1).* The trainings equipped participants with practical knowledge and skills in sustainable agroforestry techniques, integrated pest management, nursery management, and scientific planting methods. As a result, participants demonstrated an average knowledge gain of over 21% *(Annex 5.36d)*.

Parallel efforts under *Indicator 4.3 and 4.4* supported 196 community members (77% of them women and 98% from indigenous and marginalized groups) through the distribution of 11,150 seedlings of fodder and grass *(Annex 5.37).* These included fruit trees, bamboo, and fodder species aimed at increasing the availability of essential resources near homesteads. The long-term objective is to improve household resilience while reducing dependence on the forest for fuelwood, forage, and other materials. Further, 5,000 tiger grass (Amliso) plants, valued for their use in broom-making and other household applications, were distributed specifically targeting 20 low-income, land-owning households (100% female, 91% from indigenous and marginalized groups) who each received between 100 and 500 tiger grass seedlings based on their land capacity and household needs. The remaining tiger grass was planted in degraded zones under the Janahit Buffer Zone Forest User Group to support natural regeneration. By promoting tiger grass cultivation, the project is diversifying income streams while contributing to environmental conservation. The plant's multiple applications for thatch roofing, crafts, brooms, and animal feed create alternative sources of livelihood and reduce extraction pressure on nearby forests.

Additionally, agroforestry was integrated with the cultivation of cash crops designed to deter wildlife. A total of 1,900 kilograms of ginger, 2,045 kilograms of turmeric, 1,425 lemon seedlings, and 120 packets of chili seeds were distributed to 194 households (79% women, 87% indigenous and marginalized groups). These crops not only serve as natural wildlife deterrents but also offer high market value, thereby enhancing local

income opportunities *(Ind 4.3, Annex 5.38)*. Turmeric seeds used for distribution in Year 3 were procured from Surakshya WGIC members who were supported in Year 2. A total of 625 kg was purchased, generating NPR 87,500 (£500) in income for the 25 beneficiaries *(Ind 3.2.3, Annex 5.38d)*. This not only validated the economic potential of community-based agroforestry production but also reinforced local market linkages, encouraging continued cultivation. Beneficiaries increasingly recognize cash crops as a perennial income source, enhancing household financial stability while minimizing human-wildlife conflict.

To institutionalize sustainable nursery operations, a groundbreaking tripartite agreement was established between the Janahit BZCFUG of Lokhit BZUC, Mithila Wildlife Trust, and Lokhit BZUC for the joint management of the community nursery *(Ind 4.2) (Annex 5.39)*. Key infrastructural improvements, including mesh wire fencing and nursery bed establishment, were implemented to enhance the nursery's productivity and protection. This initiative not only ensures a consistent supply of quality planting material but also reinforces community ownership in forest landscape restoration.

Although the Ind 4.2 was not meet within the project time frame, the project anticipates the functionality of the nursery providing continual supply of fodder seedlings required for the community. Total of 690 household received agroforestry support *(Ind 4.3, Annex 5.36, 5.57, 5.38)* which accounts for 60% of total household i.e.,1149Hhs of three BZCFUGs namely, Churiyamai BZCFUG (299Hhs), Lokhit BZCFUG (120Hhs) and Jyamire BZCFUG (730 Hhs). Together, these efforts have catalysed the adoption of enhanced agroforestry practices throughout the community-forest corridor, establishing a scalable model for sustainable forestry-based revenues and contributing meaningfully to long-term connectivity and ecological resilience across the Parsa National Park landscape.

3.2 Outcome

The outcome achievement is strongly justified by the project's measurable achievements across ecological, socio-economic, and governance indicators. The establishment of a joint participatory management framework *(Output 1, 1.1, 1.2, 1.3,1.4)* ensured inclusive governance, with 20 Buffer Zone Community Forest User Groups (BZCFUGs) (Ind 1.1) revising operational plans for 2,184.93 hectares (Ind 1.2), surpassing the target of 1,000ha *(Ind 0.1)*. Ecological restoration *(Ind 1.3),* 3 wetlands, 100ha grasslands, 50ha regeneration and wildlife monitoring confirmed enhanced connectivity, evidenced by increased species diversity (e.g., tigers, leopards, and Greater One-horned Rhino expanding ranges) and the adoption of Nepal's first Dhole Conservation Action Plan. The endline camera trap survey conducted from January to February 2025 in the Northern Buffer Zone of Parsa National Park demonstrates clear ecological gains and effective conservation outcomes compared to the baseline survey from early 2023. With expanded survey effort 41 operational camera stations (up from 32) and 798 operational days (compared to 578) the study allowed for more robust species detection. The survey highlighted a measurable 10% or greater increase in occupancy of small and medium-sized mammals in the community-managed forest corridors and adjoining agroforestry sites, indicating positive impacts from habitat management interventions *(Ind 0.2)*. Key species such as the leopard cat *(Felis bengalensis)* saw an increase from a baseline occupancy of 0.473 to 0.505, while jungle cat *(Felis chaus)* rose from 0.228 to 0.359, and wild boar *(Sus scrofa)* increased from 0.262 to 0.412. Similarly, Indian hare *(Lepus nigricollis)* showed a rise from 0.184 to 0.15 (slight fluctuation), and barking deer *(Muntiacus vaginalis)* maintained a high occupancy, improving slightly from 0.525 to 0.528. While the Indian crested porcupine *(Hystrix indica)* was not included in baseline estimates due to low detections, its endline occupancy rose to 0.098 reflecting improved detectability and likely habitat use. These trends suggest that targeted actions such as native vegetation enrichment, corridor restoration, reduction of anthropogenic pressures, and promotion of agroforestry mosaics have contributed to enhancing landscape connectivity and ecological suitability for these species *(Ind 1.3, 1.4, 2.3, 3.2.2, 3.2.3, 4.1, 4.3)*. The observed increase in occupancy, particularly within community-use areas, confirms that well-managed human-dominated landscapes can support and sustain diverse mammal populations, reinforcing the value of inclusive, community-based conservation strategies in buffer zones. A particularly significant achievement was the marked increase in tiger activity: the number of independent tiger events rose from 6 in the baseline to 7 in the end line, and the number of stations detecting tigers increased from 3 to 5 *(Annex 5.9c)*. Importantly, tigers were recorded for the first time in the Chakari area suggesting expansion of their range within the buffer zone *(Ind 0.3)*. This indicates either an increase in tiger numbers, greater movement across the landscape, or improved detectability, all signs of a positive conservation outcome. Leopard activity also surged, with independent events more than doubling from 17 to 42 and the number of detection stations leaping from 7 to 18.

To assess progress against Indicator 0.4, an increase in well-being for 50% of households in project sites within the community-forest corridor (disaggregated by gender, income, and ethnicity) from Year 1 baseline to Year 3, a total of 84 direct beneficiary households (50%, 168 surveyed) were tracked, having been

surveyed both at baseline and endline. Over the three-year period, the well-being index of these 84 households improved (0.39 to 0.41), meeting the 50% target *(Source: Endline Household Survey)*. Site-wise, the highest proportion of households showing increased well-being was recorded in Hadikhola, where 28 households (65.12%) improved, followed by Amlekhgunj with 31 households (50%) and Manahari with 25 households (39.68%). Disaggregated by ethnicity, 100% of households from the Bote and Bhujel/Chaudhary communities reported an increase in their well-being index, followed by Magar (87.5%), Tamang (56.6%), Chepang (50%), Chetri (47.37%), Others (Shah/Rajbanshi) (45.45%), Newar (44.44%), Brahmin and Thakuri (each 42.86%), and Rai (33.33%). These findings demonstrate meaningful progress toward the indicator supported through the achievement of Output indicator 3.1, 3.2, 3.22, 3.2.3 while also highlighting variations across sites and ethnic groups that can inform future targeted support. Similarly, the efforts to reduce human-wildlife conflict (HWC), Output 2 directly supported household HWC burden index (Ind 0.5). An analysis of endline household survey revealed that the HWC burden index in the project site decreased by 80% overall by Year 3. Site-wise reductions were substantial, with Hadikhola showing an 81.67% decrease, Manahari 82.5%, and Amlekhgunj 76.67%. Disaggregated by ethnicity, the burden index reduction was highest among Chepang (93.02%), Brahmin (92%), Tamang (81.13%), Janjati (79.6%), Bote (79.07%), Others (78.72%), Dalit and Rai (76.19%), Chettri and Thakuri (73.68%), Newar (72.98%), and Magar (33.33%). In terms of beneficiary households, 96.73% reported a lower HWC burden index compared to baseline, far exceeding the 60% target. All households from Amlekhgunj (100%) that experienced HWC at baseline reported reduced burden by Year 3, followed by Hadikhola (95.45%) and Manahari (94.74%). Ethnic group comparisons showed nearly uniform reductions in burden across all categories. These results indicate a substantial and widespread decline in human-wildlife conflict burden, supporting the effectiveness of project interventions aimed at reducing vulnerability and dependence on natural resources *(Source: Endline Household Survey).* This outcome highlights a key learning for future interventions that thoughtfully designed and balanced approaches can lead to increased wildlife presence *(Ind 0.2, 0.3)* while effectively reducing human-wildlife conflict *(Ind 0.5)*, thereby fostering sustainable coexistence between communities and nature.

The project has successfully achieved Outcome 0.6, with 100% of the 286 trained community members now actively practicing agroforestry *(Ind 4.1).* These individuals, drawn from targeted buffer zone communities, received capacity-building support in enhanced agroforestry techniques, including integrated pest management, nursery development, scientific planting, and sustainable land use. Participants demonstrated an average knowledge gain of over 21%, and their engagement reflects a clear increase in willingness to conserve and contribute to revenue mechanisms that support community forestry. As a direct result of these interventions, the willingness to pay for conservation increased by 81.20% overall, demonstrating strong behavioral change in support of sustainable resource management. Site-specific data shows an increase of 76.19% in Amlekhjung, 81.75% in Hadikhola and 84.72% in Manahari, underscoring localized progress in conservation commitment *(Source: Endline Survey)*. In total, 390 households benefited directly from agroforestry interventions. Of these, 196 households (77% women, 98% marginalized) received fodder, fruit, and bamboo seedlings to enhance local resource availability and reduce forest dependency. Another 194 households (79% women, 87% marginalized) received cash crops including 1,900 kg of ginger, 2,045 kg of turmeric, 1,425 lemon seedlings, and 120 packets of chili seeds intended both for income generation and as natural deterrents to wildlife. Additionally, 20 low-income, female-headed households (91% from marginalized groups) received 5,000 tiger grass (Amliso) seedlings, with the remainder planted on degraded forest land by the Janahit Buffer Zone Forest User Group to support regeneration.

Collectively, these outputs validate the outcome: ecological connectivity was secured through community-led management, while wellbeing improved via reduced HWC, diversified livelihoods, and equitable benefit-sharing—aligning with all indicators (0.1–0.6). The project's participatory approach, data-driven adaptive management, and institutionalization of plans (e.g., corridor charter, DCAP) ensure long-term impact for both biodiversity and marginalized communities.

3.3 Monitoring of assumptions

Outcome:
Assumption 1: Department of National Parks and Wildlife Conservation (DNPWC) and Department of Forests and Soil Conservation (DoFSC) remain supportive of this initiative to strengthen connectivity.
Comments: PNP endorsed corridor plan and DNPWC endorsed Dhole conservation action plan. Also, PNP provided space for establishing visitors' information centre and provided guidance to habitat management activities.

Assumption 2: Compounding climate change and infrastructure development threats to Nepal's lowland protected areas continue to escalate, demanding a policy response to secure connectivity to higher altitudes – as will be piloted in this proposal.
Comments: Still holds true.

Assumption 3: Small mammals' rapid response to habitat conditions, without extraordinary climate events during the life of the project, will enable them as an effective indicator of connectivity recovery for efforts across Nepal, in advance of forests recovering sufficiently to enable widespread large mammal movement.
Comments: Camera trap and occupancy surveys revealed positive trends of wild animals' presence.

Assumption 4: Community indices designed by ZSL from our experiences (including DI 26-012) remain appropriate for the local context.
Comments: Still holds true. The baseline survey used the same indices.

Output 1:
Assumption 5: BZCFUGs recognise the benefits of joint management (as experienced on other ZSL Nepal projects), supported by benefits from other outputs, and all members commit to the management guidelines.
Comments: Corridor Plan endorsed and 20 BZCFOP revised.

Output 2:
Assumption 6: By building local capacity to manage HWC issues (as in Integrated Tiger Habitat Conservation Project [ITHCP] Phase I), and establishing community members as hubs of expertise, long-term community resilience and adaptability in the face of changing HWC pressures is supported (without extraneous factors greatly influencing or increasing HWC beyond the levels currently predicted).
Comments: Still holds true.

Assumption 7: A 80% reduction livestock kill and 20% reduction on crop raiding for the median household is both achievable (as evidenced by the results of the ITHCP Phase I and IUCN Nepal - Tiger in Nepal projects) and sufficient to drive a substantive shift in attitudes as attributable to this particular project.
Comments: HWC burden index in the project site decreased by 80% overall by Year 3.

Output 3:
Assumption 8: Take up of loans from community banking cooperatives is high and enables the economic barriers to new livelihood adoption to be overcome, as seen in previous ZSL projects (e.g., DI 22-009, DI 26-012).
Comments: Loan was disbursed 238 times to 131 members *(Ind 3.2.2)*

Assumption 9: By targeting the low-income, disadvantaged and vulnerable parts of the community for development of this direct revenue stream (e.g., DI-26-012 and DI 24015), those community members most likely to be forced into unsustainable natural resource dependency are sufficiently supported to avoid this outcome, substantially reducing the risk of such overuse.
Comments: Still holds true.

Assumption 10: Trends indicating the likelihood of increased tourism to Parsa National Park continue, and commitment from DNPWC to manage tourism levels can be effective with benefit-sharing commitments to buffer zone communities, as with Chitwan and Bardia NPs.
Comments: Still holds true.

Assumption 11: No travel bans, or lock downs imposed by government due to increased COVID-19 cases. Travel and tourism activities are promoted locally, nationally and globally with adequate preventive measures during COVID-19 pandemic. National and international tourists are willing to travel following required COVID-19 preventive protocols.
Comments: Still holds true. No travel bans or lock downs imposed by government this year.

Output 4 Enhanced agroforestry practices adopted throughout the community-forest corridor, laying foundations for long-term forestry revenues and sustainable corridor connectivity across Parsa National Park.
Assumption 12: Laying the foundations for biodiversity-friendly production forests now will ensure the community-forest corridor is supported to provide connectivity into the future as timber harvests are made.
Comments: Still holds true.

Assumption 13: Increased long-term forestry revenues (outside project timeframe) will secure the financial incentives for corridor management for the community.
Comments: Still holds true.

Assumption 14: Sustainable water management, through tree choice, will ensure the long-term sustainability of the agroforestry, the corridor, and Parsa National Park itself (which is dependent on

Nepal's rivers to maintain its grasslands), and raising the profile of the area will prompt the government of Nepal longer-term to recognize and ameliorate water management issues outside the NP.
Comments: Still holds true.

3.4 Impact

"***Secured sustainable connectivity from the crucial lowland PAs to the Shivalik and eastern Terai Arc Landscape using community forest networks as corridors"***

The project significantly contributed to biodiversity conservation by enhancing ecological connectivity and species recovery in the Terai Arc Landscape. Through the establishment of a joint participatory corridor management framework (Ind 0.1, Ind), the restoration of three wetlands, 100 hectares of grassland, and 50 hectares of degraded forest, the habitat suitability and landscape permeability improved for key wildlife species. Camera trap and occupancy surveys revealed positive trends: tiger presence expanded to new areas (Ind 0.3), and leopard detection stations increased from 7 to 18, while species diversity rose from 25 to 31, including new records of Greater One-horned Rhino and Striped Hyena (Ind 0.2). The development and national endorsement of the Dhole Conservation Action Plan (2025–2035) further advanced carnivore conservation efforts, positioning Nepal as a leader in dhole conservation. These interventions, grounded in scientific evidence and community engagement, contribute directly align with various treaties and convention such as Convention on Biological Diversity (CBD), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), United Nations Framework Convention on Climate Change (UNFCCC) and contributes directly to Nepal's Nationally Determined Contributions (NDCs), Nepal's NBSAP and TAL Strategic Plan.

On the other hand, the project interventions achieved tangible improvements in human wellbeing, particularly among Indigenous Peoples, women, and marginalized groups. Three women-led community banks supported 145 members (99% women, 82% marginalized) and disbursed 238 loans (times), enabling 90% of members to engage in income-generating activities (Ind 3.2.2). These activities led to a 33.94% average increase in household income, validated by statistical testing (Ind 3.2.3). Skills-based trainings benefited 140 individuals (88% women), and 64 youths received vocational training in hospitality and eco-tourism (Ind 3.2.4). The number of tourists increased tenfold, and a project-supported homestay earned NPR 99,050, supporting local income and reinforcing sustainable tourism (Ind 3.6). The wellbeing index of 50% of surveyed households improved, meeting the core poverty reduction objective (Ind 0.4). By reducing human-wildlife conflict by 80% through community-led mitigation (e.g., solar fencing, predator-proof corrals), the project also alleviated vulnerability and safeguarded livelihood assets (Ind 2.5). These outcomes demonstrate the project's strong alignment with Darwin's poverty reduction goals through inclusive development and ecological sustainability.

4 Contribution to Darwin Initiative Programme Objectives

4.1 Project support to the Conventions, Treaties or Agreements

The project is closely aligned with international environmental agreements and national climate goals. It supports the objectives of the Convention on Biological Diversity (CBD) through targeted ecosystem restoration, species protection, and community-based conservation *(all outputs)*. In alignment with the CITES *(Ind 0.2, Ind 0.3, Ind 2.2)*, the project contributes to the protection and monitoring of species listed in Appendices I, II, and III within Parsa National Park such as the Royal Bengal Tiger (*Panthera tigris*, Appendix I), Fishing Cat (*Prionailurus viverrinus*, Appendix II), and Crab-eating Mongoose (*Herpestes urva*, Appendix III). It further supports the Convention on the Conservation of Migratory Species of Wild Animals (CMS) by conserving key habitats and corridors essential for migratory species. The project also complements the goals of the United Nations Framework Convention on Climate Change (UNFCCC) and contributes directly to Nepal's Nationally Determined Contributions (NDCs) by promoting climate-resilient practices, enhancing forest carbon stocks, and strengthening nature-based adaptation measures at the community level *(Ind 0.1, Ind 0.6, Ind 1.2, Ind 1.4, Ind 4.1, Ind 4.3)*.

National Biodiversity Strategy and Action Plan (NBSAP): The project contributed to deliver Nepal's NBSAP through various activities which align with NBSAP strategies. For example, management of degraded habitats (three wetlands and 100 ha of grassland) *(Ind 1.3, DI-D01a)*, and regeneration of 50 ha of degraded forest area *(Ind 1.3, DI-D01b)*, the endorsement of Corridor plan *(Ind 0.1, 1.1, 1.2, DI-B01)* have contributed to "improvement in protected areas habitats and connectivity (PA-C)" and "improving connectivity of natural ecosystems, particularly north-south connectivity (CC-B2)" strategies. Similarly, three HWCx plan *(Ind 2.3, DI-B03)* and livelihood improvement plan *(DI-B04)* endorsed by the respective BZUCs of the project site contributed to the "preparing community-based organizations for conservation-friendly management of their forests, with a particular focus on women, disadvantaged and Indigenous groups *(CE-A).* The formulation of Dhole conservation Action plan *(DI-B02),* contributed to Improvement in management of protected area and species (PA-A). Revisions to the 20 BZCFOPs *(Ind 1.2, DI-B07)* have contributed to the "improvement in conservation of biodiversity in community managed forest (FB-

C)" strategy. The agroforestry training and practices *(Ind 4.1)* is contributing to the improving management of agrobiodiversity (AB-A) strategy. Engagement of 82% women and 86% Indigenous and disadvantaged groups across the overall project activities is contributing to "empowering women and other disadvantaged groups through financial and technical capacity building for conservation, sustainable use and access to equitable sharing of benefits (GSI-B3)" strategy.

Terai Arc Landscape (TAL) Strategic and Action Plan 2015–2025: The project made significant contributions to the implementation of the TAL Strategic and Action Plan 2015–2025, which aims *"to conserve the ecosystems of the Terai and Churia hills in order to ensure the integrity of ecological, economic, and sociocultural systems and communities."* Throughout its implementation, the project supported several key strategies under the TAL framework, including ***Strategy 1.1*** through the endorsement of Corridor Plan by Parsa National Park *(Ind 0.1, 1.1, DI-B01).* The project restored three wetlands and 100 hectares of grassland and 50 hector of regeneration *(Ind 1.3, DI-D01a, DI-D01b*), thereby contributing to the improved management of degraded habitats ***(Strategy 1.3, 1.4)***. Project also formed and trained 76 HWCx champion *(Ind 2.1)* to taken collaborative action against the HWC issues around the project communities. The project further supported *(Ind 2.4)* the maintenance of over 11 km of solar fencing, 325 meters of mesh wire, six solar-powered streetlights, and 200 predator-proof corrals ***(Strategy 1.7)***. Further. By promoting regeneration of 50 hectares of degraded forest *(Ind 1.3, DI-D01b)* and the revision of 20 Buffer Zone Community Forest Operational Plans (BZCFOPs) *(Ind 1.2, DI-B07)* supported efforts to promote long-term forest sustainability ***(Strategy 10)***. In support of ***Strategy 14,*** agroforestry training and implementation (Ind 4.1) advanced integrated land-use practices that benefit both livelihoods and forest conservation. Moreover, the establishment of three women-led community banks (Ind 3.2) enhanced local livelihoods and fostered inclusive, conservation-linked economic development ***(Strategy 16)***.

Other National Policies and Plan: Revisions to 20 BZCFOPs *(Ind 1.2, DI-B07)* contributed to the National Forest Policy 2019. Management of degraded habitats (three wetlands and 100 ha of grassland) and regeneration of 50 ha of degraded forest area *(Ind 1.3, DI-D01a, DI-D01b)* contributed to the targets around the "Restoration of Habitats and Strengthening Ecological Connectivity for Wildlife" of Nepal's National Adaptation Plan (NAP). All project activities are in line with the Parsa National Park and its Buffer Zone Management Plan (2024).

Sustainable Development Goal (SDG): The project is contributing to various SDG goals. Establishment and functioning of three women-led community banks for livelihood activities (Ind 3.2) and engagement of 82% women and 86% indigenous and disadvantaged groups in overall project activities is contributing to SDG 1 and SDG 8 *(Ind 0.4)*: No Poverty (through fostering sustainable livelihoods for marginalised communities), and Promote sustained, inclusive and sustainable economic growth, productive employment and decent work for all; SDG 2: End hunger, 5: Gender Equality (through supporting women's greater participation in decision-making on natural resource management); 10: Reduced Inequalities (through improving wellbeing and financial resilience of indigenous and marginalised people). Management of degraded habitats (three wetlands and 100 ha of grassland) and regeneration of 50 ha of degraded forest area (Ind 1.3, *DI-D01a, DI-D01b*) contributed to SDG 15: Life on Land (through improving habitats for threatened wildlife and plants).

4.2 Project support for multidimensional poverty reduction

The project made a demonstrable and multidimensional contribution to poverty reduction by improving human development, economic resilience, and overall wellbeing within buffer zone communities surrounding Parsa National Park, with a deliberate focus on women, Indigenous Peoples, and marginalized groups. Through inclusive and sustainable livelihood interventions, the project enhanced income security, built capacity, and supported long-term community empowerment.

Under **Indicator 3.1**, three women-led livelihood community banks SWIGC, JWIGC, MWIGC were successfully established, bringing together 145 members (SWIGC: 48, JWIGC: 52, MWIGC: 45), exceeding the Year 3 target of 40 members per bank. These banks achieved 99% women's participation and 82% representation from Indigenous and marginalized groups well above the 70% benchmark demonstrating exceptional inclusion. Each group received seed funding of NPR 10,95,000 (£6,257), and by the project's end, combined capital had increased by 27% to NPR 45,20,321 (£25,830), creating a self-sustaining, community-managed financial mechanism to support income-generating activities.

During the project period, a total of 238 instances of loan disbursement were recorded, benefitting 131 out of 145 members (90%), who are now engaged in diverse livelihood practices (Ind 3.2.2) out of which 99% were women and 91% were indigenous and marginalized group. Out of these 131 members, 66 members have at least taken twice or more soft loan from their respective community bank allowing them to invest and diversify their income generating activities *(Table no.1)*. These outcomes were enabled by continuous capacity-building efforts, including targeted training and on-site coaching for bank executives. Out these livelihood practices, Goat farming (39%) emerged as the most preferred income-generating activity (IGA),

followed by cow/buffalo farming (33%), off-farm businesses (15%), and farm-based activities (7%), with NPR 1,00,91,000 (£57,662) mobilized to support these IGAs *(Table No.1, Annex 5.22a*). The impact of these interventions is evident under **Indicator 3.2.3**, with an endline household survey depicting increase in income by 33.94% from a baseline average of NPR 28,111.11, validated by a Wilcoxon rank sum test ($W = 15318$, $p < 0.01$), confirming statistically significant improvement in income distribution and project's contribution in poverty reduction. Capacity-building was central to this success. 140 individuals (88% of them women, and 80% from Indigenous/marginalized backgrounds) received livelihood training on livestock and goat rearing, mushroom farming, and integrated pest management for vegetable farming (Ind 3.2). All participants received certificates supporting future engagement in formal employment or enterprise development. Additionally, under **Indicator 3.2.4**, 64 youths (41% female, 75% Indigenous/marginalized) participated in vocational training such as nature guiding and hospitality, achieving an average knowledge gain of 48%. Most hospitality participants came from the Amlekhgunj event and were linked to project-supported homestays, contributing to enhanced tourism in Parsa National Park. Furthermore, efforts to promote ecotourism contributed to community income with a total of NPR 99,050 (£566) by a project-supported homestay through accommodation services and the sale of local products (Ind 3.6). Similarly, 25 beneficiaries generated NPR 87,500 (£500) by selling the cash crop that were promoted by the project during Y2 as agroforestry and wildlife deterrent cash crop further supporting Indicator 3.2.3.

4.3 Gender Equality and Social Inclusion (GESI)

GESI Scale	Description	Put X where you think your project is on the scale
Not yet sensitive	The GESI context may have been considered but the project isn't quite meeting the requirements of a 'sensitive' approach	
Sensitive	The GESI context has been considered, and project activities take this into account in their design and implementation. The project addresses basic needs and vulnerabilities of women and marginalised groups, and the project will not contribute to or create further inequalities.	
Empowering	The project has all the characteristics of a 'sensitive' approach whilst also increasing equal access to assets, resources and capabilities for women and marginalised groups	**X**
Transformative	The project has all the characteristics of an 'empowering' approach whilst also addressing unequal power relationships and seeking institutional and societal change	

The project strategically integrated GESI across its design, implementation, and monitoring frameworks to ensure that women, Indigenous Peoples, and other marginalized groups were not merely passive participants but active decision-makers and direct beneficiaries of project outcomes. This intentional focus was informed by baseline assessments and continuous community engagement, enabling the project to remain contextually relevant and responsive to the evolving needs of diverse groups. A critical component of this GESI mainstreaming was the collection and use of disaggregated demographic data (Ind 3.1, 3.2, 3.2.2, 4.1), allowing the project team to track participation, benefit flows, and equity impacts by gender, ethnicity, and socio-economic status. This data-driven approach facilitated timely course corrections and ensured equitable access to project benefits throughout its lifecycle.

One of the most significant outcomes was the formal establishment and registration of three women-led Inclusive community Banks i.e., SWIGC, JWIGC, and MWIGC with 99% female membership, 82% of whom belong to Indigenous and marginalized communities *(Ind 3.1)*. These institutions became key platforms for economic empowerment and self-governance, challenging and reshaping prevailing norms around women's roles in financial decision-making. The transformative impact was evident in Indicator 3.2.2, which recorded 238 loan disbursement instances to 131 members (99% of them women, and 91% from Indigenous or marginalized backgrounds). These loans enabled members to launch or expand livelihood activities, contributing to measurable financial independence, as reflected in the endline survey, which reported a 33.94% increase in women's income levels. The project also prioritized those facing compounded vulnerabilities, including female-headed households, ethnic minorities such as the Chepang, Bote, and Magar communities, individuals with high exposure to human-wildlife conflict (HWC), and landless or land-poor populations. Under Indicators 3.2, 3.2.2, and 4.1, these groups received targeted support in agroforestry training, predator-proof corral construction, and high-value cash crop cultivation.

These interventions not only enhanced livelihoods but also provided essential protection against HWC-related risks, contributing to both economic resilience and safety. To ensure that participation did not exacerbate women's time burdens, the project deliberately tailored delivery methods to accommodate existing care responsibilities. This included offering flexible and locally accessible training sessions and venue and promoting income-generating activities such as goat farming and off-season vegetable production that aligned with traditional household roles without reinforcing gendered labor hierarchies. As a result, under Indicator 3.2, 140 individuals (88% women, 80% Indigenous/marginalized) were trained in livestock management, mushroom cultivation, and integrated pest management, equipping them with sustainable livelihood skills. Youth inclusion was also addressed, with particular attention to intersecting barriers related to gender and ethnicity. Under Indicator 4.1, 64 young people (41% women, 75% Indigenous or marginalized) successfully completed vocational training in eco-tourism, enhancing their employability and contributing to intergenerational equity in access to opportunities.

4.4 Transfer of knowledge

Knowledge was treated as a dynamic, co-created process—developed with stakeholders, rigorously documented, and widely disseminated to maximize practical application and long-term conservation impact. At the national policy level, the project led the development of Nepal's first Dhole (Asiatic Wild Dog) Conservation Action Plan (2025-2035), a milestone contribution created in partnership with the DNPWC, species experts, and park staff. The plan addresses key threats to a neglected carnivore species and promotes ecosystem-level conservation through corridor and community-based approaches.

At Park level, a central output was the development of a comprehensive knowledge repository for PNP, based on the systematic identification and documentation of priority conservation areas. This repository has directly informed project interventions and now serves as a foundational tool for evidence-based planning, targeted investment, and adaptive park management. *"Bridging Conservation and Human-Wildlife Conflict for Coexistence"* submitted in peer-reviewed journal *Evolution and Ecology*, expanded the project's reach to academic, policy, and practitioner audiences, while offering a replicable model for similar conservation contexts. Scientific field monitoring, including camera trap surveys in the northern buffer zone, generated actionable data on wildlife movement and species distribution. These insights were shared with park authorities to strengthen landscape zonation and prioritize conservation investments, reinforcing the ecological significance of the corridor landscape. In addition, the project facilitated the endorsement of an inclusive Wildlife Corridor Charter, a policy tool that establishes principles for maintaining ecological connectivity across administrative boundaries, while explicitly upholding the rights and roles of Indigenous Peoples and marginalized communities.

To promote institutionalization and community-level uptake, key findings were embedded into the revision of 20 BZCFOPs. These updated plans now include practical mechanisms for HWC mitigation, climate resilience, and equitable benefit-sharing ensuring forest management aligns with both ecological dynamics and social equity. Further reinforcing public engagement and conservation education, the newly established Elephant Information Centre at Hattisar (Amlekhgunj) now serves as a permanent learning hub for visitors. The project also harnessed the power of digital media to expand outreach. A Human-Wildlife Conflict awareness video broadcasted through platforms such as TV Birgunj, Dhukka and National Disaster Risk Reduction and Management Authority (NDRRMA) earned wide public engagement, marking a pivotal shift in framing HWC as a national disaster risk issue, amplifying national awareness.

4.5 Capacity building

Training on HWC management and wildlife rescue training was provided to 25 participants including game scouts (10), Nepal Army (5), community members (10) *(Annex 5.40)* with the objective of strengthening the capacity of PA staff and community members to wildlife rescue techniques, including first aid, handling, and transportation of injured or distressed animals.

5 Monitoring and evaluation

The project established robust monitoring and evaluation (M&E) mechanisms through the formation of the PCC and PMUs, which served as the central oversight bodies. In parallel, the Protected Area Management Authority, PNP, in coordination with project partners, buffer zone representatives, and local communities, regularly monitored on-site project progress *(Annex 5.42a).* A baseline assessment was conducted at the outset to establish the initial status of key indicators, and a comprehensive post-project assessment was undertaken at project completion to measure progress against the benchmarks.

The study employed both quantitative and qualitative methods to collect primary data, while secondary information was obtained from reports and records of related social institutions. Households were purposefully selected based on their involvement in ZSL interventions, and key informants, including local leaders and managers, were identified using snowball sampling. Data validation was carried out through

three key informant interviews and one focus group discussion (FGD) in each of the three sites—Amlekhgunj, Hadikhola, and Manahari where a total of 532 household respondents were surveyed (168 in Amlekhgunj, 148 in Hadikhola, and 216 in Manahari). Interviews were conducted with household heads after obtaining their consent. In total, 12 key informant interviews and 3 FGDs (with 6–12 participants each) were conducted. The endline survey successfully followed up with 174 respondents (32.71%), of which 168 were used for comparative analysis. These included 62 from Amlekhgunj (36.91%), 49 from Hadikhola (33.11%), and 63 from Manahari (29.17%). The findings from this assessment were instrumental in demonstrating achievements across the defined indicators i.e., *Ind 0.2, Ind 0.3, Ind 0.4, Ind 0.5, Ind 0.6, Ind 2.5, Ind 3.2.3 and Ind 4.3*.

M&E responsibilities were collaboratively shared among all project partners, with systematic data collection aligned with planned activities. To enhance coordination and ensure timely resolution of implementation challenges, ZSL utilized web-based tracking systems and maintained regular engagement with MWT and other stakeholders through frequent virtual meetings *(Annex 5.2.8),* complemented by field visits conducted by the project lead and joint monitoring *(Annex 5.42d, 5.42e).* Additionally, the Social Welfare Council (SWC), the government body overseeing NGO/INGO operations in Nepal, conducted a detailed monitoring visit *(Annex 5.42b, 5.42c)* to evaluate project effectiveness, identify areas for improvement, and provide recommendations for future programming. This visit included a thorough review of documentation, on-site observation, and consultations with staff, beneficiaries, and stakeholders. Monitoring by DEFRA further strengthened oversight *(Annex 5.42f)*. The DEFRA team observed the programs like Quick Relief Fund established under BZUCs, WIGC, plantation, regeneration activities, mesh wire fence, predator proof corrals, visitor information centre and wetland management. Further, the monitoring efforts captured disaggregated beneficiary data and tracked progress on key output indicators, including BZCF operation plans *(Ind 1.2),* habitat management activities *(Ind 1.3),* training of HWCx champions *(Ind 2.2),* establishment of community banks and membership *(Ind 3.1),* capacity building of members *(Ind 3.2),* livelihood adoption *(Ind 3.2.2),* and agroforestry practices *(Ind 4.1).* Partners also utilized data from monthly meetings of women-led cooperatives to report on additional membership, seed fund status, loan mobilization, and livelihood activities *(Ind 3.1, Ind 3.2.2).* Further to gauge the training effectiveness, pre- and post-event surveys was carried out.

6 Lessons learnt

Listed below are the project team's learnings from the project implementation:

- **Integrating Insurance Mechanisms for Sustainable HWC Mitigation:** While quality habitat restoration and advanced wildlife monitoring tools remain essential, the project found that integrating insurance mechanisms offers a more sustainable and equitable solution to human-wildlife conflict (HWC). These schemes provide timely compensation for losses including crop damage, livestock predation, and human casualties, thereby reducing resentment and fostering positive community attitudes toward wildlife conservation.
- **Leveraging Local Government Resources through Stakeholder Engagement:** Proactively involving local government and stakeholders in project planning and implementation significantly enhanced impact. Their engagement not only unlocked additional co-financing and in-kind support but also served as a model of shared responsibility and value for money, strengthening local ownership and institutional buy-in.
- **Clarifying Roles and Expectations Improves Partner Performance:** Regularly briefing partners on logframe targets, review feedback, and reporting responsibilities improved alignment and accountability. This transparency helped partners better understand the project's deliverables and deadlines, contributing to timelier and more coordinated implementation.
- **Community-based Conservation Requires Bottom-Up Approaches:** The detection of tigers in buffer zone communities like Chakari, confirmed through camera trap data, reinforced the need for stronger community engagement. To maintain local motivation and enhance stewardship, conservation strategies must be people-centered, rooted in bottom-up planning being responsive to community needs and aspirations.

7 Actions taken in response to Annual Report reviews

Feedback on AR 2	Response
The AR does not specify which of the above conventions are supported by project activities, if any: however, as stated in the application, the project will support the Nationally	The project is closely aligned with international environmental agreements and national climate goals. It supports the objectives of the Convention on Biological Diversity (CBD) through targeted ecosystem restoration, species protection, and community-based conservation *(all outputs)*. In alignment with the CITES *(Ind 0.2, Ind 0.3, Ind 2.2)*, the project contributes to the protection and monitoring

Determined Contribution of Nepal to the UNFCCC, which has the target to "*ensure fair and equitable benefits (carbon and non-carbon) from sustainable forest management, watershed management, and biodiversity conservation among local communities, women and Indigenous People."*	of species listed in Appendices I, II, and III within Parsa National Park—such as the Royal Bengal Tiger (Panthera tigris, Appendix I), Fishing Cat (Prionailurus viverrinus, Appendix II), and Crab-eating Mongoose (Herpestes urva, Appendix III). It further supports the Convention on the Conservation of Migratory Species of Wild Animals (CMS) by conserving key habitats and corridors essential for migratory species. The project also complements the goals of the United Nations Framework Convention on Climate Change (UNFCCC) and contributes directly to Nepal's Nationally Determined Contributions (NDCs) by promoting climate-resilient practices, enhancing forest carbon stocks, and strengthening nature-based adaptation measures at the community level *(Ind 0.1, Ind 0.6, Ind 1.2, Ind 1.4, Ind 4.1, Ind 4.3)*.

8 Risk Management

No risk has emerged in the past 12 months.

9 Scalability and Durability

The project has ensured that several key interventions will remain functional and scalable beyond the project lifecycle. Since the project was developed in line with the Government of Nepal's priority area, the Terai Arc Landscape Strategic and Action Plan 2015-2025, DNPWC's strategic plan and Parsa National Park and its Buffer Zone Management Plan (2018). DNPWC and PNP have therefore taken ownership of the project and have supported its development and implementation *(Annex 5.2.1, 5.2.2, 5.2.9, 6.42d, 5.42e).* Predator-proof corrals PPCs remain embedded within the communities as durable infrastructure safeguarding small livestock such as goats, contributing to the long-term reduction of human-wildlife conflict *(Ind 2.4)*. Other HWC mitigation measures, including over 11 km of solar fencing and 325 meters of mesh wire fencing, continue to serve as protective barriers for households and croplands, representing long-lasting physical infrastructure maintained by communities *(Ind 2.4)*. The Quick Relief Fund, operational in two BZUCs, will remain active post-project, ensuring that immediate financial support is available to HWC victims, thereby maintaining local support for conservation efforts *(Ind 2.5)*.

Community banks, which saw a 27% increase in capital by project end, will continue to serve members with larger, scalable loans to expand income-generating activities such as goat and cow farming *(Ind 3.1, 3.2.2)*. The 76 trained HWCx champions *(Ind 2.1)* have become local change agents who will persist in advocating for wildlife conservation and guiding communities in managing HWC. The project's knowledge repository, developed through systematic documentation and ecological assessments, will serve as a critical tool for Parsa National Park (PNP) to identify priority intervention areas and guide future conservation planning *(Ind 2.2, 2.3).*

The endorsed Corridor Management Plan provides a long-term ecological connectivity framework across administrative boundaries while safeguarding the rights of Indigenous Peoples and marginalized communities *(Ind 1.4, 0.1)*. The 20 revised BZCF Operational Plans which incorporate mechanisms for HWC mitigation, climate resilience, and equitable benefit-sharing offer a proven model that can be scaled up to other corridors within the Terai Arc Landscape *(Ind 1.2, DI-B07).* Ecological restoration interventions such as waterholes (3), grassland management (100 ha) will continue to offer suitable habitats for key wildlife species (Ind 1.3). Further, tourism-based infrastructure like the project-supported homestay, which already generated NPR 99,050 during the project period (Ind 3.6), is now fully community-managed and will continue to serve incoming tourists. Similarly, the Elephant Visitor Centre and watch towers in Hattisar and Amleshwor enhance long-term visitor engagement, satisfaction, and conservation awareness, creating a synergistic eco-tourism experience that supports community revenue and park visibility (Ind 3.3, 3.4).

10 Darwin Initiative identity

The Darwin Initiative has been mentioned in each agreement signed with partners. The guidelines on use of the Darwin Initiative logo were briefed to project partners during the inception meeting before the start of implementation. Throughout the implementation of the project, we have made deliberate and consistent efforts to highlight the vital support provided by Darwin Initiative and acknowledged the UK Government's integral role in enabling our work. To ensure strong project identity and donor visibility, the Darwin Initiative logo has been prominently and appropriately displayed across all major project outputs and communications. This includes technical reports, training manuals, presentation materials, field signage, and community outreach materials, in full compliance with the BCF branding guidelines *(Annex 5.41)*. In general, the wildlife conservation community in Nepal is familiar with the Darwin Initiative through

previously supported projects. However, this project has particularly publicised the Darwin Initiative in PNP through engagement with local communities, local government, line agencies and PNP, through project inceptions and stakeholder meetings and consultations.

11 Safeguarding

[redacted]

12 Finance and administration

12.1 Project expenditure

Project spend (indicative) since last Annual Report	2024/25 Grant (£)	2024/25 Total actual Darwin Initiative Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)	[redacted]			
Consultancy costs				
Overhead Costs				

Travel and subsistence	[redacted]			
Operating Costs				
Capital items (see below)				
Others (see below)				
Audit Costs				
TOTAL	£109,848.00	£109,848.00		

Staff employed (Name and position)	Cost (£)
Dr. Bhagawan Raj Dahal-Country Director	[redacted]
Bishnu Thapaliya-Program Co-ordinator	
Shyam Kumar Thapa-Program Manager	
Prachanda Maharjan- Field Programme Officer	
Amit Pajiyar-Finance Officer	
Sandip Chaudhary-Driver	
Katherine Secoy-head of Program Oversite	
Aaron Foy-Operation Coordinator	
Lucy Archer-M&E Oversite	
Sameena Nawaz-Finance Business Partner	
Satyam Kumar Chaudhary-Project Officer	
Pratik Sadula-Project Officer	
Shristee Manandhar-Project Associate	
Karuna Rai-Project Associate	
Sarita Bolan-Project Associate	
Rajnish Sharma-Finance Officer	
TOTAL	

Capital items – description	Capital items – cost (£)
TOTAL	

Other items – description	Other items – cost (£)
Monitoring and Evaluation	[redacted]
Community Tower	
Signage	
TOTAL	

12.2 Additional funds or in-kind contributions secured

Matched funding leveraged by the partners to deliver the project	Total (£)
2022-23	[redacted]
2023-24	

2024-25	[redacted]
TOTAL	

Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project	**Total (£)**
TOTAL	

12.3 Value for Money

The project delivered strong value for money through a balanced integration of economy, efficiency, and effectiveness across all components. With a Darwin Initiative grant of £467,282, the project leveraged an additional £[redacted] in matched funds, demonstrating prudent financial stewardship and cost-sharing. In doing so the project efficiently delivered all the activities on time and within budget, with a 0% variance in actual spending overall, reflecting high standards of financial discipline and operational planning reaching 3,347 households (~18,639 individuals, 48% women) throughout the project period. Of the total project budget, 20% was spent on staff costs, 51.6% on operating costs, 14.6% on overhead, 8.1% on monitoring and evaluation, and less than 1% on capital expenditure.

From an *economy* perspective, the project minimized costs by utilizing existing community structures and integrating conservation with local priorities. Community co-financing of Predator-proof corrals exemplifies this commitment that 50% of total costs were covered by the project through equipment and technical support, while the remaining 50%, primarily for wooden frames, was voluntarily contributed by beneficiary households, directly enhancing local ownership and sustainability. The local level government i.e., Jitpur Simara-21, supported SWIGC worth NPR [redacted] (£[redacted] for the construction of their own space *(Annex 5.2.12)*, while in Manahari after the project supported 20 hhs with the construction of PPC, the local level government them by providing goats (one for each hh). This not only reduced the financial burden on the project but also fostered local ownership, sustainability, and active community participation. Similarly, the Elephant Visitor Information Centre established within the office space provided free of cost by Parsa National Park, reduced capital expenditure while enhancing visitor education and tourism infrastructure. In addition, the Civil Aviation of Authority of Nepal, Simara and Janakpur provided us with the space to advertise and promote the tourism in Parsa National Park. This adaptive use of government-owned space exemplifies optimal use of available resources for long-term conservation outreach and government support for the project. Likewise, the establishment of three women-led community banks exceeded inclusion targets and served as revolving micro-finance institutions with a 27% capital increase by project end reaching NPR 4.52 million (£25,830) from a seed fund of NPR 3.285 million (£18,771), enabling 238 loan disbursements for diversified livelihoods. The outcome of which is depicted in endline household survey that household income across project sites increased by 33.94%, a result statistically validated (Ind 3.2.3). Wellbeing improvements were reported in 50% of tracked households (Ind 0.4), while 100% of the 286 agroforestry-trained participants applied their knowledge in practice (Ind 0.6), indicating strong uptake and behavior change. On the human development side, crop raiding incidents dropped by 65.8%, while livestock predation declined by 30.95% (Ind 2.5).

On *effectiveness*, the project catalyzed systemic and sustainable change: the Dhole Conservation Action Plan (2025–2035) Nepal's first for the species was officially endorsed, setting a regional precedent in carnivore conservation. In addition, camera trap surveys recorded increased detections of tigers and leopards, with tigers now sighted in new areas like Chakari, confirming enhanced habitat connectivity (Ind 0.2). Furthermore, the development of a Parsa National Park Management plan and integration of tourism Plan, supported by participatory inputs and an IEE process, aligns community needs with park priorities. Moreover, the comprehensive knowledge repository generated by the project serve as essential tools for policy-making and future adaptive program design for the PNP.

The project maximized the use of virtual platforms such as Skype, Microsoft Teams, and online drives for monitoring, reporting, progress sharing, and partner capacity building, especially during Year One of the project implementation amid the COVID-19 pandemic. These strategic uses of virtual tools minimized travel costs and risks associated with physical meetings while maximizing the reach and impact of training and capacity-building efforts. These approaches optimized resource use and ensured effective project execution, underscoring the project's strong value for money.

13 Other comments on progress not covered elsewhere

Following the initial disbursement and training, the community banks began releasing portions of the seed funds, benefiting 36 members in the first round. In Year 2, the project provided the remaining seed funds as a final instalment. By the close of the project, a total of 238 loan disbursement instances had been recorded remarkably, with no loan defaults reported to date. This also helped project to exceed the project target Ind 3.2.2, Ind 3.2.3 ultimately supporting Ind 0.4.

Annex 1 Report of progress and achievements against logframe for the life of the project

Project summary	Progress and achievements
Impact **Secured sustainable connectivity from the crucial lowland PAs to the Shivalik and eastern Terai Arc Landscape using community forest networks as corridors.**	The project "Terai Arc: Community stewardship to secure wildlife corridors and livelihoods" in Nepal made significant contributions to both biodiversity conservation and community wellbeing. The project laid the foundations by documenting required knowledge bases to implement project activities in each of the outputs during Y1 that paved the way forward for the Y2 activity implementation. Based on this knowledge, the project worked to conserve critical connectivity sites with the help of communities while addressing their stress points like HWC, natural resource dependency and lower income situation in Y2. In doing so, a total of 1,660 HHs (8466 community members) and 919 ha of agricultural crop land is directly benefitted with the implementation of HWC mitigation measures such as PPC construction for reduction of livestock depredation, maintenance of 11 km solar fence, maintenance of three existing and installation of three new electric lights *and* installation of mesh wire and livelihood support through community banking and agroforestry. Of these, 82% belonged to women and 86% to indigenous and disadvantaged groups. Furthermore, the project has also indirectly benefitted an additional 1100 HHs (around 5610 community members; 72% women) through interventions such as revision of the ten BZCFOPs. Simultaneously, the project empowered local communities especially women and marginalized groups through the establishment of three women-led community banks, disbursing 238 loans that supported diversified livelihoods and increased average household income by 33.94%. Human-wildlife conflict was substantially reduced through solar fencing, predator-proof corrals, and trained local HWCx champions, with an 80% drop in conflict burden.
Outcome: A community-managed forest corridor linking Parsa National Park to the Shivalik hills and eastern Terai Arc Landscape secures sustainable connectivity and the wellbeing of 5000 people.	• Through a joint participatory management framework (Output 1), inclusive governance was institutionalized, with 20 BZCFUGs revising operational plans covering 2,184.93 ha, exceeding the 1,000-ha target (Ind 0.1, 1.1, 1.2). • Targeted restoration activities including 3 wetlands, 100 ha of grasslands, and 50 ha of forest regeneration enhanced habitat connectivity. Wildlife monitoring confirmed range expansion of key species (tiger, leopard, Greater One-horned Rhino) and supported the adoption of Nepal's first Dhole Conservation Action Plan *(Ind 1.3, 1.4)*. • Tiger detections rose from 6 to 7 events, with new presence in Chakari, and detection stations increased from 3 to 5 *((Annex 5.9c)*. • Well-being improved in 50% of tracked households.

	The project's participatory approach, data-driven adaptive management, and institutionalization of plans (e.g., corridor charter, DCAP) ensure long-term impact for both biodiversity and marginalized communities.
Outcome indicator 0.1: Joint community-forest corridor management plans covering 1000ha, agreed and implemented by 20 Buffer Zone Community Forest User Groups (BZCFUGs), by Y3	• Identified the priority sites that needed conservation and management intervention to maintain connectivity and improve ecological services in the northern buffer zone community forest areas *(Annex 5.2.13, 5.4).* • Corridor plan prepared and endorsed by PNP *(Annex 5.3)* • 20 Buffer Zone Community Forest Operational Plans (BZCFOPs) were revised (Y1: 5; Y2: 10; Y3: 5), collectively covering 2,184.93 hectares of forest and directly benefiting over 3,347 households (~18,639 individuals, 48% women) *(Annex 5.4)*.
Outcome indicator 0.2: 10% increase in occupancy of small and medium-sized mammal in the community-forest corridor including agroforestry sites (Example: *Hystrix indica, Felis bengalensis, Felis chaus, Lepus nigricollis, Sus scrofa, Muntiacus vaginalis*) from Y1 baseline, by Y3 **Baseline**- The species wise occupancies are calculated. • ***Hystrix indica*** (Indian crested porcupine)- Not calculated due to low detection. • ***Felis bengalensis*** (leopard cat)- 0.473 • ***Felis chaus*** (jungle cat)- 0.228 • ***Lepus nigricollis*** (Indian hare) – 0.184 • **Sus scrofa** (wild boar)- 0.262 • ***Muntiacus vaginalis*** (barking deer)- 0.525	Comparative analysis of the baseline (2023) and endline (2025) camera trap surveys *(Annex 5.9)* in the northern buffer zone of Parsa National Park demonstrates clear evidence of positive wildlife movement and distribution. Endline *(Source: Endline Occupancy Survey):* • ***Hystrix indica*** (Indian crested porcupine)- 0.098 • ***Felis bengalensis (Leopard Cat): 0.505*** • ***Felis chaus*** (Jungle Cat): 0.359 • ***Lepus nigricollis*** (Indian hare): 0.15 • ***Sus crofa*** (wild boar): 0.412 • ***Muntiacus vaginalis*** (Barking deer): 0.528
Outcome indicator 0.3: Increased evidence of Panthera tigris moving through the corridor, from pre-project baseline, by end of Y3 **Baseline**- 3 individual *Panthera Tigris* (tiger) detected from three different sites (3 out of 32 grids).	5 individuals *Panthera Tigris* (tiger) detected from five different sites *(Annex 5.9c)*. Tigers were recorded for the first time in the Chakari area suggesting expansion of their range within the buffer zone *(Source: Endline Occupancy Survey)*
Outcome indicator 0.4: Increase in wellbeing for 50% of households of project sites in community-forest corridor (disaggregated by gender, income, and ethnicity), from Y1 baseline, by Y3. **Baseline**- The average wellbeing index for overall site – **0.39** Amleshwor BZUC - **0.42** Manahari BZUC - **0.41** Lokhit BZUC – **0.33**	A total of 84 direct beneficiary households (50%, 168 repeated household from baseline surveyed) were tracked, having been surveyed both at baseline and endline. *Also (Annex 5.35b, 5.38d)* Endline *(Source: Endline HHs Survey):* The average wellbeing index for overall site – **0.41** Amleshwor BZUC - **0.41**

	Manahari BZUC - **0.43** Lokhit BZUC – **0.39**
Outcome indicator 0.5: Decrease in both natural resource dependency and burden of human-wildlife conflict (HWC) for 60% of households of project sites in community-forest corridor (disaggregated by gender, income, and ethnicity), from Y1 baseline, by Y3. **Baseline** - The average natural resource dependency index of households - **0.32** Amleshwor BZUC - **0.19** Manahari BZUC - **0.32** Lokhit BZUC - **0.46** The average HWC burden index of households - **0.05** Amleshwor BZUC - **0.03** Manahari BZUC - **0.04** Lokhit BZUC - **0.07**	A total of 96.73% of the HHs burden index has lowered compared to base year data in which Amlekhgunj 100% of the HHs with HWC burden in base year has lower followed by Hadikhola (95.45%) and Manahari (94.74%) *(Endline Household Survey)*. Deployment of over 11 km of solar fencing, 325 meters of mesh wire, six solar-powered streetlights, and 200 predator-proof livestock corrals. These efforts effectively safeguarded more than 1,650 livestock and 570 hectares of cropland, significantly reducing exposure to wildlife threats *(Annex 5.13, 5.14, 5.15, 5.15c).* In addition, wildlife deterrent cash to 194 household supported to achieve this indicator *(Annex 5.38).* Endline *(Source: Endline HHs Survey): The average natural resource dependency of participating households:* Amlekhgunj BZUC: **0.52** Manahari BZUC: **0.43** Hadikhola BZUC: **0.37** The average HWC burden index of households - **0.01** which is 80% decrease overall in project site Amleshwor BZUC - **0.02** Manahari BZUC - **0.01** Lokhit BZUC - **0.007**
Outcome indicator 0.6: 90% of households practicing agroforestry as a means of livelihood show an increase in willingness to pay revenue and conserve the corridor by the end of Y3 **Baseline** - 31.77% willing to pay for conservation. Amleshwor BZUC - **33.93%** Manahari BZUC - **25.46%** Lokhit BZUC - **38.51%**	Supported 196 community members (77% of them women and 98% from indigenous and marginalized groups) through the distribution of 11,150 seedings of fodder and grass *(Annex 5.37).* Additionally, agroforestry was integrated with the cultivation of cash crops designed to deter wildlife. A total of 1,900 kilograms of ginger, 2,045 kilograms of turmeric, 1,425 lemon seedlings, and 120 packets of chili seeds were distributed to 194 households (79% women, 87% indigenous and marginalized groups). These crops not only serve as natural wildlife deterrents but also offer high market value, thereby enhancing local income opportunities *(Ind 4.3, Annex 5.38)*. **Endline** *(Source: Endline HHs Survey):* **81.20%** willing to pay for conservation. Amleshwor BZUC – **76.19%** Manahari BZUC – **84.72%** Lokhit BZUC – **81.75%**

Output 1: Joint participatory management framework for North-East Parsa community-forest corridor is established.	
Output indicator 1.1: 20 BZCFUG representatives (at least 50% women and people from low-income households) participate in participatory corridor mapping and planning workshops, by Y1.	In Year 1, foundational activities such as ecological assessments, stakeholder engagement, and a participatory corridor mapping and planning workshop involving 20 representatives from Buffer Zone Community Forest User Groups (BZCFUGs), over 55% of whom were women and individuals from marginalized backgrounds laid the groundwork for integrated planning and local ownership *(Annex 5.2.13).* These early efforts established a platform for knowledge-sharing and consensus-building, leading to the development of an inclusive corridor charter.
Output indicator 1.2: 20 BZCF management plans prepared/revised: 5 by Y1, 10 by Y2 and 5 by Y3.	20 Buffer Zone Community Forest Operational Plans (BZCFOPs) were revised (Y1: 5; Y2: 10; Y3: 5), collectively covering 2,184.93 hectares of forest and directly benefiting over 3,347 households (~18,639 individuals, 48% women) *(Annex 5.4)*.
Output indicator 1.3: Wetland (3), grassland (100ha), and forest (50ha) priority areas within the corridor maintained in 20 BZCFUGs, by Y2 supporting the movement of wildlife against baseline	• Three wetlands were maintained in Amleshwor, Manahari and Ujjowal Bhawisya BZUC *(Annex 5.5).* • 100 ha (Y1:8 ha, Y2:40ha, Y3:52ha) of grassland were maintained in Manahari and Amleshwor BZUC *(Annex 5.6)*. • 50-hectare regeneration promoted (Y1:5ha, Y2: 15 ha and Y3:30 ha) through plantation and fencing *(Annex 5.7).*
Output indicator 1.4: North-East Parsa community-forest corridor charter agreed by 20 BZCFUGs (including provisions for representation of women, disadvantaged and vulnerable groups, demarcation of priority areas, agreed management guidelines, and benefits-sharing principles) by Y3	• Identify the priority sites that needed conservation and management intervention to maintain connectivity and improve ecological services in the northern buffer zone community forest areas *(Annex 5.2.13).* • 20 BZCFOPs have been revised (Y1:5, Y2:10, Y3:5) *(Annex 5.4).* • Corridor plan prepared and endorsed by PNP *(Annex 5.3)*
Output 2: Reduced short-term costs from HWC, and long-term plan to manage future HWC pressures in corridors, enable communities to receive net benefits from their community-forest corridor.	
Output indicator 2.1: 75 Human-Wildlife Coexistence (HWCx) champions recruited (at least 3 per BZCFUG), by Y1	Two training were conducted at Amleshwor BZUC and Manahari BZUC to recruited 76 Human-Wildlife Coexistence (HWCx) champions *(Annex 5.11).*
Output indicator 2.2: HWC status assessed, and human and wildlife population trends projected with conservation measures, assessment by end of Y1 and peer-reviewed article by end of year 3.	A study was conducted to assess the impact of increasing populations of mega-carnivore, its ecological footprint, and HWC implications. The study found a total of 13,106 HWC cases including 8,053 cases of farm crop loss, 122 cases of crop storage raids, 109 human deaths, 250 human injury, 3,935 livestock depredation and 637 cases of property damage were recorded in the TAL over the last five years *(Annex 5.12).* The data directly informed adaptive conflict mitigation strategies and contributed to the Scientific manuscript in Y3 *"Bridging Conservation and Human-Wildlife Conflict for Coexistence"* and submitted to journal Evolution and Ecology *(Annex 5.12c).*

Output indicator 2.3: Participatory HWCx plan endorsed by all (20) BZCFUGs, (co-developed by HWCx champions, and incorporating projections from HWC assessment), by Y2.	Three BZUC HWCx plan were prepared in Y1 and endorsed in Y2 *(Annex 5.13).*
Output indicator 2.4: At least 80% of HWCx champions have led HWC drills, or supported intervention measures in their communities, by Y3.	HWCx champions lead the implementation of various HWC mitigation measures *(Annex 5.13, 5.14, 5.15, 5.15c).*
Output indicator 2.5: A 80% reduction in livestock kill and 25% reduction in crop raiding in project communities by Y3. (Baseline: 29 livestock killed by tiger and leopard in 2021 according to PNP FY2021 data; crop raiding baseline to be established by Y1)	The endline survey highlighted the decrease in HWC cases with a total 39 cases were reported within 3 years in the project intervened community. This shows 69% overall reduction in livestock killed by tiger and leopard cases however the rate of livestock kill in the periphery of house is reduced by 85% showing the effectiveness of HWC mitigation measures such as Predator proof coral *(Anne 5.14).* 34.19% decline in crop raiding was recorded, however, the total cropland area affected increased by 28.53%, primarily due to intensification of conflict in specific hotspots like Hadikhola.
Output 3. Diversified livelihoods for the most marginalized community members provide a direct revenue stream from the protected area, ensuring that precarious households equitably benefit from the corridor and are not forced into the overuse of natural resources	
Output indicator 3.1: Three women-led community banks formed (More than 50% of members from low-income households with 70% of members being women, disadvantaged and vulnerable people); 25 members per bank initially, growing to at least 40 members each by Y3.	Three women-led livelihood community banks Surakshya, Janahit, and Makhamali Women Income Generation Committees (SWIGC, JWIGC, MWIGC) were successfully established, bringing together a total of 145 members, 99% of members being women and 82% belonging to Indigenous and marginalized communities (SWIGC: 48, JWIGC: 52, MWIGC: 45) to support the income generating activities of its member *(Annex 5.20).*
Output indicator 3.2: 120 members (at least 50% women, disadvantaged and vulnerable people) trained on developing livelihood skills (including tourism enterprises) in Y1 (2 trainings) and Y2 (4 trainings) • 3.2.1 Market chain analysis completed to identify linkages in Y2 and community bank members accessing such linkages by Y3. • 3.2.2 50% of members adopting livelihood options by the end of Y3. • 3.2.3 20% increase in income of beneficiary members by the end of Y3. • 3.2.4 At least 80% of cooperative members pass vocational exams in business management, finance, hospitality, and promotion skills by Y2.	3.2: A total of 140 individuals (88% women, 80% of attendees belonging to Indigenous and disadvantaged groups) benefited from five livelihood training events *(Annex 5.22, 5.23, 5.24).* The trainings included sessions on livestock rearing, mushroom farming, goat rearing, and two events on off-farm vegetable farming on integrated pest management (IPM) strategies and disease prevention methods tailored for off-season crops, knowledge in crop selection, cultivation techniques, and management practices specific to off-seasonal conditions. 3.2.1: Market chain analysis completed in Y1 *(Annex 5.18)* including tourism, skills-based trainings, commercial vegetable farming, commercial livestock rearing, wildlife deterrent crop farming and bee keeping 3.2.2: A total of 238 instances of loan being disbursed to 131 individual members out of 145 total members were recorded by these three women income generation committees (WGIC) *(Table no.1)*, meaning that 90% of the members of WGIC are practicing livelihood alternatives for the income generation.

	3.2.3: Endline household survey indicated a substantial 33.94% increase in from the baseline average of NRs 28,111.11 per month. The Wilcoxon rank sum test with continuity correction showed a significant change in income distribution from baseline to endline value ($W = 15318$, $p < 0.01$). 3.2.4: Similarly, 64 youths (41% Female, 75% indigenous and marginalized group) were benefitted with skills-based vocational training such as nature guide and hospitality *(Annex 5.25, 5.26, 5.27)*. Participants of are actively pursuing official nature guide licenses from PNP, signifying their advancement towards formal roles in tourism services. Additionally, all hospitality training participants have received certificates, qualifying them for employment in the hospitality sector. Likewise, all the trained 140 individuals *(Annex 5.22c, 5.23c, 5.24c)* received certification allowing them to qualify to take CTEVT certified course.
Output indicator 3.3: Parsa National Park (PNP) tourism management plan publicly proposed and discussed, with all cooperatives and BZCFUGs represented, (led by PNP) by Y2, adopted into PNP Management Plan by Y3	Tourism plan included in Management Plan of Parsa National Park and its Buffer Zone (2023/24-2027/28) and endorsed *(Annex 5.28)*.
Output indicator 3.4: People reached by tourism promotion, over 50,000 people reached by Y2 and Over 120,000 people reached by Y3.	Project captured the opportunity to promote tourism in PNP at local fair organized by Jeetpur Simara Municipality which was attended by over 47,000 people *(Source: Jeetpur Simara Municipality based on the ticket sold).* Further, documentary *(Annex 5.30)*, installation of hoarding boarding in Janaki temple and Birgunj, digital display *(Annex 5.31)* about the tourism prospectus in PNP, has allowed to reach 5.4K diverse people in different geographical region. awareness video broadcast through platforms such as TV Birgunj *(26.2k views)* and Dhukka *(59.2k views)* pulled together wide public engagement. Recognizing its relevance and impact, the National Disaster Risk Reduction and Management Authority (NDRRMA) officially shared the video on its Facebook page reaching 444,000 views.
Output indicator 3.5: 50% increase number of visitors to Parsa National Park by Y3 against baseline. Baseline: 152 tourists visited PNP in fiscal year 2021 (147 national tourists and 5 international tourists) - Source: PNP Data FY2021.	Substantial increase in tourism in PNP, with 1,786 visitors recorded during the project period (1,605 national and 181 SAARC/international) *(Source: PNP)*
Output indicator 3.6: Increase in tourism-related income in communities (accommodation, sales of goods)	A project-supported homestay generated NPR 99,050 (approx. £566) through accommodation and local product sales, providing tangible evidence of the benefits of eco-tourism development *(Annex 5.35b)*.
Output 4: Enhanced agroforestry practices adopted throughout the community-forest corridor, laying foundations for long-term forestry revenues and sustainable corridor connectivity across Parsa National Park.	

Output indicator 4.1: 200 community members trained in enhanced agroforestry practices (from targeted communities and with at least 50% women and people from low-income groups) - 100 by end of Y1 and an additional 100 by end of Y2	A total of 286 (Y1:65, Y2:140, Y3:81) community members from targeted buffer zone communities, with 72% women and 77% participants representing indigenous, marginalized, and disadvantaged groups were trained in enhanced agroforestry practices *(Annex 5.36).*
Output indicator 4.2: Local nursery established to provide 50,000 native and low water-demand seedlings (70% in forest and 30% in private land) for North-East Parsa Community-Forest Corridor by end of Y2	Tripartite agreement has been made to establish nursery *(Annex 5.39).* Over 10,000 seedlings including fodder, fruit, bamboo, and tiger grass were distributed across project communities Although the Ind 4.2 was not meet within the project time frame, the project anticipates the functionality of the nursery providing continual supply of fodder seedlings required for the community.
Output indicator 4.3: 60% of households across community-forest corridor have implemented enhanced agroforestry practices on their small holdings by Y3	Total of 690 household received agroforestry support *(Annex 5.36, 5.57, 5.38)* which accounts for 60% of total household i.e.,1149HHs of three BZCFUGs namely, Churiyamai BZCFUG (299HHs), Lokhit BZCFUG (120HHs) and Jyamire BZCFUG (730 HHs).
Output indicator 4.4: 20% of targeted households (disaggregated by income, gender, and ethnicity) have successfully planted 10,000 seedlings from the locally established seedling nursery by end of Y3.	Supported 196 community members (77% of them women and 98% from indigenous and marginalized groups) through the distribution of 11,150 seedlings of fodder and grass *(Annex 5.37).* 5,000 tiger grass (Amliso) plants, valued for their use in broom-making and other household applications, were distributed specifically targeting 20 low-income, land-owning households (100% female, 91% from indigenous and marginalized groups).

Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)

Project summary	SMART Indicators	Means of verification	Important Assumptions
Impact: Secured sustainable connectivity from the crucial lowland PAs to the Shivalik and eastern Terai Arc Landscape using community forest networks as corridors.			
Outcome: A community-managed forest corridor linking Parsa National Park to the Shivalik hills and eastern Terai Arc Landscape secures sustainable connectivity and the wellbeing of 5000 people.	0.1 Joint community-forest corridor management plans covering 1000ha, agreed and implemented by 20 Buffer Zone Community Forest User Groups (BZCFUGs), by Y3 0.2 10% increase in occupancy of small and medium-sized mammal in the community-forest corridor including agroforestry sites (Example: Hystrix indica, Felis bengalensis, Felis chaus, Lepus nigricollis, Sus scrofa, Muntiacus vaginalis) from Y1 baseline, by Y3. 0.3 Increased evidence of Panthera tigris moving through the corridor, from pre-project baseline, by end of Y3. 0.4 Increase in wellbeing for 50% of households of project sites in community-forest corridor (disaggregated by gender, income, and ethnicity), from Y1 baseline, by Y3. 0.5 Decrease in both natural resource dependency and burden of human-wildlife conflict (HWC) for 60% of households of project sites in community-forest corridor (disaggregated by gender, income, and ethnicity), from Y1 baseline, by Y3. 0.6 90% of households practicing agroforestry as a means of livelihood show an increase in willingness to pay revenue and conserve the corridor by the end of Y3	0.1 Joint management plan, BZCF management plan, reports of management activities. 0.2 Small and medium-sized mammal camera trap survey report 0.3 DNPWC-led large mammal camera trap surveys and hotspot monitoring report. 0.4 Reports on socio-economic surveys conducted with a random sample of community capturing data on wellbeing index (income, access to education and health, dignity, etc.) 0.5 Reports on socio-economic survey conducted with a random sample of community capturing data on i) Natural Resource Dependency Index, and ii) HWC Burden Index 0.6 Reports on socio-economic survey report conducted with a stratified sample of community capturing data on willingness to i) pay revenue for agroforestry, and ii) conserve corridor connectivity through agroforestry practice	Department of National Parks and Wildlife Conservation (DNPWC) and Department of Forests and Soil Conservation (DoFSC) remain supportive of this initiative to strengthen connectivity. Compounding climate change and infrastructure development threats to Nepal's lowland protected areas continue to escalate, demanding a policy response to secure connectivity to higher altitudes – as will be piloted in this proposal. Small mammals' rapid response to habitat conditions, without extraordinary climate events during the life of the project, will enable them as an effective indicator of connectivity recovery for efforts across Nepal, in advance of forests recovering sufficiently to enable widespread large mammal movement. Community indices designed by ZSL from our experiences (including DI 26-012) remain appropriate for the local context.
Output 1 Joint participatory management framework for North-East Parsa community-forest corridor is established.	1.1 20 BZCFUG representatives (at least 50% women and people from low-income households) participate in participatory corridor mapping and planning workshops, by Y1.	1.1 Participatory corridor maps, workshop attendance records, cross referenced with baseline survey data. 1.2 BZCF management plans	BZCFUGs recognise the benefits of joint management (as experienced on other ZSL Nepal projects), supported by benefits from other outputs, and all members commit to the management guidelines.

Project summary	SMART Indicators	Means of verification	Important Assumptions
	1.2 20 BZCF management plans prepared/revised: 5 by Y1, 10 by Y2 and 5 by Y3. 1.3 Wetland (3), grassland (100ha), and forest (50ha) priority areas within the corridor maintained in 20 BZCFUGs, by Y2 supporting the movement of wildlife. 1.4 North-East Parsa community-forest corridor charter agreed by 20 BZCFUGs (including provisions for representation of women, disadvantaged and vulnerable groups, demarcation of priority areas, agreed management guidelines, and benefits-sharing principles) by Y3.	1.3 Participatory corridor maps showing priority areas, management reports for priority areas. 1.4 Community-forest corridor charter	
Output 2 Reduced short-term costs from HWC, and long-term plan to manage future HWC pressures in corridors, enable communities to receive net benefits from their community-forest corridor.	2.1 75 Human-Wildlife Coexistence (HWCx) champions recruited (at least 3 per BZCFUG), by Y1 2.2 HWC status assessed, and human and wildlife population trends projected with conservation measures, assessment by end of Y1 and peer-reviewed article by end of year 3. 2.3 Participatory HWCx plan endorsed by all (20) BZCFUGs, (co-developed by HWCx champions, and incorporating projections from HWC assessment), by Y2. 2.4 At least 80% of HWCx champions have led HWC drills, or supported intervention measures in their communities, by Y3. 2.5 A 80% reduction in livestock kill and 25% reduction in crop raiding in project communities by Y3. (Baseline: 29 livestock killed by tiger and leopard in 2021 according to PNP FY2021 data; crop raiding baseline to be established by Y1)	2.1 HWCx champions' records, workshop minutes 2.2 Assessment report, peer-reviewed paper 2.3 Participatory HWCx plan 2.4 HWCx champion reports, workshop reports, construction reports 2.5 PNP HWC records, Socio-economic surveys conducted with a random sample of community capturing data on livestock kill, crop raiding and other HWC incidence	By building local capacity to manage HWC issues (as in Integrated Tiger Habitat Conservation Project [ITHCP] Phase I), and establishing community members as hubs of expertise, long-term community resilience and adaptability in the face of changing HWC pressures is supported (without extraneous factors greatly influencing or increasing HWC beyond the levels currently predicted). A 80% reduction livestock kill and 20% reduction on crop raiding for the median household is both achievable (as evidenced by the results of the ITHCP Phase I and IUCN Nepal - Tiger in Nepal projects) and sufficient to drive a substantive shift in attitudes as attributable to this particular project.
Output 3 Diversified livelihoods for the most marginalized community members	3.1 Three women-led community banks formed (More than 50% of members from low-income	3.1 Cooperative records and by-laws	Take up of loans from community banking cooperatives is high and

Project summary	SMART Indicators	Means of verification	Important Assumptions
provide a direct revenue stream from the protected area, ensuring that precarious households equitably benefit from the corridor and are not forced into the overuse of natural resources.	households with 70% of members being women, disadvantaged and vulnerable people); 25 members per bank initially, growing to at least 40 members each by Y3. 3.2 120 members (at least 50% women, disadvantaged and vulnerable people) trained on developing livelihood skills (including tourism enterprises) in Y1 (2 trainings) and Y2 (4 trainings) 3.2.1 Market chain analysis completed to identify linkages in Y2 and community bank members accessing such linkages by Y3. 3.2.2 50% of members adopting livelihood options by the end of Y3. 3.2.3 20% increase in income of beneficiary members by the end of Y3. 3.2.4 At least 80% of cooperative members pass vocational exams in business management, finance, hospitality, and promotion skills by Y2. 3.3 Parsa National Park (PNP) tourism management plan publicly proposed and discussed, with all cooperatives and BZCFUGs represented, (led by PNP) by Y2, adopted into PNP Management Plan by Y3 3.4 People reached by tourism promotion, over 50,000 people reached by Y2 and Over 120,000 people reached by Y3. 3.5. 50% increase number of visitors to Parsa National Park by Y3 against baseline. Baseline: 152 tourists visited PNP in fiscal year 2021 (147 national tourists and 5 international tourists) - Source: PNP Data FY2021 3.6. Increase in tourism-related income in communities (accommodation, sales of goods)	3.2 Training logs, post-training assessment for cooperative members 3.3 Parsa National Park tourism management plan, workshop minutes, Parsa National Park Management Plan 3.4 Estimated viewing figures for documentary, passer rate at promotional boards at airport and major thoroughfares, website visits, PNP tourist information centre visits 3.5 Parsa National Park official visitor records 3.6 Socio-economic surveys conducted with cooperative members capturing income breakdown data.	enables the economic barriers to new livelihood adoption to be overcome, as seen in previous ZSL projects (e.g., DI 22-009, DI 26-012). By targeting the low-income, disadvantaged and vulnerable parts of the community for development of this direct revenue stream (e.g., DI-26-012 and DI 24015), those community members most likely to be forced into unsustainable natural resource dependency are sufficiently supported to avoid this outcome, substantially reducing the risk of such overuse. Trends indicating the likelihood of increased tourism to Parsa National Park continue, and commitment from DNPWC to manage tourism levels can be effective with benefit-sharing commitments to buffer zone communities, as with Chitwan and Bardia NPs. No travel bans or lock downs imposed by government due to increased COVID-19 cases. Travel and tourism activities are promoted locally, nationally and globally with adequate preventive measures during COVID-19 pandemic. National and international tourists are willing to travel following required COVID-19 preventive protocols.

Project summary	SMART Indicators	Means of verification	Important Assumptions
Output 4 Enhanced agroforestry practices adopted throughout the community-forest corridor, laying foundations for long-term forestry revenues and sustainable corridor connectivity across Parsa National Park.	4.1 200 community members trained in enhanced agroforestry practices (from targeted communities and with at least 50% women and people from low-income groups) - 100 by end of Y1 and an additional 100 by end of Y2. 4.2 Local nursery established to provide 50,000 native and low water-demand seedlings (70% in forest and 30% in private land) for North-East Parsa Community-Forest Corridor by end of Y2. 4.3 60% of households across community-forest corridor have implemented enhanced agroforestry practices on their small holdings by Y3. 4.4 20% of targeted households (disaggregated by income, gender, and ethnicity) have successfully planted 10,000 seedlings from the locally established seedling nursery by end of Y3.	4.1 Workshop records 4.2 Training certificates, attendance lists 4.3 Nursery management plan, seedling plantation photographs 4.4 Socio-economic surveys conducted with cooperative members capturing income breakdown data. 4.4 Socio-economic surveys conducted with a random sample of community capturing data on agroforestry activities, and seedling planting and success.	Laying the foundations for biodiversity-friendly production forests now will ensure the community-forest corridor is supported to provide connectivity into the future as timber harvests are made. Increased long-term forestry revenues (outside project timeframe) will secure the financial incentives for corridor management for the community. Sustainable water management, through tree choice, will ensure the long-term sustainability of the agroforestry, the corridor, and Parsa National Park itself (which is dependent on Nepal's rivers to maintain its grasslands), and raising the profile of the area will prompt the government of Nepal longer-term to recognize and ameliorate water management issues outside the NP.

Activities (each activity is numbered according to the output that it will contribute towards, for examples 1.1, 1.2 and 1.3 are contributing to Output 1)

Output 1

1.1, Support PA management in identifying and executing priority habitat management measures to increase the prey density within the core area. (Fireline, grassland, wetland)

1.2, Support BZCF towards identifying and executing priority habitat management measures to maintain vital corridors for wildlife movement.

1.2.1, Wetland/water source protection and management by BZCFUG (Cleaning, clearing, maintenance, small check dam, plantation around water source etc)

1.2.2, Grassland management by BZCFUG (uprooting trees and cutting, burning and sowing grasses etc)

1.3, Conduct camera trap survey to monitor wild mammals (small, medium and large) within buffer zone/corridor forest. (Capacity development to local resource person, equipment, food, transportation).

1.4, Support buffer zone community forests (BZCF) to prepare adaptive management plans incorporating participatory habitat management. (BZCF operation plan preparation/revision).

1.5, Support BZCF to improve the degraded forest in the identified corridor to improve ecological services.

1.5.1, Identify priority areas in the community forest corridor.

1.5.2, Plantation of native seedlings and saplings in priority areas of the corridor by BZCFUG

1.5.3, Regeneration promotion in priority areas of the corridor by BZCFUG

1.6, Support PNP and buffer zone to prepare/review the participatory adaptive management plan to improve the corridor habitat.

1.7, Update status of Dhole and prepare species action plan.

1.8, Promote collaboration between PA management and development stakeholders to construct wildlife-friendly infrastructure.

Project summary	SMART Indicators	Means of verification	Important Assumptions
Output 2 2.1 Assess the impact of increasing populations of mega-carnivore like tigers on other carnivores, its ecological footprint, and HWC implications. 2.1.1 Prioritise and map HWC hotspots to implement pre-emptive HWC mitigation measures. 2.2 Support BZMC to prepare and endorse human-wildlife coexistence (HWCx) plan, including training for the community members. 2.2.1 Conduct meeting and workshops on HWCx plan. 2.2.2 Develop HWCx plan. 2.2.3 Train HWCx champions and community members to implement HWCx plan. 2.3 Support buffer zone communities to implement HWC mitigation and management measures from HWCx plan (including PPC, fencing, and relief fund). 2.3.1 Support predator-proof corral to HWC victim HHs (Equipment and material) 2.3.2 Install and maintain wildlife-preventing fences (solar/mesh wire/biological). 2.3.3 Maintain HWC relief fund within BZUC. 2.4 Train and create awareness among PA staff and vulnerable local communities (older people, people with disabilities, women and children) on wildlife conservation and HWC. 2.4.1 Install hoarding boards on HWC. 2.4.2 Develop IEC materials on HWC. 2.4.3 Orient and train HWC-vulnerable local community. 2.4.4 Deliver HWC management and wildlife rescue training to PA staff and community members. **Output 3** 3.1 Provide sustainable, diversified livelihoods to the local people (skills training/community banking/cooperatives). 3.1.1 Document indigenous knowledge and existing best practices on diversified livelihoods and prepare livelihood improvement plan. 3.1.2 Conduct Rapid Market Assessment (market chain analysis) for identified livelihood options/trainings. 3.1.3 Support skills-based trainings and toolkits (commercial vegetable and livestock farming, plumbing, electrician, tailoring, motorcycle repair, etc.) 3.1.4 Form/strengthen community banks/cooperatives by proving trainings, cooperative education and institutional support. 3.1.5 Provide materials to start livelihood activities, including seed money. 3.2 Promote ecotourism opportunities in PNP and buffer zone, including infrastructure support through collaboration (such as training on ecotourism, information centre, and other infrastructure), incorporating local indigenous knowledge. 3.2.1 Conduct nature guide training. 3.2.2 Conduct hospitality training (cooking/housekeeping/waiting/bartending). 3.2.3 Support/strengthen information centre. 3.2.4 Maintain websites (PNP and partners) for tourism marketing. 3.2.5 Improve, maintain or establish community tourism initiative (Community homestay/lodge/towers) 3.2.6 Install signage along tourist route. 3.2.7 Create documentary. 3.2.8 Install hoarding boards in Janaki Temple area and Birgunj. 3.2.9 Conduct central-level workshop with NTB, HAN, TAAN. 3.2.10 Conduct local-level workshop for tourism promotion.			

Project summary	SMART Indicators	Means of verification	Important Assumptions
3.2.11 Install digital display (Simara Airport and Madhesh province HQ). 3.2.12 Incorporate tourism plan within management plan of PNP and its buffer zone. **Output 4** 4.1, Conduct trainings and workshops on agroforestry practice. 4.2 Provide seedlings to households for agroforestry (such as fodder, fruit, and bamboo). 4.3 Promote wildlife-deterrent cash crops (chillies, lemons, cotton, lemongrass, asparagus, ferns, turmeric, ginger, etc). 4.4 Conduct learning visit at the best agroforestry and wildlife-deterrent cash crop site. 4.5 Establish/strengthen community nursery. 5.1, Conduct baseline and endline survey.			

Annex 3 Standard Indicators

Table 2 Project Standard Indicators

Please see the Standard Indicator Guidance for more information on how to report in this section, including appropriate disaggregation. N.B. The annual total is not cumulative. For each year, only include the results achieved in that year. The total achieved should be the sum of the annual totals.

DI Indicator number	Name of indicator	If this links directly to a project indicator(s), please note the indicator number here	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total achieved	Total planned
DI-A04	Number of people reporting that they are applying new capabilities (skills and knowledge) 6 (or more) months after training.	3.2	People	Female	0	91	40	131	120
DI-B01	Number of new/improved habitat management plans available and endorsed	0.1	Number of Plan	Country: Nepal Type: New	0	0	1	1	1
DI-B02	Number of new or improved species management plans available and endorsed	-	Number of Plan	Dhole Conservation Action Plan Country: Nepal Type: New	0	0	1	1	1
DI-B03	Number of new/improved community management plans available and endorsed	2.3	Number of Plan	BZUC level HWCx mitigation Plan Country: Nepal Type: New	3	0	0	3	3
DI-B04	Number of new or improved sustainable livelihoods/ poverty reduction management plans available and endorsed	-	Number of Plan	BZUC level livelihood Improvement Plan Country: Nepal Type: New	3	0	0	3	3
DI-B07	Number of policies with biodiversity provisions that have been enacted or amended	1.2	Number of Plan	BZCFOP Country: Nepal Type: Amended	5	10	5	20	20

DI Indicator number	Name of indicator	If this links directly to a project indicator(s), please note the indicator number here	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total achieved	Total planned
DI-C01	Number of best practice guides and knowledge products published and endorsed	2.2	Number	Country: Nepal Language: English	0	0	1	1	1
DI-D01a	Area under Sustainable Management Practices	1.3	Number of Hectares	Country: Nepal Management Type: grassland management	8	40	52	100	100
DI-D01b	Area improved through restoration	1.3	Number of Hectares	Country: Nepal Management Type: Regeneration promotion	5	15	30	50	50
DI-D03a	Number of people with Sustainable Livelihoods created or protected	3.2.2	Number of People	Country: Nepal Gender: Female Sector: Agriculture	36	55	40	131	50% of 120 members.
DI-D03b	Number of people with improved income	3.2.3	Number of People	Country: Nepal Gender: Female Sector: Agriculture	0	91	40	131	20% increase in income of beneficiary members

Table 3 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)
Bridging Conservation and Human-Wildlife Conflict for Coexistence	Journal	Dinesh Neupane, Bhagawan Raj Dahal, Prakash Chandra Aryal, Sunjeep Pun, Maheshwor Basnet, Abarta Pandey, Shyam Kumar Thapa, Bishnu Prasad Thapaliya, Asmita Pandey, Ramchandra Khatiwada, Prachanda Maharjan, Haribhadra Acharya, 2024	Male	Nepal	*Authorea,* New Jersey	https://doi.org/10.22541/au.173089666.61098984/v1

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the **correct template** (checking fund, scheme, type of report (i.e. Annual or Final), and year) and **deleted the blue guidance text** before submission?	☑
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the Subject line.	
Is your report more than 10MB? If so, please consider the best way to submit. One zipped file, or a download option, is recommended. We can work with most online options and will be in touch if we have a problem accessing material. If unsure, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the Subject line.	☑
If you are submitting photos for publicity purposes, **do these meet the outlined requirements** (see section 14)?	☑
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	☑
Have you provided an updated risk register? If you have an existing risk register you should provide an updated version alongside your report. If your project was funded prior to this being a requirement, you are encouraged to develop a risk register.	☑
Have you involved your partners in preparation of the report and named the main contributors	☑
Have you completed the Project Expenditure table fully?	☑
Do not include claim forms or other communications with this report.	