Department for Environment Food & Rural Affairs





### Darwin Initiative Extra Annual Report

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

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

#### Submission Deadline: 30th April 2024

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

### **Darwin Initiative Project Information**

Project reference	DAREX008
Project title	Championing change: Living in harmony with wildlife in lowland Nepal
Country/ies	Nepal
Lead Partner	Zoological Society of London
Project partner(s)	Department of National Parks and Wildlife Conservation (DNPWC), Environment and Rural Development Centre (ENRUDEC), National Trust for Nature Conservation (NTNC), Ujjyalo Nepal (UN)
Darwin Initiative grant value	£4,906,934
Start/end dates of project	1 <sup>st</sup> April 2023 - 31 <sup>st</sup> March 2028
Reporting period	April 2023 - March 2024 and Annual Report #1
Project Leader name	Katherine
Project website/blog/l media	N/A
Report author(s) and date	Dinesh , Sanjay Matt

### 1. Project summary

In lowland Nepal, globally significant and recovering wildlife populations are being forced outside protected areas (PAs) through increasingly fragmented habitats, increasing human-wildlife conflict (HWC) which significantly impacts both people and wildlife. To address these challenges, this project aims to scale-up proven approaches for enhancing Human-Wildlife Coexistence (HWCx) in the landscape, such as investments to mitigate the impact of HWC, habitat fragmentation, and linear infrastructure development (e.g. roads, irrigation canals) upon wildlife, and livelihood support interventions to enable local communities to better coexist with wildlife.

Nepal's lowlands are home to 50% of the country's human population and 80% of the country's globally threatened species, with tiger, elephant, and rhino populations increasing in the landscape (DNPWC and DFSC 2022, Ram 2021, DNPWC 2021). The size of protected areas also increasing with 23% Nepal's land area now under protection (CBD 2022). Increasing wildlife populations has created the challenge of increasing HWC in the landscape; DNPWC reports recorded 39 human deaths in the country from HWC in 2023 (DNPWC 2023), most of which took place within buffer-zone forests and corridor areas. Land use changes have also resulted in wildlife increasingly using forests and corridor areas adjacent to PAs (DNPWC 2016, Neupane et al. 2014, Neupane et al. 2017), particularly elephants, who are affected and at greater risk from HWC (Koirala et al. 2015), which also threatens human lives and livelihoods (Neupane et al. 2014). Wildlife movement patterns are also threatened by linear infrastructure development, which limits the connectivity between PAs in Nepal (Van der Ree et al. 2015), increasing pressure

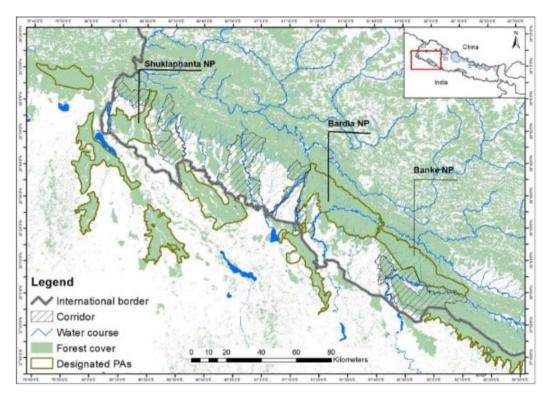
on wildlife populations, fragmenting vital habitats, and intensifying HWC and wildlife mortality (Bhatta 2022, Ament et al. 2021, Buchholtz et al. 2020, Ascensão et al. 2019). Increasing HWC incidents have also increased the strain upon already under-resourced wildlife rescue and rehabilitation facilities in the landscape, and climate change will further amplify land use changes. In addition, local livelihoods predominantly depend on subsistence agriculture, seasonal migration, ecotourism and forest resources, leaving communities exposed to limited livelihoods, diversification/strengthening opportunities, inefficient market linkages, inadequate HWC mitigation, and limited education services. This serves to weaken the resilience of communities to mitigate against increasing HWC.

To address these challenges, this project will deliver efficient HWC management interventions at site-level through capacity-building activities for managing forests and wildlife, and the promotion of HWCx champions at community-level, creating a network of 100 HWCx champions who will reach 55,000 people living within buffer zones and adjoining forests with awareness and education activities, reducing loss of both property and lives. These activities will foster positive attitude changes among local people in support of biodiversity conservation. The threat of linear infrastructure development to wildlife will be mitigated against by supporting the strengthening of wildlife-friendly crossings in Shuklaphanta National Park (ShNP) and by producing guidelines for wildlife-friendly linear infrastructure development, to be adopted by government stakeholders. The project will also secure Banke National Park (BaNP) and ShNP as hubs of wildlife rescue programmes, ensuring training, standards, guidelines and infrastructure are in place, which draw upon ZSL's expertise in animal care and rescue.

The project also seeks to address poverty-related challenges facing economically marginalised communities in the landscape, through livelihood support interventions, including the establishment of new or strengthened community banking cooperatives, to initiate income generation from new, sustainable livelihoods activities which enhances the economic resilience of community members and increase the average income of 7,265 HHs by 20%. ZSL and partners will also assess effective and relevant value chain strengthening options, to strengthen market access and valuation for chosen products/services from the project sites. Beneficiaries will also be trained to replicate agricultural and animal husbandry practices shown to be successful at reducing HWC and unsustainable dependency on forest resources. Existing ecotourism ventures in BaNP, Bardia National Park (BNP), and ShNP will also be strengthened through investments in skill development HWCx champion HHs. Livelihood support will be delivered in partnership with buffer zone institutions and local government, ensuring the long-term sustainability of livelihood interventions, while pre-and post-project beneficiary surveys will assess and evaluate the success of the project's poverty reduction and livelihood support activities.

ZSL's approach to tackling these challenges is based upon experience working in the lowlands of Nepal, knowledge from ZSL's animal exhibits in London and Whipsnade Zoos, academic expertise through the Institute of Zoology, and implementing conservation work around the world. The project will set the foundations for up-scaling HWCx and will build capacity for the effective site-level management of wildlife and habitats, with the potential for these lessons to be scaled-up across other biodiversity-rich areas in Nepal.

This project is implemented within three lowland Protected Areas in the western Terai Arc landscape of Nepal in BNP, ShNP and BaNP, by ZSL and its long-standing local partners, Department of National Parks and Wildlife Conservation (DNPWC), National Trust for Nature Conservation (NTNC), and site-based local partners Environment and Rural Development Centre (ENRUDEC), and Ujjyalo Nepal (UN). A map of the project's implementation site is found below:



### 2. Project stakeholders/ partners,

ZSL's main government partner under the project is DNPWC, under the Ministry of Forests and Environment (MoFE), who are responsible for the conservation and management of wildlife, and habitats in Nepal. DNPWC and ZSL have a project Coordination Committee (PCC) involving the Deputy Director General of DNPWC as chair, section heads from DNPWC, and representation from senior ZSL staff as members, which oversees the implementation of all ZSL's projects in Nepal (**Annex 0.5**). DNPWC grants ZSL approval for working within the project's three PAs (BaNP; BNP; ShNP). Additionally, under the project ZSL partners with in-country NGOs NTNC, ENRUDEC, and UN, selected based upon the organisations' government-authorised roles in different aspects of conservation, as follows:

- DNPWC for overall supervision and monitoring of the activities in protected areas (PAs) and management of PA buffer zones.
- NTNC for wildlife monitoring and livelihood activities in and around each PA, due to NTNC's experience in managing livelihood development and biodiversity conservation projects.
- ENRUDEC and UN for social and livelihood activities in the buffer zones of each PA, owing to their specialisms in community level activities related to conservation and wildlife.

The proposed project concept was planned and agreed by all key partners and stakeholders, incorporating each partner's inputs, feedback and suggestions during initial consultation meetings, which also engaged conservation officers of respective PAs and members from buffer zone user committees (BZUCs) of project sites. Following this, the project was approved for implementation by the Nepal government's social welfare council (SWC) and relevant ministries.

Once funding was secured, inception workshops were held at 3 tiers (i.e. central level, park level and community level), where information regarding project goals, objectives, activities, and budgets was shared to ensure all partners had common understanding on project management, delivery, and monitoring activities. A central level PCC inception meeting took place on 21 April 2023 (**Annex 0.1**), to share the project proposal and activities with DNPWC. Similarly, Project Management Units (PMUs) were formed in each respective PAs, comprising stakeholders inc. the Senior Conservation Officer of each PA as chair, and representatives from implementing partners and ZSL to execute and monitor the project activities effectively. Park level inception meetings were held sequentially in all three national parks between 8 - 11 September 2023 (see **Annex 0.2**) at PMU level, to secure agreement from all parties upon the activities to be implemented under the project at park-level. Likewise, community level inception was held on 2 December 2023 in BNP, 3 Dec 2023 in BaNP, and 18th December in ShNP (**Annex 0.3**), where Darwin Initiative Extra Annual Report Template 2024 3

poverty and biodiversity issues, and approaches for addressing these issues, were discussed between all stakeholders, to inform community stakeholders on the delivery and monitoring of project activities. Based on these inception meetings, all stakeholders agreed and confirmed the sites where the project would be implemented, and the communities to be targeted as beneficiaries of HWC mitigation and livelihood support interventions, who would be recruited to the project following wellbeing rankings determining levels of vulnerability to HWC and economic marginalisation, and validation of beneficiary lists by BZUC committee members. Additionally, central level independent monitoring of the project was agreed by SWC until project end, to ensure the project adheres to the SWC implementation guidelines.

A clear strength of this partnership model was the close collaboration and coordination between stakeholders at central, park, and community levels, with ZSL acting as the main facilitator bringing parties together. This strong partnership model is a working modality implemented by ZSL in Nepal over many years, which facilitates the smooth identification of conservation issues in project sites, the completion of needs assessments, and the identification of project beneficiaries, agreed by each relevant body involved in overseeing, monitoring or implementing the project. This is an important consideration for ZSL in the coming years of the project, as ensuring synergy and collaboration between the relevant stakeholders will be essential for ensuring the smooth delivery of future activities.

ZSL also engaged officials from the British Embassy on 16<sup>th</sup> October 2023 (**Annex 0.4**) in ZSL's office in Kathmandu, to brief Department for Environment, Food and Rural Affairs (DEFRA) on projects it has supported ZSL to implement in Nepal, including DAREX008. Additionally, the Vice Ambassador of the British Embassy also visited BNP on 18 March 2024 with ZSL staff to observe field-level project implementation progress under DAREX008(**Annex 0.4**).

### 3. Project progress

### 3.1 Progress in carrying out project Activities

### *Output 1: Foundations set for upscaling HWCx*

Output 1 is designed to create a holistic and scalable framework for managing HWC through capacity building, community engagement, technological innovation, and policy improvement. In Y1, a dedicated position within the BZMC of each PA in the Western Terai Complex (WTC) was established, to act as a crucial role for the exchange of information concerning HWC incidents. A needs assessment of PA-BZ requirements in terms of capacity, HWC database handling and mode of communication was conducted, to gain a comprehensive understanding of the capacity for HWC management in each PA. Additionally, participatory conflict mapping, HWC-themed stakeholder meetings, and a HWCx unit was established to help to identify spatial patterns, HWC intensity and information sharing, and to operationalize such strategies across BZUCs within the WTC. Workshops were also conducted to update the Community Based Anti-Poaching Unit (CBAPU) bylaws. These initiatives laid a foundation for enhancing and upscaling HWC mitigation efforts across the project sites, establishing a model to be replicated in similar contexts.

# 1.1 Build on existing understanding and capabilities within PA-BZ management with regards to HWC reduction by creating HWCx positions, organizing HWC-themed meetings, and producing participatory HWC maps.

In Y1, the project facilitated the creation of a HWCx position in each of the three project PAs to act as a focal to conduit for information exchange relating to HWC incidents. Additionally, knowledge products, including an assessment of PA-BZ requirements in terms of capacity, HWC database handling and mode of communication, and participatory HWC maps were produced for all three PA's.

### 1.1.1 Assess PA-BZ requirements in terms of capacity, HWC database handling and mode of communication.

This assessment aimed to identify strengths, weaknesses, and areas needing improvement in national parks' operational frameworks, particularly in managing HWC, HWC database management, and HWC information dissemination channels. This was achieved through literature reviews, on-site visits, and nine focus group discussions (3 per PA), along with key informant interviews with park officials, buffer zone officials, conservation partners, and local Darwin Initiative Extra Annual Report Template 2024 4

communities. These interviews were completed in two phases between 15-26 June 2023 and 21-22 March 2024 (Annex 1). These methods examined PA infrastructure, resource allocation, and technological integration for addressing HWC incidents and database management protocols in each PA. The evaluation found significant shortcomings in PA capacity to manage HWC incidents, including insufficient human and financial resources, lack of adequate technologies, and infrastructure for tracking, monitoring, and handling problematic animals involved in HWC incidents. The findings from the assessment will provide a platform for understanding the capacity of responses to HWC in each PA, which will inform where future project interventions will be targeted.

### 1.1.2 Create a position (HWC Information Focal Point) on Buffer Zone Management Councils (BZMC) at each PA as a conduit of HWC information exchange.

Three roles were created by the project, to assume responsibility for improving HWC database management and streamlining communication systems relating to HWC within each project PA and buffer zone. (Annex 2, Annex 3, Annex 4. In BNP and ShNP, the database of HWC incidents is managed directly by the parks' focal persons, while, in BaNP the responsibility falls to rangers assigned to the buffer zone department, rather than the park's focal person directly, explaining why different roles in each PA were targeted when creating these new positions.

### **1.1.3 Participatory conflict mapping completed within the landscape with priority entry sites of communities into PAs identified.**

Participatory conflict mapping workshops to draw PA territory (natural and human resources), wildlife conflict areas, active grazing zones, entry sites of communities into forests, and ideal future scenarios in terms of HWC mitigation, was conducted within 20 project BZUCs within the WTC PAs. By mapping these multi-dimensional conflict areas, insights were gained into spatial patterns and intensities of conflicts in the region, revealing trends/patterns and pinpointing priority areas for HWC mitigation interventions. Further mapping of multi-dimensional conflict areas within each PA will be done at the community level during Y2. The preliminary report found that wild boar, tiger, monkey, spotted deer, leopard, blue bull, and elephant, are the species that most frequently cause human and livestock casualties and infrastructure damage, and also cause fear, anxiety, and stress for people living in PA buffer zones. Work preparing the final reports following the exercise is on-going and will be made available in Y2.

### **1.2 Review HWC mitigation projects in Nepal and identify the effectiveness of mitigation tools trialled to inform HWC best practices guidelines for South Asia**

To review the effectiveness of mitigation tools trailed and to produce the best practice guidelines, stakeholders' meetings were conducted in all three PAs through the discussions with the related stakeholders.

# **1.2.1 Stakeholder meeting to identify effective HWC mitigation tools from previous projects for informing HWC best practice guidelines**

Eight stakeholder workshops including representatives from BZMCs, BZUC/BZCF members, CBAPUs, local government, nature guide associations and journalists were convened in BaNP (16 and 18 March 2024), BNP (10 Dec 2023, 6 Feb 2024), and ShNP (5 March 2024), to discuss previously tested HWC mitigation tools and assess their effectiveness and providing recommendations for best mitigation measures (**Annex 5**) in future. In total, 277 participants (27% women and 55% from disadvantaged groups (DAG)) were engaged in these meetings. The workshops identified the construction of predator-proof corrals (PPCs), mesh wire fences/reinforced concrete walls, awareness campaigns, electric fences, solar-powered predator deterrent lights, and early warning systems (e.g. solar-powered sirens) as the most effective mitigation methods for the species identified during A.1.1.3.

### 1.3 Map the existing network of CBAPUs and facilitate the CBAPUs to put HWC reduction at their core.

To map the existing network of CBAPUs and to put HWC mitigation at the core of CBAPU activities, stakeholder meetings in were conducted to assess the current practices of CBAPUs and to update CBAPU bylaws to include HWC mitigation actions.

### 1.3.1 Stakeholder meetings to assess current practices of CBAPU

A series of stakeholder meetings (n=10) to assess the current practices of CBAPUs, including their legal status, challenges, opportunities, and achievements, took place in all 3 PA's (3 in BaNP, 5 in BNP and 2 in ShNP) between 18 December 2023 - 23 January 2024. In total 354 participants (24% women and 40% DAG) representing CBAPUs, BZUCs and PA officials attended the meetings (Annex 6). The discussions underscored the necessity of defining clear roles and responsibilities for CBAPUs, and to ensure legal recognition of their operations within conservation frameworks, to streamline their contributions to conservation efforts.

### 1.3.2 Upgradation of CBAPU bylaws

In Nepal, there are over 700 CBAPUs units with more than 10,000 members, who support conservation efforts voluntarily, through activities such as patrolling BZCFs, wildlife rescue, awareness campaigns for wildlife conservation, and HWC mitigation. Despite their significant contributions, CBAPU's roles and responsibilities have not been formally acknowledged in conservation policies. To address this, a review of policies was undertaken through a high-level workshop convened on 23 January 2024 (refer to **Annex 7**), facilitated by the Deputy Director General of DNPWC. The workshop brought together 31 stakeholders from various government and conservation organizations to discuss the status and future of CBAPUs, highlighting the need for clearly defined CBAPU contributions, incentives for their engagement, and institutionalisation into BZUCs. Following the workshop Buffer Zone Management Regulation 1996 was amended so CBAPUs are prioritised for support with income-generating activities, providing a framework for their involvement and mobilization in conservation efforts.

# 1.4 Strengthen HWCx champion groups within the project sites to deliver their allocated responsibilities and for scaling up the work in other parts of the country

In the first year, 74 HWCx champion units were established in the WTC (13 in BaNP, 42 in BNP, and 19 in ShNP, **Annex 9**). Across these units, 370 individuals were recruited (five per unit), from CBAPUs, Forest Guards, and Local Community members (40% women, 46% from DAGs), with one focal person per unit. The primary purpose of establishing HWCx units is to enhance the community's capacity to manage HWC, through empowering communities via educational and sensitization programs delivered by HWCx champions, and by establishing links between parks and the community, with HWCx champions facilitating information exchange between the two groups following alerts received from the Joint Operation Cell (JoC) within each project PA.

# 1.5 Pilot the use of network of GSM enabled surveillance cameras in conflict species monitoring (elephant) in ShNP with a view to alert communities.

As part of HWC mitigation measures under the project, ZSL Nepal piloted the deployment of GSM-enabled surveillance cameras in the buffer zones of BaNP, BNP, ShNP, to familiarize the HWCx champions and park staff in using GSM-enabled cameras for monitoring problematic animals. The information gained from GSM cameras will be channelled to community members by the HWCx champions. Training was also provided to HWCx units on using GSM-enabled cameras in Y1.

#### 1.5.1 Training PA-HWCx champions on deployment of GSM enabled surveillance camerasdeployment training

In Y1, 45 cameras (BaNP: 15, BNP: 15, ShNP: 15) were deployed in Feb and Mar 2024 to establish an early wildlife warning system around the peripheries of designated parks, enhancing both wildlife monitoring and the safety of adjoining communities **(Annex 33)**. These deployed cameras detected 12 instances of tiger movement, 22 instances of leopard movement, and 119 instances of other wildlife movements in the area. The remaining 15 cameras are reserved as a backup for future deployment, intended to be allocated based on the needs of parks. Three orientations/training programs were organized in BaNP (23<sup>rd</sup> Feb), BNP (28<sup>th</sup> Feb), ShNP (22<sup>nd</sup> March) to equip HWCx units' focal persons with skills for GSM-enabled surveillance camera deployment, their operations, and information channelisation from park to community **(Annex 10).** In total, 125 participants (24% women), including 74 HWCx focal persons, park officials, members from BZUCs and BZMCs, army officials, JOC members and conservation partners, participated in the training.

### 1.5.3 Mobile phones for HWCx champions to communicate

Under Act 1.5.3, mobile phones were distributed to HWCx champions in ShNP to enable the flow of information on problematic animals' movement, from the JOC of each park to the mobile phones of each HWCx unit's focal person, who then disseminates this information to local communities, allowing community members to take necessary precautions for HWC mitigation. In Y1, 19 mobile phones were also distributed to the 19 HWCx units of ShNP (Annex 11).

# **1.6 Strengthen access to existing government quick relief mechanism for compensation for livestock loss**

To improve access to the existing government quick relief mechanism for wildlife damage, six quick relief funds (3 each in ShNP and BNP) were established in Y1, benefiting 5,830 HHs (BNP) and 6,000 HHs (ShNP) (**Annex 12, Annex 13**). To initiate the quick relief fund, firstly, meetings were held with senior conservation officers, BZUCs and BZMCs, during which decisions were made to establish separate HWC relief funds, as stipulated in the Wildlife Damage Relief Distribution Guideline 2080. Following this, a mobilisation guideline was developed, and the relief fund was established in adherence to the 2080 guideline.

## 1.8 Test and if appropriate scale-up insurance mechanism for mitigating HWC (primarily focused on tiger, elephant, rhino and leopard).

In Y1, discussions about piloting insurance schemes to cover crop damage, livestock predation, and property damage, took place in stakeholder workshops. A point of consensus among participants was of the critical role insurance schemes play in HWC mitigation strategies. In addition to these workshops, both formal and informal discussions were held with relevant stakeholders i.e. representatives of BZMCs, BZUC/BZCF members, CBAPUs, local government, nature guides and journalists, to discuss the rollout of the insurance schemes in the second year of the project's implementation.

### *Output 2: Livelihood investments to break the cycle of poverty*

Output 2 focuses on poverty alleviation through livelihood support to disadvantaged communities, to reduce HWC by reducing dependency levels upon forest resources. To achieve this aim, in Y1 community banks were formed (new banks) or strengthened (existing banks), training on alternative livelihood options was provided, an assessment on effective value chain strengthening options was completed, and a new community bank mobilisation guideline was developed. Beneficiaries were identified in Y1 through wellbeing rankings and a baseline survey for evaluating changes in livelihoods and resource dependency by project end was completed.

### 2.1. Assess the existing mechanism of livelihood support at the BZUC level through workshops on value chain promotion for livelihood commodities/services

In Y1, eight new livelihood groups and 12 existing groups were supported by the project. This initiative aims to empower communities by facilitating the development of small businesses and other sustainable income-generating ventures. A monitoring mechanism was established to prevent fund mismanagement, thereby ensuring the project's transparency, governance, accountability, and sustainability. However, the mobilization of the startup fund for these new groups was delayed beyond March 2024, and the plan to develop a market linkage strategy in the first year is also delayed until Y2. The delays were caused by the need to establish and approve revised procedures for fund mobilization and monitoring, which was originally anticipated at the project design phase.

### 2.1.1 Conduct participatory resource mapping for project sites in BaNP, BNP, ShNP

In Y1, participatory resource mapping was conducted by engaging BZUCs to identify and locate natural resources within project sites that support local livelihoods, with further validation by GIS tools, focus group discussions, and key informant interviews. Participatory mapping was conducted across all 20 BZUCs in the project sites. This assignment found that major livelihoods for beneficiaries within BZUCs includes agriculture, livestock farming, daily wage labour, foreign employment, government jobs, and small businesses, and most BZUCs reported a decline in the availability of natural resources, particularly fuelwood, fodder, and leaves (**Annex 43**). A detailed report on the participatory resource mapping exercise will be produced in Y2.

## 2.2 Consultation workshops to identify and establish market needs for key products/services from the project sites and strengthen market access and valuation

During Y1, local governments have instituted a collaborative monitoring mechanism (**Annex 44**) for the eight newly established livelihood groups, enhancing the initiative's transparency, governance, accountability and sustainability. As a result of these foundational preparations, the development of a market linkage strategy will be completed in Y2, which when implemented, will integrate the value chain, broaden market access, and empower smallholders to forge connections/partnerships with major buyers, thereby facilitating the growth of newly established livelihood enterprises.

#### 2.3 Replicate community banking (establish new and strengthen existing ones), with bylaws covering conservation and subsidy scaled for households with different levels of marginalisation

This activity focuses on strengthening existing community banks in the project landscape (12) and establishing 40 new community banks in the project sites, of which 8 were established in Y1. To identify where new community banks should be established wellbeing rankings of community members were carried out in Y1 to identify those scoring the lowest in terms of well-being, who will be recruited into the project as beneficiaries of livelihood support actions.

#### 2.3.2 Seed fund support to cooperative to the community banks

Top-up funds were provided to 12 existing community banks (**Annex 18**,2 in BaNP, 5 in ShNP, and 5 in BNP), with seed funds given to 8 new community banks (6 in BNP, 2 in ShNP) in Y1 (**Annex 15, Annex 16**). Prior to the establishment of these community banks, a mobilization guideline for community banks was developed and approved by the relevant local government authorities (BaNP, BNP) or BZUCs (ShNP)(**Annex 17**). A further 32 community banks will be formed and supported with funds in Y2, with all banks monitored and supported by BZUCs and local government.

### 2.4 Enhance community resilience in agriculture through replicating best practices from other sites.

This activity aims to improve community resilience through increased adoption of best agricultural practices. In Y1, the activity was initiated with HH soil test campaigns, completed by collecting soil samples across project sites and testing it in laboratories, to identify soil properties in each site and providing recommendations for best-practice agricultural activities according to the soil types identified.

#### 2.4.1 Soil test Camp

In Y1, soil from 945 HHs (BaNP 392, BNP: 354, ShNP:199) was collected between 15th Feb-15th March 2023 (**Annex 19**), so smallholders could test soil for nutrient deficiencies and fertilizer requirements. Soil technicians visited houses and conducted soil testing through soil camps, where spatial distributions of chemical properties, including pH, organic matter, total nitrogen, available phosphorus, and available potassium were examined. Recommendations for fertilizers, and overall soil health reports, were provided to each HH, providing learnings to be integrated in pest management and sustainable agricultural practises implemented in Y2.

### 2.8 Conduct pre and post project surveys of the beneficiaries to assess and evaluate changes

To evaluate the changes in the well-being of beneficiaries throughout the project, a baseline wellbeing survey was conducted covering 4,684 households (BaNP:1262, BNP: 1790, ShNP: 1632) in Y1. This survey was focussed upon identifying economically vulnerable or marginalised community members in terms of livelihoods and was completed alongside another baseline survey focussing on identifying the individuals in project communities most vulnerable to HWC (see Act 3.5). This survey considered community wellbeing holistically across 5 key categories of wellbeing: material wellbeing, livelihoods and natural resource use, security, social relations, freedoms and aspirations, and health. In total, 18 enumerators from 3 PA's were mobilised for data collection following a comprehensive 2-day training programme (**Annex 20**), and a comprehensive analysis report will be shared in the next reporting period.

#### *Output 3 HWC mitigation investments for communities and BZUCs*

Output 3 focuses upon HWC mitigation measures and investments for implementing locally appropriate and proven HWC mitigative measures via HWCx champions. In year 1, consultations were conducted with stakeholders to identify locally appropriate interventions in 3 PA's. Similarly, HWCx champion units were formed to implement proven HWC reduction measures, and a survey was completed to set baselines and measure changes in community perceptions towards HWC.

# 3.1. Build on the existing knowledge base of HWC in the landscape by participatory consultations for co-developing locally appropriate mitigation methods for the project sites.

Across the project sites, stakeholder consultation workshops were conducted to formulate HWC mitigation strategies, by engaging PA officials, representatives from BZMCs, BZUCs, BZCFs, local government, and CBAPU members. The primary objective was to conduct a thorough assessment of the effectiveness of previously implemented HWC mitigation measures and to evaluate locally appropriate interventions for for HWC mitigation within the project sites.

### 3.1.1 Meeting with PA and BZUC officials to assess existing knowledge bases and locally effective mitigation measures in relation to HWC in project sites

3 stakeholder meetings (one each in BaNP, BNP, and ShNP) were conducted to assess existing knowledge of HWC and locally effective interventions between Feb – March 2024. 145 representatives (52% Women and 27% DAG) from parks, BZUCs, CBAPUs, nature guides, and BZCFs attended the meetings (**Annex 21**). The locally appropriate interventions identified will be documented and institutionalised at the BZUC level in Y2.

### 3.2 Support BZUCs through HWCx champions under Output 1 to implement HWCx plan using proven proactive HWC reduction measures.

In Y1, a HWCx plan with proven HWC reduction measures was developed through 8 stakeholder consultation workshops (3 in BaNP and ShNP, 2 in BNP) attended by 277 participants (31% women, 39% DAG) (**Annex 5**). The HWCx plan in the process of finalization, which all 20 project BZUCs will formally endorse. Following the endorsement, HWCx units within target communities will be equipped with the necessary skills, knowledge, and resources to implement the HWCx plan at the community level in Y2.

# 3.4 Produce awareness-raising materials and outlets to spread HWC mitigation and biodiversity conservation messages to the larger public using channels identified under Output 1.

In Y1, as part of the educational and awareness-raising initiatives, an informational board was installed along the East-West highway traversing BNP (**Annex 22**) to ensure maximum visibility of HWC mitigation and conservation related messages. Concurrently, pamphlets were produced (**Annex 22 photographs**), which will be incorporated and distributed as education materials in behaviour change campaigns initiated at a community level in Y2 by HWCx champions.

### **3.5** Pre and post project social survey in the participating communities to ascertain reduction in HWC and measure changes in perception.

In Y1, a baseline survey of HWC beneficiaries (900 HH) was initiated, with 535 HHs (BaNP:117, BNP:189 and ShNP: 229) completed by March 2024, with the remainder to be completed in April 2024. This survey will establish baseline levels of perceived economic and social vulnerability from HWC, attitudes to key wildlife species, satisfaction and usage of HWC mitigation measures, incidence of HWC, sense of human-wildlife coexistence possibilities and resilience, and positive attitudes about conservation and participatory resource management. Surveys were conducted across the project site with the trained local enumerators **(Annex 23).** Data analysis and report writing is underway, with the final report to be shared in the next reporting period.

#### Output 4: Mitigation of effects of linear infrastructure and habitat fragmentation on wildlife

Output 4 focuses on mitigating linear infrastructure's impact on habitat fragmentation, and enhancing PA capacity in wildlife rescue, handling and translocation. In Y1, stakeholder meetings were conducted to identify the gaps and opportunities for linking the project with current linear

infrastructure mitigation strategies, to assess the impact of existing and proposed linear infrastructures and identify gaps and opportunities for integrating current mitigation strategies into the project. Additionally, resources were provided to ShNP and BNP for monitoring problematic tiger/leopards.

#### 4.1 Relevant stakeholders are engaged through workshops and meetings to identify gaps and opportunities to link with current mitigation strategies for the negative impacts of linear infrastructure

Under this activity in Y1, consultation workshops were conducted to increase understanding of the ecological impacts of linear infrastructure, and to identify gaps and opportunities for mitigating the negative impacts of linear infrastructure on wildlife movement. The workshops also advanced the design and implementation of eco-friendly solutions for the Mahakali Irrigation Project (Phase II and III); and catalyse coordination and collaboration between government agencies and their partners.

## 4.1.1 Workshop with stakeholders to identify gaps and opportunities to link with current mitigation strategies

Four workshops were conducted in the WTC (BNP 20<sup>th</sup> Jan 2024 and 31<sup>st</sup> Dec 2023, BaNP 10<sup>th</sup> Jan 2024, ShNP 9<sup>th</sup> Feb 2024, **Annex 24**) with 112 participants (17% women and 32% from DAG), including officials from DNPWC, PA authorities, local governmental entities, BZMC, BZUC, BZCF and CBAPU members, and conservation partners. The workshop focussed upon identifying gaps and opportunities in current linear infrastructure mitigation strategies in a collaborative and participatory approach, to ensure synergy and agreement upon the methods to be chosen for mitigating the effects of linear infrastructure on biodiversity. The workshop also highlighted the need for effective coordination between provincial governments, Divisional Forest Officers (DFO), PA authorities, and local governments, as the implementation of mitigation methods will require collaboration between many different partners. In YR2, a working group for co-designing approaches linear infrastructure mitigation efforts and linking these to current mitigation methods, will be formulated from the stakeholders attending this initial workshop. **4.2 Assessment of impact on wildlife of current and proposed linear infrastructures in the three national parks.** 

An assessment focusing on the impact of existing irrigation canals (Sikta, Babai, and Mahakali) within BaNP, BNP, and ShNP upon wildlife was completed thorough literature reviews, key information interviews, focus group discussions and secondary data analysis (Act 4.2.1), with field verification via the deployment of camera traps (Act 4.2.2).

### 4.2.1 Desk based analysis

Relevant national and international publications and reports were analysed as part of this analysis, including data from DNPWC which indicates over the past five years, 2,639 incidents of wildlife fatalities were recorded across PAs, of which linear infrastructure caused 30% of these deaths (24% from road accidents,6% from drownings in canals). Alarmingly, over 95% of the fatalities associated with canals occurred in three major irrigation systems—the Sikta, Babai, and Mahakali—situated in each project PA. This situation highlights the pressing need for effective mitigation measures to lower the danger linear infrastructure poses to wildlife in each PA.

### 4.2.2. Field Validation

Two field visits from 24-31 January 2024 and 1-7 March 2024 (**Annex 25, photos**) were conducted to observe and validate the findings/recommendations received from Act 4.1.1. and Act 4.2.1. Field level assessments also assessed existing mitigation measures implemented for linear infrastructure development projects in the major irrigation canals (Sikta, Babai, Mahakali) and major roads (Postal Road and East-West Highway) in or near project PAs. These field visits were led by a consultant Linear Infrastructure Specialist, along with PA officials and representatives from national infrastructure agencies. The findings revealed inadequate implementation of mitigation measures across the 3 major canals and major roads near PAs, and despite the construction of a few crossing ramps, the irrigation projects of Sikta, Babai, and Mahakali were identified as significant obstacles to wildlife movement.

### 4.2.3 Assessment Report

An assessment report (**Annex 25**) evaluating the impact of current and proposed irrigation projects (Sikta, Babai, and Mahakali) on wildlife within BaNP, BNP, and ShNP, integrating findings from Act 4.1.1, Act 4.2.1, and Act 4.2.2, was developed to analyse the impact these irrigation canals, compile national and international mitigation best practices, and identify and rank priority sites for intervention. The report's findings are detailed in the annex below, the learnings from which will be used to inform best practice recommendations developed under Act 4.4 in future.

To validate these findings, camera traps and animal sign surveys were deployed between January to March 2024 (**Annex 25**) to assess the impact of linear infrastructure upon wildlife movements and behaviours and identify key wildlife crossing sites. Following this assessment, key animal crossing sites were identified, and further camera traps and animal sign surveys will be conducted in Y2 in these sites to monitor changes in the use of crossing sites and wider wildlife behavior because of these infrastructural units.

The Linear Infrastructure Specialist also prepared a preliminary report for park authorities, offering best practice solutions for mitigating the impact of linear infrastructure on wildlife, which highlighted the need for integrating wildlife-friendly mitigation measures with scientific research. Key recommendations from the report included the pre-emptive identification and mapping of biological corridors, key habitats, and critical wildlife crossing points affected by infrastructure, to guide the planning and design of mitigation measures, e.g. retrofitting canals for wildlife crossings, fish ladders for aquatic passages. Additionally, the stabilization of canal banks with vegetation serves the dual purpose of enhancing habitat linkages and controlling erosion. Engagement with local communities, infrastructure agencies, and stakeholders will be vital for building a collaborative approach to mitigation, and a robust monitoring system is essential for ensuring the success of any mitigation measures introduced (**Annex 26**).

### 4.5 Strengthen wildlife response team led by Bardia NP, with two representatives from satellite sites (ShNP and BaNP).

In Y1, a high-level field visit occurred between January 14-15, 2024, led by the Director Generals of DNPWC and the Department of Water Resources and Irrigation, the Country Representative and Wildlife Biologist of ZSL, and PA officials **(Annex 27)**. This visit focused upon evaluating current wildlife rescue and rehabilitation infrastructure in ShNP and BaNP, and site observations of irrigation canals in these PAs. This visit helped to orient PA staff to identify weaknesses and priorities for strengthening wildlife responses. This activity in Y2 will focus on enhancing veterinarians' expertise in species-specific care and veterinary skill development.

### 4.6 Strengthen existing post rescue structures in the three parks through meeting the parks' infrastructural and equipment needs.

Activity 4.6 aims to enhance the post-rescue infrastructure and resources available to PAs. In Y1, 5 GPS collars were acquired to monitor the behavioural and movement patterns of problematic animals (rhinos and tigers as per DNPWC request).

#### 4.6.5 Provide GPS collars to Bardia NP to monitor problematic animals.

With the allocated budget in Y1, five GPS collars were acquired to monitor the movements of problematic tigers and rhinos identified by DNPWC in real-time (**Annex 28**). In Y2, five more problematic tigers and elephants will be collared for monitoring, expanding monitoring efforts to include the movement patterns of problematic animals outside protected areas.

#### Output 5: Investments in PA habitat quality benefit wildlife

Activities under this output focus on the improvement of park habitat and facilities. In Y1, GSMenabled cameras were deployed in the buffer zones (BZ) of 3 PAs and CCTV cameras were installed in tiger holding cages to monitor animal behaviour. Tigers, prey bases and elephants were monitored to understand population structure in the landscape and fireline maintenance, conservation technology training, and vehicle support was provided to parks to support effective management interventions, with priority sites for habitat management interventions within PAs also identified. The operational plan for BZCFs was also revised to incorporate strategies for HWC management and biodiversity conservation.

# 5.1 Stakeholders including PAs, NGOs, BZUC and Community Service Organisations (CSOs) are engaged to co-design approaches to improve wildlife habitat management.

Under this activity in Y1, following GIS mapping and workshops with government staff, project partners, BZUCs and CSOs, priority areas for habitat management interventions were delineated in three PAs via a comprehensive study. After the study report was developed, a workshop was held with all stakeholders involved to validate the report's findings in ShNP, with further validation workshops with stakeholders in BaNP and BNP planned for Y2.

#### 5.1.1 Workshops between government staff and project partners

On 10 March 2024, a workshop (**Annex 29**) was held with 11 attendees (10% women, 27% DAG) including park officials, the Nepali Army, BZMC, and NTNC, to identify areas for habitat management interventions within ShNP. The workshop focussed on the existing practices of habitat management within ShNP in grasslands and wetlands. A critical concern raised related to habitat loss within ShNP due to river cutting in the areas adjacent to the Mahakali, Shyaali, and Radha Rivers, which greatly impacts overall habitat integrity within ShNP.

#### 5.1.2 Priority areas for habitat management mapped

Activity 5.1.2 aims to identify ecologically significant zones where habitat management actions should be prioritised in PAs, to optimise limited resources and maximise the impact of habitat protection measures. This activity integrated spatial analysis on habitat conditions, species distribution, ecological threats, and land-use patterns, to assess the highest priority sites within PAs for habitat management interventions (**Annex 30**).

### 5.2 Collaborate with PA authorities to better manage priority habitats identified within the three PAs.

Under this activity in Y1, key sites for fire line maintenance work were identified through consultations with park authorities in the three PAs of WTC, with work then initiated.

#### 5.2.3 Support fire-line maintenance in all three parks.

90km of fireline maintenance was conducted (BaNP: 19km, BNP: 68 km, ShNP: 3 km) (**Annex 30**) in Y1, through bush cutting, constructing drainage/trenches, pothole filling and strategic levelling. Additionally, two wooden bridges (**Annex 30**) were built in ShNP to enhance year-round patrolling and monitoring by park staff.

### 5.3 Strengthen PA's existing capacity to monitor key species (Tiger, Elephant, Browsing species) within the PAs.

In Y1, activity 5.3 focused on the regular monitoring of tigers, elephants, and their prey bases in BaNP and ShNP, and trainings in the application of conservation technologies for wildlife monitoring.

### 5.3.1 Regular monitoring support for tiger, elephant and prey species in Banke and Shuklaphanta NPs based on National Tiger Monitoring Protocol 2017.

In Y1, the project facilitated monitoring of tigers, elephants, and their prey species in BaNP and ShNP. In BaNP, a total of 169 camera traps were deployed for 42 days between Feb-March 2024 by 28 field technicians (**Annex 31**), while in ShNP monitoring was completed via camera trapping and line-transect surveys over 161 man-days and 88 elephant days (7-15 March 2024, **Annex 31**). The report on the ecological monitoring activities completed in Y1 is anticipated to be ready in the next reporting period. To ensure the effectiveness of the monitoring efforts, ZSL supported capacity-building training delivered by park authorities in ShNP and BaNP on monitoring techniques such camera trap deployment, transect surveys, and occupancy surveys (**Annex 31**), by providing financial and technical resources.

### 5.3.4 Support capacity development in handling/use/deployment of conservation technologies including GPS/GIS/RS, camera trap, real-time SMART.

To enhance the capacity of 30 ShNP officials (Women: 20%; DAG: 30%) in deploying technologies for wildlife monitoring, a two-day training session was conducted in ShNP between 26-27 March 2024 (**Annex 32**). The training curriculum was designed to cover topics relevant to

modern conservation technologies, including use of drones, data handling, and SMART patrolling.

### 5.4 Build on existing PA infrastructure and equipment within the three parks to improve management effectiveness.

Under this activity in Y1, 45 camera traps were provided to PAs to assess management interventions, and CCTV cameras were provided to monitor problematic tigers' behaviours in holding cages in the project site.

#### 5.4.1 Support Park authorities with GSM and non-GSM enabled cameras, Instant Wild.

In Y1, 30 GSM-enabled and 30 non-GSM cameras were purchased (with 45 deployed this year under Act 1.5 and 15 more to be deployed in YR2) for park authorities to monitor problematic wildlife movement, and illegal activity in strategic locations within PAs. (**Annex 33**).

### 5.4.2 Provide wireless CCTV cameras to ShNP and Banke NP as 24/7 monitoring devices in the fringe areas of the park.

In Y1, 17 CCTV cameras were provided (BNP 16, ShNP 1, **Annex 34**) to monitor the behavior of problematic tigers in three holding cages in BNP, and wildlife movement around the Joint Operation Cell (JOC) of ShNP. The deployment of these CCTV cameras this year is aligned with activity 4.6.4 (Planned for Y2).

### 5.4.6 Support a tractor as an all-purpose habitat management vehicle and grass-cutter to ShNP.

In year 1, ShNP was provided with an all-purpose habitat management vehicle (inc. grass cutter), to implement habitat management activities in the PA. The tractor was handed over to ShNP in the presence of park authorities on 22 Feb 2024 (**Annex35**), to support habitat management efforts including fireline maintenance and bush clearance.

#### 5.4.7 Support two vehicles to Bardia NP and Shuklaphanta NP.

Two wildlife rescue vehicles were procured and handed to BNP and ShNP on 24 March 2024 (**Annex 36, 47**), as specialized wildlife ambulances dedicated to providing prompt and appropriate care to afflicted wildlife within the PAs. This will develop the capacity of park staff to respond faster to cases of injured or sick wildlife, which have an increased likelihood of causing HWC incidents.

### 5.5 Collaborate with stakeholders (PAs, conservation partners, universities) to promote studies towards strengthening the conservation effectiveness of each PA.

A workshop was organized on 13 Dec 2023, to engage professors and undergraduate students from the Institute of Forestry and Tribhuvan University in ZSL's satellite office at BaNP (**Annex 37**). The event discussed human-tiger conflict (HTC), human-tiger coexistence strategies, and the habitat requirements, habitat status and behavioural ecology of tigers (**Annex 37**), helping increase understanding among PA management professionals regarding species-specific topics, and designing and implementing PA conservation plans or strategies. Additionally, the use of natural and artificial waterholes by wildlife is being studied in BaNP using camera traps, to assess climate seasonality on patterns of waterhole use. to ensure that climate change scenarios are incorporated in recommendations for updating future PA management strategies (**Annex 37**).

### 5.6 Improve upon existing recommendations and policies to incorporate changes following the results of National Tiger Survey 2022

Under this activity in Y1, the operational plan of BZCFs in three PAs, in coordination with respective park and BZUCs, was upgraded to include HTC mitigation strategies, with the focal person (park rangers) assigned to carry out the newly defined responsibilities. These revisions aim to incorporate provisions addressing HWC management and biodiversity conservation within the operational plans, and ensure they align with the conservation goals of the park.

### 5.6.3 Support in the upgradation/development of operation plans of BZUG/CFUG.

In Y1, the operational plans of seven BZCFs were upgraded (2 in BNP: Geruwa BZCF, Samjhana Women BZCF; 5 in ShNP: ChandraSurya BZCF, Janajyoti BZCF, Pragatishil Women BZCF,

Shahid Smriti BZCF, Shuklaphanta BZCF) (**Annex 38**). In the process of revising each operational plan, a consultation workshop was carried out by representatives from BZUCs and BZCFs. The draft operational plans of BZCFs in BNP were shared by park officials while operational plans of ShNP are in the process being endorsed by the respective BZCFs. Additionally, a workshop was held in BaNP with six BZCFs of Deurali-Hariyali BZUC to identify existing gaps in current operational plans in terms of HTC, following which participants were facilitated to devise ways for addressing the gaps identified (**Annex 38**). It is hoped that by incorporating HTC mitigation plans in operational plans, communities will be better equipped to live alongside tigers within the landscape.

In Y1, 45 cameras (BaNP: 15, BNP: 15, ShNP: 15) were deployed in Feb and Mar 2024 for the purpose of setting up an early warning system around the peripheries of designated parks, enhancing both wildlife monitoring and the safety of adjoining communities (Annex 33 also referred to under Act 1.5.1).

### 3.2 Progress towards project Outputs

### *Output 1: Foundations set for upscaling HWCx*

Overall progress in Y1 was satisfactory, with the output on track to be achieved by the end of project. In Y1 a study was carried out to assess PA-BZ requirements for improving capacity. HWC database handling, and modes of communication for sharing alerts on HWC incidents with other conservation stakeholders and community members (Act 1.1.1). To facilitate information exchange, a HWCx focal person was appointed and institutionalised in each park (BNP, ShNP, BaNP, Act 1.1.2, Ind 1.1.1), who were provided with mobile phones to enhance communication channels (Act 1.5.3). These activities have set a foundation for achieving a 25% increase in information flow by the end of the project (Ind 1.2.4). Additionally, participatory HWC hotspot maps were produced (Act 1.1.3, Ind 1.1.2) to prioritise sites for HWC mitigation interventions in future years of the project. Similarly, following stakeholders' meetings, best practices guidelines relating to insurance schemes for HWC reduction were produced and institutionalised within 3 PAs (Act 1.2.1, Ind 1.4.2). CBAPUs bylaws (Ind 1.2.1) were amended following 10 assessment workshops identifying the current practices of CBAPU (Act 1.3.1, Act 1.3.2) and 74 HWCx units were formed as subgroups of the CBAPUs in 52 settlements of 3 PA's (Act 1.4, Ind 1.2.2), each receiving the training on GSM-enabled surveillance camera deployment (Act 1.5.1) for monitoring activities, of which 45 have been deployed by PA authorities (Act 1.5)

### Output 2: Livelihood investments to break the cycle of poverty

Progress on output 2 was highly satisfactory in Y1. Participatory resource maps in 20 BZUCs were produced (Act 2.1.1, Ind 2.1.1) and preliminary work has been initiated to quantify and diversify existing products and services in the project landscape (Act 2.2, Ind 2.1.2). In YR1, 8 new community banks were established, and 12 existing community banks were strengthened (Act 2.3.2, (Ind 2.2), reaching 731 HHs members (Women: 60%, DAG: 54%). Although slightly delayed, the remaining 32 community banks will be established in Y2. Y1 also saw the initiation of activities enhancing community resilience in agriculture and developing a market linkage strategy for community enterprises (Act 2.1.3), setting the foundation for livelihood enhancement activities in future years. To ascertain changes in community wellbeing a baseline survey was conducted with 60% of the total livelihood beneficiaries across 52 settlements (Act. 2.8, Ind 2.4, 2.5), which once analysed, will provide baseline information for evaluating changes in key project indicators (e.g. Ind 0.3) over the duration of the project.

### **Output 3: HWC mitigation investments for communities and BZUCs**

Progress under output 3 in Y1 is as anticipated; locally appropriate HWC mitigation interventions against high conflict species were documented (Ind 3.1) through 3 stakeholder meetings (Act 3.1.1), to be integrated into a HWCx plan (Act 3.2) endorsed at BZUC level in Y2. Similarly, a baseline survey was carried out for beneficiaries of HWC interventions (Act 3.5), to track the achievements of HWC-related targets relating to increasing the use of crop protection methods by 20% (Ind 3.3.3), reducing livestock depredation by 30% (Ind 3.3.4), reducing direct harm to humans by 15% (Ind 3.3.5), increasing knowledge on HWC mitigation of 3000 HHs (Ind 3.3.6), increasing 5000 HHs' positive attitude towards conservation (Ind 3.5), and increasing senses of coexistence with wildlife (Ind 3.4).

**Output 4: Mitigation of effects of linear infrastructure and habitat fragmentation on wildlife** Output 4 in Y1 saw the identification of relevant stakeholders including experts, the Departments of Irrigation, Roads, Railways, and the Nepal Electricity Authority (Ind 4.1), who were brought together via 4 stakeholder meetings (Act. 4.1.1), to identify the gaps and opportunities in current linear infrastructure mitigation strategies. Additionally, an evidence-based assessment on the effects of linear infrastructure on wildlife movement in the Mahakali canal (ShNP) was initiated in Y1, to be continued in Y2 (Ind 4.2). Baselines on wildlife incursions through key linear infrastructure surrounding project PAs were established (Act 4.2.3), which will inform the location of priority wildlife crossing sites introduced in future years of the project (Act 4.3). An assessment report (Act 4.2) with recommendations for best practice designs for wildlife-friendly linear infrastructure has been developed for submission to relevant stakeholders (Ind 4.4). Improvements to wildlife rescue and rehabilitation services have been made by providing 17 CCTVs (Act 4.5.1) and GPS collars to park authorities to inform post-release data on wildlife movements (Ind 4.5.2) and monitor the behaviour of wild-caught problem tigers.

#### Output 5: Investments in PA habitat quality benefit wildlife

In Y1, priority areas within PAs for habitat management interventions (Act 5.1.2, Ind 5.1.1) were co-design (Ind 5.1) via stakeholder workshops (Act 5.1.1). To enhance the capabilities of park staff to comply with CA|TS accreditation requirements (Ind 5.3.2), a two-day long training was held in ShNP to enhance capacity of 30 PA staff in using conservation technology for ecological monitoring and patrolling purposes (Act 5.3.4). Additionally, support was also provided to ShNP and BaNP authorities to conduct regular tiger and prey base monitoring (5.3.1). 17 CCTV cameras (Act 5.4.2) were provided to park authorities to understand the behaviour of problem tigers in holding cages, and 7 BZCF operational plans were upgraded (Act 5.6.3) to align with conservation policies of 2 PAs. Additionally, 90 km of fireline (Act 5.2.3) was managed in Y1 (Ind 5.2.3). Indicator 5.3.4 has almost been achieved in Y1 as 3 vehicles, 5 GPS collars, 17 CCTV cameras, and 60 other cameras (Act 5.4.6, 5.4.7, 4.6.5, 5.4.1) were provided to PAs. Assessments on the use of waterholes by wildlife (Act 5.5) set baselines for evaluating changes in wildlife uses of key habitats (Ind 5.4.1) while the deployment of GSM-enabled cameras at HWC priority sites (Act 5.7.2) will provide baselines for evaluating changes in Wildlife sightings in HWC hotspots (Ind 5.4.1, 5.4.2).

### 3.3 Progress towards the project Outcome

To support the achievement of the project's outcome, in Y1, 12,265 HH's from 52 settlements have been reached to complete well-being rankings, following which beneficiaries were selected for livelihood support interventions or HWC mitigation methods, based upon socioeconomic status or vulnerability to HWC. Final beneficiary lists were endorsed by project BZUCs. To measure outcome-level indicators, two baseline surveys for each beneficiary type were initiated to allow for the evaluation of changes in economic and social vulnerability from HWC (0.1), reduction of HWC impacts (0.2), wellbeing levels (0.3), and attitudes towards wildlife species (0.4), due to the project's interventions. Regular monitoring of elephant, tiger, and prey species populations in ShNP and BaNP completed in Y1 provides baselines from which to evaluate changes in species' population trends in future years (O.6). Findings from all baseline surveys will be shared in YR2. New community banks have been established (8) and existing community banks strengthened (12), reaching 1420 HHs by Y1 end, with this set rise to 7020 HHs by project end (O.3), of which 60% will be female beneficiaries and 54% will come from disadvantaged groups (O.4). Therefore, Y1 has effectively laid the foundations for the achievement of the project's outcome, via the development of knowledge products informing future project interventions and the collection of baseline data.

### 3.4 Monitoring of assumptions

All the outcome and output level assumptions as mentioned in the proposal phase (Annex) still hold true, there are no changes to the assumptions noted in the project logframe.

### 3.5 Impact: achievement of positive impact on biodiversity and poverty reduction

As the project is in its initial stage of implementation, it is early to report on impact-level achievement at this point. However, to deliver impact, the foundation for the project has been established in Y1, from which activities in future years will develop from. Under each output, initial assessment and reports have been produced such as participatory resource maps, assessing the existing capacity of PA and BZ in terms of HWC mitigation, the identification of priority areas for habitat management interventions, an assessment on the impact of linear infrastructure on wildlife, best practice recommendations for mitigating the impact of such infrastructure. The initial findings from these assessments will inform future project activities. A total of 1420 HHs have received support from community banking activities which are anticipated to positively impact poverty reduction efforts. Additionally, the strategic plan under Output 1 and the HWCx plan under Output 3 will help not only to mitigate HWC, but also to protect biodiversity and enhance both the livelihoods and safety of buffer zone communities. Finally, activities in YR1 have brought together key conservation authorities and government agencies across Nepal, and maintaining these partnerships and relationships developed in Y1will be critical in ensuring the delivery of future activities. The baseline surveys initiated in Y1 will also help to measure achievement against some of the project's key impact indicators in future years.

### 4. Project support to the Conventions, Treaties or Agreements

Nepal's NBSAP focuses on enhancing the integrity of ecological systems while supporting local and national economic development, and this project will support specific plans and targets within the NBSAP, which closely align with broader CBD goals and SDGs. This project's contribution to the achievements of NBSAP targets in Y1 are:

- Species conservation This year the project supported BaNP and ShNP to conduct monitoring of tiger and prey species as per the National Tiger Monitoring Protocol 2017 (act 5.3.1), contributing to NBSAP objectives to broaden conservation targets for additional species and deliver Nepal's national Tiger and Elephant Conservation Action Plans. Similarly, training was provided to park staff, army officials and wildlife technicians in handling/deployment and use of conservations technologies (e.g. GPS/GIS, camera trap, real time SMART) (Act. 5.3.4, Ind.5.3.2).
- Landscapes To align with the Ministry of Forests and Soil Conservation's Terai Arc Landscape (TAL) Strategy, in Y1 the project assessed the impact of linear infrastructure in 3 PAs (Act. 4.2, Ind 4.2), contributing to TAL Strategy 6. Similarly, priority areas for habitat management interventions were mapped in 3 PAs (Act. 5.1, Ind.5.1.1), integrating TAL Strategy 2. Likewise, community members were engaged to map natural resources in PAs and buffer zones (Act.2.1.1, Ind.2.1.1), HWC hotspots (Act 1.1.3), and form 74 HWCx units, contributing to TAL Strategy 3.
- Climate change The project contributes to NBSAP (CC-A4 to A6) in respect to the interconnectedness of climate change and biodiversity loss, by incorporating activities improving the wellbeing of communities through climate smart income generation training. However, most of the project's activities on climate change are to be implemented in Y2 onwards.
- Enhancing PA effectiveness Several of the project's activities align with PA-A4 (NBSAP), focussing on the improvement of the management capacity of PAs to combat biodiversity loss. In Y1, priority areas for habitat management intervention were mapped (Act.5.1.2, ind 5.1.1), 90 km of fireline was identified and maintained (Act 5.2.3, Ind5.2.3), park authorities and other stakeholders received capacity building training on using conservation technologies (Act. 5.3.4, Ind 5.3.2), and park staff were supported to conduct species monitoring in two PAs (Act.5.3.1, Ind. 5.3.2). Similarly, to improve park management efficiency, project PAs were provided 60 GSM and non-GSM enabled cameras (Act. 1.5, Ind 5.3.4), 17 CCTV surveillance cameras (Act 5.4.2, Ind. 5.3.4),10 GPS collars (Act 4.6.5, Ind.5.3.4).2 vehicles and 1 tractor for habitat and species management efforts (Act, 5.4.6, 5.4.7. Ind 5.3.4).
- Human-Wildlife Coexistence To contribute towards NBSAP PA-A5, 6 quick relief funds for HWC were established as a swift compensation mechanism for loss of lives and property (act.1.6). Additionally, 74 HWCx units were formed in PAs to educate, inform and increase Darwin Initiative Extra Annual Report Template 2024 16

community awareness of coexistence strategies and HWC mitigation methods, which is expected to increase positive perceptions towards wildlife (Act.1.4, Ind1.2.2, Ind.3.5)

- Connectivity the project supported the achievement of NBSAP PA-C2 and C3, which aims to mitigate the impacts of linear infrastructure alongside or within PAs (PL-B1), by completing an assessment of the impacts of linear infrastructure and habitat fragmentation upon wildlife in 3 PAs (Act. 4.2, Ind 4.3). Also, a best practice recommendations report was developed to inform PAs on how to mitigate the impacts of linear infrastructure (Act. 4.4.1, Ind. 4.4).
- Tourism income Participatory resource mapping was developed in Y1 to identify the potential livelihood activities (including tourism income) that could stimulate the sustainable income generation and wellbeing improvements (Act.2.1.1, Ind. 2.1.1). The skill development training on nature-based tourism in Y2 (Act.2.3.2, Ind.2.3.2) will directly contribute to NBSAP PA-D1. The formation of 8 new community banks with the support of seed money and strengthened existing community banks in project areas (Act. 2.3.2, Ind.2.2) has a particular focus on women and disadvantaged or indigenous people, contributing to NBSAP strategy CE-A. Similarly, 74 HWCx units were formed to foster community management of forests (Act.1.4, Ind.1.2.2), contributing to NBSAP strategy GSI-A1, CBD's targets 1, 2, 5, 7, 10, 11, 12, 14 and 15, and SDG goals 1, 5, 10 and 15. It will also support increased access and benefit sharing at a community level (NBSAP PL-B2).
- Policy alignment Assessing the existing network of CBAPUs and upgrading CBAPU bylaws (Act.1.3, Ind.1.2.1), and securing BZUC and municipality endorsement for community bank mobilisation guidelines and quick relief fund guidelines, shows the alignment of project activities with policy, therefore contributing to NBSAP strategy PL-A11.

#### 5. Project support for multidimensional poverty reduction

This project focusses upon reducing HWC and poverty among 12,265 HH in lowland Nepal. The project's beneficiaries reside in PA buffer zones, in communities that include marginalised groups such as Indigenous people (e.g. Tharu people), Dalit communities (Scheduled Castes), women, and those with disabilities, who are among the poorest in the landscape and are highly vulnerable to HWC. Their vulnerability is explained by low resilience for bouncing back from HWC incidents, which is compounded by low socioeconomic status, as a result of limited livelihood options, low education, and inefficient market linkages, and high dependency rates upon forest resources. The project guarantees the inclusion of these vulnerable groups as project beneficiaries by undertaking wellbeing rankings, which determine that >50% of respondents selected for inclusion in the project are women, and the majority of beneficiaries selected come from categories C and D of the wellbeing ranking, which are defined as the groups most vulnerable to HWC and with the most precarious livelihoods. These beneficiary lists validated by BZUCs where communities are located, ensuring the participation of the most vulnerable people in beneficiary selection. By focussing interventions on the poorest and most vulnerable communities, this project aims to deliver maximum impact in terms of reducing poverty.

The project also aims to deliver strengthened and diversified livelihood opportunities to community members, through community banking initiatives and training in new sustainable livelihoods, to initiate new income generating activities for diversifying income streams and building economic resilience (Ind.2.2, 2.4). New livelihood activities will be linked to markets and private sector businesses for value chain exercises (Ind 2.1.2 and Ind 2.1.3). This, in combination with HWC mitigation and awareness raising activities, will help reduce the impact of HWC in the project sites (Ind 0.2) while delivering wellbeing improvements to community members (Outcome 0.3). These interventions will increase community resilience towards HWC, by improving their ability to absorb its economic cost and by improving aspects of their wellbeing such as psychological safety.

In Y1, poverty reduction efforts have focussed on establishing the foundations for interventions at the community level in future years, so there are no substantial achievements to report this year. However, well-being rankings of each beneficiary settlement area ensured the most vulnerable individuals have been included in the project as beneficiaries, of which some have already been recruited into the 8 new community banks formed this year in 3 PA's (Annex 15, 16). Further, to evaluate the changes in poverty-related indicators over the duration of the project, a baseline survey was carried out in Y1 to enable the measurement of progress against these relevant indicators in future years of the project.

### 6. Gender Equality and Social Inclusion (GESI)

Please quantify the proportion of women on the Project Board <sup>1</sup> .	ZSL has 8 project members on the project board, 4 of which are female (50%) and 4 of which are male (50%).
Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women <sup>2</sup> .	ZSL meets the criteria for which 50% of the senior leadership are female, however project partners i.e. NTNC, ENRUDEC, Ujjyalo Nepal, are mostly comprised of men in their senior leadership teams. The full breakdown of genders within partners' leadership team is not known.

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	

HWC has been identified as the most pressing issue in Nepal by the Nepalese government in recent years, and therefore efforts under this project will be made protect the lives of those who are most vulnerable to HWC. As women are particularly involved in natural resource collection in forest areas and livestock grazing, they are vulnerable to HWC, and often have limited economic resilience and access to employment opportunities. Therefore, women will be targeted as project beneficiaries (>50% of beneficiaries), to support gender equality and ensure men and women are given equal opportunities for recruitment into capacity-building opportunities, and account for their heightened vulnerability to HWC, with activities focussing on reducing dependency on livelihood activities with higher HWC risk, such collecting forest resources. The participation and inclusion of women and other marginalised groups in project activities has been achieved through conducting wellbeing rankings with target communities, to ensure that beneficiary selection followed a GESI-sensitive approach. Wellbeing survey questions, and consequent surveys to collect baseline data on communities' attitudes and perceptions to HWC, and wellbeing levels, included survey questions disaggregated by gender, age, or social group. These baseline

<sup>&</sup>lt;sup>1</sup> A Project Board has overall authority for the project, is accountable for its success or failure, and supports the senior project manager to successfully deliver the project.

<sup>&</sup>lt;sup>2</sup> Partners that have formal governance role in the project, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.

surveys prioritised female participation, and 8/18 survey enumerators were female to encourage allow female respondents to feel more at ease when interviewed. Gender quality will also be promoted through the project via increased security, access to livelihood opportunities and the integration of inclusive voices in resource governance. In doing so, the project builds on ZSL's past successes enabling fairer representation of women and marginalised groups in livelihoods and governance work, and equitable benefits sharing. Marginalised groups are also prioritised for inclusion in livelihood development activities, ensuring the prevention of elite capture (ind. 0.3 and 0.4). Likewise, workshop and meetings organised by the project have been designed to be more inclusive and participatory, with members from indigenous and disadvantaged groups included within consultations when developing project outputs such as Act A.4.2.3., and settlement areas with the highest rates of HWC conflict were selected as project settlements, to ensure the project benefits the most vulnerable groups within the landscape. The project has a GESI-sensitive monitoring, evaluation and reporting system that assesses representation, participation, access, and benefit sharing to demonstrate project impacts on equality. As such, datasets are disaggregated by gender where possible. Through GESI-sensitive M&E, wellfunctioning grievance mechanisms and beneficiary feedback shared during other consultative activities, the project aims to facilitate adaptive co-management of the project's activities and continuous learning, with lessons from completed activities integrated into project delivery in future years.

Y1 of the project has set the foundations for implementing the project in a GESI-sensitive manner, and the frameworks for monitoring the inclusion of women and other marginalised groups in the project have been established.

### 7. Monitoring and evaluation

The project has well-structured mechanism for monitoring and evaluation (M&E). Day-to-day data collection and activity tracking is carried out by a M&E officer, in adherence to the project's internal monitoring plan. Similarly, PMUs are established in each PA for monitoring activities at site level, meeting 7 times (3 in BNP, 2 each in BaNP and ShNP) in Y1. At a central level, a PCC led by DNPWC monitors the delivery of activities, with the PCC meeting 3 times in Y1 to discuss progress and provide suggestions for adapting the implementation of the project (Annex 42). To measure project progress against key indicators such as changes in income (Ind 2.4) and wellbeing (Ind 0.3), baseline surveys have been completed in Y1, with mid-term and final year human data collection to follow. Analysis of the results is underway and will be shared in the next reporting period.

Following the conclusion of Y1, no changes were made to the M&E plan or the monitoring frameworks of the project. To have universal of understanding of the projects M&E systems across all implementing partners, the deliverables and targets for each activity, and overall project logframe, was explained during inception meetings with partners in Y1 (Annex 45). Moreover, activity tracking templates accounting for all logframe indicators have been shared with partners for monitoring activities. ZSL has also updated the project logframe to assign DI standard indicators to the existing logframe indicators.

### 8. Lessons learnt

The main lessons from in Y1 relate to learnings from the process ZSL undertook to secure approval for the project from the Social Welfare Council of Nepal (see below):

**Social Welfare Council (SWC) approval**: The project had to wait longer than anticipated to receive approval to begin from the SWC, the Government Authority in Nepal, the body responsible for overseeing and approving all international NGO activity in Nepal. The delay in approval came due to frequent changes in SWC board members, which prolonged the approval process as each new board member reviewed the project details. Considering these delays, the implementation timeframe for implementing Y1 was significantly squeezed. SWC's provisions also obligated ZSL onboard two new partners (Ujjyalo and ENRUDEC) to lead community-focused work in BaNP and BNP, which the SWC determined must be led by site-based NGOs. ZSL communicated this provision to NIRAS via a change request in July 2023, and following approval, due diligence exercises, partner onboarding sessions, and revisions to budgets, workplans, and contractual documents, were completed to bring on the two new partners, which

further delayed the commencement of Y1 activities. This significantly limited the window in which staff time could be charged in Y1, ensuring ZSL and partners were likely to incur a significant staff cost underspend by Y1 end. To mitigate against this budget issue, ZSL reallocated staff budget from YR1 to YR2, and activity costs from YR2 to YR1 for activities that could be implemented earlier in the project timeframe, i.e. fixed capital equipment purchases, to ensure that the overall total Y1 budget could still be spent in full by March 31<sup>st</sup>, 2024. The lessons learned regarding potential delays in SWC approval will be incorporated into future years of the project, to limit the impact delays in SWC approval may cause in future Also to mitigate this in future, ZSL will confirm final project timelines after SWC approval is granted, rather than doing this beforehand, as was done initially under DAREX008.

### 9. Actions taken in response to previous reviews (if applicable)

Not applicable as this represents the first Annual report submitted for project DAREX008.

#### 10. Risk Management

No new risks have arisen in the last 12 months that need to be reported on. ZSL has updated the project risk register to account for the downgrading of risks relating to COVID-19 and assigning new risk owners following changes in project staff, or changes to staff roles and responsibilities.

#### 11. Sustainability and legacy

To achieve long term success, this project prioritises supporting buffer zone communities, government stakeholders, and PA authorities, through activities selected for their ability to deliver sustained change. Investment in communities' skills, livelihoods, HWC mitigation infrastructure and equipment ensures that income and wellbeing improvements will continue after the project ends. Community banking initiatives established under the project are expected to grow in capital and membership post-project, as experienced in other ZSL-led projects. Buffer zone communities, local government and provincial government bodies have the necessary resources to sustain the project's interventions after the initial investments are made, and so will take ownership of project interventions and ensure the legacy of the project lasts beyond its lifecycle. By embedding HWCx positions in BZMC structures, with HWCx champions operating in partnership with both BZMCs and BZUCs, networks of communication between park and community stakeholders will be established and consolidated for the long-term, allowing for the better flow of information, identification of priorities, and direction of resources in mutually agreed ways, in alignment with respective HWC reduction strategies. HWC mitigation plans will be developed with HWCx champions and integrated within community banking schemes, ensuring recommendations for future HWC mitigation actions can be taken by relevant site-based institutions after the project's end, without requiring the support of ZSL. The project will also establish better collaboration between conservation and park stakeholders, allowing for the better management of habitats via increased coordination and knowledge sharing, reducing HWC and improving wildlife and habitat management efforts. The knowledge and skills gained through livelihood activities will remain in project communities, with continuing long-term support guided via PA authorities. HWCx champions, agroforestry practitioners, and nature guides will remain within their communities following the conclusion of the project, sharing the knowledge they've gained and inspiring the next generation to take on the roles now performed due to the project.

The group learnings and adaptive solutions for HWC mitigation and livelihood enhancement developed through this project have the potential to be scaled up to other biodiversity-rich areas of Nepal, in support of the Government of Nepal's TAL Strategy, currently in the middle of its 50-year vision. The close collaboration the project enjoys with the Government of Nepal via DNPWC ensures that the project fully aligns with DNPWCs regional and national conservation goals, and with government support, the project's interventions will continue to be sustained by DNPWC after the project's conclusion. Many of the project outputs, policy documents, and reports will be internalised by DNPWC at project end, ensuring that all learning is integrated within the Government of Nepal's TAL Programme and is fully owned by DNPWC. Therefore this 5-year project will play a strong role in validating DNPWC's approach to tackling HWC in future. In addition, ZSL and partners have a permanent presence in Nepal and will remain available for ongoing technical support after the project's conclusion.

### 12. Darwin Initiative identity

Darwin Initiative and UKAID has been publicised at all three tiers of the project's work i.e. central level, park level and community level. During the inception phase, Darwin Initiative and UKAID were acknowledged as the donor funding agencies during all workshops and consultation meetings. Minutes of all PPC, PMU and community level activities note the Darwin Initiative name to ensure its visibility during these project activities. To ensure the visibility of the Darwin Initiative identify on key project objects, the Darwin Initiative logo and UKAID logo are placed on the banners, hoarding boards, brochures and all other communication materials, demonstrating their visibility within the communities that are engaged under the project. Both vehicles and the tractor procured in Y1 of the project have also been branded with the Darwin Initiative and UKAID logos, demonstrating the visibility of the Darwin Initiative identify within the project PAs (Annex 47).

There is a strong understanding within Nepal of the Darwin Initiative, through projects implemented in Nepal by ZSL under the Darwin Initiative such as DI 29-011 and DIR29S2. Both these projects, in addition to DAREX008, involve engaging central government, local government, conservation partners and the community members on the project's aims, intentions, and progress, and involves publicising the Initiative with each of the relevant stakeholders.

### 13. Safeguarding

Has your Safeguarding Policy been updated in	the past 12 months?	No
Have any concerns been reported in the past	12 months	No
Does your project have a Safeguarding focal point?	Yes [ <i>If yes, please provi</i> Asmita	ide their name and email]
Has the focal point attended any formal training in the last 12 months?	Yes [If yes, please pro training]	vide date and details of
	Asmita has joined the org this stage has not organisational safeguard she did take park in session relating to Enviro Management on 29 <sup>th</sup> M project DAREX008.	attended any formal ding training. However, an orientation/ training nmental Safety and Risk
What proportion (and number) of project state training on Safeguarding?	aff have received forma	Past: % [and number] Planned: % [and number]
20/22 (91%) of ZSL project staff have rece safeguarding in Y1, with the final 2 to be traine		-
Furthermore, 12 project partner staff (1009 DAREX008) were included in the Safeguardin 29th March 2024, to enhance their ski environmental and social safeguards in relation projects ( <b>Annex 46</b> ).	ng training completed on Ils and knowledge on	safeguarding by the end of Y2.
Has there been any lessons learnt or challenge ensure no sensitive data is included within res	0	past 12 months? Please
As the project is in its initial stage of implement or lessons to be learned at this point. Howe meaning a new safeguarding officer has rece process is underway. As part of onboarding, Safeguarding. Any challenges/issues relating	ever, ZSL has experienc ently joined the organisat , they will take formal o	ed some staff changes, ion, so their onboarding rganisational training on

Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so please specify.

During Y2 activities, refresher sessions for partners and stakeholders will be held on safeguarding, to brief about the safeguarding process, mechanisms for reporting grievances, modality for reporting safeguarding issues, and responses to grievances or safeguarding issues.

The community will be made aware of the tools for airing grievances (e.g. anonymous grievance box, free telephone number for raising concerns with ZSL staff directly, directly registering complains with project staff) that are available to them, and the process for registering issues and concerns.

Refresher orientation will be given to partners and in house staff on ESMS policies and procedures during activities in Y2 focussed upon strengthening the project's safeguard mechanisms.

Please describe any community sensitisation that has taken place over the past 12 months; include topics covered and number of participants.

Community members have been made aware of the projects aims, its target beneficiaries, and implementation model, via community level inception workshops held in December 2023. The project will fully begin implementing community-level activities in Y2, which will demand frequent orientation for community on the specific activities to be delivered, updates on activity delivery and community engagement with the project's grievance's mechanisms, to ensure community members are fully aware of the mechanisms available to them for reporting issues, and the process for reporting issues via these tools. Extensive community engagement and sensitisation will begin in earnest in Y2.

Community members were also engaged during wellbeing rankings for beneficiary selection, and for baseline surveys to collect baseline information on indicators relating to HWC and wellbeing. During these exercises. To safeguard community members involved in the surveys, before surveys were undertaken, consent from each participant was secured, which explained the purpose of the survey, how their information would be used and stored, and the significance of their participation. Participants were also informed they could leave the interview at any stage, with no requirement to finished, if the topics covered became were too distressing for respondents.

During the project inception period, community members were involved in training lessons (alongside other government or conservation stakeholders) on ZSL's global code of conduct and global safeguarding policies. Also, grievances mechanisms were set up in project communities, and information was provided to community members engaged during inception on how to register issues and concerns as the project develops.

Furthermore, on 29th March 2024, orientation/training was held on environmental safety and risk management systems. Altogether, 54 participants including government officials, BZMC chairs, BZUC Chairs, partner staff, local community leaders, and ZSL staff participated in the training programme. The main objective of this training was to enhance knowledge and skills on environmental and social safeguards in relation to ZSL-led conservation projects, including DAREX008 (**Annex 46**).

Have there been any concerns around Health, Safety and Security of your project over the past year? If yes, please outline how this was resolved.

To date, no such concerns around health, safety and security have been identified.

### 14. Project expenditure

Project spend (indicative since last Annual Report	2023/24 Grant (£)	2023/24 Total Darwin Initiative Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)	-			N/a
Consultancy costs				N/a
Overhead Costs	_			N/a
Travel and subsistence				N/a
Operating Costs				N/a
Capital items (see below)				N/a
Others (see below)				Due to the delays in the initiation of project activitie due to SWC approval delay less monitoring
				activities were required in Y1 that originally anticipated
TOTAL	£589,626.00	£589,626.00		

Table 1: Project expenditure during the reporting period (1 April 2023 – 31 March 2024)

Table 2: Project mobilised or matched funding during the reporting period (1 April 2023 – 31 March 2024)

	Secured to date	Expected by end of project	Sources
Matched funding leveraged by the partners to deliver the project (£)			
Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project (£)			

### 15. Other comments on progress not covered elsewhere

The delays in SWC approval represented the most significant difficulty the project had to overcome this year (as noted in sections above). This delay led to the slowing down of the project activities agreed in the implementation timeline. However, this issue was mitigated against by putting in extra efforts to complete Y1 activities in the given timeline, and by submitting a change request to reallocate budget between donor budget categories. Despite these challenges, the project was able to complete nearly all planned activities in Y1, and some activities originally

designed for Y2, and therefore ZSL and partners are happy with overall project progress by the end of Y1.

### 16.OPTIONAL: Outstanding achievements or progress of your project so far (300-400 words maximum). This section may be used for publicity purposes

The project has made some outstanding achievements in terms of developing knowledge products that will guide future interventions at the community level. In Y1, the wider project team produced an assessment of PA-BZ requirements in terms of capacity, database handling and mode of communication, participatory resource maps assessing potential livelihood activities, participatory conflict maps, an assessment of locally appropriate HWC interventions for integration in a HWCx plan to be implemented by HWCx champions, an assessment of priority areas for habitat management interventions and an assessment of the impact of current and proposed linear infrastructure development on wildlife and habitat fragmentation in 3 PAs. These key knowledge products will provide a platform of evidence- based understanding from which to initiate future project interventions.

Realising the importance of community engagement for the sustainability and legacy of the project, a participatory implementation model has been developed which focusses on the inclusion of women, disadvantaged groups and indigenous community members in the project. This approach helped to secure the participation of these vulnerable groups within the project, ensuring diverse voices integrated within project delivery. An example of this is demonstrated by the 8 newly established community banks in Y1, whose members are 60% women and 54% from DAG.

Two outstanding efforts the project achieved in Y1 include the extensive wellbeing surveys carried out in 20 BZUCs, and the overachievement of the project's target number of HWCx units. The wellbeing surveys guaranteed the inclusion of the most HWC or economically vulnerable HHs in the project, therefore demonstrating the project's commitment to poverty reduction efforts, while the number of HWCx units established in Y1 exceeded its Y1 target by more than 22 units, which will maximise the impact the project can have in enhancing t positive perceptions among community members about conservation and coexistence.

Finally, recognising the importance of aligning activities with government and conservation authority conservation policies to ensure the ownership and sustainability of project activities, revisions /upgradations to CBAPU bylaws, and the development of operational plans for 7 project BZCFs was completed in alignment with the policy of PAs and BZMCs. Similarly, the community bank mobilisation guidelines/quick relief fund mobilisation guidelines were endorsed by BZUC and local government bodies, which demonstrates the engagement with, and ownership showed, by local government authorities of activities within the project, which guarantees the sustainability of the project's interventions long-term.

#### **Project summary** Progress and Achievements April 2023 - March 2024 Actions required/planned for next period Impact The foundation for achieving the project's impact was effectively established in Y1. A suite of knowledge Well-being of buffer zone and corridor human communities, products have been developed, providing a knowledge and status of globally significant wildlife populations, are base from which activities in Y2 and beyond will be secured through improved management capabilities of designed from, which will contribute towards the Nepal's Protected Area authorities and other government achievement of the impact statement. agencies.

### Annex 1: Report of progress and achievements against logframe for Financial Year 2022-2023

**Outcome** Capabilities strengthened for 12,265 households and three Protected Areas to reduce Human-Wildlife Conflict (HWC) and poverty, with investments in proactive-and-tested solutions for better management of increasing and dispersing wildlife species.

	investments in proactive-and-tested solutions for better management of increasing and dispersing wildlife species.			
Outcome indicator 0.1. 40% reduction in perceived economic and social vulnerability from HWC in 5000 HHs in 3 project PAs in the landscape (Bardia National Park (BNP), Shuklaphanta National Park (ShNP) and Banke National Park (BaNP)) by the end of the project.	0.1 Baseline survey data collection has been initiated, to set the baselines for economic and social vulnerability from HWC among communities living in the buffer zones of in 3 PA's.	0.1. The baseline analysis report will be shared in the next reporting period.		
Outcome indicator 0.2. 70% of 900 surveyed households in 3 project PAs and indirect beneficiaries in 3 additional PAs report lessened impacts of HWC due to improved knowledge of real examples of preventative and locally appropriate actions (compared to Y1 baseline) by the end of the project.	0.2 a Baseline survey has been initiated with 900HH, to set the baseline for evaluating changes in impacts from HWC due to improved knowledge of real examples of preventative and locally appropriate actions.	0.2 The baseline analysis report will be shared in the next.		
<ul> <li>Outcome indicator 0.3. 60% of 7,265 HHs (selected through consultation with BZUC chairs and participatory meetings and baseline surveys show) at least a 40% improvement in the wellbeing index (baseline to be set in Y1) by the end of the project with:</li> <li>60% of the community bank members (ca 135 per community bank and at least 52 banks) showing at least a 40% increase in wellbeing.</li> <li>All women and indigenous ethnic minority people organised into community banks achieve equal gains in wellbeing to less-marginalised groups.</li> </ul>	<ul> <li>0.3 a Baseline survey for human well-being has been initiated, to evaluate the changes in the wellbeing index of the community people after the interventions of the activities.</li> <li>-the aforementioned baseline survey has been started to evaluate changes in well-being among project beneficiaries over the duration of the project</li> <li>The aforementioned well-being survey has included disaggregated questions to ensure community members from indigenous ethnic minority people can achieve equal gains in wellbeing.</li> </ul>	<ul> <li>0.3 The baseline analysis report will be shared in the next</li> <li>The baseline analysis report will be shared in the next reporting period.</li> <li>-32 additional community banks will be established in Y2, which will include vulnerable and marginalised people as members.</li> </ul>		

- Community banking toolkit produced and shared with provincial and local governments in the landscape by mid-Y2 to scale livelihood interventions to additional 3000 HHs through match funding secured from local government	-Activities planned for Y2.	-Activities planned for Y2.
Outcome indicator 0.4. Improvement in attitudes to key wildlife species (e.g., tigers, elephants) with by at least 70% of respondents (split into disaggregated groups including women and indigenous groups) in 3 project PAs and 3 additional PAs (Chitwan, Parsa & Koshi Tappu NPs) for HWC-afflicted HHs in the project landscape reporting either positive or strongly positive attitudes, compared to Y1 baseline, by the end of the project	0.4 the project's baseline surveys are underway to evaluate the changes in the attitudes towards key wildlife species, in 3 protected PA's and 3 additional PA's, in HWC-afflicted HHs in the project landscape.	0.4 The baseline analysis report will be shared in the next reporting period.
Outcome indicator 0.5. The viability for wildlife movements of the corridors in Kamdi (Banke) and Boom-Brahmadev (Shuklaphanta) has been assessed by end of Y4	0.5 Activities Planned for Y2.	0.5 Activities to begin in Y2.
Outcome indicator 0.6. Stable or increasing trends in elephant, rhino, tiger and tiger prey species populations in all three focal PAs throughout project lifetime	0.6 Ecological monitoring for key mammal populations has started in Y1 in BaNP and ShNP.	Baseline population data for ShNP and BaNP is to be provided in Y2 following analysis, and tiger and prey base monitoring is to be conducted in BNP in Y2.
Outcome indicator 0.7. Global Conservation Assured Tiger Standards (CA TS) accreditation achieved for all 3 national parks (BNP, ShNP, BaNP) by the end of the project, bringing recognition and eligibility for additional funding investments by the end of the project.	0.7 Activity planned for Y2.	0.7 Activities to begin in Y2.
Output 1. Foundations set for upscaling HWCx		
Output indicator 1.1. Protected Area-Buffer Zone HWC mitigation collaborations are incorporated into Buffer Zone Management Committee (BZMC) structures for PAs by being streamlined and upscaled by Y2 with: 1.1.1. An HWCx position in the BZMC of each park (BNP, ShNP, BaNP) created and institutionalised by the end of Y1	<ul> <li>1.1.1 In each PA's, one HWCx position has been created as a conduit of information exchange between, Park, BZMC, BZUC, CBAPU and community.</li> <li>1.1.2 Participatory HWC maps have been prepared for the 3 project PA's.</li> </ul>	<ul> <li>1.1.1 No further activities planned for Y2.</li> <li>1.1.2 Stakeholder meetings will be held in Y2 to inform the recommendations for hotspot focussed mitigation efforts.</li> </ul>

<ul> <li>and scaled-up to be functional also in Koshi Tappu National Park (KTNP), Chitwan and Parsa NPs by the end of Y3.</li> <li>1.1.2. Climate-change-aware, lowland-Nepal-wide, participatory HWC maps prepared by the end of Y1 and informing recommendations for hotspot focussed HWC mitigation efforts by the end of Y2.</li> </ul>		
<ul> <li>Output indicator 1.2. Existing community units for HWC mitigation are scaled up to create 100 HWCx champions across 3 PAs/BZ with capacities strengthened to include a suite of species and for participatory data gathering by the end of Y3, with</li> <li>1.2.1. Bylaws of Community Based Anti-Poaching Units (CBAPUs) network in the project landscape are amended to include HWC mitigation actions by the end of Y1,</li> <li>1.2.2. 52 existing HWC reduction groups from within the CBAPUs strengthened and the approach replicated to adjoining sites by Y2 to create 100 HWCx champions across the landscape.</li> <li>1.2.3. Linkages created between Wildlife Rescue Response Team (Ind 4.5) and HWCx champions by the end of Y2.</li> <li>1.2.4. 25% increase (baseline to be set in Y1) in the flow of HWC related information from HWCx champions to PA through Ind 1.1.1 by the end of Y3.</li> </ul>	<ul> <li>1.2.1 10 stakeholder meetings assessing the current practices of CBAPU completed in 3 PA's. Based on recommendations from these stakeholder meetings, the bylaws of CBAPUS have been revised/upgraded in Y1.</li> <li>1.2.2 74 HWCx units have been formed in 52 settlements of the WTC in Y1.</li> <li>1.2.3 Planned for Y2.</li> <li>1.2.4 Information from the baseline survey initiated in Y1 will be used measure the changes in the flow of information from HWCx champions.</li> </ul>	<ul> <li>1.2.1 No further activities planned for Y2.</li> <li>1.2.2 27 HWCx units are planned to be formed in the Eastern Terai Complex in Y2.</li> <li>1.2.3 Planned for Y2.</li> <li>1.2.4 Further data collection in Y2 will support the findings derived from the baseline survey in Y1, to set the baseline for this indicator in Y2.</li> </ul>
Output indicator 1.3. A total of 10,000 HHs (55,000 people) in the project landscape reached through 96 awareness and drill programmes for behavioural change (disaggregated by gender and ethnicity) conducted by HWCx champions by the end of Y5, with 1.3.1. In combination with Output 3, a 70% increase across HHs surveyed in the positive perception of communities in three project PAs towards wildlife in current conflict areas against Y1 baseline by the end of Y5	1.3.1 baseline surveys initiated in Y1 will measure changes in the perception of communities towards wildlife in current conflict areas.	1.3.1 The baseline analysis report will be shared in the next reporting period.

<ul> <li>Output indicator 1.4. Feasibility of HWC insurance options across all six lowland Nepal national park buffer zones assessed by the end of Y3, and if feasible insurance schemes operational in Y4 and Y5, with:</li> <li>1.4.1. HWC relief payments, e.g., for loss of livestock, supported until insurance schemes in place.</li> <li>1.4.2. Any existing crop and livestock protection insurance mechanisms or other potentially appropriate insurance schemes identified and mapped by the end of Y1.</li> <li>1.4.3. Feasibility of adding HWC specific damages to existing insurance schemes assessed in consultation with insurance companies assessed by end of Y3.</li> <li>1.4.4. Options (micro-credit, CSR, government aid) for supporting farmers to pay insurance premiums explored during years 2 and 3, with feasible methods identified by end of Y3.</li> <li>1.4.5. HWC insurance schemes operational in at least 50% of HWC-afflicted communities around the 6 PAs by end of Y5.</li> </ul>	<ul> <li>1.4.1 6 Quick relief funds set up in BNP and ShNP in Y1.</li> <li>1.4.2 Piloting of the insurance mechanism to cover crop damage, livestock predation, and property damage and schemes was discussed in the workshop in Y1.</li> <li>1.4.3 Activity planned to begin in Y2.</li> <li>1.4.4 Activity planned to begin in Y2.</li> <li>1.4.5 Activity planned to begin in Y2.</li> </ul>	<ul> <li>1.4.1 6 quick relief funds to be set up in Y2.</li> <li>1.4.2 The insurance schemes for adding HWC specific damages will be identified and intervened in Y2.</li> <li>1.4.3 Activity to begin in Y2.</li> <li>1.4.4 Activity to begin in Y2.</li> <li>1.4.5 Activity to begin in Y2.</li> </ul>
Output 2. Livelihood investments to break cycle of pover (2,615 HHs) and upscaled to adjoining communities (4,650 H returns from existing and/or new livelihood options.		
Output indicator 2.1. Livelihood schemes at the Buffer Zone User Committee (BZUC) level for 7000 HHs within the three western parks are understood, assessed, and improved by mid-Y2, with 2.1.1. Participatory resource mapping for 20 BZUCs conducted by the end of Y1. 2.1.2. Products/services (agriproducts such as vegetable, cash-crops, grains; livestock products; ecotourism services such as nature guides, homestays, and restaurants) assessed by the end of Y1, taking account of access for key vulnerable groups and HHs.	<ul> <li>2.1.1 Participatory resource mapping of 20 BZUCs conducted in Y1.</li> <li>2.1.2 An assessment of the potential products/ services identified was completed in Y1 through the participatory resource mapping completed under act. 2.1.1.</li> <li>2.1.3 Activity planned for Y2.</li> </ul>	<ul> <li>2.1.1 Stakeholders meetings to validate the report on participatory resource mapping to be conducted in Y2.</li> <li>2.1.2 The report following the assessment completed will be shared in Y2, and the identified potential products/services will be strengthened in Y2.</li> </ul>

2.1.3. Market access established and functioning by the mid of Y2.		2.1.3 Activity to begin in Y2.
Output indicator 2.2. 52 Community banks, 12 existing plus 40 new (with ca. 135 HHs per CB), are established and/or	2.2 Out of 40 new community banks, 8 new community banks have been formed in 3 PA's, and seed money to	2.2 32 new community banks are to be formed in Y2.
strengthened under the framework of BZUCs and are directly benefitting 7,000 HHs, (including the most	these banks have been provided. Similarly, out of 12 existing community bank, top up money has been	2.2.1 Activity planned for Y2.
vulnerable groups and HHs) with the potential to increase income as highly as 60-120% as shown in previous	provided to all 12 in Y1.	2.2.2 Activity planned for Y2.
projects, by the middle of Y2, with:	2.2.1 Activity planned for Y2.	
2.2.1. 3,000 HHs benefitting through improved agricultural practices by the end of Y3 (refresher training in Y5).	2.2.2 Activity planned for Y2.	
2.2.2. 4,000 HHs benefitting through improved livestock practices by the end of Y3 (refresher training in Y5).		
Output indicator 2.3 265 members from HHs of HWCx	2.3.1 Activities planned for Y2.	2.3.1 Activity planned for Y2.
champions (under Ind 1.2) and existing homestays are linked to alternative livelihood schemes by the end of Y3, with	2.3.2 Activities planned for Y3.	2.3.2 Activity planned for Y3.
2.3.1. 120 HHs benefitting from electrician, plumbing, mobile repair, motorcycle repair skills training by the end of Y2.		
2.3.2. 145 HHs benefitting from nature-based tourism skills training by the end of Y3.		
Output indicator 2.4. Average income of the participating 7,265 HHs increased by 20% by the end of the project against Y2 baseline across 750 sample HHs surveyed using a wellbeing index (sample size >10% of total HHs).	2.4 the wellbeing survey initiated in Y1 will establish baseline income levels among community members, which will be used to evaluate changes in the income of the beneficiaries over the duration of the project.	2.4 The baseline analysis report will be shared in the next reporting period.
Output indicator 2.5. Communities' dependency on natural resources in adjacent PAs (i.e., firewood, fodder collection, livestock grazing) reduced by 20% in 50% of the participating HHs (baseline to be set in Y1) by the end of Y5	2.5 Surveys initiated in Y1 will provide a baseline from which to evaluate changes in community dependency on natural resources.	2.5 The baseline analysis report will be shared in the next reporting period.
Output 3. HWC mitigation investments for communities a delivered benefiting 1,000 existing HHs from previous projects sustainable means of mitigation identified for a further indirect	s and 4,000 new HHs through PA-wide community engage	

Output indicator 3.1. Areas identified and assessed for locally appropriate interventions against high conflict species (i.e., tigers, elephants, browsing species) by consulting disaggregated groups (with at least 40% from Indigenous and other disadvantaged groups) across households by the end of Y1.	3.1 Consultation meetings with PA authorities and BZUC members conducted in each PA to identify the locally appropriate HWC interventions for high conflict species.	3.1 Stakeholder workshop to validate the recommendations produced through the consultation workshops, and oversee their institutionalisation with management plans, will take place between Y3 and Y5.
Output indicator 3.2. Exchange visits to previous ZSL and NTNC HWC reduction sites in Chitwan and Bardia NPs promote approaches to HWC mitigation tested by the project to a sub-set of 5,000 HHs and 100 HWCx champions by end of Y3 with uptake of the approaches assessed by the end of Y5.	3.2 Activities planned to begin in Y3.	3.2 Activities planned to begin in Y3.
Output indicator 3.3. Lessons and experiences from the 3 project PAs made available to other HWC-afflicted	3.3 Activities planned to begin in Y3.	3.3 Activities planned to begin in Y3.
communities including, with BZUCs and PA staff in by the end of Y5:	<ul><li>3.3.1 The activity planned to begin in Y2.</li><li>3.3.2 The activity planned to begin in Y2.</li></ul>	3.3.1 Activities planned to
3.3.1. Proactive mitigation measures against damage by	3.3.3 Survey initiated in Y1 and baseline to be set	begin in Y2.
high conflict species are replicated and reduce HWC by the end of the project in 1,000 existing households from previous projects and an additional 4,000 HHs as prioritised in Ind 3.1	based on survey report in Y2.	3.3.2 Baseline for indicator is to be established in Y2 using
	3.3.4 HWC survey initiated in Y1 for the purpose of evaluating changes in livestock depredation rates	data collected by HWCx champions.
3.3.2. At least 60% of 600 representative HHs report	among community members from baseline to Y4.	3.3.3 Baseline to be set in Y2.
increased satisfaction with early warning systems for conflict species by end of Y4 compared to mid Y2 baseline.	3.3.5 HWC survey initiated in Y1 for the purpose of evaluating changes in physical harm to community members from wildlife.	3.3.4 The baseline analysis report will be shared in the next reporting period.
3.3.3. 20% increase in use of crop protection methods suitable for elephants and browsing animals in the participating communities by Y4 against baseline set in Y1.	3.3.6 HWC survey initiated in Y1 for the purpose of evaluating changes in livestock depredation rates among community members from baseline to Y4.	3.3.5 The baseline analysis report will be shared in the
3.3.4. 30% reduction in livestock depredation from large and medium carnivores in the participating HHs by Y4		next reporting period. 3.3.6 Baseline to be set in Y2.
against baseline set in year 1.		
3.3.5. 15% reduction in direct physical harm to human beings by Y5 against baseline set in Y1.		

3.3.6. 3,000 additional HHs (repeat sample of 300 HHs) against Y1 baseline reporting a sense of preparedness and increased knowledge base for mitigating HWC incidents based on awareness of case studies from the 3 project PAs delivered by government match funds (i.e., number of people recall viewing awareness materials) by project end			
Output indicator 3.4. 70% of participating 5000 HHs across 3 PAs reporting an increased sense of human-wildlife coexistence possibilities and resilience by project end (end of Y5).	3.4 HWC survey initiated in Y1 for the purpose of evaluating changes in perceptions of coexistence possibilities among community members from baseline to Y5.	3.4 The baseline analysis report will be shared in the next reporting period.	
Output indicator 3.5. Positive attitudes about conservation and participatory resource management in participating 5000 HHs surveyed in 3 PAs predicted to increase by 60% by end of Y5 against baseline set in at the start of Y2	3.5 HWC survey initiated in Y1 for the purpose of evaluating changes in perceptions towards conservation and participatory resource management among community members from baseline to Y5.	3.5 The baseline analysis report will be shared in the next reporting period.	
Output 4. Mitigation of effects of linear infrastructure and habitat fragmentation on wildlife: impacts of current and developing linear infrastructure (roads, rails, irrigation canals) on key wildlife species reduced through strengthened learning and evidence-based planning and through improved capacity of DNPWC teams to successfully perform wildlife rescue, handling, translocation or holding of various species.			
Output indicator 4.1. National and regional stakeholders identified, and expert learning provided by the end of Y1.	4.1 local stakeholder's consultations workshop organised and completed in Y1, to identify the gaps and opportunities to link with current linear infrastructure mitigation strategies, and establish links between relevant stakeholders/	4.1 National level consultation meetings to be held in Y2 as part of working a linear infrastructure national working group.	
Output indicator 4.2. Evidence-based assessment of effects of linear infrastructure on wildlife movement and habitat quality/conflict drivers across the three parks and surroundings formalized by the end of Y2	4.2 Relevant assessments of linear infrastructure impact upon wildlife and habitat fragmentation, and report on best practice mitigation interventions for the identified impacts, completed in Y1, with validation from field-level visits.	4.2 The field validation exercises of the findings from the report completed in Y1 will be undertaken in BaNP and BNP in Y2.	
<ul> <li>Output indicator 4.3. Priority wildlife crossing sites for key species identified by end Y4 with:</li> <li>4.3.1 2 priority sites for wildlife crossings in Shuklaphanta NP strengthened by the end of Y4.</li> <li>4.3.2 10% increase (baseline to be set in Y2) in the rate of</li> </ul>	<ul><li>4.3.1 Activities planned for Y3.</li><li>4.3.2 Baseline to be set in Y2.</li></ul>	4.3.1 Activities planned to begin in Y3.	
	4.3.3 Survey initiated in Y1 and baseline to be set in Y2 based on survey report.	4.3.2 Activities planned to begin in Y2.	
use of the wildlife crossings in Ind 4.3.1 by the end of Y5.		4.3.3 Baseline to be set in Y2 based on survey report.	

<ul> <li>4.3.3 10% decrease against Y1 baseline in associated incursions by wildlife to within 1 km of HHs in the two existing conflict project sites by the end of Y5.</li> <li>Output indicator 4.4. Recommendations for mitigation methods needed are reflected in project documents submitted to DNPWC, Department of Roads, Department of Irrigation, Nepal Electricity Authority and Department of Railways by end of Y2 and finalised by end of Y5.</li> <li>Output indicator 4.5. Wildlife rescue response team, led by Bardia NP with two representatives from ShNP and BaNP, strengthened and equipped for wildlife issues (related to canal, road, and HWC) and trained by Wildlife Health Bridge programme of ZSL's Wildlife Health and Living Collection departments, by the end of Y4, with:</li> <li>4.5.1. Animal holding facilities improved through staff training, enclosure improvements and best practice for animal nutrition and behaviour by the end of Y3.</li> <li>4.5.2. Post-release collaring data of large carnivores (i.e., tiger and leopard) from beginning of any animal releases informs PA wildlife and habitat management and community awareness-raising throughout project period.</li> <li>4.5.3. Disease monitoring capacity improved with sample collection and analysis links to management centre at Lalmati in Bardia NP established in Y2.</li> <li>4.5.4. Wildlife rescue response rate increases by 20% by project end compared to baseline set in Y2.</li> </ul>	<ul> <li>4.4 Recommendations are reflected in the report prepared for the impact of irrigation canal on wildlife and habitat fragmentation in Y1.</li> <li>4.5.1 Preliminary discussions held with high authority stakeholders including DNPWC, and existing animal holding cages monitored in Y1.</li> <li>4.5.2 In Y1, 10 GPS collars were purchased to initiate monitoring activities of problematic animals. 5 are currently in operational with 5 more to follow in Y2</li> <li>4.5.3 Activities planned for Y2.</li> <li>4.5.4 Activities planned for Y2.</li> </ul>	<ul> <li>4.4. The report is to be submitted to the concerned authority in Y2 and finalised by Y5.</li> <li>4.5.1 Based on recommendations from high level monitoring, capacity building training to be conducted in Y2 for improving enclosures, animal nutrition and behavior.</li> <li>4.5.2 Additional GPS collars to be purchased in Y2 and Y3. GPS collaring to be done in Y2 and Y3 to track the data of large carnivore movement.</li> <li>4.5.3. Activities planned to begin in Y2.</li> <li>4.5.4. Activities planned to begin in Y2.</li> </ul>	
Output 5. Investments in PA habitat quality benefit wildlife: threats to wildlife reduced and kept low, with better habitat and wildlife management interventions meeting needs previously identified by managers, and capability and capacity increased in 3 PA/BZs through better equipped and trained teams			
Output indicator 5.1. Multi-stakeholder engagement (PAs, NGOs, BZUC, CSOs) co-design approaches during Y1, with	<ul><li>5.1.1 Study on priority areas for habitat management interventions within project PAs carried out in Y1.</li><li>5.1.2 Assessment study in regard to PA research, infrastructure etc. needs completed in Y1.</li></ul>	<ul> <li>5.1.1 stakeholder meetings to validate findings from ShNP, BNP and BaNP key habitat intervention sites to be held in Y2.</li> <li>5.1.2. Final needs assessment report to be</li> </ul>	

<ul> <li>5.1.1 priority areas for habitat management identified by the end of Y1.</li> <li>5.1.2 priority needs of PA in research, infrastructure, equipment, policy, and capacity identified by the end Y1.</li> </ul>		developed, shared, and validated with stakeholders in Y2 following stakeholder consultation meetings.
Output indicator 5.2. Habitats identified under Ind. 5.1.1 are improved against Y1 baseline for key species by the end of Y4, with 5.2.1 50 ha of grassland maintained by the end of Y4, 5.2.2 6 water holes are strengthened through solar lifts (pumps) by the end of Y3. 5.2.3 75 km fire line maintained by the end of Y4.	<ul><li>5.2.1 Activities planned to begin in Y2.</li><li>5.2.2 Activities planned to begin in Y2.</li><li>5.2.3 89.55 km Fireline maintained in Y1.</li></ul>	<ul> <li>5.2.1 Activities planned to begin in Y2.</li> <li>5.2.2 Activities planned to begin in Y2.</li> <li>5.2.3 ongoing fireline maintenance activities to continue in Y2.</li> </ul>
<ul> <li>Output indicator 5.3. Priority needs of PAs re research, policy, infrastructure, equipment, and the capacity to monitor wildlife and to address larger biodiversity issues are improved by the end of Y5, against Y1 baseline with 5.3.1. Key research projects (including 5 master's students' projects) about animal movements, conflict incidents and mitigation, post-translocation, or post-release behaviours by end of Y5.</li> <li>5.3.2. Capabilities of 450 park and DNPWC staff improved to ensure they comply with Global Conservation Assured Tiger Standards (CA TS) requirements for accreditation by the end of Y4 (compared to Y1 baseline)</li> <li>5.3.3. Three priority needs that were identified in Year 1 (e.g., renovations or facilities improvements for visitor in any of BaNP, BNP, and PA research facility) are addressed by the end of Y3.</li> <li>5.3.4. Teams equipped with relevant gear for responses and monitoring with 3 vehicles (2 jeeps/trucks, 1 tractor), 20 GPS collars, 12 CCTV Fcameras, 90 cameras, both Global System for Mobile (GSM) and non-GS), supported by the end of Y3.</li> </ul>	<ul> <li>5.3.1 Activities planned for Y2.</li> <li>5.3.2 The activity planned for Y2.</li> <li>5.3.3 In Y1, the establishment of a visitor information centre in BNP and ShNP was identified as priority need for the PA.</li> <li>5.3.4 In Y1, 2 vehicles were provided for BNP and ShNP, 1 tractor for habitat management activities was provided to ShNP, and10 GPS collars and 17 wireless CCTV cameras were installed in ShNP and BNP. 60 GSM enabled cameras and non-enabled cameras were purchased, with 45 installed in 3 PA's</li> </ul>	<ul> <li>5.3.1 Activities planned to begin in Y2.</li> <li>5.3.2 Activities planned to begin in Y2/</li> <li>5.3.3 The establishment of visitor information centers is to be completed in Y2 in BaNP and ShNP, and a monitoring and capacity centre is to be established in Bardiya in Y3.</li> <li>5.3.4 An additional 10 GPS collars and 40 GSM enabled and non-enabled cameras to be purchased in Y2, to support with problematic animal monitoring and PA monitoring activities.</li> </ul>

Output indicator 5.4. Improved evidence of key wildlife species being present within PAs by the end of Y5, with 5.4.1. 20% increase in key wildlife species' use of improved habitats such as grasslands and waterholes (against baseline to be set in Y1/Y2) by the end of Y5. 5.4.2. 15% decrease (baseline to be set in Y1/Y2) in wildlife sightings in HWC hotspots by the end of Y5.	<ul><li>5.4.1 The activity planned for Y2.</li><li>5.4.2 HH's survey initiated in Y1 to inform baseline for indicator.</li></ul>	<ul> <li>5.4.1 Baseline for indicator to be established in Y2.</li> <li>5.4.2 Baseline for indicator to be established in Y2, incorporating baseline survey findings, camera trap data and HWCx champion reports.</li> </ul>
Output indicator 5.5. Lessons learnt are documented, analysed, and promulgated through two peer reviewed papers within a year of project end.	5.5 Activity planned for Y5	5.5 Activity planned for Y5.

Project summary	SMART Indicators	Means of verification	Important Assumptions
	nd corridor human communities, an pabilities of Nepal's Protected Area a		
Outcome: Capabilities strengthened for 12,265 households and three Protected Areas to reduce Human-Wildlife Conflict (HWC) and poverty, with investments in proactive-and-tested solutions for better management of increasing and dispersing wildlife species.	<ul> <li>0.1 40% reduction in perceived economic and social vulnerability from HWC in 5000 HHs in 3 project PAs in the landscape (Bardia National Park (BNP), Shuklaphanta National Park (ShNP) and Banke National Park (BaNP)) by the end of the project.</li> <li>0.2 70% of 900 surveyed households in 3 project PAs and indirect beneficiaries in 3 additional PAs report lessened impacts of HWC due to improved knowledge of real examples of preventative and locally appropriate actions (compared to Y1 baseline) by the end of the project.</li> <li>0.3 60% of 7,265 HHs (selected through consultation with BZUC chairs and participatory meetings and baseline surveys show) at least a 40% improvement in the wellbeing index (baseline to be set in Y1) by the end of the project with:</li> </ul>	<ul> <li>0.1 Pre- and post-project surveys to assess household incomes and natural resource dependency</li> <li>0.2 HWCx champions' meetings reporting feedback, survey results of community members, use of grievance mechanisms</li> <li>0.3 Wellbeing surveys of community bank members; community bank records of incomes and disaggregated membership groups, government enrolment records of additional HHs</li> <li>0.4 Analyses and reports on attitude surveys using a LIKERT scale from HHs in HWC-afflicted areas</li> <li>0.5 Reports on the status (vegetation cover, rate of habitat loss, use by key wildlife species) of the two corridors</li> <li>0.6 Reports on regular database of elephant, tiger and tiger prey population status conducted by project teams in Banke and Shuklaphanta NPs using National Tiger Monitoring</li> </ul>	<ul> <li>Human-Wildlife Conflict remains a priority challenge for Nepal government post doubling of tiger numbers and increasing of other globally threatened species.</li> <li>The size of the protected areas continues to remain the same. Habitat fragmentation within PAs continues as linear infrastructure (development aspirations) across the PA system continues to be proposed and developed.</li> <li>Climate change will increasingly shift tiger habitat northwards as temperature increases.</li> <li>Multi-dimensional poverty continues to be a challenge for community members living alongside protected areas.</li> <li>Disadvantaged groups (women, indigenous people, people with physical disability) face barriers to better income making livelihood options necessary.</li> <li>Community members remain supportive of biodiversity conservation and are willing to</li> </ul>

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

<ul> <li>60% of the community bank members (ca 135 per community bank and at lease 52 banks) showing at least a 40% increase in wellbeing.</li> <li>All women and indigenous ethnic minority people organised into community banks achieve equal gains i wellbeing to less-marginalised groups.</li> <li>Community banking toolkit produced and shared with provincial and local governments in the landscape by mid-Y2 to scale livelihood interventions to additional 3000 HHs through match funding secured from local government.</li> <li>Improvement in attitudes to key wildlife species (e.g., tigers, elephants) with by at least 70% of respondents (split into disaggregated groups in 3 project PAs and 3 additional PAs (Chitwan, Parsa &amp; Koshi Tappu NPs) for HWC-afflicted HHs in the project landscape reporting either positive or strongly positive attitudes, compared to Y1 baseline, by the end of the project.</li> </ul>	from government Rhino Count 2025 and Tiger Survey 2026 for all three focal PAs. 0.7 Survey and capability assessment results, (CA TS) audit results.	participate and such support increases over the lifetime of the project. Populations of key wildlife species will respond positively to reduced HWC (reduced stress, fewer retaliatory injuries, and killings), improved habitat management, and overall improvements in PA management effectiveness.
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	<ul> <li>0.5 The viability for wildlife movements of the corridors in Kamdi (Banke) and Boom- Brahmadev (Shuklaphanta) has been assessed by end of Y4.</li> <li>0.6 Stable or increasing trends in elephant, rhino, tiger and tiger prey species populations in all three focal PAs throughout project lifetime.</li> <li>0.7 Global Conservation Assured Tiger Standards (CA TS) accreditation achieved for all 3 national parks (BNP, ShNP, BaNP) by the end of the project, bringing recognition and eligibility for additional funding investments by the end of the</li> </ul>		
Output 1 Foundations set for upscaling HWCx: Human-Wildlife Coexistence (HWCx) champions are created from existing successful "HWC reduction community units", bringing strengthened skills for replication in other PAs to reduce the rate of serious encounters between wildlife and people, and future-proofed by incorporating HWC safeguards, learning and response mechanisms into Nepal's existing and inclusive PA and buffer zone (BZ) management system.	<ul> <li>1.1 Protected Area-Buffer Zone HWC mitigation collaborations are incorporated into Buffer Zone Management Committee (BZMC) structures for PAs by being streamlined and upscaled by Y2 with:</li> <li>1.1.1 An HWCx position in the BZMC of each park (BNP, ShNP, BaNP) created and institutionalised by the end of Y1 and scaled-up to be functional also in Koshi Tappu National Park (KTNP), Chitwan and Parsa NPs by the end of Y3</li> </ul>	<ul> <li>1.1 Protected area and Buffer Zone Management Council (BZMC) employment records; workshop reports/minutes, participant logs and photographs; HWC maps prepared and in use, updated based on ground-truthing as necessary</li> <li>1.2 Reports and photographs pertaining to creation of HWCx champions for all target PAs; training reports; bylaw documents; reports on data flows</li> </ul>	Structural barriers to institutionalising HWC mitigation at the PA-BZ interface are present. PA and BZUCs are willing to improve their HWC reduction strategies. CBAPUs are willing to reform their organisation to include HWC reduction as guiding principle. BZUCs are willing to match ZSL's contribution in creating a conduit of HWC reduction unit through providing focal points labour.

1	<ul> <li>.1.2 Climate-change-aware, lowland-Nepal-wide, participatory HWC maps prepared by the end of Y1 and informing recommendations for hotspot focussed HWC mitigation efforts by the end of Y2.</li> <li>.2 Existing community units for HWC mitigation are scaled up to create 100 HWCx champions across 3 PAs/BZ with capacities strengthened to include a suite of species and for participatory data gathering by the end of Y3, with</li> <li>.2.1 Bylaws of Community Based Anti-Poaching Units (CBAPUs) network in the project landscape are amended to include HWC mitigation actions by the end of Y1,</li> <li>.2.2 52 existing HWC reduction groups from within the CBAPUs strengthened and the approach replicated to</li> </ul>	<ul> <li>1.3 Community and school programme minutes, drill reports, photographs</li> <li>1.4.1 Reports on disbursement of HWC relief payments; receipts</li> <li>1.4.2 Reports on meetings with insurance companies detailing what schemes are in place in Nepal that might lend themselves to modification to include HWC</li> <li>1.4.3 HWC data analyses; reports on meetings with insurance companies; insurance companies' analyses and other documents</li> <li>1.4.4 Reports on meeting with banks, micro-credit agencies, private sector companies, and government agencies</li> <li>1.4.5 M&amp;E reports on insurance schemes performance for HWC around the PAs produced by insurance companies and project staff</li> </ul>	Awareness and behavioural change programmes increase community members' sense of resilience to HWC thus improving attitudes to wildlife recovery. Insurance companies are willing to engage in new areas and interest by communities is at sufficient scale for initial discussions to be explored. Community members in HWC- afflicted areas around the 6 PAs are willing and able to take-up opportunities to insure their crops and livestock against HWC.
	<ul> <li>amended to include HWC mitigation actions by the end of Y1,</li> <li>.2.2 52 existing HWC reduction groups from within the CBAPUs strengthened and the approach replicated to adjoining sites by Y2 to create 100 HWCx champions across the landscape.</li> </ul>	1.4.5 M&E reports on insurance schemes performance for HWC around the PAs produced by insurance companies and project	
	.2.3 Linkages created between Wildlife Rescue Response Team (Ind 4.5) and HWCx champions by the end of Y2.		

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1.2.4 25% increase (baseline to be set in Y1) in the flow of HWC related information from HWCx champions to PA through Ind 1.1.1 by the end of Y3.		
<ul> <li>1.3 A total of 10,000 HHs (55,000 people) in the project landscape reached through 96 awareness and drill programmes for behavioural change (disaggregated by gender and ethnicity) conducted by HWCx champions by the end of Y5, with</li> <li>1.3.1 In combination with Output 3, a 70% increase across HHs surveyed in the positive perception of communities in three project PAs towards wildlife in current conflict areas against Y1 baseline by the end of Y5.</li> </ul>		
<ul> <li>1.4 Feasibility of HWC insurance options across all six lowland Nepal national park buffer zones assessed by the end of Y3, and if feasible insurance schemes operational in Y4 and Y5, with:</li> <li>1.4.1 HWC relief payments, e.g., for loss of livestock, supported until insurance schemes in place.</li> <li>1.4.2 Any existing crop and livestock protection insurance mechanisms or</li> </ul>		

	<ul> <li>other potentially appropriate insurance schemes identified and mapped by the end of Y1.</li> <li>1.4.3 Feasibility of adding HWC specific damages to existing insurance schemes assessed in consultation with insurance companies assessed by end of Y3.</li> <li>1.4.4 Options (micro-credit, CSR, government aid) for supporting farmers to pay insurance premiums explored during years 2 and 3, with feasible methods identified by end of Y3.</li> <li>1.4.5 HWC insurance schemes operational in at least 50% of HWC-afflicted communities around the 6 PAs by end of Y5.</li> </ul>		
Output 2 Livelihood investments to break cycle of poverty: Entry points to breaking the cycle of poverty are strengthened in existing communities (2,615 HHs) and upscaled to adjoining communities (4,650 HHs) around the 3 focal PAs (BNP, ShNP, BaNP) through better access to solid economic returns from existing and/or new livelihood options.	<ul> <li>2.1 Livelihood schemes at the Buffer Zone User Committee (BZUC) level for 7000 HHs within the three western parks are understood, assessed, and improved by mid-Y2, with</li> <li>2.1.1 Participatory resource mapping for 20 BZUCs conducted by the end of Y1.</li> <li>2.1.2 Products/services (agriproducts such as vegetable, cash-crops, grains; livestock products; ecotourism services such as nature guides, homestays, and restaurants) assessed</li> </ul>	<ul> <li>2.1 Workshop minutes and photographs, meeting minutes, participatory resource maps, market analysis reports</li> <li>2.2 Community bank records, HH feedback in baseline, midline and project end surveys; livelihood training reports and photographs, survey reports, exposure visit reports and photographs</li> <li>2.3 Pre- and post-project surveys evaluate learning and livelihoods</li> </ul>	Below average income is a persistent problem within the project communities and is one of the major barriers to reducing multi- dimensional poverty. Community banks remain one of the most efficient ways of engaging communities in livelihood improvement schemes as demonstrated in previous ZSL Nepal projects (DI-26-012, 24-015, 22-009) and are particularly appropriate for disadvantaged groups (that include, but are not limited to, women, people with

ex 13 es un an HH vu the as in mi 2.2.1	by the end of Y1, taking account of access for key vulnerable groups and HHs. Market access established and functioning by the mid of Y2. Community banks, 12 isting plus 40 new (with ca. 5 HHs per CB), are tablished and/or strengthened der the framework of BZUCs d are directly benefitting 7,000 Hs, (including the most lnerable groups and HHs) with e potential to increase income highly as 60-120% as shown previous projects, by the ddle of Y2, with: 3,000 HHs benefitting through improved agricultural practices by the end of Y3 (refresher training in Y5). 4,000 HHs benefitting through improved livestock practices by the end of Y3 (refresher training in Y5).	trainings completed including self-assessments of new skills and 2.5 Pre- and post-project surveys to assess household incomes, natural resource dependency and wellbeing index	<ul> <li>physical disability, and indigenous groups).</li> <li>Natural resource dependency is one of the major sources of livelihoods for communities in the project landscape.</li> <li>Avenues to improved livelihood are limited for those from vulnerable groups (women, physically disabled, and Indigenous people).</li> <li>Foreign exchange rate fluctuations are buffered sufficiently in the budget.</li> </ul>
HV 1.2 lin sc	5 members from HHs of VCx champions (under Ind 2) and existing homestays are ked to alternative livelihood hemes by the end of Y3, with 120 HHs benefitting from electrician, plumbing, mobile repair, motorcycle repair		

	<ul> <li>skills training by the end of Y2.</li> <li>2.3.2 145 HHs benefitting from nature-based tourism skills training by the end of Y3.</li> <li>2.4 Average income of the participating 7,265 HHs increased by 20% by the end of the project against Y2 baseline across 750 sample HHs surveyed using a wellbeing index (sample size &gt;10% of total HHs).</li> <li>2.5 Communities' dependency on natural resources in adjacent PAs (i.e., firewood, fodder collection, livestock grazing) reduced by 20% in 50% of the participating HHs (baseline to be set in Y1) by the end of Y5.</li> </ul>		
Output 3 HWC mitigation investments for communities and BZUCs: targeted HWC mitigation investments in priority communities resourced and delivered benefiting 1,000 existing HHs from previous projects and 4,000 new HHs through PA-wide community engagement, with longer-term sustainable means of mitigation identified for a further indirect 3,000 HHs.	<ul> <li>3.1 Areas identified and assessed for locally appropriate interventions against high conflict species (i.e., tigers, elephants, browsing species) by consulting disaggregated groups (with at least 40% from Indigenous and other disadvantaged groups) across households by the end of Y1.</li> <li>3.2 Exchange visits to previous ZSL and NTNC HWC reduction sites in Chitwan and Bardia NPs promote approaches to HWC</li> </ul>	<ul> <li>3.1 Maps produced and shared, meeting minutes, existing camera trap data, HWC incident reports</li> <li>3.2 Trip reports, graphics and other learning documents and posters produced; follow-up visits and resulting feedback through end of Y5</li> <li>3.3.1 HWCx champions' meetings reporting feedback, results of survey of community members, grievance mechanism reports</li> </ul>	HWC reduction remains a priority area for the DNPWC to invest in. HWC incidents occurring primarily in human settlements within 1 km of forest borders are a motivating factor for community participation. Vulnerable groups within the communities are currently highly dependent on natural resources from the forest as supplements to their livelihoods.

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mitigation tested by the project to a sub-set of 5,000 HHs and 100 HWCx champions by end of Y3 with uptake of the approaches assessed by the end of Y5.	3.3.2 Reports on number of HHs accessing safety infrastructure (e.g., solar lights. early warning system, mesh wire fencing) and their satisfaction with these (assessed on a LIKERT scale) by end of Y4	Low levels of exposure to and awareness of effective HWC mitigation measures limit capacities of communities to implement best practices for HWC mitigation.
3.3 Lessons and experiences from the 3 project PAs made available to other HWC-afflicted communities including, with BZUCs and PA staff in by the end of Y5:	<ul><li>3.3.3 Reports on usage of methods to reduce crop damage by elephants/browsing animals</li><li>3.3.4 Reports on number of HHs with predator proof corals and results thereof</li></ul>	
3.3.1 Proactive mitigation measures against damage by high conflict species are replicated and reduce HWC by the end of the project in 1,000 existing households from previous projects and	<ul><li>3.3.5 Reports on injuries to people by wildlife</li><li>3.3.6 HH survey reports</li><li>3.4 HH survey reports</li></ul>	
an additional 4,000 HHs as prioritised in Ind 3.1 3.3.2 At least 60% of 600 representative HHs report increased satisfaction with early warning systems for conflict species by end of Y4 compared to mid Y2	3.5 Baseline, midline and endline HH surveys plus HWCx champions' reports	
<ul> <li>baseline.</li> <li>3.3.3 20% increase in use of crop protection methods suitable for elephants and browsing animals in the participating communities by Y4 against baseline set in Y1.</li> <li>3.3.4 30% reduction in livestock</li> </ul>		

	medium carnivores in the	
	participating HHs by Y4	
	against baseline set in year	
	1.	
3.3.5	15% reduction in direct	
0.0.0	physical harm to human	
	beings by Y5 against	
	baseline set in Y1.	
3.3.0	3,000 additional HHs (repeat	
	sample of 300 HHs) against	
	Y1 baseline reporting a	
	sense of preparedness and	
	increased knowledge base	
	for mitigating HWC incidents	
	based on awareness of case	
	studies from the 3 project	
	PAs delivered by	
	government match funds	
	(i.e., number of people recall	
	viewing awareness	
	materials) by project end.	
	materiale) by project end.	
347	0% of participating 5000 HHs	
	Hs across 3 PAs reporting an	
	creased sense of human-	
	ildlife coexistence possibilities	
	nd resilience by project end	
(6	end of Y5).	
350	ositive attitudes about	
	onservation and participatory	
	esource management in	
	articipating 5000 HHs surveyed	
	3 PAs predicted to increase	
	y 60% by end of Y5 against	
b	aseline set in at the start of Y2.	

Output 4 Mitigation of effects of linear infrastructure and habitat fragmentation on wildlife: impacts of current and developing linear infrastructure (roads, rails, irrigation canals) on key wildlife species reduced through strengthened learning and evidence-based planning and through improved capacity of DNPWC teams to successfully perform wildlife rescue, handling, translocation or holding of various species.	<ul> <li>4.1 National and regional stakeholders identified, and expert learning provided by the end of Y1.</li> <li>4.2 Evidence-based assessment of effects of linear infrastructure on wildlife movement and habitat quality/conflict drivers across the three parks and surroundings formalized by the end of Y2.</li> <li>4.3 Priority wildlife crossing sites for key species identified by end Y4 with:</li> <li>4.3.1 2 priority sites for wildlife crossings in Shuklaphanta NP strengthened by the end of Y4.</li> <li>4.3.2 10% increase (baseline to be</li> </ul>	<ul> <li>4.1 Case study generated with the IUCN Elephant Transport Working Group and road ecology specialists; working group minutes; monitoring data; training reports</li> <li>4.2 Pre- and post-project social survey reports, camera trap data, ranger focus group reports, wildlife roadkill and crossings data, community reports, secondary data on human fatalities and injuries, historical monitoring, and crop raiding data; recommendations document</li> <li>4.3 Camera trap and wildlife monitoring data, expert</li> </ul>	Data and recommendations inform linear infrastructure construction/upgrades and associated mitigation interventions for key species in time for reducing drivers of HWC and for cost- effective measures to be taken by relevant departments and budget allocations. Climate extremes do not cause a high level of extraneous effects to severely hamper data collection about key crossings. Budget allocations by relevant departments and infrastructure development banks continue to reflect interest in funding mitigation of the effects of linear infrastructure
	<ul> <li>Ind 4.3.1 by the end of Y5.</li> <li>4.3.3 10% decrease against Y1 baseline in associated incursions by wildlife to within 1 km of HHs in the two existing conflict project sites by the end of Y5.</li> </ul>	crossing adjustments, HH surveys and HWCx champion feedback about conflict incidents 4.4 Reports submitted to government departments and agencies; official policy documents	
	4.4 Recommendations for mitigation methods needed are reflected in project documents submitted to	4.5.1 Reports on training and inspection of facilities, photographs	
	DNPWC, Department of Roads, Department of Irrigation, Nepal Electricity Authority and Department of Railways by end of Y2 and finalised by end of Y5.	4.5.2 Reports on animal tracking data and analyses and use thereof	

<ul> <li>4.5 Wildlife rescue response team, led by Bardia NP with two representatives from ShNP and BaNP, strengthened and equipped for wildlife issues (related to canal, road, and HWC) and trained by Wildlife Health Bridge programme of ZSL's Wildlife Health and Living Collection departments, by the end of Y4, with:</li> <li>4.5.1 Animal holding facilities improved through staff training, enclosure improvements and best practice for animal nutrition and behaviour by the end of Y3.</li> <li>4.5.2 Post-release collaring data of large carnivores (i.e., tiger and leopard) from beginning of any animal releases informs PA wildlife and habitat management and community awareness- raising throughout project period.</li> <li>4.5.3 Disease monitoring capacity improved with sample</li> </ul>	<ul><li>4.5.3 Reports on training and inspection of facilities and sampling protocols, photographs</li><li>4.5.4 Reports on rescue operations</li></ul>	
• • •		
4.5.4 Wildlife rescue response rate increases by 20% by project end compared to baseline set in Y2.		

Output 5 . Investments in PA habitat quality benefit wildlife: threats to wildlife reduced and kept low, with better habitat and wildlife management interventions meeting	<ul> <li>5.1 Multi-stakeholder engagement (PAs, NGOs, BZUC, CSOs) co- design approaches during Y1, with</li> <li>5.1.1 priority areas for habitat</li> </ul>	<ul><li>5.1 Meeting minutes, maps of priority areas, lists of agreed priority needs</li><li>5.2 Reports on plot samples to track</li></ul>	Avenues exist to complement the activities of existing projects (government and other I/NGOs) within the three protected areas to magnify conservation outcomes.
needs previously identified by managers, and capability and	management identified by the end of Y1.	grassland quality, camera trap images to reveal water hole use,	The PA authorities are willing to
capacity increased in 3 PA/BZs through better equipped and trained teams	5.1.2 priority needs of PA in research, infrastructure, equipment, policy, and	reports including maps on firebreak creation and maintenance	provide staff to participate in project activities.
	capacity identified by the end Y1.	5.3 Iterative implementation plans for each PA	The quality of habitat and resources within PAs are a limiting factor in supporting the increasing population
	5.2 Habitats identified under Ind. 5.1.1 are improved against Y1	5.3.1. Research project data and reports, students' theses	of wildlife.
	baseline for key species by the end of Y4, with	5.3.2. Survey and capability results,	Climate change continues to alter the intensity and frequency of
	5.2.1 50 ha of grassland maintained by the end of Y4,	(CA TS) audit results	natural disasters (fire, drought, flash floods) within the protected areas,
	5.2.2 6 water holes are strengthened through solar lifts (pumps) by the end of	5.3.3. Reports on progress implementation plan	requiring management to mitigate its effects.
	Y3. 5.2.3 75 km fire line maintained by the end of Y4.	5.3.4 Procurement reports and receipts	Management effectiveness of PA staff is a limiting factor for managing the increasing wildlife within the
		5.4.1 Camera trap data	PAs, necessitating capacity building.
	5.3 Priority needs of PAs re research, policy, infrastructure, equipment, and the capacity to monitor wildlife and to address	5.4.2. camera trap data, HH surveys, HWC champion reports	
	larger biodiversity issues are	5.5 Number of peer reviewed	
	improved by the end of Y5, against Y1 baseline with	papers in press and in preparation	
	5.3.1 Key research projects		
	(including 5 Masters students' projects) about		
	animal movements, conflict incidents and mitigation,		

	post-translocation, or post-	
	release behaviours by end of	
	Y5.	
5.3.2	Capabilities of 450 park and	
	DNPWC staff improved to	
	ensure they comply with	
	Global Conservation	
	Assured Tiger Standards	
	(CA TS) requirements for	
	accreditation by the end of	
	Y4 (compared to Y1	
	baseline)	
5.3.3	Three priority needs that	
	were identified in Year 1	
	(e.g., renovations or facilities	
	improvements for visitor in	
	any of BaNP, BNP, and PA	
	research facility) are	
	addressed by the end of Y3.	
5.3.4	Teams equipped with	
	relevant gear for responses	
	and monitoring with 3	
	vehicles (2 jeeps/trucks, 1	
	tractor), 20 GPS collars, 12	
	CCTV Fcameras, 90	
	cameras, both Global	
	System for Mobile (GSM)	
	and non-GS), supported by	
	the end of Y3.	
5.4 lm	proved evidence of key	
	dlife species being present	
wit	hin PAs by the end of Y5, with	
5.4.1	20% increase in key wildlife	
	species' use of improved	
	habitats such as grasslands	
	and waterholes (against	

baseline to be set in Y1/Y2) by the end of Y5. 5.4.2 15% decrease (baseline to be set in Y1/Y2) in wildlife sightings in HWC hotspots by the end of Y5.	
5.5. Lessons learnt are documented, analysed, and promulgated through two peer reviewed papers within a year of project end.	

Activities

- 1.1 Build on existing understanding and capabilities within PA-BZ management with regards to HWC reduction by creating HWCx positions, organizing HWC-themed meetings, and producing participatory HWC maps.
- 1.2 Review HWC mitigation projects in Nepal and identify the effectiveness of mitigation tools trialled to inform HWC best practices guidelines for South Asia.
- 1.3 Map the existing network of Community Based Anti-Poaching Unit (CBAPU) and facilitate the CBAPUs to put HWC reduction at their core.
- 1.4 Strengthen HWCx champion groups within the project sites to deliver their allocated responsibilities and for scaling up the work in other parts of the country.
- 1.5 Pilot network of GSM-enabled cameras for conflict species (elephant) surveillance in ShNP as an early warning system for communities near agricultural and village areas.
- 1.6 Strengthen access to existing government quick relief mechanism for compensation for livestock loss.
- 1.7 Support HWCx champions to conduct awareness programmes linked to behaviour change and safety drills for communities and schools.
- 1.8 Test and if appropriate scale-up insurance mechanism for mitigating HWC (primarily focused on tiger, elephant, rhino, and leopard).
- 2.1 Assess the existing mechanism of livelihood support at the Buffer Zone User Committee (BZUC) level through workshops on value chain promotion for livelihood commodities/services.
- 2.2 Consultation workshops to identify and establish market needs for key products/services from the project sites and strengthen market access and valuation.
- 2.3 Replicate community banking (establish new and strengthen existing ones), with by-laws covering conservation and subsidy scaled for households with different levels of marginalisation.
- 2.4 Enhance community resilience by replicating agricultural practices especially that have been shown to reduce HWC in the project sites.
- 2.5 Replicate animal husbandry practices for better livestock health and rearing, introduce means of sustainable fodder and productivity reducing dependency on natural resources in PAs.
- 2.6 Strengthen existing ecotourism ventures in Banke, Bardia and Shuklaphanta through investments in skill development.
- 2.7 Connect HWCx champions (under Output 1) with skill development trainings.

Conduct pre and post project surveys of the beneficiaries to assess and evaluate changes.

- 3.1 Build on the existing knowledge base of HWC in the landscape by participatory consultations for co-developing locally appropriate mitigation methods for the project sites.
- 3.2 Support BZUCs through HWCx champions under Output 1 to implement HWCx plan using proven proactive HWC reduction measures.
- 3.3 Arrange exchange visits to past ZSL sites (PAs) to enable best practice adoption for HWC reduction, assessing take-up rate of methods 1-2 years later.
- 3.4 Produce awareness-raising materials and outlets to spread HWC mitigation and biodiversity conservation messages to the larger public using channels identified under Output 1.

Pre and post project social and field surveys in the participating communities to ascertain reduction in HWC and measure changes in perception to HWC.

- 4.1 Relevant stakeholders are engaged through workshops and meetings to identify gaps and opportunities to link with current mitigation strategies for the negative impacts of linear infrastructure.
- 4.2 Assessment of impact on wildlife of current and proposed linear infrastructures in the three national parks.
- 4.3 Priority wildlife crossing sites identified by scoping visits to Shuklaphanta NP and Bardia NP are strengthened.
- 4.4 Produce best practices recommendations for ShNP, BNP and BaNP based on the project learning for mitigating the impact of linear infrastructure on wildlife.
- 4.5 Strengthen wildlife response team led by Bardia NP, with two representatives from satellite sites (ShNP and BaNP).
- 4.6 Strengthen existing post rescue structures in the three parks through meeting the parks' infrastructural and equipment needs.
- 4.7 Support linking the wildlife response team with HWCx champions (under Output 1) to promote participatory approach to safe rescue and handling of wildlife.
- 4.8 Improve DNPWC's existing institutional capacity regarding post-rescue management of wildlife.

Scale-up the use of in-country expertise to train and systematically manage other wildlife units such as mini zoos that are operated at the municipal and forest user group level in the country and on wildlife rescue and handling.

- 5.1 Stakeholders including PAs, NGOs, BZUC and CSOs are engaged to co-design approaches to improve wildlife habitat management.
- 5.2 Collaborate with PA authorities to better manage priority habitats identified within the three PAs.
- 5.3 Strengthen PA's existing capacity to monitor key species (Tiger, Elephant, Browsing species) within the PAs.
- 5.4 Build on existing PA infrastructure and equipment within the three parks to improve management effectiveness.
- 5.5 Collaborate with stakeholders (PAs, conservation partners, universities) to promote studies towards strengthening the conservation effectiveness of each PA.
- 5.6 Improve upon existing recommendations and policies to incorporate changes following the results of National Tiger Survey 2022.
- 5.7 Understand the impact of project interventions on the retention of wildlife within protected areas to assess effectiveness of intervention.
- 5.8 Produce best practices document as future recommendation strategy for biodiversity conservation.

## **Annex 3: Standard Indicators**

#### Table 1Project Standard Indicators

DI Indicator number	Name of indicator	Units	Disaggreg ation	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Year 5 Total	Total to date	Total planned during the project
DI-A01	Capabilities of 450 park and DNPWC staff improved to ensure they comply with Global Conservation Assured Tiger Standards (CA TS) requirements for accreditation by the end of Y4 (compared to Y1 baseline)	People	Gender Stakeholde r group Training typology	30					30	450
DI-A02	Existing community units for HWC mitigation are scaled up to create 100 HWCx champions across 3 PAs/BZ with capacities strengthened to include a suite of species and for participatory data gathering by the end of Y3, with	People	Gender Stakeholde r group	74					74	100
DI-A03	Wildlife rescue response team, led by Bardia NP with two representatives from ShNP and BaNP, strengthened and equipped for wildlife issues (related to canal, road, and HWC) and trained by Wildlife Health Bridge programme of ZSL's Wildlife Health and Living Collection departments, by the end of Y4	Number of organisatio ns	Organisatio n Type	2					2	3
DI-A05	A total of 10,000 HHs (55,000 people) in the project landscape reached through 96 awareness and drill programmes for behavioural change (disaggregated by gender and ethnicity) conducted by HWCx champions by the end of Y5	People Number trained	Training typology Gender Stakeholde r group	0					0	10,000
DI-A07	National and regional stakeholders identified, and expert learning provided by the end of Y1.	Governme nt institutions	Govt. Organisatio n Type	3					3	3 (IUCN Elephant Transport Working Group and road ecology specialists)

DI Indicator number	Name of indicator	Units	Disaggreg ation	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Year 5 Total	Total to date	Total planned during the project
DI-A07	Recommendations for mitigation methods needed are reflected in project documents submitted to DNPWC, Department of Roads, Department of Irrigation, Nepal Electricity Authority and Department of Railways by end of Y2 and finalised by end of Y5.	Governme nt institutions	Govt. Organisatio n Type	5					5	5 (DNPWC, Department of Roads, Department of Irrigation, Nepal Electricity Authority and Department of Railways)
DI-A10	52 Community banks, 12 existing plus 40 new (with ca. 135 HHs per CB), are established and/or strengthened under the framework of BZUCs and are directly benefitting 7,000 HHs, (including the most vulnerable groups and HHs) with the potential to increase income as highly as 60- 120% as shown in previous projects, by the middle of Y2.	Proportion	N/a	38% (20/52)					38%	100%
DI-A11	52 Community banks, 12 existing plus 40 new (with ca. 135 HHs per CB), are established and/or strengthened under the framework of BZUCs and are directly benefitting 7,000 HHs, (including the most vulnerable groups and HHs) with the potential to increase income as highly as 60- 120% as shown in previous projects, by the middle of Y2.	Number	N/a	20					20	52
DI-B01	Global Conservation Assured Tiger Standards (CA TS) accreditation achieved for all 3 national parks (BNP, ShNP, BaNP) by the end of the project, bringing recognition and eligibility for additional funding investments by the end of the project.	Number	CATS accreditatio n	0					0	3
DI-B07	Positive attitudes about conservation and participatory resource management in participating 5000 HHs surveyed in 3 PAs	People	Gender	0					0	3000 (60% of 5000)

DI Indicator number	Name of indicator	Units	Disaggreg ation	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Year 5 Total	Total to date	Total planned during the project
	predicted to increase by 60% by end of Y5 against baseline set in at the start of Y2.									
DI-B09	Communities' dependency on natural resources in adjacent PAs (i.e., firewood, fodder collection, livestock grazing) reduced by 20% in 50% of the participating HHs (baseline to be set in Y1) by the end of Y5.	People/ Household s	Gender Typology of unsustaina ble practice	0					0	TBC following establishment of baseline
DI-B10	HWC insurance schemes operational in at least 50% of HWC-afflicted communities around the 6 PAs by end of Y5.	People/Ho useholds	Gender Typology of livelihood improveme nt practice	0					0	50% of HWC beneficiary communities
DI-B10	4,000 HHs benefitting through improved livestock practices by the end of Y3 (refresher training in Y5).	People/Ho useholds	Typology of livelihood improveme nt practice	0					0	4,000
DI-B10	265 members from HHs of HWCx champions (under Ind 1.2) and existing homestays are linked to alternative livelihood schemes by the end of Y3.	People/Ho useholds	Typology of livelihood improveme nt practice	0					0	265
DI-B10	120 HHs benefitting from electrician, plumbing, mobile repair, motorcycle repair skills training by the end of Y2.	People/Ho useholds	Gender	0					0	120
DI-B10	145 HHs benefitting from nature-based tourism skills training by the end of Y3.	People/Ho useholds	Typology of livelihood improveme nt practice	0					0	145
DI-C01	Any existing crop and livestock protection insurance mechanisms or other potentially	Number	Knowledge /practice area	0					0	1

DI Indicator number	Name of indicator	Units	Disaggreg ation	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Year 5 Total	Total to date	Total planned during the project
	appropriate insurance schemes identified and mapped by the end of Y1.		Product typology							
DI-C01	Feasibility of adding HWC specific damages to existing insurance schemes assessed in consultation with insurance companies assessed by end of Y3.	Number	Knowledge /practice area Product typology	0					0	1
DI-C01	Livelihood schemes at the Buffer Zone User Committee (BZUC) level for 7000 HHs within the three western parks are understood, assessed, and improved by mid-Y2	Number	Knowledge /practice area Product typology	0					0	1
DI-C01	Participatory resource mapping for 20 BZUCs conducted by the end of Y1.	Number	Knowledge product typology:	1					1	1
DI-C01	indeiti products/services (agriproducts such as vegetable, cash-crops, grains; livestock products; ecotourism services such as nature guides, homestays, and restaurants) assessed by the end of Y1, taking account of access for key vulnerable groups and HHs.	Number	Knowledge /practice area	1					0	1
DI-C01	Areas identified and assessed for locally appropriate interventions against high conflict species (i.e., tigers, elephants, browsing species) by consulting disaggregated groups (with at least 40% from Indigenous and other disadvantaged groups) across households by the end of Y1	Number	Knowledge /practice area	1					1	1
DI-C01	Lessons and experiences from the 3 project PAs made available to other HWC-afflicted communities including, with BZUCs and PA staff in by the end of Y5.	Number	Product typology	0					0	1
DI-C03	The viability for wildlife movements of the corridors in Kamdi (Banke) and Boom-	Number	Assessme nt method	0					0	1

DI Indicator number	Name of indicator	Units	Disaggreg ation	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Year 5 Total	Total to date	Total planned during the project
	Brahmadev (Shuklaphanta) has been assessed by end of Y4.									
DI-C03	Evidence-based assessment of effects of linear infrastructure on wildlife movement and habitat quality/conflict drivers across the three parks and surroundings formalized by the end of Y2.	Number	Assessme nt method	0					0	1
DI-C03	Priority wildlife crossing sites for key species identified by end Y4.	Number	Assessme nt method	0					0	1
DI-C03	Multi-stakeholder engagement (PAs, NGOs, BZUC, CSOs) co-design approaches during Y1.	Number	Assessme nt method	1					1	1
DI-C03	Key research projects (including 5 Masters students' projects) about animal movements, conflict incidents and mitigation, post- translocation, or post-release behaviours by end of Y5.	Number	Assessme nt method	0					5	5
DI-C08	Priority areas for habitat management identified by the end of Y1	Area (hectare)	Identified	1					1	1
DI-C14	Exchange visits to previous ZSL and NTNC HWC reduction sites in Chitwan and Bardia NPs promote approaches to HWC mitigation tested by the project to a sub-set of 5,000 HHs and 100 HWCx champions by end of Y3 with uptake of the approaches assessed by the end of Y5	Number	Attendee gender balance Types of decision- makers	0					0	TBC
DI-C17	Lessons learnt are documented, analysed, and promulgated through two peer reviewed papers within a year of project end.	Number	N/a	0					0	2
DI-D01	50 ha of grassland maintained by the end of Y4,	Area, hectares or Km	Protected areas	0					0	50 ha

DI Indicator number	Name of indicator	Units	Disaggreg ation	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Year 5 Total	Total to date	Total planned during the project
DI-D01	75 km fire line maintained by the end of Y4	Area, hectares or Km	Protected areas	90km					90km	375km (75 Km per year)
DI-D03	Protected Area-Buffer Zone HWC mitigation collaborations are incorporated into Buffer Zone Management Committee (BZMC) structures for PAs by being streamlined and upscaled by Y2 {with:	Number of instrument s	Policy typology	0					0	1
DI-D03	Bylaws of Community Based Anti-Poaching Units (CBAPUs) network in the project landscape are amended to include HWC mitigation actions by the end of Y1	Number of instrument s	Policy Typology	1					1	1
DI-D04	Stable or increasing trends in elephant, rhino, tiger and tiger prey species populations in all three focal PAs throughout project lifetime.	% Increase	Fauna	0					0	>0% increase
DI-D04	10% increase (baseline to be set in Y2) in the rate of use of the wildlife crossings in Ind 4.3.1 by the end of Y5.	% Increase	Fauna	0					0	10% increase
DI-D04	20% increase in key wildlife species' use of improved habitats such as grasslands and waterholes (against baseline to be set in Y1/Y2) by the end of Y5.	% Increase	Fauna/Flor a	0					0	20% increase
DI-D04	15% decrease (baseline to be set in Y1/Y2) in wildlife sightings in HWC hotspots by the end of Y5	% Decrease	Fauna	0					0	15% decrease
DI-D11	3,000 HHs benefitting through improved agricultural practices by the end of Y3 (refresher training in Y5).	People/Ho useholds	Gender	0					0	3,000
DI-D15	70% of 900 surveyed households in 3 project PAs and indirect beneficiaries in 3 additional PAs report lessened impacts of HWC due to improved knowledge of real examples of preventative and locally appropriate actions	Number	Conflict typology	0					0	630 HHs (70% of surveyed HHs

DI Indicator number	Name of indicator	Units	Disaggreg ation	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Year 5 Total	Total to date	Total planned during the project
	(compared to Y1 baseline) by the end of the project.									
)DI-D15	Proactive mitigation measures against damage by high conflict species are replicated and reduce HWC by the end of the project in 1,000 existing households from previous projects and an additional 4,000 HHs as prioritised in Ind 3.1	Number	Conflict typology	0					0	5,000 HHs
DI-D15	30% reduction in livestock depredation from large and medium carnivores in the participating HHs by Y4 against baseline set in year 1.	Number	Conflict typology	0					0	30% reduction (baseline TBC)
DI-D15	15% reduction in direct physical harm to human beings by Y5 against baseline set in Y1.	Number	Conflict typology	0					0	15% reduction (baseline TBC)
DI-D15	10% decrease against Y1 baseline in associated incursions by wildlife to within 1 km of HHs in the two existing conflict project sites by the end of Y5.	Number	Conflict typology	0					0	10% decrease (baseline TBC)
DI-D16	40% reduction in perceived economic and social vulnerability from HWC in 5000 HHs in 3 project PAs in the landscape (Bardia National Park (BNP), Shuklaphanta National Park (ShNP) and Banke National Park (BaNP)) by the end of the project.	Household s	HH survey metric (economic and social vulnerabilit y)	0					0	40% reduction in 5,000HH (baseline TBC)
DI-D16	60% of 7,265 HHs (selected through consultation with BZUC chairs and participatory meetings and baseline surveys show) at least a 40% improvement in the wellbeing index (baseline to be set in Y1) by the end of the project.	Household s	HH survey metric (wellbeing)	0					0	4,359HHs (60% of 7265 HHs) show at least 40% increase in wellbeing (baseline TBC)

DI Indicator number	Name of indicator	Units	Disaggreg ation	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Year 5 Total	Total to date	Total planned during the project
DI-D16	60% of the community bank members (ca 135 per community bank and at least 52 banks) showing at least a 40% increase in wellbeing.	Household s	HH survey metric (wellbeing)	0					0	60% of community banking members show at least 40% increase in wellbeing
DI-D16	Average income of the participating 7,265 HHs increased by 20% by the end of the project against Y2 baseline across 750 sample HHs surveyed using a wellbeing index (sample size >10% of total HHs).	Household s	HH survey metric (income)	0					0	750 surveyed HHs show 20% increase in income (baseline TBC)

#### Table 2Publications

No publications developed in Y1 are currently publicly available.

Title	<b>Type</b> (e.g. journals, best practice manual, blog post, online videos, podcasts, CDs)	<b>Detail</b> (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)

# Annex 4: Onwards – supplementary material (optional but encouraged as evidence of project achievement)

All Annexes are attached as a separate file submitted alongside the technical reporting document.

### **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 <b>correct template</b> (checking fund, type of report (i.e. Annual or Final), and year) and <b>deleted the blue guidance text</b> before submission?	Yes
Is the report less than 10MB? If so, please email to <u>BCF-</u> <u>Reports@niras.com</u> putting the project number in the Subject line.	Yes for main reporting document
Is your report more than 10MB? If so, please discuss with <u>BCF-Reports@niras.com</u> about the best way to deliver the report, putting the project number in the Subject line.	Yes for annexes document, which has been shared separately
<b>Have you included means of verification?</b> You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 16)?	Not applicable
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	