

Improving Tiger Conservation and Livelihoods
Best Case Studies

Zoological Society of London-Nepal,
June 2020

Submitted by
Environmental Services Nepal

Program brief

Country	Nepal
Executive organization	Zoological Society of London
Project	Supporting Transboundary Tiger Recovery in India and Nepal
Donor	KfW Development Bank and the IUCN
Start date	January 2016
Physical Completion Date	December 2019
Total budget (Euro)	2 Million
Implementing partners	Department of National Parks and Wildlife Conservation (DNPWC), National Trust for Nature Conservation, Himalayan Nature
Location	Banke, Bardia, Shuklaphanta National Parks and buffer zones, core area of Parsa National Park
Program objective	Securing the Terai Arc Landscape (TAL) to increase tiger populations through improved management and monitoring with a focus on law enforcement, biological monitoring, and sustainable development of local communities
Total implementation months	39

Contents

Program brief	I
Abbreviations	IV
Executive Summary	VI
Chapter I: Project Working Approach	1
1.1 Background information	1
1.2 Project Objective	1
Interviews with experts	2
1.3 Area Coverage	2
1.4 Key approaches	2
1.5 Project interventions	4
Chapter II: Scope and Methodology	5
2.1 Study objective/scope of the study	5
2.2 Methodology	5
Desk Review	5
Consultation meetings at Kathmandu and field offices	6
Meeting with BZMCs and BZUCs	6
Interaction with selected beneficiaries	6
Focus Group Discussion	7
Interviews with experts	7
Direct observation	7
Data processing, assurance and analysis	7
Chapter III: Best Practices and Learning	9
A. Best Practices	9
I. Revolving fund for livelihood support	9
II. Mitigation Measures to minimize Human Wildlife Conflict	12
III. Integrated Homestay	15
IV. Empowering marginalized khuna community	17
V. Skill development	19
VI. Research Support	21
VII. Law Enforcement	23
B. Social and environmental safeguard	25
C. Learning	26

Strategic learning	26
Operational learning	28
Chapter IV: Conclusion and Recommendation	29
Conclusion	29
Recommendation	30
Annexes	32
References	33

Photo 1 Discussion with single women group chairperson	10
Photo 2 Laksha working in his shop.....	11
Photo 3 Predator proof coral.....	14
Photo 4 Garden of Gabhar Homestay	16
Photo 5 Goat Farming for Khuna Women's Group	18
Photo 6 Manju as a nature guide	20
Photo 7 A camera trapped tiger roaming in the fireline (source ZSL Nepal).....	22

Figure 1 Project working area	2
Figure 2 Status of HWC (from NPs' Annual Progress Reports).....	13

Table 1 1 Loss due to attack of Wild animals	15
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Abbreviations

BaNP	Banke National Park
BCP	Bardia Conservation Program
BNP	Bardia National Park
BZ	Buffer Zone
BZMC	Buffer Zone Management Committee
BZUC	Buffer Zone User committee
CBAPU	Community-Based Anti-Poaching Unit
CCO	Chief Conservation Officer
DNPWC	Department of National Parks and Wildlife Conservation
FGD	Focus Group Discussion
GESI	Gender Equality and Social Inclusion
GoN	Government of Nepal
GSM	Global System for Mobile Communications
GTRP	Global Tiger Recovery Program
GPS	Global Positioning System
HH	Household
HN	Himalayan Nature
HTC	Human-Tiger Conflict
HWC	Human Wildlife Conflict
IGA	Income Generating Activities
INGOs	International Non-Governmental Organizations
ITHCP	Integrated Tiger Habitat Conservation Program
IUCN	International Union for Conservation of Nature
KfW	Kreditanstalt Für Wiederaufbau (German Development Bank)
KII	Key Informant Interview
LEM	Law Enforcement Monitoring
LRP	Local Resource Person
M&E	Monitoring and Evaluation
MOFE	Ministry of Forests and Environment
NGO	Non-Governmental Organization
NP	National Park
NRs	Nepali Rupees
NTNC	National Trust for Nature Conservation
NTPBMP	National Tiger and Prey-base Monitoring Protocol
NWS	Nandhaur Wildlife Sanctuary
PA	Protected Area
PCC	Project Coordination Committee
PMU	Project Management Unit
PNP	Parsa National Park

RRCC	Rapid Response Command Center
RRT	Rapid Response Team
ShCP	Shuklaphanta Conservation Program
ShNP	Shuklaphanta National Park
SMART	Spatial Monitoring and Reporting Tool
TAL	Terai Arc Landscape
WCCB	Wildlife Crime Control Bureau
WWF	World Wide Fund for Nature
ZSL	Zoological Society of London

Executive Summary

The Integrated Tiger Habitat Conservation Programme (ITHCP) was executed in the Terai Arc Landscape of Nepal and India by Zoological Society of London (ZSL) Nepal and World Wildlife Fund (WWF) Nepal, with support from German cooperation via KfW Development Bank and International Union for Conservation of Nature (IUCN). The overarching objective of ITHCP is to support the Global Tiger Recovery Programme (GTRP), a global effort to double the number of tigers in the wild by 2022. The ITHCP is based on three pillars: protecting tiger species and their prey from the threat of poaching; preserving tiger habitats including core area, buffer zones and corridors; and supporting the human population living in tiger landscapes. ZSL Nepal implemented the project entitled “Supporting Transboundary Tiger Recovery in India and Nepal” from 1 January 2016 to 30 September 2019. The project was implemented in close collaboration and coordination with the Department of National Parks and Wildlife Conservation (DNPWC). Similarly, the project was implemented in close partnership with Non-Governmental Organizations (NGOs) as National Trust for Nature Conservation (NTNC) and Himalayan Nature (HN). NTNC and HN are the long term conservation partners of ZSL and also the key partners for this project. The project was implemented through Project Coordination Committee (PCC) formed within DNPWC under the chairmanship of Deputy Director General (DDG) and ZSL’s Country Manager as well as different section heads within the DNPWC. The PCC provided guidance and conducted periodic monitoring for successful implementation of the project. Moreover, a field level Project Management Unit (PMU), chaired by the Chief Conservation Officer (CCO), implemented project activities on ground in close coordination with project partners, conservation stakeholders, buffer zone user committees and local people. The project has therefore built a strong partnership among government agencies and conservation partners in the country. Furthermore, DNPWC and Ministry of Forests and Environment (MoFE) have hugely acknowledged the project's contribution for tiger conservation in Nepal. This has ensured long term sustainability of the project.

The main objective of this assignment is to develop the best practice portfolio through reviewing the activities of ITHCP for human-wildlife conflict mitigation and income generation. The study area covered the buffer zones of Banke National Park (BaNP), Bardia National Park (BNP) and Shuklaphanta National Park (ShNP) as well as the core area of Parsa National Park (PNP); as per the consultation with concerned stakeholders, experts and beneficiaries and revision of secondary sources, the best practices were selected using following criteria: i) success in achieving intended project goal ii) stakeholder’s engagements iii) community participation iv) relevance of the project v) ownership by the communities and stakeholders vi) sustainability/level of institutionalization vii) support on livelihood (if relevant) viii) level of contribution to attract communities towards conservation (increase in tolerance level) ix) contribution to minimize HWC and x) internalization and replication of project activities by communities.

The project was observed to be successful on the basis of coordination and cooperation among transboundary stakeholders; well targeting approach to include wildlife victims, women, poor and indigenous communities; facilitation in alternative livelihoods opportunities thus stimulating positive attitude among local people towards conservation; assurance of social and environmental safeguards in every project activities; continuation of habitat restoration and facilitation towards the effective management of National Parks (NPs).

Among several project interventions, the best practices are:

- i) supporting the group of wildlife victim single women through seed funds. The supported revolving fund has revived the courage of restarting normal life despite husband's death. Group of single women have utilized seed funds in livestock farming, small and medium enterprises like cycle maintenance store and other income generating activities as cattle rearing to scaleup their livelihoods.
- ii) Predator Proof Corrals (PCC) addressed the key issues of human-wildlife conflict which contributed in its mitigation and brought positive changes towards conservation.
- iii) Integrated homestays in different BZUCs of BaNP, BNP and ShNP have enhanced livelihood opportunities for local people which contributed in promoting ecotourism and income generation.
- iv) Empowering marginalized communities e.g. Khuna Women Group of BaNP to upscale income generation activities prompted in wildlife conservation
- v) Skill development activities such as functional operation of homestay, trainings for nature guide, driving, vegetable farming and animal husbandry, supported in small enterprise development thus contributing to alternative income generation of local communities and helped reduce dependency on natural resources.
- vi) Research support on biological monitoring.
- vii) Facilitation on law enforcement and PAs management for strengthening protection inside PAs and controlling illegal activities.

The study team have summarized few recommendations; as to continue coordination and collaboration with local and central level conservation stakeholders; conduct stakeholder mapping among organizations that promote IGA and collaborate with them to maximize outcome of interventions ; timely collect, document and share knowledge products to ease the implementation process and extend visibility of project's interventions; practice integrated livestock management approach in predator proof corrals to reduce the pressure on natural resources and to facilitate organic farming ; link skill based training with IGAs so that the skill human resources could be produced at the community level to technically support IGA's related activities.

Chapter I: Project Working Approach

1.1 Background information

The ITHCP was implemented in the Terai Arc Landscape (TAL) of Nepal and India by ZSL Nepal and the World Wildlife Fund (WWF) Nepal, with support from German cooperation via KfW Development Bank and International Union for Conservation of Nature (IUCN). The overarching objective of ITHCP is to support the Global Tiger Recovery Programme (GTRP), a global effort to double the number of tigers in the wild by 2022. The ITHCP is based on three pillars: protecting tiger species and their prey from the threat of poaching; preserving tiger habitats including core habitats, buffer zones and corridors; and supporting the human population living in tiger landscapes. ZSL Nepal implemented the project entitled “Supporting Transboundary Tiger Recovery in India and Nepal” from 1 January 2016 to 30 September 2019. This project was implemented in BaNP, BNP, ShNP and its associated buffer zones along with the core area of PNP.

1.2 Project Objective

The overall objective of the project was to secure TAL to increase tiger’s population through improved management and monitoring of five transboundary tiger sites namely PNP, BaNP, BNP and ShNP in Nepal and Nandhaur Wildlife Sanctuary (NWS) in India. The project focused on law enforcement, biological monitoring and sustainable development for local communities in the surrounding landscape of these PAs. It also aimed to support local communities through various alternative income generation activities to benefit tiger conservation and to increase the capacity to cope with human-tiger conflict, which would further help in recovery of tigers.

The project was focused on four components:

Component 1: Improved management effectiveness in five PAs (PNP, BaNP, BNP, ShNP and NWS) to support monitoring and conservation of tiger population over a 3-years period.

Component 2: Improved on-site law enforcement in PNP, BaNP, BNP, ShNP and NWS reduces tiger poaching over a 3-years period.

Component 3: Human-Tiger conflict prevention and mitigation measures established across PNP, BaNP, BNP, ShNP and NWS reduces the negative impacts of living with tigers over the 3-years period.

Component 4: Access to improved alternative livelihoods for community members living around the PNP, BaNP, BNP, ShNP and NWS is improved over the 3-year period.

Interviews with experts

Key Informant Interviews (KIIs) are considered as an effective way of gathering information regarding the project outcome, its implementation, modality and benefits to local people. The frontline staff of national parks, project partners, forest guards of BZUC's, CBAPU members, and park authorities were consulted as key informants. A total of 17 individuals were interviewed for this study (see checklist in Annex 1-3).

1.3 Area Coverage

ZSL Nepal implemented this project in BaNP, BNP and ShNP in the western region of Nepal. The overall geographical area of this western complex is 2916.5 km²; of which BaNP covers an area of 550 km² with buffer zone area of 343 km² composed of nine Buffer Zone User Committee (BZUC); BNP covers an area of 968 km² as core area and 507 km² as buffer zone with 19 BZUC and ShNP covers an area of 305 km² as core area with 243.5 km² as BZ composed of nine BZUC. The project also worked in the core area of 627.39 of km² PNP.

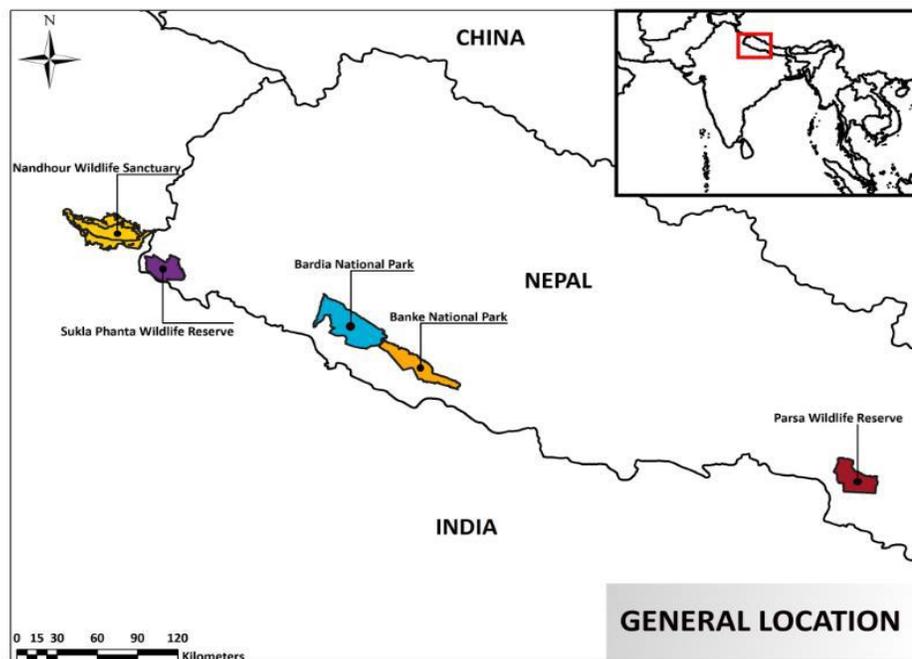


Figure 1 Project working area

1.4 Key approaches

All project activities were implemented in partnership with the concerned stakeholders of BaNP, BNP and ShNP in western Nepal. NPs, NTNC, HN and BZUCs were involved in planning, implementation, coordination, monitoring and reporting of the project. The project envisioned an approach of inclusion and prioritization of women (notably the project supported single women

group of BNP), socially marginalized communities i.e. Dalits (scheduled caste), Janajatis (ethnic groups) and conflict victims living in tiger landscapes.

Coordination and collaboration

The project was implemented in collaboration and coordination with DNPWC through NTNC and HN.

Transboundary cooperation: Project strengthened the culture of transboundary coordination between India and Nepal. Transboundary meetings formed a platform to share information, learn from ongoing practices and make common understanding on transborder challenges.

Stakeholder coordination: Coordination and collaboration were formalized through the establishment of committees in the central and local level. The PCC was formed at the central level led by the DDG of DNPWC including the section heads within DNPWC and ZSL's country manager as the members. The PCC provided guidance and conducted periodic monitoring for successful implementation of the project.

A local level PMU, chaired by the respective CCO, with NTNC and ZSL representatives as members; implemented project activities in the field in close coordination with conservation stakeholders, buffer zone user committees and local people.

Planning

All project activities were planned during proposal development with a clear timeframe and budget thus, ensuring full participation of communities and other stakeholders to finalize the list of activities.

The project was jointly formulated with DNPWC, NTNC and HN staff. According to ZSL reports; planning process included review of BZMC and NP's annual plans; consultation with NP and BZMC's representatives; information verification with existing records; consultation with affected communities; sharing results with PMU, project partners and stakeholders thus prioritizing affected communities.

Targeting

The project worked to strengthen four components viz., strengthening park management capacity, enhancing law enforcement, mitigating human wildlife/tiger conflict and promoting alternative livelihood options for those communities residing on the fringes of NPs. Park management and habitat management activities were implemented in PNP, BaNP, BNP and ShNPs aslo their surrounding BZs. The PCC and PMU determined specific locations within the communities for project interventions. Alternative livelihood programs were aimed for the residents of the BZs.

PCC coordinated with PMU along with the suggestions from the BZUC to finalize the list of community and households for project implementation.

Implementation arrangements

DNPWC, NTNC and HN were lead organizations for project implementation with support from ZSL. Project was implemented by the organizations themselves or by BZUCs,,based on the nature of project activities.

1.5 Project interventions

The following lists of interventions indicate the type of activities implemented by the project to achieve the intended goal under all four components.

- I. Law enforcement and PA management
 - Training on law enforcement strengthened and habitat management to PA staff.
 - Capacitating the judicial bodies on dealing with wildlife related cases.
 - Support to Community Based Anti-poaching Unit (CBAPU), Rapid Response Team(RRT).
 - Biological monitoring- National Tiger survey (camera trapping, capacity building), and regular hotspot monitoring.
 - Conservation technology (use of GSM - enabled surveillance cameras).
 - Infrastructures such as guard posts, fire lines, wooden bridges etc.
- II. Ecotourism ventures (Homestay support, nature guide, and facilitate the collaboration with National Tourism Board (NTB) and Tara Gaun Development Committee).
- III. Support to wildlife victim/marginalized group: Wildlife victim single women group, Khuna community support, community-based saving credit groups. These groups are formed as sub-committees under the existing framework of BZUC.
- IV. Skill Development: Trainings on nature guide, driving, animal husbandry, improved farming, homestay and hospitality management etc.
- V. Alternative livelihood: Agriculture (vegetable farming) and livestock farming.
- VI. Predator proof corrals and fencing (Electric and mesh wire).
- VII. Capacity development of PA staffs, protection unit, CBAPU.

Chapter II: Scope and Methodology

2.1 Study objective/scope of the study

The main objective of this consultancy was to review, extract and document the best practices with lessons learnt from the activities implemented by ZSL Nepal under ITHCP for the mitigation of human-wildlife conflict and promote income generation. The information obtained from this study will be helpful in developing a range of knowledge products (guidelines, reports, publications, media and other materials) for assisting DNPWC; relevant ministries at Federal and Provincial government; buffer zone communities and local government authorities.

The specific objectives were:

- i. To accumulate the best lessons learnt from a set of case studies focusing on good practices from a representative selection of projects implemented by ZSL Nepal.
- ii. To document the best practices of the ITHCP project with regards to human-wildlife conflict mitigation and income generation by summarizing its techniques and lessons learnt on addressing tiger conservation issues in the intervention areas i.e. buffer zone forest and corridor habitats.
- iii. To collect other knowledge products from assessing the ITHCP project and related activities that includes unique approach of ITHCP and its success factors, lessons learnt from the selection of various alternative livelihood programmes and the entire project implementation process that has been translated into successful programs supporting local communities to reduce their dependency on forest/wildlife.

2.2 Methodology

After discussion with the ITHCP project implementation team, the consulting team designed mechanisms to gather, compile and systematized lessons learnt from activities of ITHCP into knowledge reports and studies which would help project team to disseminate them as knowledge products for different media.

To achieve this objective, the consultant team used both Consultative and Participatory approach. The team discussed with DNPWC and PAs staff, representatives from BZMC/BZUCs, of BaNP, BNP and ShNP in western region and core area of PNP where the project was implemented CBAPUs, local communities including beneficiaries of the project, project partners and related stakeholders. The consultant team performed the duties with detailed scope of work as follow:

Desk Review

The team assessed reports from related studies conducted by leading national and international organizations for reference to extract best approaches to adapt in this study. Team also received

some periodic reports including the final ITHCP technical report and thoroughly reviewed them. In addition, the team also reviewed reports on project design, thematic studies, monitoring supervision/implementation support visits and knowledge materials generated by the project. These reports helped us to gather information on project modality, approaches, and issues identified during the implementation/supervision and measures taken to overcome the hurdles.

The team also further consulted other published and online available documents related to this study and relevant successful project design reports to take some best successful practices to have reference on the recommendation part.

Consultation meetings at Kathmandu and field offices

The team consulted project focal persons from ZSL Nepal office, DNPWC, PAs's staffs, representatives/members of BZUC, local stakeholders and discussed informally on project approaches. This included mostly planning, implementation arrangements and impact monitoring of the project activities with hurdles in implementing project and means to overcome them. This meeting helped us finalize the list of communities to visit for questionnaire surveys and FGDs.

Discussions were also made with the officials from the field offices of ZSL, NTNC, and HN to know about implementation, arrangements and challenges, responses to those. Experiences of project implementation and way forward were also discussed during the meetings.

Meeting with BZMCs and BZUCs

Field visit was initiated with courtesy visits to selected BZMC/UCs with the key objective of sharing our field plan, requesting cooperation and getting some field level information on project implementation. We discussed with them on the key changes brought by the project in the community, underlying reasons of success, key challenges on HWC and the best ways to deal with HWC and tiger conservation.

Interaction with selected beneficiaries

Beneficiary households from different locations of BaNP, BNP and ShNP were identified through consultation with NTNC and ZSL field staff. Ten different cluster activities were identified and at least three beneficiaries from each cluster were consulted. Altogether 48 beneficiaries were consulted (Annex 4). The beneficiaries were consulted on i) improvement in their skill and livelihood or creation of additional livelihood alternatives from the project, ii) their increasing level of engagement on wildlife/tiger conservation and iii) their contribution to the society in reducing human-wildlife conflict. This interaction was the key source of information to assess the underlying problems/issues in tiger conservation and livelihood also how the project approached to assist the communities.

The team also visited some beneficiary households who were semi-successful as per the intended target of implemented interventions. It was helpful for us to understand the activities that didn't work well and discussed what could be the best way to approach such interventions.

Focus Group Discussion

Focus Group Discussion (FGD) was conducted to understand that the project-initiated tiger conservation efforts and most importantly, to document best and effective practice implemented by the project. The discussion was also a good platform to assess the ownership of the project by the community. During the FGD the quality and sustainability of project were discussed. In addition, it was helpful to explore the social and environmental safeguard measures of the project. Specially, the discussions were helpful to verify the information generated from the household interviews and other sources.

A total of three focus group discussions (Satkhaluwa, Gobrella, and Khuna community) were conducted for this study. Participants included BZUC members, project staffs, beneficiary groups, forest dependent households, homestay owners and nature guides with an average of seven participants in each discussion (Annex 4). Each discussions was held for three hours (approximately) and meaningful participation was ensured as per the checklists (Annex 1-3).

Interviews with experts

Key Informant Interviews (KIIs) are considered as an effective way of gathering information regarding the project outcome, its implementation modality and benefits to local people. The frontline staff of national parks, project partners, forest guards of BZUCs, CBAPU members and park authorities were consulted as key informants. A total of 17 individuals were interviewed for this study (see checklist in Annex 1-3).

Direct observation

The team also visited some specific project intervention sites to assess the effectiveness of the interventions for tiger conservation. The purpose of the visit was to observe the project activities directly in the field. The team also interacted with local villagers about their livelihood, needs and any difficulties they face because of conservation interventions.

Data processing, assurance and analysis

The presentation of the data triangulation, data processing and quality assurance is a significant aspect of the study. MS Excel database was developed before field data collection. The database was designed in such a way that promotes data validation, quality control and consistency.

Criteria to identify best practices

Based on the discussion with concerned stakeholders, the following criteria were developed to identify the best practices: i) level of success towards achieving intended activity goal, ii) community/stakeholder engagements iii) community participation iv) relevance of the program, v) ownership by the stakeholders or the community vi) sustainability/level of institutionalization vii) support on livelihood (if relevant)viii) level of contribution to attract the community towards the conservation (or level of increase in tolerance) and ix) how much the activity contributed to minimize HWC.

Chapter III: Best Practices and Learning

A. Best Practices

Though all the project intervention adopted in the project area contributed to habitat conservation, human-wildlife conflict mitigation and livelihood opportunities, the study team selected best practices based on the criterion mentioned in the methodology section. The best practices described in this report include: i) background of local situation which gives information on the relevance of the project activity, ii) project approaches on that particular interventions like planning, community participation, stakeholder engagement, monitoring and evaluation, social and environmental safeguard, iii) impact of the project activity especially on mitigating human-wildlife conflict, income generation and making locals aware on conservation and iv) sustainability of the program.

I. Revolving fund for livelihood support

Natural dependent subsistence agriculture and livestock farming and wages labours are the major livelihoods of the community people living in the project area. One of the reason for such is that the communities have limited access to the financial institutions, especially because of the inadequate presence of financial institutions, and lack of adequate knowledge and awareness among the community for improved livelihoods.

In this regards, the project has supported to the community-based organizations (CBO), as a cooperatives by providing revolving fund . The project has supported the formation of the cooperatives based CBOs, skilled them with appropriate skill aligning the aim of the CBOs and fund mobilization for livelihood support activities. The CBOs then smoothly operate revolving funds by maintaining the financial statements and easing the soft loan procedures.

One of the best practice of the revolving fund was the support to the single women grop whose spouses lost lives due to wildlife attack. The following is a details of the work supported by a case study.

Reviving the courage of Wildlife victim single women group

The annual progress reports of BNP have mentioned five casualties and three injuries in the fiscal year 2073/74, three injuries in 2074/75 and one casualty also one injury in 2075/76. There wasn't any clear trend, but the number of casualties and injuries seems not decreasing. The exposure of wildlife threat to the of the local communities have been creating challenges to mainstream them in conservation.

Not only the people loss their grains and livestock due to human wildlife conflict but also 22 families living in the buffer zone of BNP had lost their bread winner to date¹. In order to support the victim's family with monthly minimal allowances of NPR. 1500, BNP has been collecting conservation fees from the visitors and resource collectors through NTNC. Later in 2017, ZSL together with BNP initiated the idea of empowering wildlife victim single women by formulating a group as a sub-committee of a BZUC as provisioned by the buffer zone regulations and providing a initial seed fund of NPR. 500,000 from the ZSL side. The seed fund is managed by a cooperative on behalf of the group. The members of the group could take a loan of maximum NPR. 50,000 at once for one year from the seed fund with minimal interest of 3%. The seed fund was increased by the additional support of NPR. 300,000 from ITHCP project.



Photo 1 Discussion with single women group chairperson

The victim's families are using that fund to restart or upgrade their means of earning after the loss of key family member and a few are practicing a new means for the livelihood. Mostly they were doing animal husbandry like goat, pig and buffalo rearing; while small enterprises like bicycle maintenance and grocery shops have also been started. They have so far collected NPR 25,000 as an interest and will use that as the seed fund

¹ Annual reports of BNP 2076/77

Despite the loss of loved ones, this initiation has helped them to revive their courage to restart a normal life. It has provided a platform for the victims family to share their experiences, learn from each other and gradually improve their living standard. Additionally, skill development events supported by the project have motivated them to upscale their traditional ways of agriculture and animal husbandry. This group is working to brought positivity amongst the members and their families towards the conservation and mitigating human-wildlife conflict.

A case study of Laksha Ram Tharu

Laksha Ram Tharu is a youth entrepreneur and the son of a wildlife victim single woman. Five years ago, his father died from an elephant attack. His family received thirty thousand to perform the death rituals and was further supported with NPR. 300,000 as compensation by the GoN.



Photo 2 Laksha working in his shop

Laksha had started a small cycle repairing shop with a few remaining money that his family had received as compensation and taking a loan of NPR 10,000 from his close friends back in 2016. He sometimes took took small amount of loans from the individual and cooperative but had bitter experience of difficult paper processing and high rate interest rate. After the formation of single

women group, he expanded his business by taking NPR 25,000 and got another loan of NPR 50,000 after paying back the first loan.

Laksha has set a good example by upscaling his small cycle repairing shop with a starting capital of nearly NPR10,000 to a cycle store with a recent capital of nearly a million rupees within six years time. The major portion of his income goes to the family care of five members and the remaining he uses to upscale his business. He has even provided employment to one of the youth of his village.

Despite losing his father to an elephant attack, Laksha is supportive in wildlife conservation. He is an active member of the CBAPU and is continuously working for the conservation of wild animals in his region. He believes his father invaded the territory of the elephant due to which the elephant attacked him to protect itself. He understood that habitat management and providing alternative livelihood for the communities vulnerable to wildlife attack helps to reduce human-wildlife conflict and help to increase the tolerance of local communities to HWC.

II. Mitigation Measures to minimize Human Wildlife Conflict

Predator proof corral

One of the major factor causing human wildlife conflict is the loss of Livestock by wildlife attacks. Livestock depredation by tigers and leopards is one of the rapidly increasing recurring problems faced by the communities living near to NP boundary. Communities generally owns cattle and goat sheds with inadequate safety provisions that exposes the risk of wildlife attack. Villagers have to often stay vigilant for whole nights in the fear of wild animals attack. The graph below exemplifies the status of livestock loss in three different national parks of the western region in the last three years².

² Annual reports of the BaNP, BNP and ShNP (FY 2073/74, 2074/75, 2075/76).

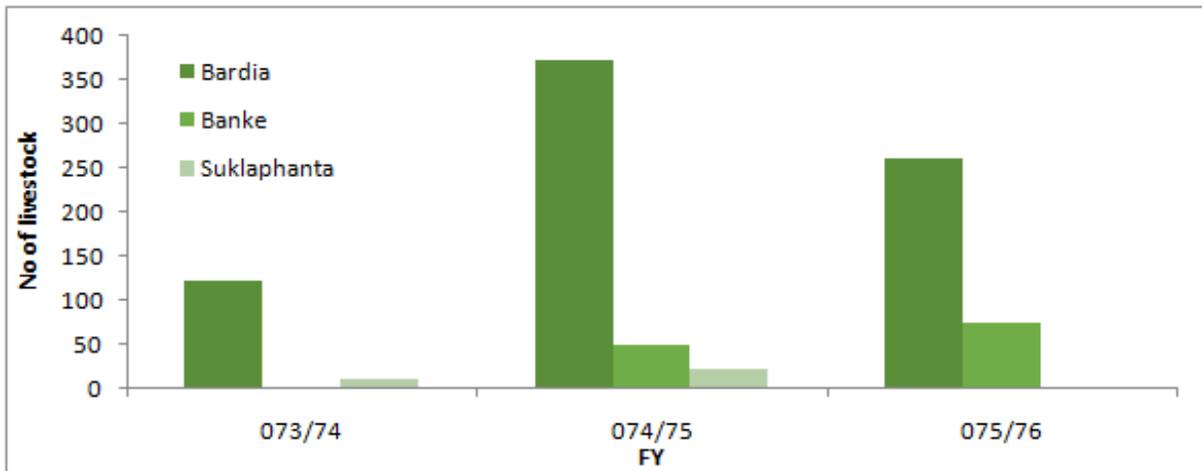


Figure 2 Status of HWC (Source: NPs' Annual Progress Reports)

The communities demanded interventions that could help them protect their livestock and idea was emerged to support predator proof corrals in the buffer zone of Banke, Bardia and Shuklaphata NPs. Project supported 227 PPC with the average size of 7 feet long and 6 feet wide appropriate for 10-12 goats. It was estimated to protect 1662 livestock worth NPR 33.5 million annually. The households were selected together with BZUCs considering the several criterias including HHs experiencing the HTC (priority has given to HT/LC experience HHs), well being ranking (poor HHs are in priority), and proximity to the forest. As other project activities, consideration has made for the marginalized and indigenous communities.

This initiation was very well owned by the community. The beneficiary's contributed timber, skilled and unskilled human resources as the project had only supported materials including sheets, meshwire and nails. Livestock loss from the PPC has been dropped to zero so that the individual as well as the municipality ward committees were planning to replicate this practice.



Photo 3 Predator proof corral

This was observed one of the best interventions of the project since it has addressed the core problem of the community and provided need and demand driven solution. People were motivated to increase the number of livestock and commercialize it as there was no fear of loss due to wildlife attack. It has also contributed to increase income of the beneficiaries to some extent from selling livestock. The communities mindset was observed changed positively towards the conservation and willing to participate in conservation activities.

A case from Gobrella Village

Gobrela village lies in the fringe of BNP. Wildlife movement is relatively higher in this village which makes this village more exposed to human wildlife conflict. Every HHs is facing carnivore attack and are losing their livestock to tiger/leopard. The table below reflects the livestock loss of the consulted villagers of Gobrela village before project intervention. It was recorded that Gobrela village had lost their livestock equivalent to approximately NPR 350 thousands in two years (2015 and 2016).

Table 1 1 Loss due to attack of Wild animals

	Loss due to Leopard/Tiger Attack (2015/16)
Villager 1	Pig-1 (NPR. 6000)
Village 2	Pig-1 (NPR. 11000), Sheep-1 (NPR. 7000)
Villager 3	Pig-2 (NPR. 8000)
Villager 4	Pig-1 (NPR.5000)

The situation of having fear of wildlife attack and losing livestock among the villagers was increasing the conservation challenges. The project assessed the situation together with the local stakeholders, and came up with the solution of predator proof corral. In early 2017, the project had supported PPCs for six HHs who had lost their livestock in the village but that funneled carnivore to new HHs which didn't have proper goatsheds. Hence, the project decided to support the entire village with PPC. It has ensured the widespread impact of the project intervention by protecting whole village. The corral support has saved approximately 282 goats per year costing at least 2.25 million NPR in Gobrella villages³ only. It was reported that the annual average household income from the goat is added by NPR 10,360 after the PPC support(details in annex-6).

The communities are attracted towards the commercial goat farming as the livestock loss by the wildlife has been dropped to zero in village after PPC support. There is also potential of organic farming facilitating villagers to produce biofertilizers and pesticides. Project can facilitate villagers by providing technical support and linking them with organization working in the same area and theme. It was also noticed that a few farmers were inspired and planning to build another PPC, the ward and municipalities also seemed interested to replicate this initiation.

III. Integrated Homestay

Conservation through Integrated Ecotourism

The project has supported NPR 4.5 million as seed money for homestays (Satkhaluwa and Janaknagar in BNP, Gabhar Valley and Khadkawar (Namuna HS) in BaNP, and Khayarkandra in ShNP) which includes 48 households. Project facilitated construction of basic infrastructures through seed money that can be taken as loan by the homestay owners. Further, support has made on skill development activities like hospitality management, nature guide and cooking trainings, vegetable and poultry farming etc. Among various activities implemented by ZSL Nepal under

³ Average number of the goat per HHs of Gobrella villages is six (Source: Field visit)

ITHCP, homestay support is labeled as the best practice as it involved local people in promoting ecotourism and their culture which further contributed to income generation.

Some of the specific implications of the homestay program are: homestay promotion has a productive impact on the livelihood of local people. The average monthly income of each homestay was 5-10 thousand per month for new homestays like Satkhaluwa whereas 75 to 100 thousands per month for established homestays like Gabhar. The Gabhar homestay had some advantages of suitable location as it was the junction of terai and midhills, near to big market like Kohalpur and Nepalgunj, unique tharu culture, dedication of the community, and the active leadership. They have a learning attitude and readiness to translate their learning into the action. It was observed that the Gabhar community was upgrading their homestay as the village resort with advanced facilities backed by the tradition.



Photo 4 Garden of Gabhar Homestay

Moreover, homestays had supported individuals to generate income for themselves through vegetable farming and poultry farming. The dependency of the homestay's owner on the forest products has diminished as they are now engaging in making money from homestay by showing wildlife as a source of attraction for homestay visitors. Homestay support programs contributed

local people to change their attitude and perception towards wildlife and natural resources. This has contributed in increasing tolerance level of local people with existing wildlife, which resulted in reduced human-wildlife conflict. In addition to this, homestay support program also reduced out migration of male members to the nearest border of India as it has supported in income generation as an alternative livelihood program. So, homestay support is labelled as the best practice as it involved local people in promoting ecotourism and their culture which contributed to income generational activities for individual households.

Gabhar and Satkhaluwa homestays are homestays with mixed culture. Communal homes at Gabhar, led by Tharu community initiated cultural shows for the guests at their homestays, depicting their rituals, practices and traditions, and also day to day livelihood of the community. This had helped to mingle in each other's culture and traditions.

Satkholuwa has also become a good tourist destination after wetland conservation program. ZSL supported nature walk infrastructure through road and pavement construction and improvement. *Satkholuwa* wetland conservation program contributed in promoting ecotourism where local people take the visitor around local trails showing natural beauty and wildlife.

Besides the tangible advantage of promotion of ecotourism, community members have now gained exposure through this project. They have been able meet all kinds of people who come from different cultures and social backgrounds through these projects. Welcoming guests in their homes and communicating with them has boosted the confidence of local people and has broadened their social boundary.

Despite limited support from the organizations, community people have now owned the homestays which has ensured the sustainability of the project. The project has contributed in empowering local communities through established institutions of homestay support program.

IV. Empowering marginalized khuna community

“Leaving no one behind” is one of the major agenda of Sustainable Development Goals 2030. Hence empowering marginalized, disadvantaged communities is significant in any project. This project supported Khuna community; one of the marginalized ethnic group residing in western region of Nepal.. Project support created alternative income generation activities to the communities who were mostly dependent on natural resource and subsistence agriculture and livestock.



Photo 5 Goat Farming for Khuna Women's Group

Project supported Khuna community through goat farming in BaNP bufferzone committee. Thorough discussions were made with buffer zone committees to find ways to livelihood support of the Khuna community and attract them on conservation. A sub-committee of ten Khuna members, living in BaNP buffer zones was formed as 'Khuna female skill development and income generation sub-committee' under the BZUC. The sub-committee was facilitated by Sharada Khuna; a young energetic, supportive girl from the local area, who has been facilitating the mobilization of community people. Leading through local female member from the same community was one of the effective medium as it eased to organize themselves, initiate income generating activities and participate in conservation works.

The project provided seed money of NPR 500,000 in a cooperative model to startup alternative livelihood options. Community members have used fund to start and upscale their activities like goat farming, pig farming and tailoring. They had made a provision to take loan from the village cooperative for a year period with a minimal interest rate of 3%.

Considering the threat of wild animal attack and potential for commercial goat farming, the project further supported additional NPR. 150,000 as a grant to construct predator proof corrals for ten HHs. Further, they were given skill development training for animal husbandary, agriculture, leadership skill development, etc. The training has oriented them on the health and hygiene maintenance as well as ways of commercial goat farming.

The visible impact of the project is the transformation in the livelihood of the marginalized disadvantaged community who used to depend on day to day livelihood through fishing, alluvial gold mining and rowing boats. Currently these local community members makes earning through goat farming, reducing dependency on forests for their livelihood consequently resulting in conservation of forests resources promoting wildlife conservation.

The income from the seed fund per household ranges between 5 to 30 thousand per household averaging approximately ten thousand NPR per household (details in annex 7). The income is used to buy quality goats, pigs and for their regular livelihood expenditures. During discussion, the members seemed encouraged for the commercial goat and pig farming.

Although, it would be early to predict the contribution of supported initiative in reducing seasonal out migration; the indication is affirmative if the community gets continuation of onsite technical support and the collaboration with other governmental and development organizations.

V. Skill development

Creating Livelihood Alternatives

A number of skill development events were organized for the community, focusing on creating alternative income generation options. As per the project completion report, CBAPU members to learn various alternative livelihood skills including driving, account keeping and improved goat farming through a skills training programme. The activities were selected through community consultations and were prioritized based on their potential contribution in reducing the community's dependency on the natural resources, particularly forest resources in national parks. The project activities were planned to interlink with alternative income generation, livelihood enhancement which ultimately contributes to the human wildlife conflict mitigation.

A successful story of a nature guide who had received nature guide training from the project.

Manju Mahatara is a permanent resident of Hattisar, Shivapur area near the BNP's headquarters. She started her journey in tourism sector as a nature guide assistant. It gave her the opportunity to learn about ecotourism, wildlife and conservation. Until 2018, she could only work as an assistant for the senior tourist guide due to the lack of guide certificate, which would allow her to practice nature guide.

ZSL conducted a week-long, basic plus advanced level nature guide training back in 2018 for 33 early professionals and newly interested youths from BaNP, BNP and ShNP to provide in depth theoretical and practical information on the profession of nature guide in Gabhar Valley where Manju was among the top of her class.



Photo 6 Manju as a nature guide

Theoretical as well as practical knowledge was imparted to the trainees. This included wildlife tracking, biological monitoring and roles of buffer zone, ecotourism, hospitality, responsibilities of nature guide, basics of conservation, etc. Trainees were given practical exposure through bird watching, wild animal identification and dealing with tourists. Trainees were also supported with supporting documents, books and leaflets about the wildlife, conservation, nature guide's roles and responsibilities from the project.

This nature guide training project was crucial for Manju to boost herself in the ecotourism and conservation, and becoming a full time nature guide. The training provided the certificate which helped her to get a nature guide license from BNP. She upgraded herself from an assistant nature guide to a senior guide where she can deal with visitors and take a lead to guide them. She is currently working as a nature guide, in addition to being engaged with a nature guide office named United Guide, operated by the CBAPU. She was earning nearly NPR. 20,000 per month during the season of tourist visit which was less than NPR 10,000 before the training.

She is also actively engaged in conservation awareness and human-wildlife conflict mitigation. Manju is leading a settlement (*tole*) level CBAPU as a chairperson. They frequently visit wildlife conflict areas to counsel the villagers and morally support them to get back to normal life. She also conducts a wildlife class for kids with the support of her field from New Zealand. They voluntarily conduct class and field-based orientation class to community kids. She believes the children are the future conservation leaders and they should be aware about conservation. She found the training was very useful for her professional career as she gained knowledge and built her

confidence to fully devote herself in it. She believes nearly 80% of the training participants are somehow active in this field.

Among others skilled development trainings supported by the project, the driving training was found effective as the participants were engaged in the same profession and had increased the positive attitude towards conservation. The hospitality management training and cook training were found impactful to upgrade the homestay. Likewise, the animal husbandry training was supportive to the farmers to rear their livestock, particularly goat, in a improved way.

VI. Research Support

Research and monitoring plays a significant role in conservation as it forms the basis for government agencies in planning for the management of the PAs. ZSL supported biological monitoring of tigers and its prey base species in tiger bearing NPs.

With the support of ZSL, protected areas conducted two annual tiger and prey base monitoring through camera trap surveys across all four sites in Nepal in 2016 and 2017/18. The camera trap survey was conducted following the National Tiger and Prey Base Monitoring Protocol. ZSL has facilitated to review this protocol. Camera trap survey of 2017/18 was a part of national tigersurvey conducted by the government every four years. This support has helped GoN in knowing the status of tigers in all tiger bearing NPs of Nepal and its adjacent forest. It highly remarks on conserving habitat based on tiger recorded location after biological monitoring. In 2016, ZSL supported annual tiger and prey base monitoring to understand the impacts of the intervention conducted inside the NPs including PNP, BaNP, BNP and ShNP. The workshop estimated the tiger population at 17, 13, 62 and 18 in Parsa, Banke, Bardia and Shukla respectively.



Photo 7 A camera trapped tiger roaming in the fireline (source ZSL Nepal)

Likewise , the project supported for national tiger census in 2018. The recent monitoring during tiger census indicates that the tiger population in PNP has increased by 157%, from 7 (2013) to 18 (2018/19) individuals⁴. In December 2018, a breeding tigress with three cubs was recorded in the recently extended park area where the project has also supported through construction of guard posts (three) to increase the coverage. They are now being continuously monitored through camera traps. The park, once considered a sink, has now become a source of population together with Chitwan National Park in Nepal and Valmiki Tiger Reserve in India. In BaNP, the tiger number has increased by 425%, from 4 (in 2013) to 21 (in 2018/19) individuals⁴. Improved law enforcement together with habitat management has made possible for the tigers to rapidly colonize BaNP from both new breed and the dispersing tigers from adjacent BNP. Moreover, the annual tiger monitoring in 2017 recorded breeding tigers in the park. The park has become a stronghold for tiger population in just over five years. Likewise, the tiger population in BNP has increased by 74%, up from 50 (in 2013)to 87 (in 2018/19) individuals⁴. Although there has been a significant

⁴ ITHCP Project Technical Report Final Summary

reduction of poaching and other illegal activities, the tiger population in ShNP has been stable, with the 2018 survey estimating 16 tigers.

This research was sufficient to understand the status of tiger conservation. The staffs of PAs after training were benefitted and are utilizing their knowledge and skills in present days to carry out research and monitoring of hotspot areas from wildlife presence point of view. This practice was considered as one among the best practices as it has capacitated staffs of DNPWC, NTNC and CBAPU in monitoring system following the National Tiger and Prey-base Monitoring Protocol (NTPBMP) and mechanism. In the long run, these technical staffs can be a valuable asset in regular monitoring procedures and can train upcoming new staff.

VII. Law Enforcement

Strengthening Park Management system

Despite the consolidated efforts from national parks, community and conservation partners to curb illegal activities including poaching, the NPs were still facing with few issues of illegal activities including forest resource extraction and poaching. For example, BNP registered five legal cases for illegal timber extraction and 23 wildlife crime cases and 440 incidents of human wildlife conflict in fiscal year 2017/2018. Likewise, ShNP reported five cases for illegal timber extraction and wildlife crime, with ten reported cases of human wildlife conflict in fiscal year 2017/2018. Similarly, BNP registered seven cases for illegal timber extraction and 6 illegal cases of wildlife crime. The project activities have supported park officials to strengthen their capacity on law enforcement. The project has supported wide range of activities to strengthen law enforcement in PNP, BaNP, BNP and ShNP. The major attempt was to improve the infrastructure of those PAs and focus more on the fulfillment of the existing gaps – specifically guard posts.

Capacity Building: Following the standardized protocol, 453 frontline staff and wildlife technician were trained to conduct tiger and prey base surveys. The project activity has supported the training of 381 personnel in basic camera trapping training as a part of biological monitoring which has been conducted across three different quarters during the project life. These trainings have enhanced the national capacity in carrying out the tiger and prey base survey following robust scientific methods with high precision levels following the revised NTPBMP. Two Data analysis workshops were supported by the project. The workshop was facilitated by experts from NTNC and ZSL.

The project provided law enforcement management (LEM) training to 2560 protection unit staff and frontline park staff. The staffs from DNPWC, NTNC, protection unit and local resource person were trained as trainers through ToT programs. The ToT has enabled the participants to conduct training for new staff who will join the tiger and prey base monitoring work in the coming days. The trained number represents around 70% of the total staffing across these tiger-bearing PAs of Terai including the Nepal army personnel deployed for security of NPs. Further, the project has

supported 31 mid-career staff in habitat management training and 90 newly appointed front line staff were trained in their capacity and skill development. Likewise, the project provided 2125 frontline staff with necessary field gears (equipment such as GPS, cameras, mobile sets as well as logistics including raincoats, rain boots, medical-kits, t-shirts, field bags, field jackets). Moreover, the project also supported the DNPWC to insure 247 frontline staff across the project sites. This support has resulted in increasing the motivation of the park staff to conduct LEM patrols more effectively.

This all ensures the sustainability of the project and also institutionalized the initiative. The staffs were trained on skills for monitoring through capacity building through ToT training and onsite technical support. The insurance mechanism is now being carried out by the government, ensuring sustainability even after the project has ended. The project's support in updating the management plan of the PA and aligning them with NTCAP was crucial as these updated management plans helped the PA managers to effectively manage the protected areas.

Remote eyes in the Forest: The difficult terrain makes patrolling a challenging task and poachers often take advantage of this, choosing to operate in the least accessible areas. ZSL is supporting the development of conservation technology to help ensure effective protection of wildlife across the four PA's through the introduction of Rapid Response Networks⁵. Spy cameras, an innovative conservation technology is designed to aid anti-poaching efforts on the ground by being a remote eye in the forest. GSM-enabled cameras, equipped with thermal and motion sensors are deployed in key vulnerable locations, captures' images of everything passing by. When the camera records a human using a motion sensor, it instantly transmits the image via email to a network of people in headquarter of each NP, including Rangers and Conservation officer with deputed protection unit staff, who can use it to intercept or disrupt intruders.

Because these cameras use infrared light invisible to human eyes, they can capture images at night without being noticed by poachers. A human-detection algorithm then processes these images to provide instant threat alerts to dedicated protected area officers whenever potential poachers are deducted. Anti-poaching units are then rapidly deployed to arrest poachers, in many cases arriving before they kill any wildlife. For the first time, these cameras give park management the opportunity to get the upper hand in the fight against poaching and illegal wildlife trade⁵. These deployed spy cameras in different strategic locations of NP's for 24-hours surveillance was to record the suspicious activities in remote areas where access was difficult. The deployment of these cameras provided real time information to the command center from the problematic area with GPS locations. Upon the receipt of the images that were deemed to pose threats, immediate action has been taken from the PAs. The images were then used for detailed investigation as if the intruders has successfully captured.

The project has been supporting PNP, BaNP, BNP and ShNP in the deployment of spy cameras that help protected area managers monitor remote and strategic locations within the PA boundary.

Spy cameras were installed in areas where the threat of illegal activities were relatively high. This technology has enabled the protected area managers and protection units to continuously monitor areas where poaching of wildlife is anticipated. Threats detected were instantly acted through the Rapid Response Team (RRT). The Rapid Response Networks have been welcomed by protected area managers. The technology has helped protected areas to protect iconic species. With these cameras installed, Rapid Response Networks installed in all four National Parks have already enabled several arrests⁵. Within the short period of its introduction, this technology has proved invaluable in the fight against poaching and other crimes inside protected areas. It has acted as a remote eye in places difficult to reach. The technology has already enabled protected area managers in BaNP and ShNP to arrest people involved in logging, fishing and killing of wildlife.

B. Social and environmental safeguard

Communities living nearby forests are the most vulnerable and affected groups, hence projects implemented in buffer zone areas need to consider social, cultural and environmental aspects of the community. Social and environmental safeguard is necessary as it engages local communities to plan and manage project activities to improve and protect their lives, rights and livelihoods while conserving nature and wildlife.

Social safeguards in this project can be understood as whether the project affected any social and cultural aspects of the community. Does this project equally participate men and women in the community level projects? Is the GESI concept mainstreamed in the projects? Concerns on environmental safeguard questions whether the projects carried out are environmentally friendly. Observation and response collected from FGD also ensures consideration of social and environmental safeguard throughout the projects. Few examples are explained below.

- ***High priority for women in interventions:*** The project has ensured that women's voices are heard not only during the project design phase but also during the implementation. Women are actively involved in predator proof corral, homestay projects, nature guide training, driving, livestock farming and poultry farming. This shows the visibility of women in the projects and their engagement in the community. An implication of the project is its contribution to equal participation of women in all project works that has led to decreasing power relations among men and women in the society as both were actively involved in the programs. ZSL implemented the GESI strategy to ensure the inclusion of women, indigenous groups as well as vulnerable and marginalized communities.

Respondents were informed about equal participation of women and men in all project activities and not using child labour in ZSL supported activities in their community. Similarly predator proof corral involved women which was a major source of income generational activities in the project.

⁵ IWT Newsletter. January 2019. Innovation and Technology

Hence, this conveys equal participation of women in project activities carried out by ZSL that ensures safeguarding equality.

- ***Inclusion of marginalized communities and deprived groups:*** Overall, the approach used by ZSL Nepal shows tangible social safeguard through participation of marginalized communities. For instance, single women from the *Khuna* community were highly emphasized in their intervention. Project implemented by ZSL involved women's groups, dalits, indigenous people and other ethnic communities, who were actively involved in group formation of buffer zone user groups and utilizing the support received from ZSL Nepal. ZSL uses a bottom up approach in engaging the community with the motto "From the community people to the community people" where local people are involved in the community to support local people themselves through local leadership.

- ***Access to resources for Indigenous communities:*** ZSL prioritized inclusion of indigenous and marginalized communities in its project and has supported 1093 Tharu HHs out of 3052 HHs in the Western Terai, representing 35.8% of the total HHs with nearly 40% of the livelihood support program's activity. Though significant numbers of projects were implemented in that locality, it did not force to change the livelihood or lifestyle of indigenous Tharu community and endangered Khuna community.

On the whole, ZSL Nepal have thoroughly considered the impact of social and environmental safeguards in project activities. All these activities did not have any negative implications on day to day life and the culture of the indigenous communities residing within the fringes of NPs of western complex of Nepal.

C. Learning

Lessons learnt are one of the most important tools to speed up the progress of any program in future. It provides great value when learning is documented, communicated and archived. While implementing the planned works, there were different lessons that need to be listed, documented, communicated and adapted in upcoming programs.

Strategic learning

- There is a commendable effort of the project to balance all three aspects; law enforcement, community empowerment and the species conservation to make it impactful and result oriented.
- The continuation of transboundary co-operation has been a good platform to exchange learning, experience and practices, build a common understanding, and enhance the synergy to work together for tiger conservation. Both Nepal and India have benefited by adopting

best practices of each other. It is important to continue the current practice of transboundary coordination.

- This project has facilitated in bringing together governmental and non-governmental organizations having similar interests. It has strengthened harmony, co-ordination and collaboration among the organizations and has created unified efforts for conservation. This kind of collaboration has eased documentations like the national tiger and prey base monitoring protocol for Nepal, Nepal's tiger conservation action plan for 2018-2022 and updating the relief guidelines.
- The mechanism of establishing co-ordination at the central (PCC) and field level (PMU) led by the governmental organization has not only been beneficial to smoothen to implement project activities but has also assisted to institutionalize implemented activities to a certain extent and ensure the sustainability.
- The minimum possible layers of stakeholder engagement on the fund flow expedite the implementation process. Project has able to maintain direct support to the beneficiaries. However, active engagement of different stakeholders in monitoring ensures quality implementation, post implementation support and sustainability of the interventions.
- Project approach of capacitating the park staff on habitat management and judicial process is effective. This has helped staff to accomplished their responsibilities effectively.
- Project has been successful in addressing the issues of human wildlife conflicts. Interventions like predator proof corrals have helped to reduce human-wildlife conflict and also contributed for additional income through goat and pig farming.
- There are ample opportunities to work with several organizations working in the project sites. Project should develop and periodically review the stakeholders mapping to identify and assess the nature, capacity and ongoing programs of stakeholders to best utilize their contribution to buffer zone communities. For instance, the project has successfully implemented predator proof corral and it can be further upscaled through collaboration.
- The concept of seed money was observed as effective as it increased common funds and attracted more beneficiaries. This had a positive implication on communal ownership of the project activity resulting in its sustainability.
- Project has a well-targeting approach, which enabled the project to reach out to wildlife victims, minority groups and women. The co-ordination among the stakeholders is essential for clear targeting.
- Youth engagement is crucial for the success of these kinds of programs, ensuring long term impact. Empowering youth through skill development activities and backstopping CBAPU helps to improve awareness in the community, reduce human wildlife conflict and strengthen law enforcement.
- Livelihood support brings positive changes to conservation by changing the community's attitude and behavior.

Operational learning

- The successful implementation of the project is determined by participatory planning engaging the local communities.
- Rather than emphasizing on a single component of an issue, an integrated approach provides more impact on livelihood and conservation.
- The collaboration with local government at ground level helps institutionalize project intervention and ensure the sustainability.
- Supplementary capacity building training in agriculture and livestock farming interventions makes it more effective.
- Regular on-site technical assistance to beneficiaries makes the program successful.
- Strengthening group members is important and sustainable rather than depending on the focal person of the community.

Chapter IV: Conclusion and Recommendation

Conclusion

The assignment has selected best practices including supporting the group of wildlife victim single women through revolving funds, Predator Proof Corrals construction, promotion of integrated homestay, empowering marginalized communities like Khuna community, skill development activities for income generation, research support on biological monitoring and facilitation on law enforcement.

The project has upgraded ongoing income generating activities and has also supported to create alternative ones. Revolving fund has eased the access on finance for the rural households so that they can start or upgrade income generating activities. The project has internalized the importance of youth engagement and has empowered them through skill development activities. Several skill development activities including nature guide training, small vehicle driving training, hospitality management, cooking, vegetable farming and animal husbandry were provided to youths. These programs were effective to aware and sensitize communities on practive several alternativeincome generation activities and ease or upgrade their livelihood standard.

The predator proof corral was found very effective to tackle the human wildlife conflict as livestock loss from wildanimal attack was dropped to zero in supported households. This has encouraged villagers to increase the number and quality of goats to generate additional income. Moreover, the holistic approach of including all the villagers like Gobrela was effective to control the loss from entire village.

The project design had followed a participatory planning and targeting approach. Targeting approaches were able to identify the real victims and were successful to involve deprived, marginalized, indigenous and wildlife conflict victims' families for project support. Consultation with park authorities, buffer zone committees was ensured while selecting the location and communities for project interventions. Project has well covered disadvantaged and marginalized communities; Tharu and Khuna community were some examples this report has presented. The communities were trying to shift their natural resource-based livelihood to the commercial goat and pig farming. It was observed that the program has brought a positive mindset among the community on conservation which was also supportive to mitigate human-wildlife conflict.

Recommendation

The project has achieved several appreciable efforts in co-ordination, collaboration, selection of beneficiaries and implementation. These should be well documented on time and circulated among the stakeholders to best utilize their experiences which could increase the visibility of project's interventions. It would be better to have a short and clear project implementation manual for common understanding among the stakeholders to facilitate the implementation.

Wildlife victim single women group has a large area coverage which seems to have created trouble for regular meetings. A small cluster of groups focusing on geographic areas would ease the regular interaction among the members and loan disbursement. Furthermore, additional capacity development work is required for the women of this group to empower and motivate them to actively engage in alternative livelihood opportunities and wildlife conservation.

It would be better to conduct stakeholder mapping to identify and assess the stakeholders to utilize the experiences and expertise from them on project interventions. The activities carried out by the project in sites are highly effective as it contributed for livelihood support and conservation. However, there are projects carried out by other I/NGOs in the same area through livelihood development programs. It would have brought better results if the organizations working in the same areas collaborated and co-ordinated together for the same activities.

Predator proof corrals can be further upscaled by using an integrated livestock management approach, linking up with other organizations contributing for animal husbandary and assuring regular on-site technical support. Supporting organizations could also use a few more approaches such as introducing a lead farmer approach to promote their products and outputs. Lead farmers could be a local resource person for the organization. Project should adopt an integrated and holistic approach for the interventions of planned activities. For instance, the livestock program should also consider including fodder production, stall feeding, integrated pest management practices.

It seemed the community was under the impression that the homestay support had been only made for the homestay owners. There were sufficient examples that the community was getting benefit from the infrastructure and flow of visitors. The project needs to deliver a clear message through awareness programs otherwise the investment could create a conflict between the beneficiaries and surrounding HHs. Moreover, project implementing organizations need to know the carrying capacity of that local area in the homestay project. Furthermore, homestay should ensure to support the promotion and conservation of nature, traditional culture and biodiversity.

It was found that though projects support community people in skills development, they do not have enough capital to start their own business. Hence it would be better if projects could establish a seed fund for potential business startups that are willing to become an entrepreneurs. This could

further create a “ripple effect” in the community to motivate young people to engage in business development through skills development.

There are some individuals who continued their skill development training to business startups. Project should assess the impact of skill development activities and should incorporate the need based on findings.

It would be better if project could support to mainstream the regular monitoring of the biological hotspot areas and technological use for law enforcement (spy camera) within the PAs. This would ensure the sustainability of the project interventions.

Annexes

Annex 1: Guiding questions for beneficiary interview

- I. Basic information on the project and the support they received?
- II. How did they get support? Was that the demand from HH/community? Do they think those activities are relevant for the HHs like them?
- III. How difficult was it to approach the project? What would be the suggestion to ease the approach/process to reach project targeted people?
- IV. How did they implement planned activities? How satisfied are you from that?
- V. What are the key problems of the communities (for livelihood and the wildlife conservation)?
- VI. What are the changes that have been brought by the project (focus on the problems stated above)?
- VII. What was the role of project (or project interventions) on the changes?

Annex 2: KII guiding questions:

- I. Critical view on the project approaches: planning, targeting, implementation arrangements, impact monitoring. What would they change/enhance if given the chance to do so?
- II. What are the changes they have noticed in terms of awareness, skill and livelihood improvements?
- III. How does the community perceive ongoing conservation activities like distribution of soft loans to women groups? Are they taking ownership of these activities?
- IV. Do you think the project was concerned to mitigate negative impacts of tiger conservation works led by the project? If not, could you please give some examples?
- V. What are their observations towards the role of the project on the HWC reduction or the improvement on the tiger conservation?
- VI. What worked well in co-ordination (with park, BZUCs, development/conservation partners, local organization and community) and what are the areas of improvements?
- VII. Is there any correlation between project intervention and livelihood of local communities?
- VIII. Which were the three best practices of the project interventions?

IX. What is your opinion on sustainability of the project works? Do you think the initiatives will be ongoing even after project completion? If so, how? If not, what should be the further measures to continuation of implemented interventions?

Annex 3: FGD guiding checklist

I. Are the communities of project interventions sites well aware of the conservation activities? How are they getting such information?

II. Are the communities benefited from the projects?

III. Do marginalized and worthy locals have access to these project interventions?

IV. Is there any change in (any kind of) well-being of community members due to project interventions?

V. Is there any observed changes in the attitude of locals towards tiger conservation after the implementation of the project?

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