



Human-Wildlife Conflict Management

Conflict to Coexistence (C2C) Strategy for
Samtse Gewog, Samtse (2025-2029)

DIVISIONAL FOREST OFFICE, SAMTSE
DEPARTMENT OF FORESTS AND PARK SERVICES
MINISTRY OF ENERGY AND NATURAL RESOURCES



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Abbreviations

C2C	Conflict to Coexistence
DoFPS	Department of Forests and Park Services
DFO	Divisional Forest Office
GAO	Gewog Administrative Officer
GIS	Geographic Information System
HEC	Human Elephant Conflict
HHs	Households
HWC	Human-wildlife Conflict
IKI	International Climate Initiative
M&E	Monitoring and Evaluation
NWFP	Non-wood Forest Products
%	Percentage
QRT	Quick Response Team
RGoB	Royal Government of Bhutan
WWF	World Wildlife Fund



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Royal Government of Bhutan
Ministry of Energy and Natural Resources
Department of Forests and Park Services
Thimphu: Bhutan



Foreword



Human-Wildlife Conflict (HWC) remains a major challenge for conservation and rural livelihoods in Bhutan, particularly in forest-dependent communities like Samtse Gewog. As pressures from climate change and development increase, promoting coexistence between people and wildlife has become more urgent than ever.

The Conflict to Coexistence (C2C) Strategy for Samtse Gewog (2025-2029) is a timely, community-driven response developed

through field assessments and consultations across all chiwogs. It focuses on reducing conflict with key species while strengthening livelihoods, protecting habitats, and enabling wildlife to thrive alongside communities through prevention, mitigation, and strong local participation.

With the support of the IKI-WWF Project, "Living Landscapes: Securing High Conservation Values in South-Western Bhutan," and close collaboration with local governments and partners, this Strategy provides a practical roadmap for sustainable coexistence. I extend my sincere appreciation to the communities of Samtse Gewog and the DFO Samtse team for their dedication and stewardship in driving this important initiative forward. The Department of Forests and Park Services remains fully committed to its implementation to safeguard both biodiversity and community well-being for generations to come.

(Karma Tenzin)
Director

Acknowledgement

The C2C strategy for Samtse Gewog is the result of a collective and dedicated effort by the staff of the Divisional Forest Office, Samtse. The Division sincerely acknowledges the commitment, professionalism, and teamwork demonstrated by all officers and staff who contributed their time, experience, and technical inputs toward the successful formulation of this strategy. Their sustained engagement throughout the process ensured that the document is comprehensive, practical, and grounded in field realities.

The formulation of this strategy was made possible through the unwavering support and guidance of the Department and WWF, Bhutan. The Division is deeply grateful for their strategic direction, technical advice, and continuous encouragement. The Division further expresses its sincere gratitude to the IKI Project, “Living Landscapes: Securing High Conservation Values in South-Western Bhutan,” for its generous financial support, which enabled the conduct of comprehensive socio-economic and field surveys. The data generated through these assessments formed a critical foundation for evidence-based planning and significantly informed the management interventions contained in this strategy. WWF–Bhutan, together with the Project Coordination Unit, played a pivotal role in facilitating the timely procurement of essential equipment and field gear, and in delivering capacity-building programs. These interventions greatly strengthened the technical capacity of the field teams involved in the assessment.

The Division would like to extend special appreciation to Mr. Sonam Tshering of DFO Samtse, who played a crucial leadership role in guiding and coordinating the formulation of this strategy. His dedication, technical oversight, and leadership were instrumental in bringing the C2C planning process to completion. Finally, the Division extends its heartfelt thanks to all individuals, institutions, and stakeholders who, in various capacities, contributed to the development of this strategy. Their collective efforts have resulted in a key milestone that will guide Human Wildlife Conflict management and their co-existence in Samtse Gewog in the years to come.

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1. Introduction

Bhutan is located at the ecotone of the northern Palearctic and southern Indo-Malayan biogeographic realm which makes it one of the most biologically diverse countries in the world (Myers et al. 2000,). As per the State of Forest Report 2023, the forest cover of Bhutan stands at 69.71%. These well-preserved forest ecosystem and vast altitudinal differences create diverse habitats which harbor a rich biodiversity of over 5,300 plant species under 220 families and 1,415 genera, almost 200 species of mammals, 800 to 900 species of butterfly and more than 120 freshwater fish species. The herpetological data recorded more than 160 species of amphibians and reptiles (NBC 2019,). The country is also enormously rich in bird diversity with over 760 bird species recorded (NEC 2014,). The rich diversity of flora and fauna is attributed by commitment in conservation, strong conservation policies and the leadership of our kings. The constitution of the kingdom of Bhutan mandates 60% of the country under forest cover for all the time to come.

Bhutan is an agrarian nation with more than 60% of the population depending on agriculture for income and livelihood. Agriculture serves as the back bone of the economy, however, much of the cultivated land are near the forests and conflict between the people and the wildlife is invariably present. In Bhutan, HWC is a major problem to the country's agricultural sustainability and food security. The most commonly experienced conflicts between humans and wildlife in Bhutan are crop depredation, livestock predation, attacks on humans, and wildlife straying too near human settlements.

Samtse Dzongkhag is geographically located at the south-west part of Bhutan and is one of the Dzongkhag with highest numbers of gewogs (15). The Dzongkhag has a total population of 62,590 and a population of 52,916 are living in rural area and a population of 9,174 resides in three urban areas of Gomtu, Tashicholing and Samtse town (PHCB, 2017). Almost all the gewogs under the Dzongkhag have reported numerous incidences of HWC. Samtse and Tashicholing gewog in the dzongkhag are two main hotspots of Human Elephant conflicts (HEC) which had resulted in huge economic loss and social pressures to the people of the two Gewogs. Other wildlife such as monkey, wild pigs, rodents and birds tends to cause nuisance to the farmers a much more prominent is the HECs.

Given the proximity of the settlement and farming practices in Bhutan HWC is an inevitable event. The rapid expansion of human population and the rate of fragmentation of wildlife habitat have furthermore escalated HWC. This complex issue requires interventions in multiple ways from cross sectors much more than a mere short-term solution. Conflict to Coexistence (C2C)-Approach is one such approach which offers a framework for an integrated, holistic and inclusive approach to manage HWC on a landscape level and includes a step-wise methodology and tools for implementation, monitoring, and adaptation.

2. Goal & Objective

Goal: “To ensure harmonious co-existence between wildlife and people through holistic approach”

Objectives

The objectives of this strategy are to;

1. Safeguard people and their livelihood/assets alongside wildlife presence.
2. Secure wildlife and its habitat to sustain healthy and resilient wildlife population.

3. Methodology

3.1 Site Description

Samtse gewog is located to the south-west of the Samtse Dzongkhag. It is bordered by Phuntshapelri gewog in the south, Dophuchen gewog in the northeast, Tading gewog in the east, Norbugang gewog in the west and Indian State of West Bengal in the southwest. It has an approximate area of 105.48 km². The gewog lies in sub-tropical monsoon climate zone with the large area of intact vegetation and experience hot and humid summer, cold and dry winter with annual rainfall ranges from 1,500 mm to 4,000 mm. The monthly temperature ranges from 15°C to 30°C in summer.

Samtse gewog has a total of 779 households with a population of 9,002 (4,475 Male, 4,527 Female) resulting in a population density of 77.92 people per square kilometer. A total of 3,606 individuals resides in the rural area while a total of 5,396 individuals resides in the urban area. The gewog raises livestock, including goats, cows, and poultry, and grows cash crops such as paddy, cardamom, orange, and areca nut.

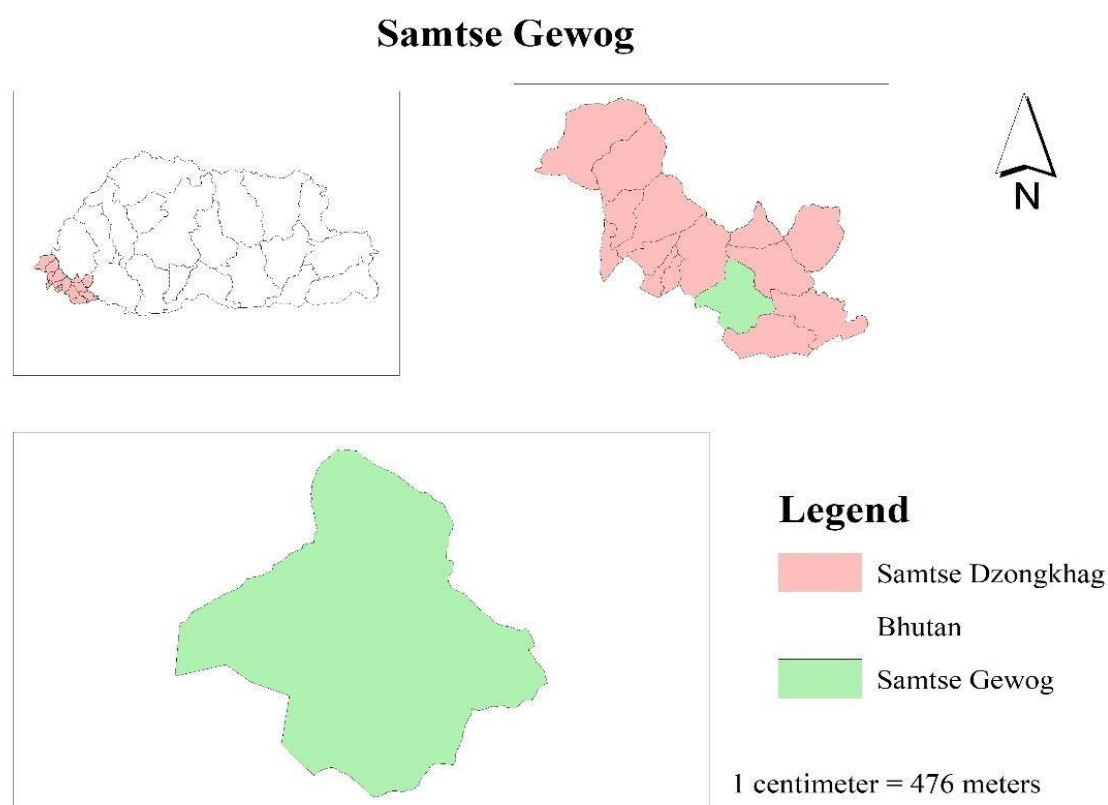


Figure 1: Study area

3.2 Methods: C2C Framework

A social survey was conducted in Samtse gewog to evaluate the current state of HWC. The survey covered five chiwogs, employing random sampling proportional to the number of households in each chiwog. Data collection used the SMART (Spatial Monitoring and Reporting Tool) app, which was preloaded with questionnaires designed for HWC assessment, structured around six key elements and four expected outcomes. Interviews were conducted at two levels: with community members residing in the gewog and with service providers or duty bearers operating in the area. The C2C manager within the jurisdiction was also surveyed. Additionally, Focus Group Discussions were organized in each chiwog to gather deeper insights into HWC-related issues.

The C2C approach focuses on improving the management of HWC by involving all key stakeholders and coordinating management strategies through detailed planning, execution, and monitoring. This approach establishes a structured framework for effective management, delivering both immediate and long-term solutions that can be tailored to the unique scale and context of a specific area.

This approach highlights the importance of fully recognizing the complexity of human-wildlife conflict (HWC), which demands expertise from various

disciplines. Creating suitable structures, developing essential capacities, and establishing effective processes requiring substantial time and effort. Such investments are crucial for ensuring the active participation and commitment of all stakeholders, which is key to achieving sustainable, long-term solutions.

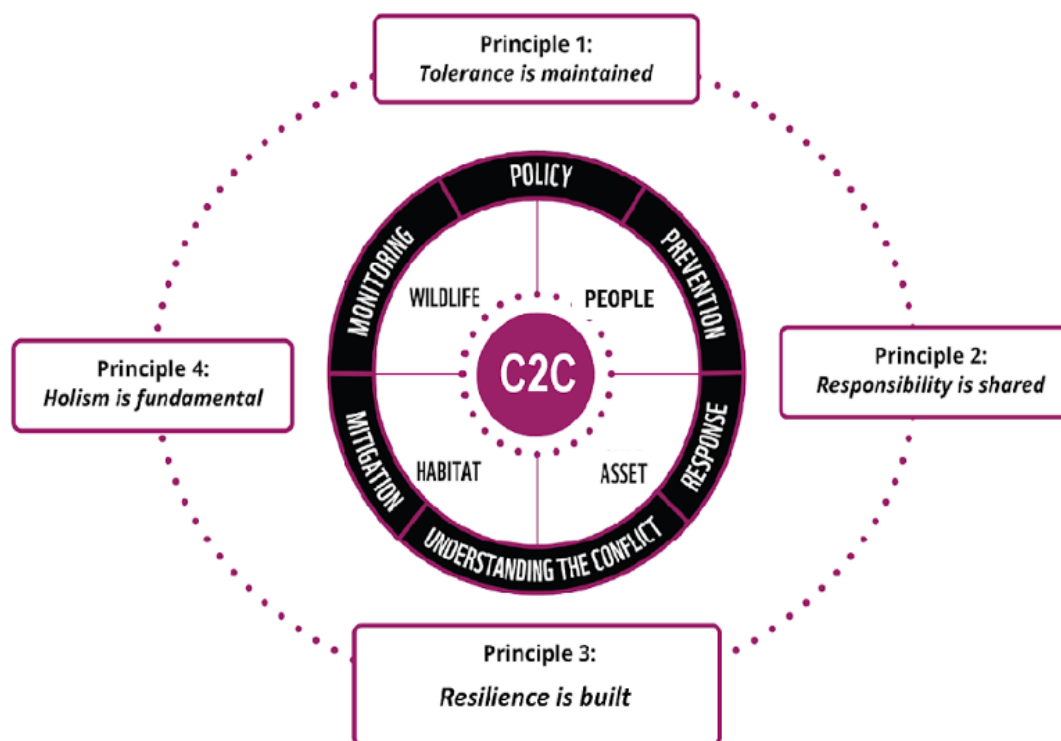


Figure 2: Framework of C2C Approach

The C2C approach is on the basis of four principles namely; tolerance, shared responsibility, building resilience and maintaining holism. The approach ultimately aims to achieve four outcomes in the context of managing human-wildlife conflict. The four outcomes are; people, wildlife, asset and habitat represented in the inner circle of Figure (2). These four outcomes must be achieved and realized by executing actions within the framework of six HWC management elements as depicted in the middle circle of Figure (2), with actions tailored to the specific context. These six elements of HWC management are interdependent and must be addressed holistically and not in isolation to achieve the four outcomes.

The C2C approach acknowledges the necessity of implementing both short-term and long-term measures to address HWC effectively. It highlights the significance of fostering and maintaining trust among stakeholders throughout the process, with a strong emphasis on tackling the root causes of the issues to ensure impactful and sustainable outcomes. This approach follows a seven-step process, as illustrated in Figure 3.

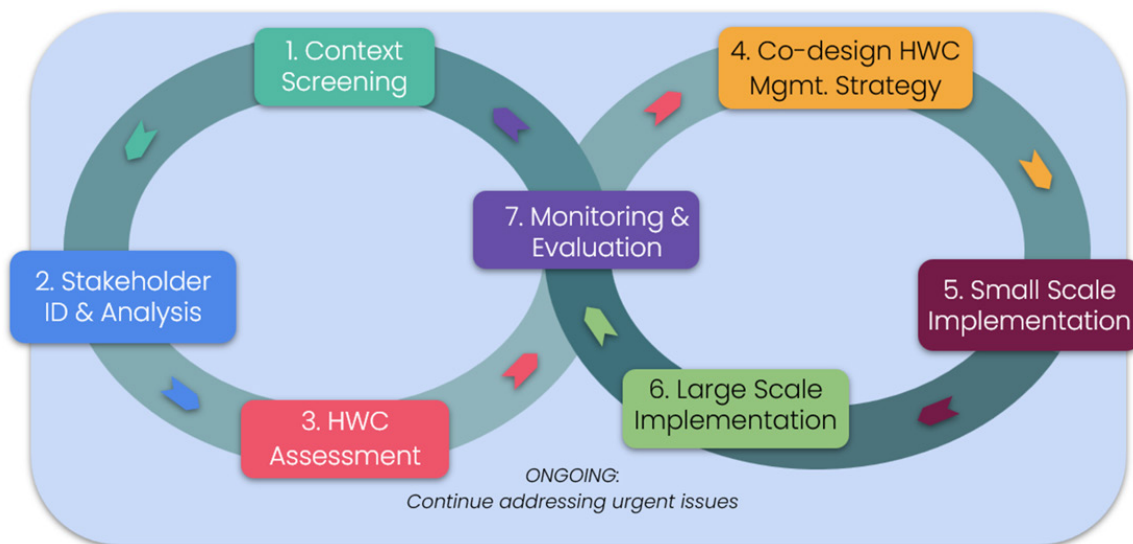


Figure 3: The C2C methodology for HWC management

3.2.1 Context Screening

The process of context screening was conducted to identify and understand the landscape and situation related to HWC, following the format specified in C2C tool 4. Before this step began, background information was gathered from various sources, including documents and literature about the gewog. Data was obtained from relevant field offices and online sources. The focus of this step was to assess the current state of the conflict and examine the roles played by different stakeholders in addressing the issue.

In this initial step, a desktop study was conducted, focusing on six key themes. The first theme involved describing the site by collecting information on demographics, geography, threats, and stakeholders. The second theme gathered data on human-wildlife conflict trends, including the species involved, the types of conflict, and their frequency. The third theme focused on understanding the causes and drivers of HWC, which were broadly categorized into anthropogenic and natural factors. The fourth theme aimed to assess the social situation of the locality and its composition. The fifth theme examined the wildlife species present, their movement, and behavior. Lastly, the sixth theme involved reviewing the laws and policies related to the management of wildlife.

Significant information was collected from the office of Samtse gewog regarding facilities, support structures, and the issues and challenges faced throughout the year. This step aimed to assess the intensity and frequency of the conflict, as well as to understand the causes and drivers of HWC, which can be broadly categorized into anthropogenic and natural factors.

3.2.2 Stakeholder Identification and Analysis

Addressing HWC requires a comprehensive approach that involves the participation of multiple stakeholders. The process began with identifying all relevant stakeholders and analyzing their roles in HWC management. The roles of duty bearers were evaluated using a 1 to 5 scale, assessing three aspects: Interest, Influence, and Availability. The importance of each stakeholder was determined based on the scores, and stakeholders were prioritized accordingly. Additionally, a WhatsApp group was created to facilitate discussions and engage relevant stakeholders in understanding the scope and roles of each participant. These stakeholders included individuals from government offices, corporations, security personnel, shop owners, and private individuals, using the C2C format tool 5.

Table 1: Stakeholder Analysis Matrix

Stakeholders	INTEREST in HWC and its management in this landscape (1 - 5)	INFLUENCE on long-term success of a HWC management strategy (1 - 5)	AVAILABILITY to participate in the co-design of a HWC management strategy (1 - 5)	Category
Samtse Gup	5	5	5	High interest, influence & availability
QRT	5	5	5	
Divisional Forest Office, Samtse	5	5	5	
Forest Range Office, Samtse	5	5	5	
Nyimaling_Chhirlogsa_Tshogpa	5	5	5	
Satshamchhu_Tshongdzom_Tshogpa	5	5	5	
Dewathang_Lingmaithang Tshogpa	5	5	5	
Lamaithang_Taserpo Tshogpa	5	5	5	
Damtshangma_Khandothang Tshogpa	5	5	5	
Gewog Agriculture Extension	5	5	5	
GAO, Samtse	5	5	4	High interest & availability but slightly low influence
Janam Janam CF	5	4	5	
Chhirlogsa CF	5	4	5	
Lhakhangpong CF	5	4	5	
Tamangdara CF	5	4	5	
Rongqueng CF	5	4	5	
Bukay A CF	5	4	5	
Sisney CF	5	4	5	High influence but comparatively low interest and availability
Dratshang	3	5	3	
Dzongkhag Administration	4	5	3	
Mandir	3	5	3	
RBA	4	5	4	
Desuung	3	4	4	Mid-level interest, influence and availability
Gewog Livestock Extension Officer	4	4	4	
Schools	3	4	3	
RBP	4	4	4	
Dredgers & Crushers	3	3	5	Low interest, influence and availability
Hospital	2	2	2	
NFE	1	1	1	
ECCD	1	1	1	

The stakeholder analysis reveals varying ranges of interest, influence, and availability in contributing to HWC management in Samtse Gewog. As shown in Table 1, key office bearers such as the Gup, Quick Response Team, Divisional Forest Office, Samtse Range Office, Chiwog Tshogpas, Gewog Agriculture Extension and the GAO exhibit very high levels of interest, influence, and availability. Similarly, offices such as Dzongkhag Administration, Mandir, RBA, Desuung and Dratshang, demonstrate high influence but slightly low interest and availability. Additionally, seven Communities Forests indicate high interest and availability but slightly low influence. On the other hand, stakeholders such as Dredgers & Crushers, Hospitals, NFE and ECCD exhibited low interest, influence and availability.

3.2.3 HWC Assessment

In order to understand the situation of HWC under Samtse gewog, a survey was conducted with the community members and the stakeholders. Through the survey the current scenario on the six elements such as the prevention, response, mitigation, interaction, policy and governance, and monitoring was assessed. In this step the capacities of communities and various stakeholders were assessed to understand the interactions and their causes.

The survey was conducted from 3rd to 14th June 2024. The sample size for this survey was determined using Yamane's formula at 95% Confidence interval:

$$n = \frac{N}{1 + Ne^2},$$

n represents the sample size, N the total population, and e is the desired margin of error (0.05).

Based on this formula, n = 271 households were selected for the interview out of total N= 846 households within the gewog. Subsequently the sample size at the chiwog level was calculated based on the total households in the chiwog out of the total population in the gewog multiplied by the total samples. In addition, for the service providers/ duty bearers a total of 29 respondents were listed that are based within the gewog jurisdiction.

Table 2: Household survey from each chiwog under Samtse

Sl no.	Name of Chiwog	No. of Households Enumerated
1	Damtshangma	89
2	Dewachen	26
3	Lamaithang	38
4	Nyimaling	37
5	Satshamchu	81
	Total Hhs	271

The survey questions were designed to assess the strengths and weaknesses of the six elements in implementing HWC interventions. The assessment aimed to evaluate the effectiveness of current interventions across the six elements and four outcomes. It also focused on identifying gaps in the existing framework and understanding stakeholder perspectives on HWC, including their utilization of available programs and policies. Furthermore, the assessment sought to uncover challenges and inconsistencies faced by implementers in managing HWC.

3.2.4 Co-design

Developing a holistic and practical strategy requires a collaborative effort from both stakeholders and community members. As part of the strategy co-design process, participants were educated on the general causes of HWC, including the current global and national contexts, with a focus on Bhutan. A total of 287 community members were involved for the codesigning process comprising of 165 male and 122 female participants across the five chiwogs. They were also introduced to the concepts and steps of the C2C approach. During this process, special emphasis was placed on the four guiding principles: maintaining tolerance, sharing responsibility, building resilience, and adopting a holistic perspective.

Additionally, participants were introduced to the six key elements essential for achieving the four outcome areas (People, Livelihood & Assets, Wildlife, and Habitat). These elements include policy and governance, prevention, understanding interactions, response, mitigation, and monitoring.

The outcome of this step was the development of a comprehensive action plan and proposals specifically aimed at addressing human-elephant conflicts. This was achieved through group work, which focused on detailing the nature of interventions, including site specifications, timelines, and levels of urgency. Additionally, estimated budgets for implementation were prepared and proposed, with clear identification of the lead agency and collaborating partners.

4. Result and Discussion

4.1. Demographic Information of Survey Respondents

Understanding the demographic profile of the community was essential for capturing perspectives across diverse social groups and ensuring an inclusive and accurate representation of their experiences and needs. Efforts were made to achieve gender-balanced participation in the survey. However, the final report consisted of 62.77 % male respondents (n = 177) and 37.23 % female respondents (n = 105), indicating a higher representation of males.

With respect to age distribution, the majority of respondents 53.19 %, (n = 150) were between 41 to 60 years of age, followed by those in the 19–40 age group 36.17 %, (n = 102). Respondents aged over 60 years accounted for 10.28 % (n = 54), while a small proportion 0.35 %, (n = 1) fell within the 15 to 18 age group.

In terms of education background, a substantial proportion of respondents 44.57%, (n = 123) had no formal education, while 34.06% (n = 94) had completed primary education. Additionally, 15.58% (n = 43) had secondary-level education, and 3.26% (n = 9) had attended Non-Formal Education (NFE) programs. Only 1.45% (n = 4) had attained tertiary education, while 1.09% (n = 3) fell under other educational categories.

Overall, the demographic profile indicates that the community is predominantly composed of subsistence farmers dependent on agriculture and livestock farming as their primary sources of livelihood and income. Understanding these demographic and socio-economic characteristics is critical for designing effective and targeted interventions for the management of HWC in the gewog.

4.2 Overall results of Samtse Gewog

This is the result of the assessment carried in June 2024. The assessment team had enumerated 271 community members and 29 stakeholders. According to the survey the gewog faces human wildlife conflict mainly with the species such as Macaques, Wild Pig, Barking deer, Birds, Elephants, and Porcupine.

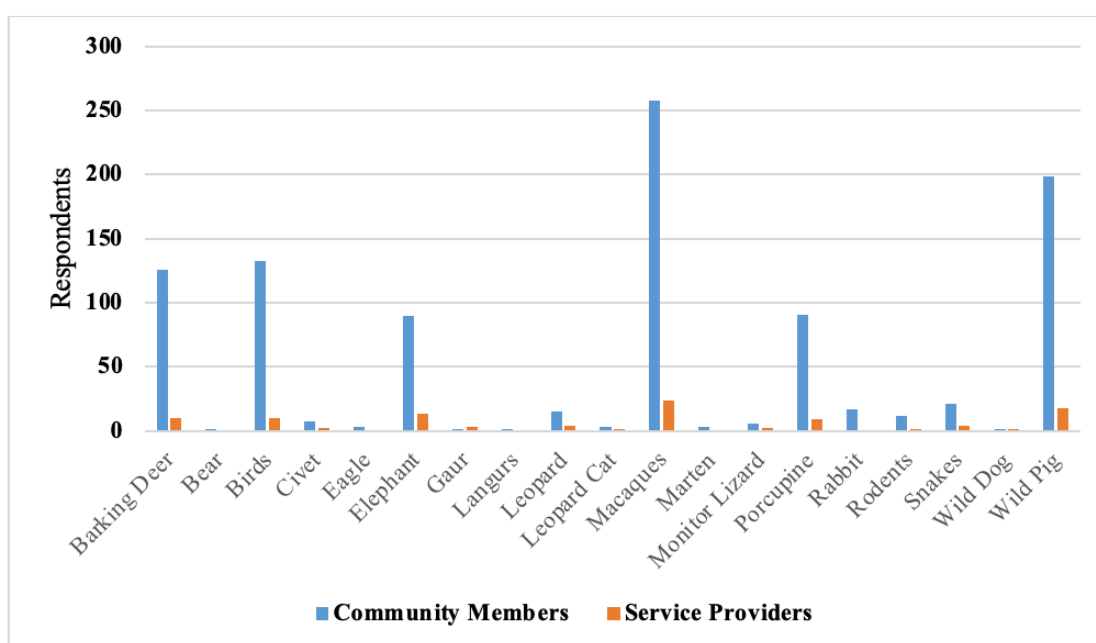


Figure 4: Overall Conflict Species of Samtse gewog

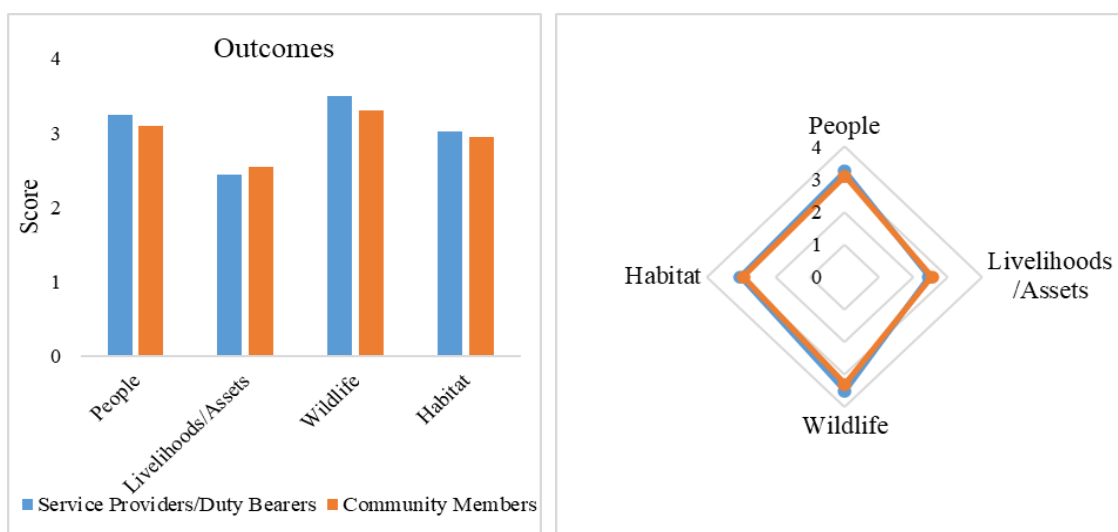


Figure 5: Overall Outcome of Samtse gewog

The current state of HWC management in Samtse gewog revealed ratings below 4 across all four outcomes: People, Livelihood/Assets, Wildlife, and Habitat. The lowest score was recorded for Livelihood and Assets, likely due to significant destruction of crops and properties throughout the Gewog caused by conflict species such as macaques, wild pigs, birds, porcupine and elephants.

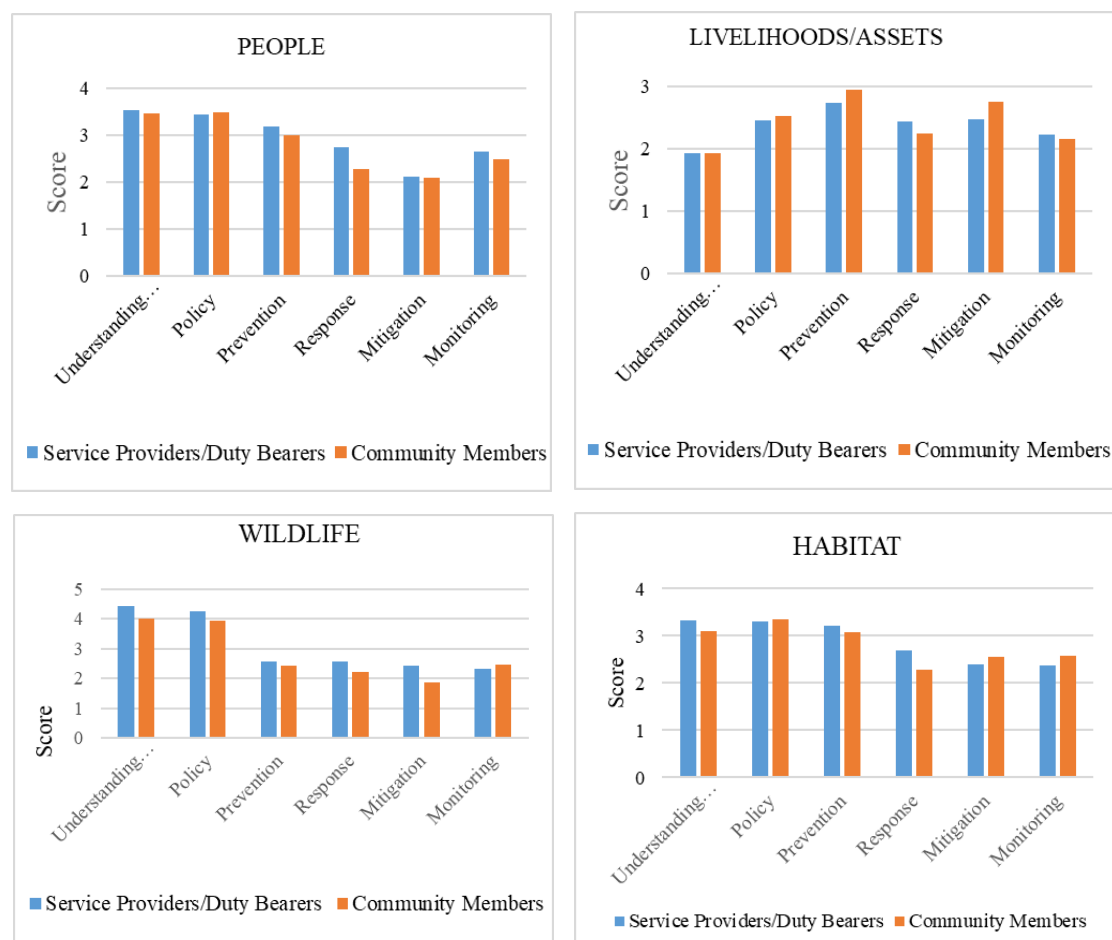


Figure 6: Results of four Outcome against six Elements in Samtse gewog

The four outcome parameters were further related and compared with the six elements namely; prevention, response, policy, mitigation, monitoring, and understanding the interaction. Referring the people outcome graph, it indicated better score for understanding the interaction, policy and prevention and the least for mitigation. The livelihood graph showed prevention, mitigation and policy with comparative better score and the lowest in understanding the interaction. For effectively addressing the issue greater emphasis needs to be provided towards understanding the interaction and mitigation measures.

4.2.1 Damtshangma Chiwog

The chiwog, located near Samtse town, comprises a total of 304 households. The gewog Administrative Office and the Dhamdum Industrial Estate are both situated within the chiwog. Farmers in the area primarily cultivate maize, paddy, and areca nut.

According to the assessment, the most problematic wildlife species in the chiwog include elephants, macaques, wild pigs, barking deer, birds, porcupines, and leopards. Among these, elephants pose the greatest challenge, causing significant damage to crops like areca nut and paddy. Herds of 5 to 9 elephants frequently cross into the area from the floodplains of Dhamdum, located across the border, and seek shelter in the forest near the landfill.

To mitigate these issues, intervention measures such as electric fences, concrete barriers, and Quick Response Teams (QRT) have been implemented, particularly to address HEC. Additionally, conflicts with macaques and wild pigs remain a considerable concern. During the harvest season, Indian Peafowls are also a major threat, as they destroy paddy crops.

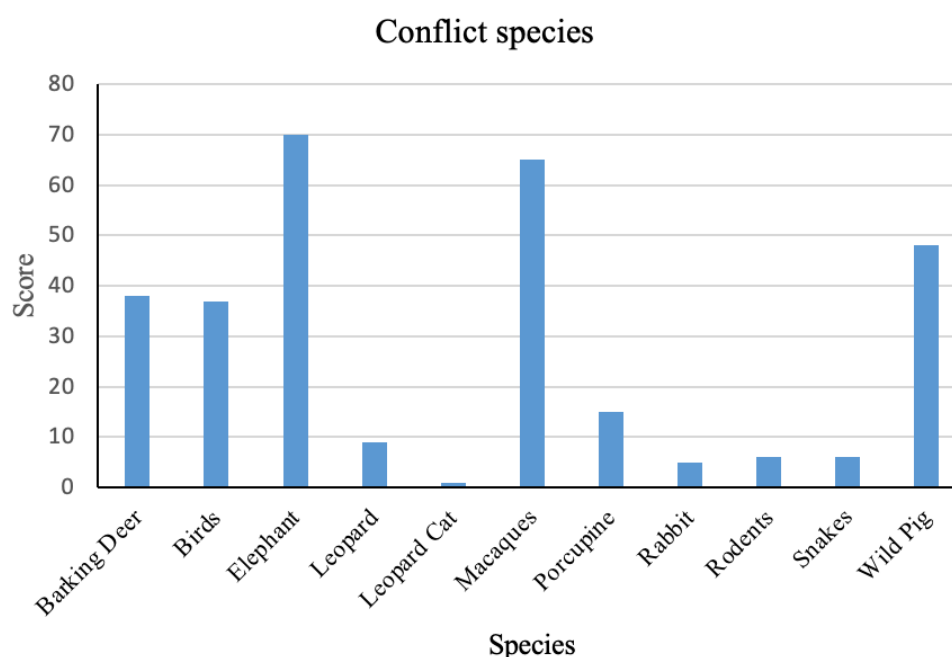


Figure 7: Conflict Species of Damtshangma chiwog

The current status of HWC management in Damtshangma chiwog shows a comparatively lower score for Livelihood/Assets compared to People, Wildlife, and Habitat. This may be attributed to the community's highly negative perception of wildlife, such as elephants and leopards, due to the significant destruction of crops, livestock and property in their villages.



Figure 8: Outcome of Dhamtshangma chiwog

The four desirable outcomes were further related and compared with the six elements namely; prevention, response, policy, mitigation, monitoring, and understanding the interaction. The outcome graph on people showed that more focus needs to be given to mitigation compared to rest of the elements. For the outcome livelihood lowest score was observed for understanding the interaction whereas it scored slightly better for response and prevention.

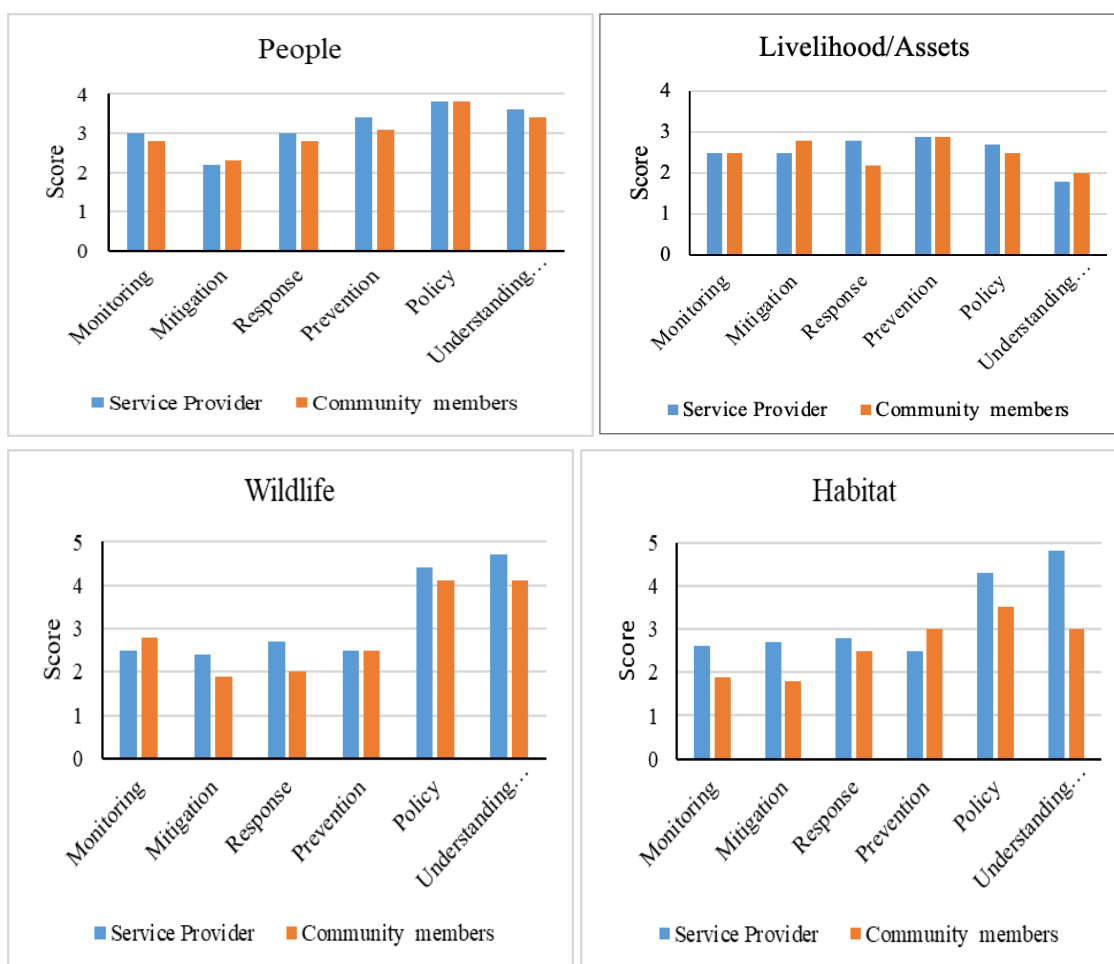


Figure 9: Six Elements of Damtshangma chiwog

The wildlife outcome graph indicates higher score for understanding the interaction and policy with lower score for mitigation and response for Damtshangma chiwog. For the outcome habitat highest score was observed for understanding the interaction and policy whereas low score for monitoring and mitigation.

4.2.2 Dewathang Chiwog

Dewathang chiwog has total population of 81 households. As per the records the most conflicting species under the Chiwog comprises of macaques, wild pigs, birds, barking deer and porcupine.

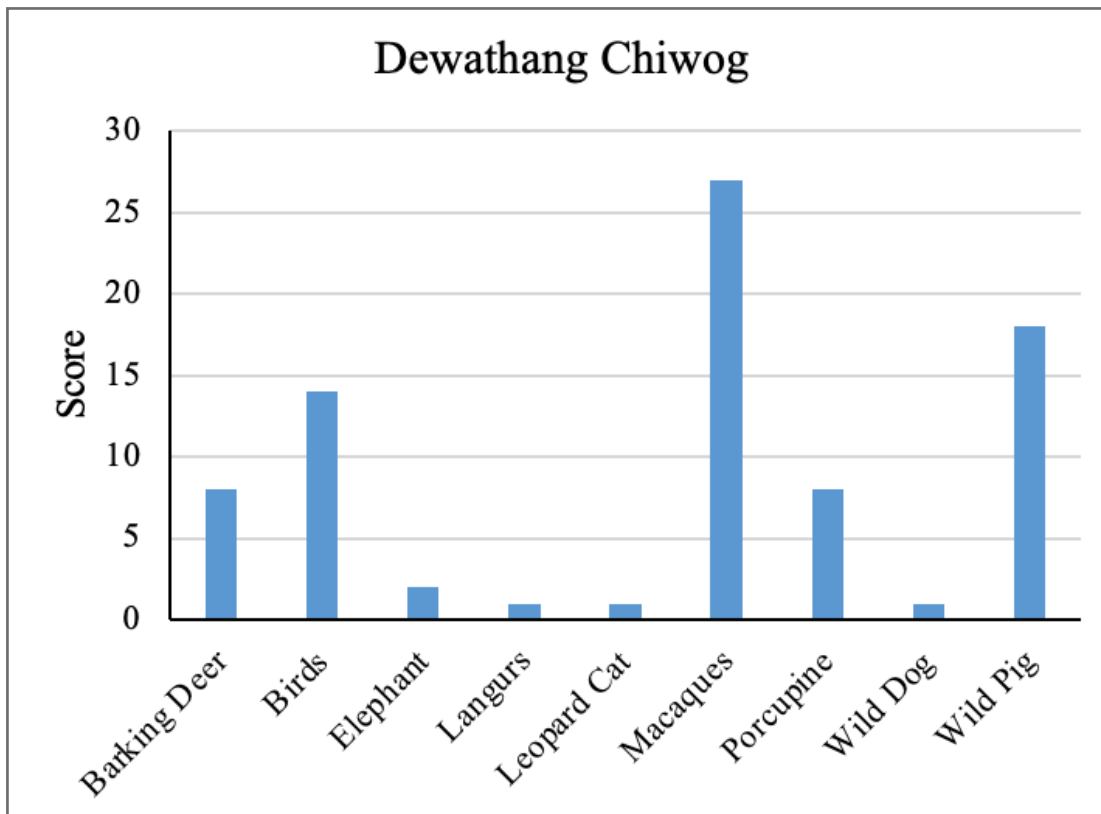


Figure 10: Conflict Species of Dewathang chiwog

The current outcome scenario of Dewathang chiwog depicts similarity to the overall result with lowest score for livelihood/assets in comparison people, wildlife and habitats. The highest score is observed in wildlife with people and habitat having slight lower score. The low score for the Chiwog could be attributed to perceived high destruction of crops including livestock by conflicting species

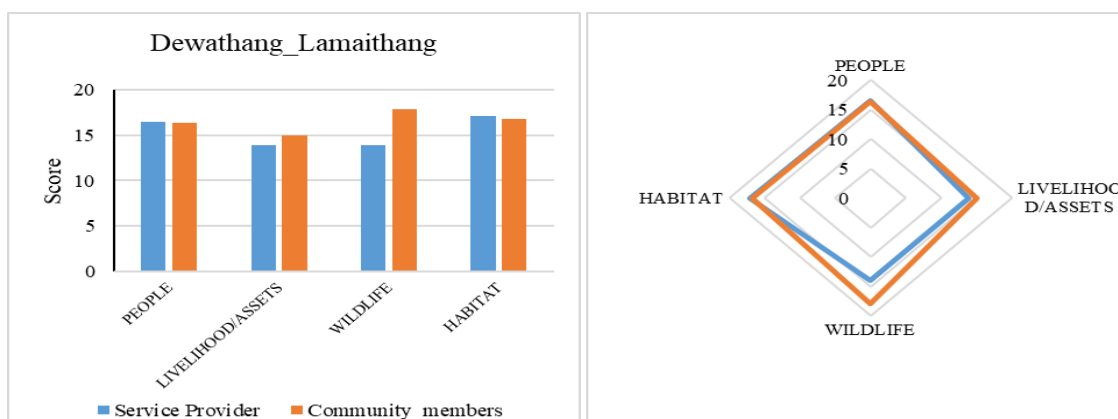


Figure 11: Outcome of Dewathang chiwog

The four desirable outcome parameters were further analyzed with the six elements namely and it was observed that lowest score to People as an outcome is for mitigation and highest for understanding the interaction. However, the outcome livelihood/assets showed that lack of understanding of the interaction with lowest score with better scores for policies, prevention and mitigation.

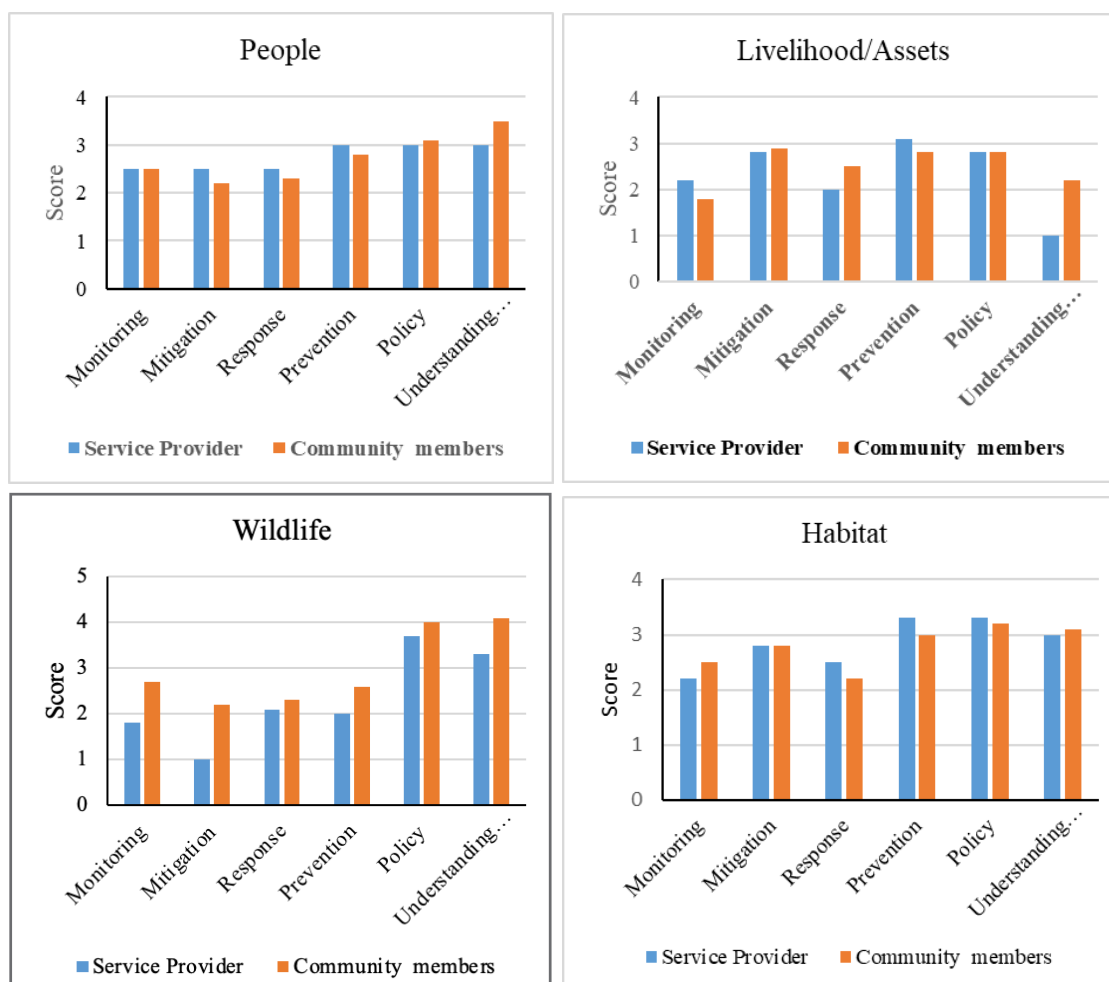


Figure 12: Six Elements of Dewathang chiwog

The outcome wildlife for Dewathang chiwog indicated comparatively better scores for policy and understanding the interactions but low score for mitigation and monitoring. For the outcome Habitat, 3 elements (prevention, policy and understanding the interaction) showed higher score compared to low score for response.

4.2.3 Lingmaithang Chiwog

Lingmaithang chiwog has total of 102 households and the chiwog is well connected with road and other basic amenities. The result from C2C survey indicates that HWC is usually experienced mainly with macaques, wild pigs, porcupine, birds and barking deer. The other conflict species include snakes, civet, elephants and monitor lizard.

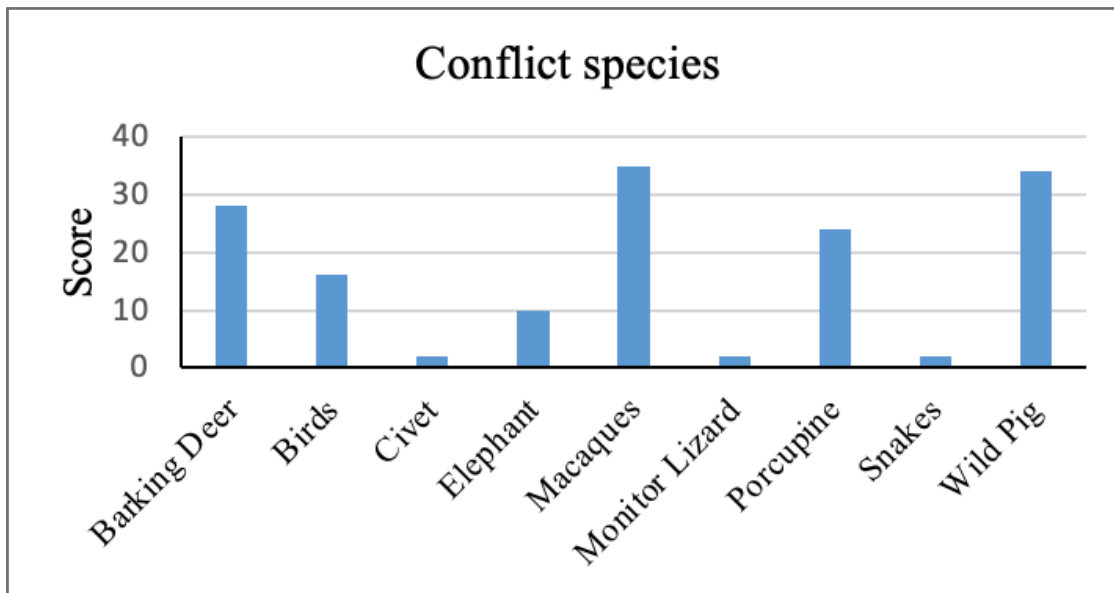


Figure 13: Conflict Species of Lingmaithang chiwog

Similar to rest of the chiwogs the Outcome scenario of Lingmaithang chiwog indicates lowest score for livelihood/assets in comparison to people, wildlife and habitats. The highest score is observed in people and wildlife. The low score for the Chiwog in terms of livelihood/assets could be due to damages of crops by wildlife such as wild pigs, porcupine, macaque, barking deer and birds.

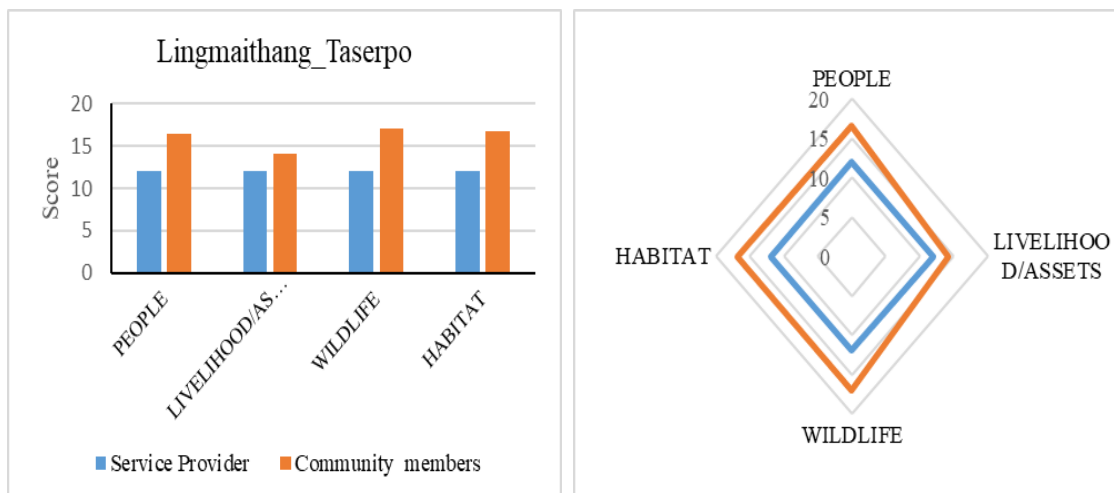


Figure 14: Outcome of Lingmaithang chiwog

The outcome parameters were further related and compared with the six elements namely; prevention, response, policy, mitigation, monitoring, and understanding the interaction. The outcome graph on people showed that more focus needs to be given to mitigation and response whereas for the outcome livelihood least score was observed for understanding the interaction and in the monitoring.

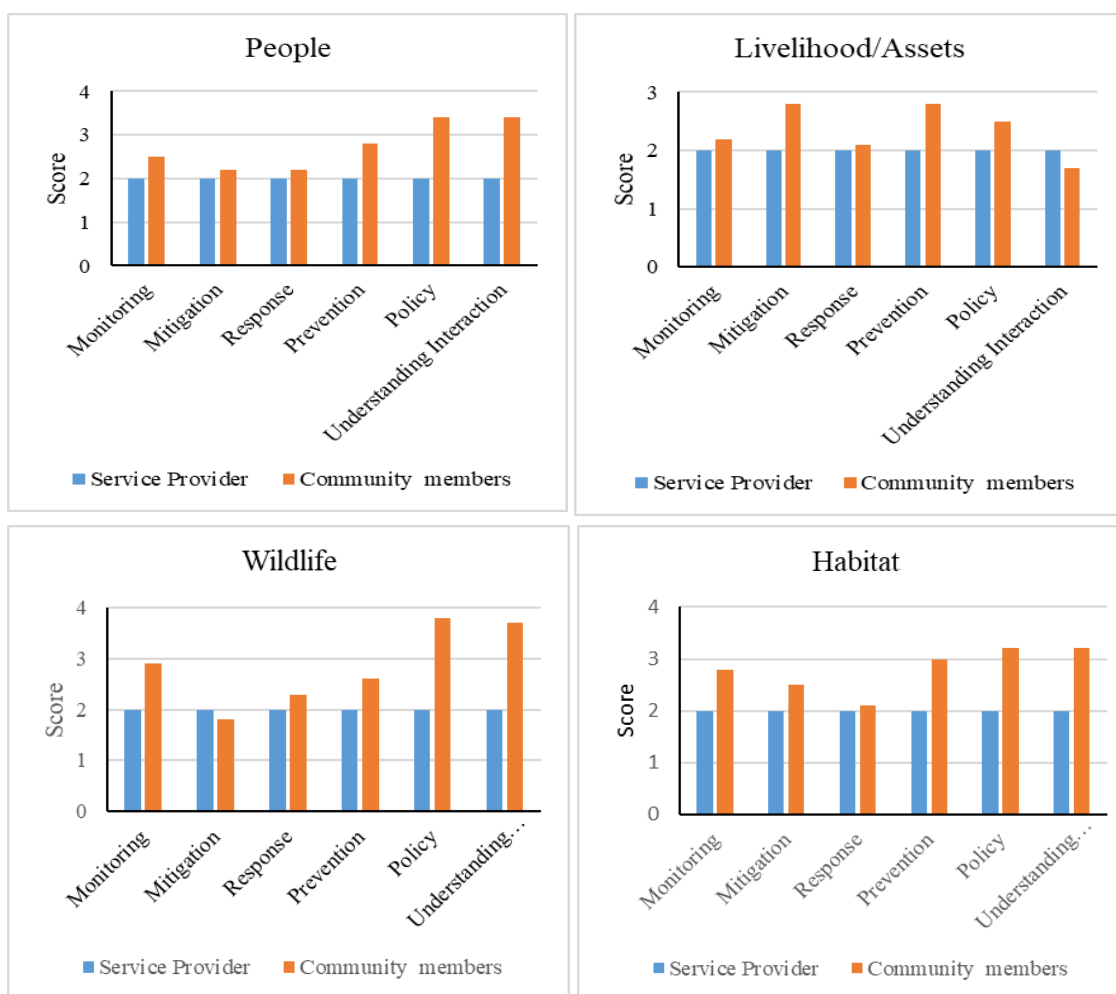


Figure 15: Six Elements of Lingmaithang chiwog

The outcome 'wildlife' indicated scores comparatively better for policy and understanding the interactions whereas low score for mitigation, response and prevention. For the outcome 'Habitats' highest scores were observed for policy and understanding the interactions with rest of the elements scores below 3 for monitoring, mitigation, response and prevention.

4.2.4 Nyimaling Chiwog

The total population of Nyimaling chiwog is 108 households. As per the report of the assessment species such as macaques, wild Pig, porcupine and barking deer are the main conflicting species. The other conflict species include elephants, birds, rabbit, snakes and rodents.

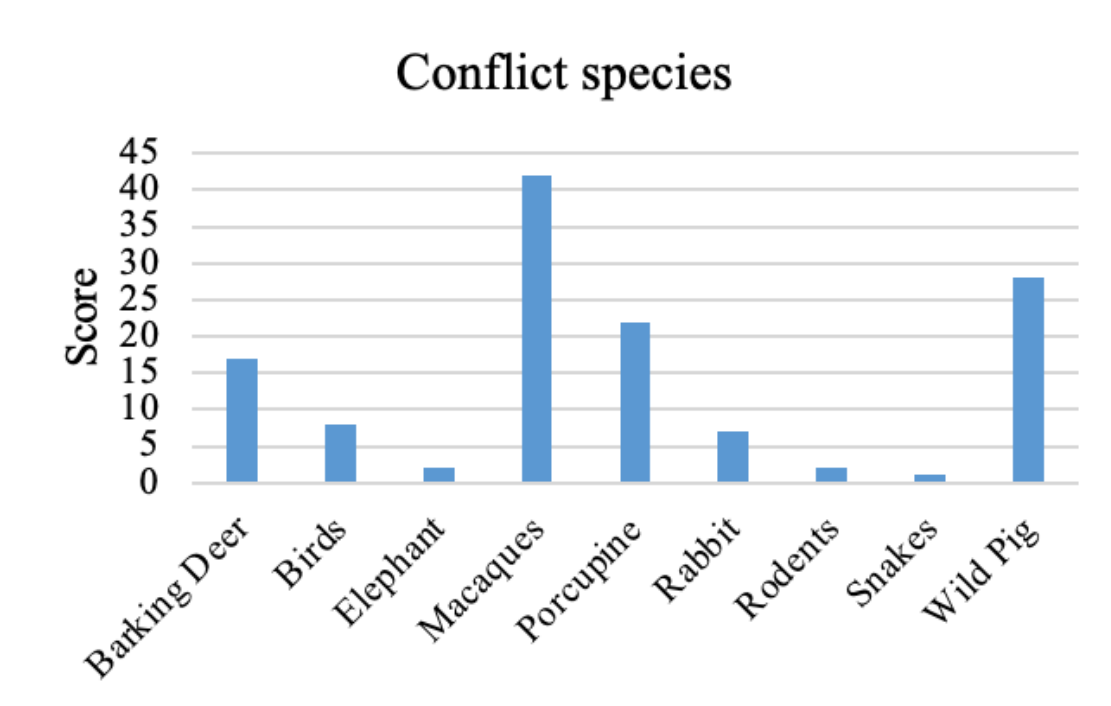


Figure 16: Conflict Species of Nyimaling chiwog

The outcome scenario of Nyimaling chiwog indicates lowest score for livelihood/assets in comparison to people, wildlife and habitats. The score for wildlife and habitats is observed similar for both community members and stakeholders. The low score for the outcome 'livelihood' is attributed to the HWC with macaques, wild pigs, porcupine, barking deer, rabbits and elephants. The other species include rodents and snakes.

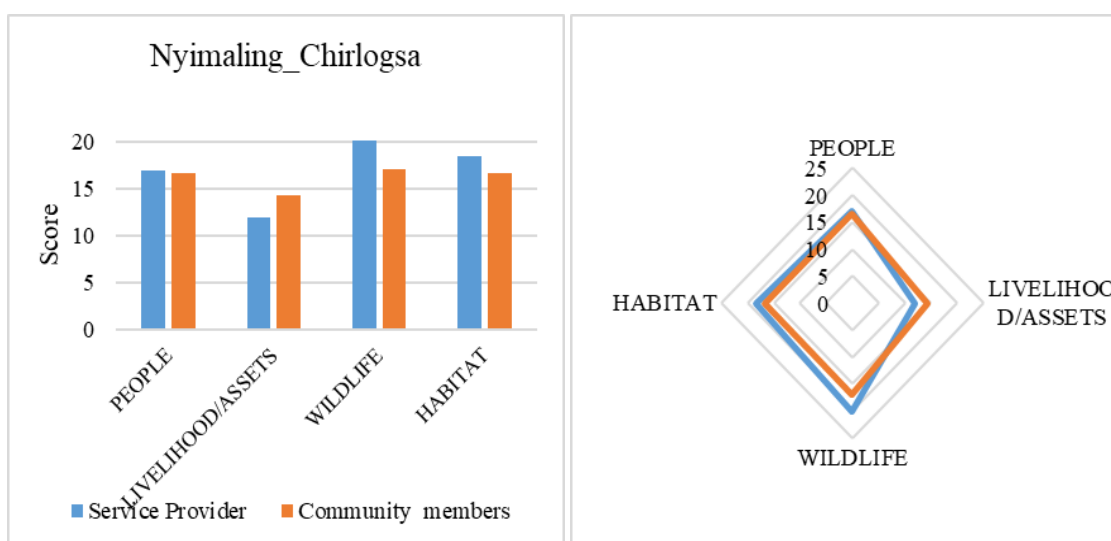


Figure 17: Outcome of Nyimaling chiwog

On comparing the four outcome parameters with six elements it was observed that for outcome 'people' scores were high for policy and understanding the interaction and least for monitoring and mitigation.

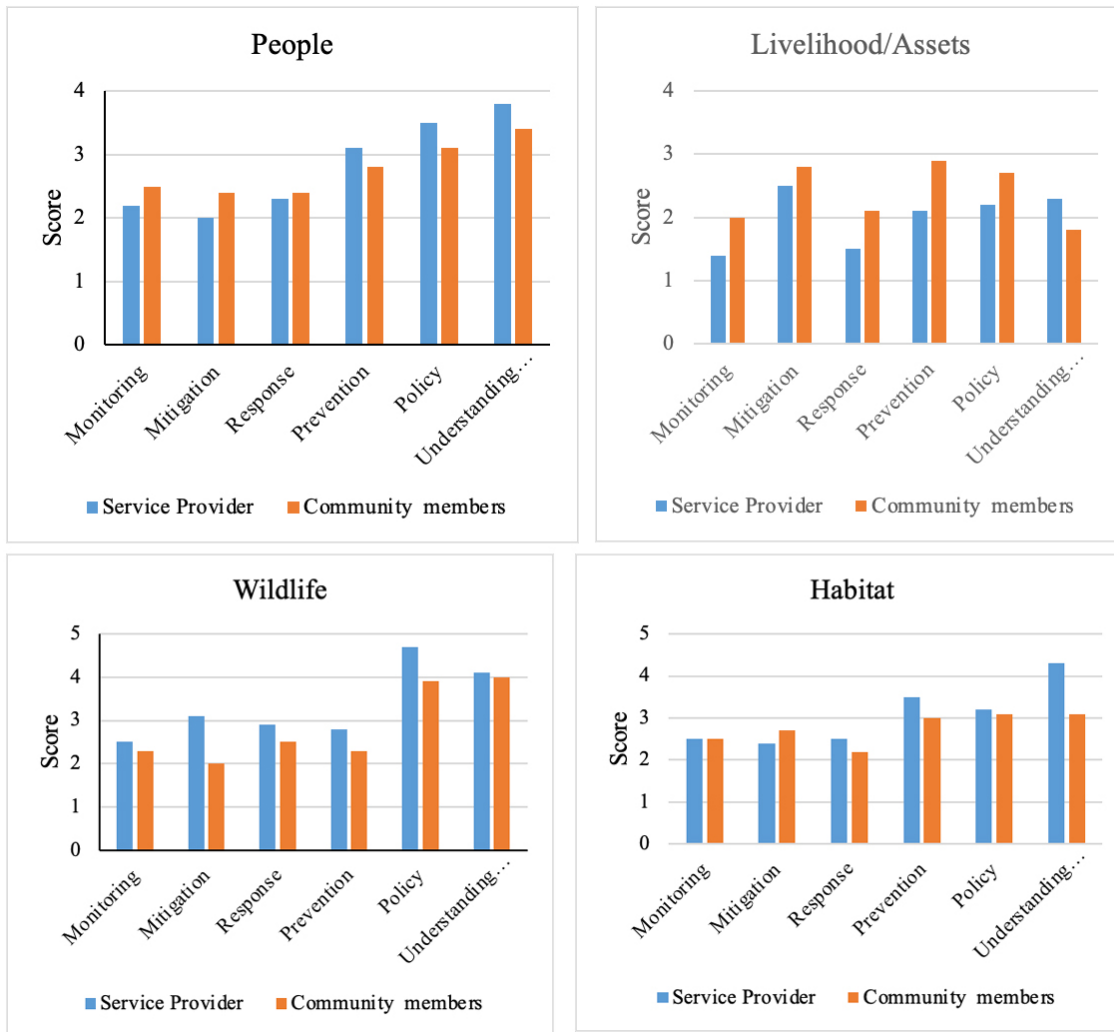


Figure 18: Six Elements of Nyimaling chiwog

The outcome 'livelihood' indicated comparatively high scores for mitigation, prevention and policy but lower for response. For the outcome 'wildlife' the scores are highest for policy and understanding the interaction whereas lowest was observed for monitoring and mitigation. Similarly, for the outcome 'habitat' highest score was observed for understanding the interaction and lowest for response.

4.2.5 Samtsham Chiwog

The chiwog has population of 251 households. As per the assessment report species such as macaques, marten, monitor lizard, porcupine, rabbit, rodents, snakes, wild pigs, birds, and bear all conflict species within the Gewog.

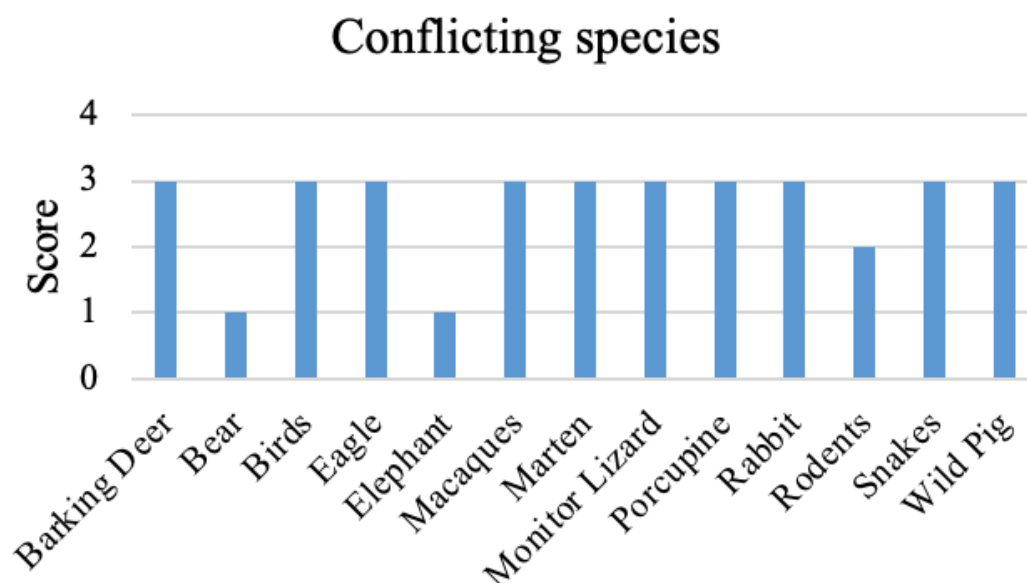


Figure 19: Conflict Species of Sathamchu chiwog

The outcome scenario of Samtshamchu Chiwog indicates comparatively lowest score for livelihood/assets in comparison to people, wildlife and habitats. The highest score is observed for wildlife with intermediary scores for people and habitat. The low score for livelihood/asset is most likely from the damages by wildlife such as macaques, wild pigs, barking deer, rabbit etc.

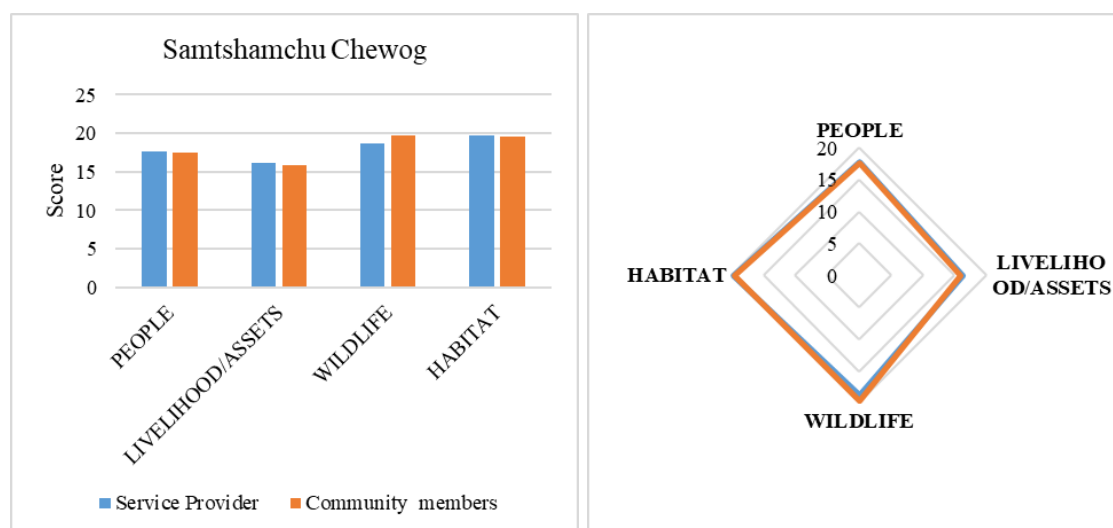


Figure 20: Outcome of Satshamchu chiwog

On comparing the four outcome parameters with six elements namely; prevention, response, policy, mitigation, monitoring, and understanding the interaction it was observed that the score for the outcome people is lowest for mitigation needing emphasis while the other five were comparatively better. For the outcome livelihood the highest score is observed for mitigation and the indicated relatively slight low score for others with lowest for response.



Figure 21: Six Elements of Samtshamchu chiwog

While comparing the outcome 'wildlife' with the six elements it was observed that the scores are slightly better for monitoring and response while understanding interaction has scored the least. Similarly, for the outcome 'habitat' it is observed that the scores are slightly better for monitoring, response, and prevention but lowest for policy and understanding the interaction.

5. Conflict to Coexistence Strategy

Human-wildlife conflict is a common issue across the chiwogs, but conflicts with elephants are notably more severe, especially in Damtshangma chiwog. The Chiwog faces significant challenges due to its proximity to elephant movement corridor across the border. Elephants are often attracted to the Majathang landfill area, which is surrounded by forest cover, exacerbating the conflict. In the past, the Gewog Administration and DFO, Samtse, through fund support of RGoB and various projects, have implemented several measures for mitigation. Physical barriers such as electric fences and concrete walls have been installed, and QRT established. In 2022, with fund support of BTFEC project radio-collaring and tracking of one elephant was done to study their movement patterns. Currently, local communities are being supported through awareness programs, training, distribution of safety gear to QRTs, and guidance for safe interventions during confrontations. Despite these efforts, further effective and sustainable solutions are required. Similarly, actions are also needed to address conflicts with other species, including wild pigs, macaques, porcupines, and birds like Indian peafowls. Therefore, discussion covered these aspects during the co-designing exercise across all the five Chiwogs. With the actions illustrated in Table 3 the Gewog aims to address existing HWC issues and achieve the results in four key outcomes, aiming to establish sustainable practices and foster harmonious co-existence between humans and wildlife.

First, to ensure the safety of people, four activities are proposed. These include the strengthening of QRT and supply of field gears, installation of street lights and creating awareness on wildlife feeding/ animal behavior and safety measures and plan for relocation of landfill site at Majathang.

Second, to safeguard and enhance local livelihoods, four activities have been proposed. These include construction of watch towers, installation of chain link fencing with electric fencing, maintenance of concrete wall and improvement of farming practices.

Third, under the wildlife conservation outcome, activities include the management of natural mineral licks, creation of artificial salt licks, and creation of water holes.

Finally, for habitat management, two activities are proposed: maintenance and improvement of grasslands and plantation of fodder trees and palatable species in the habitats.

In total, the implementation of all twelve activities is estimated to require a budget of Nu. 24.05 million as elaborated in table 3.

Table 3 Implementation Plan and Financial Outlay

Outcome	Activities	Location	Category	Responsibility		Budget (M)	Source of fund	Timeline
				Lead	Collaborator			
People	1.1 Creation, strengthening of QRT and supply of field gears to the members	Samtse Gewog	LT	DFO-Samtse	Gewog administration	1	NA	2025
	1.2 Installation of street lights	Majathang to Khanduthang	LT	DFO-Samtse	Gewog administration	3	NA	2025
	1.3 Create awareness on wildlife feeding/animal behaviors and safety measures	Samtse Gewog	ST	DFO-Samtse	Gewog administration	0.25	NA	2026
	1.4 Relocation of landfill site or Proper management of the waste	Samtse Gewog	LT	Dzongkhag Administration	Gewog administration, DFO Samtse	1	NA	2026
Livelihoods/ Assets	2. 1 Construction of watch towers	Samtse Gewog	LT	DFO-Samtse	Gewog administration	3	NA	2026
	2.2 Construction of chain link along with electric fencing	Jangchubling	ST	RNR	Gewog administration	3.5	Gol	2025
	2.3 Maintenance of concrete walls	Lafeti	ST	DFO-Samtse	RNR, Gewog administration	1	NA	2028
	2.4 Improved farming practices (seeds, green houses, cold storage, market sheds along the highway)	Samtse Gewog	ST	RNR	DFO-Samtse, Gewog administration, Tarayana	10	NA	2026- 2029
Wild life	3.1 Management of natural mineral licks and creation of artificial salt licks	Samtse Gewog	ST	DFO-Samtse	Gewog administration	0.3	NA	2026
	3.2 Creation of water holes	Samtse Gewog	ST	DFO-Samtse	Gewog administration	0.2	NA	2026
Habitat	4. 1 Maintenance and improvement of grasslands	Samtse Gewog	ST	DFO-Samtse	Gewog administration	0.5	NA	2026
	4.2 Plantation of fodder trees and palatable species	Samtse Gewog	LT	DFO Samtse	Gewog administration	0.3	NA	2027
Total in budget in million						24.05		

6. Monitoring and Evaluation:

Monitoring and evaluation (M&E) are an integral component of the C2C approach, ensuring that planned activities achieve their intended outcomes. This section outlines the framework for tracking and assessing the implementation of the four strategies and their associated actions. A detailed M&E plan is presented in Table 4, which includes specific indicators designed to measure the performance against each outcome. These indicators provide a clear basis for evaluating progress and effectiveness. Output indicators will focus on tracking the completion and impact of the actions outlined in Table 3, ensuring accountability and driving continuous improvement throughout the implementation process.

6.1. Monitoring

Regular monitoring is crucial for providing timely updates on activity progress and ensuring transparency and clarity throughout the implementation process. The strategic plan spans a five-year period, during which monitoring will be conducted annually. This approach ensures that planned actions remain on track, enabling the identification and implementation of necessary adjustments to achieve the intended outcomes effectively. The Division shall conduct annual monitoring to track progress and to ensure that the actions are aligned as per the intended outcomes.

6.2. Evaluation

The actions/implementations will be assessed during the middle and final years of the plan. The midterm evaluation will occur in the second quarter of the third year, while the final evaluation will take place in the last quarter of the fifth year. Both evaluations will be carried out collaboratively by staff of DFO-Samtse and concerned Functional Division ensuring a thorough review of the results from the actions implemented on the ground.

Table 4: Monitoring and Evaluation Plan

Outcome	Action	Action Indicator	Baseline	Unit	Yearly Target				
					2025	2026	2027	2028	2029
People	1.4 Creation and strengthening of QRT and supply of field gears to the members	No. of QRT created, strengthened and no. of members supplied with field gears	1	No. of reports	5	-	-	-	-
	1.2 Installation of street lights	No. of street lights installed	0	No.	100	-	-	-	-
	1.3 Create awareness on wildlife feeding/animal behaviors and safety measures	No. of awareness conducted and no. of participants	3	No. of report	-	1	-	-	-
	1.4 Relocation of landfill site or Proper management of the waste	Area identified for relocation, necessary FC and EC obtained	1	Ha	-	6	-	-	-
Livelihoods/ Assets	2.1 Construction of watch towers	No. of watch towers constructed	0	No.	-	5	-	-	-
	2.2 Construction of chain link along with electric fencing	Area of cultivated land fenced	1	Ha	-	20	-	-	-
	2.3 Maintenance of concrete walls	No. of concrete wall maintained	1	No.	-	-	-	1	-
	2.4 Improved farming practices (seeds, green houses, cold storage, market sheds along the highway)	No. of Household aided in the farming practices	-	No.	-	30	30	30	30
Wild life	3.1 Maintenance of natural mineral licks and creation of artificial salt licks	No. of salt licks maintained and created	-	No	-	3	-	-	-
	3.2 Creation of water holes	No. of waterholes created	-	No	-	1	-	-	-
Habitat	4.1 Maintenance and improvement of grasslands	Area of grasslands maintained	-	Ha	-	8	-	-	-
	4.2 Plantation of fodder trees and palatable species	Area of SRFL planted with fodder trees	-	Ha	-	-	5	-	-

7. Conclusion

Addressing HWC requires multisectoral collaboration with shared responsibility and accountability. Samtse Gewog holds strategic importance as it houses key regional offices, including the Dzongkhag Administration. However, the Gewog frequently faces HWC, particularly with elephants, leading to substantial crop and property damage. The C2C strategy for the Gewog is therefore a timely and appropriate initiative, engaging all stakeholders through a community-driven approach to address these challenges. This approach focuses on six key elements: policy, mitigation, understanding interactions, prevention, intervention, and monitoring.

Recent rapid development in the Gewog, including urban expansion, dredging and mining, highway construction, and industrial activities, has heightened the risk of worsening HWC. Without careful planning, these developments may exacerbate conflicts in the future. Consequently, the C2C strategy emphasizes four key outcomes—people, wildlife, livelihoods, and habitat—as the foundation for devising effective strategies and actions.

The implementation of the C2C strategy will not only improve the safety of human lives and properties but also enhance ecological resilience and biodiversity conservation. By protecting wildlife and their habitats, the strategy promotes sustainable coexistence, ensuring a balanced relationship between human development and biological conservation. This holistic approach ultimately aims to foster harmonious coexistence between humans and wildlife in Samtse Gewog.

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WWF. (2023). C2C: Conflict to Coexistence-Approach. Managing HWC for coexistence. Step-by-step guide for pilots.

Annexure: C2C Tool 4: Context Screening Form for C2C: Conflict to Coexistence-Approach

Overview of Categories:			
1. Landscape / Site description: demographics, geography, threats, stakeholders,			
2. Human-wildlife conflict trends: type of conflict, frequency, conflict species			
3. Drivers of conflict: Anthropogenic drivers, natural drivers			
4. Social dynamics: social carrying capacity, community heterogeneity			
5. Wildlife dynamics: species population, movements, behaviors			
6. Policy: legal instruments, management mechanisms			
Screening:			
Before completing this screening format, collect all baseline information on the landscape/site (previous assessments, reports, published literature, social landscape mapping if completed, etc.).			
** All information below might not be known/available/collected - fill out all available information. In case information is not available mark "NN"			
1. Landscape/Site description for the area C2C: Conflict to Coexistence-Approach will be implemented in			
Category	Example	Information/Details	Reference (Source of information)
1.1 Name of landscape or site where C2C: Conflict to Coexistence-Approach will be implemented	e.g., Ruvuma; Terai Arc Landscape; Tawau, KAZA TFCA	Samtse	NSB
1.2 Country	e.g., Nepal; Gabon; Tanzania	Bhutan	
1.3 Administrative division (Province, State, District etc.)	Chitwan District; Province de l'Ogooué-Maritime; Namtumbo and Tunduru districts	DFO, Samtse	
1.4 Area/size of the landscape or site (km ²)	e.g., 100 km ²	105.48 km ²	
1.5 Name/Proportion protected area (include type of PA/OECM) within the landscape	e.g., Nyungwe National Park (25% of landscape), Volcanoes National Park (10% of landscape), etc.		
1.6 Dominant land use type within site or landscape	e.g., National Park; Villages; Rangelands; Agroforestry		

1.7 Human population (number of residents and density) in the landscape or site - and population trend	e.g., 5000 residents in village Xy, 50 per sq km, increasing population; 2500 residents in village Xy, 50 per sq km, decreasing population		
1.8 Location of Communities within the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented	e.g., One community within national park, one community outside of national park	1,Dungakarling, Khanduthang, Gumpazor (Damtshangma_Khandothang) 2, Lamaythang (Lamaithang_Taserpo) 3, Nyimaling (Nyimaling_Chhirlogsa) 4, Bukay A & B, Tshongzom (Sa-tshamchhu_Tshongdzom) 5, Lingmithang, Chathagang (Dewathang_Lingmaithang)	
1.9 Community demography (age, gender, education, income) in landscape or site where C2C: Conflict to Coexistence-Approach will be implemented	e.g., any available census data - 52% female, 48% male - 10% over 50, 40% 30-50, 50% under 30 - 85% of residents have primary level education, 50% secondary level - mean income level, etc. etc.	Male : Female: Age: Childern (0 to 14): Economic/working/adults (15 to 64): Old (65+):	NSB
1.10 Indigenous Peoples/ Sub-Saharan African Historically Underserved Traditional Local Communities resident in landscape or site where C2C: Conflict to Coexistence-Approach will be implemented	e.g. Sami, Inuit, Khoisan, etc		
1.11 Ethnic groups/castes resident in landscape or site where C2C: Conflict to Coexistence-Approach will be implemented	Orang Asli, Brahmins, Adivasi, etc	Adivasi, Sharchops, Ngalops, Lhostham, Lepcha,	
1.12 Proportion of people living in poverty landscape or site where C2C: Conflict to Coexistence-Approach will be implemented	e.g., 30% of residents live below poverty line (as defined for the region)	e.g., of residents live below poverty line	
1.13 Faiths/Religions of people living in poverty landscape or site where C2C: Conflict to Coexistence-Approach will be implemented	Buddhist, Islam, etc	Buddhist, Hindu, Christian, Kerati, Manav Dharma	

1.14 Main community livelihood activities in the landscape (including livestock type, crop type, etc.)	e.g., livestock production (cattle, sheep), crops (corn, soybeans),	e.g., Livestock production (cattle, poultry, piggery, goat), Agriculture (Paddy, maize; Vegetables, horticulture (Areca nut),	
1.15 Non-consumptive tourism activities	e.g., photo tourism, visiting NP, hiking, rafting, camping	Bukay Dham	
1.16 Consumptive tourism activities	e.g., trophy hunting, fishing, mushroom collection		
1.17 Other important site information		Major regional branch offices (Financial Institutions (BoB, BNB, BDBL, RCB, PNB), RBP, RBA, Tcell, Bhutan Telecom, Schools, BPC substation), FCB, Hospital, Forest Range Office, Forest Division Office, BoD, , Sawmill, Crushing Unit, Dratshang, Workshops, ECCD, NFE centre, Post Office, Immigration Office, RNR -EC, Gewog Administration, Mandir, Archery Range, Futsal ground, ORC, Hotels	

2. Human-wildlife conflict trends

Category	Example	Information/Details	Reference (Source of information)
2.1 Which wildlife species cause negative interactions with people in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented (conflict species)	e.g., elephant, lion, wild boar	Elephants, Leopard, Wildpigs, Squirrels, Macqua, Peafowl, rabbit, porcupine, barking deer, rodent	Secondary data
2.2 Conflict animal characteristics (sex, age, hierarchy, etc., if known) in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented.	e.g., if there is problem animal or animals could list their characteristics here: bachelor young male elephant	1. Small herd of Elephants encroach settlement 2. Birds degrading crops (Peafowl, Jungle fowl) 3. Macques 4. Wild pigs 5. Porcupine 6. Squirrel 7. Leopard 8. Snakes (Python, Cobra)	Field observation
2.3 Description of physical damage (crops, livestock, other property) caused by wildlife species in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented.	e.g., elephants damage maize and vegetable gardens lions kill livestock at pastures wild boar damage vegetable gardens	Elephants damage maize and vegetable gardens, Areca nut, Paddy) Damages to houses, Banana plant, water pipeline Leopard kill livestock (goats, cattle) Wildboars damage vegetable gardens	Field observation/SMART data
2.4 Severity of conflict (number of lethal conflicts for wildlife and people)	e.g., 1 lethal conflict resulting in death of human in year 2022, 1 retaliatory killing of lion in 2023	1 lethal conflict resulting in death of human in year 2022	SMART Data
2.5 Frequency of conflict (number of conflict incidents* over 12 months)	e.g., 12 incidents of livestock predation and 30 crop damage incidents over past year		

2.6 What HWC-related data is available for the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented and how is it gathered?	e.g. Monitoring data by forest department, based on reports/claims of farmers	1. Google Spreadsheet maintained on incidences 2. FIRMs report	
2.7 Is HWC increasing, stable or decreasing in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented.	e.g. Increasing crop damage by elephant and wild boar reported from villages in area xx, but overall increasing number of human fatalities.	Increasing trend of crop damage by elephant and wild boar reported from villages in area , The wildpig, birds, squirrels conflict incidences is increasing	SMART Data
2.8 Which HWC hotspots have been identified in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented?	e.g. 3 villages (name1, name2, name3) in district xx, have been identified based on frequency and severity of HWC	Joji Dara (Landfill site), Mechaytar (Khanduthang), Dungkarling, Majathang, Gompazor	
2.9 Description of intangible costs caused by wildlife in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented.	e.g. behavioral adjustments; heavy workload through guarding practices; exposure to other risks; fear	Risk to human life and property due to movement corridor falling within human settlement.	
2.10 Level of tolerance of communities towards wildlife (e.g., attitudes or behaviors) in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented.	e.g., high tolerance for herbivores, low tolerance for lions	Moderate tolerance for elephant	
2.11 HWC management methods implemented in the past or currently being implemented (e.g. technical, financial or social strategies to prevent, reduce or mitigate HWC) in the landscape or site.	e.g., fences around rangelands, guard donkeys/dogs used, deterrents in use, guarding, conservation performance payments, awareness programs, community HWC response teams, early warning systems	Electric Fences, Trenches, around agricultural land and human settlement, QRT, Supply of field/patrol gears.	Field observation
2.12 Have any of the HWC management methods listed above failed in the past? If yes, please elaborate on the barriers to success.	e.g. the electrical fence constructed 5 years ago was damaged, due to low buy-in of community and insufficient maintenance	Due to challenges such as filling up of trenches during summer, weak cooperation from the communities most of the interventions are difficult to achieve the expected outcome. Failure to take collective social responsibility Poor cooperation amongst beneficiaries	Field observation
2.13 Other important information on HWC trends.		NN	

3. Drivers of conflict			
Category	Example	Information/Details	Reference (Source of information)
Anthropogenic drivers			
3.1 Which changes in land cover/use have been observed in the past years in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented?	e.g., in the past 10 years (from 2012) 30% of the natural forest in the buffer zone of xx NP has been cleared for rangeland; in 2020 a palm oil plantation has been converted into a forest corridor between NP1 and NP2	1. Increase in fallow land 2. Change in land use due to loss of forest cover (Developmental activities) 3. Disturbances in migratory route 4.	
3.2 Which developments have impact on connectivity for wildlife in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented?	e.g., settlements or development in corridors, infrastructure fragmenting habitat	Developmental activities	
3.3 What attractants are found for wildlife on community-lands?	e.g., food (fruit trees, crops), light, heat, garbage dumps	Food (paddy, arecanut, banana), Mineral (salt), garbage dumps, traditional migratory route	
3.4 How is hunting regulated in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented and which local hunting practices exist?	e.g., hunting is not permitted in landscape	Hunting is prohibited Strict enforcement of law Regular patrolling Awareness Law enforcement agencies in close proximity Spiritual believes	
3.5 Illegal hunting trends	e.g., illegal hunting of small prey species common	Data deficit	
3.6 What types of land rights are found in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented?	e.g. legal land rights, illegal land use, traditional land rights, etc.	PRL, SRFL, Institutional Land, PF, CF, Lease land	
3.7 Other anthropogenic drivers	e.g., any other anthropogenic drivers not listed here?	Urbanization, Satshab, Land lease, Developmental activities, Land exchange	
Natural drivers			
3.8 How does or could climate change impact on HWC?	e.g., longer dry season leading to drought conditions	1. Habitat loss and fragmentation 2. Migration 3. Resource scarcity induced by climate change 4. Extreme weather conditions	
3.9 Which landscape features (topography) of the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented influence behavior, movement and dispersal of wildlife (and people)?	e.g., river along part of national park border (dry conditions make this river crossable)	Plain area (grassland) adjacent to Indian Border separated by rivers. Fallow private land near to forest facilitate presence of wildlife	

3.10 Are natural food and water sources sufficient for the wildlife species in conflict in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented?	e.g., river in national park provides sufficient water year-round, prey abundance sufficient for tiger population	No	
3.11 How do forest fires impact on wildlife and what are fire trends in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented?	e.g., annual bush fires are natural but number and severity of fires has been increasing in past 5 years.	No incidences	
3.12 Other natural drivers	e.g., any other natural drivers not listed here?		

4. Social dynamics			
Category	Example	Information/Details	Reference (Source of information)
4.1 Which surveys/research to capture social aspects related to HWI have been conducted in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented?	e.g. social dynamic study; community knowledge and perceptions; media study; stakeholder assessments, social landscape map	CVCA & SES survey SMART patrol	
4.2 Which power dynamics between stakeholders are observed in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented?	e.g. Conflict of interests between stakeholder groups, Stakeholder groups influencing/polarizing, rivalry between stakeholder groups, high level of escalation	Communities, Forest, Gewog	
4.3 Any other information/ observation regarding social dynamics in the area?		NN	

5. Wildlife dynamics			
Category	Example	Information/Details	Reference (Source of information)
5.1 Conflict species relative abundance/density in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented.	e.g., estimated abundance of 55 elephants in national park and 30 lions	NFI, NTS, RBA Report	
5.2 Population trends of conflict species in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented.	e.g., increasing population of elephants, decreasing population of lions (could include specific population numbers if known)	No data	
5.3 Population trends of prey species (in case carnivore conflicts are observed)	e.g., decrease in small ungulate species (could include specific population numbers if known)	No data	
5.4 Which wildlife movements through the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented, are observed	e.g. elephant migrate through community land between national parks in the dry season; crocodiles gather in specific waterholes during months xx-xx; baboons pass xx fields in morning hours	Existence of elephant migratory route Collaring of wildlife (Elephant)	
5.5 Has any type of behavior by specific wildlife species or individuals been observed that may point at learned behavior or that might be specifically challenging? Please provide details.	e.g., Individuals of elephants use tusks to lift up electric fence wires; wolf jumps over specific fences; hyena follows wild boar under barrier; primates learned to unlock doors	Elephant becomes aggressive during mating season Elephants are intelligent and they damage barrier such as electric fencing without getting shock. Wild pigs and Macaques are accustomed to live alongside with human	
5.6 Which changes of wildlife behavior, movement or dispersal have been observed in the past years in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented?	e.g., troops of primates found close to NP boundary more often; elephants moving out of NP in evening and returning during day, stronger activity of deer at night	Wild pigs and Macaques are accustomed to live alongside with human	
5.7 Other important wildlife-related information that impacts on human-wildlife relationship			

6. Policy, governance and institutions			
Category	Example	Information/Details	Reference (Source of information)
6.1 List of policies related to HWC or HWC management relevant for the landscape	e.g., Law 153B no killing of protected species (elephant, lion), Policy #453 land use policies within community land, etc. etc.	FNCA and FNCRR 2023 Biodiversity Act of 2022 National Biodiversity Strategy Action Plan Bhutan Legal Framework	
6.2 List of SOPs or other operational regulations/documents relevant for managing the interaction of wildlife and people	e.g., SOP on rapid HWC response; decision support system for problem animal control	HWC management strategy 2018-2028	
6.3 Which administrative and other governance structures are in place in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented that relate to HWC and coexistence?	e.g. district level HWC reporting scheme; natural resource boards operating fence maintenance; conservancy board involved in HWC monitoring; landscape level platform/forum on HW coexistence	Dzongkhag Gewog Samtse Forest Division Forest Range Office Schools	
6.4 Which governmental, non-governmental and private institutions are active in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented?		Gewog Samtse Forest Division Forest Range Office Agriculture and Livestock Extension Offices	
6.5 Which funding sources for managing HWC and developing HW coexistence strategies are currently available in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented?	e.g., WWF, local government, etc.	1. WWF IKI Project 2. IUCN Tiger Conservation Project 3. WWF Elephant Landscape Conservation Project	
6.6 Which staff capacity is available to be engaged in HWC management and human dimensions of conservation work?	e.g. HWC focal person, staff with background in social sciences	Forest Rangers	
6.7 Which lead group is expected to manage HWC in the landscape or site where C2C: Conflict to Coexistence-Approach will be implemented?		QRT	

