



Best Practice Guidance Note: Human Wildlife Conflict Mitigation

LLF ESMS Annex K

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ACRONYMS AND ABBREVIATIONS

Name	Description
E&S	Environmental and Social
ESMS	Environmental and Social Management System
HWC	Human Wildlife Conflict
IP	Indigenous Peoples
IUCN	International Union for Conservation of Nature
LL	Legacy Landscapes
LLF	Legacy Landscapes Fund
MoU	Memorandum of Understanding
SEP	Stakeholder Engagement Plan
WWF	World Wide Fund for Nature

DOCUMENT HISTORY

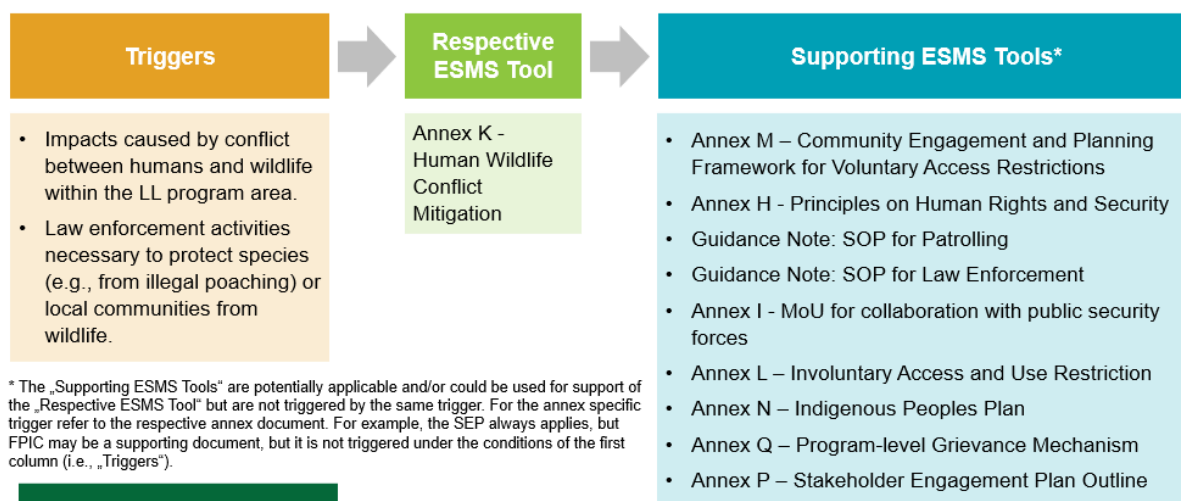
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1. INTRODUCTION

Human being and wildlife have lived together for millennia, both in conflict and co-existence. With increased population growth and loss of natural habitats (e.g., through deforestation or climate change) human and wildlife are increasingly facing each other, which could lead to conflicts between human populations and wildlife (HWC). On a global scale HWC challenges have impact on both sides – wildlife and human beings. Communities affected by HWC may face negative impacts ranging from losses of agricultural production affecting their livelihoods, decreased quality of life, physical, and mental health impacts or in extreme cases loss of life. This will decrease their tolerance for conservation that can lead to the killing, removal or eradication of species involved, wildlife crimes etc. if those issues are left unaddressed. Therefore, effective HWC management strategy is key for the legacy landscape (LL) programs.

The requirement to develop the HWC mitigation scheme might be stated in the environmental and social action plan (ESAP) that is part of the grant agreement between the grantee and LLF.

Alternatively, such requirement will be triggered by legacy landscape (LL) program activity during the lifecycle of the LL program.



* The „Supporting ESMS Tools“ are potentially applicable and/or could be used for support of the „Respective ESMS Tool“ but are not triggered by the same trigger. For the annex specific trigger refer to the respective annex document. For example, the SEP always applies, but FPIC may be a supporting document, but it is not triggered under the conditions of the first column (i.e., „Triggers“).

Comments

Prior the development of the HWC mitigation strategy, existing and potential HWCs should be analyzed in-depth in order to understand underlying roots, nature and depth of the conflict at hand. This step might be initiated by a grievance submitted to the grievances mechanism and stakeholder engagement. This will also be used for evaluation of HWC solution.

Efficient HWC mitigation measures often include community-based solutions for which a CEPF should be developed.

Ethical and legal law enforcement response protocols for HWC should also be developed in context and agreed upon between stakeholders when rangers are solicited. For all HWC actions using security forces, the principles on security and human rights should be considered, as well as the SOP for law enforcement. If the PA/national legislation does not allow community members to engage in law enforcement activities and public forces have to be engaged, an MoU should be put in place and include relevant provisions on how to effectively conduct HWC mitigation.

HWC is often linked to other aspects, such as restrictions on land access and use, increased human settlements close to conservation areas, climate change etc. Furthermore, in many cases IP or customary communities might be involved in the conflict, since those groups often live in more remote areas in close connection with nature. Therefore, HWC mitigation strategies should be included in respective documents, if applicable.

In order to understand HWC and develop strategies for coexistence, a holistic overview of its drivers and an understanding of their interaction with one another is necessary. HWC is often linked to other aspects, such as restrictions on land access and use, increased human settlements close to conservation areas, climate change etc. Furthermore, in many cases indigenous people (IP) or customary communities might be involved in the conflict, since those groups often live in more remote areas in close connection with nature. Changes in their environment might, therefore, impact those groups differently than mainstream population groups. LLF’s ESMS documents, **Annex L – Process Framework for Involuntary Access and Use Restriction**, as well as **Annex N – Indigenous**

Peoples Plan provide further guidance on managing conflicts involving IP or land access and use restrictions.

This guidance sets out main principles and procedures for effective management of HWC, highlighting solutions with the ultimate aim of coexistence between humans and wildlife, meaning people and wildlife living in close proximity to one another, preferably in neutral or beneficial coexistence.

Note: This document provides a guidance and templates that are aligned with the applicable standards listed in LLF ESMS manual. In all cases, the grantee and/or the party developing the templates and/or procedures must comply with the local/national requirements; then, the guidance provided in this document (including the other recommended publications) should be utilized to determine how to align the LL program with the applicable standards. If the LL program (or the grantee organization) already have similar procedures and/or templates developed and/or currently implemented, the grantee should conduct the gap analysis exercise between the existing template and/or procedure and this LLF guidance. The identified gaps should be closed following the rule – stricter applies.

1.1 Purpose

The purpose of this HWC management strategy is to provide guidance to the grantee in dealing with HWC and develop effective prevention and mitigation strategies. The ultimate aim is to move from HWC to human wildlife coexistence.

1.2 Objective

The objective of this document is to provide guidance on prevention and minimizing negative effects from HWC in the LL programs and reduce incidents having negative impacts on species and human livelihoods. This should be done while constantly improving mitigation strategies, anticipating occurring conflicts and finding timely solutions based on a common approach. This should involve a variety of actors, such as governmental officials, local communities, the general public, conservation specialists, park rangers, social scientists and other relevant stakeholders.

2. APPLICABLE STANDARDS

The full list of the applicable standards for developing the HWC mitigation strategy is indicated in the LLF ESMS manual document. In addition, the following standards were used for the development of this guidance note and should be reflected:

- World Bank Environmental and Social Standards (2017), in particular;
 - Guidance Notes on ESS7 (2018), ESS8 (2018) ESS10 (2016);
- The UN Guiding Principles on Business and Human Rights (UNGPR, 2011), including:
 - Guidance Note on Displacement and Resettlement (UNGPR, 2021)¹;
- Voluntary Principles (VPSHR) on Security and Human Rights (2010)²;
- Voluntary Guidelines on the Responsible Tenure Governance of Land, Fisheries and Forests (FAO, 2012)³.

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https://info.undp.org/sites/bpps/SES_Toolkit/SES%20Document%20Library/Uploaded%20October%202016/UNDP%20SES%20S5%20Displacement%20and%20Resettlement%20GN_Final-rev_July2021.pdf

² <https://www.voluntaryprinciples.org/>

³ <https://www.fao.org/publications/card/en/c/I2801E/>

3. KEY TERMINOLOGY

Table 3-1 below elaborates on key terms used in this HWC guidance note.

Table 3-1 Key Terminology

Term	Definition
Area of Influence	The area within which program’s activities have the potential to create E&S changes, including the: <ul style="list-style-type: none"> ■ Zone of direct impact, an area, often demarcated by a LL boundary, where land access restrictions will be in place and enforced, and where program facilities may be constructed. ■ Zone or zones of indirect impact, areas where stakeholders affected by a program’s reside, work or farm, including areas that experience economic growth, increased traffic or influx as a result of program’ activities.
Coexistence	Refers to people and wildlife existing in proximity to each other, whether in contentious, neutral, or beneficial coexistence.
Grantee	A NGO(-s) and/or party that is in contractual agreement with LLF and receiving grant funds through the grant agreement.
Human-wildlife interaction	Neutral term referring to any encounter between people and wildlife.
HWC mitigation	Any measures that reduce the impact of HWC after it has occurred, such as compensation programs, insurance schemes, or development of alternative livelihoods.
HWC policy	Legal frameworks and guidelines addressing HWC drivers and HWC management.
HWC prevention	Actions that help stop or minimize HWC before it occurs.
HWC response	Any actions taken to alleviate specific or ongoing HWC.
Indigenous People (IP)	Indigenous Peoples are distinct social and cultural groups that share collective ancestral ties to the lands and natural resources where they live, occupy or from which they have been displaced.
Legacy Landscape Program/Program activity	All activities ⁴ related to the legacy landscape and/or stakeholders that are planned, implemented and/or supervised by the grantee and/or their contractor.
Legacy Landscape Staff	All staff related to the legacy landscape program and/or program activity development and implementation (e.g., grantee, contractors, park management, etc.)
Stakeholder	Any interested individual or group directly or indirectly affected by or affecting HWC.
Tolerance	Passive or active acceptance of a species. Highly dependent on the risk-benefit belief people have towards this species. Tolerance is influenced by magnitude of losses, as well as perception and value attributed to a species.

⁴ The HWC management strategy shall cover not only LLF funded activities for the program, but all activities in the program specific legacy landscape and surroundings

4. HWC MANAGEMENT STRATEGY

The following sub sections will set out relevant steps in addressing HWC and elaborate on key aspects necessary for each element of HWC management. Key elements of HWC management that will be further assessed are presented in Figure 4-1 below. While this document provides guidance on the overall management of HWC, the development of a mitigation strategy will be unique to each individual case of HWC.

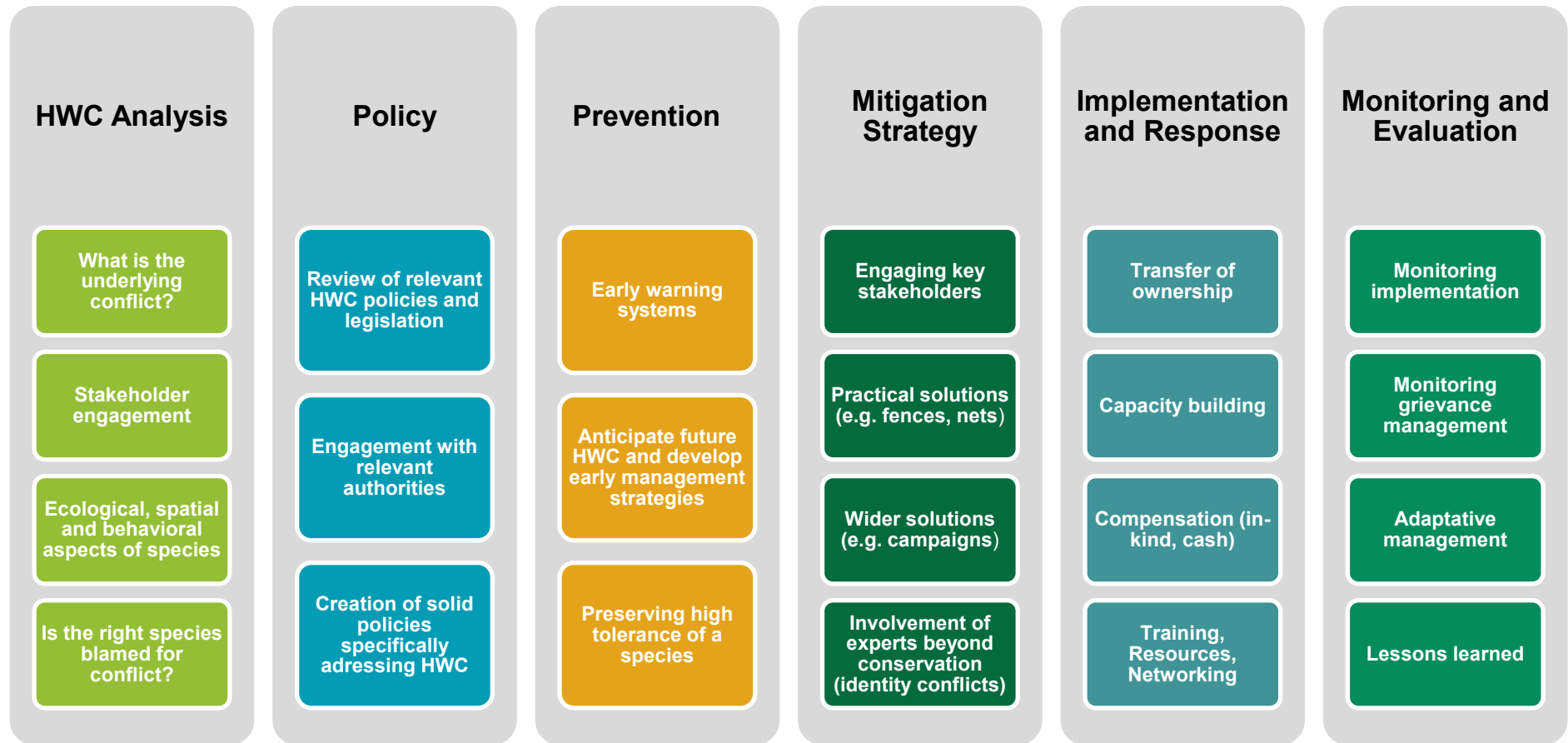


Figure 4-1 Elements of HWC Management

4.1 Conflict Analysis

Conflicts between human population and wildlife can be complex. Prior the development of the HWC mitigation strategy, existing and potential HWCs should be analyzed in-depth in order to understand underlying roots, nature and depth of the conflict at hand. This step might be initiated by a grievance submitted to the grievances mechanism (refer to LLF ESMS documents, **Annex Q – Program-level Grievance and Feedback Mechanism**). In some cases, communities might feel left out by the program, since there are no benefits like job creation or their land use and access is restricted for conservation purposes, while wildlife is coming closer to living and agricultural areas, which might lead to conflicts. Therefore, thorough stakeholder engagement (refer to LLF ESMS documents, **Annex P – Stakeholder Engagement Plan Outline**), such as with local communities, IP, government officials etc. is needed and grievances should be checked on a regular basis.

Another level of analysis stems from protection and surveillance activities, whether performed by park rangers or community groups. They are the “eyes and ears” of the authorities to corroborate conflicts or species presence through patrols or biological monitoring missions. These actions allow the assessment of wildlife populations, potential threats and can serve as a preventative measure. Furthermore, this step should include an analysis of the ecological, spatial, and behavioral aspects of the species blamed for the conflict. Sometimes, a species might be blamed for HWC while the study of this species shows, that actually another species is responsible for the conflict. Therefore, this stage is essential in order to understand underlying societal and ecological patterns.

Only after a thorough analysis of the conflict, HWC can be understood properly. The analysis based on ecological, spatial and behavioral study of the species involved, as well as engagement with local communities and other stakeholders involved will shed light on the underlying root causes of the conflict. It should be establishing whether the conflict is about:

- Survival;
- Resources;
- Culture and/or Identity⁵.

While conflicts that center on survival and resources and culture can normally be addressed with a human wildlife mitigation plan, conflicts about culture and identity usually go beyond conservation and should involve relevant social/political experts to develop mitigation strategies. HWC conflicts that are about culture usually center around cultural norms and traditions (e.g., the Massai having to kill a lion in order to become men), identity conflicts usually split stakeholder groups (that can be from the same cultural background) and use polarization, or an “us versus them” mentality, of groups associated with differing opinions about how to manage wildlife that pose problems for humans⁶.

The stakeholder engagement phase is essential in establishing what conflicts are really about. While some HWC seem to be about resources only (e.g., species is killing livestock or destroying harvest), stakeholder engagement might shed light on cultural patterns that surround the killing of a species (e.g., for traditional reasons, superstition or misconception about the species etc.). All those aspects need to be understood, in order to develop a coherent and effective mitigation strategy in order to avoid having to prosecute communities for wildlife crimes based on beliefs or abusive repression by the wildlife authority due to a misunderstanding of said belief or identity.

Figure 4-2 below presents key drivers of HWC that should be considered when analyzing and understanding respective conflicts. In various cases a combination of several drivers will contribute to pressures and cause adverse impacts.

⁵ Please note: For the purpose of this document, the term “culture” refers to a set of inherent norms and values that people adapt while growing up. The term “identity” includes culture and many other personal things about each individual, such as gender identity, education, religion, sexual orientation, and many others.

⁶ A commonly cited identity HWC is wolf hunting in Michigan, U.S. where several social identity groups have varying concerns/positions on wolf hunting based on their social identity groups.

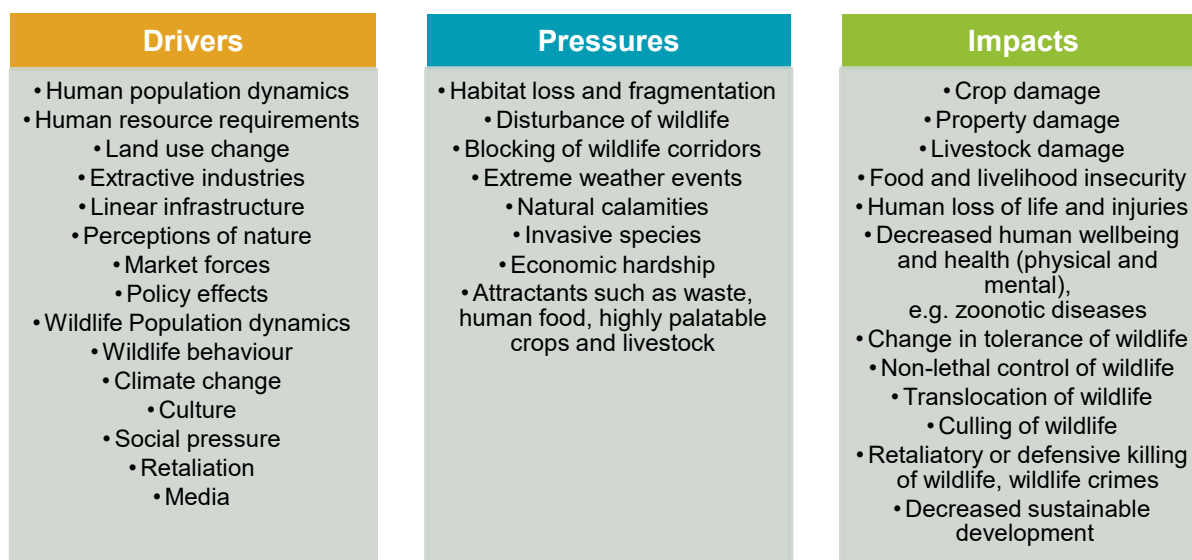


Figure 4-2 Key Drivers of HWC

4.2 Policy

Effective HWC management should be enabled through protocols, principles, provisions, and measures stipulated in legislation and undertaken by authorities (international and national law, national and local HWC management plans, spatial plans, etc.). Therefore, existing policies and legislation should be reviewed in order to have a better understanding of the political and legal context governing the HWC and being able to engage with the responsible authorities.

National and local governments (central wildlife authorities and park managers) should be involved in developing a management strategy and mitigation procedure, since they are a crucial actor in implementing legislative and practical measures protecting endangered species, if necessary. In many cases, if governments are under pressure from the general public, they might (not) implement protective measures. Therefore, government involvement is often a necessary step in the effective HWC management. Furthermore, some communities might distrust the government, if there are legislative measures protecting species from illegal poachers, but no protective measures to protect local communities from wildlife conflicts. Such cases can create further distrust and a decreased effectiveness of the HWC management. In such cases the government should be consulted, and measures implemented, to create trust within local communities and develop effective HWC policies, protecting both, people, and wildlife.

At the current stage many legal regulations regarding HWC and coexistence (if existent) are only at local level and have yet to reach international conventions⁷.

4.3 Prevention

HWC prevention refers to actions that help stop or minimize HWC before it occurs, which is the core objective of effective HWC management.

Possible prevention strategies can include fences, early detection tools and warning systems, crop selection, strategic warning, the use of repellents, focused law enforcement and biological monitoring patrols etc. Prevention-measures should be community-based (e.g., a local community affected by crop raids should be responsible for guarding and maintaining a certain part of a fence), informed by research and monitoring and backed by local regulations. This encourages self-help and catered

⁷ For further information see amongst other: Woolaston, Katie, et al. "A Review of the Role of Law and Policy in Human-Wildlife Conflict." *Conservation & Society*, vol. 19, no. 3, 2021, pp. 172–83. JSTOR, <https://www.jstor.org/stable/27081498>. Accessed 22 Nov. 2022.

solutions, however, park authorities, insofar as biodiversity protection is their core business, need to be involved at all levels (e.g., community conservation focal points, rangers etc.).

Preventing HWC can also include cases in which there is a high tolerance for a species, even though this species is causing damage to livelihoods. In this case, the HWC mitigation scheme should assess and develop strategies on how this high tolerance can be kept. It should be noted that there is no common predictor of tolerance, and an assessment needs to be done on a case-by-case basis, engaging with local communities and stakeholders.

4.4 Mitigation Strategy

Key element of HWC is a mitigation strategy. While completely eradicating HWC is not possible, a successful approach will bring different elements together to create opportunities and benefits not only for biodiversity and impacted communities but for society, sustainable development, production, and the global economy at large. For a coherent and effective mitigation strategy, it is not sufficient to merely focus on substance (e.g., replacement of loss of crops or livestock). A mitigation strategy and relationship building with local communities and other relevant stakeholders are equally important and all three aspects should be considered in equal measures in developing effective HWC mitigation strategies.

While for conflicts that are merely about resources, practical solutions, such as usage of nets or building fences to guard territory and crops might be sufficient, more deep-rooted causes of conflicts might need a wider approach for mitigation, e.g., information campaigns to combat misconception of a species and its importance for ecosystems. In many cases a combination of practical and wider solutions will be necessary. Figure 4-3 below presents some examples for practical and wider solutions for HWC.

Practical Solutions

- Fences
- Nets
- Repellents
- Compensation payments
- etc.

Wider Solutions

- Information campaigns
- Network building
- Trainings
- Capacity building
- etc.

Figure 4-3 HWC Solutions

Local communities and stakeholders directly affected by the conflict should be involved in developing a mitigation strategy and its implementation. Rangers should also be included in some of the wider solutions implemented as they are often called upon to intervene. Ethical and legal law enforcement response protocols for HWC should also be developed in context and agreed upon between stakeholders when rangers are solicited (refer to LLF documents, **Guidance Note: SOP for Patrolling** and **Guidance Note: SOP for Environmental Law Enforcement**)⁸.

⁸ These guidance are available at LLF and can be shared on a request basis.

Example: In the case of creating fences to guard livestock and crops it should be established which local communities own the fence, who is responsible for its maintenance, where should the fence best go given local communities knowledge and input etc.

4.4.1 Key Principles

The following principles presented in Figure 4-4 below should be incorporated in an effective HWC management strategy and adequate mitigation measures and are elaborated on in the below sections.

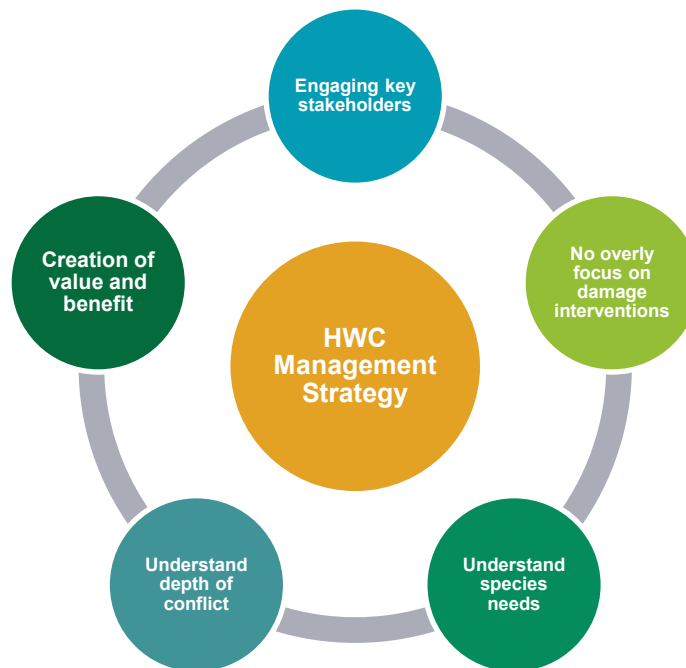


Figure 4-4 Key Principles for HWC Management

4.4.1.1 Engaging key stakeholders

Information sharing is an important component of the effective HWC mitigation. While it is important to conduct stakeholder engagement with affected communities, it is often essential to include the general public in information campaigns and knowledge sharing. Furthermore, it should be considered that not every stakeholder is a conservation or social expert. Therefore, simple language should be used to engage with relevant stakeholders (e.g., rangers, local communities, government officials etc.). Involving the public should not be limited to stakeholder engagement meetings to obtain information about the conflict, but rather actively involve the public and LL staff, in particular affected communities in developing mitigation strategies and implement them.

4.4.1.2 No overly focus on damage interventions

While damage interventions are an important aspect of HWC and essential for securing people's livelihoods, many HWC mitigation schemes over focus on damage interventions, while leaving out other important aspects to effectively mitigate HWC, such as cultural aspects, traditions, unawareness, legal provisions etc. This goes in line with understanding human psychology, cultural backgrounds and societal changes. In many cases losses do not determine the extent of retaliation, since there are other factors that need to be considered.

4.4.1.3 Understanding species needs

While the human dimensions play an essential role in HWC, the concerned species needs have to be assessed carefully and insights incorporated into respective mitigation strategies. Factors considered should be at minimum as following: why the species is taking a particular route, what are the common patterns in mating or the procurement of food, have any external factors triggered behavioral change and how are those patterns conflicting with the human sphere, etc.

4.4.1.4 Understanding depth of conflict

In order to develop adequate mitigation strategies, the depth of a conflict at hand need to be assessed and understood. Therefore, disputes, underlying conflict and deep-rooted conflicts need to be understood. Figure 4-5

Figure 4-5 below provides a graphical representation of different levels of conflict in the HWC context.

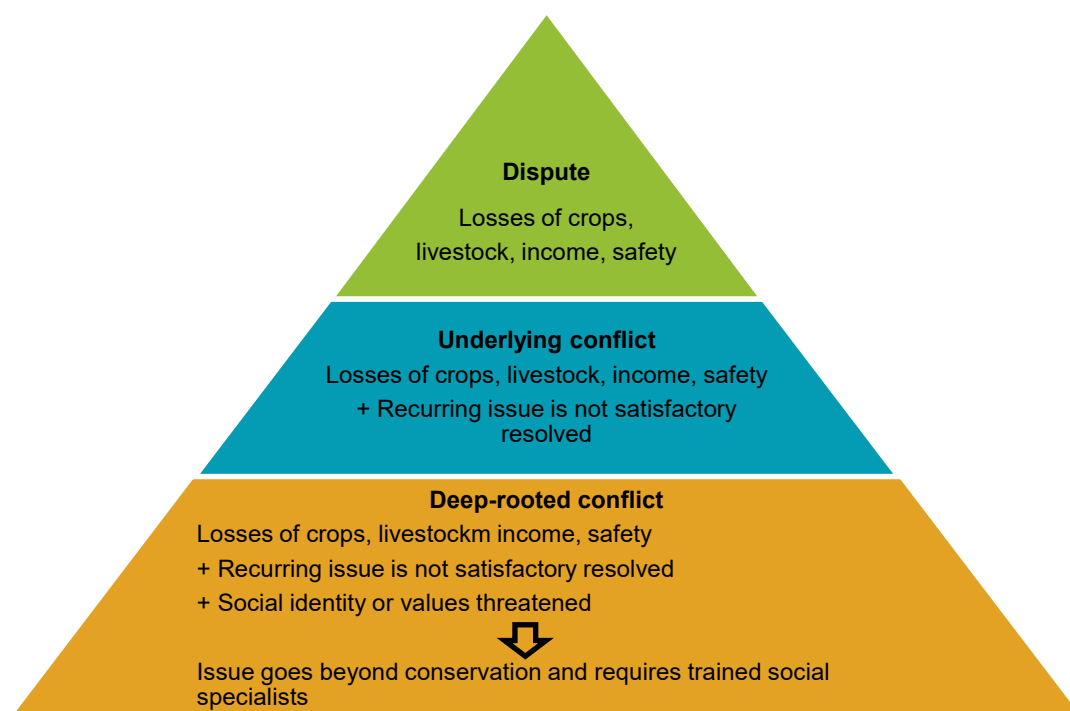


Figure 4-5 Levels of Conflict

Source: adopted from Zimmermann, McQuinn & McDonald (2020)

According to Zimmermann et al. (2020), there are different levels of HWC. While the first level conflict is merely about resources (e.g., damaged crops), the second level conflict includes an underlying conflict, namely, loss of a resource and in addition that the recurring issue is not satisfactory resolved. The most complex conflict is deep-rooted and includes in addition to the abovementioned levels that stakeholders feel their social identity and values threatened. This level of conflict goes beyond conservation and requires the involvement of social experts and potential law enforcement monitoring to work on solutions to tackle this type of conflict. While practical solutions might easily solve level one conflicts, this will not be the case for level two and three conflicts that require wider mitigation strategies. Figure 4-6 below highlights possible approaches for the resolution of different conflict levels.

Level 1 - Dispute

Practical solutions

- Safeguard income and security (barriers, fences, alarm systems etc.)
- Reduce risk of losses (and actual losses) to levels acceptable to the (farmer) and reduce levels of risk
- Increase productivity or diversifying income sources to off-set risk

Level 2 - Underlying conflict

Relationship building

- Focus on building and fostering constructive relationships between the stakeholders
- Ensure initiatives address past issues in practical or symbolic ways
- Practical solutions play a role but are effective only if in combination with approaches to address norms and behaviors

Level 3 - Identity-based conflict

Reconciling conflicting identities

- Addressing conflict at this level usually involves dialogue processes that balance power among the parties and empower communities
- Emphasis must be on re-balancing decision-making, ownership and co-investment
- symbolic gestures demonstrating respect afford stakeholders dignity that is often perceived to be lacking

Figure 4-6 Resolution Approaches

4.4.1.5 Creation of value and benefit

In order to successfully mitigate long-term HWC conflicts and reach coexistence, value and benefit needs to be created from conservation for local communities. Cases in which there is value of a species and a benefit for local communities are more likely to reach coexistence. In order to reach this goal, stakeholders need to be informed and kept informed about the value of a species e.g. for the overall functioning and health of ecosystems and potential or actual benefits this species can bring for local communities e.g. for eco-tourism purposes. Where such benefits do not exist yet, incentives for mutual benefits should be incorporated into a HWC mitigation scheme.

4.5 Implementation and Response

When implementing the strategy, it is essential to involve local communities in the process. They often do play a crucial part in implementing mitigation measures, such as monitoring/reporting wildlife incursions, maintaining and using protective structures (fences, nets etc.), reporting⁹ when planned mitigation measures seem not to work properly or fail to work and continued awareness raising etc.

Furthermore, it is essential to have a quick and accurate verification of any damages caused by a species and when compensation for any damages caused will be given to affected communities, such compensation (in-kind or cash payments) should be done promptly and in a fair manner.

Response to ongoing HWC conflicts is an essential part of the implementation strategy and are measures to minimize or alleviate an ongoing HWC. Possible actions could be, but are not limited to the following:

- On the ground rapid response teams;
- Innovative technical solutions (e.g., chilli bricks or blasters, automated infrared devices with sound/lights etc.)
- Effective reporting mechanisms;

⁹ Please note that while some sites might use the program-level GM for reporting measures, others (with comprehensive HWC strategy) monitor and report HWC separately through community committees. Both approaches are acceptable.

- Standard operating systems and procedures;
- Removal or translocation of the animals causes problem;
- First aid;
- Crowd control; and
- Development of capacity trainings.

4.6 Monitoring and Evaluation

Monitoring and evaluation play a crucial role in developing HWC mitigation strategies and ensure their effective implementation. HWCs are constantly changing, and with successful mitigation there might be new challenges arising (e.g., bigger populations of an endangered species causing new problems in human wildlife interactions). Effective monitoring and evaluation can help anticipate future HWC and find early mitigation strategies, before the conflict escalates. Therefore, HWC should be constantly monitored and information should be shared on a frequent basis. Local populations should be involved in the monitoring process, which will increase transparency and local acceptance. Measures that local communities could take to conduct effective monitoring is for example the use of an Event Book System¹⁰, in which they decide which factors should be monitored and later assessed with respective experts. Records should include human fatalities, crop and livestock damage correlated with the species involved as well as park interventions to expulse or physically manage wildlife. Such a decentralized monitoring tool promotes information sharing in local communities while giving them a sense of ownership of the process.

HWC is not, as such, a security or human rights issue. However, conflicts may spill over into these categories if, as a consequence of repeated incidents, communities violently take matters into their own hands. Using illegal weapons (traded or stolen) for retaliatory killings or to threaten rangers who can be perceived as the cause of their hardships may lead to abuses, overreactions, loss of life, even in self-defense, on both sides. Social experts, communities and LL managers must remain aware of these risks in the conflict analysis phase. Once identified, security mitigation measure can be included in the HWC management protocols. Finally, law enforcement standard operating procedures, training and monitoring should be abided by and communicated upon to avoid issues generally and are relevant in HWC management (refer to LLF ESMS documents, **Annex H – Security and Human Rights in Protected Areas**, **Annex I – MoU for collaboration with public security forces**, as well as **Guidance Note: SPO for Patrolling** and **Guidance Note: SOP for Law Enforcement**¹¹).

There should be reporting mechanisms in place and the local population should know about their accessibility. The grievances mechanisms are an important tool to understand potential conflicts and allow stakeholders to raise their concerns and give input (refer to LLF ESMS documents, **Annex Q – Program-level Grievance and Feedback Mechanism**). Data on the frequency and magnitude of damage caused by wildlife, monitoring efforts and the spatial distribution of conflict incidents are the basis for informed and evidence-based decision making. LLF encourages the grantee to gather and share the lessons learned about the HWC mitigation schemes/strategies with other grantees and other relevant stakeholders. Integrating HWC data monitoring into established spatial conservation monitoring systems such as SMART¹² is technically feasible and already implemented in several countries and can be accomplished by involving the communities and partners in whose areas the data are collected. HWC management should be adapted accordingly, if necessary. Lessons learned from evaluation should be shared with local communities, stakeholders and other relevant entities.

¹⁰ Stuart-Hill, Greg & Diggle, Richard & Munali, Bevan & Tagg, Jo & Ward, David. (2005). The Event Book System: A Community-based Natural Resource Monitoring System from Namibia. *Biodiversity and Conservation*. 14. 2611-2631. 10.1007/s10531-005-8391-0.

¹¹ These guidance are available at LLF and can be shared on a request basis.

¹² The SMART (Spatial Monitoring and Reporting Tool) is an open-source, non-proprietary, and freely available tool to measure, evaluate, and improve effectiveness of wildlife law enforcement patrols and site-based conservation activities.

5. FURTHER RESOURCES

The below listed documents provide additional guidance and information on the development of a HWC management strategy guidance:

- Guidelines on Human-Wildlife Conflict and Coexistence (IUCN SSC, coming soon)¹³;
- Human-Wildlife Conflict & Coexistence Library (IUCN)¹⁴;
- Human Wildlife Conflict Mitigation Annex (WWF, 2019)¹⁵;
- The Need for Human-Wildlife Coexistence (WWF, 2021)¹⁶;
- Levels of conflict over wildlife: Understanding and addressing the right problem, *Journal of the Society for Conservation Biology*, Zimmermann et. Al (2020).

¹³ <https://www.hwctf.org/guidelines>

¹⁴ <https://www.hwctf.org/document-library>

¹⁵ <https://www.wwf.de/fileadmin/fm-wwf/Publikationen-PDF/WWF-Report-Tx2-Human-Wildlife-Conflict-Global-Compensation-and-Insurance-Schemes.pdf>

¹⁶ <https://www.worldwildlife.org/publications/a-future-for-all-the-need-for-human-wildlife-coexistence>