



CASE STUDY
**PROMOTING
HUMAN-
WILDLIFE
COEXISTENCE**

**AFRICAN
WILDLIFE
INITIATIVE**





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EXECUTIVE SUMMARY

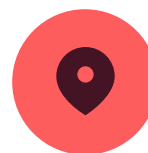
As human populations increase and land-use change accelerates, interactions between people and wildlife are becoming more frequent and severe, particularly in landscapes where communities depend directly on livestock, agriculture and natural resources. Human-wildlife conflict is one of Africa's most urgent and complex conservation challenges, with increasing consequences for community livelihoods and safety, food security, survival of threatened species and habitat integrity.

The IUCN Save Our Species African Wildlife Initiative (AWI), funded by the European Union, supports locally led, science-based action to reduce these pressures. The initiative sets out to strengthen human-wildlife coexistence by strengthening developing partners' capacities for conflict mitigation, community engagement and habitat protection. Across the portfolio:

- **30 projects (33% of the portfolio)** promoted human-wildlife coexistence, of which 26 focused specifically on human-carnivore conflict across 13 countries, collectively impacting more than 500,000 people.
- **Over 22 million hectares of habitat safeguarded** through integrated coexistence measures.
- **1,972 predator-proof enclosures**, alongside livestock guarding dogs, solar fencing, early warning systems and rapid response teams, were deployed to reduce crop loss, livestock losses and prevent retaliatory killing contributing to a 50–86% reduction in livestock predation across target landscapes.
- **A 68% decrease in the communities' desire to retaliate** and a 39% increase in tolerance towards living with carnivores across relevant project areas, driven by transparent compensation schemes, grievance mechanisms, cultural engagement and community education programmes.

The seven projects featured here demonstrate field-tested approaches to human-wildlife coexistence across diverse ecological and social contexts in Kenya, Namibia, Botswana, Cameroon, Zambia, Tanzania and Niger. Though each is tailored to its landscape, all combine locally led prevention, rapid response systems, livestock and crop protection, early warning tools, habitat restoration, community governance, policy engagement and livelihood support to achieve the outcomes summarised below:

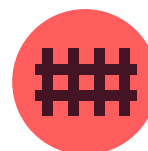
- **Conflict response and corridor protection:** In Southern Rift Valley of Kenya, a carnivore liaison network and standardised multi-agency response reduced incident response times across more than 680,000 hectares, supported by 103 trained personnel, eight community working groups and spatial mapping of 35,000 homesteads embedded into county planning.



30
projects



22M
hectares
of habitat
safeguarded



1,972
predator-proof
enclosures

- **Technology-enabled early warning and lion recovery:** In the Kunene region of Namibia, a GPS and Radio Frequency Identification based early warning system combined with more than 50 collared lions, reinforced kraals and 111 community rangers across 30 conservancies cut livestock predation by more than 50% and reduced lion killings by 75% by the end of the project.
- **Livestock protection and farmer livelihoods:** In Western Kalahari region of Botswana, improved livestock husbandry among 396 farmers, combined with 73 Tswana livestock guarding dogs distributed across conflict-prone farms, reduced predation among participating farmers by 86% and overall conflict reports by 26%, while 137 community members moved into alternative livelihoods.
- **Local capacity and community partnerships:** In the Mpem and Djim National Park in Cameroon, eco-guard training increased patrol frequency by 45%, while a demonstration boma and stronger community-park communication enabled the first systematic response mechanism to incidents. Livestock losses were reduced by 80–95% from 80–90 cattle killed in early 2019 to a single incident at project end.
- **Infrastructure-based conflict prevention:** In Mosi-oa-Tunya landscape in Zambia, restoration of a 5 km solar-powered electrified fence, paired with maintenance training for 10 park authority officers helped achieve a 100% reduction in conflict along the park's boundary and protected approximately 600 residents, securing a critical zone for a local population of 150 elephants within the wider Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA).
- **Community leadership, technology and habitat protection:** In the Ngorongoro Conservation Area in Tanzania, deployment of 30 locally recruited Ilchokuti (lion guardians), hundreds of reinforced predator-proof bomas across more than 12 villages, and EarthRanger enabled alerts resulted in zero recorded retaliatory lion killings during the reporting period and expanded the secured corridor by 304 km², with monitoring data informing Tanzania's Lion Conservation Action Plan.
- **Integrated approaches:** In the Parc W complex in Niger, conflict monitoring, early warning systems and habitat interventions contributed to a 73% increase in the giraffe population by the project's end, alongside the restoration of more than 250 hectares of degraded land and livelihood support for 499 direct beneficiaries and an estimated 4,500 indirectly across 20 villages.

Across the portfolio, the strongest project results were achieved where technical interventions were paired with community response capacity, livelihood protection, inclusive awareness-raising and alignment with wider land-use and policy frameworks.

The recommendations below capture lessons that can inform the design and implementation of future human-wildlife conflict programmes.



Photo credit: © Roimen Lelya

- **Start with diagnosis and design alongside communities.** Effective programmes begin by mapping where conflict occurs and who bears its costs, dedicating time and budget to gathering evidence, then co-designing solutions with the communities affected and adapting to local ecological, cultural and species-specific conditions rather than applying a single model everywhere.
- **Prioritise proven, scalable interventions while securing the wider landscape.** Concentrate resources on field-tested tools such as predator-proof bomas, livestock guarding dogs and early warning systems, supported by monitoring that tracks impact, while also investing in the slower work of habitat restoration, prey recovery and connectivity that allows site-level gains to hold.
- **Empower communities rather than simply compensating them.** Lasting tolerance depends on safety, alternative livelihoods, market access and technical support that build resilience, reinforced by education programmes that measure real shifts in attitude and behaviour, because communities with a genuine stake in the outcome are the ones that sustain coexistence.
- **Share knowledge openly and build it into policy.** Documenting both successes and failures, integrating field evidence into the wider literature and aligning projects with national strategies from the outset turns isolated pilots into scalable models, as in Namibia and Tanzania, where field data shaped national conflict-management and lion conservation plans.
- **Sustain coexistence through long-term finance and governance.** Match funding cycles to the timelines of ecological recovery, blend donor support with national and local resource mobilisation and strengthen governance, particularly for transboundary landscapes, to secure the connectivity and coordination on which long-term resilience depends.

Documenting both successes and failures, integrating field evidence into the wider literature and aligning projects with national strategies from the outset turns isolated pilots into scalable models.¹⁷

Photo credit: © International Fund for Animal Welfare



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This document draws on conservation actions supported by the IUCN Save Our Species (SOS) African Wildlife Initiative funded by the European Union and implemented through the IUCN SOS programme.

The case studies presented here reflect the leadership, dedication and on-the-ground experience of frontline conservation actors and partners working to address human-wildlife conflict and promote coexistence across diverse landscapes in sub-Saharan Africa. They showcase the efforts and achievements of grant recipients and their partners and include the work of South Rift Association of Landowners (SORALO) and its collaboration with county governments and the Kenya Wildlife Service in Kenya; Integrated Rural Development and Nature Conservation (IRDNC), community conservancies and the Ministry of Environment, Forestry and Tourism in Namibia; Cheetah Conservation Botswana (CCB), community trusts and local authorities in Botswana; Biodiversity, Environment and Sustainable Development (BEDD) and park authorities in Cameroon; Elephant Connection and the Department of National Parks and Wildlife in Zambia; KopeLion, the Ngorongoro Conservation Area Authority and the Tanzania Wildlife Research Institute in Tanzania; and Contribution à la Gestion des Zones Humides (COGEZOH) in Niger community members around Parc W complex in Kouré and Harikanassou.



INTRODUCTION TO IUCN SOS AFRICAN WILDLIFE INITIATIVE

The International Union for Conservation of Nature (IUCN) is the world's oldest and largest global environmental organisation, founded in 1948 and composed of over 1,600 member organisations, including states, government agencies, NGOs and Indigenous Peoples' organisations. IUCN plays a critical role in shaping global conservation policies and is widely recognised for developing The IUCN Red List of Threatened Species™, a comprehensive inventory assessing the global conservation status of species. Through research, field projects, advocacy and the coordination of expert networks, IUCN works to conserve biodiversity, promote sustainable development and support communities in managing natural resources more effectively.

Photo credit: © Paul Funston



One of IUCN's flagship grant-making mechanisms is the Save Our Species (SOS) programme, launched in 2010. IUCN SOS seeks to secure the future of threatened species by partnering with local partners to implement conservation action. It supports a wide range of taxa – from charismatic megafauna like elephants and big cats to lesser-known reptiles, amphibians and plants – by partnering with local organisations, scientists and conservationists to implement effective, science-based solutions on the ground. The IUCN SOS programme not only addresses immediate threats to species survival, such as poaching and habitat destruction, but also strengthens long-term conservation outcomes through community engagement, education and policy influence.

Within this broader framework, the SOS African Wildlife Initiative (AWI) was created in 2017 to respond specifically to the alarming rate of biodiversity loss across the African continent. Funded primarily by the European Union, the AWI focuses on delivering conservation action where it is most urgently needed. Its main objectives include reducing direct threats to vulnerable species, strengthening the capacity of local conservation actors and improving knowledge and monitoring of key species and ecosystems. The initiative places strong emphasis on addressing critical drivers of biodiversity loss, including poaching, illegal wildlife trade, habitat degradation, human-wildlife conflict and the growing threat of invasive alien species.

Through a portfolio of 91 projects implemented across 34 African countries, the SOS AWI has supported interventions that enhance species recovery, protect habitats and foster coexistence between humans and wildlife. By collaborating with governments, local communities, NGOs and research institutions, the initiative contributes to the implementation of international biodiversity targets, including the Kunming-Montreal Global Biodiversity Framework and the Sustainable Development Goals (SDGs). Its targeted support to locally led, effective and scalable conservation solutions makes the SOS AWI a vital mechanism in the global effort to halt species extinction and secure a future for Africa's unique and irreplaceable biodiversity. Between 2017 and 2025, SOS AWI put about €5 million into human-wildlife conflict, funding 30 coexistence projects across 13 African countries, reaching over 500,000 people and helping protect more than 22 million hectares of habitat. Of these, 26 focused specifically on human-carnivore conflict, reflecting the disproportionate toll that large predators place on rural livelihoods and conservation outcomes.



Photo credit: © International Fund for Animal Welfare

“The IUCN SOS programme not only addresses immediate threats to species survival, such as poaching and habitat destruction, but also strengthens long-term conservation outcomes through community engagement, education and policy influence.”

A GROWING CRISIS: HUMAN-WILDLIFE CONFLICT IN A CHANGING LANDSCAPE

The IUCN SSC Human-Wildlife Conflict & Coexistence Specialist Group defines human-wildlife conflict as situations arising when wildlife presence or behaviour creates real or perceived, direct and repeated threats to human interests, resulting in tension among people and adverse effects on communities and wildlife alike. At its core, such conflict involves actual or perceived interactions between people and wildlife that generate disagreement among those affected. These situations are typically characterised by recurring incidents, intentional responses and deeper social or political dynamics, and frequently involve species of conservation significance (IUCN, 2023).

In sub-Saharan Africa, the challenge is particularly acute. Lions preying on livestock, elephants raiding crops and communities retaliating against wildlife are not isolated incidents, they are symptoms of deeper pressures on shared landscapes. As human populations expand and agricultural and grazing areas encroach further into wildlife habitats, interactions between people and wildlife are becoming more frequent, more costly and harder to manage. The result is a double burden: threatened species face increased pressures and habitat loss, while rural communities bear the immediate costs and reduced livelihood security. In this context, coexistence must be understood as both a conservation priority and a development imperative (Combes et al., 2023).

Rapid urbanisation is compounding these pressures, pushing settlements into former rangelands and park buffer zones, fragmenting habitat and intensifying human-wildlife contact at the urban edge. Sub-Saharan Africa is among the world's fastest-urbanising regions, with city populations projected to grow by one billion people by 2050 (Combes et al., 2023). In Kenya, for example, subdivision and settlement along the Kitengela corridor bordering Nairobi National Park have blocked wildlife migrations and increased conflict incidents as animals are confined to shrinking spaces and community tolerance declines (Wandaka & Kabii, 2019). In Ethiopia, spotted hyenas are present in high densities in several cities, including Addis Ababa, Harar and Mekelle,



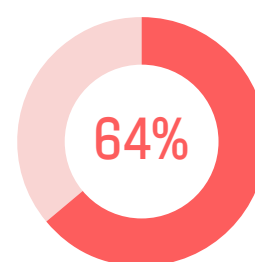
Photo credit: © Integrated Rural Development and Nature Conservation

scavenging urban waste and preying on livestock as their native food sources diminish. While coexistence between people and wildlife is possible even in peri-urban settings, proximity to human populations and livestock heightens conflict risks (Young et al., 2020). These conflicts are also deeply intertwined with broader socio-economic inequities. Many rural communities living adjacent to protected areas receive few direct benefits from wildlife conservation and when their livelihoods are harmed by wildlife, tolerance for conservation efforts erodes. This dynamic is particularly concerning for ecologically significant species that are critical to ecosystem balance yet frequently targeted in retaliatory killings.

The urgency of this challenge is underscored by the World Bank Global Perception Survey (2023), which highlights human-wildlife conflict as a growing development and conservation concern. Nearly two-thirds (64%) of responding governments classified it as a “major” or “serious” issue, with particularly high levels of concern among low-income countries (86%) and African respondents (72%). A strong consensus also emerged that the situation is deteriorating: 73% of countries reported that human-wildlife conflict is increasing, a perception most pronounced among low-income countries (86%) and consistently reflected across lower-middle- and upper-middle-income countries (74% and 78%, respectively). These findings reinforce the need to address human-wildlife conflict not only to protect wildlife, but also to safeguard human lives, food security, livelihoods and public confidence in conservation (World Bank, 2023).

Human-wildlife conflict is not simply a matter of negative encounters between people and animals. It is a complex social-ecological interaction shaped by governance systems, land use change, inequality, cultural values and economic vulnerability. Addressing it effectively requires moving beyond reactive responses to isolated incidents and instead applying a structured process: diagnosing the underlying drivers of conflict, engaging affected stakeholders in co-designing context-specific solutions, prioritising prevention over compensation and embedding actions within accountable institutional frameworks (Combes et al., 2023).

Practical measures such as predator-proof enclosures, early warning systems, rapid response teams and livelihood diversification are most effective when paired with inclusive dialogue, transparent decision-making and ongoing monitoring. Conflict must therefore be treated not as a wildlife problem alone, but as a shared management challenge requiring coordinated, adaptive and equity-based approaches to foster long-term coexistence.



! Nearly two-thirds of responding governments classified human-wildlife conflict as a “major” or “serious” issue.!

MANAGING HUMAN-WILDLIFE CONFLICT: FIELD APPROACHES FROM THE AFRICAN WILDLIFE INITIATIVE



The SOS African Wildlife Initiative approaches human-wildlife conflict through a species-habitat-people lens, recognising that conflict in Africa rarely stems from a single cause. It arises instead where threatened species, community livelihoods and mounting pressure on land intersect, and it is in that intersection that durable, integrated solutions must be found. Practitioners across the continent draw on a broad range of approaches that are most effective when combined rather than applied individually.

Photo credit: © Monica Dalmasso

At the preventive end sit measures that reduce the opportunity for conflict to occur, using predator-proof enclosures, reinforced bomas and kraals, livestock guarding dogs and improved herding. Where conflict cannot be prevented outright, early warning and rapid response systems that frequently combine GPS or satellite tracking with alert networks and trained community responders allow communities to act quickly, even in remote or resource-constrained settings. Physical barriers and non-lethal deterrents such as electrified fencing and solar lighting hold the line along defined boundaries, while population and conflict monitoring, coupled with spatial planning, protect wildlife corridors and inform land-use decisions. Beyond these field tools, compensation and grievance mechanisms address the economic costs that drive retaliation, livelihood diversification eases pressure on contested landscapes and habitat restoration confronts the ecological roots of conflict directly.

Increasingly, projects also worked at the policy level, engaging county and national authorities to embed coexistence priorities, mapped corridors and conflict data within land-use plans, species action plans and national conflict-management strategies, so that field gains could be anchored in the frameworks that govern land and wildlife management over the long term. Underpinning all of these approaches is the engagement of the communities themselves: their traditional knowledge, local governance structures and participatory monitoring are what make surveillance, response, policy influence and long-term stewardship possible.

This report documents seven AWI-supported projects that combined these approaches into integrated packages tailored to local need rather than relying on any single tool, layering locally led prevention and rapid response, crop and livestock protection, community-linked early warning and habitat and corridor restoration with livelihood diversification, inclusive governance and sustained policy engagement. This last dimension features prominently across the case studies: in Kenya, mapped carnivore corridors and coexistence priorities were embedded within county and ecosystem land-use plans; in Namibia, field data and lessons directly shaped the National Human-Lion Conflict Management Plan and the Kunene Human-wildlife Coexistence Strategy; in Botswana, sustained policy advocacy helped secure 18,000 km² of habitat from conversion to grazing land; and in Tanzania, monitoring data from community guardian networks fed into the national Lion Conservation Action Plan.

Projects invested heavily in awareness-raising and local capacity-building alongside this institutional engagement, on the conviction that coexistence endures only when the people living closest to wildlife are equipped and empowered to lead it, and when their efforts are recognised within the wider policy frameworks that govern land and wildlife over time. Applied with attention to each local context, this integrated, policy-connected approach allowed AWI to pursue conflict mitigation that was ecologically sound, socially grounded and realistic about the conditions on the ground.

The interventions that follow show how this integrated approach, combining field-level prevention with policy engagement, played out across a range of ecological and social settings.

Underpinning all of these approaches is the engagement of the communities themselves: their traditional knowledge, local governance structures and participatory monitoring are what make surveillance, response, policy influence and long-term stewardship possible!'



Photo credit: © Kope Lion

3.1. Case study 1: Communities and connectivity in Kenya's Southern Rift Valley

DEFINING THE CHALLENGE

The project aimed to address escalating human-carnivore conflict and habitat fragmentation in Kenya's Southern Rift Valley, a key corridor linking the Maasai Mara-Serengeti and Amboseli-Tsavo-Mkomazi ecosystems. Retaliatory killings of lions, cheetahs and African wild dogs were increasing due to livestock predation, poisoning, weak conflict response mechanisms and declining community tolerance towards wildlife. At the same time, expanding agriculture, fencing and other land-use changes were disrupting critical habitats and movement corridors. Pastoralist communities had limited capacity and institutional support to manage conflict, while outdated information on carnivore populations and habitat use constrained effective conservation planning and policy responses.



Photo credit: © South Rift Association of Landowners

FROM APPROACH TO ACTION

Led by the South Rift Association of Landowners (SORALO), the project anchored its work in the community structures and governance systems already operating across the landscape, ensuring that every intervention was owned locally and built to last.

- 1. Assessing the landscape and building frontline capacity.** Implementation opened with community engagement and baseline assessments: conflict hotspots were mapped, the scale of livestock predation quantified and community perceptions of wildlife systematically documented, grounding every later decision in local realities. This diagnostic work directly shaped where the project placed its first responders. Community scouts and Carnivore Liaison Officers were recruited and trained from the highest-conflict villages, establishing a presence communities could call on directly to address incidents, monitor carnivore movements, raise alerts and mediate after predation events, before any other intervention was introduced.

- 2. A shared and coordinated response system.** As the local response network began operating, the project turned to fixing the fragmented, uncoordinated responses that had undermined earlier efforts. Community wildlife committees were established as liaison platforms between herders and formal authorities and standardised multi-agency training brought county officials, Kenya Wildlife Service rangers and NGO partners into joint working groups aligned around shared protocols.
- 3. Layering in monitoring, deterrence and attitude change as evidence and trust grew.** Two mobile coexistence teams began systematic carnivore monitoring through capture-recapture surveys, occupancy assessments and spatial mapping of fences, farmland and homesteads, closing the data gap. Deterrence measures were also put in place: predator-proof bomas and improved herding provided communities with early, tangible evidence that conflict could be managed. Sustained community dialogue and peer exchange reinforced and extended the shift in attitudes that formal training alone could not secure.
- 4. Embedding the results in formal land-use planning to enhance corridor connectivity.** In the final phase, the accumulated population data and spatial mapping were fed into county and ecosystem plans. Communities, county representatives and national agencies were convened to embed mapped corridors and coexistence priorities within official land-use frameworks and data-sharing arrangements with research institutions were put in place so the evidence underpinning carnivore connectivity would continue to be maintained after the project ended.

RESULTS AND OUTCOMES FOR SPECIES, PEOPLE AND HABITAT

Faster response times to conflict incidents were achieved through the deployment of carnivore liaisons and coordinated prevention and response mechanisms at landscape scale. Faster response directly reduced the risk of retaliatory killings that threaten lion, cheetah and wild dog populations: for communities, there was a reduction in livestock losses and greater confidence in formal support systems.

A workforce of 103 local personnel made up of carnivore liaisons and community rangers was engaged and equipped, with training reaching over 450 community members. Targeted technical training was delivered to 64 liaisons and 39 game scouts across eight communities, 12 communities received dedicated conflict mitigation strategies and government response capacity was strengthened in parallel through training for 25 county and national officers and 10 Kenya Wildlife Service rangers. Communities and stakeholders now have the skills to manage conflict proactively, while carnivores benefit from reduced persecution pressure across a landscape critical to their survival. The liaison network also generated local jobs, delivering direct economic returns to the communities living alongside wildlife.

Eight community working groups and standardised response protocols were established across the landscape, creating the institutional architecture for consistent, multi-stakeholder coexistence management.

Habitat connectivity that carnivores depend on is now formally recognised and protected within county-level land-use frameworks, with affected communities directly involved in shaping the plans. This was achieved through two mobile monitoring teams tracking key populations of lions (50–65 individuals), cheetahs (15–30) and wild dogs (25–40) across nearly one million hectares, combined with comprehensive spatial mapping of fences, agricultural land and 35,000 homesteads. These efforts helped identify critical habitats and movement corridors that shaped county-level spatial planning.

Improved access to safety information and human-wildlife conflict support services reached 17,325 community members, reducing exposure to risk, strengthening household resilience and building the sustained tolerance essential to the long-term survival of lions, cheetahs and wild dogs across this critical landscape.



Photo credit: © South Rift Association of Landowners

3.2. Case study 2: Harnessing technology and local leadership to reduce human–lion conflict in Namibia

DEFINING THE CHALLENGE

Over two decades, the lion population in Namibia's Kunene Region recovered from around 20 individuals in 1997 to approximately 180 by 2015, expanding its range from 7,000 km² to more than 40,000 km². While this reflected the success of Namibia's community conservancy model, it also increased human–lion conflict. Livestock predation became more frequent and retaliatory killings emerged as the leading cause of lion mortality, accounting for 80% of adult and all subadult lion deaths. An extended drought from 2013 further intensified conflict by reducing wild prey populations by up to 60%, forcing lions to rely more heavily on livestock.

The impact on local communities was severe. Pastoralism is the primary livelihood in Kunene, where poverty levels are high and livestock losses have significant economic consequences. Predators account for around 30% of cattle losses, with lions responsible for nearly 20%, placing additional pressure on households and fuelling cycles of retaliation against wildlife (Heydinger et al., 2019).



Photo credit: © Integrated Rural Development and Nature Conservation

FROM APPROACH TO ACTION

The project was led by Integrated Rural Development and Nature Conservation (IRDNC), whose approach aimed at promoting sustainable coexistence, working closely with those affected by conflict:

- 1. Diagnosing the conflict and building community-based response capacity.** Implementation began with baseline assessments that mapped conflict hotspots, analysed lion movement patterns and identified priority conservancies, directing resources to where risk to both communities and lions was greatest. This diagnostic phase ran

alongside the recruitment and training of Lion Rangers and Human-Wildlife Support (HWS) teams from within these conservancies, equipped with skills in lion ecology, conflict mitigation, Spatial Monitoring and Reporting Tool (SMART) monitoring, law enforcement and first aid. Farmers were engaged directly in patrols and lion collaring from the outset enabling local ownership and trust in the response network before it went live.

2. Deploying early warning technology paired with practical prevention.

With frontline teams and priority areas identified, the project introduced an early warning system that linked GPS and Radio Frequency Identification collared lions to alert towers at high-risk farms, shifting conflict management from reactive to proactive. Recognising that technology alone would not change outcomes, this was paired with reinforced kraals, night-time corralling and supervised grazing, and with community outreach that taught farmers how to interpret alerts and act on them. This ensured warnings translated into protective action on the ground.

3. Sustaining field response and adapting as conflict intensified.

Once the warning system was operational, Lion Rangers and HWS teams maintained a continuous presence across the conservancies responding to alerts, investigating predation incidents and applying deterrence or, where necessary, translocation. Participatory patrols and local radio programmes kept community dialogue and tolerance-building going. This steady-state model was tested when an extended drought drove conflict beyond initial projections: IRDNC responded by strengthening rapid response mechanisms, intensifying community engagement and expanding coordination with the Ministry of Environment, Forestry and Tourism (MEFT) to manage lions dispersing into farmland, keeping the model responsive to changing conditions rather than fixed to its original design.

4. Integration within national policy frameworks. Monitoring data, operational experience and lessons from across 30 conservancies were consolidated and shared with MEFT, WWF and the Northwest Lion Working Group. This sustained collaboration aligned field interventions with Namibia's National Human-Lion Conflict Management Plan and the Kunene Human-Wildlife Coexistence Strategy, institutionalising the approach and ensuring community experience would continue to shape national conservation policy after the project ended.

RESULTS AND OUTCOMES FOR SPECIES, PEOPLE AND HABITAT

Livestock predation in key hotspot conservancies declined by more than 50% during the project period, with reported small-stock losses falling from 99 animals in 2020–2021 to 19 in 2021–2022. This reduction resulted from the combined impact of the early warning system, reinforced kraals, improved herding practices and the continuous support provided by Lion Rangers and HWS teams. Fewer livestock losses reduced economic hardship for pastoralist households and lowered the pressures that often triggered retaliatory action against lions.

Photo credit: © Integrated Rural Development and Nature Conservation



The early warning system achieved a 70–75% success rate in preventing lion attacks on livestock, contributing to a substantial decline in retaliatory killings. Suspected farmer-caused lion deaths fell from 12 in 2018–2019 to just three confirmed incidents in 2021–2022. More than 50 lions were fitted with tracking collars, enabling proactive monitoring and management by IRDNC and the MEFT. This helped safeguard key prides and breeding females, supporting the long-term viability of Namibia’s globally significant desert-adapted lion population.

A network of 111 Lion Rangers and HWS team members from 30 conservancies was trained and deployed, establishing a landscape-scale frontline response to human–lion conflict. Communities became active participants in lion monitoring, kill verification and conflict mitigation, strengthening local ownership of conservation efforts and building the capacity needed to sustain coexistence over the long term.

The project’s success demonstrated the effectiveness of combining technology-enabled monitoring with community-led conservation. The early warning system was expanded into neighbouring conservancies and incorporated into national coexistence initiatives, providing a tested and scalable model for reducing conflict while protecting carnivore populations.

Evidence and lessons generated through the project directly informed Namibia’s National Human–Lion Conflict Management Plan and the Kunene Human–Wildlife Coexistence Strategy, strengthening the role of community-led approaches within national conservation policy. The project also contributed to the development of a payment-for-ecosystem-services model through the Lion Ranger Programme, creating a mechanism to link conservation outcomes with community benefits and tourism revenues, thereby reinforcing incentives for coexistence.

3.3. Case study 3: Enhancing community resilience and coexistence along the Kalahari in Botswana

DEFINING THE CHALLENGE

Botswana hosts around 30% of the world's cheetahs, but an estimated 80% live outside protected areas, where they frequently come into conflict with livestock farmers. This challenge is particularly pronounced in the Ghanzi District, a key wildlife corridor linking the Kgalagadi Transfrontier Park, Central Kalahari Game Reserve and the Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA). Human-carnivore conflict is driven by a combination of overgrazing, land degradation, declining wild prey populations and climate-related pressures, which increase livestock predation by carnivores. For Kalahari San and Bakgalagadi pastoralist communities, limited livelihood alternatives and weak conflict-mitigation support make livestock losses especially difficult to absorb, often leading to retaliatory killings that threaten cheetah populations and perpetuate a cycle of ecological and economic insecurity.

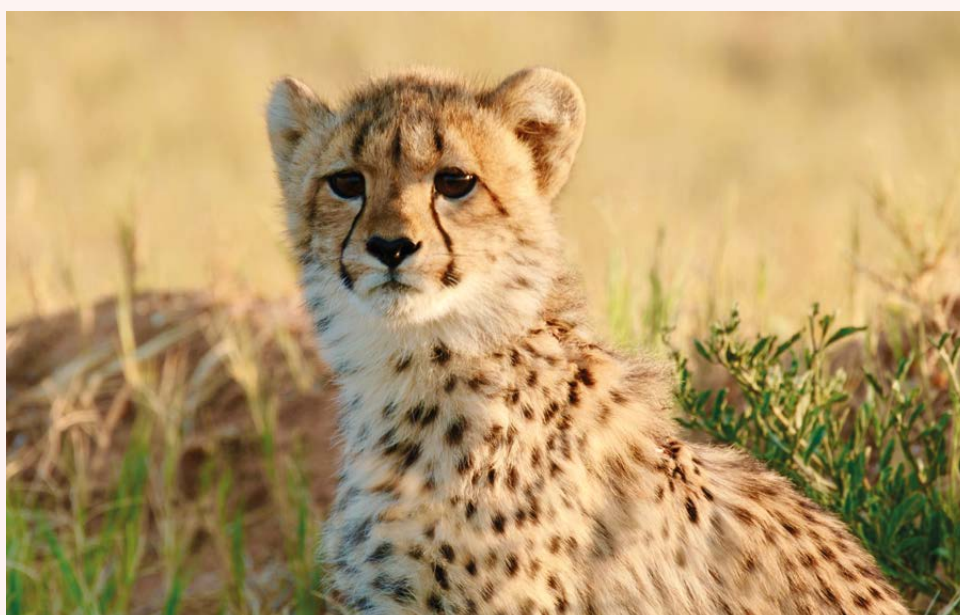


Photo credit: © Cheetah Conservation Botswana

FROM APPROACH TO ACTION

The project was led by Cheetah Conservation Botswana (CCB), which recognised from the outset that reducing conflict required addressing both its immediate drivers and its underlying causes:

- 1. Community engagement and institutional partnerships that grounded the response in local priorities.** In 2020, consultations across Bere, Kacgae and Kanagas identified where conflict was concentrated and what local priorities should shape the design of interventions. These consultations ran alongside early partnerships with the Department of Wildlife and National Parks, the District Community Based Natural Resources Management (CBNRM) Technical Advisory Committee (TCA) and local community trusts, anchoring the project within existing national conservation and resource management frameworks from the outset.

2. **Protecting livestock from predation through improved practices, non-lethal deterrence and livelihood diversification.** Building on this diagnostic phase, CCB worked directly with farmers to improve livestock management, establishing a farmers' network, mobile training workshops and on-site farm visits, and setting up demonstration farms to model improved kraaling and herding systems. This was paired with a Livestock Guarding Dog programme deploying Tswana-breed dogs across conflict-prone farms as a non-lethal deterrence measure and with information and awareness materials that reinforced coexistence messaging and farmer-to-farmer communication. Economic vulnerability was identified as a core driver of conflict during the 2020 consultations. This enabled the project to introduce livelihood diversification activities that target both men and women, lowering households' dependence on livestock and easing the economic loss.



Photo credit: © Cheetah Conservation Botswana

3. **Building institutional and social capacity for coexistence to outlast the project.** Alongside these field measures, CCB invested in strengthening community trusts in Bere and Kacgae, building the leadership, governance and strategic planning capacity needed for communities to manage conservation decisions independently. Conservation education ran in parallel through school outreach programmes and educational materials embedding coexistence messages across generations.
4. **Securing the habitat that site-level gains depended on and consolidating lessons learned.** CCB engaged government authorities on land-use planning to prevent the conversion of critical wildlife habitat and secure formal recognition of the Western Kalahari's ecological corridors within national frameworks, addressing the habitat dimension of cheetah survival that farm-level interventions alone could not secure. The project concluded with a comprehensive synthesis of lessons across all of its interventions, informing future conservation approaches and positioning CCB's coexistence model within national discussions on predator management.

RESULTS AND OUTCOMES FOR SPECIES, PEOPLE AND HABITAT

Livestock predation among participating farmers decreased by 86%, while overall human-wildlife conflict reports fell by 26% over the project period. These results were achieved through a combination of improved kraaling systems, strengthened herding practices and the deployment of 73 Tswana-breed livestock guarding dogs across farms in conflict-prone areas.



Photo credit: © Cheetah Conservation Botswana

CCB worked directly with 396 farmers, representing 82% of all farmers in the project area, to improve livestock husbandry and introduce drought-resilient fodder production. A demonstration farm was established and three model farmers were trained to lead peer learning on kraal design and herd management. The Farmers Network, comprising 136 members, facilitated 14 mobile workshops and 51 farm visits, providing hands-on training that strengthened farmer confidence and equipped participants with the skills needed to maintain improved practices independently.

The project enhanced the capacity of local institutions to support both conservation and community development. Two community trusts in Bere and Kacgae, each comprising 8 to 10 board members, received training in leadership, governance and strategic planning, enabling them to take greater ownership of local decision-making processes.

Partnerships with organisations including Conserve Global and the District CBNRM Technical Advisory Committee further strengthened institutional collaboration and helped embed human-wildlife conflict mitigation within local governance structures, improving the long-term sustainability of project outcomes.

To address economic vulnerability, a key driver of human-wildlife conflict, the project supported 137 community members, representing 11.5% of the local population, to develop alternative livelihood opportunities. Training was provided in craft production, veld product harvesting, catering and wildlife tracking.

These activities enabled the establishment of new enterprises, including ecotourism campsites, cultural heritage trails and veld product value chains, notably ventures based on devil's claw and Kalahari melon seed products. By diversifying income sources, the project strengthened household resilience and reduced reliance on livestock as the sole means of livelihood.

Environmental education initiatives reached 667 students through 28 school talks and activities, complemented by the nationwide distribution of more than 763 copies of *Xabe The Cheetah Hero* to schools across Botswana.

In Kacgae, the community-led preschool provided early childhood education to 36 children annually while creating employment for six local women. Beyond its educational function, the preschool served as a community hub for conservation awareness, learning and livelihood development. Together, these initiatives helped foster a culture of conservation stewardship among children and young people, laying the foundation for long-term community ownership of conservation efforts.

CCB's advocacy contributed directly to the protection of 18,000 km² of wildlife habitat in the Okwa Valley by successfully preventing its conversion into grazing land. This outcome preserved a critical ecological corridor connecting the Central Kalahari Game Reserve and Kgalagadi Transfrontier Park, maintaining landscape-scale connectivity essential for cheetahs and other large carnivores.

At the national level, engagement with the Department of National Museums and Monuments and the Ministry of Environment and Tourism strengthened CCB's role as a leading voice on predator management and human-wildlife coexistence. This ensured that lessons from the Western Kalahari informed conservation policy discussions and contributed to broader efforts to promote coexistence across Botswana.



Photo credit: © Cheetah Conservation Botswana

3.4. Case study 4: Rebuilding coexistence for a re-emerging lion population in Cameroon

DEFINING THE CHALLENGE

Few conservation situations are as precarious as the return of a predator to a landscape from which it has long been absent. In and around Mpem-Djim National Park in Cameroon, a small and vulnerable lion population had recently reappeared after decades of local extinction, and its survival was immediately threatened by a convergence of pressures that the park was ill-equipped to manage.

Frequent livestock attacks had generated significant economic losses for pastoralist communities, fuelling hostility and raising the risk of retaliatory killings before the population had any opportunity to establish itself. Seasonal cattle encroachment through transhumance further intensified competition between wildlife and livestock, pushing lions into closer proximity with human settlements. Within the park itself, illegal hunting, logging and bushfires were depleting prey species and degrading the critical habitats on which the recovering population depended. The situation was compounded by a near-total absence of reliable data: the size, genetic origin and movement patterns of the lion population were unknown, severely limiting the capacity for informed conservation planning.

Institutional capacity was equally constrained. Park authorities and eco-guards lacked adequate training, equipment and logistical support to monitor lions effectively or enforce protection measures across the park's territory. Without the ability to track lions, respond to conflict incidents, or communicate reliably with surrounding communities, the conditions for retaliatory killing and unchecked persecution were firmly in place.



FROM APPROACH TO ACTION

The project was led by Biodiversity, Environment and Sustainable Development (BEDD), which designed an integrated response recognising that securing the lions' survival depended as much on community trust as on field protection.

- 1. Mobilising the first line of response.** The project began in mid-2019 by identifying and monitoring the two male lions that had recently migrated into the area, likely from Faro National Park. Eco-guards were trained and deployed with smartphones, compasses and GPS tools to track them, while local communities, pastoralists and forest users were encouraged to report sightings, therefore building the foundation on which everything that followed would depend on.
- 2. Deepening ecological understanding to target the drivers of conflict.** The project expanded its efforts through a comprehensive prey inventory using distance-sampling methods and geographic information system (GIS) mapping across the park and its buffer zones. This assessment explained why lions were moving towards settlements and livestock, giving the project the context it needed to design interventions around the actual drivers rather than the symptoms, while eco-guards received further training, equipment and rations to extend their operational reach.
- 3. Scaling community engagement and introducing practical livestock protection.** With field operations strengthened and ecological data in hand, the project intensified its community-facing work. Sensitisation campaigns delivered through village meetings, posters and group discussions helped residents understand lion behaviour and adopt non-lethal deterrence, while the construction of a demonstration boma in Ndimi village – built from affordable, locally available materials – gave pastoralists a practical means of securing livestock overnight, addressing both the attitudes and the economic vulnerabilities driving retaliation.
- 4. Building communication between communities and park authorities.** Running alongside these measures, the project established reliable reporting channels linking pastoralists, traditional leaders, government agencies and park management, so that lion sightings and conflict incidents could be communicated promptly and acted on quickly, shortening the window in which retaliatory action might otherwise occur.

RESULTS AND OUTCOMES FOR SPECIES, PEOPLE AND HABITAT

For a population returning from local extinction, Mpem-Djim National Park now has, for the first time, systematic monitoring data confirming the presence of two male lions, a modest number, but a foundational result that gave park management the baseline needed to plan targeted interventions, track population trends and make the case for continued conservation investment in the region. This was achieved through the deployment of trained eco-guards and the activation of community reporting networks, together generating the accurate, ongoing knowledge of the lions' presence and movement that everything else in the project's response depended on.

Livestock losses fell by 80–95% over the course of the project, from 80–90 cattle killed in early 2019 to just one reported incident near the project's end. This was achieved through the combination of community sensitisation campaigns, the introduction of the demonstration boma and more reliable communication channels between pastoralists and park authorities. For communities, it meant measurable economic relief and a growing recognition that conflict was manageable rather than inevitable; for lions, it meant a significant reduction in the retaliatory pressure that had been the most immediate threat to their survival.

Patrol frequency rose by 45%, alongside a marked improvement in the quality of field data collection, as targeted training and equipment provision transformed eco-guard capacity. This strengthened anti-poaching enforcement, improved responsiveness to conflict incidents and extended effective coverage across key habitats within the park. The maps of prey distribution, human pressure points and patrol routes generated in the process gave the park warden the spatial intelligence needed for more targeted, efficient management and a more effectively protected habitat for lions and other species.

Real-time reporting of lion sightings and conflict incidents is now possible, thanks to improved communication channels between communities and park authorities, enabling faster interventions that shrink the window for retaliatory action. Awareness of lion behaviour, coexistence practices and non-lethal deterrence improved substantially across surrounding communities, with over 2,500 local residents and pastoralists reached through sensitisation campaigns. The demonstration boma in Ndimi was well received as a practical, affordable model for preventing night-time predation that pastoralists could realistically adopt and maintain on their own.



3.5. Case study 5: Rebuilding a park boundary to protect people and elephants in Zambia

DEFINING THE CHALLENGE

Human-elephant conflict and the associated risks to both people and elephants have increased in Mosi-oa-Tunya National Park, in Zambia. The main threat arises from elephants leaving the park and entering residential areas due to the collapse of the park's electrified boundary fence, which was damaged after severe power cuts caused by drought-related hydroelectric shortages.

With the fence no longer functioning, elephants have gained unrestricted access to community gardens and residential zones, resulting in frequent crop raids, property destruction and human injuries or deaths. This situation has fuelled hostility towards wildlife and triggered retaliatory killings. At the same time, economic hardship caused by the COVID-19 pandemic and the collapse of tourism has intensified poaching pressures, as local residents facing loss of income turn to illegal hunting for subsistence or profit.

These overlapping crises have created an urgent conservation and human safety emergency. Without immediate intervention, continued elephant incursions threaten both community livelihoods and the survival of the park's elephant population, which forms part of the wider Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA), home to over half of Africa's remaining elephants.



Photo credit: © Elephant Connection

FROM APPROACH TO ACTION

The project was led by Elephant Connection, which recognised that restoring safety for both people and elephants in the Mosi-oa-Tunya landscape required more than physical infrastructure. Lasting solutions demanded inclusive planning, institutional investment and community ownership, ensuring that whatever was built could be sustained long after the project concluded.

- 1. Grounding the intervention in community and institutional consensus.** When the project launched in August 2020, the first priority was consultation, not construction. Structured consultations with the Department of National Parks and Wildlife (DNPW), local leaders and residents of Dambwa identified exactly where along the boundary conflict was most frequent and severe, and built the trust without which a long-term infrastructure solution could not be owned or maintained.
- 2. Moving from consultation to construction of the physical barrier.** With priorities mapped and stakeholder confidence established, the project moved into technical design: site surveys determined fence alignment, materials and power supply, with solar technology deliberately chosen to address the drought-induced grid outages that had caused the original fence to fail. The restored five-kilometre boundary fence incorporated an electric restraining line and mesh wire, a high-tensile, pre-fabricated galvanised wire fencing system designed to withstand high-impact forces without snapping, absorbing animal collisions safely, reducing wildlife injury risks.
- 3. Building institutional capacity for maintenance in parallel with construction.** Rather than handing over unfamiliar infrastructure at the end, the project trained DNPW staff and community liaison officers throughout the build with a technical supervisor providing hands-on guidance in monitoring, voltage testing and repair, ensuring operational knowledge was transferred in real time as the fence went up.

RESULTS AND OUTCOMES FOR SPECIES, PEOPLE AND HABITAT

Elephant intrusions into the Dambwa community zone have been entirely halted, with post-installation monitoring by DNPW recording a 100% reduction in conflict incidents along the fenced boundary. This was achieved through the installation of the five-kilometre solar-powered electrified fence. For the approximately 600 residents living along the park boundary, the result was transformative: farmland and homesteads became safe to use again, night-time distress caused by elephant presence was eliminated and communities could return to normal agricultural activity without fear of crop destruction or physical harm. For elephants, the defined boundary reduced the dangerous proximity to human settlements that had triggered retaliatory killings, giving the population a more secure interface between park habitat and the surrounding landscape.

DNPW has assumed complete, independent ownership of the fence's daily maintenance and performance monitoring, securing its effectiveness well beyond the project's lifetime. This was achieved through the transfer of operational knowledge to ten DNPW officers, who received hands-on training in fence monitoring, voltage testing and repair techniques, ensuring those responsible for the fence understood it fully before the project concluded.

A critical boundary zone supporting a local elephant population of approximately 150 individuals has been secured as part of the wider Kavango-Zambezi Transfrontier Conservation Area (KAZA TFCA), home to over half of Africa's remaining elephants. This was achieved through the physical fence and through the reduction in human-wildlife tension, removing the conditions under which retaliatory killing and poaching pressure had been intensifying.

Understanding of coexistence and accountability for the fence as shared infrastructure have grown across the communities immediately surrounding Mosi-oa-Tunya, while the wider conservation community now has a documented, cost-effective, solar-powered conflict prevention model applicable to other urban-adjacent protected areas across Africa facing similar pressure from expanding settlement and infrastructure. This was achieved through community meetings, on-site signage and social media communications that reached an estimated 5,000 people.



Photo credit: ©
Elephant Connection

3.6. Case study 6: Securing lion corridors through community guardian networks and corridor connectivity in Ngorongoro, Tanzania

DEFINING THE CHALLENGE

For generations, lions have preyed on livestock in the Ngorongoro Conservation Area (NCA), leading to economic losses and fuelling negative perceptions among herders. This has resulted in a cycle of conflict, with herders spearing or poisoning lions to protect their cattle, threatening both the species' survival and ecosystem balance.

In addition to direct persecution, habitat fragmentation and the loss of wildlife corridors between the NCA and the Serengeti ecosystem exacerbate the problem by limiting lion movement and gene flow. Traditional grazing practices and expanding human settlements further increase the overlap between livestock and predator ranges, heightening conflict risk.



Photo credit: © Kope Lion

FROM APPROACH TO ACTION

- 1. Establishing a guardian network.** When the project launched in January 2021, consultations with the Ngorongoro Conservation Area Authority (NCAA), village leaders and elders shaped the deployment of Ilchokuti (lion guardians) recruited from Maasai and Datoga communities who were deployed in village hotspots. By mid-2021, KopeLion had trained and equipped these guardians with GPS devices and field kits and begun lion-collaring, building the movement database the rest of the model would run on.
- 2. Enabling real-time monitoring and reducing livestock vulnerability.** As guardians began operating, continuous GPS and telemetry monitoring of collared lions was paired with first aid and veterinary kits so Ilchokuti could respond to and document depredation events, while communities were supported to improve boma design and herding practices using durable, locally available materials. This approach combined rapid response with reduced livestock vulnerability.

- 3. Scaling geographically while deepening cultural engagement.** With the model proving effective, the project expanded into new conflict-prone villages including Kakesio, Olbalbal and Oloirobi, and in early 2022, formally extended into buffer zones between Ngorongoro and Maswa Game Reserve. Culturally relevant films in Maa and Datoga, community film nights and school engagement scaled alongside this geographic expansion, reinforcing coexistence messages across a wider area and across generations.
- 4. Consolidating corridor protection and long-term community ownership.** Throughout, the project worked with communities and authorities to identify and safeguard lion movement corridors linking the Ngorongoro highlands to surrounding protected areas. In the final phase, joint planning and evaluation meetings with communities, the NCAA and conservation partners consolidated this into a model local teams were equipped to sustain monitoring, conflict mitigation and education independently.

RESULTS AND OUTCOMES FOR SPECIES, PEOPLE AND HABITAT

No retaliatory lion killings were recorded during the reporting period and the local lion population began to stabilise. This was achieved through the deployment of 30 locally recruited Ilchokuti rangers, who conducted daily monitoring of lion movements, responded swiftly to livestock predation incidents and facilitated dialogue between herders and conservation authorities. By selecting rangers from within the communities they served, KopeLion grounded conflict response in trust and local legitimacy rather than external enforcement, giving community members an accessible, credible first point of contact following predation events.

Livestock losses to lions and hyenas declined across the project area. This was achieved through a combination of interventions: hundreds of bomas were reinforced using predator-resistant designs built from durable, locally available materials, creating physical barriers that significantly reduced night-time predation, the period of greatest vulnerability for penned livestock. This was complemented by hands-on training for herders across more than 12 villages in improved grazing routes, daytime vigilance and rapid response protocols, and reinforced by a real-time communication channel enabled by EarthRanger – a wildlife monitoring and protection platform consolidating data from GPS collars, ranger patrols and field sensors – that allowed Ilchokuti to alert herders the moment collared lions approached grazing areas or settlements, giving households the critical window needed to move livestock to safety.

A recognised 304 km² corridor now enables lions to move safely across community lands between the Ngorongoro Highlands and the Serengeti-Maswa ecosystem. This expansion was accomplished through continuous lion monitoring combined with sustained, long-term relationship-building with local communities. For carnivores, restored corridor connectivity supports genetic exchange between subpopulations, a critical factor in ensuring the long-term viability and health of northern Tanzania's lion population.



Photo credit: © Kope Lion

Community attitudes towards lions shifted measurably, with pre- and post-project surveys showing lions increasingly viewed as symbols of cultural pride and identity rather than threats to be eliminated. This was achieved through sustained community engagement that reached over 2,500 people via 27 community film nights and outreach sessions delivered in Maa and Datoga, alongside school programmes and exposure visits to Ngorongoro Crater involving more than 200 students.

Monitoring data on lion movements and conflict hotspots directly informed regional planning for carnivore conservation and human-wildlife coexistence under Tanzania's broader Lion Conservation Action Plan. This was made possible through sustained collaboration with the NCAA, the Tanzania Wildlife Research Institute (TAWIRI) and local governance bodies. Across northern Tanzania, project-generated data has led to more informed management decisions, with project lessons now integrated into national frameworks that will continue to guide carnivore conservation.

3.7. Case study 7: Integrated species recovery, habitat restoration and livelihoods in Niger

DEFINING THE CHALLENGE

Across rural Niger, communities living in proximity to wildlife habitats experience persistent and intensifying human-wildlife conflict. Expanding agriculture, livestock grazing and fuelwood collection increasingly overlap with wildlife ranges, particularly around the Parc W complex and in the giraffe landscapes of Kouré and Harikanassou. This overlap has led to frequent crop damage by giraffes, livestock predation by large carnivores and retaliatory responses from affected communities.

Between 2021 and 2023, 418 incidents of giraffe-related crop damage were formally recorded, illustrating the scale and recurrence of conflict. In the Parc W buffer zone, predation by lions, hyenas and leopards caused significant livestock losses, directly undermining household incomes and reinforcing negative perceptions of wildlife. At the same time, heavy reliance on protected area resources, particularly baobab leaves and forage, contributed to habitat degradation, further intensifying wildlife movements into community lands.

These combined pressures threatened both the survival of threatened species and the socio-economic resilience of local communities, underscoring the urgent need for an integrated approach that simultaneously addresses ecological integrity, livelihood security and conflict mitigation.

FROM APPROACH TO ACTION

Implemented by Contribution à la Gestion des Zones Humides (COGEZOH) across the Parc W complex and adjacent giraffe landscapes, the project was built on the premise that neither wildlife nor communities could thrive without simultaneous investment in conflict mitigation, livelihood security, conservation education and habitat restoration.

- 1. Participatory diagnosis feeding a community-based monitoring network.** The project began by mapping conflict hotspots and priority livelihood needs. This baseline directly shaped the recruitment and training of community animators and informants, who built a decentralised network collecting and transmitting conflict data, generating conflict intelligence from those closest to it rather than relying on infrequent external surveys.
- 2. Building capacity and awareness across generations.** Local capacity-building ran alongside large-scale awareness campaigns reaching farmers, herders, women, youth and local leaders, while school-based programmes and youth engagement embedded conservation values early, recognising that attitude change is most durable when it takes root across generations.
- 3. Deploying conflict mitigation, livelihood diversification and habitat restoration together.** Field implementation combined improved livestock protection practices with alternative income activities –

beekeeping, baobab leaf cultivation and fodder production – that reduced households' dependence on unsustainable harvesting inside protected areas, while native tree planting and assisted natural regeneration proceeded concurrently to address the ecological drivers of conflict, particularly forage scarcity and land degradation.

- 4. Adapting through continuous monitoring under operational constraints.** Incident data from community networks were reviewed regularly with local authorities and park managers, enabling real-time learning and course correction to targeting and mitigation measures. This adaptive approach proved particularly critical in responding to operational constraints linked to insecurity and restricted field access, keeping the model workable as conditions on the ground shifted.



Photo credit: © Contribution
à la Gestion des Zones
Humides du Niger

RESULTS AND OUTCOMES FOR SPECIES, PEOPLE AND HABITATS

Giraffe numbers grew from 194 individuals in 2021 to 335 in 2023 – a 73% increase – while recorded mortality fell sharply from 22 animals annually to just three and giraffes expanded their range across western Niger. This recovery reflected the combined effect of improved protection and reduced threats, together with improved habitat conditions and reduced human pressure in key conservation areas, pointing to stronger ecological integrity and improved landscape functionality.

Predation incidents in project villages declined in both frequency and severity, easing conflict between communities and large carnivores and other wildlife. This was achieved through the introduction of improved livestock management practices and early warning systems. As livestock losses declined, households were better able to protect productive assets, strengthen food security and improve their economic resilience.

The project reached 499 direct beneficiaries, including women and youth, through sustainable livelihood opportunities, with an estimated 4,500 people benefiting indirectly across 20 villages and generated stronger participation in conservation activities at village level. This was achieved through improved natural resource management, livelihood support and conflict mitigation measures, including community-based enterprises that produced 3,200 litres of honey, 5.8 tonnes of baobab leaves and more than seven tonnes of livestock fodder, diversifying incomes and reducing reliance on unsustainable resource use.

More than 250 hectares of degraded land were restored, improving vegetation cover, forage availability and overall habitat condition, while unsustainable harvesting of baobab and fodder resources inside protected areas declined significantly and ecological connectivity across the landscape improved. This was achieved through tree planting and assisted natural regeneration, which reduced pressure on fragile ecosystems and promoted more sustainable resource use, while improved connectivity helped reduce habitat fragmentation and address underlying drivers of human-wildlife conflict by facilitating wildlife movement and easing pressure in community-use areas.



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à la Gestion des Zones
Humides du Niger

ACTIONABLE INSIGHTS FOR PRACTITIONERS



4.1. Understanding the problem before selecting the solution

Effective conflict interventions begin with diagnosis, not solutions. Successful projects combined spatial data such as mapping hotspots, corridors and livestock enclosures with social insights on livelihoods, risk tolerance and local decision-making to establish a clear evidence base before any tools were selected. Dedicating roughly 10–15% of early project time and budget to this diagnostic phase ensures that interventions are targeted to the right place, for the right reasons, therefore reducing the risk of misdiagnosis and delivering faster, more cost-effective and more durable reductions in conflict.

Photo credit: © Felipe Rodriguez

4.2. Co-designed, context-driven conservation

Effective conservation across SOS AWI-supported projects was driven by genuine community participation and context-specific solutions. Initiatives co-designed with communities built trust, secured local ownership and strengthened long-term accountability. Success also depended on adapting approaches to local ecological, cultural and species-specific conditions, in recognition that no single model works everywhere. This was clearest in species-specific interventions such as translocations, which followed best-practice guidelines and were used only where underlying threats had been resolved and community support secured. Tailoring strategy to the species and the context was what made interventions effective.

4.3. Prioritising high-impact, scalable interventions

The strongest returns came from interventions that were both practical and replicable. Proven conflict-mitigation tools such as predator-proof bomas, livestock guarding dogs and early warning systems consistently improved coexistence and should anchor programme design. Expanding law enforcement and anti-poaching patrols, paired with species monitoring, both demonstrates effectiveness and informs adaptive management, while veterinary support for snared or diseased carnivores delivers immediate, measurable benefits. Concentrating resources where impact is proven and scalable maximises the conservation value of every dollar spent.

4.4. Investing in habitat and landscape-level management

Conflict cannot be resolved at the boma alone; it is shaped by the condition of the wider landscape. Projects should support habitat restoration, prey recovery, fire management and connectivity to address the ecological roots of conflict, even though these are long-term strategies rather than quick wins. Pairing habitat work with carnivore and prey monitoring builds the evidence base needed to demonstrate its effectiveness over time. Investing in the landscape is what allows site-level gains to hold.

4.5. Empowering and engaging communities

Lasting coexistence depends on communities that are equipped, not simply compensated. Education programmes should be backed by frameworks that track real shifts in perception, tolerance and behaviour, so that attitude change can be measured rather than assumed. Investment in alternative livelihoods supported by market access and technical guidance consistently outperforms the simple dispersal of cash, because empowering people to improve their own livelihoods builds resilience that handouts cannot. When communities have a stake in the outcome, tolerance follows.



Photo credit: © Jane Horgan

“Lasting coexistence depends on communities that are equipped, not simply compensated!”

4.6. Building knowledge and transparency

Conservation learns fastest when it is open about what works and what does not. Integrating project data, monitoring results and implementation experience into the scientific and practitioner literature closes the persistent gap between research and practice, enabling evidence-based decisions and sparing others the repetition of ineffective interventions. Sharing both successes and setbacks across measures such as predator-proof bomas, early warning systems, compensation schemes, land-use planning and community engagement accelerates learning across landscapes and institutions. Transparency is what turns individual projects into collective progress.

4.7. Planning for policy uptake and scaling from the outset

Projects should be designed from the outset to align with existing national human-wildlife conflict strategies and conservation plans. They should systematically document and share data and lessons so that evidence can inform policy and replication, while sustaining engagement with government agencies throughout implementation to build ownership. Sustained government collaboration allows locally tested models to influence national frameworks and scale beyond individual sites.

4.8. Ensuring sustainable financing and governance

Ecological recovery runs on timelines that short funding cycles rarely match. Longer-term financing, aligned with the pace of recovery, gives interventions the time they need to deliver durable results. Blending donor support with national and local resource mobilisation reduces dependence on any single source. Strengthening governance frameworks safeguards the connectivity and coordination on which long-term resilience depends. Sustained finance and sound governance are what carry coexistence beyond the life of a project.

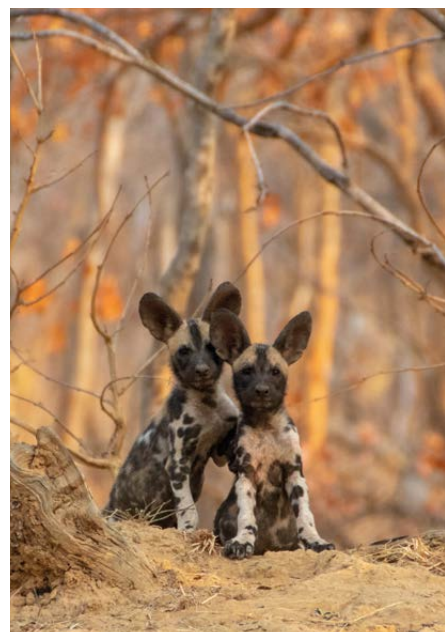


Photo credit: © Ben Goodheart

LESSONS FOR FUTURE CONSERVATION APPROACHES

The IUCN Save Our Species African Wildlife Initiative (AWI) serves as a blueprint for modern conservation, proving that science-based, locally led strategies can solve complex human-wildlife conflicts. Whether in east African pastoralist zones or southern African transboundary corridors, AWI-supported projects have successfully lowered conflict rates while bridging the gap between local communities and state authorities. To meet Target 4 of the Global Biodiversity Framework and the African Union's biodiversity goals, we must now scale these successes through improved policy alignment, cross-border knowledge sharing and long-term financing. Investing in local leadership and evidence-driven management remains the only viable path to sustaining coexistence amidst rising climate and demographic pressures.

Photo credit: © International Fund for Animal Welfare



Across the AWI case studies, a clear narrative emerges about what future conservation must look like if coexistence between people and wildlife is to be sustained at scale. Human-wildlife conflict cannot be solved through isolated technical fixes; it is a social-ecological challenge shaped by land use, livelihoods, governance and trust. The most effective interventions began not with solutions, but with listening and diagnosis, investing time in understanding where conflict occurs, who bears the costs and what drives negative interactions. This grounding allowed projects to deploy the right tools in the right places and avoid one-size-fits-all approaches that communities often reject.

A central lesson is that people and not infrastructure are the backbone of conflict management. Locally recruited and trained responders, embedded within their communities, consistently reduced response times, prevented escalation and built credibility. These roles transformed conflict response from external enforcement into shared responsibility. Technology played a supporting role, not a leading one: GPS collars, early warning systems, fencing and improved enclosures delivered results only when communities trusted them, understood how to act on information and saw clear benefits.

The case studies also show that livelihood security is inseparable from coexistence. Where interventions reduced economic vulnerability through employment, alternative income sources, or fewer livestock losses, tolerance towards wildlife increased and retaliation declined. Conservation succeeded when it helped households manage risk, not when it asked them to absorb losses in the name of biodiversity. Early, visible gains in reducing damage further strengthened trust and created space for longer-term institutional and behavioural change.

At a systemic level, longevity and scale depended on alignment with government frameworks and planning processes. Projects that complemented national wildlife authorities and fed field evidence into policy frameworks demonstrated how local action can drive national change. At the same time, flexibility proved essential: wildlife behaviour, climate pressures and human land use are dynamic, and successful programmes adapted continuously rather than rigidly replicating models across landscapes.

Taken together, these lessons point towards a future conservation paradigm built on locally led, adaptive systems that integrate ecological knowledge with social realities and economic resilience. Coexistence is not achieved through tools alone but through sustained investment in people, institutions and learning, ensuring that conservation delivers tangible benefits while safeguarding species and the landscapes they depend on.

“Human-wildlife conflict cannot be solved through isolated technical fixes; it is a social-ecological challenge shaped by land use, livelihoods, governance and trust.”

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