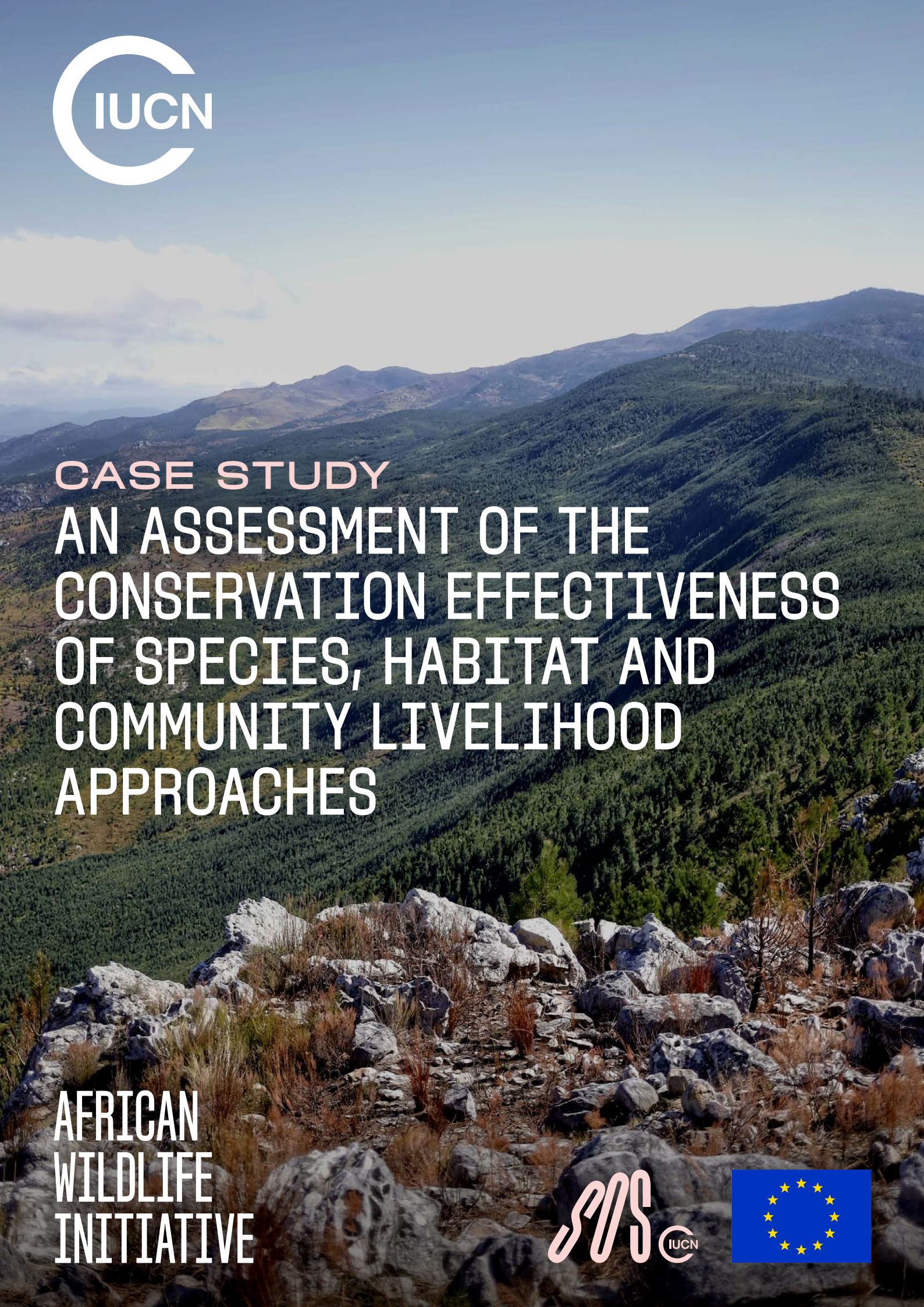

CASE STUDY

AN ASSESSMENT OF THE CONSERVATION EFFECTIVENESS OF SPECIES, HABITAT AND COMMUNITY LIVELIHOOD APPROACHES

AFRICAN WILDLIFE INITIATIVE

IUCN is pleased to acknowledge the support of its Framework Partners who provide core funding: Ministry of Foreign Affairs, Denmark; Ministry for Foreign Affairs, Finland; Government of France and the French Development Agency (AFD); Ministry of Environment, Republic of Korea; The Ministry of the Environment, Climate and Biodiversity, Grand Duchy of Luxembourg; the Norwegian Agency for Development Cooperation (Norad) and the Swiss Agency for Development and Cooperation (SDC).

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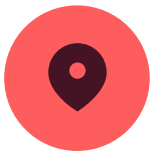
EXECUTIVE SUMMARY

The IUCN Save Our Species African Wildlife Initiative (SOS AWI) represents one of the most comprehensive conservation portfolios for large carnivores and their ecosystems in Sub-Saharan Africa. Implemented through 91 contracted projects across 31 countries, including 40 projects directly targeting large carnivores, SOS AWI has generated a substantial body of evidence on effective conservation practice under complex and often challenging socio-ecological conditions.

This document summarises findings from two independent programme-level assessments that provide a consolidated analysis of the effectiveness of conservation approaches under SOS AWI, with a particular focus on large African carnivores, the habitats they depend on and associated community livelihood support activities. It is intended as a synthesis of study findings, project results and learnings from across the SOS AWI portfolio of projects.



91
projects

Across
31
countries

Across SOS AWI portfolio, consistent findings indicate that:

- Anti-poaching patrols, community ranger systems, veterinary interventions and livestock protection measures deliver the most immediate and measurable benefits for carnivore survival.
- Habitat restoration and management are essential for long-term ecological resilience, but require sustained investment, technical expertise and multi-year planning.
- Livelihood support, particularly approaches that restore and strengthen existing livelihoods, is critical for reducing pressure on wildlife. Benefits were most tangible where activities addressed direct financial shocks, such as livestock losses or loss of income, rather than introducing unfamiliar alternatives.
- Strong governance, legitimacy and community trust are foundational to conservation success.
- Integrated approaches consistently outperform single-focus interventions, producing more durable ecological and social outcomes.
- Enabling approaches such as education, livelihoods, governance and species monitoring are effective for building tolerance, institutional capacity and adaptive management, but require longer timeframes, strong baselines and clear monitoring systems to demonstrate species-level impacts.

Photo credit: © Wildlands Conservation Trust/ Kirsten Oliver

The findings are relevant to IUCN and to African carnivore conservation more broadly because they can:

- **Inform the development of adaptive conservation strategies** capable of responding to environmental change, emerging threats and shifting socio-economic conditions.
- **Identify best practices in habitat management** that strengthen ecosystem restoration and resilience, with benefits extending beyond target carnivore species.
- **Strengthen the evidence base** for effective species-level conservation approaches, contributing to broader learning on species recovery.
- **Provide practical insights** into reducing human–carnivore conflict, safeguarding livelihoods and promoting long-term coexistence.
- **Highlight effective mechanisms** for community engagement and stewardship that underpin sustained conservation support.
- **Offer evidence to inform** national, regional and international policy frameworks, including transboundary cooperation for wide-ranging species and shared landscapes.

Overall, the assessments confirm that conservation success in Sub-Saharan Africa depends on approaches that are ecologically sound, socially grounded and institutionally supported.

“Conservation success in Sub-Saharan Africa depends on approaches that are ecologically sound, socially grounded and institutionally supported.”

ACKNOWLEDGEMENTS

This synthesis document consolidates findings from two programme-level assessments of effectiveness of conservation approaches implemented under the IUCN Save Our Species African Wildlife Initiative (AWI), bringing together evidence and learnings related to species protection, habitat management and community livelihood approaches.

We gratefully acknowledge the African Wildlife Initiative partnership and support provided through the European Commission's Directorate General for International Partnerships (DG-INTPA), whose funding enabled implementation across diverse landscapes and contexts.

We also recognise the crucial contributions of AWI grantees and partners—civil society organisations, protected area authorities, technical specialists and community institutions—whose field implementation, reporting and learning generated the evidence base synthesised in this document.

Special thanks go to the independent assessment teams, M.A.P Scientific Service and Shared Planet, whose analyses underpin this synthesis, covering carnivore conservation, habitat management and community livelihood support.

Finally, we acknowledge the local communities living alongside carnivores and other threatened wildlife across sub-Saharan Africa, whose stewardship, knowledge and willingness to engage in coexistence and governance solutions are foundational to sustainable conservation outcomes.

INTRODUCTION TO SOS AFRICAN WILDLIFE INITIATIVE

Photo credit: © Tony King

The International Union for Conservation of Nature (IUCN) is the world's largest and most diverse global environmental organisation, founded in 1948 and composed of over 1,400 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.

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 organisations 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 address the alarming rate of biodiversity loss across the African continent. Funded primarily by the European Union, AWI focuses on delivering conservation action where it is most urgently needed. Its main objectives include reducing direct threats to threatened 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 habitat destruction, but also strengthens long-term conservation outcomes through community engagement, education and policy influence.

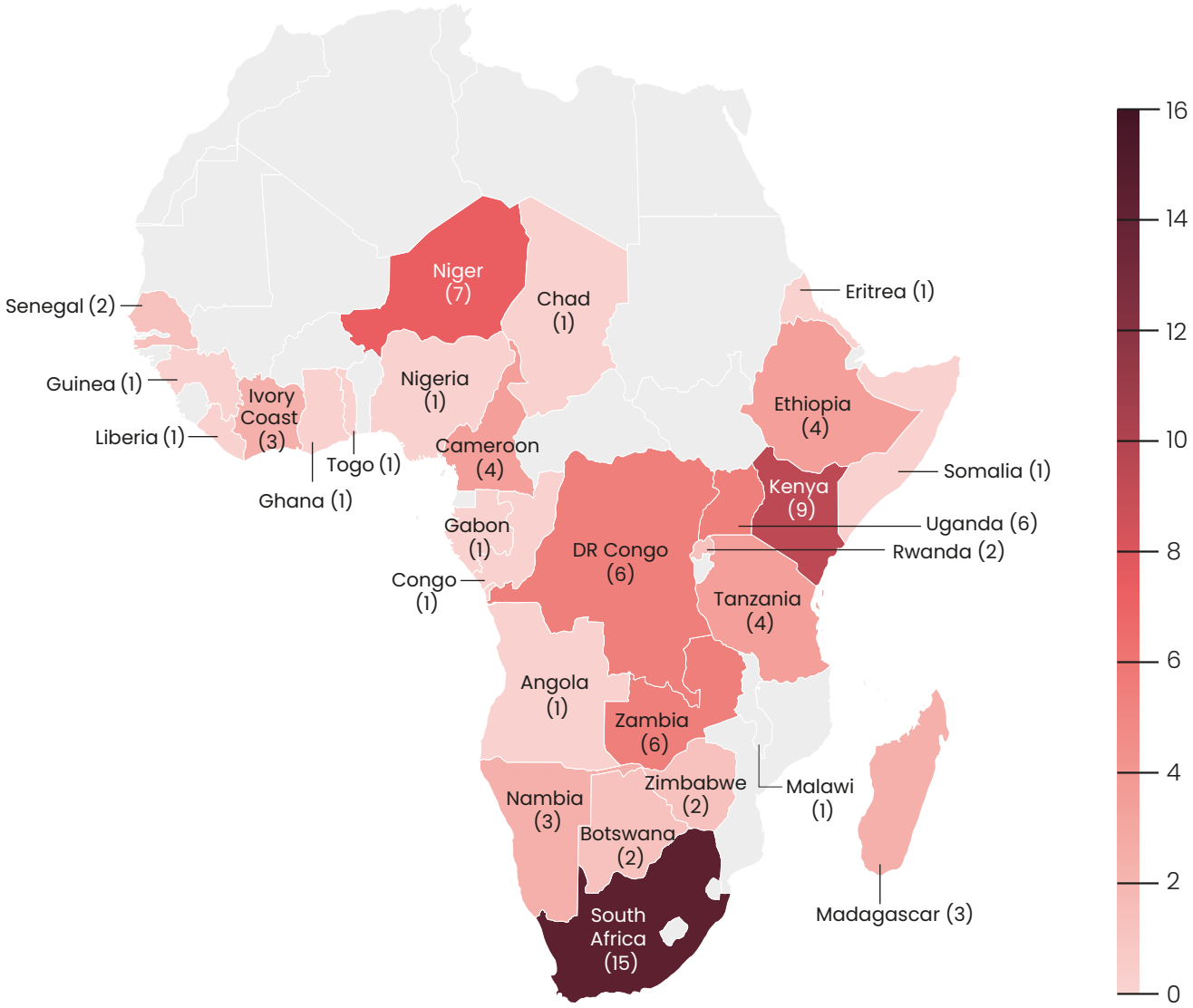
Through a portfolio of 91 contracted projects across 31 African countries, SOS AWI has supported interventions that enhance species recovery, protect habitats and foster coexistence between humans and wildlife. Working with governments, local communities, NGOs and research institutions, the initiative has also contributed to wider conservation goals, including the Kunming–Montreal Global Biodiversity Framework and the Sustainable Development Goals. Across its portfolio, SOS AWI has generated field-based evidence on what works in conservation, under which conditions and through which combinations of ecological, social and institutional approaches, providing a strong foundation for more effective and scalable interventions.

This document draws on project outcomes and evidence to highlight approaches that proved most effective across the AWI portfolio — examining why they worked, what conditions enabled their success and what should be considered when applying them in other settings.

Photo credit: © Wildlife Action Group

"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."

Figure 1: AWI project distribution across Africa



1.1 Methodology

This synthesis is based on a qualitative, criteria-based evaluation of conservation approaches implemented under SOS AWI. It draws on two independent programme-level assessments, complemented by project-level monitoring data, technical reports and grantee documentation across the SOS AWI portfolio.

Scope and data sources

The assessment is based on a review of 88 completed SOS AWI-funded projects implemented across multiple African landscapes over the programme period (2017–2024). Primary data sources included final technical reports submitted by grantees, project monitoring data,

interviews with grantees and documented outputs and indicators aligned with approved logical frameworks. Where available, supplementary materials (e.g. training outputs, patrol records, ecological monitoring data) were also considered.

Analytical approach

Projects were grouped into thematic intervention categories aligned with the main activity types in the AWI portfolio: species-focused interventions such as anti-poaching, human-wildlife conflict mitigation, veterinary care, detection dogs, translocations, monitoring and learning, habitat-based interventions (restoration, conservation area management) and community livelihood approaches (livelihood restoration and diversification, education and training).

Within each category, interventions were assessed through a cross-project comparative approach, examining delivery of planned outputs; evidence of outcomes (changes in income, threat levels, habitat condition, or species observations); and the presence or absence of enabling conditions necessary for sustained impact. Findings were derived through iterative synthesis, identifying recurring patterns across projects rather than relying on single-case examples.

Limitations

Several limitations constrain cross-project analysis and the ability to draw trends from the portfolio:

- Inconsistent baseline data: Many projects did not establish quantitative baselines for key outcome indicators, limiting the ability to measure change over time.
- Variable monitoring quality: Differences in indicator selection, data collection methods and reporting depth constrained cross-project comparability.
- Short project timeframes: Many interventions were implemented over one- to two-year periods, which is insufficient to capture outcomes for longer-term processes such as behaviour change, habitat recovery, or enterprise development.
- Attribution challenges: In complex socio-ecological systems, observed changes cannot always be attributed solely to project interventions.

Given these constraints, findings should be interpreted as indicative of portfolio-level patterns rather than definitive measures of impact.

UNDERSTANDING THE SOCIO-ECOLOGICAL CONTEXT OF CONSERVATION IN SUB-SAHARAN AFRICA

Sub-Saharan Africa's conservation landscape is shaped by a complex mix of ecological, economic, cultural and governance dynamics. Wildlife-rich ecosystems face simultaneous pressures from rapid population growth, agricultural encroachment, infrastructure expansion, extractive industries and climate variability. Many landscapes that harbour threatened species (savannas, drylands, forests and wetlands) are also those where rural communities depend directly on natural resources for food, energy, income and cultural identity. As a result, conservation decisions are closely tied to everyday survival needs such as bushmeat protein, grazing areas for livestock, fuelwood, medicinal plants, water access and smallholder agriculture.

These realities mean that conservation cannot be isolated from development concerns. In many countries, protected areas are under-resourced, with limited budgets, insufficient ranger staffing, fragmented governance mandates and high demand for land. Where enforcement capacity is weak, incentives for unsustainable resource use or illegal hunting increase. At the same time, climate shocks, including extended droughts, floods and shifting vegetation patterns, intensify pressure on both wildlife and people, increasing human–wildlife conflict and reducing local tolerance of conservation restrictions.

AWI's portfolio demonstrated repeatedly that conservation succeeds only when it addresses both acute threats to species and the broader socio-economic vulnerabilities of surrounding communities. Projects that focused narrowly on species monitoring, anti-poaching, or law enforcement made short-term gains but struggled to maintain impact without combining these with livelihoods, governance and habitat interventions. Conversely, projects that integrated ecological protection with community empowerment, sustainable resource management and benefit-sharing mechanisms showed stronger community buy-in, fewer conflicts and more stable ecological outcomes.

"Conservation succeeds only when it addresses both acute threats to species and the broader socio-economic vulnerabilities of surrounding communities."

Photo credit: © Zambia Carnivore Programme

Effective conservation in Sub-Saharan Africa, therefore, requires:

- **Recognising communities as equal partners**, with meaningful roles in planning, stewardship and decision-making, not just as beneficiaries or labour.
- **Designing solutions that align ecological outcomes** with socio-economic priorities, such as food security, income diversification, land rights and cultural values.
- **Ensuring that benefits are tangible, fair and visible,** strengthening incentives for local communities to participate in and defend conservation actions.
- **Strengthening local institutions and leadership**, including community conservancies, women's groups, youth networks, traditional authorities and co-management structures.
- **Prioritising long-term, adaptive engagement**, acknowledging that relationships, trust and capacities evolve and require consistent support, monitoring and flexibility.

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EFFECTIVENESS OF CONSERVATION APPROACHES UNDER THE SOS AFRICAN WILDLIFE INITIATIVE

A common analytical framework was used to examine how different species, habitat and livelihood interventions contributed to reducing threats, improving ecological conditions and strengthening coexistence with communities. Given that most AWI projects applied multiple, overlapping interventions, effectiveness is interpreted in terms of demonstrated threat reduction, behavioural change and intermediate ecological and social outcomes, rather than population recovery alone.

Table 1 summarises the main conservation approaches applied under SOS AWI, the key threats they addressed and the typical indicators used to assess their effectiveness.

Photo credit: © Anjarasoa Harena

Table 1. Summary of conservation approaches assessed across the IUCN SOS AWI projects targeting large African carnivores and their prey species

Conservation approach	Description	Examples	Main threats addressed	Typical indicator of effectiveness
SPECIES-BASED CONSERVATION APPROACHES				
Law enforcement and anti-poaching	Regular field patrols by rangers or community scouts to prevent and detect illegal activities.	Foot/vehicle patrols, snare removal, camp destruction, firearms seizure, arrests.	Poaching, illegal wildlife trade, habitat degradation, snaring.	Patrol distance/ frequency; snares removed; arrests; reduction in poaching rates.
Rapid human-wildlife conflict response and livestock management	Measures to reduce livestock losses to carnivores and decrease retaliatory killings.	Predator-proof bomas, livestock guarding dogs, herder training, early warning systems.	Human-wildlife conflict; retaliatory killings; carnivore persecution.	Bomas built; livestock losses prevented; reduction in carnivore killings.
Veterinary treatment and disease management	Medical care to wildlife and domestic animals to treat injuries and prevent disease.	De-snaring injured animals, rabies vaccination of domestic dogs, wildlife veterinary support.	Snaring; zoonotic diseases (rabies, canine distemper); population health decline.	Animals treated/ vaccinated; survival rates; reduction in disease mortality.
Detection and patrol dogs	Trained scent-detection dogs to support anti-poaching and species monitoring.	Dogs detecting illegal wildlife products, tracking poachers, locating injured animals.	Poaching; illegal wildlife trade; smuggling.	Dogs deployed; arrests/ confiscations; patrol coverage; reduction in poaching.
Species translocations/ reintroductions	Deliberate movement of individuals to restore populations or mitigate conflict.	Translocating lions/wild dogs to new areas, reintroducing carnivores to restored habitats.	Local extirpations; small/isolated populations; genetic erosion.	Animals translocated; post-release survival/ reproduction; establishment at new sites.
Species Monitoring	Systematic data collection on species presence and distribution to inform decisions.	Camera traps, GPS collars, ranger observations, audio surveys.	Data deficiency; weak management planning; inability to assess population trends.	Individuals monitored; area surveyed; population trend data; integration into adaptive management.

HABITAT-BASED CONSERVATION APPROACHES				
Habitat improvement/ restoration	Restore or enhance degraded ecosystems supporting carnivores and prey.	Invasive species removal, rangeland restoration, fire management, reforestation.	Habitat loss/ degradation; bush encroachment; invasive species; fire damage.	Area restored; vegetation recovery; invasive species removed; fire incidence reduced.
Expanding and strengthening areas under conservation management	Expand land under protection or management to improve connectivity and habitat availability.	New protected areas, community conservancies, wildlife corridors, governance/ management plans.	Habitat fragmentation, land-use conversion, weak governance and lack of community inclusion.	Area added under protection; new conservancies/ corridors; evidence of wildlife use.

COMMUNITY LIVELIHOODS APPROACHES				
Alternative or improved livelihoods	Income-generating opportunities to reduce reliance on natural resources.	Beekeeping, sustainable gardening, artisanal crafts, eco-tourism, benefit-sharing schemes.	Poaching for income; habitat degradation from unsustainable resource use; poverty-driven exploitation.	Participants, household income increase, livelihood diversification; reduced poaching/illegal harvesting.
Village savings and loans associations (VSLAs) and financial resilience	Community-owned savings and credit schemes that build household financial resilience and reduce reliance on unsustainable resource use.	Pooled savings groups, low-interest loans for income-generating activities, financial literacy training, women-led savings circles.	Poverty-driven exploitation; unsustainable resource use as coping mechanism during economic shocks.	VSLAs established and operational; members participating; savings accumulated; loans issued; proportion of members investing in income-generating activities; continued operation after project support ends.
Education and training	Increasing awareness and capacity among communities to improve coexistence with carnivores.	Community sensitisation, school clubs, radio programs, technical training on livestock protection.	Human-wildlife conflict; poaching; habitat degradation.	People trained; changes in perception/ tolerance; reduction in retaliatory killings.

3.1 SPECIES-BASED CONSERVATION APPROACHES

Photo credit: © Mpala Research Centre

Across the portfolio, direct threat-reduction approaches produced the strongest, most measurable outcomes.

- **Patrols and law enforcement** removed more than 4,800 snares, patrolled over 260,000 km and resulted in 260+ arrests.
- **Veterinary interventions** were effective in all projects, including the treatment or de-snaring of 39 carnivores and zero rabies-related wild dog mortalities in vaccinated landscapes.
- **Livestock management interventions** reduced predation by carnivores and retaliatory killings in over 60% of projects, improving coexistence at the community level.

3.1.1 Law enforcement and anti-poaching

Anti-poaching patrols and community ranger systems formed the frontline defence against threats facing carnivores and their prey across project landscapes. Teams moved systematically across protected areas and community zones to dismantle snares, intercept illegal firearms, document incursions and apprehend poachers. The integration of professional rangers with trained community scouts was a key driver of success: scouts brought extensive knowledge of terrain and social networks, helping patrol teams anticipate threats and establish community trust. Patrol data collected via Global Positioning System (GPS) or Spatial Monitoring and Reporting Tool (SMART) informed adaptive deployment across emerging threat hotspots.

Success depended on ranger welfare, equipment quality, judicial follow-up and sustained funding to prevent patrol fatigue. Overall, this approach was the most consistently effective across the portfolio.

Key success factors

- Adequate ranger staffing, training and equipment (transport, communications and safety gear).
- Inclusion of community scouts with strong local knowledge and social legitimacy.
- Use of patrol monitoring tools (e.g. SMART, GPS) to inform adaptive deployment.
- Coordination with judicial authorities to ensure follow-up and deterrence.
- Sustained funding to prevent patrol fatigue and loss of momentum.

“Success depended on ranger welfare, equipment quality, judicial follow-up and sustained funding to prevent patrol fatigue.”

Recommendations

1. Anti-poaching should remain the core of any carnivore conservation strategy, particularly where poaching and snaring are the dominant threats. Resource adequately and ensure community integration is built into operational design from the outset, not added as a secondary activity.
2. SMART or equivalent patrol management systems should be standard. Patrol data should feed into regular strategic reviews, not only compliance reporting. Programmes should establish minimum reporting standards for patrol-based projects to enable cross-portfolio learning.
3. Community-based enforcement models, when properly resourced, can achieve substantial scale at reasonable cost. The Zambian Carnivore Programme demonstrates that building on existing social infrastructure — rather than replacing it — offers a replicable template for cost-effective impact.

SPECIES-BASED CONSERVATION APPROACHES

Photo credit: © Zambia Carnivore Programme

Scaling law enforcement effectiveness through community scouts and canine units

Location	South Luangwa, Lower Zambezi and Kafue, Zambia
Implementing partner	Zambian Carnivore Programme
Project period	2019–2021

This project demonstrated a significant strengthening of anti-poaching enforcement capacity, with clear improvements compared to pre-project baselines despite increased pressure during the COVID-19 period. From baseline (2018) to project completion (2021):

- Snare recoveries rose by 89% (478 to 903 snares)
- Wildlife crime arrests increased by 102% (82 to 166 arrests)
- Firearms confiscations increased by 31% (78 to 102 firearms)
- Annual patrol coverage expanded by 243% (17,069 km to 58,711 km)

These results were achieved by scaling enforcement capacity from 65 to 93 trained community scouts, alongside deployment of two specialised canine detection dog units, which contributed up to 45% of total arrests by 2021. Enforcement teams conducted 1,337-day patrols covering a total of 141,316 km. Although relatively few arrests directly involved large carnivores, most targeted illegal bushmeat hunting and firearms — addressing prey depletion, a key driver of large carnivore decline.

3.1.2 Rapid human–wildlife conflict response systems and livestock management

Integrated approaches combining rapid conflict response with improved livestock management proved among the most effective strategies for reducing human–wildlife conflict and preventing retaliatory killings. Rapid response systems involved trained conflict officers travelling to incident sites (often within hours) to verify losses, de-escalate tensions and document evidence. Complementing this, strengthened livestock enclosures — reinforced bomas and "living walls" — significantly reduced nighttime predation, while improved herding practices lowered daytime risk.

These measures led to immediate and measurable outcomes, including substantial reductions in livestock losses, improved household economic stability and decreased retaliatory killing of carnivores. The Ruaha Carnivore Project in Tanzania demonstrated particularly strong results, with livestock losses reduced by up to 95% and wider adoption of improved husbandry practices.

Key success factors

- Fast response times and clear communication channels with communities.
- Trained personnel skilled in mediation, verification and conflict resolution.
- Locally appropriate livestock protection designs and materials, with communities involved in construction and maintenance..
- Complementary training in herding practices and animal health.

Recommendations

1. Rapid human-wildlife conflict response and livestock protection should be treated as complementary pillars, not separate activities. Response capacity should be linked to community alert networks, enabling proactive rather than purely reactive management.
2. Boma construction programmes work best when local artisans are trained and involved, creating both local ownership and supplementary livelihood income. Design should be adapted to local materials and predator species.
3. Projects should track both livestock losses and carnivore killing incidents against a baseline. Reduction in retaliatory killings (not just bomas built) is the meaningful outcome indicator.

"Measures led to substantial reductions in livestock losses, improved household economic stability and decreased retaliatory killing of carnivores."

SPECIES-BASED CONSERVATION APPROACHES

Photo credit: © Lion Landscapes

Integrated human-wildlife conflict response and livestock protection (Laikipia–Selous landscapes)

Location	Laikipia, Kenya and the Selous-Nyerere and Ruaha landscapes, Tanzania
Implementing partner	Lion Landscapes
Project period	2021–2024

Lion Landscapes implemented an integrated system combining rapid human-wildlife conflict response with improved livestock management across two landscapes in Kenya and Tanzania. Fourteen trained Lion Extension Officers were deployed to monitor and respond to conflict events, provide husbandry advice and support community engagement.

Over the grant period, teams responded to 1,013 conflict incidents (837 in Laikipia; 176 in Selous), recovered 461 head of livestock and reinforced 72 predator-proof bomas, while delivering over 3,000 instances of husbandry advice. Baseline surveys at project inception established pre-intervention conditions, enabling comparison of conflict management capacity before and after the project.

Project targets aimed for a 40% reduction in conflict-related carnivore killing. Thirty-eight mortalities were recorded during implementation (noting a single poisoning event significantly influenced this figure). Behavioural indicators showed positive trends, including increased awareness of poisoning risks and improved community attitudes toward wildlife. The project also established the data systems necessary for longer-term impact assessment — an important foundation for future monitoring.

3.1.3 Veterinary treatment and disease management

Veterinary interventions addressed both wildlife injuries and domestic animal health, delivering ecological and social co-benefits. Mobile veterinary teams treated carnivores caught in snares or injured by gunshots, increasing survival rates for species with low reproductive resilience. They also vaccinated domestic dogs against rabies — a major documented threat to lions, wild dogs and human communities alike — and provided livestock treatment services that built community trust and reciprocal reporting of illegal activities and wildlife in distress.

Despite being less common across the AWI portfolio than patrol-based approaches, veterinary interventions consistently ranked among the most effective. AWI veterinary teams treated 39 injured carnivores and carried out large-scale canine vaccination campaigns, substantially lowering disease transmission risks.

Key success factors

- Availability of skilled veterinary personnel and rapid response capacity.
- Integration of wildlife health with domestic animal health services.
- Strong collaboration with communities to report injured animals.
- Clear protocols for treatment, monitoring and post-release follow-up.

Recommendations

1. Veterinary support should be explicitly planned as a community trust-building mechanism as well as a conservation intervention. Its social value — through livestock care and rabies vaccination — often generates conservation goodwill that extends far beyond direct wildlife benefits.
2. Disease management frameworks, as developed in Kenya's Ewaso ecosystem, should be treated as a public good. Implementing partners should be supported in sharing protocols nationally and with government veterinary authorities.
3. One Health approaches that link wildlife, domestic animal and human health outcomes are both more effective and more fundable. Projects should design for and report on co-benefits across these domains.

"Veterinary interventions addressed both wildlife injuries and domestic animal health, delivering ecological and social co-benefits."

SPECIES-BASED CONSERVATION APPROACHES


Photo credit: © Mpala Research Centre

Recovering a globally important African wild dog population in Kenya's Ewaso ecosystem

Location	Laikipia and Samburu counties in central and northern Kenya
Implementing partner	Mpala Research Centre
Project period	2020–2022

Prior to intervention, infectious diseases (particularly rabies and canine distemper) accounted for an estimated 32% of African wild dog mortality in the Ewaso ecosystem — a critical constraint to recovery. This project scaled up domestic animal health measures, vaccinating over 38,000 domestic dogs against rabies and 10,000 against canine distemper during the project period.

As a result, no wild dog deaths from disease were recorded between 2020 and 2022, effectively eliminating disease as a mortality driver for the population. Human health co-benefits were significant: at baseline, the landscape experienced approximately 25 human rabies deaths annually; by project completion, no human rabies deaths were reported and dog bite cases declined by 53% (2020–2022).

Population recovery outcomes demonstrate the effectiveness of removing disease pressure at scale: from a baseline of approximately 24 individuals in two packs (2019), the wild dog population increased to over 100 individuals in seven or eight packs by 2022 — a more than fourfold increase within three years. In parallel, the project developed Kenya's first national-level disease management framework for wild dogs, in collaboration with government and research partners.

3.1.4 Detection and patrol dogs

The use of detection and patrol dogs showed mixed or unclear effectiveness across the SOS AWI portfolio, largely determined by deployment context and operational clarity. Canine units demonstrated clear value in specific law enforcement contexts—particularly for tracking and interdiction—and contributed up to 45% of total arrests in the Zambian Carnivore Programme. However, their performance was less consistent when applied to species-detection objectives, where intended outcomes were not always achieved and reporting was insufficient to attribute results to canine deployment specifically.

Canine units demonstrated clear value in specific law enforcement contexts.

Key success factors

- Clear, specific operational objectives tied to measurable outcomes (e.g. arrests, confiscations, patrol area coverage).
- Integration within a broader enforcement system, with coordination between canine units, ranger teams and judicial follow-up.
- Robust monitoring frameworks to attribute results specifically to canine deployment.
- Strong logistical support for handler welfare, animal care and equipment maintenance.
- Avoiding deployment in contexts where enabling conditions or monitoring frameworks are weak.

Recommendations

1. Canine units should be deployed against clearly defined operational objectives with specific, trackable indicators. Avoid deployment in contexts where success metrics are vague or where monitoring frameworks are weak.
2. Detection dogs work best as part of an integrated enforcement system rather than as a standalone intervention. Their effectiveness depends on coordination with ranger teams, judicial follow-up and strong logistical support.

Photo credit: © Cheetah Conservation Botswana

3.1.5 Species translocations and reintroductions

Species translocations and reintroductions produced variable outcomes across the AWI portfolio, reflecting their inherently high-risk and technically complex nature. Success depends on rigorous feasibility assessments, suitable and secure receiving habitats and long-term post-release monitoring — conditions that are difficult to fully meet within short project timeframes. Where enabling conditions were only partially in place, outcomes were uncertain or difficult to measure, limiting confidence in conservation impact.

Key success factors

- Rigorous pre-translocation feasibility assessment covering habitat suitability, genetic compatibility, receiving site security and institutional capacity.
- Secure and ecologically appropriate receiving habitat with sufficient prey availability for carnivore species.
- Multi-year post-release monitoring to track survival, reproduction and establishment outcomes.
- Strong coordination with wildlife authorities, veterinary services and receiving site managers.
- Realistic timelines and multi-year funding commitments, not confined to a single project cycle.

> Success depends on rigorous feasibility assessments, suitable and secure receiving habitats and long-term post-release monitoring.

Recommendations

1. Translocations require multi-year financing and post-implementation monitoring commitments before they can deliver interpretable results. Short funding cycles are poorly suited to this approach; donors and practitioners should consider whether standalone translocation grants are appropriate or whether these activities should sit within longer programmatic frameworks.
2. Practitioners should conduct and document rigorous feasibility assessments — covering habitat suitability, genetic compatibility, receiving site security and institutional capacity — before proceeding. Minimum enabling conditions should be established as a prerequisite for grant approval.

3.1.6 Species monitoring

Monitoring allowed projects to assess ecological health, identify threats and make evidence-based decisions. Camera traps captured carnivores' presence and behaviour, GPS-enabled patrol trackers highlighted poaching hotspots and conflict logs documented patterns in livestock depredation. Projects with strong monitoring systems adjusted their strategies more quickly and demonstrated clearer conservation results.

However, challenges related to long-term trend analysis arose across the portfolio due to the lack of ecological baselines and inconsistent socio-economic monitoring. Where monitoring was strong, such as in Zambia's South Luangwa landscape (highlighted in section 3.1.1 above), conservation teams maintained identification records for 984 individual carnivores (including lions, leopards, cheetahs, wild dogs and hyaenas), enabling swift response to threats and detailed understanding of population dynamics.

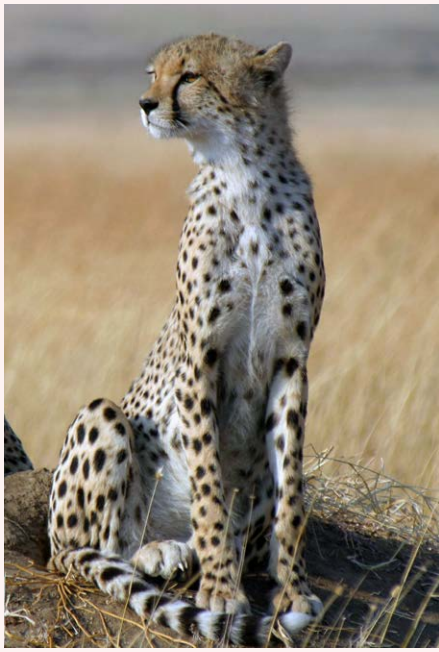

Photo credit: © Sarah Durant

Key success factors

- Establishing quantitative ecological and socio-economic baselines at project inception, before interventions begin.
- Defining a small, focused set of outcome indicators at the design stage, rather than collecting large volumes of output data that cannot be used for adaptive management.
- Using standardised tools (camera traps, SMART patrol data, GPS collars, conflict registers) consistently across sites to enable trend detection and cross-project comparison.
- Integrating monitoring results into regular management reviews and decision-making cycles, not only into final reports.
- Ensuring sufficient technical capacity among field staff to collect, manage and interpret data reliably.
- Disaggregating socio-economic data by gender and household type to capture differential impacts.

Recommendations

1. Baseline data collection and outcome monitoring must be non-negotiable. Projects should define a small set of clear ecological and socio-economic indicators at inception, collect baseline values and track change over time.
2. Reporting should move beyond outputs (people trained, kilometres patrolled) to measure behaviour change, threat reduction, livelihood resilience and ecological response. Without outcome data, effectiveness cannot be assessed or compared across projects.
3. Establish minimum monitoring standards for all future projects, particularly for high-cost or experimental approaches. Standardised indicators, where applicable (while allowing context-specific additions), would significantly improve cross-portfolio learning.

> Projects with strong monitoring systems adjusted their strategies more quickly and demonstrated clearer conservation results.

SPECIES-BASED CONSERVATION APPROACHES

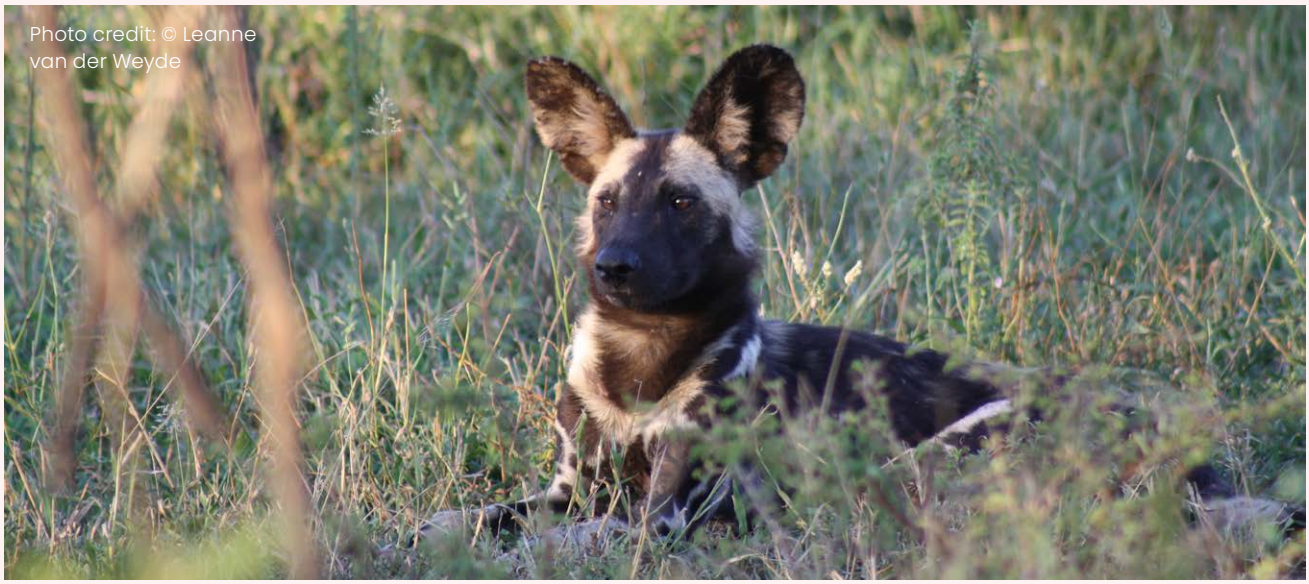
Photo credit: © Leanne van der Weyde

An emergency programme for West Africa's last wild dogs

Location	Niokolo-Koba National Park, Senegal
Implementing partner	Zoological Society of London
Project period	2021–2023

The project established the first robust, park-wide baseline for large carnivore monitoring in Niokolo-Koba National Park (NKNP), Senegal. At the outset, ecological data on African wild dogs and other large carnivores were fragmented and largely anecdotal, limiting the ability to assess population status, understand spatial distribution, or guide conservation action.

To address this gap, the project deployed a systematic monitoring system centred on large-scale camera trap surveys across the park and adjoining areas, including community-managed zones. Two full-coverage surveys conducted between 2021 and 2022 were followed by a targeted carnivore density survey in 2023. These efforts were complemented by the collection of photographic records from field teams and partners, enabling individual identification and the analysis of pack dynamics over time.

This approach generated the first spatially explicit dataset on wild dog distribution in NKNP and established a standardised monitoring protocol at landscape scale. The project produced a robust population estimate of 26 adult wild dogs and two puppies organised into four packs, with an estimated density of 0.46 adults per 100 km². Monitoring data further revealed that wild dogs were largely restricted to core protected areas and absent from peripheral zones experiencing higher human pressure, while also identifying key threats including snaring, road mortality and the presence of domestic dogs within the park.

These findings directly informed conservation planning, contributing to the development of a national wild dog action plan and enabling more targeted deployment of patrol efforts. More broadly, the project demonstrates how investment in systematic species monitoring can transform a data-poor landscape into an evidence-based conservation system. At the same time, it highlights a persistent constraint across the portfolio: in the absence of baseline data, it remains difficult to assess trends, attribute impact, or support adaptive management.

3.2 HABITAT-BASED CONSERVATION APPROACHES

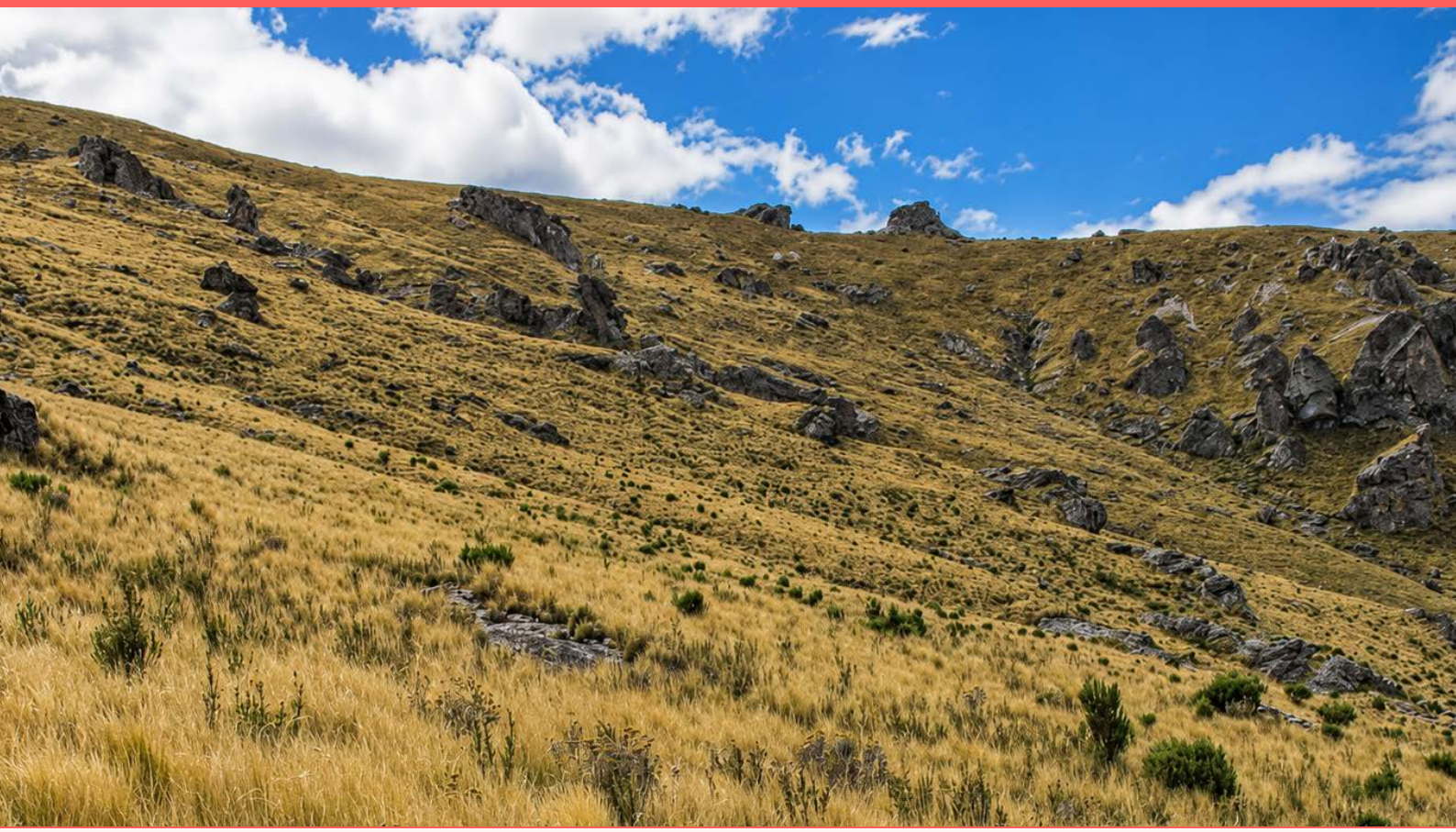

Photo credit: © Ethiopian Wolf Conservation Programme

Habitat-based approaches were less frequently implemented across SOS AWI projects but were consistently effective where applied. As the underlying assessments focused primarily on carnivore-relevant habitats, projects targeting non-carnivore species or broader ecosystem objectives were not systematically assessed. Nevertheless, SOS AWI projects delivered significant results:

- Restoration of nearly 989,400 ha of habitat.
- Establishment or maintenance of 647 km of firebreaks.
- Clearing of 7,200 ha of invasive species.
- Planting of 4,977 seedlings or trees.
- Improvements in management across 39 million ha.

Collectively, these actions enhanced prey availability, improved habitat quality and strengthened ecosystem resilience, laying ecological foundations for long-term species recovery.

3.2.1 Habitat improvement and restoration

Habitat restoration formed an important ecological foundation for long-term carnivore conservation by improving the productivity and functionality of grazing systems that support wild prey. Rehabilitation activities — including re-seeding grasslands, stabilising degraded zones and managing bush encroachment — helped restore vegetation structure, reduce soil erosion and improve water infiltration, with downstream benefits for prey availability and carnivore carrying capacity.

Projects that invested in restoration reported clear ecological improvements, even where these were incremental. However, unlike species protection approaches, habitat restoration requires a multi-year effort: full recovery may take several years or decades and gains are vulnerable to reversal without ongoing maintenance.

Photo credit: © Nigeria Conservation Foundation

Key success factors

- Strategic selection of degraded areas based on ecological and prey relevance.
- Integration of traditional land-use knowledge with scientific restoration methods.
- Regular monitoring and adaptive management to guide rehabilitation activities.
- Engagement of local communities and stakeholders to ensure sustainable implementation.

Recommendations

1. Habitat restoration components should be designed with realistic multi-year timelines and explicit ecological milestones. Avoid standalone restoration objectives within short project cycles unless embedded in a longer programmatic framework.
2. Combine interventions for compounding ecological effect: the strongest habitat outcomes came from projects that integrated invasive species removal with grassland rehabilitation, or linked fire management with community monitoring. Single-measure interventions tend to produce incremental gains that are difficult to sustain.
3. Establish ecological baselines (vegetation cover, prey abundance, habitat structure) at project inception and implement regular monitoring protocols to track progress. Without baseline data, it is not possible to attribute change to conservation action.
4. Community co-management should be embedded as a structural element of habitat programmes, with clear roles, incentives and capacity-building built into project design. Without local involvement, restoration gains are vulnerable to reversal once project funding ends.

> Projects that invested in restoration reported clear ecological improvements.

3.2.2 Invasive species management

Invasive species management supported ecosystem recovery by reducing competitive pressure on native vegetation, restoring natural ecological processes and improving habitat suitability for prey and associated biodiversity. In SOS AWI projects, invasive species removal (often involving the clearing of invasive shrubs or plants) helped restore natural hydrology, improve vegetation composition and increase overall biodiversity. While these interventions are rarely linked to rapid species population responses within short project timeframes, they strengthen the ecological integrity of habitats that species depend on through improved prey availability and habitat connectivity.

Key success factors

- Prioritising invasive species that have the highest ecological impact on prey habitat and ecosystem function.
- Combining removal with habitat restoration or rehabilitation to reinforce ecological recovery.
- Implementing systematic monitoring and adaptive management to track regrowth and prevent reinvasion.
- Engaging local communities in clearing and ongoing management to ensure sustainability.
- Ensuring sufficient technical capacity and resources for repeated interventions where necessary.

> "In SOS AWI projects, invasive species removal helped restore natural hydrology, improve vegetation composition and increase overall biodiversity."

Recommendations

1. Prioritise invasive species with the highest ecological impact on prey habitat and ecosystem function. Pair removal with complementary habitat restoration or rehabilitation to reinforce and sustain ecological recovery.
2. Where feasible, pursue formal land protection mechanisms (biodiversity stewardship agreements, nature reserve designation, conservancy status) to consolidate ecological investments. The South Africa Rough Moss Frog project demonstrates how invasive species clearance can unlock permanent protection arrangements.

HABITAT-BASED CONSERVATION APPROACHES

Photo credit: © Endangered Wildlife Trust

Restoring rough moss frog habitat through invasive pine removal in South Africa

Location	Klein Swartberg Mountain, Western Cape, South Africa
Implementing partner	Endangered Wildlife Trust
Project period	2021–2022

The rough moss frog (*Arthroleptella rugosa*) is one of the world's most range-restricted amphibians, found only on Klein Swartberg Mountain in South Africa's Western Cape, where alien pine invasion had smothered more than 80% of its type locality. Through an AWI Rapid Action Grant, the Endangered Wildlife Trust led a controlled ecological burn in March 2022 that cleared 4,384 hectares of invasive pine — more than seven times the originally planned area.

Survey outcomes exceeded expectations on every front: what began as a single known population grew to seven confirmed localities by project end, with breeding activity recorded across all sites within weeks of the burn. Five properties totalling 2,654 hectares have since qualified for formal Nature Reserve status through South Africa's Biodiversity Stewardship programme.

Beyond conservation, the project employed 23 local community members, strengthened a catchment area supplying water to the town of Caledon and catalysed follow-on investment. Klein Swartberg has since been designated an Alliance for Zero Extinction site and a 10-year management plan is in place.

3.2.3 Expanding and strengthening areas under conservation management

Across SOS AWI-supported landscapes, efforts to expand and improve conservation management focused on enhancing ecological functionality and safety for both prey and carnivore species, rather than formal designation alone. Key tools included controlled early-season burns to reduce fuel loads and promote vegetation growth; targeted clean-up campaigns to remove snares, wire traps and fishing gear; and governance support for community conservancies and protected area management bodies.

Community engagement was central to sustaining outcomes. Local fire brigades and community groups were trained in fire management, habitat maintenance and risk reduction, ensuring that conservation gains could be maintained beyond project timelines.

Key success factors

- Prioritising ecological functionality over formal expansion: Effective interventions focused on improving habitat quality—prey availability, vegetation structure and safety—rather than increasing protected area size alone.
- Using context-appropriate management tools: Approaches such as controlled early burning were most effective when aligned with local ecological conditions and implemented consistently.
- Delivering immediate risk reduction: Removal of snares, wire traps and other hazards provided rapid, visible gains for wildlife survival.
- Embedding community ownership: Training and equipping local groups (e.g. fire brigades, community rangers) was critical to sustaining management actions beyond project timelines.
- Linking habitat actions to species outcomes: Interventions were more effective where habitat improvements were explicitly designed to support prey recovery and carnivore use.

Recommendations

1. Threat reduction and habitat management must be sequenced and linked: habitat restoration delivers limited long-term value if direct threats (poaching, snaring, encroachment, wildfire) are not simultaneously addressed. The Bafing watershed project in Guinea illustrates this well, pairing forest regeneration with anti-poaching and community fire management.
2. Snare and trap clearance campaigns are low-cost and high-impact. Prioritise these as a standard component in any landscape where snaring pressure is documented and track wildlife injury and mortality rates against baseline.
3. Where feasible, use project investments as leverage for formal legal protections. The Guinea project demonstrates that field evidence and community governance infrastructure can underpin national-level designation processes.

> Community engagement was central to sustaining outcomes.

Photo credit: © Simon Wotton

HABITAT-BASED CONSERVATION APPROACHES

Photo credit: © Wild Chimpanzee Foundation

Enhanced conservation of the leopard (*Panthera pardus*) in the Bafing River Watershed

Location	Moyen Bafing basin, Republic of Guinea
Implementing partner	Wild Chimpanzee Foundation
Project period	2020–2022

At project outset, just 3% of extant leopard habitat in Guinea fell within a protected area. Through an AWI Threatened Species Grant, the Wild Chimpanzee Foundation implemented a community-centred programme combining wildlife monitoring, forest regeneration, wildfire management and anti-poaching efforts in and around the Bafing River watershed.

The project's most significant achievement came in May 2021, when a Presidential Decree formally created the Moyen-Bafing National Park, expanding leopard range under formal protection from 3% to 26.7% of Guinea's leopard habitat (6,767 km²). On the ground, 251 surveillance patrols covering over 37,000 km drove declines in illegal activities: logging fell by 91%, agricultural encroachment by 98% and hunting by 49%. A network of 382 camera-traps recorded 235 leopard observations, establishing the first long-term baseline for the species in the region.

Forest regeneration brought 568 ha of degraded habitat under active recovery, while community-led wildfire management protected up to 81% of the park's forests during the 2021–2022 fire season. Over 4,777 community members are now actively involved in park management through a multilevel committee structure and community cooperative generated USD 42,000+ in sales of honey, onions and shea butter in 2021.

3.3 COMMUNITY LIVELIHOODS APPROACHES

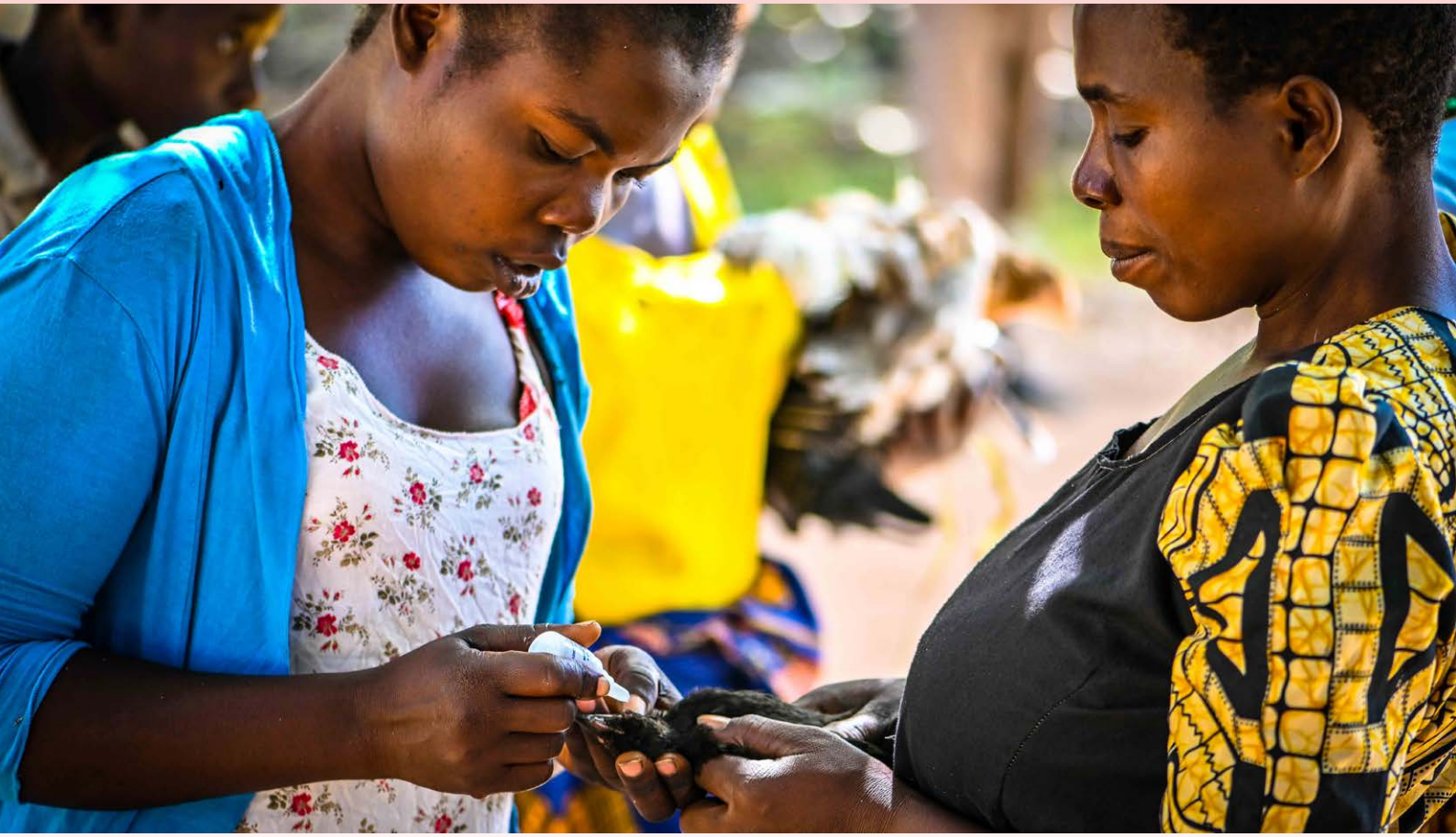

Photo credit: © Wildlife Action Group

Livelihood interventions aimed to reduce economic pressures on natural resources and support more sustainable interactions between communities and wildlife. Across SOS AWI-portfolio, these approaches achieved:

- 44,514 people trained through capacity-building activities.
- 257+ training and workshop sessions delivered.
- 3,454 beehives established or supported.
- 2,064,578 kg of conservation-compatible products produced.
- 665,426 people reached through awareness and sensitisation efforts.

These figures demonstrate the scale of delivery. However, the assessment also found significant variation in the degree to which activities translated into sustained livelihood improvements and conservation behaviour change. The sections below draw on specific project evidence to identify what worked and where gaps remain.

3.3.1 Restoring existing livelihoods

Restoring existing livelihoods, especially pastoralism, proved the most effective livelihood strategy under AWI. Rather than introducing unfamiliar income sources, restoration approaches helped communities strengthen the economic activities they already depended on. Predator-proof enclosures reduced livestock losses; veterinary services improved livestock health; and conservation jobs provided stable wages and strengthened community involvement in wildlife management.

These interventions addressed the direct financial shocks that often drive negative coping strategies — including retaliatory killing of carnivores and increased bushmeat hunting. During crises such as COVID-19, livelihood restoration also prevented social collapse in communities with no other economic buffers.

> During crises such as COVID-19, livelihood restoration also prevented social collapse in communities with no other economic buffers.

Key success factors

- Alignment with existing systems: Builds on pastoral practices, ensuring high uptake and low implementation risk.
- Direct loss reduction: Targets key shocks (predation, disease) to stabilise livelihoods quickly.
- Rapid, visible benefits: Early gains build trust and sustained adoption.
- Resilience to shocks: Maintains livelihoods during crises, limiting negative coping strategies.

Recommendations

1. Default to restoration and enhancement approaches over alternative livelihoods. SOS AWI projects consistently evidenced that approaches grounded in existing practices achieve faster uptake, lower implementation risk and more durable outcomes.
2. Predator-proof enclosures and veterinary services should be evaluated not only as conservation tools but as livelihood stabilisation mechanisms. Track livestock survival, household income stability and retaliatory killing rates together.
3. Conservation employment (community rangers, conflict response officers, ecoguards) is an undervalued livelihood tool that simultaneously delivers conservation outcomes. Track employment quality, wage levels and duration as part of livelihood reporting.

Photo credit: © Zambia Carnivore Program

3.3.2 Enhancing and diversifying existing livelihoods

Enhancing existing livelihood activities offered communities opportunities to increase income without increasing pressure on natural resources. Beekeeping, horticulture and improved fish processing were particularly successful when they leveraged existing skills and were linked to functional markets. These interventions strengthened food security, provided flexible income streams and promoted conservation-friendly enterprises.

In Uganda, beehive fences along elephant corridors both reduced crop-raiding and produced honey for household sale or consumption — a direct conservation-livelihood linkage. In Nigeria's Kainji Lake National Park, cooperatives of women and youth improved access to microfinancing, enabling increased shea butter production and a reduction in demand for firewood and logging. These examples illustrate how integrating capacity building with gender-responsive design can strengthen livelihoods while delivering wider environmental benefits.

Photo credit: © Cheetah Conservation Botswana

Key success factors

- Grounding interventions in market reality: The most effective approaches were informed by value-chain analysis, ensuring clear demand, viable pricing and reliable market access.
- Building on existing skills and systems: Interventions that strengthened locally familiar practices achieved faster uptake.
- Providing end-to-end support: Success depended on combining training with sustained mentoring, access to inputs and organisational strengthening through cooperatives.
- Promoting inclusive, group-based models: Collective structures engaging women and youth improved access to finance, inputs and markets.

Recommendations

1. Market viability must be assessed before implementation. A recurring failure across AWI projects was the introduction of livelihood activities without adequate value-chain analysis or market connectivity. All income-generating activities should be preceded by a market assessment confirming demand, identifying buyers and mapping the pathway from production to sale.
2. Gender-responsive design is both an equity and an effectiveness issue. Where projects explicitly supported women's participation, outcomes were stronger: households were more financially resilient, conservation attitudes more positive and community engagement more sustained. Women's roles, incentives and constraints should be addressed explicitly in project planning and monitored throughout implementation.
3. Build financial resilience alongside income generation. Even well-designed livelihood activities are vulnerable to external shocks. Village savings and loans associations (VSLAs), savings groups and access to microfinance provide a critical safety net and should be integrated into livelihood programmes as a standard component.

"Enhancing existing livelihood activities offered communities opportunities to increase income without increasing pressure on natural resources."

3.3.3 Alternative livelihoods

Alternative livelihoods (those introducing entirely new income sources) showed mixed effectiveness across the AWI portfolio. Success depended heavily on climatic conditions, community interest, market access and the intensity of training provided. New agricultural products or crafts frequently faced challenges: drought, poor soil, limited buyers, or insufficient follow-up training. Where market access and value-chain infrastructure were in place, results were more positive, but these enabling conditions were not consistently present.

An AWI project, which provided gardening kits, beehives and improved cookstoves to COVID-affected communities, found that while gardening increased food security and beekeeping improved yields, these enterprises did not generate substantial profit due to limited market access and packaging opportunities – highlighting the importance of value-chain planning at the design stage.

Photo credit: © Wildlife Action Group

Key success factors

- Prior market assessment confirming demand, viable pricing and reliable market access before activities begin.
- Activities grounded in existing skills or knowledge, reducing the learning burden and implementation risk.
- Sustained follow-up support including mentoring, input supply and organisational strengthening, not one-off training.
- Locally owned structures and income models designed to function without continued project inputs.
- Favourable and stable enabling conditions: climate reliability, political stability and connectivity.
- Integration with financial resilience mechanisms (e.g. VSLAs) to buffer against shocks once project support ends.

Recommendations

1. Alternative livelihoods should only be introduced where strong enabling conditions – market access, climate reliability, community interest and sufficient follow-up support – are already in place. Practitioners should conduct a robust assessment before proceeding, rather than implementing at risk of failure.
2. Design for sustainability from day one. Several approaches delivered results during the project period but collapsed once external support ended. Locally owned structures, maintenance arrangements and income models that function without ongoing project inputs are essential. VSLAs offer a useful model: low-cost, community-owned and capable of outlasting the grant cycle.
3. Measure outcomes, not just activities. Livelihood reporting across the portfolio was heavily skewed toward outputs (beehives established, people trained) with limited evidence of change in household income or conservation behaviour. Projects should define outcome indicators at the design stage, collect baseline data and track change using meaningful measures disaggregated by gender.

"Success depended heavily on climatic conditions, community interest, market access and the intensity of training provided."

COMMUNITY LIVELIHOODS APPROACHES

Photo credit: © Missouri Botanical Garden

Targeted employment for vulnerable community members in Madagascar

Location	Makirovana-Tsihomanaomby – in the SAVA region, northeastern Madagascar and Ankarabolava-Agnakatrika – in the Atsimo-Atsinanana region, southeastern Madagascar
Implementing partner	Missouri Botanical Garden
Project period	2020–2021

In response to sharply increased illegal timber exploitation during the pandemic, this project introduced temporary alternative livelihoods through paid community patrols across two newly established protected areas. At project start, illegal logging had intensified, income opportunities were severely limited during lockdowns and community engagement in conservation was low but improving.

Over 12 months, the project generated short-term employment for 2,513 community members (against an initial target of 300), alongside 34 community coordinators, providing critical income during the agricultural lean season. By the second half of implementation (Feb–Aug 2021), patrol intensity increased and detected infractions per patrol day declined (approximately 0.87/day at one site and 0.14/day at another), indicating progress toward pre-pandemic baselines.

These alternative livelihoods delivered immediate socio-economic benefits while reducing reliance on illegal resource use during acute vulnerability. However, consistent with the broader AWI portfolio, the results highlight that temporary employment-based livelihoods can stabilise communities in the short term but require sustained financing, integration with longer-term livelihood strategies and strong governance to maintain conservation gains beyond the project cycle.

3.3.4 Community-wide benefits

Investments in shared infrastructure created goodwill and strengthened local perceptions of protected areas. Boreholes reduced water scarcity, solar lighting improved safety and community grazing infrastructure reduced pressure on wildlife habitats. The value of these investments lay in increasing community resilience and strengthening relationships — not in being directly linked to specific carnivore outcomes.

The Lower Tana Delta Conservancy in Kenya provides a strong example: community ownership of a safari lodge ensured 60% of revenues were reinvested into local development, while the remaining portion supported conservation operations. This arrangement provided predictable income for households and strengthened community support for wildlife protection.

Key success factors

- Address widely shared priority needs (e.g. water, transport, basic services) identified through community consultation.
- Deliver visible, durable, low-maintenance public goods that benefit many households.
- Ensure transparent and equitable benefit allocation, with attention to women and youth.
- Link benefits to conservation objectives where appropriate, without relying on cash-only transfers.
- Include simple outcome monitoring (not just outputs) to demonstrate real change.

Photo credit: © ZSL

Recommendations

1. Address widely shared priority needs (water, transport, basic services) identified through community consultation, rather than infrastructure chosen by projects. Visible, durable, low-maintenance public goods benefit many households and generate broader conservation goodwill.
2. Ensure transparent and equitable benefit allocation, with attention to women and youth. Where community-wide benefits are linked to conservation behaviours, make this connection explicit and track both the delivery of benefits and any associated changes in community attitudes or illegal activity.

COMMUNITY LIVELIHOODS APPROACHES


Photo credit: © The Snares to Wares Initiative

Conserving wildlife by building capacities in local communities in Uganda

Location	Murchison Falls National Park, Uganda
Implementing partner	The Snares to Wares Initiative (S2W)
Project period	2020–2023

Over the 2020–2023 project period, the Snares to Wares Initiative delivered significant community-wide benefits in the Murchison Falls landscape by linking wildlife conservation with alternative livelihood development. The project introduced a model based on transforming confiscated wire snares into marketable sculptures, combined with structured skills training and market development.

A total of 516 artisans were trained, with more than 600 individuals engaged overall. This capacity building created new and more stable income streams, generating over USD 200,000 in direct earnings reinvested into household needs such as education, healthcare and food security. More than half of participating artisans diversified their incomes further, establishing additional micro-enterprises. Thirty-two retail outlets were established to support the sale of wire-based artworks, opening pathways to national tourism markets and early international trade.

An important unintended outcome was the election of three trained artisans into local leadership roles, reflecting increased social inclusion among previously marginalised groups. The project demonstrates how conservation-linked livelihood interventions can improve household incomes, strengthen market systems and enhance social inclusion while supporting broader ecosystem recovery.

3.3.5 Village savings and loans associations and financial resilience

Village savings and loans associations (VSLAs) played an important role across the AWI portfolio in helping households manage economic shocks and reduce reliance on unsustainable livelihood strategies. By pooling savings and providing accessible credit, VSLAs enabled families to cover medical expenses, invest in small enterprises and avoid harmful coping strategies — such as bushmeat hunting or illegal resource extraction — during difficult periods.

Women often played leading roles in VSLAs, which increased their financial independence and influence in community decision-making. Although not heavily documented across all AWI projects, field evidence confirmed that VSLAs were a flexible and durable tool for building household economic resilience. Their community-owned structure means they can continue functioning after project support ends, making them one of the most cost-effective mechanisms for sustaining livelihood gains over time.

Key success factors

- Locally owned, low-cost savings and credit systems that expand access to finance for households without dependence on external funding.
- Small group structure (typically 15–25 members) that builds trust, accountability and peer support among participants.
- Strong participation of women and youth, contributing to empowerment and household-level resilience.
- Financial literacy and savings/credit management training embedded in VSLA formation, not added as an afterthought.
- Flexible, low-interest loans that can support both income-generating activities and essential household needs during shocks.
- Integration with livelihood enhancement or alternative livelihood activities, so that VSLA credit translates into productive investment.
- Minimal dependence on external facilitation, supporting durability beyond the grant period.

'VSLAs enabled families to cover medical expenses, invest in small enterprises and avoid harmful coping strategies during difficult periods.'

Recommendations

1. VSLAs should be integrated into livelihood programmes as a standard component, particularly in contexts with high exposure to climate or economic shocks. They provide a critical financial safety net that reduces the risk of communities reverting to unsustainable resource use when other income sources fail.
2. Ensure that VSLA formation is accompanied by robust training in financial literacy. Groups that understand savings cycles, loan management and interest structures are more stable and more likely to continue operating independently after project closure.
3. Track VSLA outcomes beyond formation: the meaningful indicators are savings accumulated, loans issued, proportion of members investing in income-generating activities and continued operation after project support ends — not simply the number of VSLAs established.

3.3.6 Education and training

Education and training activities aimed to increase awareness, knowledge and capacity among local communities, schools and other stakeholders to improve tolerance and coexistence with wildlife and promote conservation-friendly behaviours. Across SOS AWI projects, these included community sensitisation meetings, school conservation clubs, radio programmes, film nights and technical training on livestock protection, veterinary care, species monitoring and wildlife laws.

Education approaches contributed to positive shifts in community attitudes and conservation knowledge in a number of projects, but their contribution to measurable behaviour change or species-level outcomes was more difficult to demonstrate within short project timeframes. They were most effective when combined with direct conservation or livelihood activities, rather than implemented as standalone awareness-raising components.

Photo credit: © Zambia Carnivore Programme

Key success factors

- Designing activities around specific, targeted behavioural changes (e.g. reduced retaliatory killing, increased reporting of injured wildlife) rather than general awareness objectives.
- Combining education with direct conservation or livelihood actions that reinforce and incentivise the desired behaviour change.
- Using contextually appropriate and locally trusted communication channels (e.g. community radio, traditional authorities, local language materials).
- Engaging schools and youth groups for long-term attitude formation alongside community-level outreach.
- Tracking behaviour change indicators, not only reach or attendance figures.

Recommendations

1. Education and outreach activities should be designed with specific, measurable behavioural outcomes in mind (e.g. reduction in retaliatory killings, increased reporting of injured wildlife) rather than general awareness objectives. Track changes in targeted behaviours, not only reach or attendance figures.
2. Combine education with direct conservation or livelihood actions. The evidence suggests that awareness-raising is most effective when it reinforces behaviour change that is also supported by practical and economic incentives.

"Education approaches contributed to positive shifts in community attitudes and conservation knowledge in a number of projects."

14

INTEGRATED APPROACH

Integrated approaches consistently produced the most sustainable and wide-reaching conservation outcomes under AWI. By combining species protection, habitat restoration, livelihoods, governance strengthening and monitoring, projects addressed both immediate and underlying drivers of wildlife decline. This synergy ensured that carnivores were protected in the short term while ecosystems and communities grew more resilient in the long term. Integrated projects saw reductions in livestock losses, improvements in community reporting of illegal activities, enhanced habitat quality and increased carnivore survival. AWI's evidence shows clearly that no single intervention strategy is sufficient; multi-dimensional strategies tailored to local contexts are essential for lasting conservation results.

Multi-dimensional strategies tailored to local contexts are essential for lasting conservation results.

Photo credit: © Rebecca Jackrel.


Photo credit: © COGEZOH

Building community resilience to secure carnivore habitat in the W National Park, Niger

Location	The W National Park, Niger
Implementing partner	COGEZOH
Project period	2020–2022

The W National Park is one of West Africa's most important strongholds for large carnivores. At project outset, communities surrounding the park depended directly on its resources — illegally harvesting baobab leaves, grazing livestock inside the boundary and retaliating against carnivores that preyed on unprotected animals. No structured conflict monitoring system existed and community involvement in park management was minimal.

COGEZOH's response was deliberately integrated. Six women's groups were trained and equipped to cultivate baobab leaves through market gardening, removing the incentive for illegal harvesting: by project completion, 364 women were producing their own supply and no further arrests for illegal baobab extraction inside the park were recorded — a complete cessation of one of the park's most persistent encroachment pressures.

In parallel, 110 community members were trained in beekeeping, 25 producers established fodder cultivation plots and livestock enclosures were constructed — reducing predation and retaliatory killing. A network of 40 trained local informants was established to monitor and respond to human-wildlife conflict incidents in real time, feeding data into the landscape's first structured human-wildlife conflict database. By project completion, 499 direct beneficiaries were producing baobab leaves (5,791 kg), honey (3,202 litres) and fodder (7,080 kg) without recourse to park resources.

These results are particularly significant given that security conditions rendered the park interior inaccessible for much of the project period, preventing planned wildlife surveys. That the project sustained momentum and achieved its core outcomes under these conditions reflects the resilience of community-anchored design and points to an important lesson for fragile contexts: community-based systems at the park boundary can continue to function where centralised operations cannot.

CONCLUSION

Photo credit: © Wild Chimpanzee Foundation

IUCN's SOS AWI project portfolio shows that effective conservation in sub-Saharan Africa is not achieved through isolated interventions but through holistic, integrated strategies that reinforce ecological, economic and social systems simultaneously. Species protection provides immediate results; habitat restoration builds long-term ecological stability; livelihood interventions reduce human pressure; governance strengthens local ownership; and monitoring ensures that decisions are evidence-based.

SOS AWI demonstrates that conservation and community well-being are inextricably linked. Field practitioners, protected area managers and programme designers can apply these lessons to build resilient landscapes where wildlife and people coexist and thrive. By scaling integrated, community-centred, evidence-based approaches, future conservation efforts can achieve a durable impact across Africa's most threatened ecosystems.

> SOS AWI demonstrates that conservation and community well-being are inextricably linked.

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