Darwin Initiative Main & Extra Annual Report

Submission Deadline: 30th April 2025

Submit to: BCF-Reports@niras.com including your project ref in the subject line

Darwin Initiative Project Information

Scheme (Main or Extra)	Main
Project reference	31-006
Project title	Equitable Responses to Illegal Wild Meat Hunting in Tsavo, Kenya
Country/ies	Kenya
Lead Organisation	Zoological Society of London (ZSL)
Project partner(s)	Taita Taveta Wildlife Conservancies Association (TTWCA), Tsavo Trust (TT), University of Wyoming (UoW), Kenya Wildlife Service (KWS), Wildlife Research and Training Institute (WRTI)
Darwin Initiative grant value	£599,637.00
Start/end dates of project	1st July 2024 – 30th June 2027
Reporting period (e.g. Apr 2024 – Mar 2025) and number	July 2024 - Mar 2025 Annual Report 1
Project Leader name	Gurveena Ghataure
Project website/blog/social media	https://www.zsl.org/conservation/regions/africa/kenya-conservation-work Twitter: @ZSLAfrica
Report author(s) and date	Gurveena Ghataure, Clarine Kigoli, Rebecca Sennett Day, Hannah Klair, Fridah Mutili, TTWCA (Noel Kasololo); UoW (Douglas Njeri); TT (Joseph Kyalo); 30th April 2025

1. Project summary

Illegal wild meat hunting is one of the most pressing threats to wildlife in the Tsavo Conservation Area (TCA), a vast, ecologically rich landscape in southeastern Kenya. TCA supports globally important populations of endangered species, including lions and African wild dogs - the only resident wild dog population in a Kenyan national park. However, increasing poverty, deepening food insecurity, crop failure, and the collapse of tourism-related livelihoods; especially after COVID-19 have pushed many local community members to hunt wildlife for meat, both for subsistence and informal trade. This puts them at legal risk, exposes them to potential health issues, and further threatens already vulnerable wildlife populations.

Wild meat hunting has sharply increased, with patrol data showing the recovery of over 2,800 kg of illegally hunted meat in less than a year and 92 wildlife crime incidents reported in northern Tsavo between 2020 and 2021. Snaring, in particular, is widespread. Snares not only reduce prey populations but also unintentionally trap and kill lions and wild dogs. The resulting scarcity of prey increases livestock attacks, fuelling human-wildlife conflict and weakening community support for conservation. Evidence shows that many Kenyans recognise the dangers of wild meat use and are open to change; creating a critical opportunity for intervention.

This project was designed to address these interconnected challenges by tackling both the biodiversity threats and the underlying human wellbeing issues. Through community-driven action, the project aims to:

- Reduce illegal wild meat hunting and trade across the 17,000 km² Tsavo landscape.

- Promote alternative protein sources and sustainable livelihoods in identified wild meat ‘hotspot’ communities.
- Support behaviour changes campaigns that shift attitudes away from wild meat consumption.
- Strengthen law enforcement, with a focus on de-snaring across TCA
- Track trends in wild meat sales and consumption.
- Monitor predator and prey populations using lions and wild dogs as indicators of ecological recovery.

The project area spans Tsavo East and West National Parks and adjacent conservancies in Taita Taveta County **(see map in annex 1- Baseline Report).** This location is particularly significant for wild dogs, which require large, connected habitats with low human disturbance. Tsavo’s relatively low projected temperature increases also make it more resilient to climate change than other wild dog strongholds in southern Africa, increasing its conservation importance.

Problems and priorities were identified using a combination of community engagement, wildlife patrol data, wild meat seizure reports, household surveys, and analysis of the broader socioeconomic impacts of climate shocks and COVID-19 on rural livelihoods. Evidence-based targeting ensures that project interventions are focused on the areas of greatest need and potential impact.

2. Project stakeholders/ partners

This project is strongly collaborative and brings together seven formal partners: the Taita Taveta Wildlife Conservancies Association (TTWCA), Tsavo Trust, University of Wyoming (UoW), Kenya Wildlife Service (KWS), Wildlife Research and Training Institute (WRTI), and the County Governments of Makueni and Taita Taveta. The project also works closely with local communities living on both the northern and southern sides of the Tsavo Conservation Area (TCA), particularly in identified wild meat 'hotspot' areas. ZSL leads activities in the northern side of TCA (Makeuni County) while TTWCA coordinates the interventions in the south (Taita-Taveta County).

Communities are directly involved in planning and implementation, and supported through training, outreach, and livelihood initiatives that aim to reduce reliance on wild meat and improve local wellbeing. Partnerships were formed in response to problems raised by local stakeholders themselves, including poverty, food insecurity, and rising wildlife poaching. Activities are shaped through consultations, patrol data analysis, and expert input from partners, ensuring that project actions respond directly to local needs.

Each partner brings unique expertise and plays a clearly defined role: TTWCA leads all community related activities on the southern side of the TCA, working closely with conservancies and local leaders. Tsavo Trust oversees de-snaring patrols and surveillance in bushmeat hotspots. University of Wyoming is responsible for ecological research, particularly on wild dogs and lions, and their prey. KWS contributes to both research and enforcement activities and provides a venue within the park for quarterly stakeholder meetings. WRTI supports scientific research and field methodologies on species research. County Governments help coordinate and support community level implementation on the ground. Local communities provide local knowledge, co-lead outreach efforts, and are essential to project monitoring and feedback. All implementing partners are involved in planning, monitoring, and decision making for their activities, supported by subgrant agreements that clearly define their roles.

To keep key government stakeholders involved and informed, KWS, WRTI, and the County Governments of Makueni and Taita Taveta are engaged through quarterly stakeholder meetings, where the project team shares updates on project progress, and discusses any arising issues. These partners are also involved when planning community outreach activities, helping to ensure that efforts are coordinated and that all relevant institutions are aware of the project’s direction and achievements. As the lead implementer, ZSL ensures that TTWCA delivers the same set of activities for communities on the southern side using the same methods as in the north and adapting to local contexts where needed. This consistency is important for comparing impact across the landscape. Regular communication through phone calls, emails, and team meetings has helped maintain this coordination and ensure smooth delivery of the work.

One major achievement is the strong collaboration we have between partners and communities, which has helped build trust and engagement. Regular joint planning meetings and clear role definitions have improved coordination. A key challenge for the project has been the slow permitting process for wildlife research by KWS and WRTI. This has delayed activities such as camera trapping and collaring of wild dogs. To address this, the project team continues to engage with the relevant authorities while preparing everything needed to start immediately once permits are approved.

In terms of raising awareness about how biodiversity and poverty are connected, the first year of the project has focused on identifying and engaging key community stakeholders in wild meat hotspot areas. While the main behaviour change activities are scheduled for Y2, plans are in place to use local language radio broadcasts to communicate these issues clearly and accessibly. To support this work, the project has

recruited a consultant who will focus specifically on developing effective messaging. He will work closely with local communities to understand what kinds of messages are culturally acceptable and likely to have an impact. This will be done through interviews and focus group discussions. Once implementation begins, the project will monitor how well messages are understood and adapt outreach materials accordingly.

3.1 Progress in carrying out project Activities

Output 1: Targeted law enforcement, including de-snaring efforts, leading to reduced snaring levels in the Tsavo landscape, and data on trends in snaring and illegal killing of wildlife

Activity 1.1 Project inception meetings held in Taita and Mtito Andei. A project inception meeting was held on 3rd July 2024 at the AVID Hotel in Voi. It brought together 41 participants from key institutions, including ZSL, TTWCA, KWS, WRTI, TT, and the UoW, as well as representatives from national and county governments. The meeting introduced the project, outlined its objectives, and provided a platform for stakeholders to contribute feedback to shape the project's design and implementation, including the need for cultural sensitivity, improved mapping accuracy, effective communication strategies, and the inclusion of broader wildlife trade threats. They also raised key issues such as the integration of human-wildlife conflict mitigation measures, targeting emerging hotspot areas and sustainable beneficiary selection. Institutional representatives expressed their commitment to collaboration, emphasizing the importance of data sharing, stakeholder engagement, and accountability. (Annex 2 – Project Launch Report)

Activity 1.2 Regular snare patrols with TT to remove threat and provide data on snaring trends and monitoring trends. Over the past nine months (July to March), significant progress has been made in targeted law enforcement and de-snaring efforts aimed at reducing snaring in the Tsavo landscape. In collaboration with our partner, TT, these efforts have focused on Tsavo West National Park (TWNP) to better understand trends in snaring and illegal wildlife killings. Patrol teams- Tembo 5, 6, and 9 covered extensive ground: 19,981km, 30,054km, and 30,924km respectively, with all teams successfully completing 274 patrol days each, averaging 30.4 patrol days each month (Annex 3- De snaring Effort).

Tembo 5 recovered 101 snares and 44kg of dik-dik bushmeat, including 14 dik-diks killed using the lamping method. Tembo 9 found 63 snares and recovered 2kg of Tilapia illegally fished within TWNP. Tembo 6, which patrols the central part of the park where wildlife crimes are less frequent, encountered no active snares. Although the total number of snares recovered across patrol teams is just a tiny bit higher than what we reported in the previous six-month period (April to September 2024), several factors explain why this increase is small. First, the region experienced significant rainfall between November and February, leading to improved conditions for farming and a temporary decline in snaring activities. Second, there is a noticeable shift in poaching methods, with a decline in snaring and an increase in the use of lamping method, as evidenced by the 14 dik-diks killed using this method, which the project will continue to monitor.

Arrests were also made, with Tembo 5 making 5 arrests (3 for bushmeat poaching, 1 for illegal grazing and 1 for illegal entry to the park), and Tembo 9 making 42 arrests (1 for bushmeat poaching - in possession of game snares, 1 for illegal fishing, 7 for illegal entry, 1 for fence vandalism, and 32 for illegal grazing). Tembo 6 made no arrests in the period. Annex 4- Patrol maps & Annex 5- Snare Map

(Activity 1.3 *Activity removed in previous change request)*

Activity 1.4 In collaboration with KWS, conduct quarterly outreach meetings to build positive people-park relationships and educate communities on penalties and fines prescribed by Wildlife Act 2013. The project team, in collaboration with KWS, held a series of community outreach meetings across seven locations within the Tsavo Conservation Area (Kathekani, Mtito Andei, Nthongoni, Njukini, Msorongo, Ovasia, and Kamtonga). In total, nine meetings were conducted, reaching 909 community members (575 in Makueni, 334 in Taita-Taveta), including local leaders, KWS officials, and other key stakeholders. These meetings aimed to build positive relationships between communities and the park, and to introduce the project. A phased approach was adopted with initial meetings focused on building trust, securing Free, Prior, and Informed Consent (FPIC), and providing a detailed introduction to the project before engaging with the legal aspects of wildlife conservation. Across both regions, KWS officers played a central role in delivering conservation education, explaining human-wildlife conflict compensation mechanisms, and introducing the Wildlife Conservation and Management Act (2013). In Taita-Taveta, discussions also included practical legal scenarios, highlighting penalties for unauthorized park entry, illegal hunting, and transport of wild meat, which resonated strongly with the communities. These discussions demystify legal consequences and also created a platform for the community to raise concerns ranging from human-wildlife conflict and transparency in project implementation, to land tenure issues in one location. These concerns were addressed during the discussions, thus reinforcing community trust and engagement. We also sought community consent for project implementation and baseline surveys, which was unanimously granted across all meeting sites. (Annex 6 – Outreach meeting reports)

Output 2: Targeted social marketing campaigns based on an improved understanding of the drivers of wild meat successfully shift attitudes leading to a reduction in hunting, consumption, and local trade of wild meat in target (wild meat hunting hotspot) communities

Activity 2.1: Conduct baseline survey to assess levels of harvesting, consumption and sale of wildmeat and their drivers across target communities. The project utilised Key Informant Interviews (KIIs) to better understand the hotspot areas and the drivers of wild meat consumption and trade. Using a snowball sampling approach, the project team interviewed a total of 30 community members: 15 from Makueni County (Locations: Kambu, Kathekani, Mangelete, and Mtito Andei) and 15 from Taita Taveta County (Locations: Mwachabo, Mwakitau, and Njukini). Respondents were selected based on their extensive experience and knowledge related to wild meat hunting, consumption patterns, and trade networks and included individuals such as ex-poachers, long-term community residents, and local chiefs who, as administrators, have insight into illegal activities within the community. (Annex 7-KII Analysis results & Annex 7b- KII questionnaire)

Findings from the KIIs across both counties revealed consistent results. Wild meat consumption was primarily driven by poverty, food insecurity, unemployment, and the relatively low cost and high preference for wild meat compared to certified/domesticated meat. In both regions, young men aged 15–28 were identified as the primary actors in wild meat hunting, often motivated by the need for quick income, cultural identity, or peer pressure. Commonly hunted species included dik-dik, gazelles, giraffe, zebra, and eland. Proximity to the Tanzanian border (especially in areas like Challa in Njukini, Taita Taveta) was noted as a factor enabling cross-border wild meat trade. While awareness of the health risks associated with wild meat such as zoonotic diseases was relatively high, the lack of affordable and accessible alternatives meant many households continued to rely on it as a protein source. (Annex 7-KII Analysis results)

Additionally, the project conducted baseline household surveys (Annex 1b- Household survey questionnaire) in February 2025 in Makueni and Taita Taveta aimed to assess wild meat harvesting, consumption, and sale levels, alongside the drivers behind these activities in the hotspot areas. The survey also explored food security, household livelihoods, and the challenges faced by these communities. Data collection covered a total of 25 villages, distributed across six locations, with a total of 252 respondents (102 males;150 females). A systematic sampling method was employed, including KIIs as mentioned above to identify hotspot villages, followed by random sampling techniques for the household survey, reaching 10% of each village population.

Alongside standard interview approaches, the survey also used the 'Bean Count Method' – a technique used for asking sensitive questions (specifically around illegal activity) which allows respondents to respond anonymously (for detail on this method, please see Annex 1- Baseline report). Not all 252 respondents answered the questions in the Bean Count section, and we have shown the total respondents as 'n=' by each result.

Using the bean count method, the baseline survey revealed that wild meat hunting is not widespread but persists in specific hotspots. In Taita Taveta, the highest hunting levels were reported in Maktau (16% of respondents said their household hunts wild meat; n=172). In Makueni, the level of hunting reported was slightly lower but still present, with Kathekani at 12%, Nthongoni at 10%, and Mtito Andei at 9%. However, within these locations, some villages were clear hotspots, eg. 56% of respondents in one village in Mtito Andei said their household hunts wild meat. When it comes to the sale of wild meat, the activity was more commonly reported by households in Taita Taveta (17%; total respondents n=168) than in Makueni (7%).

Buying wild meat was much more prevalent than hunting or selling, particularly in Taita Taveta, where 69% of respondents in Mwachabo and 60% in Maktau reported purchasing wild meat (n=193). In Makueni, Kathekani led with 54%, followed by Mtito Andei (35%) and Nthongoni (22%). This strong demand suggests that many community members depend on purchasing wild meat rather than sourcing it directly. Reported consumption of wild meat was also high across both counties. In Taita Taveta, an average of 48% of respondents reported consuming wild meat (n=196), with the highest reported levels in Maktau (72%). In Makueni, the average was slightly lower at 36% of respondents.

The survey also explored the drivers behind hunting, revealing that the majority of respondents (41%; total respondents n=252) ranked economic necessity or poverty as the main reason, followed by 40% ranking lack of other income sources as second, food insecurity and nutritional needs as third (36%), market demand for wild meat as fourth (54%), cultural practices as fifth (71%), and sport or recreational motivations as sixth (85%). The main drivers for wild meat consumption in wild meat hotspot communities were as follows: ranked first by 48% of respondents was its low cost compared to domestic meat options, ranked second by 37% of respondents was a food shortage and needing to provide for their families, and ranked third by 40% of respondents was its ready availability. Wild meat as a source of protein was ranked third by only 7% of respondents (ranked second by 3% and ranked first by 1%). Interestingly, tradition and cultural beliefs were only ranked second and third by 1% of respondents, and no one ranked it as first.

The main drivers for selling wild meat, based on the household survey (n=252), are primarily economic. A large majority of respondents (87%, n=252) cited wild meat as a key source of income, reflecting the financial reliance many households have on its trade. Additionally, 42% of respondents (n=252) pointed to the availability of wild meat as a contributing factor, indicating that its accessibility makes it an easier commodity to sell. (See Annex 1 – Baseline Report)

Activity 2.2: Using baseline data from 2.1, identify local values, motivations and drivers of wildmeat use across groups, and generate user profiles to understand needs and wildmeat dependence. Following the baseline survey and KII data analysis (Annex 7)**,** we analysed the motivations, values, and drivers of wild meat use across target communities, and developed user profiles to better understand dependence and inform more tailored interventions.

As summarised in 2.1, wild meat consumption is primarily driven by economic and practical considerations. The most common reason cited where its low cost compared to domestic meat, the need to address food shortages and its ready availability (see above for % breakdowns). Cultural or traditional beliefs played a minimal role and few cited wild meat as a preferred protein source. Similarly, hunting and selling were overwhelmingly linked to income generation, cited as the main reason for hunting by 41% of respondents, and for selling by 87% with other key factors including poverty, lack of alternative livelihoods (40%), and market demand (54%). Similarly, the primary driver for selling wild meat was income generation, cited by 87% of respondents (n=252). (Annex 1)

Barriers to alternative livelihoods included lack of capital, drought, livestock disease and predation, and limited access to training and resources, underscoring the structural challenges facing these communities. From the KII data, seven distinct user profiles emerged, offering a deeper understanding of the diverse actors involved in the wild meat trade. These include 1) Young Male Hunters, 2) Female Wild Meat Traders or Facilitators, 3) Male Middle-Aged Hunters or Trainers, 4) Unemployed Youth, 5) Community-Based Buyers or Informal Consumers, 6) Cross-Border Female Traders, and 7) Outsider or Non-Local Participants (these are described in full in Annex 7). These diverse profiles highlight the complexity of wild meat use, shaped by both economic hardship and cultural traditions, and point to the need for integrated, practical, and culturally sensitive solutions.

Activity 2.3: *Activity planned for FY2****; Activity 2.4:*** *Activity planned for FY2*

Activity 2.5: Support KWS to convene quarterly stakeholder meetings on emerging conservation challenges including bush meat trends and engage stakeholders in resolving identified challenges. In this reporting period, ZSL and TTWCA, in collaboration with KWS, convened four stakeholder meetings across the Tsavo landscape. Two meetings were held at the Education Hall in TWNP (Dec 2024 & Mar 2025), and two others were hosted in Taita Taveta at Avid Hotel, Voi (in Jan & Mar 2025). These meetings brought together a diverse group of participants, including representatives from county and national governments, project partners, and community leaders. The purpose of the meetings was to review project progress, validate findings from KIIs that had been conducted, and jointly explore solutions to reduce wild meat consumption and hunting in the hotspot areas. Across all locations, stakeholders discussed key drivers of wild meat use. Participants identified priority hotspot areas like Lukenya and Challa and emphasized the importance of engaging youth. Some of the recommendations offered by the stakeholders as alternative livelihoods included beekeeping, poultry, agribusiness, leather tanning, and even snake farming among others. The meetings also covered sessions on Village, Savings and Loans Associations (VSLA) group formations, and the introduction of the project's Grievance Redress Mechanism (GRM) (Annex 8- Grievance Mechanism). Creative outreach methods were proposed to improve community engagement, especially with hard-to-reach groups such as hunters, with suggestions including the use of Swahili radio shows, brochures, pictorial materials, and night cinemas. Stakeholders appreciated the transparent, inclusive approach of the project and committed to supporting implementation even as we proceed. (Annex 9- Quarterly Stakeholder meeting reports)

Activity 2.6: Conduct surveys to measure changes in wild meat use.

This survey is the same as the baseline survey described in Activity 2.1.

Output 3: Implementation of sustainable income-generating activities resulting in improved livelihoods and economic opportunities for target (wild meat hotspot) communities and successful promotion of alternative protein sources to reduce dependency on wild meat.

Activity 3.1: Assess skills and existing livelihood options of those dependent on wild meat to identify potential interventions that address priority drivers (identified in 2.2).

The baseline survey assessed existing livelihood options of 252 respondents from wild meat hotspot areas. Key findings showed that most depend on subsistence farming (86%) and livestock keeping (58%), with others engaged in casual labour (36%), small businesses (19%), and less common activities like charcoal burning (8%) and sand harvesting (2%). These findings highlighted income insecurity as a key driver of

wild meat reliance. In Y2, we will conduct a targeted survey to further assess the skills and livelihood options of the direct project beneficiaries to inform tailored interventions. (Annex 1- Baseline report)

Activity 3.2: Conduct participatory workshops to discuss and prioritise viable interventions (e.g. income and protein generating alternatives) acceptable by the communities for 400 individuals. The project team conducted a series of participatory workshops to help communities identify culturally acceptable and sustainable alternatives to illegal wild meat use. 676 community members participated (326 in Makueni and 350+ in Taita Taveta), exceeding the target of 400, with strong representation from women and youth. Workshops were held and co-facilitated by ZSL, TTWCA, KWS, local county departments of Agriculture and Social Services, and other technical experts. The full-day workshops created safe, inclusive spaces for communities to openly discuss the drivers of wild meat reliance and collaboratively prioritize practical alternatives. Participants shared challenges to alternative livelihoods, including water scarcity, unreliable rainfall, human-wildlife conflict, and limited employment opportunities. They mapped their current protein sources—both legal (e.g., goats, poultry, beans) and illegal (e.g., dik-dik, impala, buffalo, elephant)—which led to open discussions on food safety, zoonotic risks, and the ecological impacts of wildlife hunting.

In Makueni, goat rearing, poultry farming, green grams, cowpeas, and beans were repeatedly identified as preferred options, valued for their adaptability and potential to enhance both food security and income. In Taita Taveta, improved breeds of poultry, Galla goats, bananas, and green grams ranked highly, alongside suggestions for small-scale businesses like food kiosks, water vending, and soap-making. Service-based ideas such as boda boda transport and salon work also featured strongly. These workshops clearly demonstrated that the community is ready to embrace alternative, legal livelihoods if they receive the necessary training, support, and market access. (Annex 10 –Participatory workshop Reports)

Activity 3.3: Mobilise at least 400 individuals to form VSLA groups in villages identified as hotspots for wild meat trade. In this reporting period, the project team successfully mobilised over 400 individuals to form VSLAs across the two key areas (Makueni County - 340 individuals; Taita Taveta County -97 individuals). The VSLA model is a community-based savings and loan system where members meet regularly to save together and take small loans. The activities of the group run in cycles of one year, after which the accumulated savings and the loan profits are distributed back to the members. The purpose of a VSLA is to provide simple savings and loan facilities in a community that does not have easy access to formal financial services helping improve financial security and support local needs like businesses or education.

In Makueni, ZSL held meetings in four wild meat hotspot locations to introduce the VSLA model. Community members were encouraged to form groups of about 15-30 people, and it was explained that VSLA formation was voluntary and self-selecting, with no pressure for anyone to join. In Taita Taveta, TTWCA mobilised and trained 286 community members (114 men, 172 women) across four hotspot villages (details in Annex 11).

The response in Makueni was particularly strong, with 37 groups forming, far exceeding the target of around 15. A vetting process was conducted to prioritise groups based in hotspot villages and assess new and existing groups based on size, cohesion, saving practices, vulnerability, and commitment. Groups lacking a clear common goal or motivated solely by project benefits were not selected. Where multiple groups qualified in the same village, a ballot process was used to ensure fairness. By the end of mobilisation, 4 VSLAs were onboarded in Taita Taveta and 15 in Makueni. All selected groups received training in financial management, record-keeping, legal registration, and governance to lay a strong foundation for Y2 activities. (Annex 11- VSLA mobilisation reports)

Activity 3.4: *Activity planned for FY2****; Activity 3.5:*** *Activity planned for FY2****; Activity 3.6:*** *Activity planned for FY2****; Activity 3.7:*** *Activity planned for FY2*

Output 4: Market surveys have provided trend data on wild meat sales in target (wild meat hotspot) communities around Tsavo.

Activity 4.1: Conduct surveys in key markets to assess availability and variety of meat products. Record information on species, quantities, prices, and sources of meat.

This activity, led by our partner University of Wyoming, was designed to assess the types, sources, prices, and availability of meat, especially wild meat in key markets across Tsavo. Initially, it was assumed that we would visually identify the species of wild meat being sold. However, this proved to be impossible, as the meat is usually fully skinned and cut into smaller pieces before it reaches the market. We also planned to carry out DNA testing of meat samples in butcheries and villages known to be wild meat hotspots, which would have helped us better understand which species were being hunted and sold. Unfortunately, we couldn't move forward with this as our partner did not manage to secure the expected matched funding from the Lion Recovery Fund.

Despite these setbacks, we made use of DNA data collected by our partners from confiscated wild meat and related arrests in the area. In 2024, efforts by the Kenya Wildlife Service (KWS) led to the confiscation of 697 kilograms of wild meat and removal of 985 snares in Tsavo. A total of 26 individuals were arrested for wild meat-related offenses. While this is a notable achievement, we believe it only reflects a small fraction of the actual wild meat trade in the region. Between July and December 2024, KWS and African Wildlife Foundation carried out DNA testing on 29 confiscated samples. The meat came from a wide range of species including dik diks, impalas, giraffes, hares, kudu, warthogs, oryx, duiker, and even zebra.

We are actively applying to other donors to help fund the DNA analysis. However, in the meantime, we will work on a change request for Output 4 to suggest a proxy measure and will submit following this report. (Annex 12- Data summaries on snares and DNA analysis)

Activity 4.2: Conduct interviews with key stakeholders involved in the meat trade, including suppliers, traders, and consumers. Gather information on trade networks, market dynamics, and consumption patterns.

Both the KII and baseline household survey detailed under Activity 2.1 have provided information on market dynamics and consumption patterns. 83% of respondents reported that the price of wild meat was lower than domestic meat, with the main motivation to sell and trade in wild meat being an additional income source (87%), followed by availability (43%). 100% of respondents reported that households are more likely to consume wild meat during the dry season and they prefer to eat dik dik (74%) (Refer to Annex 1- Baseline Report). From the KII, it was clear that there are a multitude of methods used to sell wild meat, often designed to evade detection. Bikes and motorcycles are the primary means of transport, with wild meat typically carried in small, concealed pieces hidden in sacks. Delivery is often done directly to consumers, sometimes door-to-door and mostly at night, using coded language and specific routes. Hunters may carry the meat themselves or deliver it to agents, who then coordinate sales via phone calls. In some cases, there are no middlemen involved, and hunters sell directly to consumers at local markets. This hidden trade relies heavily on established contacts and informal packaging methods, enabling a discreet but consistent flow of wild meat from hunter to buyer. (Refer to Annex 7- KII Data analysis).

Activity 4.3: Monitor key markets to track changes in meat availability, prices, and consumption trends over project period. As mentioned under Activity 4.1, we were not able to collect data from markets in Y1 due to unsecured matched funding from our partner and the inability to carry out visual identification. However, we will continue to track the data provided by partners, KWS and TT as mentioned above. This includes information on wild meat-related arrests, quantities confiscated, and DNA analysis of seized samples to identify species. (Refer to Annex 12).

Activity 4.4: *This activity has been removed due to safeguarding concerns around sharing sensitive information with enforcement agencies.*

Output 5: Comprehensive monitoring of large carnivores (African wild dog, lion, cheetah, leopard, hyena spp.) and their prey in Tsavo established and generating both training opportunities and data on demography, snare-related mortality, and distribution and population trend.

Activity 5.1: Implement park-wide camera trap surveys to estimate the distribution, occupancy, and status of large carnivores and their ungulate prey, including proportions with snare-related injuries. Due to the immense size of TWNP (9,000 km²), this activity initially faced challenges. The limited availability of camera traps (only 60 units) made it difficult to cover enough ground to gather meaningful data. In response to this, the team successfully secured funding for an additional 90 camera traps, bringing the total to 150, which is expected to significantly improve spatial coverage using grid sampling. However, the time taken to obtain the funding for the camera traps led to a delay in starting this activity until Y2.

The survey is planned between May and September 2025. During this period, camera traps will be deployed across strategic points in the park to collect photographic data. This data will be used to classify images, identify species, and analyse the occupancy patterns of both lions, wild dogs and their prey species. We will also incorporate snare density data into the analysis model to understand the impact of illegal hunting on wildlife occupancy. This is crucial for linking the effectiveness of anti-poaching efforts and alternative protein livelihood opportunities to actual conservation outcomes on the ground.

Activity 5.2: Conduct line transects using distance sampling to measure ungulate densities and distribution. To assess the spatial and temporal variation in the abundance and distribution of wild ungulates, our partner, University of Wyoming conducted monthly transect counts from December 2024 to March 2025, employing distance sampling methods within the Southern sector of TWNP. During these counts, we recorded all instances of lion prey observed along the transects, based on our kill site surveys. This included buffalo, eland, hartebeest, oryx, zebra, as well as giraffe, impala, warthog, and wildebeest. We also collected data on herd size, sighting distance, and compass-bearing. Our findings revealed significant seasonal and spatial variation in the biomass of lion prey across the months. (Annex 13- Monthly Biomass trend & distance sampling results).

Plans for Year 2 will be to continue to conduct monthly drive transect counts. The data from the transect counts will be used to assess both the spatial and temporal variations in prey density and the influence of snare density alongside other relevant factors such as water availability, proximity to human settlements, presence of livestock, and habitat type.

Activity 5.3: Deploy GPS-collars (1-2 per pack) to facilitate visual observation of African wild dogs. The deployment of GPS collars has been delayed due to the time-consuming process of amending existing research agreements and also due to bureaucratic hurdles experienced with government institutions like WRTI and KWS. The initial research permit only covered the Samburu-Laikipia landscape, excluding Tsavo. As a result, ZSL was required to initiate an amendment to the existing Memorandum of Agreement to include the Tsavo landscape. This involved convening a meeting with all partners listed under the original permit to secure consensus on the amendment. Following this, WRTI/KWS requested an additional revision, which had to undergo internal legal review before being circulated again for signatures from all partners. These necessary but lengthy procedures have resulted in delays; however, all groundwork is in place, and the team is ready to proceed with collar deployment once the updated documentation is approved, and research permits issued.

Activity 5.4: Monitor GPS-collared and uncollared African wild dog packs to estimate demographic rates. Activity delayed because of permits – see above

Activity 5.5: Integrate African wild dog GPS-collar data with data on prey densities, distribution, and snaring to estimate impact of snaring on habitat selection and hence occupancy. Activity delayed because of permits – see above

Activity 5.6: Deploy Daily Diary collars (1-2 per GPS-collared pack) to measure African wild dog hunting success and food intake. Activity delayed because of permits – see above

Activity 5.7: Use visual observations and camera trap images of known animals to quantify variation in lion numbers and demography over time and space. Between September and December 2024, we partnered with the KWS and WRTI to capture and fit GPS collars on four lion prides (Table 1). These collared prides occupy the southern sector of TWNP, Lualenyi Ranch, Lumo Conservancy, and the Taita Hills Conservancy. As lion prides move together as cohesive units, the movements of a collared female are typically indicative of her entire pride; collectively, these four prides comprise a total of 29 individuals. The high-resolution data collected from the GPS collars significantly enhances our understanding of spatial and temporal variations in lion occupancy and the associated changes in prey abundance resulting from snare removal. As well as real-time monitoring for snare-related injuries and mortalities. See Annex 14- Collared Lion Data

Activity 5.8: Involve student interns (ideally from the local area) in camera trapping, line transects, and visual monitoring to provide field training. Between July 2024 and March 2025, we engaged two students: one from WRTI and another from Egerton University. The students participated in all the monitoring activities in the project, including transect counts using distance sampling methods, camera trapping and image classification using AI software (i.e., Trap Tagger), lion tracking and monitoring, and lion kill site identification. This helped mentor the students and enhance their skills through hands-on experience.

In Y2, we intend to run wildlife monitoring courses in collaboration with WRTI. The course outline has already been developed and shared with WRTI for input. The course will run for one week and will target student interns and young conservationists working in Tsavo.

Activity 5.9: *Activity planned for FY2.*

3.2 Progress towards project Outputs

Output 1: Indicators 1.1-1.3: Over the past year, the project has made strong progress toward achieving Output 1. Activities began with a well-attended inception meeting in Voi, bringing together over 40 representatives from key institutions and government agencies to align on project goals. Stakeholders emphasized the importance of cultural sensitivity, accurate mapping, and community integration – feedback that has been taken seriously and directly shaped subsequent planning and implementation.

Baseline data from early 2023 revealed high levels of illegal activity, with 578 snares recovered and 251 arrests recorded within just four months. In Year 1, joint de-snaring patrols with Tsavo Trust covered over 80,000km, maintaining an average of 30 patrol days per month. Patrol teams recovered 164 snares, confiscated 44kg of dik-dik bushmeat, and made 47 arrests for various wildlife-related offences. **(Refer to details on Activity 1.2)**

While snare recoveries were lower than the baseline period, this trend is linked to significant rainfall between November and February, which improved farming conditions and likely reduced reliance on bushmeat. In addition, long-term comparisons indicate a gradual decline in snaring across the landscape, with a shift towards lamping—a new method of bushmeat poaching—becoming more prominent. Some areas, such as central Tsavo West, reported fewer incidents, suggesting reduced threat levels.

Monthly patrol and arrest reports have provided detailed insights into snaring hotspots and coverage trends, contributing to a stronger evidence base for adaptive law enforcement planning.

Beyond patrols, the project has prioritised community engagement. Outreach meetings were held in seven locations across northern and southern Tsavo, reaching over 900 people. These sessions introduced the Darwin Initiative project, secured FPIC, and raised awareness about the Wildlife Act 2013 and its penalties for illegal hunting and trade. KWS officers led legal awareness discussions, while local government staff introduced alternatives such as poultry and goat farming. These sessions aimed to build trust, raise awareness, and present practical alternatives to bushmeat hunting. (Refer to details on Activity 1.4)

The combination of consistent, well-documented law enforcement and meaningful community engagement has laid a strong foundation for reducing snaring and illegal wildlife killings in Tsavo. Output indicators are being tracked through detailed patrol records, snare data, and community feedback all of which suggest promising trends as the project moves into its second year.

Output 2: Indicators 2.1 *(Indicators 2.2-2.3 planned for Y2)*

Behaviour change activities under this output are scheduled to begin in Year 2 of the project, as indicated in the change request submitted in December 2024. This will enable consultant support during campaign implementation and ensure that the ZSL team is trained to deliver the campaign throughout Year 2.

However, significant groundwork has been laid in Year 1 to prepare for effective delivery. An assessment of community use of wild meat resources was conducted, combining baseline and Key Informant Interview (KII) data. The findings reveal that economic necessity (41%) and food insecurity (37%) are the primary drivers for wild meat hunting and consumption. Market demand (54%) is also a significant factor influencing hunting activities. Affordability (83%), taste preferences (43%), and cultural practices (20%) are the primary reasons for consuming wild meat, while income generation (66.6%) is the leading reason for selling wild meat. The assessment identified several barriers to adopting alternative protein sources, including economic constraints such as poverty, high seed costs, and limited capital; environmental challenges like unreliable rainfall and poor crop performance; disease outbreaks affecting poultry and harvests; knowledge gaps around alternative livelihoods; strong market demand for wild meat, particularly across borders; youth engagement in poaching driven by the need for quick income; human-wildlife conflict, including poaching and fence vandalism; limited support for wildlife conservation; and complex social dynamics, including cases where women act as intermediaries in the wildlife trade. These findings highlight that reducing reliance on wild meat and promoting alternative protein sources will require addressing these interconnected barriers. These insights will directly inform the design of targeted social marketing campaigns. (Annex 15- Assessment report)

To support the development and roll-out of these campaigns, a behaviour change communication consultant has been recruited. The consultant will lead the co-creation and implementation of tailored messaging and outreach strategies aimed at shifting community attitudes and reducing reliance on wild meat.

Output 3: Indicator 3.1 (*Indicator 3.2-3.7 planned for Y2 &Y3)*

The project has made encouraging progress toward Output 3 .During this reporting period, foundational activities were successfully completed, setting a strong base for full-scale livelihood interventions in Years 2 and 3. Based on achievements to date and the high level of community engagement observed, it is likely that Output 3 will be fully achieved by project close, provided planned activities continue to be rolled out as scheduled.

To date, significant steps have been made towards achieving the output indicators. Under Indicator 3.1, a baseline survey was conducted with 252 respondents from wild meat hotspot areas to assess existing livelihood options and identify gaps. Findings from this survey, documented in the Baseline Report (Annex 1), revealed that the majority of community members depend on subsistence farming (86%) and livestock keeping (58%), with a smaller proportion engaged in casual labour (36%) and small businesses (19%). Other activities like charcoal burning (8%) and sand harvesting (2%) were less common. This assessment confirmed income insecurity as a key driver of wild meat reliance, highlighting the urgent need for alternative livelihood opportunities. In addition progress was made towards mobilizing community members into VSLAs. In this reporting period, over 400 individuals from wild meat hotspot areas in Makueni and Taita Taveta counties were successfully mobilized to form VSLAs. Through a structured mobilisation and vetting process, 19 VSLA groups were formalized (15 in Makueni and 4 in Taita Taveta), and group

members received basic training on financial management, record-keeping, governance, and legal registration under the Ministry of Social Services. This lays a strong foundation for strengthening financial resilience among vulnerable communities and reducing reliance on wild meat. Further details of the mobilisation and selection process are provided **under Activity 3.3 above and in Annex 11 (VSLA Mobilisation Reports).** Under Indicator 3.2, the project aimed to deliver structured, livelihood-related training to 400 new beneficiaries by the end of Year 3. While full training sessions have not yet begun, the project conducted a series of participatory workshops in both Makueni and Taita Taveta counties to identify and prioritize viable livelihood alternatives. More than 676 community members (326 in Makueni and 350+ in Taita Taveta) participated, far exceeding the original target of 400. These workshops provided vital insights into community needs and preferences and were co-facilitated by key partners including ZSL, TTWCA, Kenya Wildlife Service (KWS), and local county departments. Although structured livelihood training is planned for Year 2, the engagement achieved through these workshops suggests strong readiness among the communities to receive and apply new skills.

Indicators 3.3, 3.4, 3.6, 3.7a, and 3.7b will be measured after training and livelihood interventions are rolled out. At present, there is no progress to report against these indicators as training, enterprise establishment, and alternative protein initiatives are scheduled for Years 2 and 3. However, the workshops revealed a high level of interest among communities in adopting new livelihood practices. Activity 3.2 and Annex 10-Participatory Workshops Report**.**

Output 4: Indicator 4.1 *(Indicator 4.2 Scheduled for Y2)*

Progress toward Output 4 has challenging due to funding constraints and methodology. The original plan involved market surveys using both visual identification and DNA testing to determine the species and volume of wild meat being sold in the market. However, visual identification proved unfeasible because meat is typically skinned before sale, making it nearly impossible to determine the species by appearance alone. Additionally, our partner was unable to secure the anticipated funding to carry out DNA analysis on meat from markets and butcheries, which limited our ability to directly assess market trends as initially envisioned.

Despite this, the project team adapted by leveraging alternative data sources. In 2024, partners Tsavo Trust and KWS confiscated 697 kg of bushmeat, removed 985 snares, and made 26 arrests linked to wild meat-related offenses. DNA analysis was conducted on 29 samples of confiscated meat between July and December 2024 (Annex 12), revealing a wide range of species including dik-diks, impalas, giraffes, hares, kudu, warthogs, oryx, duiker, and zebra. This data not only provides a baseline for monitoring change over the project period but also highlights the wide impact of bushmeat hunting on biodiversity—including species critical to predator populations like lions.

In addition, household interviews were conducted in early 2025 with 252 households across known wild meat hotspots within the TCA. These interviews aimed to understand community-level use of wild meat, trade networks, and consumption patterns, contributing to a new assessment of biodiversity resource use (Indicator 4.2), which is expected to be finalized and published by Year 3. From the baseline household survey in Y1 the project asked questions around selling of wild meat using the bean count method: 10% (n=17) of total respondents (n=168) reported that their household sells wild meat (Refer to Annex 1 – Baseline Report). The main drivers for selling wild meat are income source (87% of total respondents; n=252) and availability (42% of respondents). KIIs revealed various discreet methods used to sell wild meat, primarily via bikes and motorcycles (Refer to Annex 7- KII data analysis). Meat is transported in small, hidden portions often in sacks, buckets, or bags and delivered directly to consumers, usually at night using coded language and specific routes. Some hunters sell directly at local markets or through agents who coordinate sales by phone, with minimal involvement of middlemen. The trade is informal, relying on trusted contacts and concealed packaging to maintain a steady but hidden supply.

While direct market monitoring using visual or DNA methods has not been feasible so far, wild meat trends are being tracked through proxy indicators such as arrests, snares collected, and quantities confiscated. These figures serve as indirect measures of illegal wild meat activity and will help us assess hunting pressure over time.

We acknowledge that current data only captures a fraction of the actual wild meat trade, but it forms a useful baseline for understanding trends. We are also continuing to explore funding options for the more comprehensive DNA testing as originally planned. If successful, this would allow us to revisit and strengthen Output 4's evidence base before the close of the project.

Output 5: Indicators 5.1 & 5.2 (Indicator 5.3- 5.5 to be conducted in Y2)

At the beginning of the project, there was no baseline monitoring system in place for large carnivores in Tsavo, no structured training, secondments or placements for local students or stakeholders, and no carnivores were GPS-collared. Since then, some notable progress has been made. To begin with, two Kenyan students; one from WRTI and another from Egerton University, have participated in ongoing

fieldwork activities between July 2024 and March 2025. These activities included line transect counts using distance sampling, camera trap deployment and image classification using AI software, lion monitoring, and kill site identification. This field engagement has served as a foundation for skill development and hands-on experience. In addition, a structured wildlife monitoring course has been developed in collaboration with WRTI, which will be rolled out in Year 2. The course targets student interns and early-career conservationists working in Tsavo and will be complemented by a follow-up mechanism to assess how participants apply their skills over time. These efforts contribute to the training and placement targets under Output Indicators 5.1 and 5.2, with plans to scale up through more formalized secondments and training in the coming year.

Progress under Indicator 5.4, which focuses on camera trap surveys, was initially constrained by a limited number of traps (only 60 units), restricting the spatial coverage necessary for meaningful analysis across the 9,000 km² park. However, the project team has since secured an additional 90 camera traps, bringing the total to 150. A comprehensive camera trap survey is now scheduled for implementation between May and September 2025. This survey will focus on estimating the occupancy, distribution, and relative abundance of large carnivores (including lions, leopards, hyenas, and wild dogs) and their prey. It will also integrate data on snare density to assess the effect of illegal hunting on species distributions.

Significant progress has also been made under Indicator 5.7 through lion monitoring activities. Between September and December 2024, the project partnered with KWS and WRTI to collar four lion prides across Tsavo West National Park and adjacent conservancies (Lualenyi, Lumo, and Taita Hills). These prides, which collectively represent 29 individuals, are now being monitored through GPS collars that provide real-time data on pride movements, enabling detection of snare-related injuries and improved understanding of pride demography. The aim for Year 2 is to collar an additional 2–3 lion prides to expand spatial coverage and deepen insights. This movement data will be complemented by the upcoming park-wide camera trapping to assess how prey removal via snaring influences lion occupancy over time. (Refer to details on Activity 5.7)

In terms of prey monitoring (Activity 5.2), monthly line transects were conducted from December 2024 to March 2025 using distance sampling methods in Tsavo West's southern sector. These counts recorded sightings of lion prey species such as buffalo, hartebeest, eland, giraffe, zebra, and impala, as well as group size, distance, and bearing data. Early results show noticeable seasonal and spatial variations in prey biomass. Preliminary results indicate an average baseline prey density of 1.56 animals/km² across the monitored species, which include six of the nine target prey species (data on dikdik, kudu, and gazelles was not available) **(Annex 13).** The data will be analysed using Generalized Linear Models to derive Resource Selection Function (RSF) coefficients and explore how factors like snare density, water availability, NDVI, livestock presence, proximity to humans, and habitat type influence prey distributions. These findings will serve to inform habitat suitability and threat models for large carnivores.

However, activities related to collaring and monitoring African wild dogs (Indicators 5.5 and Activities 5.3–5.6) have been delayed due to research permits delays. WRTI had indicated that an existing wild dog collaring permit, held by ZSL for another part of Kenya, could be extended to cover the Tsavo landscape. Unexpectedly, the process for this extension has proven complicated and subjected to delays. This process is approaching its end but, despite our best efforts, the permits are not yet in place. Nevertheless, preparations for collaring are ongoing, including procurement of collars and tracking equipment, collaborating with other partners in the field to share coordinates of live wild dog sightings to help us understand their movements, developing a system for matching and storing photographic IDs of individual wild dogs (including from tourist photos), and planning with KWS veterinarians to share knowledge of capture techniques, so that collaring can begin immediately upon permit issuance. Once deployed, the GPS and Daily Diary collars will allow the team to monitor pack movements, hunting success, prey intake, and snare-related mortality. This data will be used to assess the direct and indirect impacts of snaring on wild dog habitat use and occupancy. While these delays present a challenge, they are expected to be resolved in the coming months, allowing significant progress on these indicators in Year 2.

3.3 Progress towards the project Outcome

The project is progressing well toward achieving its intended outcome: "*Reduced hunting and sale of wild meat by local communities, enhanced livelihoods for those communities, fewer snares and improved status of large carnivore and prey populations in Tsavo*". Baseline data collected in early Year 1 indicated that 11% (n=21 of 172) of households reported that they hunt wild meat, 10% (n=17 of 168) reported selling wild meat, and 40% (n=78 of 196) reported consuming wild meat (Indicator 0.1 a,b,c). These indicators will be reassessed at the end of Year 3 to evaluate the extent of change. **(Refer to Annex 1 –Baseline Report)**

To address the drivers of wild meat trade and improve livelihoods, the project has already mobilised 437 individuals into Village Savings and Loans Associations, exceeding the target (400) set for the entire project. These individuals will begin implementing livelihood activities in Year 2, including poultry,

aquaculture, and vegetable farming, which are expected to improve both income and food security at the household level. This directly contributes to improved resilience and reduced dependence on wild meat (Indicator 0.3a) (Refer to Annex 11- VSLA Mobilisation Reports)

Snaring has shown a measurable decline over the past year. While baseline data from early 2023 recorded 578 snares in just four months, joint de-snaring patrols with Tsavo Trust in Year 1 covered over 80,000 km, removed 164 snares, and made 47 arrests for illegal activities, including the confiscation of 44 kg of dik-dik meat. This reduction is attributed in part to the significant rainfall between November and February, which improved farming conditions and likely reduced the incentive to poach. In addition, community feedback and patrol observations suggest a shift from snaring to lamping methods of hunting. (Indicator 0.2) (Annex 3- De snaring Efforts)

For the outcome indicators related to improved livelihoods (0.3a) and household resilience (0.3b), baseline assessments were completed at the start of Year 1. Progress toward these will be measured at the end of Year 3. Similarly, for ecological indicators (0.4a to 0.7) such as carnivore occupancy, survival, prey status, and food intake, monitoring has been delayed due to the lengthy bureaucratic process of acquiring research permits (see details on Output 5). Overall, the indicators are well suited to measure the intended outcomes, and although some activities have faced delays, the project is generally on track to achieve its planned Outcome by the end of the funding period.

3.4 Monitoring of assumptions

Assumption 1: KWS data on the communities most engaged in snaring in Tsavo are accurate and up to date, allowing us to target the majority (3 out of 4, see map in Additional Information document) of 'hotspot' communities.

This assumption largely holds, though our understanding of snaring hotspots was strengthened and refined following the project launch. We received additional information from WRTI and KWS shared updated bushmeat hotspot village data based on arrest records, which helped us map high-risk areas more precisely. The project triangulated this with further data from TTWCA and the UoW. To validate and deepen our understanding, we conducted KIIs which confirmed some hotspots and highlighted others that had not initially been prioritized (Project map in Annex 1).

Assumption 2: Methods for asking sensitive questions such as the bean count (e.g., 16) and more recent approaches (e.g., 17) alongside and approaches that include thoughtful researcher positionality e.g., Insider vs Outsider (18) will successfully elicit accurate data on the illegal hunting, sale, and consumption of wild meat.

We applied the bean count methodology during the baseline household survey to encourage honest responses about bushmeat hunting, consumption, and sale. This method helped minimize the tendency to provide socially acceptable answers and ensured greater anonymity, allowing respondents to answer sensitive questions without directly revealing themselves. To strengthen this further, we deliberately selected and trained enumerators who had strong ties to the region and spoke the local language. Their familiarity with the communities made participants more at ease and created the kind of rapport essential for trust. (Annex 1- Baseline Report).

Assumption 3: Reports from de-snaring teams on snare and carcass encounter rates will provide an accurate picture of trends in snaring and illegal killing for wild meat.

Reports from de-snaring teams have been a valuable source of data, providing us with consistent insights into snare and carcass encounter rates across key areas, allowing us to track trends in illegal snaring and wild meat killing. However, we recognize that snare removal efforts alone do not capture the full scope of snaring activity, as some snares may go undetected or removed by other groups. The project also hoped to triangulate the data with other sources, including arrest records from KWS if they agree to share with us. (Annex 3 De snaring Efforts).

Assumption 4: Indicators for multi-dimensional poverty accurately reveal trends in income and food security for target communities.

The project has collected the baseline for this, we will be able to comment on this assumption following further monitoring. From project we have implemented in other ZSL programmes, we have seen this assumption to be true. (Annex 1- Baseline Report).

Assumption 5: Sufficient camera traps can be maintained in working order and few are stolen.

A shortage of cameras delayed the park-wide survey. However, the additional 90 cameras secured have increased the total to 150, which will enable us to carry out the survey in Year 2 (May–September 2025) and test the assumption.

Assumption 6: ZSL permissions for collaring African wild dogs are updated to include Tsavo by KWS/WRTI (application is being considered).

ZSL permits have been updated to include Tsavo and partners in the Tsavo region. However, the process has taken longer than initially anticipated, with considerable back-and-forth involved. Despite these delays, ZSL has now finalized the updated permit documentation, which includes all relevant partners, most of whom have already signed the documents. The updated documents will now be forwarded to KWS and WRTI for review before the final permit is issued.

Assumption 7: Sufficient African wild dogs can be collared in a timely manner (ZSL teams have extensive experience of catching and collaring wild dogs in Kenya working with KWS veterinarians).

This assumption remains untested due to permit delays (as outlined above). Once resolved, collaring is expected to proceed smoothly, based on ZSL's prior experience

Assumption 8: Tracking collars prove reliable (ZSL has extensive experience of the most reliable collar types based on multiple projects elsewhere).

This remains untested pending collaring. ZSL has extensive experience with reliable collar models and will monitor performance once deployment begins.

Assumption 9: KWS will continue to support targeted law enforcement efforts by project partner TT and others to reduce snaring and illegal hunting of wild meat in Tsavo.

This assumption holds true, with significant progress in law enforcement and de-snaring efforts in Tsavo, supported by KWS and Tsavo Trust (TT). (Annex 3,4 & 5).

Assumption 10: Reports from de-snaring teams on snare and carcass encounter rates and arrests provide an accurate picture of trends in snaring rates and illegal killing of wildlife for wild meat.

Same as Assumption 3.

Assumption 11: Data on arrests rates and subsequent legal action taken can be obtained reliably; experience of project partner TT suggests they can.

TT have consistently provided a reliable process for obtaining data on arrest rates and subsequent legal actions.

Assumption 12: Most illegal wild meat consumption in the Tsavo area is driven by the need for protein and lower cost of wild meat and so can be reduced through increasing access to alternative protein sources directly (e.g. chicken and goat farming) or purchase of alternative protein as a result of improved incomes (14,15). Taste may also be driver, so we will establish that in Y1 and tailor methods accordingly.

Baseline data confirmed that cost is the primary driver for wild meat consumption (48% of respondents said this was the main driver), food shortages as secondary driver (41% said this) and availability of wild meat as the third main driver (40%). This supports the idea that increasing access to affordable alternative protein sources, such as poultry or goat farming, and improving household incomes could help reduce wild meat reliance.

Assumption 13: The project will be able to be able to increase access to viable alternative protein sources (directly through farming and/or purchase) sufficient to replace most target groups' wild meat consumption.

Livelihood activities providing alternative protein sources will be implemented in Year 2. (Activity 3.2).

Assumption 14: The targeted behaviour change campaigns linked to the legal consequences of illegal hunting, the damage to ecosystems resulting, disease risk, and the availability of alternative protein sources, will effectively influence attitudes and behaviours related to wild meat consumption.

Behaviour change campaigns will begin in Year 2.

Assumption 15: Drivers of wild meat hunting and consumption are assumed to be a mix of cost (cheaper than alternative sources of protein), taste, and culture. Interventions are designed to address all drivers while also helping elicit which ones are most important.

Baseline data confirmed that cost is the primary driver for wild meat consumption, food shortages as secondary driver and availability of wild meat as the third main driver. Taste, tradition and cultural beliefs were the least cited primary drivers (4% taste, 0% tradition and culture).

Assumption 16: Its best to establish all VSLAs in year one so that we anchor behaviour change and livelihood diversification work on established VSLA structures.

All targeted VSLAs were successfully established in Year 1 through community-led processes and training. This strong foundation will enable behaviour change and livelihoods activities to roll out effectively in Y2, allowing us to test this assumption.

Assumption 17: Wild meat hunters will join the VSLA groups to benefit from diversified livelihoods and in so doing also be exposed to conservation awareness trainings delivered within the VSLA.

During the VSLA mobilisation phase, communities were encouraged to form inclusive groups, and some known or suspected wild meat hunters have joined, although due to the illegal nature of their activities, many do not openly self-identify. The socio-economic baseline and community meetings have revealed that several VSLA members are either directly or indirectly involved in the wild meat trade, especially in high-risk areas. More direct links between VSLA participation and reduced engagement in illegal hunting will become clearer as behaviour change interventions progress. (Activity 3.3).

Assumption 18: Income generating opportunities fostered through VSLAs will allow people to buy alternative sources of protein, reducing the need to buy wild meat.

This will be tested in Y2 (Activity 3.2).

Assumption 19: Livelihood diversification initiatives will allow previous consumers of wild meat to raise their own sources of protein, e.g., chicken and goat farming, reducing the need to hunt or buy wild meat.

This assumption will be tested in Y2.

Assumption 20: Alternative protein farming is identified as a feasible intervention (and will be informed by research as part of this project) to reduce harvesting and consumption of wild meat

This assumption remains valid and is being informed by both the baseline socio-economic survey and participatory workshops conducted in Y1. These activities revealed strong community interest in alternative protein options and identified activities such as poultry, goat farming, and aquaculture as feasible interventions.

Assumption 21: Visual surveys augmented, if possible (match funding dependent), by DNA based surveys can reveal trends in wild meat sales, ideally disaggregated by species.

Due to funding and methodological constraints, the project could not conduct the planned visual and market-based DNA surveys, and so this assumption remains untested.

Assumption 22: Surveys conducted in 3 of 4 wild meat sale hotspot communities are representative of overall trends for Tsavo.

See response to Assumption 21.

Assumption 23: Sufficient camera traps can be maintained in working order and few are stolen.

See response to Assumption 5.

Assumption 24: Existing permissions for collaring African wild dogs are updated by KWS/WRTI to include Tsavo (applications are being processed).

See response to Assumption 6.

Assumption 25: Sufficient African wild dogs can be collared in a timely manner (ZSL teams have extensive experience of catching and collaring wild dogs in Kenya working with KWS vets).

See response to Assumption 7.

3.5 Impact: achievement of positive impact on biodiversity and multidimensional poverty reduction

Our project's intended impact: *reducing wild meat poaching, improving livelihoods, and supporting the recovery of large carnivore and prey populations to foster coexistence in Tsavo* remains at the heart of our work. While full impact builds over time, meaningful progress has already been made toward this vision.

Contribution to Biodiversity Conservation:

Wild meat hunting continues to pose a major threat to biodiversity in the Tsavo Conservation Area (TCA), home to key populations of carnivores such as wild dogs and lions. Over the past year, the project has focused on reducing this pressure through de-snaring patrols, community engagement, and behaviour change initiatives. Community workshops and dialogues have brought biodiversity concerns into local

conversations, helping people recognise the links between poaching, declining wildlife, and human-wildlife conflict. These discussions are shifting mindsets, with growing recognition of the ecological and economic value of wildlife. Monitoring of lions, wild dogs, and snaring activity is showing early positive signs: reduced snare presence in some hotspots and increased community interest in conservation.

Contribution to Human Development and Wellbeing:

Recognising that poverty and food insecurity drive illegal hunting, the project engaged over 676 community members, many of them women and youth, in participatory workshops to understand local challenges and identify practical, culturally appropriate alternatives to bushmeat. These included poultry, small livestock, and climate-resilient crops such as beans and green grams. These locally led solutions have strengthened trust and enabled communities to shape the project in ways that reflect their own priorities. In addition, 19 Village Savings and Loan Associations (VSLAs) have been established; surpassing our original target benefiting over 400 individuals. These groups are improving access to financial tools, enabling investment in small businesses and farming, while also providing important social safety nets and empowering women in leadership roles.

By reducing reliance on bushmeat and expanding sustainable livelihood options, the project is securing a future for both wildlife and people. The establishment of strong community structures, promotion of alternative proteins, and growing conservation awareness all contribute to our long-term impact and align with the Darwin Initiative's goal of achieving biodiversity conservation through locally led, poverty-reducing solutions.

4. Project support to the Conventions, Treaties or Agreements

During the current reporting period, the project has made direct contributions to Kenya's national biodiversity and climate commitments through both strategic engagement and field-based activities. Notably, the project manager participated in the Cheetah and Wild Dog National Action Plan (NAP) workshop held in Machakos County, convened by KWS in collaboration with key stakeholders. This workshop focused on revising Kenya's national strategy for these threatened species and aligning it with international obligations under the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and the Convention on International Trade in Endangered Species (CITES). Our contribution helped shape the discussion on species recovery, threat mitigation, and landscape-scale conservation priorities. This aligns with CMS Resolution UNEP/CMS/COP12/CRP36, which calls on range states to strengthen habitat connectivity for migratory species. It also supports Kenya's National Biodiversity Strategy and Action Plan (NBSAP), particularly Strategic Target 8 on threatened species recovery and Strategic Target 5 on contributing data to international biodiversity platforms such as GBIF and the GEF. These links are further supported by materials shared at the workshop (Annex 14 – Presentation photos; Annex 16 – Kenya NBSAP reporting).

Beyond direct policy engagement, the project's ongoing activities in community outreach, sustainable livelihoods, and ecological monitoring contribute meaningfully to Kenya's progress on several Sustainable Development Goals, including SDG 15 (Life on Land), SDG 13 (Climate Action), and SDG 1 (No Poverty). These efforts enhance local resilience and ecosystem health, thereby contributing to Kenya's implementation of its Nationally Determined Contributions (NDCs) under the UNFCCC. Although no formal reports were submitted to convention focal points during this period, the project's participation in the national action planning process and continued collaboration with KWS—a key government focal agency—have ensured that project evidence, lessons, and outcomes are feeding into national reporting and international obligations in a policy-relevant and timely manner.

5. Project support for multidimensional poverty reduction

This project works closely with communities in key wild meat hotspots across the Tsavo Conservation Area, with rural households facing layers of poverty, food insecurity, and limited livelihood options. Over the past year, more than 600 people have been reached through workshops and the mobilisation of VSLAs with strong participation from women and youth.

The project's success is rooted in its participatory approach. Through workshops communities have identified challenges, mapped current protein sources, and selected culturally acceptable, climate-resilient, and market-ready alternatives. VSLA formation followed transparent, inclusive processes, ensuring strong community ownership. As a result, 19 VSLAs (15 in the north, 4 in the south) have been established, giving over 400 individuals access to structured saving and lending systems to support business start-up, agriculture, and household needs as we move into Year 2. Beyond income generation, the project is strengthening food and nutrition security. A total of 676 people (including 257 women) participated in shaping alternatives to bushmeat, with initial training conducted in animal husbandry, food safety, sustainable agriculture, and business skills, with deeper capacity-building sessions planned.

Looking ahead, the project is expected to deliver lasting benefits. By reducing bushmeat reliance, it will help protect wild dogs and prey species, support healthier ecosystems, and strengthen local governance

through the VSLAs. Critically, it is empowering women and youth by building pathways to economic independence and greater social inclusion.

6. Gender Equality and Social Inclusion (GESI)

GESI Scale	Description	
Not yet sensitive	The GESI context may have been considered but the project isn't quite meeting the requirements of a 'sensitive' approach	
Sensitive	The GESI context has been considered, and project activities take this into account in their design and implementation. The project addresses basic needs and vulnerabilities of women and marginalised groups, and the project will not contribute to or create further inequalities.	X
Empowering	The project has all the characteristics of a 'sensitive' approach whilst also increasing equal access to assets, resources and capabilities for women and marginalised groups	
Transformative	The project has all the characteristics of an 'empowering' approach whilst also addressing unequal power relationships and seeking institutional and societal change	

The project is GESI-sensitive, considering different gender roles in interventions and aligning with Kenya's Constitution (2010), which embeds public participation as a national value. Under Article 69, public involvement in environmental management is encouraged, aligning with the project's focus. The constitution also mandates ≥30% gender representation in leadership for public initiatives. The project secured women and vulnerable groups participation in KIIs, baseline surveys, VSLAs, stakeholder meetings, outreach, training, and workshops to strengthen their voices in project design and decision-making. The project conducted extensive stakeholder mapping and power analysis to understand how women and marginalised groups engage in decision-making, identify barriers, assess gender roles in the wild meat trade, and address intersecting vulnerabilities (Annex 20 Stakeholder Mapping). GESI-responsive engagement plans were developed to overcome these barriers and promote inclusive participation.

To support safe and free engagement, female staff were included in all activities as role models, and practical steps were taken such as scheduling meetings outside market days, during mid-mornings to early afternoons, and localising activities to reduce travel time. Behaviour change campaigns will also consider gendered time divisions, scheduling radio broadcasts at appropriate times with targeted messaging.

Fear of being identified for engagement in illegal activities was a cross-cutting challenge. To address this, the project reinforced its commitment to anonymity, triangulated data sources for reliability, and maintained confidentiality to build community trust. Language barriers were resolved by conducting outreach in Swahili and translating into local dialects. Meetings were further localised, and transport costs covered where needed to ensure participation across economic backgrounds.

A key learning from the project is that, due to the sensitivity of addressing illegal bush meat hunting, sale and consumption activities, frequent consultations with communities are essential to ensure buy-in, build trust, and keep all stakeholders engaged. To support this, the project mapped the work plan to highlight key activities requiring stakeholder and community engagement, either to provide advance information for smooth implementation or to seek consent. Working closely with the local administration, consultations were carefully planned with GESI considerations to ensure that women and other marginalized groups had equal opportunities to participate. This approach has been highly effective and will continue to be implemented in year two.

7. Monitoring and evaluation

Over the past year, the project rolled out a centralised M&E system led by ZSL that includes regular logframe reviews, shared reporting, and a centralised database to track activities, outputs, timelines, and key metrics. ZSL leads survey design, data analysis, and oversight, while TTWCA, TT, and UoW collect field data and species reports. Coordination meetings and shared databases keep partners aligned.

A baseline household survey was conducted across target communities to assess wild meat hunting, selling, and consumption (Outputs 0.1a–c), as well as livelihoods and resilience (0.3a–b). Both direct and anonymous methods (e.g. bean counts) were used to encourage honest disclosure. At baseline, 11% of

households reported hunting wild meat, 10% selling it, and 40% consuming it. The main drivers were cost (48%), food shortages (41%), and availability (40%).

Field data from TT de-snaring teams recorded 164 active snares recovered during the year—a sharp decline from 578 recorded at baseline—indicating a potential early reduction in illegal activity (Output 0.2).

Participatory workshops with over 676 community members helped co-develop livelihood alternatives and gathered qualitative data on food access, challenges, and community priorities. These sessions showed early shifts in attitudes toward bushmeat alternatives, contributing to Outcomes 2 and 3.

The project uses a clear theory of change with defined indicators. Livelihood indicators were informed through survey and workshop data on income, food security, and preferred alternatives. Ecological indicators (Outputs 0.4–0.5) will begin being measured in Year 2 using tools such as camera traps, GPS collars, and carnivore monitoring.

In Year 2, priorities include rolling out behaviour change campaigns, starting ecological monitoring, and improving community feedback mechanisms to ensure the project remains grounded in local perspectives.

8. Lessons learnt

This past year, the project has benefited from strong collaboration, adaptive management, and active community engagement. One of the standout successes has been the use of FPIC and community consultation processes under ZSL's FAIRER framework. These approaches helped reduce tensions in key wild meat hotspots and created opportunities to listen to communities and build trust. This deeper engagement has led to increased local enthusiasm and ownership, which we believe is critical for long-term behaviour change around wild meat consumption and alternative livelihoods.

A key operational success was forming a new partnership with TTWCA at the start of the project. This has significantly improved field-level coordination and delivery of community-related activities in Taita Taveta. Additionally, the M&E system set up by ZSL has supported tracking of key project indicators and allowed for adjustments where needed.

That said, not everything went smoothly. There were delays in obtaining permits for wild dog collaring and camera trap surveys, largely due to centralized government systems and bureaucracy. In hindsight, we should have allocated more lead time in the workplan to account for these national approval processes. We recommend that others working in similar contexts build realistic time buffers for such administrative steps. Support from DEFRA, through the British High Commission, in engaging with national-level stakeholders could also help ease these bottlenecks in the future.

Another challenge was with the market survey activity. Initial plans to identify wild meat species visually and conduct DNA testing proved unfeasible due to the condition of meat sold and the lack of matched funding. As a result, we plan to submit a change request in Year 2 for this output.

Moving forward, we remain committed to adaptive learning, strengthening our partnerships, and ensuring that our efforts deliver lasting benefits for both people and wildlife in Tsavo.

9. Actions taken in response to previous reviews (if applicable)

We already responded to feedback at the award as detailed in HYR1 that we submitted on 31st October 2024.

10. Risk Management

Two new risks emerged over the past year. [redacted]

The second risk stems from the ongoing de-gazettement of Ngai Ndethya Game Reserve, which has created uncertainty around land ownership for several project beneficiaries. This may affect their sense of belonging, livelihoods, and trust in conservation actors, with potential implications for the project. The team is actively monitoring the situation, engaging stakeholders, and documenting consultations and community feedback. (Refer to Annex 17- Risk register).

10. Scalability and durability

Over the past year, we've seen growing interest and engagement from local communities and other stakeholders, which is a promising sign for the long-term sustainability and potential to scale this work. Continuous community engagements especially through participatory workshops, FPIC processes, and ongoing dialogue has fostered strong local ownership. This is already changing how people view wild meat consumption and encouraging more sustainable alternatives and awareness.

Stakeholders now have a clearer understanding of the project's benefits including improved income, food security, and reduced legal risk. High participation in meetings and workshops, alongside enthusiasm for forming VSLAs, reflects growing commitment to change and suggests that communities see real value in the work. To support wider adoption and scaling, we've built strong relationships with key institutions like KWS, County Governments of Taita Taveta and Makueni, and other conservation partners working across the Tsavo landscape. These partnerships not only support our current activities but also open doors to future expansion and collaborations.

As part of our exit strategy, we committed to building capacity and setting up systems that will last beyond the life of the project. So far, we've:

- Facilitated formation of community-led VSLAs, which will provide both savings structures and financial security among target community members;
- Rolled out a monitoring system that partners and communities can continue to use after the project;
- Created awareness about wild meat consumption, which has sparked behaviour change discussions that are now gaining traction.

We're also documenting lessons and sharing them through regular updates and meetings with partners, helping build a shared understanding of what works. Ultimately, our goal is to leave behind a well-grounded and adaptable model built on local partnerships, shared knowledge, and strong community ownership that can grow well beyond the project's original scope and timeline.

11. Darwin Initiative identity

The project has actively promoted the Darwin Initiative throughout its implementation, ensuring strong visibility and consistent recognition. All materials—such as reports, training templates, registers, and banners—featured the Darwin Initiative logo, reinforcing its identity as the project's primary funder. At launch, stakeholders were formally introduced to the Darwin Initiative, with continued acknowledgment at all meetings and events. The Project Manager has highlighted the Initiative during key presentations, including:

- Canid & Hyaenid TAG meeting, EAZA Conference (August 2024)
- 14th Annual Carnivore Conference, KWS Headquarters (October 2024) (Annex 18-Worshop Photos)
- One ZSL Conference (January 2025)
- Stakeholders' Consultative Workshop on the 2nd Edition of the Cheetah and Wild Dog Action Plan (February 2025)
- Upcoming Tanzania-Kenya Carnivore Coalition Conference in Arusha (May 2025)

The Darwin Initiative is now widely recognised as a standalone project supporting carnivore conservation in Kenya. Awareness has grown among conservationists, wildlife authorities, and local communities reinforced by workshops, field activities, and partner platforms such as TTWCA's social media.

12. Safeguarding

13. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2024 – 31 March 2025)

Project spend (indicative) since last Annual Report	2024/25 Grant (£)	2024/25 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				

Travel and subsistence				
Operating Costs				
Capital items (see below)				
Others (see below)				
TOTAL	**142,531.95**	**142,532.01**		

Table 2: Project mobilised or matched funding during the reporting period (1 April 2024 – 31 March 2025)

	Secured to date	Expected by end of project	Sources
Matched funding leveraged by the partners to deliver the project (£)	N/A		
Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project (£)	N/A		

14. Other comments on progress not covered elsewhere

In our Half year report, we mentioned that we will be conducting an in-depth Environmental and Social Risk Assessment and establish grievance mechanisms within our target communities. ZSL has rolled out its environmental and social safeguarding framework called FAIRER (Fair Accountable Inclusive Respectful Ethical and Reflexive – see Annex 22) alongside the project implementation. So far, the project team and implementing partners have been trained on four mandatory safeguards in the framework including safeguards: 1. Power, Privilege and Positionality; 2. Inclusive engagement and FPIC; 3. Accountability and transparency; 4. Environmental and Social Management. These trainings have enabled the project teams to effectively apply safeguard tools to develop appropriate project plans. While safeguard 1-3 plans are complete, safeguard 4 is still under development with the scoping already conducted to identify project affected persons **See Annex 21- ESIA scoping document**

11. OPTIONAL: Outstanding achievements or progress of your project so far (300-400 words maximum). This section may be used for publicity purposes.

See text in Annex 30- Outstanding achievement text

I agree for the Biodiversity Challenge Funds to edit and use the following for various promotional purposes (please leave this line in to indicate your agreement to use any material you provide here).

Image, Video or Graphic Information:

File Type (Image / Video / Graphic)	File Name or File Location	Caption including description, country and credit		Social media accounts and websites to be tagged (leave blank if none)	Consent of subjects received (delete as necessary)
Image	Annex 23	Photo of a VSLA group receiving VSLA tool kit (in Tsavo, Kenya- for all)		conservation-work Twitter: @ZSLAfrica	Yes
Image	Annex 24	Participatory meeting on protein/alternative livelihood		As above	Yes
Image	Annex 25	Training session on VSLA group dynamics		As above	Yes
Image	Annex 26	Community outreach meeting in session		As above	Yes
Image	Annex 27	Community outreach meeting in session	As above	Yes	

Image	Annex 28	Community members giving consent during one of the community consultative meetings	As above	Yes

Annex 1: Report of progress and achievements against logframe for Financial Year 2024-2025

Project summary	Progress and Achievements April 2024 - March 2025	Actions required/planned for next period
Impact ***Targeted law enforcement and livelihood diversification has reduced poaching of wild meat, improved livelihoods, and put large carnivore and prey populations on the path to recovery, fostering coexistence in Tsavo***	In Year 1, the project has made significant progress toward positive impacts on biodiversity and human communities in Tsavo. Law enforcement efforts, including joint de-snaring patrols, have covered over 80,000 km, removing 164 snares and confiscating bushmeat, contributing to a reduction in snaring levels. Early monitoring of carnivores, including GPS collaring of lion prides, are providing valuable data to assess the impact of illegal hunting on wildlife populations. **More details in section 3.1, Activity 5.7** The project has also made strides in improving human livelihoods. 437 individuals were mobilized into Village Savings and Loans Associations (VSLAs), exceeding the target, and these groups will soon implement alternative income-generating activities like poultry farming, aquaculture, and vegetable farming, reducing reliance on wild meat. Participatory workshops have engaged communities in identifying culturally appropriate alternatives to wild meat consumption, while outreach efforts have raised awareness about wildlife protection laws and provided practical solutions for sustainable living. By promoting alternative livelihoods and increasing community engagement, the project is helping to ensure that the benefits of conservation are equitably shared, fostering both economic resilience and sustainable use of resources. These efforts, alongside the collection of important monitoring data, have set a strong foundation for the project's continued progress towards its long-term conservation and community objectives. Refer to details under **Activity 3.2 & 3.2, section 3.1**	Continue with targeted law enforcement and de-snaring operations to reduce snaring and illegal wildlife killings and monitor trends through data collection. Support and monitor VSLAs, coaching them and collecting monthly data on share purchases to track progress. Implement sustainable income-generating activities and promote alternative protein sources to improve livelihoods and reduce reliance on wild meat. Co-develop culturally sensitive messaging to discourage wild meat use by aligning with local values and highlighting its negative impacts. Conduct comprehensive monitoring of large carnivores and their prey to generate data and training opportunities on demographics, snare-related mortality, and population trends.
Outcome Reduced hunting and sale of wild meat by local communities, enhanced livelihoods for those communities, fewer snares and improved status of large carnivore and prey populations in Tsavo		

Outcome indicator 0.1a Number of HH reporting a decrease in unsustainable practices as a result of project activities by end of Y3; target = hunting of wild meat reduced by at least 50% compared to baseline established early in Y1 **[D1-B09]**	Baseline from Y1: 11% (n=21) of total respondents (n=172) reported that their household hunts wild meat (see Section 3.1 - Activity 2.1 and Annex 1). *Please note this data cannot be disaggregated due to the bean count method used for asking this question (as described in Activity 2.1 & Annex 1-Baseline Report).*	Continue with targeted law enforcement and de-snaring operations to reduce snaring and illegal wildlife killings and monitor trends through data collection. Support and monitor VSLAs, coaching them and collecting monthly data on share purchases to track progress. Implement sustainable income-generating activities and promote alternative protein sources to improve livelihoods and reduce reliance on wild meat. Co-develop culturally sensitive messaging to discourage wild meat use by aligning with local values and highlighting its negative impacts.
Outcome indicator 0.1b Number of individuals (sellers) reporting a decrease in unsustainable practices as a result of project activities by end of Y3 target = illegal sale of wild meat reduced by at least 40% (ca. 150 sellers) compared to baseline established early in Y1 **[D1-B09]**	Baseline from Y1: 10% (n=17) of total respondents (n=168 respondents) reported that their household sells wild meat (see Section 3.1 -Activity 2.1 and Annex 1-Baseline report). *Please note this data cannot be disaggregated due to the bean count method used for asking this question (as described in Annex 6)*	Support and monitor VSLAs, coaching them and collecting monthly data on share purchases to track progress. Implement sustainable income-generating activities including training and provision of resources to establish selected enterprises. Monitor livelihood beneficiaries through short surveys and regular visits. Co-develop culturally sensitive messaging with target communities to discourage wild meat use by aligning with local values and highlighting its negative impacts. Followed by implementation of the campaign, through e.g. radio and at

		quarterly community outreach meetings.
Outcome indicator 0.1c Number of HH reporting a decrease in unsustainable practices as a result of project activities by end of Y3; target = consumption of wild meat reduced by at least 50% (ca. 400 people) compared to baseline established early in Y1 **[D1-B09]**	Baseline from Y1: 40% (n=78) of total respondents (n=196) reported that their household consumes wild meat. (see Section 3.1 - Activity 2.1 and Annex 1). *Please note this data cannot be disaggregated due to the bean count method used for asking this question (as described in Annex 1).*	Actions the same as Indicator 0.1b
Outcome indicator 0.2 Drivers of biodiversity loss (snaring of large carnivores' prey species - from dik-dik to buffalo - for meat) assessed to have been reduced by end of Y3; target 1 assessment at end of Y3 compared to 2023 baseline (578 snares to date, in 4 months' data from most recent TT reports on snaring and illegal killing of wildlife in Tsavo) **[DI-D18]**	Assessment to be completed in Y3. In 9 months from July 2024 to March 2025 there were a total: 164 active snares recovered by ranger teams, Tembo 5&9 (evidence in section 3.1 Activity 1.2 and Annex 3- De snaring efforts)	Continue with targeted law enforcement and de-snaring operations to reduce snaring and illegal wildlife killings, and monitor trends through data collection
Outcome indicator 0.3a Number of HH reporting improved livelihoods by end of Y3; target = at least 400 individual direct beneficiaries (representing ca. 2,400 beneficiaries) (baseline to be established at start of Y1) **[DI-D16]**	This indicator will be measured using surveys of direct beneficiaries once enhanced livelihoods have been supported from Y2. However, from the baseline household survey (n=252), the most common existing livelihood options are subsistence farming (crops) (86%) and livestock rearing (58%), with casual labour forming 36%. The average monthly income ranged from 'less than KES5,000' (c.£30GBP) to 'KES40,001-50,000' (c.£230-290GBP), with 40% in the lowest range and just 1% in the highest range. Of those who are subsistence farmers, 58% were female and 42% were male. Younger age categories (18-34) made up only 12% of subsistence farmers. 24% were aged 35-44, 21% were aged 45-54, 19% were aged 55-64, 18% were 65-74 and 6% were 75+. Both gender and age proportions almost exactly track the distribution of survey respondents across age categories. Across locations: Of respondents from Kathekani 94% were subsistence farmers, 90% in Nthongoni, 75% in Mtito Andei, 85% in Mwachabo, 81% in Maktau and 95% in Njukini. Of those who keep livestock, the disaggregation follows almost exactly the same trend. 57% were female, 43% were male. Younger age categories (18-34) made up only 12% of subsistence farmers. 24% were aged 35-44, 21% were aged 45-54, 19% were aged 55-64, 19% were 65-74 and 5%	Implement sustainable income-generating activities including training and provision of resources to establish selected enterprises. Monitor livelihood beneficiaries through short surveys and regular visits to mentor and coach participants.

	were 75+. Across locations: Of respondents from Kathekani 71% were subsistence farmers, 49% in Nthongoni, 63% in Mtito Andei, 43% in Mwachabo, 63% in Maktau and 64% in Njukini. Of those who had small businesses, again, the disaggregation followed the same trend, matching the representation of the sample. Again, 57% were female and 43% were male. The younger age categories (18-34) made up 17% of small businesspeople. 13% were aged 35-44, 38% were aged 45-54, 19% were aged 55-64, 11% were aged 65-74 and 2% were aged over 75. Across locations: Of respondents from Kathekani 16% had small businesses, 17% in Nthongoni, 21% in Mtito Andei, 19% in Mwachabo, 13% in Maktau and 25% in Njukini. (See Section 3.1 - Activity 2.1 and Annex 1- Baseline report)	
Outcome indicator 0.3b Number of HH whose resilience (income and food security) has been improved by end of Y3; target = at least 400 HHs (ca. 2400 beneficiaries) (baseline to be established at start of Y1) **[ZSL1]**	This indicator will be measured using surveys of direct beneficiaries as 0.3a. However, from the baseline household survey (total respondents n=252), 45% of respondents were **sometimes** able to meet their basic needs, 34% **rarely** able, 10% **mostly able** and 6% **not at all** able. In times of financial hardship, 38% of households borrow from friends or family to cope, 16% reduce household expenditure, 11% sell household assets and only 9% have access to savings and 5% take loans from financial institutions. In a typical year, 93% of respondents experience food shortages. During the last 3 months, 82% worried about not having enough food or struggled to eat nutritious food due to lack of money, and 73% skipped meals. 48% said that food shortages were more frequent in 2024 compared to 2023. Using a food security index, the majority of respondents experience **moderate** food insecurity (42%), 31% experience **severe** food security and 26% have **improving** food security. When disaggregated, the average scores for “able to meet basic needs” are as follows, where 1 is *‘not at all’* and 5 is *‘fully able’*. The average female score was 2.63, and the average male score was 2.84 (no statistical difference was found through two-sample t-test). People aged 18-24 average score was 3.4; 25-34 scored 2.76; 35-44 scored	Support and monitor VSLAs, coaching them and collecting monthly data on share purchases to track progress on savings, and later, the taking out of loans which will help to build resilience. Implement sustainable income-generating activities including training and provision of resources to establish selected enterprises. Monitor livelihood beneficiaries through short surveys and regular visits to mentor and coach participants.

	2.65, 45-54 scored 2.88, 55-64 scored 2.86, 65-74 scored 2.37 and over 75 scored 2.15 (representing the lowest average score). Across locations: Of respondents from Kathekani the average score was 2.38, 2.65 in Nthongoni, 2.52 in Mtito Andei, 2.6 in Mwachabo, 3.05 in Maktau and 3.02 in Njukini. When disaggregated, the average score for food security are as follows, where 1 is "Worsening Crisis", 2 is "Severe Food Insecurity", 3 is "Moderate Food Security" and 4 is "Improving Food Security". The average female score was 2.84, and the average male score was 3.06 (statistical difference was found through two-sample t-test, with a p-value of 0.035). People aged 18-24 average score was 3; 25-34 scored 3; 35-44 scored 2.33, 45-54 scored 3.05, 55-64 scored 3.15, 65-74 scored 2.8 and over 75 scored 2.76. Across locations: Of respondents from Kathekani the average score was 2.51 (representing the lowest score), 2.98 in Nthongoni, 2.52 in Mtito Andei, 3.06 in Mwachabo, 3.26 in Maktau and 3.25 in Njukini. (See Annex 3.1- Baseline report)	
Outcome indicator 0.4a Improved occupancy of focal carnivore species within Tsavo by end of Y3; target = increase in occupancy of 30% for African wild dogs and 15% for lions (baselines from recent reports/papers and Y1 survey data) **[DI-D04]**	A full baseline assessment to be completed in Y2 due to delays in obtaining research permits that has meant we have been unable to carry out wild dog-related monitoring. However, between September and December 2024, through our partner University of Wyoming's permit, we were able to fit GPS collars on four lion prides. These collared prides occupy the southern sector of Tsavo West National Park, Lualenyi Ranch, Lumo Conservancy, and the Taita Hills Conservancy. Collectively, these 4 prides comprise a total of 29 individuals. (See Activity 5.7 & Annex 14- Collared Lions data)	Deploy GPS collars to 2-3 additional lion prides within Tsavo West National Park-Southern sector, as well as deploy GPS-collars to African wild dogs as soon as possible (pending ZSL's research permit). Deploy camera traps in Tsavo West from May to September 2025 to estimate the distribution, occupancy, and status of large carnivores and their ungulate prey, including proportions with snare-related injuries.
Outcome indicator 0.4b Improved health, survival, and reproductive success of focal carnivore species (African wild dog and lion) within Tsavo by end of Y3; target = positive trend in all three indices, with snare mortality declining (relative to baselines established in Y1) and estimated annual population growth (lambda) ≥1 **[DI-D04]**	Same as indicator 0.4a	Same as indicator 0.4a

Outcome indicator 0.4c Improved food intake of focal carnivore species (African wild dog) within Tsavo by end of Y3; target = African wild dogs' food intake increases to reach levels recorded in areas without prey depletion (Laikipia/Samburu and other sites [ZSL data]) **[DI-D04]**		Deploy Daily Diary collars (1-2 per GPS-collared pack) to measure African wild dog hunting success and food intake as soon as research permit is secured.
Outcome indicator 0.5 Improved status of carnivore prey species (buffalo, zebra, eland, wildebeest, impala, kudu, giraffe, dikdik, gazelles) within Tsavo by end of Y3; target = 35% increase in encounter rates (baseline from recent reports/papers and Y1 survey data) **[DI-D04]**	This indicator is being measured using distance sampling. From December 2024 to March 2025, monthly line transects were conducted in Tsavo West's southern sector using distance sampling. Key lion prey species monitored included buffalo, hartebeest, eland, giraffe, zebra, and impala. The baseline prey density across these species is 1.56 animals/km², with early results showing seasonal and spatial variation. This sets a reference point for tracking progress toward the Year 3 target of a 35% increase (target: 2.11 animals/km²). See Output 5 paragraph 4 Baseline Density = 1.56 animals/km² (based on available Y1 data for 6 prey species) **(Annex 13)**	Continue to conduct line transects using distance sampling to measure trends in ungulate densities and distribution.
Outcome indicator 0.6 Number of new conservation or species stock assessments published (target = 1 assessment for all large carnivore and prey species; baseline = 0 based on Tsavo-wide camera trapping) **[DI-C02 Core]**	To be assessed in Y3	Deploy camera traps in Tsavo West from May to September 2025 to estimate the distribution, occupancy, and status of large carnivores and their ungulate prey.
Outcome indicator 0.7 Number of unique papers submitted to peer reviewed journals by end of Y3; target = 2, baseline = 0 **[DI-C17]**	To be assessed in Y3	
Output 1 Targeted law enforcement, including de-snaring efforts, leading to reduced snaring levels in the Tsavo landscape, and data on trends in snaring and illegal killing of wildlife		
Output indicator 1.1 Duration and frequency of patrols by law enforcement rangers maintained throughout the project (baseline is number of 30 days patrolling/month) **[IWTCF-B09]**	Average of 30.4 patrol days each month (evidence in section 3.1 Activity 1.2 of the report and Annex 3- De snaring efforts)	Continue with targeted law enforcement and de-snaring operations to reduce snaring and

		illegal wildlife killings and monitor trends through data collection.
Output indicator 1.2 The number of active snares found per unit effort during de-snaring operations decreases by at least 50% by end of Y3; baseline = 578 snares found first 4 months of 2023) **[TT1**]	Total: 164 active snares recovered by Tembo 5&9 164/50,905km=0.003 snares/km (evidence in section 3.1 - Activity 1.2 of the report and Annex 3- De snaring efforts)	Continue with targeted law enforcement and de-snaring operations to reduce snaring and illegal wildlife killings and monitor trends through data collection.
Output indicator 1.3 Number of arrests (linked to snaring and illegal hunting of wild meat) facilitated by the project; no target given because of ethical concerns over setting arrest quotas (baseline = 251 so far in 2023, 4 months up to April) **[IWTCF-B10 Core]**	47 arrests (4 specifically for wild meat hunting) including 44 kg of Dik-dik, 2kg of Tilapia fish (evidence in section 3.1 - Activity 1.2 of the report and Annex 3- De snaring efforts) Please note that the baseline of 251 arrests was for the whole Tsavo landscape, whereas the project is reporting specifically on Tsavo West National Park.	Continue with targeted law enforcement and de-snaring operations to reduce snaring and illegal wildlife killings and monitor trends through data collection.
Output 2. Targeted social marketing campaigns, based on an improved understanding of the drivers of wild meat use, successfully shift attitudes leading to a reduction in hunting, consumption, and local trade of wild meat in target (wild meat hunting hotspot) communities		
Output indicator 2.1 New assessments of community use of biodiversity resources published; target = 1 assessment of drivers and perceived/actual benefits of wild meat consumption and barriers to adopting alternative protein options conducted covering at least 3 of 4 wild meat hotspot communities early in Y1 (baseline = 0 assessments) **[DI-CO4 Core]**	From the baseline household survey (n=252), the main drivers for wild meat consumption in wild meat hotspot communities were as follows: ranked first by 48% of respondents was its low cost compared to domestic meat options, ranked second by 37% of respondents was a food shortage and needing to provide for their families, and ranked third by 40% of respondents was its ready availability. Wild meat as a source of protein was ranked third by only 7% of respondents (ranked second by 3% and ranked first by 1%). Interestingly, tradition and cultural beliefs were only ranked second and third by 1% of respondents, and no one ranked it as first. From the survey, the most common response to barriers to adopting alternative protein options was poverty (a lack of money/capital) (44% of respondents), with drought/water availability (12%) and livestock predation (9%) as second and third respectively. See details in section 1- activity 2.1 and Annex 1- Baseline report The KIIs yielded similar results, with 83% of respondents (n= 30) stating that affordability/low cost of wild meat was the main reason for consuming wild meat. This was followed by	Assessment complete using data from the baseline survey and KIIs.

	taste and preference (43%), culture (20%), availability (13%), and religion (3%). 30% of respondents believed that wild meat had benefits. **Annex 7-KII data analysis & Annex 15-Assessment Report**	
Output indicator 2.2 Number and type of wild meat hunting and consumption related behaviour change materials produced and distributed; targets to be set in Y1 based on research into types of behaviours and numbers and types of consumers) **[IWTCF-CO2]**	These targets will be set in Y2Q1 following the delay in the project behaviour change activities. (see details under output 2 paragraph one)	Co- develop culturally sensitive messaging with target communities to discourage wild meat use. Followed by implementation of the campaign, through e.g. radio and at quarterly community outreach meetings.
Output indicator 2.3 Number of people reached with behaviour change messaging (i.e., audience); target = 6,000 individuals reached and information distributed of the negative impacts of wild meat consumption on focal species and human health, and the legal consequences of illegal hunting by end of Y3 (baseline to established early in Y1) **[IWTCF-CO5]**	These targets will be set in Y2Q1 following the delay in the project's behaviour change activities (see Output 2 paragraph one)	Sames as indicator 2.2
Output 3. Implementation of sustainable income-generating activities resulting in improved livelihoods and economic opportunities for target (wild meat hotspot) communities reduce dependency on wild meat		
Output indicator 3.1 Number of individuals (at least 400, ca. 50% women) establishing VSLA groups end of Y1 **[ZSL2]**	A total of 437 individuals have been mobilised to form VSLA's disaggregated as follows: Gender (Female = 315, Male = 122). Age group as follows: 15-24 years =12; 25-49 years =282; 50- 64 years = 111; Above 65 years = 32 **See section 3.1 activity 3.2 & Annex 19- VSLA groups data**	Support and monitor VSLAs, coaching them and collecting monthly data on share purchases to track progress.
Output indicator 3.2 Number of people from key local stakeholder groups completing structured and relevant training (livelihood related); target = 400 new beneficiaries (targeting 50% women) by end of Y3 (baseline = 0 trained by project, 361 people trained by ZSL projects to date in Tsavo) **[DI-A01 Core]**	This indicator will be reported on in Y2.	Provide training and resources for other income-generating activities identified
Output indicator 3.3 Number of people reporting they are applying new capabilities (skills and knowledge related to livelihoods) 6 (or more) months after training; target = 300 people, of which 50% are	This indicator will be reported on in Y2.	Monitor and track the number of individuals benefiting from livelihood opportunities and

women (75% of total 400 trainees) by end of Y3 (baseline = 0 people) **[DI-A04 Core]**		purchasing alternative protein sources through surveys, interviews and data collection.
Output indicator 3.4 Number of sustainable livelihood enterprises established that are functioning at end of project (at least a year after establishment); target = at least 200 enterprises that are functioning by end of Y3 (baseline = 0 enterprises) **[DI-A10]**	This indicator will be reported on in Y2	Monitor and track the number of individuals benefiting from livelihood opportunities and purchasing alternative protein sources through surveys, interviews and data collection.
Output indicator 3.6 Number of individuals reporting an adoption of livelihood improvement practices (e.g., chicken, rabbit or fish farming and apiaries actual practices adopted to be informed by research and feasibility/risk assessments) as a result of project activities; target 400 people 50% women) in wild meat hotspot communities (baseline to be established early in Y1 **[DI-B10]**	This indicator will be reported on in Y2.	Monitor and track the number of individuals benefiting from livelihood opportunities and purchasing alternative protein sources through surveys, interviews and data collection.
Output indicator 3.7a Number of people purchasing alternative protein sources (not wild meat) by end of Y3; target 75% of people in wild meat hotspot communities (baseline to be established early in Y1) **[ZSL3]**	Baseline from Y1: 79% of total respondents (n=211) reported that they purchase alternative protein sources (not wild meat). Of these, 57% were female, 43% male. The percentages across age categories matched those of the sample population (i.e., no outliers of age groups particularly purchasing or not purchasing alternative proteins: 18-24 (2%); 25-34 (12%); 35-44 (21%); 45-54 (24%); 55-64 (20%); 65-74 (15%); 75+ (6%). Finally, when disaggregated by village, this also tracked the representation of each village within the sample. Alternative protein sources purchased: 50% of respondents purchase beef, 43% purchase legumes, 31% purchase fish, 21% purchase goat, 12% purchase eggs and 11%, chicken. **(See section 3.1 - Activity 2.1 and Annex 1- Baseline Report)**	Monitor and track the number of individuals benefiting from livelihood opportunities and purchasing alternative protein sources through surveys, interviews and data collection.
Output indicator 3.7b Number of people who have set up alternative protein farming by end of Y3; target at least 200 people in wild meat hotspots communities (baseline to be established early in Y1) **[ZSL4]**	This indicator will be reported on in Y2.	Provide training and resources for other income-generating activities identified

		Monitor and track the number of individuals benefiting from livelihood opportunities and purchasing alternative protein sources through surveys, interviews and data collection.
Output 4: Market surveys have provided trend data on wild meat sales in target (wild meat hotspot) communities around Tsavo		
Output indicator 4.1 Number of illegal wildlife products (wild meat items) detected in markets in 3 of 4 wild meat hotspot communities; target = 50% reduction by end of Y3 (baseline to be determined at start of Y1) **[IWTCF-B07]**	There have been delays to this component due to lack of matched funding – See details on Activity 4.1, Output 4. Therefore, we hope to report on this indicator in Y2.	
Output indicator 4.2 New assessments of community use of biodiversity resources (sale of wild meat) published; target 1 assessment by end of Y3 (reporting on trends since early-Y1 baseline established) **[DI-C04 Core**	This indicator will be reported on in Y3. However, it is relevant to note that from the baseline household survey in Y1 the project is measuring trends in household selling of wildmeat: 10% (n=17) of total respondents (n=168) reported that their household sells wild meat. The main drivers for selling wild meat are income source (87% of total respondents; n=252) and availability (42% of respondents). **See details in section 3.1 activity 2.1 and Annex 1- Baseline report**	
Output 5: Comprehensive monitoring of large carnivores (African wild dog, lion, cheetah, leopard, hyena spp.) and their prey in Tsavo established and generating both training opportunities and data on demography, snare-related mortality, and distribution and population trends		
Output indicator 5.1 Number of people from key national and local stakeholders completing structured and relevant training (in monitoring methods); target at least 15 KWS/WRTI staff (national/local) and at least 20 Kenyan students trained by project staff in Y1 and Y2 (baseline = 0 staff/students) **[DI-A01 Core]**	This indicator is being measured through direct participation records of training activities. Between July 2024 and March 2025, two students (one from Wildlife Research and Training Institute [WRTI] and one from Egerton University) completed field-based training in wildlife monitoring methods including transect surveys, camera trapping, AI image classification, lion tracking, and kill site identification. A formal one-week wildlife monitoring training course is planned for Y2 targeting additional students and young conservationists in Tsavo. Refer to Activity 5.8	Run a one-week structured course in wildlife monitoring methods targeting additional students and young conservationists in Tsavo

Output indicator 5.2 Number of wildlife monitoring related secondments or placements with project completed by individuals of key local and national stakeholders during 3 years of project; target at least 5 KWS/WRTI staff (national/local) and at least 10 Kenyan students by end of Y3 (baseline = 0 placements) **[DI-A02 Core]**	This indicator is being measured by tracking formal placements into project wildlife monitoring activities. Two student placements were completed during July 2024–March 2025 (WRTI and Egerton University students). Both individuals participated fully in all monitoring activities under project supervision. Follow up on placements and secondments will be done in Y2. Refer to activity 5.8	Conduct follows ups on placements and secondments for those trained above
Output indicator 5.3 Number of people reporting that they are applying new capabilities (skills and knowledge related to wildlife monitoring) 6 (or more) months after training; target at least 15 KWS/WRTI staff (national/local) and at least 10 Kenyan students by end of Y3 (baseline = 0 staff/students) **[DI-A04 Core]**	This indicator will be reported on in Y3.	Conduct post-training follow-up surveys and mentorship sessions to assess application of wildlife monitoring skills.
Output indicator 5.4 Number of successful camera trap surveys of carnivores and prey in Tsavo completed; target one cross-Tsavo survey in early Y1 and one in late Y3 (no camera trap survey of this type previously done in Tsavo so no baseline) **[UoW1]**	This indicator will be reported in Y2 due to delays with permits as described in activity 5.3, Output 5	Conduct a camera trap survey between May and August 2025
Output indicator 5.5 Number of African wild dog packs collared in Tsavo landscape; target 4 packs (3 dogs collared per pack) in Y1 out of an estimated 7-10 packs in Tsavo (current baseline: no packs currently collared) **[ZSL5]**	This indicator will be reported in Y2 due to delays as described in activity 5.3, Output 5	Conduct collaring of African wild dog packs in Tsavo landscape

Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)

Project summary	SMART Indicators	Means of verification	Important Assumptions
Impact: **Targeted law enforcement and livelihood diversification has reduced poaching of wild meat, improved livelihoods, and put large carnivore and prey populations on the path to recovery, fostering coexistence in Tsavo**			
Outcome: Reduced hunting and sale of wild meat by local communities, enhanced livelihoods for those communities, fewer snares and improved status of large carnivore and prey populations in Tsavo	0.1a Number of HH reporting a decrease in unsustainable practices as a result of project activities by end of Y3; target = hunting of wild meat reduced by at least 50% compared to baseline established early in Y1 **[D1-B09]** 0.1b Number of individuals (sellers) reporting a decrease in unsustainable practices as a result of project activities by end of Y3 target = illegal sale of wild meat reduced by at least 40% (ca. 150 sellers) compared to baseline established early in Y1 **[D1-B09]** 0.1c Number of HH reporting a decrease in unsustainable practices as a result of project activities by end of Y3; target = consumption of wild meat reduced by at least 50% (ca. 400 people) compared to baseline established early in Y1 **[D1-B09]** 0.2 Drivers of biodiversity loss (snaring of large carnivores' prey species - from dik-dik to buffalo - for meat) assessed to have been reduced by end of Y3; target 1 assessment at end of Y3 compared to 2023 baseline (578 snares to date, in 4 months' data from most recent TT reports on snaring and illegal killing of wildlife in Tsavo) **[DI-D18]**	0.1a,b,c Reports on questionnaire surveys using methods appropriate to asking sensitive questions early in Y1 and end of Y3, disaggregated by gender, age group, type of unsustainable practice 0.2 Assessment report on snaring and illegal killing of wildlife in Tsavo (based on field work by de-snaring teams), disaggregated by hunting method, species targeted, and habitat type 0.3a,b Household and VSLA survey reports (including indicators on number of income-generating activities, average monthly income, food insecurity coping mechanisms, locally designed wealth ranking indicators) at start and end of project, disaggregated by gender, age group, stakeholder type, and community 0.4a Park-wide camera trap surveys of large carnivore occupancy and distribution, disaggregated by species 0.4b Park-wide and targeted camera trap surveys and direct observations of known individuals to measure survival and reproduction (African wild dogs and lions are all individually recognisable from coat markings and whisker spots respectively, plus African wild dog packs will be monitored with GPS-	KWS data on the communities most engaged in snaring in Tsavo are accurate and up to date, allowing us to target the majority (3 out of 4, see map in Additional Information document) of 'hotspot' communities. Methods for asking sensitive questions such as the bean count (e.g., 16) and more recent approaches (e.g., 17) alongside and approaches that include thoughtful researcher positionality e.g., Insider vs Outsider (18) will successfully elicit accurate data on the illegal hunting, sale, and consumption of wild meat. Reports from de-snaring teams on snare and carcass encounter rates will provide an accurate picture of trends in snaring and illegal killing for wild meat. Indicators for multi-dimensional poverty accurately reveal trends in income and food security for target communities. Sufficient camera traps can be maintained in working order and few are stolen. ZSL permissions for collaring African wild dogs are updated to include Tsavo

	0.3a Number of HH reporting improved livelihoods by end of Y3; target = at least 400 individual direct beneficiaries (representing ca. 2,400 beneficiaries) (baseline to be established at start of Y1) **[DI-D16]** 0.3b Number of HH whose resilience (income and food security) has been improved by end of Y3; target = at least 400 HHs (ca. 2400 beneficiaries) (baseline to be established at start of Y1) **[ZSL1]** 0.4a Improved occupancy of focal carnivore species within Tsavo by end of Y3; target = increase in occupancy of 30% for African wild dogs and 15% for lions (baselines from recent reports/papers and Y1 survey data) **[DI-D04]** 0.4b Improved health, survival, and reproductive success of focal carnivore species (African wild dog and lion) within Tsavo by end of Y3; target = positive trend in all three indices, with snare mortality declining (relative to baselines established in Y1) and estimated annual population growth (lambda) ≥1 **[DI-D04]** 0.4c Improved food intake of focal carnivore species (African wild dog) within Tsavo by end of Y3; target = African wild dogs' food intake increases to reach levels recorded in areas without prey depletion (Laikipia/Samburu and other sites [ZSL data]) **[DI-D04]**	collars to aid visual observation, and snare-related mortality of all large carnivores can be estimated using camera traps[1]) 0.4c Monitoring of African wild dog food intake using Daily Diary collars (which use accelerometery and magnetometry to record speed & direction of movement in 3D at 40Hz and have been calibrated by ZSL's Institute of Zoology on wild dogs elsewhere to identify hunting and feeding behaviours) 0.5 Camera trap surveys and line transects to estimate prey species occupancy, distribution, and density, disaggregated by species 0.6 Published report on park-wide surveys of carnivore and prey species status published 0.7 Manuscripts of papers submitted to journals	by KWS/WRTI (application is being considered). Sufficient African wild dogs can be collared in a timely manner (ZSL teams have extensive experience of catching and collaring wild dogs in Kenya working with KWS veterinarians). Tracking collars prove reliable (ZSL has extensive experience of the most reliable collar types based on multiple projects elsewhere).

	0.5 Improved status of carnivore prey species (buffalo, zebra, eland, wildebeest, impala, kudu, giraffe, dikdik, gazelles) within Tsavo by end of Y3; target = 35% increase in encounter rates (baseline from recent reports/papers and Y1 survey data) **[DI-D04]** 0.6 Number of new conservation or species stock assessments published (target = 1 assessment for all large carnivore and prey species; baseline = 0 based on Tsavo-wide camera trapping) **[DI-C02 Core]** 0.7 Number of unique papers submitted to peer reviewed journals by end of Y3; target = 2, baseline = 0 **[DI-C17]**		
Output 1: Targeted law enforcement, including de-snaring efforts, leading to reduced snaring levels in the Tsavo landscape, and data on trends in snaring and illegal killing of wildlife	1.1 Duration and frequency of patrols by law enforcement rangers maintained throughout the project (baseline is number of 30 days patrolling/month) **[IWTCF-B09]** 1.2 The number of active snares found per unit effort during de-snaring operations decreases by at least 50% by end of Y3; baseline = 578 snares found first 4 months of 2023) **[TT1**] 1.3 Number of arrests (linked to snaring and illegal hunting of wild meat) facilitated by the 1.1 Duration and frequency of patrols by law enforcement rangers maintained throughout the project (baseline is number of 30 days patrolling/month) **[IWTCF-B09]** 1.2 The number of active snares found per unit effort during de-snaring operations decreases by at least 50%	1.1 De-snaring teams' reports with data on effort (days on patrol) per area and month, disaggregated by habitat type and region of Tsavo 1.2 De-snaring teams' reports on active snares found and removed per unit area and illegal killing of wildlife in Tsavo, disaggregated by habitat type and region of Tsavo 1.3 Reports detailing number or arrested individuals, meat quantities, species involved, and legal action taken (level of offence charged)	KWS will continue to support targeted law enforcement efforts by project partner TT and others to reduce snaring and illegal hunting of wild meat in Tsavo. Reports from de-snaring teams on snare and carcass encounter rates and arrests provide an accurate picture of trends in snaring rates and illegal killing of wildlife for wild meat. Data on arrests rates and subsequent legal action taken can be obtained reliably; experience of project partner TT suggests they can.

	by end of Y3; baseline = 578 snares found first 4 months of 2023) **[TT1**] 1.3 Number of arrests (linked to snaring and illegal hunting of wild meat) facilitated by the project; no target given because of ethical concerns over setting arrest quotas (baseline = 251 so far in 2023, 4 months up to April) **[IWTCF-B10 Core]**		
Output 2: Targeted social marketing campaigns, based on an improved understanding of the drivers of wild meat use, successfully shift attitudes leading to a reduction in hunting, consumption, and local trade of wild meat in target (wild meat hunting hotspot) communities	2.1 New assessments of community use of biodiversity resources published; target = 1 assessment of drivers and perceived/actual benefits of wild meat consumption and barriers to adopting alternative protein options conducted covering at least 3 of 4 wild meat hotspot communities early in Y1 (baseline = 0 assessments) **[DI-CO4 Core]** 2.2 Number and type of wild meat hunting and consumption related behaviour change materials produced and distributed; targets to be set in Y1 based on research into types of behaviours and numbers and types of consumers) **[IWTCF-CO2]** 2.3 Number of people reached with behaviour change messaging (i.e., audience); target = 6,000 individuals reached and information distributed of the negative impacts of wild meat consumption on focal species and human health, and the legal consequences of illegal hunting by end of Y3 (baseline to established early in Y1) **[IWTCF-CO5]**	2.1 Assessment of wild meat consumption and drivers of such based on social surveys published, disaggregated by assessment method 2.2 Behaviour change materials produced (receipts, example copies, photos) and evidence of distribution (reports, photos), disaggregated by language and type of materials 2.3 Radio Mangelete and Mwenedu Radio Radio audience listening figures will track wider reach; at the local level, social surveys, disaggregated by gender, age and stakeholder group will track changes in knowledge and awareness within target communities 2.4 & 2.5 Pre- and post-intervention surveys using stratified sampling and methods designed to elicit honest answers to sensitive questions (disaggregation not possible due to anonymity of survey method)	Most illegal wild meat consumption in the Tsavo area is driven by the need for protein and lower cost of wild meat and so can be reduced through increasing access to alternative protein sources directly (e.g. chicken and goat farming) or purchase of alternative protein as a result of improved incomes (14,15). Taste may also be driver, so we will establish that in Y1 and tailor methods accordingly. The project will be able to be able to increase access to viable alternative protein sources (directly through farming and/or purchase) sufficient to replace most target groups' wild meat consumption. The targeted behavaiour change campaigns linked to the legal consequences of illegal hunting, the damage to ecosystems resulting, disease risk, and the availability of alternative protein sources, will effectively influence attitudes and behaviours related to wild meat consumption.

Output 3: Implementation of sustainable income-generating activities resulting in improved livelihoods and economic opportunities for target (wild meat hotspot) communities reduce dependency on wild meat	3.1 Number of individuals (at least 400, ca. 50% women) establishing VSLA groups end of Y1 **[ZSL2]** 3.2 Number of people from key local stakeholder groups completing structured and relevant training (livelihood related); target = 400 new beneficiaries (targeting 50% women) by end of Y3 (baseline = 0 trained by project, 361 people trained by ZSL projects to date in Tsavo) **[DI-A01 Core]** 3.3 Number of people reporting they are applying new capabilities (skills and knowledge related to livelihoods) 6 (or more) months after training; target = 300 people, of which 50% are women (75% of total 400 trainees) by end of Y3 (baseline = 0 people) **[DI-A04 Core]** 3.4 Number of sustainable livelihood enterprises established that are functioning at end of project (at least a year after establishment); target = at least 200 enterprises that are functioning by end of Y3 (baseline = 0 enterprises) **[DI-A10]** 3.6 Number of individuals reporting an adoption of livelihood improvement practices (e.g., chicken, rabbit or fish farming and apiaries actual practices adopted to be informed by research and feasibility/risk assessments) as a result of project activities; target 400 people 50% women) in wild meat hotspot communities (baseline to be established early in Y1 **[DI-B10]** 3.7a Number of people purchasing alternative protein sources (not wild	3.1 VSLA membership records and reports, disaggregated by gender, age group, stakeholder group. 3.2 Reports on training including lists of people trained and for how long, disaggregated by gender, age group, stakeholder group, community location, and type of training. 3.3 Reports on post-training follow-ups, disaggregated by gender, age group, stakeholder group, community location, and type of training. 3.5 VSLA reports and social surveys and questionnaires, disaggregated by gender, age group, stakeholder group. 3.6 VSLA reports and social surveys and questionnaires, disaggregated by gender, age group, stakeholder group, and livelihood practices. 3.7a Social surveys using stratified random sampling and including use of tools for asking sensitive questions in conservation (see Assumptions above (Outcome) and refs therein), disaggregated by gender, age group, and village. 3.7b Social surveys, disaggregated by gender, age group, and village.	Drivers of wild meat hunting and consumption are assumed to be a mix of cost (cheaper than alternative sources of protein), taste, and culture. Interventions are designed to address all drivers while also helping elicit which ones are most important. Its best to establish all VSLAs in year one so that we anchor behaviour change and livelihood diversification work on established VSLA structures. Wild meat hunters will join the VSLA groups to benefit from diversified livelihoods and in so doing also be exposed to conservation awareness trainings delivered within the VSLA. Income generating opportunities fostered through VSLAs will allow people to buy alternative sources of protein, reducing the need to buy wild meat. Livelihood diversification initiatives will allow previous consumers of wild meat to raise their own sources of protein, e.g., chicken and goat farming, reducing the need to hunt or buy wild meat. Alternative protein farming is identified as a feasible intervention (and will be informed by research as part of this project) to reduce harvesting and consumption of wild meat

	meat) by end of Y3; target 75% of people in wild meat hotspot communities (baseline to be established early in Y1) **[ZSL3]** 3.7b Number of people who have set up alternative protein farming by end of Y3; target at least 200 people in wild meat hotspots communities (baseline to be established early in Y1) **[ZSL4]**		
Output 4: Market surveys have provided trend data on wild meat sales in target (wild meat hotspot) communities around Tsavo	4.1 Number of illegal wildlife products (wild meat items) detected in markets in 3 of 4 wild meat hotspot communities; target = 50% reduction by end of Y3 (baseline to be determined at start of Y1) **[IWTCF-B07]** 4.2 New assessments of community use of biodiversity resources (sale of wild meat) published; target 1 assessment by end of Y3 (reporting on trends since early-Y1 baseline established) **[DI-C04 Core]**	4.1 Market meat sales survey reports, disaggregated by species and survey method (visual identification / DNA-based identification). 4.2 Assessment published, specifying assessment method(s).	Visual surveys augmented, if possible (match funding dependent), by DNA based surveys can reveal trends in wild meat sales, ideally disaggregated by species. Surveys conducted in 3 of 4 wild meat sale hotspot communities are representative of overall trends for Tsavo.
Output 5: Comprehensive monitoring of large carnivores (African wild dog, lion, cheetah, leopard, hyena spp.) and their prey in Tsavo established and generating both training opportunities and data on demography, snare-related mortality, and distribution and population trends	5.1 Number of people from key national and local stakeholders completing structured and relevant training (in monitoring methods); target at least 15 KWS/WRTI staff (national/local) and at least 20 Kenyan students trained by project staff in Y1 and Y2 (baseline = 0 staff/students) **[DI-A01 Core]** 5.2 Number of wildlife monitoring related secondments or placements with project completed by individuals of key local and national stakeholders during 3 years of project; target at least 5 KWS/WRTI staff (national/local) and at least 10 Kenyan students by end of	5.1 Training reports including pre- and post-training assessments, disaggregated by gender, age group, stakeholder type, training type, and employment status at end of project 5.2 Placement reports including pre- and post-placement assessments, disaggregated by gender, age group, stakeholder type, training type, host organization type, and employment status at end of project 5.3 Training / placement follow-up reports, disaggregated by gender, age group, stakeholder type, and training type	Sufficient camera traps can be maintained in working order and few are stolen. Existing permissions for collaring African wild dogs are updated by KWS/WRTI to include Tsavo (applications are being processed). Sufficient African wild dogs can be collared in a timely manner (ZSL teams have extensive experience of catching and collaring wild dogs in Kenya working with KWS vets).

	Y3 (baseline = 0 placements) **[DI-A02 Core]** 5.3 Number of people reporting that they are applying new capabilities (skills and knowledge related to wildlife monitoring) 6 (or more) months after training; target at least 15 KWS/WRTI staff (national/local) and at least 10 Kenyan students by end of Y3 (baseline = 0 staff/students) **[DI-A04 Core]** 5.4 Number of successful camera trap surveys of carnivores and prey in Tsavo completed; target one cross-Tsavo survey in early Y1 and one in late Y3 (no camera trap survey of this type previously done in Tsavo so no baseline) **[UoW1]** 5.5 Number of African wild dog packs collared in Tsavo landscape; target 4 packs (3 dogs collared per pack) in Y1 out of an estimated 7-10 packs in Tsavo (current baseline: no packs currently collared) **[ZSL5]** **NB**: For species-specific survey result related indicators please see Outcome indicators 0.4-0.7.	5.4 Camera trap survey reports (data summaries and analyses: occupancy, distribution, snare-related injuries, and relative abundance or abundance depending on species) giving results by species, time period, and zone of the Tsavo landscape 5.5 Reports on African wild dog collaring and subsequent tracking (data on behaviour, hunting success, and demography including snare-related mortality and pup survival), giving results by pack, time period, and zone of the Tsavo landscape 5.6 Reports on direct observations of lions (data on behaviour and demography including snare-related mortality), giving results by pride, time period, and zone of the Tsavo landscape	

Activities

Output 1: Targeted law enforcement, including de-snaring efforts, leading to reduced snaring levels in the Tsavo landscape, and data on trends in snaring and illegal killing of wildlife.

Activity 1.1: Project inception meetings held in Taita Taveta and Mtito Andei.

Activity 1.2: Regular snare patrols with TT to remove threat and provide data on snaring trends and monitoring trends.

Activity 1.4 With KWS, conduct quarterly outreach meetings to build positive people-park relationships and educate communities on penalties and fines prescribed by Wildlife Act 2013.

Output 2: Targeted social marketing campaigns based on an improved understanding of the drivers of wild meat successfully shift attitudes leading to a reduction in hunting, consumption, and local trade of wild meat in target (wild meat hunting hotspot) communities

Activity 2.1: Conduct baseline survey to assess levels of harvesting, consumption and sale of wildmeat and their drivers across target communities.

Activity 2.2: Using baseline data from 2.1, identify local values, motivations and drivers of wildmeat use across groups, and generate user profiles to understand needs and wildmeat dependence,

Activity 2.3: Develop culturally sensitive, targeted messaging to discourage wild meat use, aligned with local values and motivations identified in 2.2, highlighting negative impacts of wild meat.

Activity 2.4: Run monthly programs on community radio stations (Radio Mangelete and Mwenedu Radio) and quarterly community outreach meetings to raise awareness of wildmeat trade impacts and Wildlife Act 2013.

Activity 2.5: Support KWS to convene quarterly stakeholder meetings on emerging conservation challenges including bush meat trends and engage stakeholders in resolving identified challenges.

Activity 2.6: Conduct surveys to measure changes in wild meat use.

Output 3: Implementation of sustainable income-generating activities resulting in improved livelihoods and economic opportunities for target (wild meat hotspot) communities and successful promotion of alternative protein sources to reduce dependency on wild meat.

Activity 3.1: Assess skills and existing livelihood options of those dependent on wild meat to identify potential interventions that address priority drivers (identified in 2.2).

Activity 3.2: Conduct participatory workshops to discuss and prioritise viable interventions (e.g. income and protein generating alternatives) acceptable by the communities for 400 individuals.

Activity 3.3: Mobilise at least 400 individuals to form VSLA groups in villages identified as hotspots for wild meat trade.

Activity 3.4: Monitor, coach and provide ad hoc support to established VSLAs to track performance and progress including collecting monthly data on number of shares purchased.

Activity 3.5: Provide training and resources for other income-generating activities identified during 3.2.

Activity 3.6: Support the establishment of market linkages for community products to benefit from economies of scale.

Activity 3.7: Monitor and track the number of individuals benefiting from livelihood opportunities and purchasing alternative protein sources through surveys, interviews and data collection.

Output 4: Market surveys have provided trend data on wild meat sales in target (wild meat hotspot) communities around Tsavo.

Activity 4.1: Conduct surveys in key markets to assess availability and variety of meat products. Record information on species, quantities, prices, and sources of meat.

Activity 4.2: Conduct interviews with key stakeholders involved in the meat trade, including suppliers, traders, and consumers. Gather information on trade networks, market dynamics, and consumption patterns.

Activity 4.3: Monitor key markets to track changes in meat availability, prices, and consumption trends over project period.

Activity 4.4: Collaborate with KWS to share information and intelligence on the meat trade. This can help identify illegal activities and key actors involved.

Output 5: Comprehensive monitoring of large carnivores (African wild dog, lion, cheetah, leopard, hyena spp.) and their prey in Tsavo established and generating both training opportunities and data on demography, snare-related mortality, and distribution and population trend.

Activity 5.1: Implement park-wide camera trap surveys to estimate the distribution, occupancy, and status of large carnivores and their ungulate prey, including proportions with snare-related injuries.

Activity 5.2: Conduct line transects using distance sampling to measure ungulate densities and distribution.

Activity 5.3: Deploy GPS-collars (1-2 per pack) to facilitate visual observation of African wild dogs.

Activity 5.4: Monitor GPS-collared and uncollared African wild dog packs to estimate demographic rates.

Activity 5.5: Integrate African wild dog GPS-collar data with data on prey densities, distribution, and snaring to estimate impact of snaring on habitat selection and hence occupancy.

Activity 5.6: Deploy Daily Diary collars (1-2 per GPS-collared pack) to measure African wild dog hunting success and food intake.

Activity 5.7: Use visual observations and camera trap images of known animals to quantify variation in lion numbers and demography over time and space.

Activity 5.8: Involve student interns (ideally from the local area) in camera trapping, line transects, and visual monitoring to provide field training.

Activity 5.9: Prepare reports and publications on ecological monitoring.

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the **correct template** (checking fund, scheme, type of report (i.e. Annual or Final), and year) and **deleted the blue guidance text** before submission?	**Yes**
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the Subject line.	
Is your report more than 10MB? If so, please consider the best way to submit. One zipped file, or a download option, is recommended. We can work with most online options and will be in touch if we have a problem accessing material. If unsure, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the Subject line.	
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
Have you provided an updated risk register? If you have an existing risk register you should provide an updated version alongside your report. If your project was funded prior to this being a requirement, you are encouraged to develop a risk register.	Yes
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see Section 16)?	Yes
Have you involved your partners in preparation of the report and named the main contributors	**Yes**
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	