

Darwin Initiative Main: Annual Report

To be completed with reference to the “Project Reporting Information Note”:
(<https://www.darwininitiative.org.uk/resources-for-projects/information-notes-learning-notes-briefing-papers-and-reviews/>).

It is expected that this report will be a **maximum of 20 pages** in length, excluding annexes)

Submission Deadline: 30th April 2024

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

1. Darwin Initiative Project Information

Project reference	DIR27S2\1040
Project title	African Wild Dogs and African People - Conservation through Coexistence
Country/ies	Kenya
Lead Partner	Mpala Research Centre
Project partner(s)	Laikipia County Government, Northern Rangeland Trust, Samburu County Government, Isiolo County Government, Kenya Wildlife Service, Community Conservancies, Ewaso Lions, Action For Cheetahs, Community Outreach Arts.
Darwin Initiative grant value	£393,674
Start/end dates of the project	April 2022- March 2025
Reporting period (e.g. Apr 2022 – Mar 2023) and number (e.g. Annual Report 1, 2, 3)	Apr 2023 – Mar 2024 Annual Report 2
Project Leader name	Dedan [REDACTED]
Project website/blog/social media	Website: www.mpala.org/ Facebook: https://www.facebook.com/MpalaResearchCentre Twitter: @MpalaWildDogs Instagram: Mpala_WildDogs
Report author(s) and date	Dedan [REDACTED], May 2024

2. Project summary

Range-wide conservation planning for African wild dogs was inspired by a study showing how wild dogs and people could coexist in Kenya’s Ewaso ecosystem. Yet, in 2017, an epidemic of canine distemper devastated this iconic population. In the well-studied core of the ecosystem, two solitary animals remained where 20 packs had lived just a few months earlier.

As survivors and immigrants re-form tiny packs, we are working to recover this globally-important population, encouraging rapid population growth by tackling the two greatest causes of mortality: infectious diseases, and deliberate killing by people. The distemper epidemic has passed, and rabies is the most immediate risk to recovery. We are directly working to locally eliminate rabies through mass domestic dog vaccination, protecting human health as well as wild dogs. We also have plans in place to vaccinate wild dogs against rabies and distemper, if an expert-led workshop recommends this approach.

Our local outreach program is using participatory theatre to share evidence-based advice on livestock husbandry practices known to reduce wild dog depredation and encourage domestic dog vaccination. We are also building support for wild dog conservation nationally using in-country print, broadcast, and social media. Additionally, we are building national capacity by offering project staff opportunities to gain skills and qualifications while in their post.

3. Project stakeholders/ partners

The project implementation across year three has been largely strengthening partnerships with actors within and outside of the project area for different aspects of the project. The partners and their contributions are as follows;

1. Kenya Wildlife Service (KWS)

We proposed KWS provide technical guidance to our project, including ensuring that all our work contributes to Kenya's goals under national and international agreements. KWS veterinarians and ecologists were to participate in workshops on disease management and human-wildlife conflict, and their involvement will be essential to the implementation of many decisions. KWS was also to oversee any response to incidents of ill health or mortality detected in wild dogs or other focal wildlife, for example, through post-mortem examination.

Achievements: In the year 2023-24, we have managed to successfully collar 9 individual wild dogs, belonging to two packs. This enhances our goals of monitoring which will inevitably help us to closely protect the few remaining wild dogs. Collaring of wild dogs was carried out by KWS-certified veterinarians which greatly boosts our partnership.



Figure 1. Dr. James Ngatia, Project vet assisted in the collaring of African wild dogs in Laikipia, Kenya.

In addition, we managed to remove a snare from an individual wild dog that was reported to the project team by management of a conservancy within our project area. This was done with the help of KWS Certified veterinarian,

2. County Governments of Laikipia, Samburu, and Isiolo

The County Governments of Laikipia, Samburu, and Isiolo are supporting this project in two ways;

First, they continue being involved in planning mass domestic dogs vaccinations (see attached planning minutes). This is followed by contributing their teams of county veterinary officers to work with the Mpala and partner teams to implement domestic dog vaccinations within the project area, in liaison with the Zoonotic Disease Unit which is coordinating national rabies eradication efforts.

Second, they are helping promote Mpala's outreach efforts among local communities, to encourage both coexistence with wildlife and participation in the rabies vaccination program.

3. Northern Rangelands Trust (NRT)

NRT is an umbrella organization for community conservancies. There are 17 NRT conservancies within the project area, and five of these conservancies are hosting Community Officers supported by the project, and NRT is also facilitating collaring and wild dog monitoring, community outreach, rabies vaccinations, and other activities throughout the 17 conservancies.

4. Smithsonian Global Health Programme

At Mpala, the Smithsonian Global Health Programme is supporting training and capacity building for Kenyan veterinarians and the development of systems for wildlife health surveillance for integration into SMART monitoring which is already widely used on ranches and community conservancies. As an in-kind support for the project, Smithsonian veterinarian Dr. Ann Haw continue mentoring the project's Veterinary Officer, while Smithsonian Research Fellow Dr. Katherine Worsley-Tonks helped to design a zoonotic diseases surveillance system and is also mentoring the Monitoring and Surveillance Officer.

5. Community Outreach Arts

As reported in the previous reporting period, Community Outreach Arts worked with the Mpala Wild Dog project team to develop two local-language plays, each incorporating the key project message in a format that encourages audience members to participate and discuss the topic, creating a forum of change. Optimizing outreach to the youth, the Community Outreach Arts team continues to perform the plays in schools throughout the project area. Administration of brief audience questionnaires before and after selected performances has been done by the Monitoring and Surveillance Officer to quantify the impact of the plays as a tool of communication.

6. Zoological Society of London (ZSL)

ZSL is contributing in-kind support for the project through technical advisor Prof Rosie Woodroffe, who is an authority on the ecology and conservation of African Wild Dogs. Prof Woodroffe established the Samburu-Laikipia Wild Dog project at Mpala in 2001 and has built a comprehensive body of evidence on sustainable ways for people and wild dogs to coexist. She continues to play her role in this project in providing technical guidance relating to wild dog ecology, epidemiology, and co-existence with people. She also leads the workshops on disease management and human-carnivore conflict (in partnership with the IUCN/SSC Canid Specialist Group, of which she is a core member)

4. Project progress

4.1 Progress in carrying out project Activities

In order of outputs, the progress of this project's activities in the third year has been as follows;

Output 1: Zero human deaths from rabies in the project area by 2024

1.1 Vaccinate domestic dogs annually across 10,000 sq km project area, achieving 70% vaccine coverage, including traveling with camels in areas not accessible by vehicle.

Within the reporting period, we vaccinated a total of 14,072 domestic dogs representing a vaccination estimated coverage of 71% of all dogs in the project area. This spreads over 9,200 sq km of land. Vaccinations are ongoing and further updates will be provided in future reports. This success has been achieved through a private-public partnership of stakeholders within the project area, with the local County Governments taking a big role in this as the mandate of disease control lies with the County Governments.



Figure 2. Activities happening at a vaccination center; domestic dog vaccinations, issuing of vaccination certificates, and filling data in the WVS data collection app.

1.2 Collect data on rabies vaccination efforts and coverage using the Mission Rabies smartphone app (<http://www.missionrabies.com/app>).

All vaccination-related data including the number of dogs vaccinated, the type of vaccine administered, and other details of domestic dogs' characteristics are captured in a mobile app making it readily available and safely kept for use.

1.3 Conduct mark-resight monitoring of domestic dogs after a sample of vaccination days to estimate vaccination coverage.

To estimate vaccination area and percentage coverage of domestic dog vaccination, the project's Monitoring and Surveillance Officer has led in conducting a mark-resight activity. Information from this activity has been used to advise adjustments and modifications of vaccination approaches. This is indeed helpful in computing vaccination coverage estimates as described in 1.1.

1.4 Develop a participatory play about rabies, dog vaccination, how the correct dog bite management can save lives, and the parallels between human and wildlife health.

The Community Outreach Arts team together with the Mpala project team has developed a modified play on rabies eradication in the reporting period of this project. The play modified play is designed to be as interactive as possible with the audience, allowing our rabies control messages to get easily disseminated to the people.

1.5 Perform the rabies play on >20 occasions in advance of rabies vaccination days, targeting locations likely to attract women as well as men.

Three plays on aspects of rabies control were performed within the year. The plays were performed in 2 primary and 1 secondary schools, to increase our coverage, in terms of the number of youth reached.





Figure 3 and 4. Plays happening in primary schools targeting children of between 6-15 years old.

We hope to still keep performing the plays in new schools and areas within the coming project year.

1.6 Monitor the effectiveness of participatory play by interviewing audience members before-and-after performances.

Before and after play performances, questionnaires were administered to the target audiences to determine the initial status of knowledge among locals. Questionnaires have been administered on the perception and knowledge of people on rabies control.

1.7 Develop short videos, based on the rabies play, optimised for sharing over WhatsApp, and encourage sharing over local networks.

To promote sharing information to a larger community within the project area and beyond, the project team has continuously made short clips from the plays and shared them on its socials. See sample videos in the attached links;

<https://drive.google.com/file/d/1EYL4yk5zyumjEqjH0eaOtkZTbrsnGxVv/view?usp=sharing>

<https://drive.google.com/file/d/1Wl28itjAGQ5q1Cjo7O4xQnhmtCW2jtoM/view?usp=sharing>

1.8 Develop and distribute posters and leaflets about rabies prevention, as part of community sensitization ahead of rabies vaccination days.

Designed in the previous year, 150 posters, 200 leaflets, and 30 stickers were printed and distributed before the 2023 mass vaccinations.



Figure 5. Women engaging a poster in Isiolo County

They were used to educate and create awareness among residents within the project area and to whom vaccinations were targeted. This helped increase vaccination uptake amongst residents. Copies are attached.

1.6 Train outreach officers and scouts from partner projects in rabies prevention messages, so that they can help with community sensitization.

We trained 33 scouts in this reporting period. The training sessions included scouts from partner conservancies and were focussed on rabies control and domestic dog-bite management. An addition 27 youths from various communities were trained on the same topic during the mass rabies vaccinations..



Figure 6. Project Coordinator, in a scout training session in Samburu County

1.7 Monthly project meetings to evaluate progress, continue staff training, and consider ways to improve effectiveness.

In the reporting period, regular monthly meetings with the project team and project advisors continued. The meetings provide great platforms for discussions on different aspects of the project to ensure smooth implementation, evaluate project progress and efficiency in project management. The meetings are also training platforms for project members and to develop individual goals.

1.8 Adapt outreach efforts to specific local issues if monitoring indicates vaccination coverage is insufficient.

Monitoring of vaccination activities in 2022 identified sections of the project area that were not adequately covered mainly due to logistical challenges occasioned by long distances and vast areas with low human populations. Consultations with partners, stakeholders and community members advised a change of approach in 2023 from centred mass vaccination, where people bring their dogs to a central point to door-door approach. We adopted a door-to-door vaccination strategy for these communities. With this approach, we have vaccinated 2,244 domestic dogs within the period. This represents 84% of all domestic dogs in these communities, 55% higher than 29% covered in previous year for these areas.

1.9 Establish systems for collecting age- and sex-specific data on dog bites and rabies deaths at 4 hospitals and 20 dispensaries.

The project team continues to engage the partnering Laikipia County Government in the project area in the development of the proposed system. Partly successful, data on dog bite distribution and human deaths have been availed as a segregated data collection tool awaits approval. We are waiting to receive data for 2023 and 2024. Such data on hospital records take time to retrieve but we have agreements in place to sure that we will get these in time.

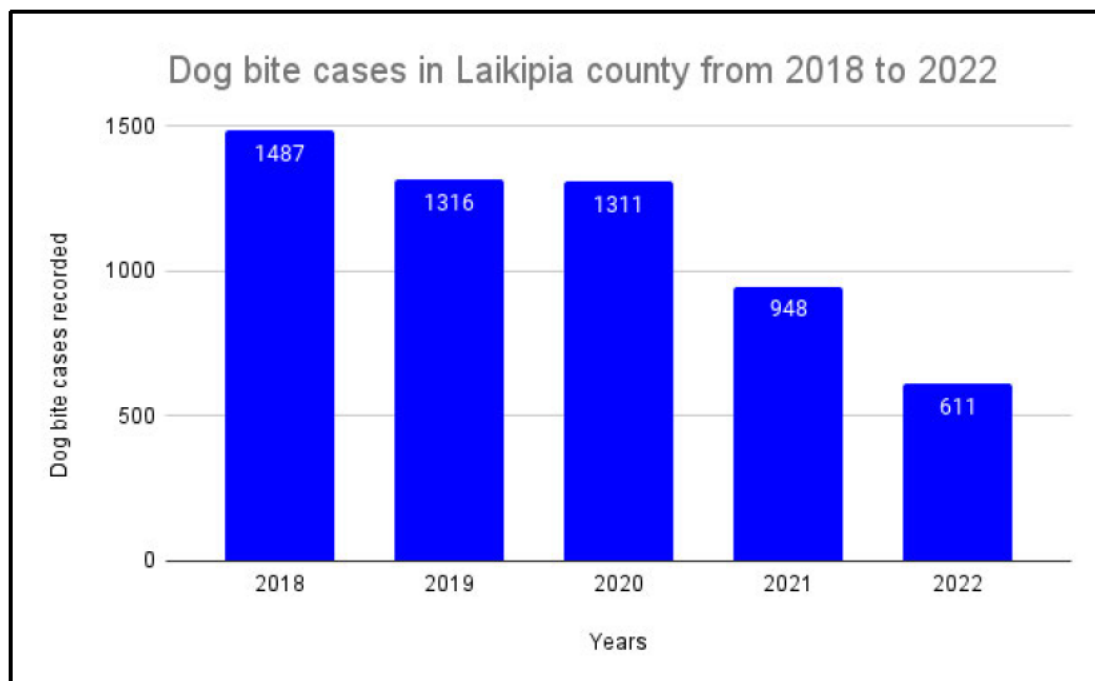


Figure 7. Graph showing declining dog bite cases in project area from 2018-2022

- 1.10 *Liaise regularly with the national “Rabies-Free Kenya” campaign to ensure efforts are complementary and share experiences of best practices.*

Our project's vaccination campaign progress and experiences have been shared with the “Rabies Free Kenya” to enhance knowledge and experience sharing among implementers of similar interventions.

- 1.11 *Close-out meeting early in Year 3 to assess progress relative to national rabies eradication efforts, and to decide next steps.*

To ensure these interventions are sustained beyond project life, the proposed close-out meeting will be done in the last year of the project.

Output 2: Two-thirds reduction in wild dog deaths caused directly or indirectly by people

- 2.1 *Convene workshop on managing disease risks to wild dogs, involving local and international experts and drawing on existing data and epidemiological modeling.*

The workshop was held in previous reporting period bringing together experts from local and international partners and stakeholders including; the Zoological Society of London, Laikipia County Government, Kenya Wildlife Service, Mpala Research Centre, Ewaso Lions, Zoonotic Disease Unit, Rabies-Free Kenya, and the international Livestock Research Institute (ILRI). The recommendations of the workshop continue to guide the project team on outreach activities regarding disease control.

- 2.2 *Based on disease workshop outcomes, develop and publish a local disease management plan for wild dogs and other large carnivores.*

As an output of the workshop, a disease management model was developed. The model continues to inform conservation interventions on going now and into the future. This document is under review.

- 2.3 *If recommended by disease workshop participants, including Kenya Wildlife Service, initiate vaccination (rabies and/or CDV) within each collared wild dog pack.*

The resolutions from the workshop were as follows:

- i) There is sufficient evidence that administering inactivated rabies vaccine to African wild dogs is safe and effective. Vaccination of African wild dogs against rabies would be appropriate following a rapid risk assessment, taking into account wild dog population size, risk of exposure (including domestic dog vaccine coverage and any ongoing outbreaks), as well as the consequences of not acting.
- ii) Neither inactivated nor recombinant distemper vaccines appear able to protect African wild dogs from the canine distemper virus. There is strong evidence that administering the modified-live vaccine to African wild dogs is safe and confers immunity in captivity. Given the

currently low numbers of wild dogs in the Ewaso ecosystem and the frequent CDV outbreaks in domestic dogs, jackals, and wild dogs, there is an acute risk of losing wild dogs altogether. Vaccination of free-ranging African wild dogs against distemper is, therefore, necessary and urgent in the context of a carefully designed field trial and thereafter based upon rapid risk assessment (as for rabies) if trial outcomes are favourable.

2.4 With workshop participants, develop a SMART-integrated surveillance system for reporting sickness in wild and domestic carnivores, including response plans.

The workshop proposed the development of a disease-reporting system to be incorporated into the data collected by the project team. This has been actualized by developing a data collection tool on sick and dead carnivores and domestic dogs which is being used to collect data by Community officers in their respective areas of operation.

2.5 Train project Community Officers, and project partners' scouts, outreach officers, and other SMART users to use the surveillance system.

The project's Community Officers continue to use SMART in data collection. Training on the SMART use was done in the previous reporting period with support from the project's technical advisors, Dr. Katherine Worsley-Tonks. We plan to train more representatives from partner organizations in the next year.

2.6 Train and equip veterinarians from KWS, Mpala, and partners to implement the response plan.

Training in response has been done by Dr. Katherine Worsley-Tonks to veterinarians in Mpala and surrounding conservancies and plans are in place to extend this training to veterinarians from partner organizations.

2.7 Convene workshop on mitigating livestock depredation in the project area, involving local and international experts.

To be done in the next reporting period

2.8 Based on depredation workshop outcomes, develop and publish a local plan to mitigate livestock depredation by wild dogs and other large carnivores.

To be done after activity 2.7 has been completed

2.9 Monitor wild dog health, survival, and reproduction by deploying tracking collars on all known wild dog packs in the project area, with frequent visual checks.

- In close collaboration with the Kenya Wildlife Service, KWS, and community/private conservancies, we deployed 9 collars in two packs, leading to a total of 3 packs being monitored.
- We have recorded 5 denning packs with 28 puppies within this reporting period.
- The project team together with KWS removed a snare from a dog which was reported to the team by a partnering conservancy.
- In addition, new packs continue to be sighted in our project area, and our team is working to get them collared. Our Monitoring and Surveillance Officer and community officers are actively keeping track of the uncollared packs and documenting their health and reproductive status.

2.10 Retrieve and (with KWS) necropsy and wild dogs which die, collating data on mortality rates and causes.

We lost an adult dog from one of the collared parks to natural causes in one of private conservation ranches. The collar that was on this dog was retrieved. Also, a litter of 2 puppies was lost in the 1st week out of their denning site possibly from attacks by other large carnivores. These are recorded as deaths from natural causes which we have no means of intervening.

2.11 Collate data annually from KWS and partner projects on conflict-related mortality of other large carnivore species.

The project team has initiated plans targeted at data collection on mortality of other carnivores related to human-wildlife-related data from partner projects and organizations. The data will be presented in the next reporting period.

Output 3: Declining incidence of livestock predation by all large carnivores, despite the rising population of wild dogs

3.1 With participants in the depredation workshop, agree on appropriate methods to mitigate livestock predation by wild dogs and other large carnivores.

To be done in the next reporting period during the workshop,

3.2 Integrate chosen methods into new and existing training materials for Mpala and partner projects, and train key staff to use and share them.

To be done in the next reporting period after the workshop.

3.3 Solicit and follow up reports of large carnivore attacks on livestock, collecting case-control data on husbandry methods and offering advice on mitigation methods.

Data collection on large carnivore predation within the project area has continued to be actualized by the Community Officers. In these cases, details are recorded and advice on mitigation are shared with the community members

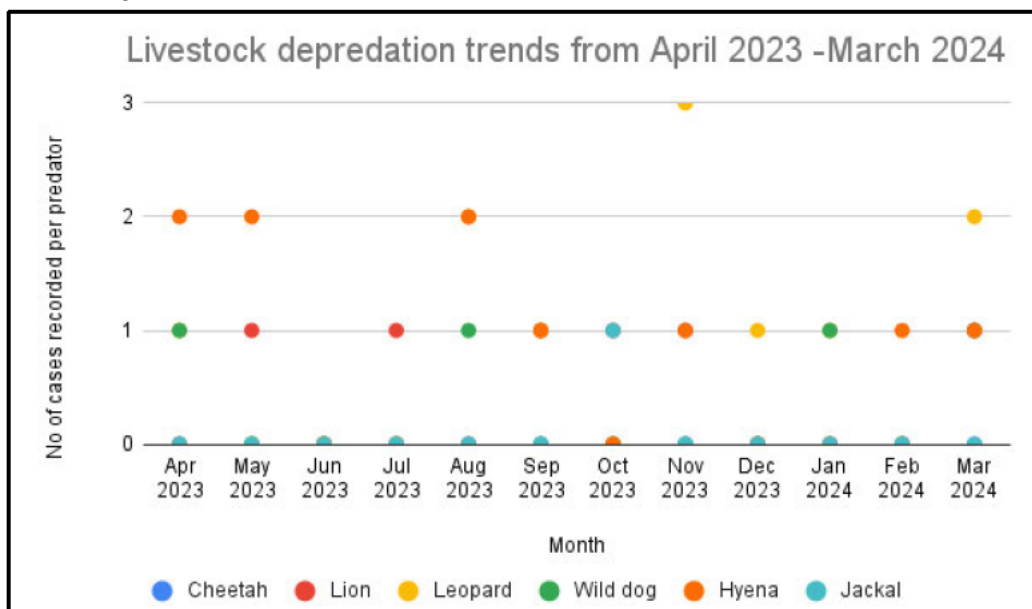


Figure 8. A chart showing Livestock depredation trends from April 2023- March 2024

3.4 Develop a participatory play about coexisting with large carnivores, especially wild dogs, sharing evidence on sustainable ways to prevent livestock attacks.

As with activity 1.4, a co-existence message play was developed consultatively.

3.5 Perform the coexistence play on ≥ 20 occasions, targeting locations experiencing livestock depredation problems, especially wild dog depredation.

Targeting youthful school going community members, 3 plays has been performed in 2 primary school and 1 secondary schools.



Figure 9. Performance of participatory plays at Kirimon Secondary, Samburu.

3.6 Monitor the impact of the coexistence play by counting audiences, and by interviewing a sample of audience members before-and-after performances.

The projects Monitoring and Evaluation Officer has been monitoring activities impacts: numbers reached and message passed. The three plays performed in schools have reached over 1100 students, improving the knowledge and acceptance of coexistence/human wildlife conflict mitigation.

3.7 Develop short video clips, based on the coexistence play, optimized for sharing over WhatsApp, and encourage sharing over local networks.

Short video clips from coexistence plays have been developed and shared through WhatsApp to local networks including community groups, women groups, and other local contacts. See sample videos in the attached links;

<https://drive.google.com/file/d/1fUKi4AA8MWKqASpsdSYqiyHZvtoLi9WF/view?usp=sharing>

https://drive.google.com/file/d/1OvNwBNsDcqMlnK8QMgJQ_yvBshzOo1mB/view?usp=sharing

3.8 Develop and distribute posters and leaflets about coexistence with wild dogs and other large carnivores, targeting places women are likely to visit, as well as men.

These were developed in previous reporting period and distributed within this project year. They have included messages the project team has researched conclusively over years and proved to be effective measures to enhance coexistence. 400 leaflets have been distributed

3.9 Share knowledge about approaches to coexistence through regular formal and informal meetings with community members and groups.

The project team through different avenues including formal and informal meetings in communities has reached out to over 59,405 residents in the project area with coexistence and best herding practices messages.



Figure 10. Community meeting on coexistence with wild dogs at Kimanjo area led by our Community Liaison Officers.

3.10 Monitor key livestock husbandry measures (e.g., number/age/sex of herders) in a sample of herds at the start of the project and annually thereafter.

Through standardized household depredation monitoring, data on livestock husbandry measures are collected by community officers in their respective regions. Currently, 54% of herders are adults with 46% being Children. This improvement has led to a decrease in livestock depredation within the project area. Data collection on this will continue till the end of the project when we shall be able to deduce changes in practice

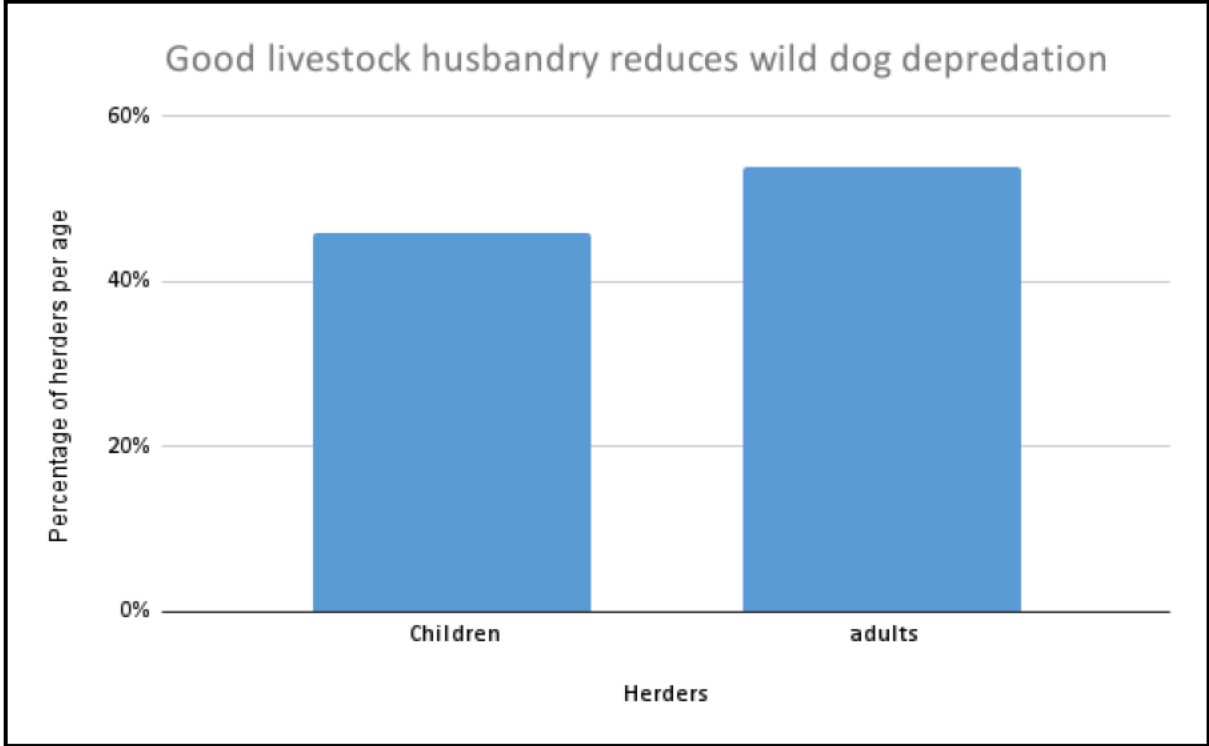


Figure 11. percentage of herders per age

3.11 Identify a sample of focal households for each community officer, to facilitate a standardized measure of predator impact with constant observer effort

This was implemented in the previous reporting period. 100 sample households were selected, a standardized questionnaire was developed for data collection, and the Community Officers were trained on how to effectively collect the data. The activity was piloted and modifications were done to allow efficient implementation. Data from these surveys have been analysed separately by the project's PhD student. Some of the results include:

- Most depredation cases are happening when it's hot.
- More animals in a single depredation event are killed when there's a big number of domestic dogs present.
- There's no correlation between the probability of a depredation event occurring and temperature.

These results are a little bit out of the project scope/goals, but are important in building more knowledge for follow-up research.

3.12 Collect data on livestock depredation and economic losses per focal household; estimate trends in losses over time.

Depredation data collected monthly has shown that depredation by large carnivores has reduced. 166 goats and sheep were attacked in the year 2022-23 against 54 goats and sheep killed in the year 2023-24. Depredation by other large carnivores still continues to present an economic loss in communities within the project area.

Output 4: Improved public attitudes to coexisting with African wild dogs

4.1 Encourage discussion about the benefits of coexisting with wildlife, as well as the costs, during play performances and formal and informal community meetings.

This discussion is promoted during the plays as well as in community meetings which the project has organized within the project area to communicate to the residents.

4.2 Actively encourage journalists and filmmakers to visit the project, promoting positive media stories linking human health to wildlife conservation.

This reporting period had the project work captured in a documentary aired biweekly for two months in Citizen TV, one of the leading TV stations in Kenya:

<https://twitter.com/citizentvkenya/status/1664540220447141889>

<https://twitter.com/citizentvkenya/status/1669277653600272386>. The project team continues to actively engage journalists to create stories for promotion of wild dog conservation.

4.3 Promote positive stories about wild dog conservation and human health through our own, and partners', social media accounts and other digital platforms.

Positive conservation stories related to wild dogs and other large carnivores are consistently promoted through our own social media handle listed above. We endeavour to maintain this throughout the project and beyond.

4.4 Use a simplified version of the questionnaire developed for ref (87) to measure local attitudes to wild dogs at the start and end of the project.

Perceptions and attitudes towards wild dogs and conservation interventions including rabies vaccinations amongst residents are being documented through questionnaires administered to residents of areas frequented by wild dogs or opportunistically to residents neighbouring wild dog denning sites.

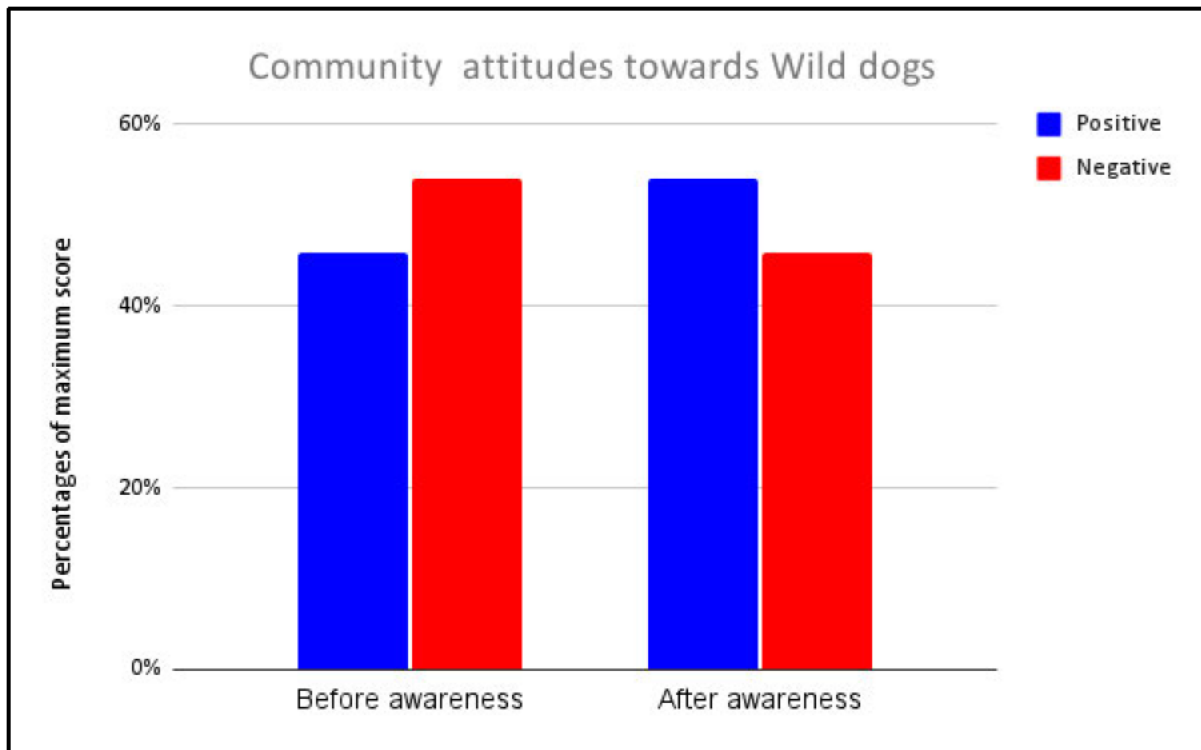


Figure 12. A graph showing community attitudes towards Wild dogs April 2023- March 2024

4.5 Monitor and record reports about the project in print, broadcast, and social media.

The project team has printed previously developed leaflets and posters. Within this recording period, we have distributed 350 leaflets and 80 posters as well as a newsletter which has been distributed, and/or emailed to project partners and stakeholders. We continue to update posts, monitor and record progress on our social media pages.

4.6 Promote the use of wild dogs in marketing tourism to the project area through informal meetings with individual lodges and camps.

Several private and community conservancies are now using wild dogs as the focal species to attract tourists to their conservancies. Specifically, the Laikipia Wilderness Camp (<https://www.laikipia-wilderness.com/>), based in Oldonyo Lemboro Ranch, mainly attracts tourists interested in tracking African wild dogs. Other conservancies that have centered wild dogs as focal species for tourism include; Loisaba Conservancy, Suyian Conservancy, Ol Jogi Conservancy, and Sosian Conservancy. In addition, we have also partnered with organizations operating tours and safaris in our study area, mainly focussing on wild dogs e.g. the FootPrint Safaris. To promote African wild dog tourism, we have shared tracking details of the collared packs with more than 10 conservancies.

Output 5: Improved national capacity for protecting wildlife populations and human health

5.1 Conduct initial training workshops for the project team at the start of the project

At the start of the project, all the project team members including Community Officers had the initial training while joining the training.

5.2 Include training sessions in every monthly project meeting

The initial training has been supplemented by regular training on different topics. The monthly training has been facilitated by senior project team members and advisors.



Figure 13. Project team undergoing a training session at Mpala Research Centre.

5.3 Ensure that specific training provided to project staff is also offered to relevant staff from partner projects

Through a series of meetings bringing on board NRT officers and conservancy leaders, the project has been able to hold 6 trainings with over 75 participants from partner staff on rabies control measures and wild dog coexistence messages. This is aimed at building their capacity to educate the rest of community members on importance of wild dog conservation and rabies control.



Figure 14. Training in progress at Nanapa Conservancy, Isiolo County

5.4 Schedule vaccination days to involve County Veterinary Officers, providing transport to facilitate their involvement

The project has successfully involved 44 County Government Veterinary Officers putting in a total of 3870 man-hours in planning and implementation of vaccination activity with transportation during vaccination days being provided by the project.

5.5 Train dispensary nurses and hospital staff to collect and report age- and sex-specific data on rabies deaths and dog bites.

The designing of a system to train hospital staff to collect detailed rabies-related data on dog bite cases presented at hospitals has been initiated and awaits approval by Health Departments of County Governments which manages hospital operations. We expect to have it operationalized in the next reporting period.

5.6 Engage Kenyan veterinarians and other conservationists with epidemiological modeling in the course of the disease management workshop

The disease management workshop brought together diverse expertise from veterinarians and conservationists drawn from different organizations from Kenya and beyond, as captured in our previous reporting period. During the workshop, participants discussed modelling results on rabies and canine distemper viruses and their likely impacts on our local wild dog population. In addition, prevention and response measures to disease outbreaks were developed.

4.2 Progress towards project Outputs

Output 1: Zero human deaths from rabies in the project area by 2024

Significant progress towards this output is being achieved by the project. In this project year, and from the hospital data in the project area, we have 1 confirmed reported rabies human death. This is sad, but a great improvement from a baseline of 25 deaths/p.a in 2017. The following activities planned for the reporting period contributing to this output have been carried out:

Awareness creation, and education towards the eradication of rabies, and domestic dog handling in the project area has been ongoing through mainstream media, social media, one-on-one approaches, community meetings, and plays. In total, the project has reached out to 43,481 people (16,430 youth, 14,224 women and 12,827 men) with rabies control measures and practices within the reporting period.

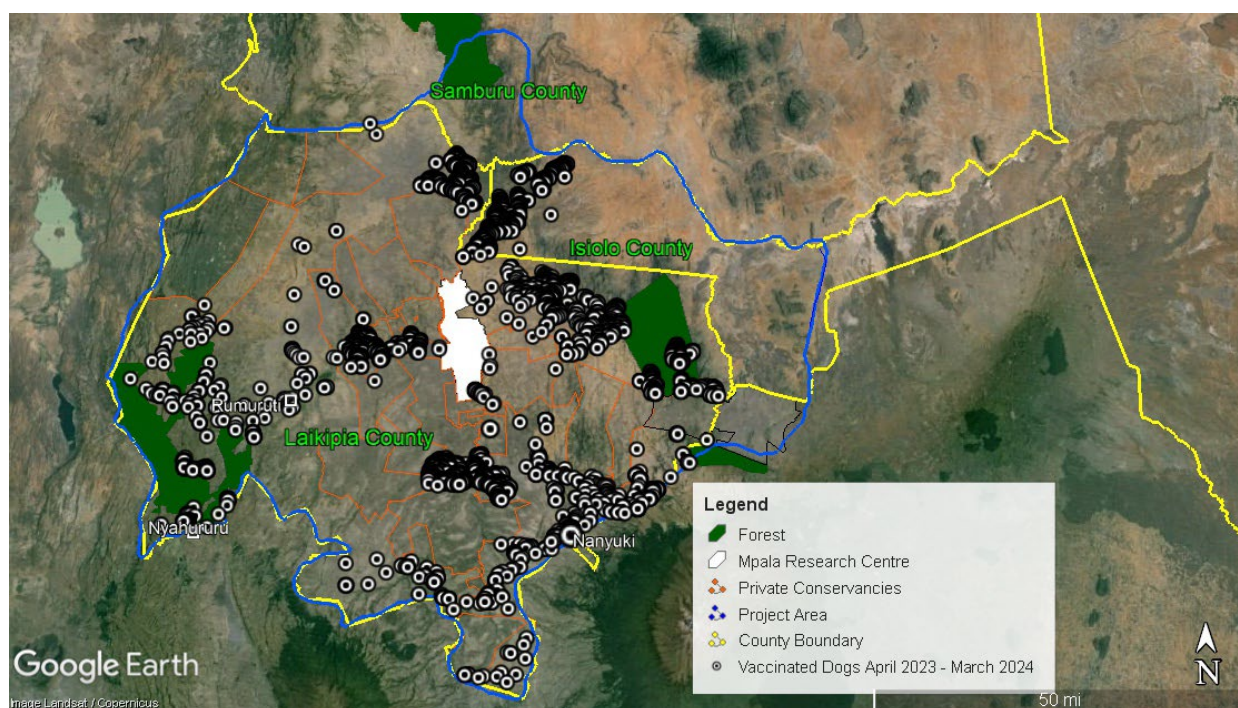


Figure 15. Project area and area covered by vaccination 2023/24

The area covered by domestic vaccinations in the reporting period is 9,200 sq km with a total of 14,072 domestic dogs being vaccinated as captured in Figure 12. Further vaccination data is gathered from the post-vaccination surveys and capture-recapture method carried out after every vaccination day.

Output 2: Two-thirds reduction in wild dog deaths caused directly or indirectly by people

This has successfully been achieved. So far, we have recorded a single wild dog death from what we suspected was natural cause. Our conclusion was based on the fact that its collar was recovered in a conservation area, inside a conservancy. All the same, the zero deaths from people likely is because the wild dog population is still low in our area. Wild dog monitoring through collaring is still ongoing. We also continue to receive a lot of sighting information to date.

A disease management workshop successfully held by the project in previous reporting period, developed a disease surveillance system that is systematically being implemented through our trained

community officers in their respective areas. This is supplemented by disease surveillance efforts from our project-based veterinarian within the project area.

Output 3: Declining incidence of livestock predation by all large carnivores, despite the rising population of wild dogs

In contribution to this output, the project has reached out to 59,405 persons (18,954 youth, 16,338 women, and 24,113 men) on good husbandry practices in coexistence messages within the project area using its different communication methods as in output 1. Mainstream media through a documentary aired bi-weekly for two months in Citizen TV, which is amongst leading stations in Kenya, reached out to ~800,000 persons nationally.

A standardized method of predation cases documentation implemented by the project has recorded 34 wild dog depredation cases within the reporting period as shown. Notably, depredation cases recorded in different months continued to reduce e.g. 11 in April 2023 to 1 in Dec 2023. Monitoring trends in livestock husbandry practices has and will continue throughout the project through surveys.

Output 4: Improved public attitudes to coexisting with African wild dogs

The project, through its different communication and outreach methods including prints and social media posts, see sample social media post, has initiated and strengthened information sharing on the benefits of coexistence with large carnivores. This is all aimed at changing community perception towards wild dogs and other carnivores. Combining community benefits accrued by the achievement of outputs 1-3, communities can associate and accommodate coexistence as the better option. Baseline questionnaires to assess the status quo were administered before and after outreach activities and a positive change in attitude has been noted.

Output 5: Improved national capacity for protecting wildlife populations and human health

This reporting period has seen conservancy leaders trained on rabies control and coexistence with large carnivores, mainly African Wild Dogs. A total of 75 leaders have been trained and expected to have the capacity to promote conservation by passing the correct message to the rest of community residents within the project area.

The project has directly engaged County government Veterinary Officers in domestic dog vaccinations within this project period. This year has seen 44 experts directly engaged in the vaccinations totalling 3870-man hours.

Progressively, the project's team (9 members), with guidance of senior project staff and advisors, has had monthly training on different topics related to wild dog conservation; threat, opportunities, and approaches for effective project delivery which has significantly contributed to improved project staff capacity.

In addition, the project has trained one PhD student who is just about to graduate in 2024. His dissertation title was on 'Conservation of African wild dogs in Northern Kenya.

4.3 Progress towards the Project Outcome

Our project outcome is to create an ecosystem free of rabies where people can coexist sustainably with wild carnivores. In addition, we also aim at recovering the African wild dog population in our study area. In line with this, the project has achieved the following:

- The project has documented an increase in number and packs of wild dogs in the project area. An additional 53 wild dogs have been reported and confirmed by the project team. This is in addition to continued breeding by the known packs which produced 28 pups in the reporting period.
- To eradicate rabies related human deaths in the project area, the project has achieved 9200 sq km in vaccination. However, we have one human rabies related death in the reporting period.
- The reporting period have not recorded any deaths of wildlife including wild dogs from rabies
- We only recorded 3 cases of livestock predation by wild dogs. With more people adopting good livestock husbandry promoted by the project, we are hopeful that this will continue to reduce.

- We recorded a reduced number of livestock killed by all large carnivores from 166 in the previous reporting period to 54 in this reporting period.

4.4 Monitoring of Assumptions

Outcome. ASS 1.: This outcome assumes that the main constraints on wild dog recovery in the project area are domestic dog diseases and deliberate killing by people. This assumption is based on intensive studies of wild dog ecology and population dynamics through population recovery in 2001-2016 a crash in 2017, and subsequent slow recovery.

Comment

The assumption still holds true.

Outcome. ASS 2: The effect of domestic dog vaccination on human rabies is well-documented. Effective and locally appropriate ways to reduce livestock predation have been identified, but other factors may constrain the extent to which people adopt them.

Comment

The assumption still holds true with mass vaccinations reducing human deaths. The project will continue to evaluate if there are more factors affecting livestock depredation beyond what is previously documented.

Outcome. ASS 3: This outcome also assumes that civil unrest does not return to the project area at levels sufficient to impact our project. Recent investment in security within the region, and strong community links, should minimize any such impact.

Comment

Part of the project area has witnessed civil unrest in the 2nd half of this reporting period despite security stabilization investment done in the previous years. The project has slowed community engagements in some areas highly affected by this. Rescheduling activities and ensuring activities have been happening with project staff only going to safe communities.

Output 1, Ass1: This output is based on the assumptions that human rabies risks can be mitigated by domestic dog vaccination, and that dog bites are a good proxy for rabies incidence in domestic dogs. These assumptions are supported by a very strong well-replicated evidence base, with similar projects elsewhere reducing human rabies mortality to zero within 2-3 years of starting mass domestic dog vaccination, and a close correlation between dog bites and human rabies risk (76,77,31).

Comment

The assumption still holds true.

Output 1, Ass2: This output also assumes that women are at least as impacted by rabies as men, an assumption supported by evidence that African women can face slightly higher rabies risks than men (67).

Comment

The assumption still holds true.

Output 1, Ass 3: The output also assumes that local communities will consent to vaccination of their domestic dogs, and participate in outreach activities. Participation to date has been high, but our project includes explicit plans to improve it further, drawing on experience from other animal health and public health initiatives (47).

Comment

The assumption holds largely true with pockets of residents mildly rejecting the exercise. The project team targets these regions with awareness and education activities on the importance of vaccinations.

Output 2, Ass 1: This output assumes that rabies risks to wild dogs can be reduced by vaccinating domestic dogs. This assumption is supported by strong evidence that wild dogs acquire rabies from domestic dogs at the project site (49,74) and elsewhere (78), by very strong evidence from elsewhere that vaccination reduces domestic dog rabies (31), and also by evidence from mathematical modeling (52).

Comment

The assumption still holds true.

Output 2, Ass 2: A second assumption, that vaccinating domestic dogs against canine distemper is unlikely to reduce risks to wild dogs (and will therefore be considered at the disease workshop rather

than recommended here), is based on evidence that this pathogen does not persist in domestic dogs in the project area (27), and on evidence that mass distemper vaccination of domestic dogs around the Serengeti ecosystem did not reduce CDV exposure in wild carnivores (50).

Comment

Decision on this by the workshop is as listed in Section 3 (2.1).

Output 2, Ass 3: Any plan to vaccinate wild dogs themselves would be based on careful evaluation, in a workshop setting, of existing and emerging data on the consequences of such vaccination for captive wild dogs (79,80,42), and for free-ranging wild dogs in our project area (for rabies (41)) and in South Africa (for distemper).

Comment

The assumption still holds true. See also results from the workshop (Section 3 (2.1))

Output 2, Ass 4: This output also assumes that we will be able to detect sick or dead wild dogs across a large area. While rare, wild dogs are conspicuous animals where present, and we will achieve high coverage of the landscape by leveraging an existing ranger-based monitoring system (SMART), which is already in use across the project area.

comment

The assumption still holds true.

Output 2, Ass 5: This output also assumes that reducing wild dog predation on livestock can reduce deliberate killing by people, which is supported by scientific evidence from within the project area (36).

Comment

The assumption still holds true.

Output 3, ass 1: This output assumes that predation on livestock can be reduced by modifications of traditional livestock husbandry methods, which is supported by case-control studies conducted within the project area (37) as well as evidence from elsewhere (58-60).

Comment

The assumption still holds true.

Output 3, ass 2: This output also assumes that participatory theatre is an effective way of communicating conservation messages and effecting behavior change, a view which is supported by multiple studies (81-83) including evidence of behavior change in both public health (55) and human-elephant conflict (61).

Comment

The assumption still holds true.

Output 4, ass 1: This output assumes that a package of measures, including linking practical action on human health to the health of endangered wildlife, and wild dog recovery to the recovery of the beleaguered ecotourism industry, can help to improve local attitudes to wild dogs.

Comment

The assumption still holds true.

Output 4, ass 2: This output also assumes that increased use of wild dogs to advertise local tourism venues will encourage visits, especially by African tourists.

Comment

The assumption still holds true.

Output 5, ass 1: This output assumes that improving national capacity for practical conservation and disease management will help to improve outcomes for wildlife conservation and sustainable development, an assumption supported by a large volume of evidence from the conservation (85) and public health (86) fields.

Comment

The assumption still holds true.

4.5 Impact: achievement of positive impact on biodiversity and poverty reduction

The project was designed to contribute to the increase of the population of African wild dogs in the Ewaso ecosystem as well as contribute to human welfare through reduced livestock depredation and losses occasioned by human and livestock diseases.

This reporting period has seen an increase in the number of wild dogs from ~59 to 112 at the end of year two. This is a great achievement brought about by the project's effort in neutralizing threats that hindered the growth and stabilization of this population; zero killing of wild dogs in the communities and zero deaths of wild dogs from diseases (Refer to figure 2).

The contribution of this project to human well-being is strongly anchored in reducing losses; from livestock deaths caused by rabies, human treatment costs when rabid and livestock depredation. Having recorded significantly reduced human rabies cases and deaths from rabies have saved communities on financial cost and psychological stress improving their general well-being. This is considerate of the single human rabies related death in the reporting period compared to 25 cases in 2017

5. Project support to the Conventions, Treaties, or Agreements

The outcome of this project contributes to the main objective of the Kenya National Biodiversity and Action Plan to “ensure biodiversity loss is reversed and the present levels of biodiversity resources are maintained for at sustainable levels for posterity”. A specific objective of the NBSAP in Kenya is to have “a community that is empowered, informed, and fully involved in biodiversity utilization and conservation” amongst others. This project promotes this objective by ensuring that communities are well aware and capable of making informed decisions that benefit wild dogs and other carnivores and keeps their livestock secure; securing their livelihoods. Therefore, our project addresses Kenya's commitment to the Convention on Biological Diversity through KNBSAP.

6. Project support to poverty reduction

The project has contributed to poverty reduction for communities living in the project area in three ways;

First, through the promotion of proper livestock husbandry, our work has led to reduced livestock losses from depredation by large carnivores. Since the local communities solely depend on livestock for subsistence, this goes a long way in improving community livelihoods and well-being. Local communities will continue to benefit from this intervention. Previous results from our work provide evidence that livestock losses from depredation cost communities over 11% of their annual income, but we are keen on reducing these losses.

Second, our project has created employment for 6 local youth as Community Officers, directly contributing financial support to their families. In addition, we have embarked on training our project staff, which has helped develop their intellectual capacity.

Third, our work has led to reduced human deaths from rabies. The mass domestic dog vaccination has prevented human deaths caused by rabies; having 1 death in the 3rd year of the project against 25 deaths in 2017. This has avoided unquantifiable distress to victims' families and friends in addition to saving financial costs associated with treatment and management. Children and women are the most beneficiaries of this intervention

7. Gender Equality and social inclusion

Our project has in all its aspects considered the promotion of gender equality:

First, the awareness and education aspect that aims at building community capacity to make informed decisions has targeted communities and schools. The schools had ~98% youth while in communities, the women youth and men were mixed in events.

Second, the planning and implementation of mass vaccinations of domestic dogs have been implemented by a wide variety of stakeholders, partners, and volunteers. Specifically, among others, it enjoyed support from youthful volunteers of Karatina University, Kenya, and the County Government of Laikipia. The project consistently and intentionally requested for volunteers to be men and women who were mostly youth. This has been a great opportunity for the project to determine all gender involvement in the project which was successfully grabbed.

Third, we have also showcased women in leading roles in our project. We have hired a female outreach officer and a female monitoring and evaluation officer. Half of our technical advisors are women.

Lastly, and more broadly, Mpala is committed to gender equality and works to achieve this in multiple ways.

Please quantify the proportion of women on the Project Board ¹ .	Two women. Three men.
Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women ² .	40%

8. Monitoring and evaluation

Generally, we plan to continue using monitoring to direct our project activities, as well as to evaluate our overall impact. For example, if our mark-resight monitoring shows evidence of low domestic dog vaccine coverage in particular areas, we have increased our outreach efforts and vaccination efforts in these areas. Likewise, if surveillance returns reports of dead or sick hyenas at a carcass, the project veterinarian responds by investigating poison and disease as potential causes of death, and, if the poisoning was confirmed or suspected, community teams (from either Mpala or partners) would intervene with advice on addressing conflict between people and hyenas.

Monitoring and evaluation, for reporting months, have been managed by our monitoring and evaluation officer, technical advisors, and project partners. We continue to guide the monitoring officer on sampling design, data analysis, and interpretations.

The specific monitoring events that happened within the reporting period included:

1. Human rabies and dog bite injuries were monitored across the project area.
2. Monitoring of existing wild dog packs and other large carnivores, and identification of mortality causes has been ongoing. We have movement data on wild dog packs acquired through GPS collars fitted on wild dogs by the monitoring and evaluation officer, working closely with the technical advisors.
3. We have records and estimates of the numbers of people, and sexes engaged with outreach efforts, estimated by counting audiences, and meeting participants as shown in table 1 .

	<i>Comm. meetings</i>	<i>Plays</i>	<i>Prints</i>	<i>Social Media</i>	<i>Total</i>
Outreach On					
Human-wildlife Coexistence	6218	912	12397	39878	59405
Rabies Control	8124	912	16237	18208	43481
Total	14342	1824	28634	58086	102886

Table 1. Table showing outreach activities and reach conducted over the project period.

4. Livestock husbandry practiced in focal areas, measured on annual surveys of a predetermined number of herds.

¹ A Project Board has overall authority for the project, and are accountable for its success or failure, and supports the senior project manager to successfully deliver the project.

² Partners that have formal governance roles, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.

5. Community attitudes to wild dogs (based on a simplified version of the questionnaires used before for consistency) assessed on a stratified sample of respondents, in surveys conducted at the beginning and end of the project.
6. We administered a multi-choice questionnaire before and after the participatory plays. We will use this to estimate perception shifts by audiences and the effectiveness of our outreach efforts.
7. Data on news articles, TV reports, and social media reach continuously collated to document efforts by the project team

9. Lessons learned based on priority intervention/s -

10.

11. The design of this project was largely based on recommendations of scientific research. This widely captured the specific threats and opportunities available for interventions. Through this, two major threats and two major interventions were identified; wild dog persecution by people and deaths from diseases- coexistence promotion and vaccination respectively. Designing this project intervention(s) with a wide knowledge of the species, habitat, and threats and opportunities enabled the prioritization of conservation interventions widely accepted by residents and stakeholders. To achieve an impactful project design, it is therefore critical that any intervention falls in the species protection priority list and is widely accepted which can be clearly articulated by research.

Strengthening piloted action- Designing interventions based on successfully piloted interventions or successfully implemented actions (although small scale) proved to create a springboard for a smooth design in terms of project time planning and resource allocation, including stakeholder analysis and participation. Although on a small scale, the Laikipia Rabies Vaccination Campaign annually vaccinated domestic dogs in the project area. This gave the designing process a practical feel of what challenges and opportunities were expected through the designing and implementation of the interventions. Learning from this, the vaccination aspect of this project smoothly exceeded the target.

Directly engaging residents- The project largely benefited from directly engaging local youth as employees. This was a major force leading to more youths within the project area easily adopting the project's promoted agenda. Common language and having shared the same environment with the target audience, it was easy for the locals' employees to successfully engage and convince their relatives and tribesmen of the importance of protecting species and wildlife.

Sustained partnership- To sustain existing and newly established partnerships throughout the cause of the project, partners in all interventions existing or established by the project were kept updated and in regular communication of project progress. This was a great tool to guarantee their contribution and participation throughout the year.

12. Action taken in response to previous reviews (if applicable)

Not applicable

11. 10. Risk Management

The reporting period has been occasioned by drought prompting movements of residents (most of whom are nomadic pastoralists) to search for pastures for their livestock. The movement has caused conflicts in parts of the project area as a result of resource competition. On the other hand, criminals amongst the herders have taken advantage of the situation to do cattle rustling which has caused a situation of insecurity. The project had activities planned in these areas, which had to be adjusted to ensure safety of project staff..

12. Other comments on progress not covered elsewhere

Not applicable

13. Sustainability and legacy

Our project continues to interest a lot of like-minded and goal-aligned stakeholders. For example, the National Geographic Society kids tv series reached out to us for filming and conversations about our project. This will be vital in further getting into the limelight, while also helping us achieve and broaden our outreach goals.

The County Government of Laikipia and the National Government of Kenya amongst others are also keenly working with us on our rabies eradication efforts.

We continue to engage all partners in our work, and we have managed to successfully monitor the existing packs while also working to maximize efforts with the surveillance program. This would not have been possible without these partnerships!

To ensure a sustained legacy for our project, we have committed ourselves to include all stakeholders and partners in all decisions made, and this is adequately helping in steering buy-ins and confidence by all. In the end, all participants own this work and feel integral to all our plans. This means that all our social, economic, and ecological goals are shared across the board.

Lastly, and in preparation to a smooth closure and transitioning of the project, we continue to engage multiple other partners to enable us to keep working on wild dogs as a team, and to also bring together ideas on future fundraising. We hope to extend our coverage to other wild dog ranges in the next project phase. This way, our results and models of conservation can be emulated in other areas to broaden wild dog conservation.

14. Darwin Initiative identity

The project has always made recognition to the Darwin Initiative for all its activities. During our main in-house activity, the disease workshop, the project team explained to participants that the activity was supported by the DI. This recognition creates a good platform for recognition amongst experts across the country and beyond. During plays in communities, it's always mentioned that the DI is supporting the activities.

We have included the DI's logo on all the print materials that the project produced in the reporting period including; leaflets and posters.

15. Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?	Yes/ No
Have any concerns been investigated in the past 12 months	Yes/ No
Does your project have a Safeguarding focal point?	Yes/ No [If yes, please provide their name and email]
Has the focal point attended any formal training in the last 12 months?	Yes/ No [If yes, please provide date and details of training]
What proportion (and number) of project staff have received formal training on Safeguarding?	Past: 0% [and number] Planned: 0% [and number]
Have there been any lessons learned or challenges in Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses. NA	

Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so please specify.
 NA

16. Project Expenditure

Please expand and complete Table 1. If all receipts have not yet been received, please provide indicative figures and mark them as Draft. The Actual claim form will be taken as the final accounting for funds.

Table 1: Project expenditure during the reporting period (1 April 2022 – 31 March 2023)

Project spend (indicative) since last Annual Report	2022/23 Grant (£)	2022/23 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)				-
Monitoring & Evaluation (M&E)				-
Others (see below)				**A few details might be wrong in this table. Our finance team is engaging Darwin's to correct this. Please allow me to share this separately once updated.
TOTAL	£ 124,177	£ 124,177		

Highlight any agreed changes to the budget and **fully** explain any variation in expenditure where this is +/- 10% of the budget. Have these changes been discussed with and approved by Darwin Initiative?

Table 2: Project mobilizing of matched funding during the reporting period (1 April 2022 – 31 March 2023)

	Matched funding secured to date	Total matched funding expected by end of project
--	---------------------------------	--

Matched funding leveraged by the partners to deliver the project.		
Total additional finance mobilized by new activities building on evidence, best practices, and project (£)	-	-

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

I agree for the Biodiversity Challenge Funds Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here).

The project would want to note the following achievements;

There has been a notable increase in the number of wild dogs in our project area where an additional 53 dogs have been recorded.

Additionally, so far, we have not recorded any wild dog deaths from human persecution or diseases in the one-year project period

We have achieved 83% area coverage within the project area with vaccinations. This is an area of 9,200 sq km. We aim to eradicate rabies in our study area by consistently vaccinating against rabies.

Our community outreach and awareness efforts have been very successful within the year, reaching out to over 102,886 residents (women and children taking the largest share) on different topics including human-wildlife coexistence and zoonotic disease control

File Type (Image / Video / Graphic)	File Name or File Location	Caption, country, and credit	Online accounts to be tagged (leave blank if none)	Consent of subjects received (delete as necessary)
Image	WD001	Collaring exercise, Kenya, Celine Wandia	@MpalaWildDogs Mpala_WildDogs	Yes / No
Image	WD002	Community plays on rabies, Kenya, Celine Wandia	@MpalaWildDogs Mpala_WildDogs	Yes / No
Image	WD003	School outreach, Kenya, Celine Wandia	@MpalaWildDogs Mpala_WildDogs	Yes / No
Image	WD004	Domestic dogs vaccination by an LRVC branded vet, Celine Wandia	@MpalaWildDogs Mpala_WildDogs	Yes / No
Image	WD005	Domestic dogs brought in to a vaccination center, Kenya, Celine Wandia	@MpalaWildDogs Mpala_WildDogs	Yes / No

18. Annex 1: Report of progress and achievements against log frame for Financial Year 2023-2024

Project summary	SMART Indicators	Progress and Achievements April 2023 - March 2024	Actions required/planned for next period
<p>Impact Insert agreed-on project Impact statement</p> <p>Sustainable long-term coexistence of an intact and ecologically functioning large carnivore guild with healthy and prosperous local people in Kenya's Ewaso ecosystem</p>		<p>The project continues to cultivate the strengthening of pillars to support the outlined project impact. Community capacity building towards sustained coexistence with a stable population of wild dogs and other carnivores has successfully been carried out within the reporting period. Efforts to ensure a thriving wild dog population by reducing wild dog deaths have been successful and are ongoing. Similarly, community welfare will cumulatively improve with the progress of the project. These aspects together, continue to contribute to a sustainable long-term functioning ecosystem with optimal benefits to people and wildlife.</p>	
<p>Outcome (Insert agreed project Outcome statement)</p> <p>An ecosystem free of rabies where people coexist sustainably with wild carnivores, including a recovering African wild dog population</p>	<p>(Insert agreed Outcome level indicators)</p> <p>0.1 African wild dog numbers at least doubled by the end of the project, from 2 packs in Jan 2022 to at least 4 breeding packs by 2024.</p> <p>0.2 Annual human rabies deaths reach zero by the end of the project, from an estimated 25 deaths p.a. in 2017</p> <p>0.3 Wildlife (including the wild dog) rabies cases reach zero by the end of the project, from a (known non-zero)</p>	<p>(Report against the indicators on progress towards achieving the project Outcome)</p> <p>The project has documented an increase in number and packs of wild dogs in the project area. An additional 53 wild dogs have been reported and confirmed by the project team. This is in addition to continued breeding by the known packs which produced 28 pups in the reporting period.</p> <p>To eradicate rabies related human deaths in the project area, the project has achieved 9200 sq km in</p>	<p>(Highlight key actions planned for next period)</p> <p>The project intends to strengthen community outreach and training on coexistence through informal and formal community meetings and community art performances</p> <p>Vaccinations of domestic dogs will continue in the next reporting period with an effort to increase the area covered.</p>

	<p>baseline established at the start of the project</p> <p>0.4 Livestock predation by wild dogs remains at zero throughout the project despite increased wild dog numbers</p> <p>0.5 Livestock predation by other large carnivores reduced by one-third in the course of the project, relative to a starting baseline</p>	<p>vaccination. However, we have one human rabies related death in the reporting period.</p> <p>The reporting period have not recorded any deaths of wildlife including wild dogs from rabies</p> <p>We only recorded 3 cases of livestock predation by wild dogs. With more people adopting good livestock husbandry promoted by the project, we are hopeful that this will continue to reduce.</p> <p>We recorded a reduced number of livestock killed by all large carnivores from 166 in the previous reporting period to 54 in this reporting period.</p>	
<p>Output 1. (Insert agreed Outputs with activities relevant to that Outputs in lines below. Activities relevant to more than one Output should be cross-referenced rather than repeated)</p> <p>Zero human deaths from rabies in the project area by 2024</p>	<p>(Insert original Output level indicators)</p> <p>1.1 Annual human rabies deaths in the project areas reduced from 25 p.a. in 2017 to zero in 2023-4</p> <p>1.2 Bites by suspected rabid dogs decline from 130/100,000 people/year in 2017 to <20/100,000 people/year in 2023-4, with no female bias in dog bite victims.</p> <p>1.3 Area covered by domestic dog rabies vaccination expanded from 1,500 sq km in 2017 to 10,000 sq km in 2022</p>	<p>(Report general progress against indicators, comment on their appropriateness, and reference where evidence is provided e.g. <i>Evidence provided in section 3.2 of the report and Annex X</i>)</p> <p>Significant progress towards this output is being achieved by the project. In this reporting period, as reported from the hospital data in the project area, we have lost one person from rabies. This is against a baseline of 17 deaths p.a. in 2017.</p> <p>Activities planned for the reporting period contributing to this output have been carried out:</p> <p>Awareness creation and education towards the eradication of rabies and domestic dog handling in the project area have continuously been in progress through mainstream media, social media, one-on-one approaches, community meetings and plays reaching out to 43,481 residents as shown in appendix 3 without out gender biases; reaching to school going children, women, men and the youth.</p> <p>The area covered by domestic vaccinations has significantly increased from 1500sq km in 2017 to 9,200sq km in 2023 which is also the case with the</p>	

	<p>1.4 Proportion of domestic dogs vaccinated against rabies in targeted areas increased from 24% in 2017 to ≥70% in 2022-4</p> <p>1.5 Local people engaged by community outreach efforts related to domestic dog ownership increased from 0 in 2017 to 30,000 in 2022-4, with equal gender participation.</p>	<p>percentage coverage of vaccinated dogs against the total number of dogs which has increased from 24% to 71%, 2017 and 2023 respectively; information gathered from the post-vaccination surveys and capture-recapture method carried out after every vaccination day.</p>	
<p>Activity 1.1 Insert activities relevant to this Output</p>	<p>(Report completed or progress on activities that contribute toward achieving this Output)</p>	<p>(Outline what will be carried out in the next period)</p>	
<p>Vaccinate domestic dogs annually across a 10,000 sq km project area, achieving 70% vaccine coverage, including travelling with camels in areas not accessible by vehicle.</p>	<p>The first year has seen the achievement of this activity having covered 82% of the project area. This has been achieved through a private-public partnership of stakeholders within the project area. The project team intends to extend the mass vaccination to more areas for its second-year vaccinations.</p>	<p>we plan to have mass domestic dog vaccinations in the next reporting period while supplementary vaccinations constantly continue in areas identified with insufficient coverage.</p>	
<p>Collect data on rabies vaccination efforts and coverage using the Mission Rabies smartphone app (http://www.missionrabies.com/app).</p>	<p>All vaccination-related data including numbers vaccinated, type of vaccine administered, and other details of vaccinated domestic dogs' characteristics are captured in the mobile app making it readily available and safely kept for future use.</p>	<p>This continues till the project end</p>	
<p>Conduct mark-resight monitoring of domestic dogs conducted after a sample of vaccination days to estimate vaccine coverage.</p>	<p>To estimate vaccination coverage, the project's Monitoring and Surveillance Officer has led in conducting a mark-resight activity. Information from this activity has been used to advise</p>	<p>This continues till the project end</p>	

	modifications of vaccination approaches.	
Develop a participatory play about rabies, dog vaccination, how correct dog bite management can save lives, and the parallels between human and wildlife health.	The Community Outreach Arts team together with the Mpala project team developed a combined play that highlights both rabies education and human-wildlife coexistence. The play is designed to be as interactive as possible with the audiences giving the approach an edge to reach more and educate communities.	Performances to different community audience segments are planned within the project phase
Perform the rabies play on ≥20 occasions in advance of rabies vaccination days, targeting locations likely to attract women as well as men	The plays were later performed for different audiences in communities within the project area. A total of 3 plays on rabies control have been performed within the year. These included market days, community meetings, and in schools.	Another ten plays are to be done in the next reporting year.
Monitor the effectiveness of participatory play by interviewing audience members before-and-after performances.	Before and after play performances, questionnaires were administered to the target audiences to determine the initial status of knowledge amongst locals and the knowledge and perception change after the plays were performed.	To happen for all plays performed.
Develop short video clips, based on the rabies play, optimized for sharing over WhatsApp, and encourage sharing over local networks.	To promote sharing of information to a larger community within the project area and beyond, the project team has continuously made short clips from the plays and shared them on its socials.	To continue till the project end.
Develop and distribute posters and leaflets about rabies prevention, as part of community sensitization ahead of rabies vaccination days.	Posters, leaflets, and stickers were developed before the mass vaccinations. They were used to educate and create awareness among residents within the project area and to whom vaccinations are to benefit. This	Distribution to select audiences continues especially in areas targeted by vaccinations.

	helped increase vaccination uptake amongst residents.	
Train outreach officers and scouts from partner projects in rabies prevention messages, so that they can help with community sensitization.	To optimize outreach regarding rabies eradication, the project has engaged over 44 community youth from different community conservancies as local assistants during mass vaccinations and as rabies control education promoters.	Community engagement continues with any available opportunity.
Monthly project meetings to evaluate progress, continue staff training, and consider ways to improve effectiveness.	Throughout the year, we have had regular bi-weekly meetings with the whole project team including the project advisors. Every meeting offers a platform to discuss different aspects of the project to ensure smooth implementation and efficiency in project management	To be continued till the project end.
Adapt outreach efforts to specific local issues if monitoring indicates vaccination coverage is insufficient.	Monitoring of the vaccination effort indicated a few areas within the project area that were vaccinated insufficiently. This was mainly due to logistical challenges occasioned by long distances and vast areas with low human populations. Supplementary follow-up vaccinations were done to ensure sufficient coverage was done in these areas.	Continuing now and to be continued following mass vaccinations in the next phase
Establish systems for collecting age- and sex-specific data on dog bites and rabies deaths at 4 hospitals and 20 dispensaries.	The project team has engaged the Laikipia County Government in the development of the proposed system. Partly successful, data on dog bite distribution and human deaths have been availed as a detailed data collection tool awaits approval.	If approved, the training of nurses happens in the next reporting period
Liaise regularly with the national “Rabies-Free Kenya” campaign to ensure efforts are complementary and, share experience of best practices.	As with other partners and stakeholders within and outside of the project area, the project's vaccination	Keep sharing lessons with the national rabies control team throughout the project

		campaign progress and experience have been shared with “Rabies Free Kenya” to enhance knowledge and experience sharing among implementers of similar interventions.	
Close-out meeting early in Year 3 to assess progress relative to national rabies eradication efforts, and to decide the next steps.		To ensure these interventions are sustained beyond project life, the proposed close-out meeting will be done in the last year of the project	Await the last project year to happen
Output 2. (Insert agreed Output) Two-thirds reduction in wild dog deaths caused directly or indirectly by people	(Insert agreed Output level indicators) 2.1 Wild dog mortality caused by domestic dog diseases reduced from 10% of all adult wild dogs <i>p.a.</i> in 2001-2015 to 3% in 2022-4 2.2 Wild dog mortality caused deliberately by people reduced from 5% of all adult wild dogs <i>p.a.</i> in 2001-2015 to 2% in 2022-4 2.3 Local action plan for disease management in wild and domestic carnivores agreed by Jun 2022 and implemented by Jun 2023. 2.4 Surveillance system for reporting sickness in wild and domestic carnivores developed & implemented by Oct 2022. 2.5 Local action plan for mitigating livestock depredation by other large carnivores agreed by Jun 2022 and fully implemented by Jun 2023.	(Report against the indicators on progress towards achieving the Output) This has successfully been achieved having no wild dogs reported to have died from diseases and or been killed by people in the project area against a benchmark of 5% of all adult wild dogs <i>p.a.</i> in 2001-2015. Wild dog monitoring through collaring and documentation of sightings by communities continues A disease management workshop was successfully held by the project. It developed a disease surveillance system that is partially implemented and continues to guide action within the project and beyond. Community Officers were trained in disease surveillance and are reporting on any disease cases in their respective areas via SMART App as per recommendations of the workshop	
Output 2; Activities			
Convene workshop on managing disease risks to wild dogs, involving local and international experts and drawing on existing data and epidemiological modeling.		A 3 days disease management workshop was held at Mpala Research Centre bringing together 22 experts from local and international partners	Done

	and stakeholders including; the Zoological Society of London, Laikipia County Government and other partners	
Develop and publish a local disease management plan for wild dogs and other large carnivores based on the disease workshop outcomes,	As an output of the workshop, a disease management model was developed. The model continues to inform conservation interventions going now and into the future.	Work to operationalize remaining sections of the plan
If recommended by disease workshop participants, including Kenya Wildlife Service, initiate vaccination (rabies and/or CDV) within each collared wild dog pack.	The recommendations from the workshop were positive on vaccinating wild dogs against rabies and CDV in known parks. However, this activity has not been actualized, pending approvals/permitting from the Kenya Wildlife Services, KWS.	If permits are given; vaccinate known individuals in known packs for monitoring
With workshop participants, develop a SMART-integrated surveillance system for reporting sickness in wild and domestic carnivores, including response plans.	The workshop proposed developing a disease-reporting system to be incorporated into the data collected by the project team. This has been actualized by developing a data collection tool on sick and dead carnivores and domestic dogs which is being used to collect data by Community officers in their respective areas of operation.	Done
Train project Community Officers, project partners' scouts, outreach officers, and other SMART users to use the surveillance system.	Training on SMART was done on data collection and surveillance. We plan to extend this training to partners' scouts/rangers and other staff that the project would benefit from them acquiring the skills in the coming year/s.	-Community Officers continue collecting data using SMART -Our project trains scouts from partner organizations to collect data using the system
Train and equip veterinarians from KWS, Mpala, and partners to implement the response plan.	Partly done with vets at Mpala and a few other conservancies trained. Plans in place for bringing veterinarians from partners in the actualization of the disease response plan	Bring on board vets in implementing the disease response plan

Convene a workshop on mitigating livestock depredation in the project area, involving local and international experts.	To be done in the next reporting period	
Based on depredation workshop outcomes, develop and publish a local plan to mitigate livestock depredation by wild dogs and other large carnivores.	To be done after activity 2.7 has been completed	
Monitor wild dog health, survival, and reproduction by deploying tracking collars on all known wild dog packs in the project area, with frequent visual checks.	The project team, in close partnership with KWS and NRT, and individual conservancies has within the second year of our project period deployed 9 collars to individuals from 2 parks. Frequently, the collared parks are checked to document their status. This has helped the project document survival and health status. However, there are more collaring attempts of wild dog packs newly sighted in the project area but the team has not been successful owing to challenges in rough terrain and long distances; hampering the productivity of collaring attempts.	Collaring will continue for any new park or dispersing pack till the project ends to complement population monitoring.
Retrieve and (with KWS) necropsy and wild dogs which die, collating data on mortality rates and causes.	The project area has had a collared wild dog death within the reporting period. Successful retrieval of the collar was done	Collar retrieval will happen for any deaths in future
Collate data annually from KWS and partner projects on conflict-related mortality of other large carnivore species.	Plans are in place so we can collect human-wildlife-related data from partner projects and organizations at the start of the next reporting period.	Data to be collected
Output 3. Declining incidence of livestock predation by all large carnivores, despite the rising population of wild dogs	3.1 No wild dog attacks on livestock in 2022-4 (compared with >20 attacks in 2014 when rates were last enumerated) 3.2 Livestock killed by other large carnivores reduced by one-third in 2023-4 compared with the 2022 baseline.	In contribution to this output, our project has reached out to 59,405 persons (gender inclusive) on good husbandry practices in coexistence messages within the project area using its different communication methods as in output 1, as shown in appendix 3. Outreach activities encourage participants to train more residents and to practise livestock husbandry practices that promote human-wild dog coexistence. Compared to the baseline of 2014 where >20 cases of depredation were experienced, the reporting period has reported 4 wild dog depredation cases

	<p>3.3 Majority of livestock keepers (both male and female) practising carnivore-friendly husbandry by 2024</p> <p>3.4 Local people engaged in community outreach efforts related to wild dog conflict increased from 0 in 2018 to 30,000 in 2022-4, with equal representation of men and women</p>	<p>representing a decline of more than 75%. The trend in livestock husbandry practices has and will continue throughout the project to be captured by monitoring surveys carried out within the project area</p>
--	---	--

Activities		
3.1 With participants in the depredation workshop, agree on appropriate methods to mitigate livestock predation by wild dogs and other large carnivores.	To be done in the next reporting period	
3.2 Integrate chosen methods into new and existing training materials for Mpala and partner projects, and train key staff to use and share them.	To be done in the next reporting period	
3.3 Solicit and follow up reports of large carnivore attacks on livestock, collecting case-control data on husbandry methods and offering advice on mitigation methods.	Data collection on large carnivore depredation within the project area has been happening and advice given to victims by the Community Officers.	To be continued till our project end
3.4 Develop a participatory play about coexisting with large carnivores, especially wild dogs, sharing evidence on sustainable ways to prevent livestock attacks.	As with activity 1.4, a co-existence messaged-play was developed consultatively	Done
3.5 Perform the coexistence play on ≥ 20 occasions, targeting locations experiencing livestock depredation problems, especially wild dog depredation.	3 plays on coexistence have been performed for similar audiences as in 1.5.	7 play performances to happen in the next reporting period
3.6 Monitor the impact of the coexistence play by counting audiences, and by interviewing a sample of audience members before-and-after performances.	As with 1.6 monitoring has been happening before and after plays	To be continued
3.7 Develop short video clips, based on the coexistence play, optimized for sharing over WhatsApp, and encourage sharing over local networks.	Similar to 1.7 short clips and picture has been made and used for awareness and education	To be continued
3.8 Develop and distribute posters and leaflets about coexistence with wild dogs and other large carnivores, targeting places women are likely to visit, as well as men.	Over 100 posters and 200 leaflets were produced and distributed to 5	To be continued until the end of the project

		community areas within the project area.	
3.9 Share knowledge about approaches to coexistence through regular formal and informal meetings with community members and groups.		Through different avenues including; formal and informal community meetings, social media, and prints, the project team has reached over 59,405 residents in the project area with coexistence and best practices messages.	To be continued until the end of the project
3.10 Monitor key livestock husbandry measures (e.g., number/age/sex of herders) in a sample of herds at the start of the project and annually thereafter.		Through standardized household depredation monitoring, data on livestock husbandry measures are collected by community officers in their respective regions.	This will continue till the end of the project
3.11 Identify a sample of focal households for each community officer, to facilitate a standardized measure of predator impact with constant observer effort		This has been implemented. 100 sample households were selected and a standardized questionnaire developed for data collection. The Community Officers were trained on effective data collection. The activity was piloted and modifications were done to allow efficient implementation	Achieved.
3.12 Collect data on livestock depredation and economic losses per focal household; estimate trends in losses over time.		In focal households, depredation data is collected monthly. This will allow the project to determine trends in losses caused by large carnivores within and after the project period.	Happening and continues
Output 4 Improved public attitudes to coexisting with African wild dogs	(Insert agreed Output level indicators) 4.1 Percentage of community members wanting wild dogs on their land increased from 38% in 2007 to 70% in 2023-4. 4.2 Ten-fold increase in Kenyan print and broadcast media items presenting positive new stories about wild dogs (from 1 newspaper article and 1 TV report in 2018).	The project through its different communication and outreach methods including prints and social media posts, see sample leaflet and social posts attached, has initiated and strengthened information sharing on the benefits of coexistence with large carnivores. This is all aimed at increasing the positive perception towards wild dogs and other carnivores. Combining community benefits accrued by the achievement of outputs 1-3, communities can associate and accommodate coexistence as the better option. Baseline questionnaires administered before and after outreach activities reveal an increase in positive perception towards wild dog conservation from 45% to 53% in this reporting period.	

	<p>4.3 Ten-fold increase in social media reach of project accounts, primarily within Kenya (e.g. @MpalaWildDogs to increase from 590 followers to >5,000).</p> <p>4.4 Increase in the proportion of tourism operators using wild dogs' presence in their advertising.</p>	<p>We continue to grow our audience in social media e.g in April 2023 our twitter account had 869 followers and March 2024 we were at 938 followers, instagram from 823 to 958 and facebook from 1123 to 2086 respectively within the reporting period</p>
Activities		
4.1 Encourage discussion about the benefits of coexisting with wildlife, as well as the costs, during play performances and formal and informal community meetings.	Discussions based on the importance and benefits of conservation are promoted in the theatre play performances as well as in most of the avenues used by our project team to communicate with the residents.	To be continued.
4.2 Actively encourage journalists and filmmakers to visit the project, promoting positive media stories linking human health to wildlife conservation.	This reporting period, we have had a TV documentary aired biweekly for two weeks capturing our work in a leading TV station in Kenya	The project team continues to scan for opportunities and encourage prospective media persons and houses to consider covering project interventions
4.3 Promote positive stories about wild dog conservation and human health through our own, and partners', social media accounts and other digital platforms.	Positive conservation stories related to wild dogs and other large carnivores are consistently promoted through our own social media handle listed above and in collaboration with partner social media accounts. We endeavour to maintain this throughout the project period and beyond.	To be continued.
4.4 Use a simplified version of the questionnaire developed for ref (87) to measure local attitudes to wild dogs at the start and end of the project.	Perceptions and attitudes towards wild dogs are being documented through questionnaires administered to residents of areas frequented by wild dogs or opportunistically to residents neighbouring wild dog denning sites	To be continued.
4.5 Monitor and record the number of reports about the project in print, broadcast, and social media.	The project team has over the period worked together to share amongst themselves and document progress	To be continued.

		achieved with communications via the project socials. We have annexed the posts from our socials in this report.	
4.6 Promote the use of wild dogs in marketing tourism to the project area through informal meetings with individual lodges and camps.		Through informal, formal, and social meetings and gatherings with partners, lodges, and conservancies, the project team has been able to promote tourism with wild dogs being the main character.	To be continued.
Output 5. Improved national capacity for protecting wildlife populations and human health	(Insert agreed Output level indicators) 5.1 Number of trained full-time Kenyan professional wild dog conservationists in the project area increased from 2 (male) in 2019 to 10 (including ≥3 women) by April 2022. 5.2 Number of Kenyan wildlife veterinarians with practical expertise in wild dog health increased from 2 (both male) in 2019 to 4 (2 male, 2 female) in 2022. 5.3 Days each year that County Veterinary Officers have transport to contribute to mass dog vaccination increased from 0 in 2019 to 201 modelings 2022-2024. 5.4 Number of nurses trained to collect sex- and age-disaggregated anonymized data on rabies deaths and dog bites increased from 0 in 2019 to 24 in 2022. 5.5 Number of Kenya conservation professionals engaged in using epidemiological models to inform wild dog disease management increased from 0 in 2017 to ≥20 in 2022.	The project has directly engaged County government Veterinary Officers in domestic dog vaccinations within the project period. The 3rd year has seen 44 experts directly engaged in the vaccinations totalling to 3870 man hours. Progressively, the project's 9 team members have had monthly training on different topics related to wild dog conservation; threats, opportunities, and approaches for effective project delivery which has significantly contributed to improved project staff capacity. The previous reporting period saw the disease management workshop expose a significant number of local conservation practitioners >15 to epidemiological modelling informing wild dog disease management which is a self-sustaining impact of this project.	

Activities		
5.1 Conduct initial training workshops for the project team at the start of the project	At the start of the project, all 9 project team members, inclusive of the 5 community liaison officers, received training on the project objectives and goals.	Achieved.
5.2 Include training session in every monthly project meeting	The initial training has been supplemented by regular monthly training sessions on different topics. The monthly training has been facilitated by senior project team members and advisors.	Training on topics are to be constantly identified and training held during monthly project meetings.
5.3 Ensure that specific training provided to project staff is also offered to relevant staff from partner projects	Training to over 75 partner staff members on rabies control and coexistence has been achieved in the reporting period	The project will extend select training successfully scouts in the next reporting period
5.4 Schedule vaccination days to involve the County veterinary officers, providing transport to facilitate their involvement	The project has successfully involved the County Government Veterinary Officers from both Laikipia and Isiolo Counties in planning and implementation of vaccination activities with transportation during vaccination days being provided by the project.	To continue throughout the project period.
5.5 Train dispensary nurses and hospital staff to collect and report age- and sex-specific data on rabies deaths and dog bites.	The designing of a system to train hospital staff to collect detailed rabies-related data on dog bite cases presented at hospitals has been initiated and awaits approval by the Health Departments of County Governments which manage hospital operations. We expect to have it operationalized in the next reporting period.	If approved, training for nurses will be done in the next reporting period

<p>5.6 Engage Kenyan veterinarians and other conservationists with epidemiological modeling in the course of the disease management workshop.</p>	<p>The disease management workshop implemented earlier in the project period brought together diverse expertise including veterinarians and conservationists drawn from different organizations from Kenya and beyond.</p>	<p>Accomplished.</p>
---	--	----------------------

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

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions
Impact: Sustainable long-term coexistence of an intact and ecologically functioning large carnivore guild with healthy and prosperous local people in Kenya’s Ewaso ecosystem			
<p>Outcome: An ecosystem free of rabies where people coexist sustainably with wild carnivores, including a recovering African wild dog population</p>	<p>0.1 African wild dog numbers at least doubled by the end of the project, from 2 packs in Jan 2022 to at least 4 breeding packs by 2024.</p> <p>0.2 Annual human rabies deaths reach zero by the end of the project, from an estimated 25 deaths p.a. in 2017</p> <p>0.3 Wildlife (including the wild dog) rabies cases reach zero by the end of the project, from a (known non-zero) baseline established at the start of the project</p> <p>0.4 Livestock predation by wild dogs remains at zero throughout the project despite increased wild dog numbers</p> <p>0.5 Livestock predation by other large carnivores reduced by one-third in the course of the project, relative to a starting baseline</p>	<p>0.1 Wild dog numbers will be assessed through population monitoring</p> <p>0.2 Human rabies deaths will be monitored using data from hospitals and dispensaries</p> <p>0.3 Cases of wildlife (including the wild dog) rabies will be counted using ongoing monitoring of collared individuals (by Mpala and project partners) and through a wildlife health surveillance system integrated into ongoing SMART monitoring.</p> <p>0.4 Livestock predation will be systematically monitored by community officers and by partner projects.</p>	<p>This outcome assumes that the main constraints on wild dog recovery in the project area are domestic dog diseases and deliberate killing by people. This assumption is based on intensive studies of wild dog ecology and population dynamics through population recovery in 2001-2016 a crash in 2017, and subsequent slow recovery.</p> <p>The effect of domestic dog vaccination on human rabies is well-documented. Effective and locally appropriate ways to reduce livestock predation have been identified, but other factors may constrain the extent to which people adopt them.</p> <p>This outcome also assumes that civil unrest does not return to the project area at levels sufficient to impact our project. Recent investment in security within the region, and strong community links, should minimize any such impact.</p>
<p>Outputs: 1. Zero human deaths from rabies in the project area by 2024</p>	<p>1.1 Annual human rabies deaths in the project areas reduced from 25 p.a. in 2017 to zero in 2023-4</p> <p>1.2 Bites by suspected rabid dogs decline from 130/100,000 people/year in 2017 to <20/100,000 people/year in 2023-4, with no female bias in dog bite victims.</p>	<p>1.1 Data (disaggregated by sex and age) on causes of death collected from 4 hospitals and 20 dispensaries serving the project area.</p> <p>1.2 Data (disaggregated by sex and age) on dog bites by suspected rabid dogs recorded by nurses at 20 dispensaries and four hospitals serving the project area.</p>	<p>This output is based on the assumptions that human rabies risks can be mitigated by domestic dog vaccination, and that dog bites are a good proxy for rabies incidence in domestic dogs. These assumptions are supported by a very strong well-replicated evidence base, with similar projects elsewhere reducing human rabies mortality to zero within 2-3 years</p>

	<p>1.3 Area covered by domestic dog rabies vaccination expanded from 1,500 sq km in 2017 to 10,000 sq km in 2022</p> <p>1.4 Proportion of domestic dogs vaccinated against rabies in targeted areas increased from 24% in 2017 to ≥70% in 2022-4</p> <p>1.5 Local people engaged by community outreach efforts related to domestic dog ownership increased from 0 in 2017 to 30,000 in 2022-4, with equal gender participation.</p>	<p>1.3 Information on area coverage will be collected in the course of delivering vaccination, using a dedicated smartphone app (http://www.missionrabies.com/app).</p> <p>1.4 Estimates of vaccine coverage from re-sighting of domestic dogs marked temporarily at the time of vaccination</p> <p>1.5 Engagement will be estimated by counting audiences (separately enumerating men, women, boys, and girls where possible) for participatory theatre, community meetings, etc.</p>	<p>of starting mass domestic dog vaccination, and a close correlation between dog bites and human rabies risk (76,77,31). This output also assumes that women are at least as impacted by rabies as men, an assumption supported by evidence that African women can face slightly higher rabies risks than men (67).</p> <p>The output also assumes that local communities will consent to vaccination of their domestic dogs, and participate in outreach activities. Participation to date has been high, but our project includes explicit plans to improve it further, drawing on experience from other animal health and public health initiatives (47).</p>
<p>2. Two-thirds reduction in wild dog deaths caused directly or indirectly by people</p>	<p>2.1 Wild dog mortality caused by domestic dog diseases reduced from 10% of all adult wild dogs <i>p.a.</i> in 2001-2015 to 3% in 2022-4</p> <p>2.2 Wild dog mortality caused deliberately by people reduced from 5% of all adult wild dogs <i>p.a.</i> in 2001-2015 to 2% in 2022-4</p> <p>2.3 Local action plan for disease management in wild and domestic carnivores agreed by Jun 2022 and implemented by Jun 2023.</p> <p>2.4 Surveillance system for reporting sickness in wild and domestic carnivores developed & implemented by Oct 2022.</p> <p>2.5 Local action plan for mitigating livestock depredation by wild dogs and other large carnivores agreed by Jun</p>	<p>2.1 Rates and causes of wild dog mortality will be measured by monitoring radio-collared packs, including a <i>post-mortem</i> exam of any wild dogs which die, by reports of wild dog deaths from the SMART surveillance system, and by community reporting.</p> <p>2.2 Disease management workshop process completed, and the plan agreed upon by Kenya Wildlife Service and other stakeholders.</p> <p>2.3 The proportion of wild dogs vaccinated (if recommended in the disease management plan) will be estimated in the course of wild dog monitoring.</p> <p>2.4 Wildlife health surveillance system developed and integrated into SMART platform, with staff and partners across the project area trained in its use.</p>	<p>This output assumes that rabies risks to wild dogs can be reduced by vaccinating domestic dogs. This assumption is supported by strong evidence that wild dogs acquire rabies from domestic dogs at the project site (49,74) and elsewhere (78), by very strong evidence from elsewhere that vaccination reduces domestic dog rabies (31), and also by evidence from mathematical modeling and (52).</p> <p>A second assumption, that vaccinating domestic dogs against canine distemper is unlikely to reduce risks to wild dogs (and will therefore be considered at the disease workshop rather than recommended here), is based on evidence that this pathogen does not persist in domestic dogs in the project area (27), and on evidence that mass distemper vaccination of domestic</p>

	<p>2022 and fully implemented by Jun 2023.</p>	<p>2.5 Livestock depredation workshop process was completed, and the plan was agreed on by project partners, Kenya Wildlife Service, and other stakeholders.</p> <p>2.6 Agreed messages from the livestock depredation workshop integrated into training and outreach materials by all relevant partner projects, and in use by community officers throughout the project area.</p>	<p>dogs around the Serengeti ecosystem did not reduce CDV exposure in wild carnivores (50).</p> <p>Any plan to vaccinate wild dogs themselves would be based on careful evaluation, in a workshop setting, of existing and emerging data on the consequences of such vaccination for captive wild dogs (79,80,42), and for free-ranging wild dogs in our project area (for rabies (41)) and in South Africa (for distemper).</p> <p>This output also assumes that we will be able to detect sick or dead wild dogs across a large area. While rare, wild dogs are conspicuous animals where present, and we will achieve high coverage of the landscape by leveraging an existing ranger-based monitoring system (SMART), which is already in use across the project area.</p> <p>This output also assumes that reducing wild dog predation on livestock can reduce deliberate killing by people, which is supported by scientific evidence from within the project area (36).</p>
<p>3. Declining incidence of livestock predation by all large carnivores, despite the rising population of wild dogs</p>	<p>3.1 No wild dog attacks on livestock in 2022-4 (compared with >20 attacks in 2014 when rates were last enumerated)</p> <p>3.2 Livestock killed by other large carnivores reduced by one-third in 2023-4 compared with 2022 baseline.</p> <p>3.3 Majority of livestock keepers (both male and female) practicing carnivore-friendly husbandry by 2024</p> <p>3.4 Local people engaged in community outreach efforts related to wild dog</p>	<p>3.1 Declining incidence of livestock predation reported to community officers stationed throughout the project area (total, and subset reported from a predetermined sample of focal households to avoid observation bias), as well as to project partners.</p> <p>3.2 Improved livestock husbandry (by both male and female farmers) observed in annual monitoring surveys.</p>	<p>This output assumes that predation on ock can be reduced by modifications of traditional livestock husbandry methods, which is supported by case-control studies conducted within the project area (37) as well as evidence from elsewhere (58-60).</p> <p>This output also assumes that participatory theatre is an effective way of communicating conservation messages and effecting behavior change, a view which is supported by</p>

	<p>conflict increased from 0 in 2018 to 30,000 in 2022-4, with equal representation of men and women.</p>	<p>3.3 Engagement with outreach will be estimated by counting audiences (separately enumerating men, women, boys, and girls where possible) for participatory theatre, community meetings, etc.</p>	<p>multiple studies (81-83) including evidence of behavior change in both public health (55) and human-elephant conflict (61).</p>
<p>4. Improved public attitudes to coexisting with African wild dogs</p>	<p>4.1 Percentage of community members wanting wild dogs on their land increased from 38% in 2007 to 70% in 2023-4.</p> <p>4.2 Ten-fold increase in Kenyan print and broadcast media items presenting positive new stories about wild dogs (from 1 newspaper article and 1 TV report in 2018).</p> <p>4.3 Ten-fold increase in social media reach of project accounts, primarily within Kenya (e.g. @MpalaWildDogs to increase from 590 followers to >5,000).</p> <p>4.4 Increase in the proportion of tourism operators using wild dogs' presence in their advertising.</p>	<p>4.1 Community attitudes to wild dogs will be assessed through surveys conducted at the start and end of the project</p> <p>4.2 Changes in media coverage (print, broadcast, and social media) will be measured in the course of conducting media outreach</p> <p>4.3 Changes in tourism advertising will be monitored by regular evaluation of tourism advertising materials.</p>	<p>This output assumes that a package of measures, including linking practical action on human health to the health of endangered wildlife, and wild dog recovery to the recovery of the beleaguered ecotourism industry, can help to improve local attitudes to wild dogs.</p> <p>This assumption is supported by our preliminary evidence, although the translation of attitudes into behavior change is less certain.</p> <p>This output also assumes that increased use of wild dogs to advertise local tourism venues will encourage visits, especially by African tourists. This assumption is supported by our surveys from the project area (84), as well as from South Africa (62).</p>
<p>5. Improved national capacity for protecting wildlife populations and human health</p>	<p>5.1 Number of trained full-time Kenyan professional wild dog conservationists in the project area increased from 2 (male) in 2019 to 10 (including ≥3 women) by Apr 2022.</p> <p>5.2 Number of Kenyan wildlife veterinarians with practical expertise in wild dog health increased from 2 (both male) in 2019 to 4 (2 male, 2 female) in 2022.</p> <p>5.3 Days each year that County Veterinary Officers have transport to contribute to mass dog vaccination</p>	<p>5.1 Numbers and gender balance of wild dog conservationists will be apparent in the process of assembling the final project team.</p> <p>5.2 Training of all team members (both core staff and those from partner projects) will be documented in records of monthly meetings.</p> <p>5.3 Mobilisation of County Veterinary Officers will be documented in project records.</p> <p>5.4 Training of nurses will be documented in project records and</p>	<p>This output assumes that improving national capacity for practical conservation and disease management will help to improve outcomes for wildlife conservation and sustainable development, an assumption supported by a large volume of evidence from the conservation (85) and public health (86) fields.</p>

	<p>increased from 0 in 2019 to 72 in 2022-2024.</p> <p>5.4 Number of nurses trained to collect sex- and age-disaggregated anonymized data on rabies deaths and dog bites increased from 0 in 2019 to 24 in 2022.</p> <p>5.5 Number of Kenya conservation professionals engaged in using epidemiological models to inform wild dog disease management increased from 0 in 2017 to ≥ 20 in 2022.</p>	<p>apparent from data collected in the course of monitoring human rabies risks.</p> <p>5.5 Engagement with epidemiological modeling measured in the course of the disease management workshop process.</p>	
--	--	--	--

Activities

- 1.12 Vaccinate domestic dogs annually across a 10,000 sq km project area, achieving 70% vaccine coverage, including traveling with camels in areas not accessible by vehicle.
- 1.13 Collect data on rabies vaccination efforts and coverage using the Mission Rabies smartphone app (<http://www.missionrabies.com/app>).
- 1.3 Conduct mark-resight monitoring of domestic dogs conducted after a sample of vaccination days to estimate vaccine coverage.
- 1.4 Develop a participatory play about rabies, dog vaccination, how proper dog bite management can save lives, and the parallels between human and wildlife health.
- 1.5 Perform the rabies play on ≥ 20 occasions in advance of rabies vaccination days, targeting locations likely to attract women as well as men.
- 1.6 Monitor the effectiveness of participatory play by interviewing audience members before-and-after performances.
- 1.7 Develop short video clips based on the rabies play, optimized for sharing over WhatsApp, and encourage sharing over local networks.
- 1.8 Develop and distribute posters and leaflets about rabies prevention, as part of community sensitization ahead of rabies vaccination days.
- 1.9 Train outreach officers and scouts from partner projects in rabies prevention messages, so that they can help with community sensitization.
- 1.10 Monthly project meetings to evaluate progress, continue staff training, and consider ways to improve effectiveness.
- 1.11 Adapt outreach efforts to specific local issues if monitoring indicates vaccination coverage is insufficient.
- 1.12 Establish systems for collecting age- and sex-specific data on dog bites and rabies deaths at 4 hospitals and 20 dispensaries.
- 1.13 Liaise regularly with the national “Rabies-Free Kenya” campaign to ensure efforts are complementary and share experiences of best practices.
- 1.14 Close-out meeting early in Year 3 to assess progress relative to national rabies eradication efforts, and to decide next steps.

- 2.1 Convene workshop on managing disease risks to wild dogs, involving local and international experts and drawing on existing data and epidemiological modeling.
- 2.2 Based on disease workshop outcomes, develop and publish a local disease management plan for wild dogs and other large carnivores.
- 2.3 If recommended by disease workshop participants, including Kenya Wildlife Service, initiate vaccination (rabies and/or CDV) within each collared wild dog pack.
- 2.4 With workshop participants, develop a SMART-integrated surveillance system for reporting sickness in wild and domestic carnivores, including response plans.
- 2.5 Train project Community Officers, and project partners’ scouts, outreach officers, and other SMART users to use the surveillance system.

- 2.6 Train and equip veterinarians from KWS, Mpala, and partners to implement the response plan.
 - 2.7 Convene workshop on mitigating livestock depredation in the project area, involving local and international experts.
 - 2.8 Based on depredation workshop outcomes, develop and publish a local plan to mitigate livestock depredation by wild dogs and other large carnivores.
 - 2.9 Monitor wild dog health, survival, and reproduction by deploying tracking collars on all known wild dog packs in the project area, with frequent visual checks.
 - 2.10 Retrieve and (with KWS) necropsy and wild dogs which die, collating data on mortality rates and causes.
 - 2.11 Collate data annually from KWS and partner projects on conflict-related mortality of other large carnivore species.
-
- 3.1 With participants in the depredation workshop, agree on appropriate methods to mitigate livestock predation by wild dogs and other large carnivores.
 - 3.2 Integrate chosen methods into new and existing training materials for Mpala and partner projects, and train key staff to use and share them.
 - 3.3 Solicit and follow up reports of large carnivore attacks on livestock, collecting case-control data on husbandry methods and offering advice on mitigation methods.
 - 3.4 Develop a participatory play about coexisting with large carnivores, especially wild dogs, sharing evidence on sustainable ways to prevent livestock attacks.
 - 3.5 Perform the coexistence play on ≥ 20 occasions, targeting locations experiencing livestock depredation problems, especially wild dog depredation.
 - 3.6 Monitor the impact of the coexistence play by counting audiences, and by interviewing a sample of audience members before-and-after performances.
 - 3.7 Develop short video clips, based on the coexistence play, optimized for sharing over WhatsApp, and encourage sharing over local networks.
 - 3.8 Develop and distribute posters and leaflets about coexistence with wild dogs and other large carnivores, targeting places women are likely to visit, as well as men.
 - 3.9 Share knowledge about approaches to coexistence through regular formal and informal meetings with community members and groups.
 - 3.10 Monitor key livestock husbandry measures (e.g., number/age/sex of herders) in a sample of herds at the start of the project and annually thereafter.
 - 3.11 Identify a sample of focal households for each community officer, to facilitate a standardized measure of predator impact with constant observer effort
 - 3.12 Collect data on livestock depredation and economic losses per focal household; estimate trends in losses over time.
-
- 4.1 Encourage discussion about the benefits of coexisting with wildlife, as well as the costs, during play performances and formal and informal community meetings.
 - 4.2 Actively encourage journalists and filmmakers to visit the project, promoting positive media stories linking human health to wildlife conservation.
 - 4.3 Promote positive stories about wild dog conservation and human health through our own, and partners', social media accounts and other digital platforms.
 - 4.4 Use a simplified version of the questionnaire developed for ref (87) to measure local attitudes to wild dogs at the start and end of the project.
 - 4.5 Monitor and record reports about the project in print, broadcast, and social media.
 - 4.6 Promote the use of wild dogs in marketing tourism to the project area through informal meetings with individual lodges and camps.
-
- 5.1 Conduct initial training workshops for the project team at the start of the project
 - 5.2 Include training sessions in every monthly project meeting
 - 5.3 Ensure that specific training provided to project staff is also offered to relevant staff from partner projects
 - 5.4 Schedule vaccination days to involve County Veterinary Officers, providing transport to facilitate their involvement
 - 5.5 Train dispensary nurses and hospital staff to collect and report age- and sex-specific data on rabies deaths and dog bites.

5.6 Engage Kenyan veterinarians and other conservationists with epidemiological modeling in the course of the disease management workshop.

19. Annex 3: Standard Indicators

The Biodiversity Challenge Funds (BCFs) use high-quality and accessible Monitoring, Evaluation, and Learning (MEL) to enable scaling, replication, and increase the impact of the funds and the projects we support.

By asking project teams to align indicators with the Darwin Initiative Standard Indicators, we aim to increase our contribution to the global evidence base for activities that support biodiversity conservation, poverty reduction, and capability & capacity.

The tables below are provided to assist project teams in reporting against Standard Indicators. Please report against the Standard Indicators that you have selected specifically for your project in Table 1 below. Refer to the Standard Indicator Guidance & Menu available on the [Darwin Initiative](#) website for guidance on how to select indicators, as well as how to disaggregate reporting within your chosen indicators.

New projects should complete the Y1 column and also indicate the number planned during the project lifetime. Continuing projects should copy and paste the information from previous years and add data for the most recent reporting period.

We recognize that our menu cannot cover all the potential monitoring needs for all projects – where necessary you can select indicators from other sources or develop your own. See our BCF MEL guidance on best practices for selecting and developing indicators.

Table 1 Project Standard Indicators

DI Indicator number	Name of indicator using original wording	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
E.g. DI-A01	E.g. People who attended training on CBD Reporting Standards	E.g. Number of officials from national Department of Environment who attended training on CBD Reporting Standards	People	Men	20			20	60
E.g. DI-C17	E.g. Articles published by members of the project team	E.g. Number of unique papers published in peer reviewed journals	Number	None	1			1	4
DI A01	Number of Kenya conservation professionals engaged with using epidemiological models to inform wild dog disease management increased from 0 in 2017 to ≥ 20 in 2022	Number of people from key national and local stakeholders engaged with using epidemiological models to inform wild dog disease management	Number	Men Women Group: public sector, civil society, private sector	10 11	0		21	21
DI A01	Local people engaged by community outreach efforts related to domestic dog ownership increased from 0 in 2017 to 30,000 in 2022-4, with equal gender participation	Number of people from local stakeholders with relevant training on domestic dog handling and rabies control	Number	Women Men Youth Stakeholder group: Local Community	31005 16000 23325	14,224 12,827 16,430		113,811	90000
DI A01	Local people engaged by community outreach efforts related to wild dog conflict increased from 0 in 2018 to 30,000 in 2022-4, with equal representation of men and women	Number of people from local stakeholders with relevant training on human wildlife conflict reduction practises	Number	Women Men Youth Stakeholder group: Local Community	12178 14007 17880	16,338 24,113 18,954		103,470	90000

DI Indicator number	Name of indicator using original wording	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DI-A07	Days each year that County Veterinary Officers have transport to contribute to mass dog vaccination increased from 0 in 2019 to 72 in 2022-2024	Number of governments institutions/departments with enhanced awareness and understanding of biodiversity and associated poverty issues.	Number of days Government departments Veterinarians used for the project	Number of days	22	28		50	72
DI B02	Local action plan for disease management in wild and domestic carnivores agreed by Jun 2022 and implemented by Jun 2023.	Number of new/improved wild and domestic carnivores disease management plans available and endorsed	Number	Type: Disease management plan	1	0		1	2
DI-C15	Ten-fold increase in Kenyan print and broadcast media items presenting positive new stories about wild dogs (from 1 newspaper article and 1 TV report in 2018)	Number of Media related activities.	Number of local media coverage	Radio adverts Tv documentary	18	4		22	20
DI-C12	Ten-fold increase in social media reach of project accounts, primarily within Kenya (e.g. @MpalaWildDogs to increase from 590 followers to >5,000)	Increase social media presence	Numbers of followers	Twitter- Instagram	1500	1896		3,396	5000
DI D01	Area covered by domestic dog rabies vaccination expanded from 1,500 sq km in 2017 to 10,000 sq km in 2022	Hectares of habitat under sustainable management practices	Area in sq km	Extent of pre-project and post-project rabies controlled area	8600	9,200		9,200	10000
DI-D04	African wild dog numbers at least doubled by the end of the project, from 2 packs in Jan	Improved species population within the project area	Number of wild dogs packs	Type: Fauna	3	4		7	2

DI Indicator number	Name of indicator using original wording	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
	2022 to at least 4 breeding packs by 2024		increase in project area						
DI-D15	Livestock predation by wild dogs remains at zero throughout the project despite increased wild dog numbers	Net change in incidences of human wildlife conflict.	The number of livestock depredation cases		6	4		10	0
DI-D11	Majority of livestock keepers (both male and female) practicing carnivore-friendly husbandry by 2024	Number of people benefitting from improved sustainable agriculture practices and are more resilient to weather shocks and climate trends.	Percentage of herders	Practising carnivore herding practices	44%	53%		53%	>50%
DI-E03	Wild dog mortality caused by domestic dog diseases reduced from 10% of all adult wild dogs <i>p.a.</i> in 2001-2015 to 3% in 2022-4	Status of Threatened Species improved	Number Wild dog deaths	Disease caused= 0 Killed by people=0	0	0		0	<3%

In addition to reporting any information on publications under relevant standard indicators, in Table 2, provide full details of all publications and material produced over the last year that can be publicly accessed, e.g. title, name of publisher, contact details, cost. Mark with an asterisk (*) all publications and other material that you have included with this report.

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)
Not Applicable						

20. Annex 4: Onwards – supplementary material (optional but encouraged as evidence of project achievement)

This may include outputs of the project, but need not necessarily include all project documentation. For example, the abstract of a conference would be adequate, as would be a summary of a thesis rather than the full document. If we feel that reviewing the full document would be useful, we will contact you again to ask for it to be submitted.

It is important, however, that you include enough evidence of project achievement to allow reassurance that the project is continuing to work towards its objectives. Evidence can be provided in many formats (photos, copies of presentations/press releases/press cuttings, publications, minutes of meetings, questionnaires, reports, etc.) and you should ensure you include some of these materials to support the Annual Report text.

If you are attaching separate documents, please list them here with an Annex reference number so that we can clearly identify the correct documents.

21. Annex 4: Social Media Communications

Date published	Title	Channel/media	Reach/impressions (if known)	Link (if it is not available online, please Dropbox folder)
12/08/2019	45 Turtles hatched	Facebook	1,074 reach	www.facebook.....
Date Published	Title	Channel/Media	Reach/Impressions (if known)	Link
5/04/2023	Wild dog post	Twitter	109 impressions	https://twitter.com/MpalaWildDogs/status/1681234567
11/04/2023	Read on wild dog dispersal	Twitter	1835 impressions	https://twitter.com/MpalaWildDogs/status/1681234567
18/04/2023	Project team meeting	Instagram	20 likes 167 impressions	https://www.instagram.com/p/CrK_SArKO
		Twitter	113 impressions	https://twitter.com/MpalaWildDogs/status/1681234567
		Facebook	233 impressions	https://www.facebook.com/photo?fbid=518707963803021
19/04/2023	Introduction to project team	Instagram	24 likes 176 impressions	https://www.instagram.com/p/CrNWgRUKI
		Twitter	276 impressions	https://twitter.com/MpalaWildDogs/status/1681234567
		Facebook	132 impressions	https://www.facebook.com/photo/?fbid=519174100423074
24/04/2023	Wild dog facts	Instagram	44 likes 294 impressions	https://www.instagram.com/p/CralbmLK2T
		Twitter	445 impressions	https://twitter.com/MpalaWildDogs/status/1681234567
		Facebook	152 impressions	https://www.facebook.com/photo/?fbid=52383291767344642
25/04/2023	Rabies signs	Twitter	185 impressions	https://twitter.com/MpalaWildDogs/status/1681234567
		Facebook	81 impressions	https://www.facebook.com/photo/?fbid=52383291767344642
27/04/2023	Wild dog facts	Instagram	31 likes 229 impressions	https://www.instagram.com/p/CrhzFHJgkL
		Twitter	264 impressions	https://twitter.com/MpalaWildDogs/status/1681234567
3/05/2023	Conference highlight Shared post	Twitter	265 impressions	https://twitter.com/MpalaWildDogs/status/1681234567

17/05/2023	Celebration of Endangered species day	Instagram Twitter Facebook	32 likes 172 impressions 321 impressions 85 impressions	https://www.instagram.com/p/CsVasrhqtR https://twitter.com/MpalaWildDogs/status/166 https://www.facebook.com/photo/?fbid=533291767344642
22/05/2023	Celebrating #Endangered Species day	Instagram Twitter Facebook	11 likes 131 impressions 375 impressions 140 impressions	https://www.instagram.com/p/CsiSylLK9SS https://twitter.com/MpalaWildDogs/status/164 https://www.facebook.com/photo/?fbid=533291767344642
22/05/2023	Biodiversity and the projects activities Shared post	Twitter	112 impressions	https://twitter.com/MpalaWildDogs/status/162
22/05/2023	Celebrating international biodiversity day	Instagram Twitter Facebook	26 likes 195 impressions 125 impressions 66 impressions	https://www.instagram.com/p/Csi21nKKCC https://twitter.com/MpalaWildDogs/status/163 https://www.facebook.com/photo/?fbid=533291767344642
25/05/2023	Celebrating Africa day	Instagram Twitter Facebook	24 likes 179 impressions 161 impressions 153 impressions	https://www.instagram.com/p/Csqn4qSqu3 https://twitter.com/MpalaWildDogs/status/163 https://www.facebook.com/photo/?fbid=533291767344642
5/06/2023	Effects of plastic pollution on biodiversity Shared post.	Twitter	110 impressions	https://twitter.com/MpalaWildDogs/status/167
19/06/2023	Posters on rabies control	Instagram Twitter Facebook	9 likes 199 impressions 156 impressions 98 impressions	https://www.instagram.com/p/CtqmbYBq https://twitter.com/MpalaWildDogs/status/167 https://www.facebook.com/photo/?fbid=533291767344642

26/06/2023	Wild dog facts	Instagram Twitter Facebook	27 likes 127 impressions 222 impressions 358 impressions	https://www.instagram.com/p/Ct8nfNBKwj https://twitter.com/MpalaWildDogs/status/13 https://www.facebook.com/photo/?fbid=55a.383291767344642
1/08/2023	Wild dog appreciation post	Instagram Twitter Facebook	13 likes 120 impressions 1443 impressions 341 impressions	https://www.instagram.com/p/CvZZNs8KX https://twitter.com/MpalaWildDogs/status/10 https://www.facebook.com/photo/?fbid=57a.383291767344642
2/08/2023	Wild dog appreciation post	Twitter	563 impressions	https://twitter.com/MpalaWildDogs/status/17
3/08/2023	Wild dog appreciation post	Instagram Twitter	28 likes 134 impressions 100 impressions	https://www.instagram.com/p/CveS9kdKh https://twitter.com/MpalaWildDogs/status/15
7/08/2023	Conservation education program	Instagram Twitter Facebook	8 likes 96 impressions 607 impressions 63 impressions	https://www.instagram.com/p/Cvone2nqM https://twitter.com/MpalaWildDogs/status/12 https://www.facebook.com/photo/?fbid=57a.383291767344642
8/08/2023	Wild dog post	Instagram Twitter	25 likes 143 impressions 321 impressions	https://www.instagram.com/p/CvrMcyjCA7p https://twitter.com/MpalaWildDogs/status/18
10/08/2023	Wild dog post	Instagram Twitter	39 likes 184 impressions 1408 impressions	https://www.instagram.com/p/CvwQ9AjKk https://twitter.com/MpalaWildDogs/status/16
11/08/2023	Project team meeting	Instagram Twitter Facebook	12 likes 154 impressions 185 impressions 72 impressions	https://www.instagram.com/p/CvzHDMUq https://twitter.com/MpalaWildDogs/status/10 https://www.facebook.com/photo/?fbid=58a.383291767344642

14/08/2023	Newly collared pack	Instagram Twitter Facebook	75 likes 309 impressions 2207 impressions 143 impressions	https://www.instagram.com/p/Cv6nDvoqgM https://twitter.com/MpalaWildDogs/status/1444444444 https://www.facebook.com/photo/?fbid=5833363974004086
17/08/2023	Rabies vaccinations Shared post	Twitter	329 impressions	https://twitter.com/MpalaWildDogs/status/1444444444
22/08/2023	Paper on wild dog Shared post	Twitter	234 impressions	https://twitter.com/MpalaWildDogs/status/1444444444
26/08/2023	Celebration of world african wild dog day	Instagram Twitter Facebook	73 likes 287 impressions 842 impressions 80 impressions	https://www.instagram.com/p/CwZsSEcKd https://twitter.com/MpalaWildDogs/status/1444444444 https://www.facebook.com/photo/?fbid=5833363974004086
29/08/2023	Wild dog appreciation post	Twitter	1347 impressions	https://twitter.com/MpalaWildDogs/status/1444444444
30/08/2023	Collar connectivity success	Instagram Twitter Facebook	23 likes 162 impressions 1087 impressions 272 impressions	https://www.instagram.com/p/Cwjy9lbqg8s https://twitter.com/MpalaWildDogs/status/1444444444 https://www.facebook.com/photo/?fbid=5833363974004086
31/08/2023	Wild dog monitoring. Shared post	Twitter	2112 impressions	https://twitter.com/RosieWoodroffe/status/1444444444
1/09/2023	Highlighting world rabies day	Instagram Twitter Facebook	22 likes 162 impressions 1275 impressions 122 impressions	https://www.instagram.com/p/CwpEQZ-Kb https://twitter.com/MpalaWildDogs/status/1444444444 https://www.facebook.com/photo/?fbid=5833363974004086
6/09/2023	Papers highlighting effects of climate change on AWDs	Twitter	6098 impressions	https://twitter.com/MpalaWildDogs/status/1444444444

6/09/2023	Wild dog appreciation post Shared post	Twitter	185 impressions	https://twitter.com/MpalaWildDogs/status/15
7/09/2023	Wild dog video	Instagram	47 likes 197 impressions	https://www.instagram.com/p/Cw4U6sHKl
		Twitter	269 impressions	https://twitter.com/MpalaWildDogs/status/13
11/09/2023	Team member appreciation post	Instagram	21 likes 173 impressions	https://www.instagram.com/p/CxCryJeKzK
		Twitter	758 impressions	https://twitter.com/MpalaWildDogs/status/17
		Facebook	129 impressions	https://www.facebook.com/photo/?fbid=59pcb.597773282563155
12/09/2023	Wild dog facts	Instagram	31 likes 144 impressions	https://www.instagram.com/p/CxFUzYuqO
		Twitter	132 impressions	https://twitter.com/MpalaWildDogs/status/19
		Facebook	1498 impressions	https://www.facebook.com/photo/?fbid=59a.383291767344642
26/09/2023	World rabies day activities	Instagram	10 likes 133 impressions	https://www.instagram.com/p/CxpZInjKPNl
		Twitter	529 impressions	https://twitter.com/MpalaWildDogs/status/13
		Facebook	339 impressions	https://www.facebook.com/photo/?fbid=60pcb.606120655061751
27/09/2023	Preparation for world rabies day	Instagram	11 likes 115 impressions	https://www.instagram.com/p/Cxr5fYKi0q/
		Twitter	401 impressions	https://twitter.com/MpalaWildDogs/status/16
		Facebook	497 impressions	https://www.facebook.com/photo/?fbid=60a.383291767344642
28/09/2023	Celebrating world rabies day	Instagram	21 likes 132 impressions	https://www.instagram.com/p/CxusZLXKh2
			13 likes 97 impressions	https://www.instagram.com/p/CxusHj6K9g
		Twitter	409 impressions 208 impressions 106 impressions	https://twitter.com/MpalaWildDogs/status/18
				https://twitter.com/MpalaWildDogs/status/13 https://twitter.com/MpalaWildDogs/status/16

29/09/2023	Recap of world rabies day	Instagram Twitter Facebook	12 likes 118 impressions 61 impressions 337 impressions 127 impressions	https://www.instagram.com/p/CxxAINpqL9 https://twitter.com/MpalaWildDogs/status/133 https://twitter.com/MpalaWildDogs/status/134 https://www.facebook.com/photo/?fbid=60pcb.607846551555828
3/10/23	Wild dog appreciation post	Instagram Twitter Facebook	32 likes 167 impressions 434 impressions 1050 impressions	https://www.instagram.com/p/Cx7X4EJKD https://twitter.com/MpalaWildDogs/status/130 https://www.facebook.com/photo/?fbid=60pcb.609889758018174
6/10/2023	Community engagement post	Instagram Twitter	11 likes 124 impressions 432 impressions	https://www.instagram.com/p/CyDUTxiKp3 https://twitter.com/MpalaWildDogs/status/132
11/10/2023	Wild dog facts	Instagram Twitter	44 likes 202 impressions 223 impressions	https://www.instagram.com/p/CyP2DriKMr https://twitter.com/MpalaWildDogs/status/135
25/10/2023	Rabies alliance nomination appeal Shared post	Twitter	354 impressions	https://twitter.com/MpalaWildDogs/status/138
31/10/2023	LRVC post	Instagram Twitter Facebook	13 likes 128 impressions 556 impressions 73 impressions	https://www.instagram.com/p/CzDeOBeqk https://twitter.com/MpalaWildDogs/status/132 https://www.facebook.com/photo/?fbid=62a.383291767344642
2/11/2023	Rabies alliance nomination appeal Shared post	Twitter	641 impressions	https://twitter.com/MpalaWildDogs/status/132
3/11/2023	LRVC post	Instagram	10 likes 110 impressions 19 likes	https://www.instagram.com/p/CzLD0WBKf https://www.instagram.com/p/CzLYqUIKjw

			121 impressions 16 likes 131 impressions	https://www.instagram.com/p/CzLhSSGqr/
		Twitter	396 impressions 112 impressions 903 impressions	https://twitter.com/MpalaWildDogs/status/12 https://twitter.com/MpalaWildDogs/status/12
		Facebook	154 impressions	https://twitter.com/MpalaWildDogs/status/18 https://www.facebook.com/photo/?fbid=62pcb.626876202986196
4/11/2023	LRVC post	Instagram	8 likes 91 impressions	https://www.instagram.com/p/CzNsgX8Kb/
			15 likes 137 impressions	https://www.instagram.com/p/CzO3JzUKK/
		Twitter	230 impressions 422 impressions 543 impressions 227 impressions	https://twitter.com/MpalaWildDogs/status/15 https://twitter.com/MpalaWildDogs/status/16 https://twitter.com/MpalaWildDogs/status/16
		Facebook	137 impressions 146 impressions	https://twitter.com/MpalaWildDogs/status/17 https://www.facebook.com/photo/?fbid=62pcb.627389859601497 https://www.facebook.com/photo/?fbid=62pcb.627630612910755
21/11/2023	LRVC Post	Instagram	11 likes 120 impressions	https://www.instagram.com/p/Cz5kmhXq1/
		Twitter	885 impressions	https://twitter.com/MpalaWildDogs/status/17
		Facebook	571 impressions	https://www.facebook.com/photo/?fbid=63pcb.636067398733743
28/11/2023	LRVC post	Instagram	8 likes 113 impressions	https://www.instagram.com/p/C0LfCQGqw/
		Twitter	285 impressions	https://twitter.com/MpalaWildDogs/status/18
		Facebook	96 impressions	https://www.facebook.com/photo/?fbid=63a.383291767344642
1/12/2023	LRVC post	Instagram	18 likes 133 impressions	https://www.instagram.com/p/C0TcNDVKx/
		Twitter	147 impressions 260 impressions	https://twitter.com/MpalaWildDogs/status/18

				https://twitter.com/MpalaWildDogs/status/16
2/12/2023	LRVC post	Instagram	14 likes 139 impressions	https://www.instagram.com/p/C0WLC0mqc
		Twitter	207 impressions	https://twitter.com/MpalaWildDogs/status/163
		Facebook	145 impressions	https://www.facebook.com/photo/?fbid=64pcb.641763728164110
17/1/2024	Appreciation post for student visitors	Twitter	594 impressions	https://twitter.com/MpalaWildDogs/status/160
22/1/2024	Wild dog monitoring	Instagram	41 likes 285 impressions	https://www.instagram.com/p/C2ZKYsKyF
		Twitter	978 impressions	https://twitter.com/MpalaWildDogs/status/169
		Facebook	185 impressions	https://www.facebook.com/reel/408757884
24/1/2024	Celebrating international education day	Instagram	13 likes 126 impressions	https://www.instagram.com/p/C2efdElq_w
		Twitter	378 impressions	https://twitter.com/MpalaWildDogs/status/165
		Facebook	138 impressions	https://www.facebook.com/photo/?fbid=67pcb.671577805182702
29/1/2024	Celebrating the projects Monitoring officer # Womeninconservation	Instagram	17 likes 157 impressions	https://www.instagram.com/p/C2rKUB7qK
		Twitter	647 impressions	https://twitter.com/MpalaWildDogs/status/168
		Facebook	209 impressions	https://www.facebook.com/photo?fbid=674cb.674427114897771
31/1/2024	Community engagement meeting	Twitter	130 impressions	https://twitter.com/MpalaWildDogs/status/160
1/2/2024	Community engagement meeting and conservation education program	Instagram	16 likes 163 impressions	https://www.instagram.com/p/C2zEI6mK1
		Twitter	60 impressions	https://twitter.com/MpalaWildDogs/status/168
		Facebook	154 impressions 326 impressions	https://twitter.com/MpalaWildDogs/status/166 https://www.facebook.com/photo/?fbid=67pcb.676181078055708
12/2/2024	Wild dog appreciation post	Instagram	44 likes 319 impressions	https://www.instagram.com/p/C3PW34vyo

		Twitter	241 impressions	https://twitter.com/MpalaWildDogs/status/16
		Facebook	306 impressions	https://www.facebook.com/reel/215034874
15/2/2024	Wild dog appreciation post	Instagram	31 likes 157 impressions	https://www.instagram.com/p/C3W2XYZqU
		Twitter	238 impressions	https://twitter.com/MpalaWildDogs/status/18
		Facebook	947 impressions	https://www.facebook.com/photo/?fbid=68pcb.684457047228111
19/2/2024	Wild dog monitoring-soit pack	Instagram	44 likes 206 impressions	https://www.instagram.com/p/C3hNCFEqC
		Twitter	189 impressions	https://twitter.com/MpalaWildDogs/status/11
		Facebook	576 impressions	https://www.facebook.com/photo/?fbid=68a.383291767344642
21/2/2024	LRVC post	Instagram	24 likes 178 impressions	https://www.instagram.com/p/C3mgI0NqriX
		Twitter	67 impressions 62 impressions 76 impressions 502 impressions	https://twitter.com/MpalaWildDogs/status/16 https://twitter.com/MpalaWildDogs/status/12 https://twitter.com/MpalaWildDogs/status/10 https://twitter.com/MpalaWildDogs/status/15
		Facebook	128 impressions	https://www.facebook.com/photo/?fbid=68pcb.687789443561538
26/2/2024	LRVC donor appreciation post	Twitter	79 impressions	https://twitter.com/MpalaWildDogs/status/11
12/3/2024	Wild dog appreciation post	Instagram	43 likes 232 impressions	https://www.instagram.com/p/C4aAGTGqA
		Twitter	105 impressions	https://twitter.com/MpalaWildDogs/status/17
		Facebook	849 impressions	https://www.facebook.com/photo/?fbid=69pcb.698402725833543
18/3/2024	Rabies vaccination updates	Instagram	30 likes 162 impressions	https://www.instagram.com/p/C4pp9CBK6
		Twitter	46 impressions 304 impressions 339 impressions	https://twitter.com/MpalaWildDogs/status/16 https://twitter.com/MpalaWildDogs/status/18

		Facebook	177 impressions	https://twitter.com/MpalaWildDogs/status/1177777777777777777 https://www.facebook.com/photo/?fbid=701735705500245
19/3/2024	Wild dog appreciation post	Twitter	91 impressions	https://twitter.com/MpalaWildDogs/status/1177777777777777777
20/3/2024	Wild dog appreciation post	Instagram	45 likes 210 impressions	https://www.instagram.com/p/C4uZloXqho
		Facebook	651 impressions	https://www.facebook.com/photo/?fbid=701735705500245
25/3/2024	Conservation education through theatre arts performances	Instagram	18 likes 99 impressions	https://www.instagram.com/p/C47p5myKXp
		Twitter	431 impressions 275 impressions	https://twitter.com/MpalaWildDogs/status/1177777777777777777 https://twitter.com/MpalaWildDogs/status/1177777777777777777
		Facebook	174 impressions	https://www.facebook.com/photo?fbid=701735705500245

22. 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, type of report (i.e. Annual or Final), and year) and deleted the blue guidance text before submission?	X
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the Subject line.	X
Is your report more than 10MB? If so, 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.	X
Do you have hard copies of the material you need to submit with the report? If so, please make this clear in the cover email and ensure all material is marked with the project number. However, we would expect that most materials will now be electronic.	X
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 16)?	X
Have you involved your partners in the preparation of the report and named the main contributors	X
Have you completed the Project Expenditure table fully?	X
Do not include claim forms or other communications with this report.	