Biodiversity Challenge Funds Projects
Darwin Initiative, Illegal Wildlife Trade Challenge Fund, and Darwin Plus

Half Year Report

It is expected that this report will be a **maximum of 2-3 pages** in length.

If there is any confidential information within the report that you do not wish to be shared on our website, please ensure you clearly highlight this.

Submission Deadline: 31st October 2025

Please note all projects that were active before 1st October 2025 are required to complete a Half Year Report.

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

Project reference	DIR29S2\1073
Project title	Promoting connectivity to create Living Landscapes in southern Mozambique
Country(ies)/territory(ies)	eSwatini (Kingdom of), Mozambique, South Africa, Zimbabwe
Lead Organisation	Drs. Carlos Lopes Pereira and Joao Almeida President and Vice-President of the Mozambique Wildlife Alliance (MWA)
Partner(s)	Elephants Alive, Elephant Crisis Fund, PAMS Foundation, Sensing Clues, For Elephants
Project Leader	*Antonio Alverca; Mozambique Wildlife Alliance*
Report date and number (e.g. HYR1)	HYR3
Project website/blog/social media	Regular updates via Elephants Alive social media page: https://elephantsalive.org/ and https://www.mwa.co.mz/

1. Outline progress over the last 6 months (April – September) against the agreed project implementation timetable (if your project started less than 6 months ago, please report on the period since start up to end of September).

Although we are not looking for specific reporting against your indicators, please use this opportunity to consider the appropriateness of your monitoring, evaluation and learning (MEL) systems (are your indicators still relevant, can you report against any Standard Indicators, do your assumptions still hold true?). The guidance can be found on the resources page of the relevant fund website.

This report is structured to present each project indicator alongside the corresponding progress achieved to date. As noted in our previous ARY2 submission, we continue to welcome feedback regarding the suitability of the five core standard indicators we selected to support the standardisation process as per the requirements. At this stage, we confirm that these indicators remain relevant to the project and will continue to be monitored. However, revisions to the wording of certain indicators are required to ensure that the data collected accurately reflects project outcomes (see Section 7). We also confirm that we are updating the project's logical framework to align with the most current Monitoring and Evaluation (M&E) processes.

We acknowledge the reviewer's feedback highlighting the need to report on measurable indicators at the project output level for the annual report. We will incorporate this requirement in the next annual reporting cycle. The following section outlines project progress for the review period April–September, in alignment with the project indicators:

Output 1: Further understanding of the motivation behind elephant movements from core conservation areas into peripheral PAs, as well as their crop-raiding strategies (Phase 1).

1.1 Number of collared elephants moving through the corridor is to be increased from 20 to 35 by the end of Year 3 due to 30 additional collars deployed: MWA collared six elephants in the first half of the reporting period, with a seventh collared in January 2025. Three more elephants will be collared by the end of the project and reflected in the end of project report.

1.2 Elephant movement through the corridor and associated crop raiding hotspots will be updated each year until the end of the project as movement data collection increases. Each month will serve as a baseline for the next: We continue to monitor elephant movements and crop raiding hotspots. See Table 1 and Figure 1 below for the reporting period:

Table 1: Deployment date, end date (final day of this reporting period), the number of GPS points logged, and total distance travelled within the given time-period, for the seven elephants collared in southern Mozambique in the reporting period.

Elephant name	Sex	Deployment date	End date	Number of GPS points	Distance travelled (km)
sMikkey*	Male	2025/01/29	2025/09/30	5807	1782
Femme1	Female	2025/05/27	2025/09/30	3000	1013
Femme2	Female	2025/05/27	2025/09/30	2951	770
Bang	Female	2025/06/23	2025/09/30	2373	557
Cinzenta	Female	2025/06/23	2025/09/30	2337	509
Erik	Male	2025/06/27	2025/09/30	2269	1016
Chitinini**	Male	2025/08/11	2025/09/12	648	30

* For this elephant, the data start from 29 January and are included in the analyses.
** Chitinini has died due to snare injuries.

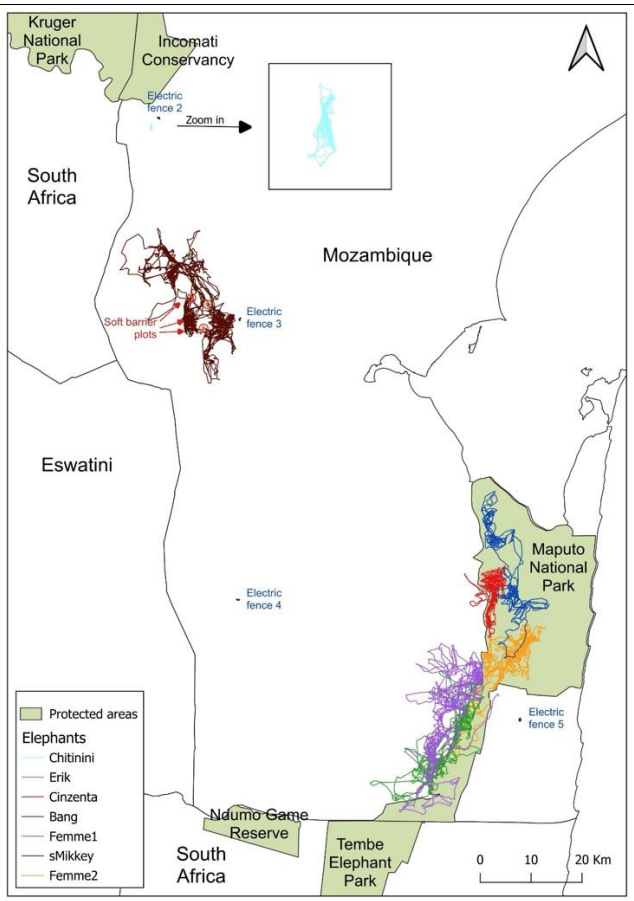

Figure 1: Tracking movements of the seven elephants collared for this reporting period. The electric fences in the region of these seven elephants are shown, as well as the location of the soft barrier plots (red circles).

1.3 Key natural resources (i.e., key plant species or vegetation communities) driving elephant movements through the corridor are established through remote sensing and ground-truthing by end of Year 3: Ground truthing data is no longer required as remote sensing vegetation data layers have proven to be sufficient. We are in the process of developing risk maps and these will be completed by the end of the project.

1.4 Elephant stress hormones within the corridor are established and compared to baseline levels within the Greater Kruger National Park by end of Year 3: Last month, the laboratory manager at Elephants Alive began training for this process. The method, led by Dr Kari Morfeld, has been developed which is suitable for determining stress hormones in the field, without the samples requiring refrigeration. This method was adapted after realising that the planned method involving sample refrigeration was unsuitable for the challenging field conditions.

Output 2. Ensuring human and elephant safety with the establishment and deployment of an additional Rapid Response Unit (RRU) and ensuring the protection of human assets through the establishment of non-income generating barriers (Phase 2).

2.1 Based on a pre-project baseline of 76% crop raiding prevention success rate by the RRUs in operation, an additional RRU will increase the success rate to 80% by Year 1 as it would allow to help cover more ground in the corridor (area of 36 707 km^2, six regions, with 138,466 inhabitants) over the same period of time: Four rapid response units (RRU) were employed (Table 2). Most of the RRU GPS logs were taken at 30 second intervals (some were also taken at 3min, 10min and 20min intervals), explaining the high number of GPS logs (Table 3). A factor to consider is that it is difficult to determine if these GPS logs include travel to and from the RRU bases (which differ between and within RRUs, e.g. a RRU may operate from two different bases). Thus, the calculated distances travelled (Table 2) represent the minimum distances travelled by

each RRU within this reporting time-period. A heatmap of the RRU tracks, in relation to HEC reports and responses, shows that there is overlap between reports and RRU actions in the southern area (between Kruger National Park and Maputo National Park) (Figure 2).

Table 2: The number of GPS logs (mostly at a log rate of 30 seconds) and distance travelled by each rapid response unit (RRU), during this reporting period.

RRU	Number of GPS logs	Distance travelled (km)
Atanasio	3 231	3 091
Williamo	8 708	4 362
Cumbana	1 919	2 922
Mabuto	6 152	4 664
Total	**20 010**	**15 039**

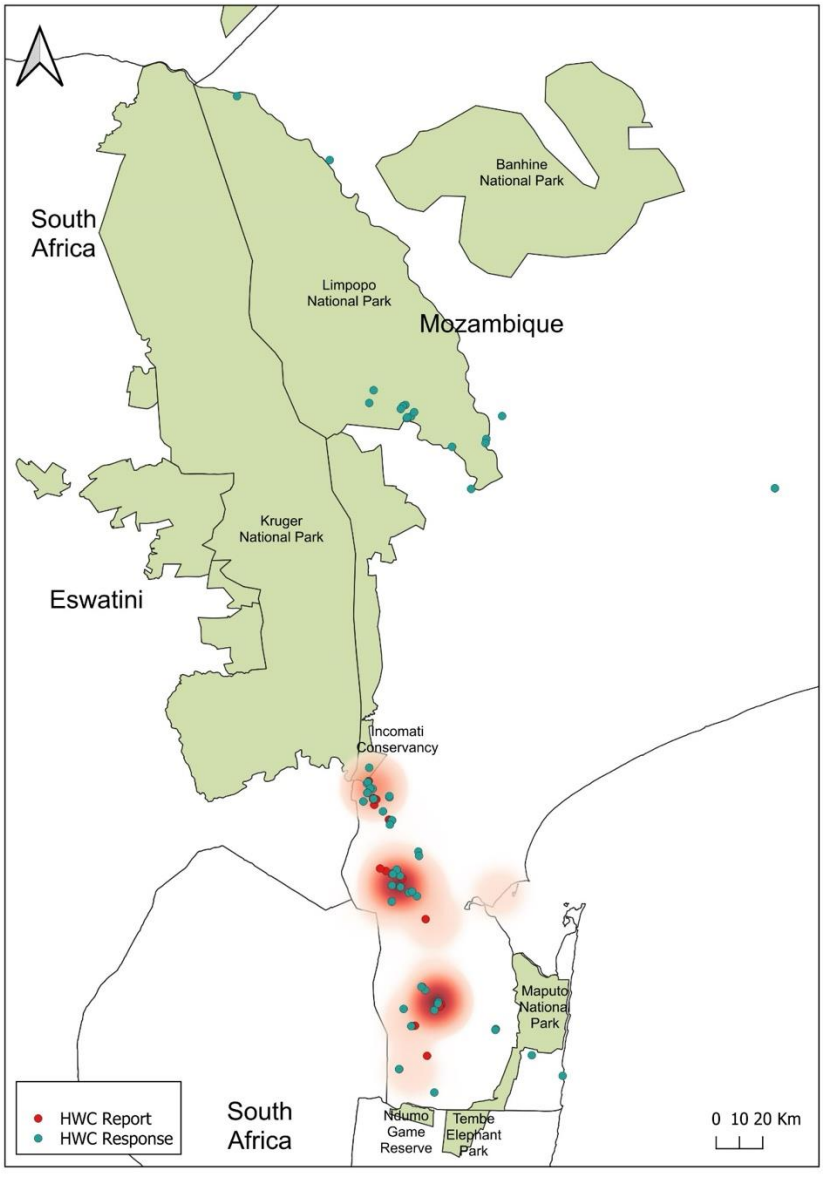

Figure 2: A heatmap of all four RRU tracks all together, in relation to the HEC reports and responses.

2.2 20 Educational workshops, hosting 250 participants in total per year, are facilitated in the corridor by the RRU in Year 1 following a baseline of 16 workshops hosting 178 people pre the grant period, focusing on how to increase personal safety around elephants. [DI-A01]: MWA have exceeded this indicator in for this reporting period: 703 people (351 men and 352 women).

2.3 Human mortalities and casualties within the corridor aimed to be decreased by 100% by the end of Year 3 in comparison to survey records collected by the Mozambique Wildlife Alliance prior to project commencement according to which 7 people died across the whole of Mozambique due to elephant attacks (year prior to the project): **Confidential information, this should not be shared on the BCF website**: In this reporting period, there were four human injury reports, of which at least one was a fatality due to an elephant attack. The number of human-elephant conflict (HEC) reports and responses, for the reporting period, are presented in Table 3.

Table 3: Number of human-elephant conflict (HEC) reports and responses for this reporting period (6 months), in comparison to the previous two years. Also included are the number of unique days for each event type.

Event type	**Number of events**			**Number of unique days of events**		
	Year 1	**Year 2**	**Year 3**	**Year 1 (% of 365 days)**	**Year 2 (% of 365 days)**	**Year 3 reporting period (% of 183 days)**
HEC report	128	89	31	97 (27%)	69 (19%)	25 (14%)
HEC response	146	188	72	112 (31%)	127 (35%)	52 (28%)
Total	**274**	**277**	**103**			

2.4 Demonstration plot programs in the Namaacha Valley (part of the corridor), funded by the Elephant Crisis Fund, are established in Year 1 (4 non income generating barriers) [DI-A04]: As described in the Y2AR, there are five electric fences. Four of these are within the area of the seven collaring's for year 3, as shown in Figure 1. None of these elephants crossed any of the electric fences.

Since the last annual report, the soft barrier plot borders have had some changes, and a new soft barrier plot has been set up (Figures 1 and 3). The soft barrier plots consist of combinations beehives, chilli rags, flashing lights and metal strips, as shown in Figure 3. Only one collared elephant of the seven collared this year, came close to some of these plots and there's no evidence that this elephant entered the plots.

In the final project report, analyses will be shown in comparison with reports from community members, on the effectiveness of the various types of soft barriers in keeping elephants (collared and uncollared) out.

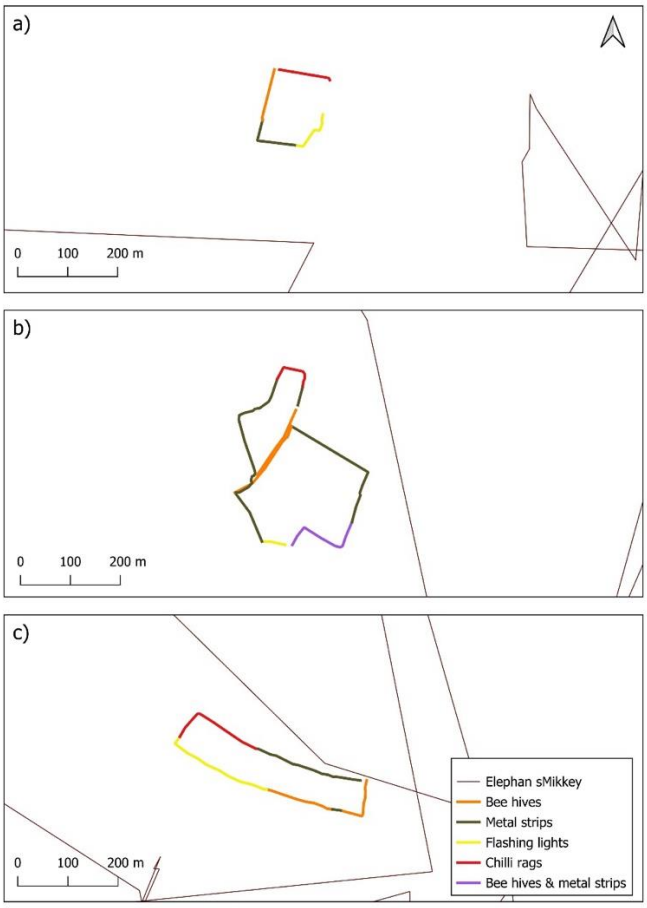

Figure 3: Soft barrier plots: (a) Gumbe, (b) Makwakwa and (c) Dlamini (new plot, July 2025). Only one of the collared elephants (sMikkey) passed close to some of these plots.

Output 3. Training and capacity building in sustainable and gender-equitable non-income and income-generating HEC mitigation opportunities promoted at watch towers as discussion sub-centres, whilst facilitating the understanding of the socio-economic needs of affected communities and their attitudes towards wildlife (Phase 3).

3*.1 The newly established watch towers in the Namaacha Valley (part of the corridor) will facilitate an increase of 50% attendance of households from Namaacha Valley in Year 1 and 80% in Year 3 relative to pre-project baseline of 50. [DI-B05]:* The third and final watch tower was installed at our final site, Dlamini (1.6 ha) in July 2025. See Table 4 for the total number of attendees at each site:

Table 4: Total number of people attending workshops at the tower locations.

Year	Tower sites		
	Mkwakwa	Gumbe	Dlamini
2023	26 (15 Males, 11 Females)	N/A	N/A
2024	30 (19 Males, 11 Females)	18 (8 Males, 10 Females)	N/A
2025	7 (3 Males, 4 Females)	N/A	30 (15 Males, 15 Females)

In addition, each of the towers have educational posters so people can read mitigation strategies outside of the designated workshops, which is accessible to all of the people within the community. These posters have been translated into Portuguese from the STE manual.

3*.2 80% increase in the number of women attending workshops by Year 3 relative to Year 1:* This indicator has proved to be challenging due to it being difficult to engage with the females in

the communities because of gender disparities. In the third year of the project, the following numbers of females attended at each site, respectively: Mkwakwa: 22; Dlamini: 15 and Gumbe: 10. The percentage increase of female attendees from year 1 to year 3 will be quantified at the end of the project.

3.3 Usage of natural resources within the corridor is decreased by 20% by the end of Year 3, in conjunction with an 40% increase in the number of alternative income crops (elephant unpalatable) being planted in the same time period: Elephant unpalatable seeds (chills are sunflowers) have been given to all 3 sites: 2000 of both given to the Mkwakwa site in 2023; 2000 of both given to the Gumbe site in 2023 and 2000 chill seeds were given to the Dlamini site. At both Mkwakwa and Gumbe, drought caused these seedlings to die, as the seeds were given to the Dlamini site in the reporting period, we cannot yet quantify the seedling recruitment rates. We will quantify this increase in number of alternative income crops at the end of the project to report on this indicator.

Output 4. Establishment and development of income- generating barriers within the corridor (beehive fences and elephant unpalatable crop types with a market value) (Phase 4)

4.1 Demonstration plot programs in the Namaacha Valley (part of the corridor), funded by the Elephant Crisis Fund, are established in Year 1 (1 income generating barrier i.e. beehive fences). Establishment of alternative income generating crops with a market value (chili and essential oils) in Year 2-3: Demonstration sites within the Namaacha valley have been established (see Figure 3 for these sites). As explained in section 3.3, the establishment of the uptake of both chilli and sunflower seeds have proven to be a challenge due to unforeseen drought events. Elephants Alive are continuing to work on determining the best drought resistant species at their established demonstration site in Phalubeni in South Africa.

4.2 40% average reduction in crop-raiding between the five mitigation strategies by the end of Year 3: This indicator is ongoing, and we will report on the reduction in crop-raising events at the end of the project. We continue to monitor these crop raiding events.

4.3 Efficiency of each income and non-income generating mitigation strategy as elephant deterrents to be analysed and quantified by end of Year 3, as well as testing the combined effect of mitigation strategies: This indicator will be quantified at the end of the project, led by a social scientist. To date, we have found that metal strip fences and flashing lights from the towers have been the least effective at elephant mitigation. The beehive fences are season dependent but should be adaptively managed that by providing bees with pollen to ensure survival over winter. We will continue to use the funds from the projects to implement post project surveys by the end of Year 3.

4.4 25% increase in our outlined income- and non-income generating mitigation methods have been applied within the project study site, relative to pre-project baseline of 0, by Year 3: We will use the funds from the projects to implement post project surveys by the end of Year 3.

4.5 30% of 2-acre beehive fences, managed by two independent families as demonstration projects in the Namaacha valley, for replication by others are occupied by bee colonies by the end of Year 2: Monthly data continues to be recorded and is seasonally dependent. The following data has been recorded at each site: Mkwakwa community: 18 in total, 14 active; Gumbe community: 6 in total, 2 active; Dlamini community (beehive installed in 2025) 13 in total and 1 active. Bee keeping training courses have been implemented by Elephants Alive, with a total of 12 courses to date.

4.6 20% of farms within the study site have included essential oils and/or honey-related items as a part of their income generating products by the end of Year 3 with a pre-project base line of zero: Due to challenges in the weather and water provision, work on this aspect is ongoing with a new batchof seeds provided for the current growing season. We will use the funds from the projects to implement post project surveys by the end of Year 3.

Output 5. Increased knowledge and research on human-elephant-coexistence and ecological connectivity at local and national level. Successful models (post-application period) are replicated to upscale solving HEC at landscape level resulting in the establishment of biosphere reserves and reforestation schemes with functioning as vegetation steppingstones for elephant using the corridors (Phase 5).

5.1 Community members living in the corridor (Namaacha Valley), show an increased understanding of the importance (value-based statements) of biodiversity protection and the potential for coexistence in Year 3, relative to pre-project baseline assessed by a social scientist: We continue to advance this work by utilising project funds to implement an additional survey by the end of Year 3.

5.2 Research conducted on quantifying the corridor's connectivity using elephant movement data, combined with remote sensing, will be published and identify sections of the corridor to be prioritised according to their associated connectivity values by Year 1. Furthermore, three popular articles (one per year) with accompanying social media posts, will be published by the end of Year 3 to promote and inform about the corridor [DI-C03]: 1) Bedetti, A., Bunney, K., Wall, J., Wittemeyer, G., Vogel, S.M., Kirkman, S., Almeida, J., Douglas-Hamilton, I and Henley, M.D. (In prep.) Trailblazing elephants and the key landscape features that shape connectivity in Southern Mozambique.
2) Cassander C. Engelen, Henrik J. de Knegt, Michelle D. Henley. (Submitted to Journal of Applied Ecology) Uncovering the Role of Nutrients in the Crop-Raiding Risk by African Savannah Elephants.
Nijsten, Lynn. *Facilitating Human-Elephant Coexistence by Identifying Movement Corridor Characteristics in Southern Mozambique: Application of an Integrated Approach Combining Movement Ecology and Remote Sensing Techniques.* Research proposal, Open University of the Netherlands.

5.3 Relationships established at the watch tower conversation hubs enable 1-2 new community-oriented NGOs to work towards expanding the coexistence model to new sites within the corridor by the end of Year 3: We continue to organise strategic meetings and develop Memoranda of Agreement (MOAs) with key partner organisations. These partnerships are essential for aligning objectives, strengthening cross-institutional collaboration, and ensuring long-term sustainability of project outcomes.

5.4 Matched funding to the value of [redacted] *is secured by the end of Year 3 to expand the coexistence model to a new community within the corridor:* No updates on funding throughout this reporting period. However, we are actively seeking new partnerships and financial support to maintain momentum, protect biodiversity, and foster human-elephant coexistence across this vital landscape. Elephants Alive had secured funding from the U.S. Fish and Wildlife Service (USFWS). This support was instrumental in enabling us to expand our impact, strengthen regional connectivity, and implement community-driven solutions to mitigate human-elephant conflict. However, we report the loss of this USFWS funding. This development represents a significant challenge for the organisation, the communities we work with, and the elephants whose long-term survival depends on the continuity of this work.

MWA has secured [redacted] for scalable and expansion within the Magoe National Park, including a HWC program in tete province in the next 2 years. Between 2024 and 2027 (excluding Darwin) – [redacted] has been matched funded.

5.5 Landuse legislation is revised to promote biodiversity and move towards the establishment of biosphere reserves [DI-B01]: Workshops for this indicator will be implemented by the end of year 3, and end of project period.

2. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.	
No problems or unexpected developments occurred during this reporting period.	
3. Have any of these issues been discussed with NIRAS and if so, have changes been made to the original agreement?	
Discussed with NIRAS:	Yes/ **No**
Formal Change Request submitted:	Yes/ **No**
Received confirmation of change acceptance:	Yes/ **No**
Change Request reference if known: *If you submitted a financial Change Request, you can find the reference in the email from NIRAS confirming the outcome*	

Guidance for Section 4: The information you provide in this section will be used by Defra to review the financial status of projects. This review will identify projects at random for spot checks on financial management and will include requests for evidence of the actual spend information provided below. Please ensure the figures you provide are as accurate as possible and that you have the evidence to support it. You do not need to provide it now.

4a. Please confirm your actual spend in this financial year to date (i.e. from 1 April 2025 – 30 September 2025)

Actual spend: [redacted]

4b. Do you currently expect to have any significant (e.g. more than £5,000) underspend in your budget for this financial year (ending 31 March 2026)?

Yes ☐ **No** ☒ Estimated underspend: N/A

4c. If you expect an underspend, then you should consider your project budget needs carefully. Please remember that any funds agreed for this financial year are only available to the project in this financial year.

If you anticipate a significant underspend because of justifiable changes within the project, please submit a re-budget Change Request as soon as possible, and not later than 31st December. There is no guarantee that Defra will agree a re-budget so please ensure you have enough time to make appropriate changes to your project if necessary. Please DO NOT send these in the same email as your report.

NB: if you expect an underspend, do not claim anything more than you expect to spend this financial year.

5. Are there any other issues you wish to raise relating to the project or to BCFs management, monitoring, or financial procedures?

Suspicions or allegations related to fraud and error concerns should be reported to fraudanderror@Defra.gov.uk

As noted in the first section, we would like to continue discussions on the alignment of core indicators to ensure the most effective and coherent M&E process. We also informed the reviewer that we have reached out to BCF on several occasions prior to this reporting period to discuss indicator alignment and BCF have replied to us on the 28th October 2025. We will continue to liaise with BCF.

6. Project risk management

6a. If your project has an Overseas Security and Justice assessment, please provide an update on any related risks, and any special conditions in your award paperwork if relevant for your project.

Despite adverse weather conditions, the project remains on track to achieve the collaring of 30 elephants by the end of the implementation period. Both Elephants Alive (EA) and the Mozambique Wildlife Alliance (MWA) have established and approved comprehensive Safeguarding and SEAH (Sexual Exploitation, Abuse and Harassment) policies, with staff and partner training scheduled for the final project reporting period. This will ensure full compliance with FCDO safeguarding standards and strengthen governance across both organisations.

As noted under Indicator 3.3, additional adverse weather (drought) led to seedling mortality during community-based trials. The project team continues to adaptively manage this indicator, with community members replanting and Elephants Alive researching drought-resistant crop varieties to promote long-term resilience.

Other identified risks are being effectively mitigated. Political instability in Mozambique is being closely monitored but has not affected implementation due to strong collaboration with local authorities. Evidence collection and reporting systems have been strengthened through improved M&E processes and documentation. Reputational and operational risks are further reduced through transparent communication, consistent donor engagement, and dedicated safeguarding oversight.

Overall, the project's residual risk remains moderate, with mitigation measures firmly in place and continuous monitoring ensuring delivery remains on schedule despite external challenges. Please refer to the updated risk register.

The social surveys required for community feedback may be delayed due to the onset of the rainy season, which can render roads impassable until March or April. This could result in the social survey report being submitted after the official project period.

[redacted]

7. Please use this section to respond to any feedback provided when your project was confirmed, or from your most recent Annual Report. As a reminder, all projects that were

scored as 'Not Yet Sensitive' in the Gender Equality and Social Inclusion (GESI) assessment of their latest Annual Report should demonstrate how they are meeting the minimum GESI-Sensitive standard.

In response to the previous Annual Report Review, several key improvements have been implemented to strengthen project reporting and management. Reporting has been restructured to align explicitly with output-level indicators, supported by clearer quantitative evidence and verification materials. [redacted] Partner coordination has been formalised through regular M&E meetings and improved documentation of collaborative decisions. Finally, project visibility under the Darwin Initiative has been strengthened through updated branding on all communication materials and the inclusion of a dedicated project section on the Elephants Alive website.

We are working on updating our logframe through the steps outlined on the Darwin Initiative website (change request form). There are four indicators that we have flagged on the log frame that we would like to discuss with the Darwin team, and we will reach out accordingly with the appropriate change request form. These are from discussing in detail the indicator framework from the mid-term review. For reference, these are as follows:

3.1 The newly established watch towers in the Namaacha Valley (part of the corridor) will facilitate an increase of 50% attendance of households from Namaacha Valley in Year 1 and 80% in Year 3 relative to pre-project baseline of 50. [DI-B05]: The pre project baseline should be 0 and we should change the households to number of people.

3.2 80% increase in the number of women attending workshops by Year 3 relative to Year 1: Reword to highlight what the 80% increase is of, what baseline.

4.2 40% average reduction in crop-raiding between the five mitigation strategies by the end of Year 3. Define clearly what the reduction is from.

4.5 30% of 2 acre beehive fences, managed by two independent families as demonstration projects in the Namaacha valley, for replication by others are occupied by bee colonies by the end of Year 2. This needs to be reworded to define barrier lengths, not area coverage.

Checklist for submission

Have you responded to **feedback from your latest Annual Report Review?** You should respond in section 6, and annexe other requested materials as appropriate.	Yes
Have you reported against the most **up to date information for your project?**	Yes
Have you **clearly highlighted any confidential information** within the report that you do not wish to be shared on our website?	Yes
Include your **project reference** in the subject line of submission email.	Yes
Submit to **BCF-Reports@niras.com**	Yes
Please ensure claim forms and other communications for your project are not included with this report.	Yes