



Darwin Initiative Capability & Capacity: Final 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: no later than 3 months after the agreed end date.

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

Darwin Initiative Project Information

Project reference	DARCC004
Project title	Upskilling Uganda Wildlife Authority staff to tackle human wildlife conflict
Country(ies)	Uganda
Lead Partner	Space for Giants
Project partner(s)	Uganda Wildlife Authority (UWA) & Uganda Wildlife Research and Training Institute (UWRTI)
Darwin Initiative grant value	£199,428.00
Start/end dates of project	01/04/2022-31/03/2024
Project Leader's name	Maurice Schutgens
Project website/blog/social media	N/A
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1 Project Summary

Uganda's network of Conservation Areas (CAs) encompasses 16% of its land area and holds significant importance in safeguarding vital ecosystems and biodiversity. However, as one of Africa's most densely populated countries, Uganda faces challenges with shifting and distinct boundaries between human settlements and wildlife habitats that are increasingly coming to a head to the detriment of the environment.

Since 2014 (in spite of generally poor and inaccurate data availability), there has been a notable increase in Human-Wildlife Conflicts (HWCs), with almost 12,000 incidents recorded by UWA, marking a 510% rise from 2014 to 2019, particularly affecting communities in socially and economically deprived areas. Elephant-related conflicts account for over 78% of HWC cases, prevalent in 5 out of 7 CAs. Wildlife crop raiding significantly impacts community livelihoods, food security, and overall well-being, posing challenges to the Uganda Wildlife Authority's (UWA) conservation objectives and the achievement of Uganda's Sustainable Development Goals (SDGs).

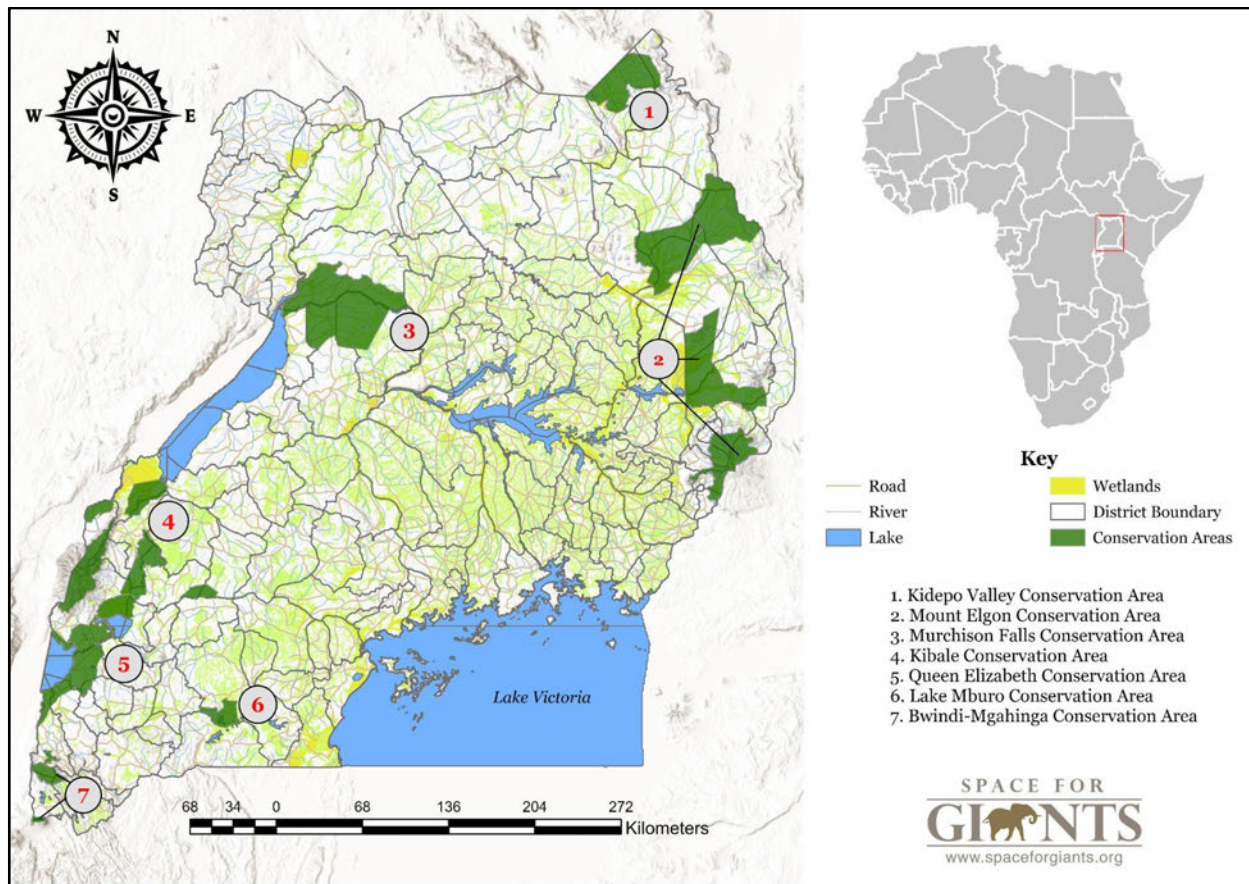


Figure 1: Map of Uganda conservation areas

In 2018, Space for Giants (SFG) was invited by the Government of Uganda to launch a pilot electric fence project on the boundary of Queen Elizabeth National Park (QENP) to tackle escalating levels of Human Elephant Conflict (HEC). During the initial assessments prior and during the implementation of this pilot project, it became apparent that UWA lacked the necessary skills, capacity and equipment required to deliver this project or an associated strategy around the monitoring and evaluation, data collection and reporting to guide management and future interventions. This was most notable around the inability to record, map and pinpoint HWC hotspots around CAs.

For instance, UWA established problem animal control units (PACs) at the CA level in 2019 (comprising 52 staff) which lacked proper training and equipment to handle HWC cases effectively. In addition, over 800 community wildlife scouts recruited to aid in HWC control needed comprehensive training beyond awareness sessions (which they never received). While, both newly appointed staff and scouts required ongoing support and training to fulfil their roles effectively.

At both UWA and CA headquarters, data collection is centralised; however, insufficient training and equipment hinder staff from collecting data effectively, resulting in decisions made without accurate field data. While the various CA's do (or did) collect data on HWC incidents they used a number of different platforms (paper based, ODK, SMART, Cybertracker, KoboCollect etc.) with varying levels of success resulting in unharmonised and unstandardised data. In the absence of empirical data SFG conducted rapid assessments to identify hotspots and this has now led to the construction of over 100km of fence line and a 90% reduction in HEC incidents around those specific areas.

Given the success of the fencing project thus far and the commitment of funding by the World Bank to the Government of Uganda UWA intends (and has started) to construct a further 160 km of electric fence over the next six years. Despite SFGs investment into partnering with UWA it was clear that UWA still lacked the capacity to take this on independently. Therefore, SFG identified capacity-building needs in collaboration with UWA, focusing on strategic planning for HWC management, mentorship, technical skill development, accurate data recording, mapping/visualising HWC data, fence construction, and comprehensive training for community wildlife scouts (CWS). The project aimed to enhance data collection capabilities to facilitate better decision-making in and around UWA's conservation areas.

By enhancing the skills and knowledge of staff in HWC management, the project sought to improve the overall delivery of the HWC strategy, particularly through the deployment of electric fences at hotspots to mitigate crop losses and strengthen relationships between UWA and local communities, ultimately enhancing CA governance.

The project spanned across seven distinct conservation areas in Uganda, encompassing both national parks and wildlife reserves managed by UWA (**Figure 1**). By targeting the CA level we were able to ensure that we would have a good distribution of staff from across the country involved in the project (i.e. rather than targeting only popular parks of Murchison, Queen Elizabeth and Kidepo).

2 Project stakeholders/partners

SFG identified and implemented the project collaboratively with two key partners, i.e. the Uganda Wildlife Authority (UWA - with a mandate to conserve, manage and regulate Uganda's wildlife) and the Uganda Wildlife Research and Training Institute (UWRTI - with a mandate to provide technical and professional training in the conservation and tourism sectors for Ugandans). These partners played a critical role in supporting the project's successful implementation by helping co-deliver various activities, making their staff and facilities available and for buying into the overall project.

As part of the project guidance, a Darwin Executive Implementation Committee was established at the start of the project. Each institution identified a focal point: UWA appointed Ms. Vanice Mirembe as Project Coordinator; the UWRTI appointed Robert Baluku and SFG appointed Justus Tusuubira. This Committee met quarterly throughout the course of the project and served as the decision-making body in charge of project delivery and performance (**Annex 1: Darwin Executive Committee Minutes for all meetings May 2022 - April 2024**). We found this forum to be an excellent platform to keep the project on track and to keep all partners accountable and up to speed.

Both UWA and UWRTI were excellent partners. UWA supported key successes as follows:

- UWA provided a site within QENP, mobilised staff and transported local materials to construct a fence demonstration site (**Described in Annex 8**), making it easy for SFG to deliver training and impart skills to its staff members. UWA continued to maintain and use the fence demonstration site through recruitment of a dedicated casual worker to ensure this demo site remained in good condition. It is now being used to show local and international partners what can be done in Uganda with different fence designs. Most recently the demo site hosted visitors from the **Greater Virunga Transboundary Landscape** to share lessons learnt.
- As part of this project SFG was able to procure 168 smartphones for HWC data collection on a national scale. However, for these to be operationalised required UWA to procure and register 168 sim cards. This was no easy feat for a government institution but they demonstrated the commitment to ensure the project succeeded.
- Trainers' of CWS (community Wildlife Scouts) were supported by UWA to train more than 1,530 wildlife scouts (exceeding the target of 300 set in the project) as part of the project.
- All UWA staff who were trained under this project were solely identified by UWA. However, Space for Giants stressed the importance (wherever possible) of ensuring that gender and social inclusion was considered in all opportunities and that we received candidates from across all 7 of UWA's CAs.

The second partner, UWRTI hosted and provided the necessary conducive environment for learning at the training institute. Additionally, the lecturers of the institute supported and participated in the training. Given the role of the UWRTI in training and capacity building, they were a natural fit for the project with an opportunity to ensure that project learnings will be adopted through the institute for future teachings.

As part of the project, Space for Giants brought in subject matter experts to deliver the best possible outputs for UWA staff and meet international best practice. These included but were not limited to securing GIS training through ESRI (<https://www.esri.com/>), fence training through Instarect LTD (<https://instarect.com/>), data collection with EarthRanger software (<https://www.earthranger.com/>), St John Ambulance and individual consultants who provided training to CWS trainers'.

The project did not offer opportunities or scope to engage with local communities. SFG gave the partners access to the final report document and were requested to review it before the submission. Their reviews and feedback were considered and incorporated into the final version of the report.

SFG, having signed memorandum of understanding (MoU)s with both UWA and the UWRTI and expects to continue its collaboration with these institutions in future whether on the subject matter of this grant or otherwise. We have found both institutions to be highly credible, supportive and committed notwithstanding budgets and other challenges.

3 Project Achievements

3.1 Outputs

Output 1: Improved technical capacity of UWA staff to address HWC (through training and mentorship).

This output was successfully accomplished within the project period, training the anticipated number of UWA staff in the anticipated number of training courses. Following the establishment of the Darwin Project Implementation Executive Committee (responsible for sign-off identified service providers and training content) (**Annex 1: Executive Committee minutes**), SFG commenced with the identification of service providers required.

SFG identified the following service providers (ESRI, Instarect, St. Johns Ambulance, Jonan Muhindo (Private Consultant) and Fred Banura (Lecturer at UWRTI) each developed a course outline for delivery of capacity building that was signed off (**Annex 2: Training Course Outlines**). These included consultants for Electric Fence Construction, Geographic Information Systems (GIS) and CWS Trainers courses. For the EarthRanger course, training was facilitated by SFG, leveraging in-house expertise. Additionally, course materials such as outlines were developed for the participants.

Once identified and scheduled (as per the availability of staff and the facilities of the UWRTI) the training commenced. These training sessions aimed to equip *Trainers of Trainers*, who would then educate other UWA staff. Thus a trainer of trainers approach was used in all the courses to ensure the transfer of knowledge and skills to more personnel involved in human wildlife conflict management.

Four electric fence construction sessions, comprising 2 basic and 2 advanced courses, were conducted between October 2022 and March 2023. Thirty UWA staff (29 male, 1 female) attended each session lasting five days. For GIS courses, four sessions were conducted between October, 2022, and October, 2023. Each seven-day session was attended by 15 UWA staff (14 male, 1 female). As GIS and EarthRanger are interconnected, participants of GIS training were also trained in basic and advanced EarthRanger courses. The training sessions occurred between April, 2023 and September, 2023 with 15 participants in attendance. The CWS Trainers' course trained 15 (11 male, 4 female) participants in two sessions between 20 February - 2 March, 2023 and 26 October - 5 November, 2023, with each session lasting a ten-day period (**Annex 3: Attendance lists for various courses**). A training report was generated after each training (**Annex 4(a): Training reports**), and certificates of attendance were awarded to participants (**Annex 4(b): Sample Certificates awarded to the participants**) (**Annex 4(c): Photos of some training sessions**).

Pre and post training evaluations were conducted for each course to assess knowledge improvement. The pre and post training evaluations of each course indicated 76% improvement in Electric Fence Construction, 142% in using EarthRanger, 77% improvement in using GIS, and 93% improvement in Community Conservation Scout Training. The overall self improvement was 93% which surpassed the 50% target for all the courses (**Annex 5: Summary of Pre and post training scores**). The results of the re-evaluation of the courses affirmed that the acquisition of knowledge and skills were high. In addition, the majority of the trained staff also indicated high confidence in delivering the content of the various training courses (**Annex 19(a): Training course re-evaluation reports**). As such we feel we successfully delivered the intended outcome of Output 1.

Subsequently, mentorship sessions commenced immediately after conducting training for each course. They were conducted online via Google Meet, Whatsapp calls and in person where possible (**Annex 6(a): Mentorship logs, Annex 6(b): Arcgis Mentoring Reports**). This really ensured that participants were constantly forced to practice their skills.

In addition, SFG established a fence demonstration site at Queen Elizabeth Conservation Area (QECA) headquarters. The site was selected by UWA in consultation with SFG. The construction took place after the identification of different types of fences relevant for Uganda. These different fence types were compiled into a fence catalogue that became a reference guide (**Annex 7: Fence Catalogue**). The QECA team helped in identifying sources of local materials and casual staff who participated in the construction. After construction, the fence demo site was formally handed over to QECA management for use and maintenance. A casual labourer was hired to maintain and ensure the site operated well (**Annex 8: Handover letter of completed fence demo site with photos of constructed fence types**).

However, SFG encountered challenges in implementing this output, particularly regarding scheduling conflicts among stakeholders, leading to delays in training delivery for some of the courses. Additionally, online mentorship sessions faced low turnout due to reasons such as poor internet connectivity, busy UWA staff schedules, and participants' reassignments to different stations. To address this, in-person mentorship sessions were scheduled across all CAs in the last quarter of the project, facilitated by SFG staff and focusing on EarthRanger/GIS and Electric fence Construction.

Output 2: Improved HWC data collection and reporting around CAs (through the provision of equipment, standardised data collection, and templates)

This output was successfully met through a series of strategic actions. To ensure effective implementation, we first procured equipment to enhance HWC data collection, which was then provided to the UWA. The equipment included laptops, android smartphones, power banks, GPS units, first aid kits, vuvuzelas, gum boots, solar-powered torches, raincoats, and water bottles. Additionally, fourteen ArcGIS licences to access mapping software were acquired for the participants, facilitating accurate mapping of HWC incidents and subsequent spatial analysis. Notably, EarthRanger software did not necessitate additional procurement, as both the data collection app and server instance are freely available (**Annex 9: Handover Equipment (phones, GPS, laptops and assorted CWS items to UWA)**).

We can confidently assert that the subsequent EarthRanger roll out, a real-time software solution, facilitated data capture and enabled real-time response to incidents, which significantly transformed UWA operations in HWC management. This sentiment was reiterated by CA management during in person visits by the SFG team to each CA in February 2024. From its implementation in 1 July 2023 to Present a total of 1,981 incidents were collected on a standardised data collection model across Uganda (**Annex 22**).

Regarding monthly reports, after the training and sharing of the HWC report templates, it was agreed that the CAs would start reporting using these templates with effect from October, 2023. We achieved 79% of CAs consistently producing monthly reports using the agreed templates (**Annex 10: CA Monthly HWC Reports and Tally of HWC reports**), surpassing the set target of 75% (albeit sometimes the reports were a month or two delayed in being submitted to SFG).

These reports provided UWA management with comprehensive insights into the on-the-ground realities of HWC cases, their statistics, and their spatial distribution. However, these achievements did not happen without some challenges. For example, there were delays in UWA acquiring the SIM cards for use in the smartphones, and UWA were also unable to provide data bundles for the collection of HWC data using EarthRanger. To salvage the situation SFG stepped in and provided data bundles enabling transmission of data collected from the field to the central EarthRanger server. Additionally, some CA managers and wardens did not immediately support the use of EarthRanger as they were already using other applications for data collection. There were also delays in the submission of the HWC monthly reports, and the SFG team had to continuously follow up with the trained staff to submit reports. SFG had to conduct physical mentoring in all the CAs, where the top leadership rallied to support the program.

Finally, SFG played a pivotal role in ensuring the quality of the HWC database and the reliability of the incoming data for decision-making purposes.

Output 3: Increased involvement of communities in preventing HWC through the CWS

UWA uses CWS who play a crucial role in reporting and responding to HWC incidents. During the project, Trainers of CWS (trained by SFG), supported by UWA, trained more than 1,530 community scouts to better handle HWC incidents, exceeding the initial target of 300 scouts under the project (baseline). However, there were challenges in the means of verification for this indicator. For example, we were unable to obtain the UWA HWC intervention report logs and all the scouts' training reports. Only one CWS training report was received from MFCA (**Annex 16: Evidence of some CWS trainers' activities**). To gather some more information SFG conducted a training re-evaluation survey, in which we asked the trainers of community scouts how many scouts they had trained, and this is how we arrived at the figure of 1,530 scouts (**Annex 19: Course Re-evaluation Report**).

For consistency in HWC monthly reports, we achieved 79% of CAs consistently producing monthly reports using the agreed templates outlined in **Annex 10: CA Monthly HWC Reports and tally**. Another challenge we faced with these reports was that UWA was unable to accurately quantify the number of reports coming from community wildlife scouts interventions as opposed to their own UWA CA staff.

3.2 Outcome

Outcome: Improved HWC management by UWA in and around its conservation area estate.

The project succeeded in improving HWC management across Uganda's protected areas. Where electric fences are under construction the increased capacity and number of skilled UWA personnel ensured that high quality, context specific fences were constructed to benefit local households. Improved data collection provided a much clearer picture of where the key HWC hotspots were around each CA. In hindsight we might have adopted different, more appropriate indicators as part of measuring the outcome of this project. I.e. Improved understanding of HWC hotspots around CAs because we cannot control what UWA does or does not spend its money on in order to improve management of HWC and over what timeline. We knew that UWA had financing from the World Bank to construct fences which is the reason we adopted the indicator below.

Indicator 1: 25% increase in parish households within 3 km of new electric fences constructed by the end of year 2.

From 2018 when the first electric fence was introduced in Uganda to March 2022, a total of 68 km of electric fence had been constructed both in Queen Elizabeth and Murchison Falls conservation areas; that is 43 km in QECA and 25 km in MFCA. The estimated number of households living within 3 km of the neighbouring parishes who benefited from the constructed electric fence before the project started were **16,973** (using the Uganda projected population of 2021 by Uganda Bureau of Statistics). By the end of March 2024, the number of households benefiting from completed electric fences had increased to 35,403 (this is 19,321 households in MFCA and 16,082 in QECA) after an additional 42 km were constructed in QECA (22 km) and MFCA (20 km) during the life of the project. This represented an 109% increase in the number of households benefiting from the electric fences alone (**Annex 25 - Computed households benefiting from completed electric fences before and after the Darwin Capacity building project**) & (**Annex 26: Sample Electric fence construction and maintenance reports**). The conclusion that can be cautiously drawn from this is that food security, improved livelihoods, household incomes and social harmony at household level increased resulting in decreased poverty levels similar to other impact studies conducted (**Annex 14: Uganda HEC Impact Report 2022**). The above resulted from the increased capacity of UWA staff to participate in fence construction since all the electric fences have been constructed by UWA with technical support from SFG.

Indicator 2: 50% increase in trained staff ability to perform tasks related to HWC management.

The overall improvement in abilities of trained staff to perform tasks was 93% for all the courses. The aggregated scores for each course were as follows; 76% for fence construction, 142% for EarthRanger, 93% for CWS trainers and 77% for ArcGIS (**Annex 5: Summary of Pre and post training scores**). The increased ability translated to more community scouts being recruited and trained. For example, at the end of the project 1,530 CWS had been trained by CWS trainers to better handle HWC incidents. The UWA staff were also able to collect, analyse and report on HWC incidents. This helped UWA management to prioritise HWC mitigation measures and compute in time the compensation claims where applicable. **Annex 24** also provides detailed feedback of retention of information by the participants.

3.3 Monitoring of assumptions

SFG continued to monitor assumptions throughout the project period and occasionally discussed with project partners at the Darwin Executive Implementation Committee meetings.

Assumption 1: The Covid pandemic will not adversely affect the delivery of the project, including in-person training of participants and travelling into and within Uganda.

The World Health Organization's Covid-19 trends for Uganda consistently indicated a declining trend in new cases, with zero cases reported by December 2023. However, the project remained vigilant in adhering to WHO Covid-19 prevention measures throughout its activities. These measures included social distancing and regular hand washing at designated hand washing stations. The project was ultimately not negatively impacted although the start was slow as a result of the pandemic.

Evidence <https://www.who.int/countries/uga/>
<https://data.who.int/dashboards/covid19/cases?m49=953&n=c>

Assumption 2: Political stability and political support for national HEC strategy remain strong

Uganda remained politically stable. The Government of Uganda, particularly through the Ministry of Tourism, Wildlife and Antiquities, and UWA, has shown unwavering dedication to addressing HEC issues and enhancing community livelihoods. UWA has actively elevated the importance of HWC management on various platforms, including the recent recognition of HWC Warden Ms. Sharon for her outstanding efforts in mitigating human-wildlife conflicts in Uganda. This recognition underscores UWA's steadfast commitment to ensuring the strength and effectiveness of the national HWC strategy. (**Annex 11: Wildlife Policy and National HWC Strategy**).

Assumption 3: Trained UWA staff will not leave their employment with UWA during the next three years.

According to the retention survey conducted at the end of the project, all the staff trained under the project were still employed by UWA. The majority are still young, capable and having opportunity for employment contracts renewal when the existing ones expire.

Assumption 4: Training of UWA staff will improve their proactive management and application of skills at the CA level

Staff trained in fence construction at QECA not only successfully initiated the construction of two additional fence sections but also completed a total of 22 km of fencing with continued guidance and mentorship from

SFG technical staff. Furthermore, QECA staff trained in EarthRanger effectively expanded the EarthRanger data model by incorporating additional data collection fields, thereby enhancing the capacity to capture more comprehensive data related to human-wildlife management.

Moreover, in Kidepo Valley Conservation Area, trainers of community wildlife scouts successfully trained 520 wildlife scouts in 2023 and an additional 80 in 2024. Similarly, in Mt Elgon National Park, staff conducted training sessions for 150 community wildlife scouts and an additional 12 UWA staff members in HWC management, thus further bolstering proactive management efforts within the conservation areas (**Annex 12 - Community wildlife scouts training picture in KVCA, MFCA and KCA**).

Assumption 5: Improvements in CWS operations help to secure CAs in Uganda through improved research and monitoring and engagement with the community on HWC

Improvements in CWS operations played a crucial role in safeguarding CA's in Uganda by enhancing research and monitoring efforts and fostering community engagement in HWC interventions. By equipping UWA staff and CWS with comprehensive technical knowledge and leadership skills, coupled with necessary equipment, their capacity to effectively carry out their mandates was bolstered. This led to a more proactive approach in addressing HWC incidents, such as elephant crop-raiding, and enabled better prioritisation of interventions in HWC hotspots by UWA. Additionally, the improved training and equipping of CWSs resulted in enhanced reporting, timely responsiveness by UWA HWC units, and reduced damage to community livelihoods, particularly for smallholder farmers living on the borders of CA's. Ultimately, these enhancements in CWS operations contributed to the sustainable management of CA's, fostering harmonious coexistence between wildlife and communities in Uganda.

However, tracking the overall contribution of CWS to HWC management was difficult as they usually carry out operations with UWA staff. Therefore, we were only able to track the combined efforts of CWS and UWA staff in the collection of HWC data. This data showed a total of 1,981 HWC incidents collected since July 2023 (**Evidence in Annex 22: Collated Uganda HWC Incidents 2023 - 2024**). It is hoped that UWA will utilise the enhanced data capabilities to monitor HWC trends and appropriately plan interventions, such as paying compensation claims.

Assumption 6: Data and analysis allows for understanding of HWC dynamics and helps inform management interventions.

By utilising the EarthRanger training delivered under this project, UWA now conducts comprehensive data analysis on HWC cases collected from the field, identifies hotspots, and generates reports to guide management interventions such as implementation of the compensation scheme. These reports, produced by EarthRanger administrators on a monthly basis, serve as crucial tools for decision-making. Notably, UWA has already leveraged data and analysis of HWC and used the information in the processing of compensation claims.

4 Contribution to Darwin Initiative Programme Objectives

4.1 Project support to the Conventions or Treaties (e.g. CBD, Nagoya Protocol, ITPGRFA, CITES, Ramsar, CMS, UNFCCC)

The project contributed to the following:

UN SDGs

- **SDG 2 (Zero Hunger)** - The project contributed to this goal by improving the protection of smallholder livelihoods by building the capacity of UWA staff in electric fence construction. The communities affected by HWC in Uganda still heavily depend on smallholder agriculture for food and livelihood security. Crop destruction, the major form of HWC, affects food security at the household level. In similar projects we have seen transformational impacts on household food security (**Evidence in Annex 14: Uganda Human Elephant Impact Report 2022**) and we extrapolate this to this existing project.
- **SDG 4 (Quality Education)** - The project contributed to this goal by enabling access to information and improved skills transfer on HWC and CA management. The project increased the number of people with relevant technical skills by training UWA staff in GIS, EarthRanger, electric fence construction, and community wildlife scouts training in problem animal behaviour, human-wildlife conflict mitigation measures, first aid and entrepreneurial skills. The project had a wider impact by transferring knowledge and skills to others. For example, the CWS trainers were able to transfer knowledge and skills to over 1,530 CWS and during fence construction, communities who participated in provision of unskilled labour gained knowledge and skills that will help them to gainfully be employed in the same industry.

- **SDG 15 (Life on Land)** through protection of biodiversity. Improved interventions such as electric fencing will help to shape positive attitudes amongst local households (who normally suffer at the hands of wildlife) and gradually build tolerance. This will reduce retaliatory killings of wildlife.
- **SDG 16 (Strong Institutions)** by building capacity within UWA and UWRTI to carry out their mandates. SFG not only helped train over 15 UWA staff members to improve their capacity of carrying out their jobs but the project also helped implement and adopt new software to centralise and manage HWC (Earthranger) and also helped to institutionalise new templates for data collection. UWA is much better off now to manage HWC on a national scale.

NATIONAL BIODIVERSITY STRATEGY AND ACTION PLAN II (2015-2025)

- This project conformed with Uganda's NBSAP II, specifically Strategic Objective:
 - **Objective 1: To strengthen stakeholder coordination and frameworks for biodiversity management**
 - By creating closer synergies between UWA and the UWRTI to build capacity and co-deliver initiatives - such as this entire grant.
 - **Objective 2: To facilitate and build capacity for research, monitoring and information management on biodiversity**
 - By introducing new software that UWA did not previously utilise for this purpose (i.e. Earthranger and ArcGis) to improve data management on a national scale.
 - **Objective 3: To reduce and manage negative impacts while enhancing positive impacts on biodiversity.**
 - By training and upskilling UWA staff in HWC mitigation measures the project contributed to reducing negative impacts on local livelihoods and biodiversity.

NATIONAL DEVELOPMENT PLAN (NDP) I, NDPII, NDPIII

- The National Development Plan (NDP) I, NDPII, NDPIII and its overarching goals of achieving increased household incomes and improved quality of life of Ugandans by reducing HWC through electric fencing and training/equipping of community scouts.

UGANDA WILDLIFE POLICY 2014

- The Uganda Wildlife Policy (2014) which provides a framework to mitigate human wildlife conflict eliminating IWT, enhancing community benefits from conservation and promoting private-sector enterprises in wildlife conservation. This was achieved through ensuring the involvement of community scouts as beneficiaries of our project.

UGANDA NATIONAL STRATEGY FOR MANAGEMENT OF HUMAN WILDLIFE CONFLICTS

- The Uganda National Strategy for Management of Human Wildlife Conflicts (2019) with its overarching goal to contribute to harmonious coexistence with wildlife, improved community livelihoods and national development. Key components of this strategy which this Project contributed to included:
 - Conflict mitigation and management
 - Capacity development
 - Community livelihoods
 - Education and awareness
 - Research and monitoring
 - Coordination and collaboration

POST 2020 GLOBAL BIODIVERSITY FRAMEWORK

- Target 14 - by minimising conflict with wildlife and;
- Target 19 - by enhancing information and data management for more accurate and context specific decision making

4.2 Project support to biodiversity conservation and poverty reduction

Conservation in Africa is increasingly about building tolerance, especially in countries like Uganda with well defined hard boundaries and rapidly growing populations. This project has tackled a specific theme around the capacity building for monitoring and reporting of HWC incidents as a way of improving the understanding about HWC hotspots across Uganda. As such our impact is more indirect than say the removal of snares or supporting farmers with training to increase crop yields.

Nevertheless we feel this project contributed to securing food security for a minimum of 35,403 households (18,403 new households during the project period) to varying degrees by training UWA personnel to construct, maintain and monitor context specific electric fences on the boundaries of MFCA and QECA. A previous impact study conducted in 2022 in QECA (**Annex 14**) demonstrated that 60.9% of households

reported an increase in harvests and 57% indicated that land prices had increased significantly in the area. Most importantly 77% indicated that they now had a positive attitude towards the park and its wildlife (148% increase from the baseline survey). Given this project worked in the same geographic area we feel we can draw parallels to these important data.

Similarly the training of CWS trainers' trained more than 1,530 CWS and this is expected to continue beyond the life of the project. The community wildlife scouts help prevent HWC occurrences in their communities using the provided equipment and skills. Since CWS are technically volunteers, they were also equipped with entrepreneurial skills so as to promote self-reliance by initiating income generating activities. As such we feel we have directly contributed to these households also (**Annex 12**) - not just to the 300 community scouts who were provided equipment to carry out their job.

As far as impacts on biodiversity - the benefit of this project is again largely indirect. Severe HWC regularly leads to retaliatory killing of key wildlife species (and as mentioned above a lack of tolerance and negative attitudes towards conservation activities and protected areas as a whole). HWC is often the most emotive subject for local communities and this project is a demonstration by UWA that it takes HWC seriously, is willing to improve its processes and capacity to understand HWC better and also to include local communities themselves directly in addressing this challenge (through community scouts).

4.3 Gender equality and social inclusion

While UWA had the ultimate control of who was selected for which training SFG did proactively advise UWA on the importance of equitable selection of the participants to ensure all gender and socially disadvantaged persons were considered for training. Due to the male-dominated nature of the organisation, it was not possible to achieve a 50% gender balance. However, all participants selected had equal opportunities for participation in the capacity-building training sessions. For example, one lady who was breastfeeding was given an opportunity to attend the ArcGIS training despite the inherent challenges.

Please quantify the proportion of women on the Project Board ¹ .	The Darwin executive committee consisted of two females and four men, resulting in a 33% representation of women on the committee.
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 .	The UWA Top Management comprises 8 individuals of which 1 is female. The UWRTI executive Director is a male individual. Within the project equal opportunities were given to male and female gender to participate in the training sessions; however, due male-dominated nature of UWA, 54 (90%) of males versus 6 (10%) of females attended the training (Annex 15: Gender Analysis of UWA).

4.4 Transfer of knowledge

The project did not generate any “new” knowledge however there was ample knowledge transferred to UWA staff, to CWS and to UWRTI lecturers. In particular:

- Through the creation of learning content for specific courses (Earthranger, ArcGIS, Electric Fencing etc.) which have all been handed over to the UWRTI to be included (where appropriate) in their curriculum going forwards.
- Representatives from a number of institutions, including parliamentarians and school groups visited the fence demonstration site at QECA to understand the different types of fencing available for HWC mitigation in order to lobby for such interventions in their own respective areas where they encounter HWC.
- CWS trainers shared knowledge generated by the project's capacity building activities to trainees, as well as the general public. The CWS trainers conducted formal training sessions, but also disseminated information through school outreach presentations and radio programmes. This helped in transferring the knowledge to a wider audience. Information shared in these public

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

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

programmes included survival skills in the presence of problem animals and how to provide first aid to victims of wildlife conflict.

For example in MECA, the CWS trainers trained 15 UWA staff on how to handle HWC incidents. They also sensitised 6,500 males and 8,500 females in 8 secondary schools. In Kibale National Park, the CWS trainers conducted 16 radio talks to disseminate the knowledge gained during CWS training (**Annex 16: Photo evidence of the CWS trainers activities**).

During fence construction in QECA and MFPA, communities participated in various electric fence construction activities, including surveying the fenceline, clearing, pole planting and alignment, and wiring. As a result, by the end of an electric fence construction, these community members gain enough knowledge to maintain fences independently (**Annex 17: Photo evidence of communities working on the fence with UWA staff**).

4.5 Capacity building

Ms. Vanice Mirembe, the Human Wildlife Conflict Manager at UWA headquarters is a member of the World Bank Project to ensure the human wildlife conflict component of the project is well implemented. Ms Mirembe was the Project Coordinator for the Darwin Project.

Ms. Sharon Kagwisa Kamuganga, the Warden responsible for human wildlife conflict at UWA, was among the women recognised and given a medal during the Women's Day 2024 celebrations for her outstanding excellence in promoting human wildlife coexistence. Ms. Sharon has been part of the project from the beginning. She is also a technical member of the human wildlife conflict Compensation Verification Committee.

Both are part of the [Human Wildlife Conflict Coexistence Network](#).

5 Monitoring and evaluation

During the project, the main change was related to the logframe and setting of SMART indicators that were measurable. The changes are summarised below:

Originally, the outcome aimed at improving HWC management by UWA in and around its conservation area estate with 3 key indicators:

- 25% increase in the number of households benefiting from UWA HWC interventions
- 25% reduction in HWC incidents around protected areas with active interventions.
- 25% increase in trained staff ability to perform tasks related to HWC management

These indicators were deemed problematic to measure and not time bound. In the revised final log frame, the outcome remained the same, but the SMART indicators were updated to reflect a 25% increase in the number of parish households within 3 km of new electric fences constructed, benefiting from UWA HWC interventions by the end of year 2, and a 50% increase in trained staff ability to perform tasks related to HWC management. This allowed actual measurable improvements and project impact and SFG was grateful for the guidance of the reviewer to facilitate this change.

The other major comment was on the original Output 3 which was deemed poorly defined. With the support of the reviewer this was changed to "300 CWS benefiting from skills transfer from UWA trainers by the end of year 2". The revised Output 3 shifted focus to increasing community involvement in preventing HWC through the CWS, maintaining the same SMART indicator but adding revised means of verification that included the UWA HWC intervention report log, monthly HWC reports, and scout training reports. In doing so, we were able to track the training of 1,530 community scouts who benefitted from skill transfer.

The project made a very deliberate effort to collate and document every single intervention, training, equipment handover etc. in formal project reports. We feel that we achieved an acceptable standard that captured all important changes and would be considered both robust and comprehensive.

Nevertheless it was not possible to fully track all information required under the project. For example:

SFG was unable to differentiate between UWA staff and community scouts in the reporting of HWC incidents and so it was impossible to track exactly how the transfer of knowledge by UWA trainers (trained under the grant) actually resulted in active participation in HWC mitigation efforts by community scouts.

A key aspect of the M&E system involved the creation of an overarching project implementation database, which encompassed various components such as the log frame, activities, delivery schedule, reports, and metrics. Additionally, the pre and post-evaluation assessments conducted for each training activity provided valuable insights into the uptake of taught materials, while regular remote mentorship training exercises served as a measure of continuous learning. There were also whatsapp groups created for each

course. They were very useful in following up agreed actions for each course and submission or sharing documents with the relevant group members.

Furthermore, monthly mapping tasks for individuals trained on GIS skills were indicative of their willingness to develop further skills. The deployment of EarthRanger facilitated real-time monitoring of HWCt cases across CA's, with all project reports shared with UWA. An important lesson learned was the significance of standardising data collection methods within an organisation.

Additionally, practical assessments by trainers and anonymous participant end-of-course evaluations further enhanced the M&E process, soliciting feedback on what worked well, areas for improvement, and the applicability of skills acquired. Feedback from CA management and participants was continually sought at regular intervals to gauge the impact of the training on job performance and career development (**Annex 24**).

Reflecting on the project's lifespan, the M&E system proved to be practical and invaluable in providing useful feedback to partners and stakeholders, enabling informed decision-making and continuous improvement. There have not been any external evaluations conducted during the project period but not for any particular reason. We are confident in the project that we delivered and the value add provided to UWA.

Overall, in order to track progress of implementation of project activities both monthly and quarterly reports were prepared by SFG and shared with the Executive Committee members (**Annex 18: Project monthly and quarterly reports**).

6 Actions taken in response to Annual Report reviews

The project received a number of comments from the reviewer. The main comments were related to the LogFrame which were adequately addressed with the BCF team. There were also a number of comments that did not require a response. The comments were discussed with the partners.

The two comments that needed addressing during the next Annual Report were as follows:

- That SFG establishes the criteria used to select/recruit, the gender of the trained CWS and training content covered.
 - This was established through the re-evaluation survey of the CWS trainers course. It was found that UWA selected the scouts in consultation with local leaders and 14% of the CWS trained were females and the training content was largely derived from topics covered during Darwin capacity building course.
 - Re-evaluation reports for fence construction, ArcGIS and Earth Ranger courses were also done as suggested by the reviewer (**Annex 19: Re-evaluation reports - CWS trainers, fence construction, ArcGIS and EarthRanger**).
- Additionally, gender analysis for the partner institutions was also done (**Annex 15 - Gender analysis of stakeholder partners**).

7 Lessons learnt

What worked well?

- The training sessions were successful in both scheduling and the actual training/facilities. Great trainers, good context specific training outlines and very practical sessions.
- The project team ensured that the training sessions were participatory, allowing trainees to actively engage in the learning process.
- Before the training, the team sent out pre-training assessments to gather participant feedback, which helped tailor the training to their needs. This approach contributed to the effectiveness of the training and ensured that the trainees gained relevant knowledge and skills.
- The purchase and provision of equipment to boost morale and achieve training outcomes.
- The scope of the project was spot on for the context and needs of UWA.
- The project implementation committee was excellent for accountability and project review
- Physical mentoring on site was critical.
- Bringing in subject matter experts to deliver specialised training.

What didn't work well this past year?

- Gender equity was challenging due to the organisation's male-dominated workforce, making it difficult to meet the recommended ratio of females in the training program.
- In the courses, the participants felt that the training duration was short and more time needed to be scheduled for the practical courses.
- Online mentorship sessions sometimes lacked a quorum due to challenges with the internet at PA's, busy work schedules etc.

- Collaboration with other NGOs involved in similar activities to achieve economies of scale was difficult to achieve due to their reluctance in partnering with us.

If you had to do it again, what would you do differently?

- Increase the duration of training workshops.
- Employ a full time mentor in Uganda with general subject knowledge of all training materials covered
- Potentially reduce the scope to focus on one subset of this particular project e.g. just focus on EarthRanger training and capacity building or focus just on a single CA to demonstrate what a well thought out pilot project could achieve.

What recommendations would you make to others doing similar projects?

- Field work training elements are critical for adoption of best practice.
- Try and keep a manageable project scope and not be too ambitious as the funding available is not sufficient to be overly ambitious.
- Touch base with other in-country partners both before and after the award of the project to determine if there are synergies to leverage expertise and funding and to build on lessons learnt and progress made (assuming they are happy to share information etc.).

What are the key lessons?

- An active and responsive Executive Committee is key to ensuring the project is delivered on track.
- Baseline assessments prior to project implementation are absolutely critical.
- Being proactive to approach the funder/BCF if some assumptions change or if the delivery of some project components are no longer relevant.
- Ensuring that the logframe is agreed upon at the earliest convenience (in this project the logframe was still being edited after the first Annual report review which was very late).

8 Risk Management

In the past 12 months, the project identified two new significant risks and made adaptations to address them. The risks were terrorism, added on October 18, 2023, after a terrorist attack in QENP (resulting in the tragic loss of life of 2 tourists and their guide) and a social political risk, added on August 8, 2023, due to the World Bank suspending future funding for projects in Uganda over human rights violations linked to the recent anti-homosexuality law. These risks were new and significant, and the project leadership had to consider each on their merits to determine what action was required.

In response to the terrorism risk, SFG worked closely with UWA and UWRTI to ensure the safety of project personnel and participants to the best of our abilities. We kept updated with local media reports, secured direct communications with the UWA leadership and followed the advice of local authorities. We briefly considered changing the location of the training courses going forward (to another location within the country) but the UWA management and local authorities indicated that it was safe to proceed as planned.

For the social political risk, SFG recognized the potential jeopardy to the project due to the World Bank's suspension of funding. While specific mitigating actions were not ultimately required the Project Implementation Committee did discuss the matter. Given that the World Bank and the Government of Uganda engaged in active mitigations in early 2024 it was deemed to affect the delivery of the project at this stage but ultimately (IF the World Bank maintains the suspension of its funding post project period it may be that SFG trained UWA staff on electric fencing will be limited in the utilisation of their newly taught skills.) (**Annex 20: Risk Register**).

9 Sustainability and legacy

Space for Giants made every effort to ensure the sustainability of the project from the outset. For example, it deliberately partnered with the UWRTI (as the mandated organisation to conduct training and capacity building) to ensure that the learnings, training content and materials from the project would be available to the UWRTI to use in future.

In addition, the project adopted a "train the trainer" approach not only to ensure the project was economical but also to ensure that it is scalable by UWA themselves as an institution. This has been demonstrated to be effective through the CWS.

Space for Giants is currently engaging with partners in the conservation space in Uganda to ensure continuity. For example Space for Giants is currently discussing the streamlining of all EarthRanger instances at key CAs into a more centralised format to ensure maximum benefit to each conservation area (these discussions are taking place with the Uganda Conservation Foundation who support EarthRanger in Murchison, Queen Elizabeth and Kidepo).

The establishment of a Fence Demo site was another intervention that will ensure that knowledge and capacity can continue to be built. The demo site has brought the best learnings from Kenya to Uganda and will remain available at Queen Elizabeth HQ for UWA to continue training future fence staff.

As part of the project Space for Giants has rolled out Earthranger on a national scale and kickstarted data collection through the provision of 168 smartphones. The UWA top management have pledged to ensure the HWC EarthRanger instance be installed on other smartphones that are present in the organization for data collection. This would increase the numbers of phones available for HWC data collection. It further pledged to provide finances for data bundles and necessary security for the HWC data post project.

On utilisation of knowledge and skills gained by the trained staff, UWA top management pledged to ensure the human resource directorate gets all the names of the trained staff and ensure proper placement during staff transfers.

Finally, SFG has a long term MoU with UWA and the provision of technical capacity is part and parcel of this agreement. SFG employs two full time fence technicians in Uganda and therefore ongoing mentorship and guidance on fence construction shall continue. SFG will also continue to strengthen the use of EarthRanger in HWC management through increase in coverage and availability of quality data for decision making for the foreseeable future and we hope to secure future funds to maintain this programme.

The project has laid excellent foundations and we believe will leave a strong legacy for a turning point in how information is gathered, stored and managed in the HWC space in Uganda.

10 Darwin Initiative identity

All materials used during the implementation of the project including reports, templates, attendance lists, and certificates included the Darwin Initiative logo. Both the partners, UWA and UWRTI were well acquainted with the source of funding, as it was communicated to management at the time of project launch. Additionally, the project was implemented as an independent project within SFG and UWA, with a designated project leader and a project implementation committee.

The progressive achievements of the project such as training sessions, mentorship programmes and activities undertaken were usually posted on social media, in particular LinkedIn and X (formerly Twitter) where SFG has a good following (BCF linked into posts where possible to highlight their contribution). Examples of these postings included physical EarthRanger and fence construction mentoring sessions in all 7 CAs and training trainers of community wildlife scouts (**Annex 21: Darwin Identity**).

Nevertheless, beyond UWA and the UWRTI (and ofcourse conservation partners in country who follow what type of funding is awarded in country) there will be limited understanding or knowledge of the BCF.

SFG anticipated that UWA, as a partner in this project, would play a significant role in promoting and disseminating information about the project contributions in enhancing the skills of its staff members in managing human-wildlife conflict and to other partners who they work with.

11 Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?	Yes
Have any concerns been investigated in the past 12 months	No
Does your project have a Safeguarding focal point?	Yes- Safeguarding Lead - Integrity Blue Consulting firm who is the SFG Corporate Governance Advisor Darren [REDACTED]
Has the focal point attended any formal training in the last 12 months?	Yes
What proportion (and number) of project staff have received formal training on Safeguarding?	Past: 100% [4] Planned: N/A
Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses.	
None	

12 Finance and administration

12.1 Project expenditure

Project spend (indicative) since last Annual Report	2023/24 Grant (£)	2023/24 Total actual Darwin Initiative Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				Cheaper costs of consultancy services in year 2.
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Others (see below)				
TOTAL	£75,708.10	£75,708.10		

Staff employed (Name and position)	Cost (£)
Maurice [REDACTED], Managing Director of Conservation	[REDACTED]
Clarine [REDACTED], Conservation Monitoring Coordinator	[REDACTED]
Wellington [REDACTED] Monitoring and Evaluation Officer	[REDACTED]
Samuel [REDACTED], Human Wildlife Conflict Manager	[REDACTED]
Justus [REDACTED], UWA Liaison Officer	[REDACTED]
Annie [REDACTED], Grant Coordinator	[REDACTED]

Capital items – description	Capital items – cost (£)
None purchased in Year 2	-
TOTAL	-

Other items – description	Other items – cost (£)
Audit Costs	2,500
TOTAL	2,500

12.2 Additional funds or in-kind contributions secured

Source of funding for project lifetime	Total (£)
Space for Giants match funding from internal sources Proposal Indicated GBP 46,260.55	46,999.66
TOTAL	46,999.66

Source of funding for additional work after project lifetime	Total
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	(£)
Space for Giants will continue to support the project technically at a cost of GBP 1,589 per month over the next 9 months.	14,301.00
TOTAL	14,301.00

12.3 Value for Money

Space for Giants considers this project to have been excellent value for money. The investment of GBP [REDACTED] has essentially resulted in the training and establishment of a national HWC Framework including software, capacity and equipping. We believe that there are few examples out there where the same has been achieved for the same amount of money in the same reporting period. Space for Giants acknowledges that this is still work in progress but the foundations laid within this project are extremely valuable to be built upon by us, UWA or other conservation partners in future.

The investment in enhancing the technical capacity of UWA staff to address HWC through a 'trainer of trainer' model has been particularly impactful. This approach not only optimised resource allocation but also ensured sustainable capacity building by empowering trained staff to further disseminate knowledge and skills across various conservation areas. This was evident from the Trainers of CWS who instead of the target of 300, reached 1,530 individuals. We consider this a major success.

By utilising this model, the project was able to extend its reach and influence, effectively training personnel across the entire country. Furthermore, the focus on improving HWC data collection and reporting has yielded tangible results, with enhanced accuracy and reliability of data, thereby informing better management strategies. The project's allocation of resources, coupled with the achievement of key indicators and targets, underscores its effectiveness in advancing conservation efforts in Uganda. This comprehensive and strategic approach demonstrates a favourable return on investment, making the project an exemplary case of delivering substantial value for money in conservation initiatives.

13 OPTIONAL: Outstanding achievements of your project (300-400 words maximum). This section may be used for publicity purposes

Annex 1 Project's original (or most recently approved) indicators of success, including indicators, means of verification and assumptions.

Note: Insert your full indicators of success. If your indicators of success have changed since your application and was approved by a Change Request the newest approved version should be inserted here, otherwise insert the indicators of success.

Project summary	SMART Indicators	Means of verification
Outcome: Improved HWC management by UWA in and around its conservation area estate	0.1 25% increase in no of parish households within 3km of new electric fences constructed, benefiting from UWA HWC interventions, by the end of year 2. 0.2 50% increase in trained staff ability to perform tasks related to HWC management	0.1 Fence construction reports 0.2 Collated self evaluation scores
Output 1 Improved technical capacity of UWA staff to address HWC (through training and mentorship)	1.1. 14 individuals trained on GIS/SMART/ER by the end of Year 2 (broken down by CA, Gender) 1.2. 14 individuals trained on Community Scout Training Guidelines by the end of Year 2 (broken down by CA, Gender) 1.3. 30 individuals trained on electric fence construction by the end of Year 2 (broken down by CA, gender) 1.4. 50% self-improvement scores for all trained individuals by the end of Year 2	1.1 Training reports with associated attendance sheets, photographs & self evaluation scores 1.2 Self improvement evaluations post training courses 1.3 Training reports, certificates handed out, capacity assessment reports, personal improvement scores, training and course materials, dated photographs. 1.4 Training reports, certificates handed out, capacity assessment reports, personal improvement scores, training and course materials, dated photographs & Self evaluation scores.
Output 2 Improved HWC data collection and reporting around CAs (through the provision of equipment, standardised data collection, and templates)	2.1 25% increase in data collected by Community Wildlife Scouts and UWA Staff around CAs by the end of Year 2. 2.2 75% of CA's consistently produce monthly reports using agreed templates by the end of Year 2. 2.3 All equipment is handed over to UWA by the end of Year 1	2.1. Monthly & Annual UWA Reports on HWC incidents 2.2. Copies of CA HWC Monthly Reports 2.3 Procurement receipts, UWA registration details & Copies of handover of equipment to CAS & Handover Letters
Output 3 Increased involvement of communities in preventing HWC through the CWS	3.1 300 CWS benefitting from skills transfer from UWA trainers by the end of year 2	3.1 UWA HWC intervention report log, Monthly HWC reports, scout training reports
Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)		
1.1.1. Identify consultants to develop training courses & sign contracts 1.1.2. Fence Construction Training Outline/Overview 1.1.3. GIS Training Outline/Overview. 1.1.4. SMART/Cyber-tracker/ER Training Outline 1.1.5. Executive Committee Sign Off on all training content		

- 1.2.1. Develop designs based on various needs for 15-20 types of demos
- 1.2.2. Agree location for the construction of 15-20 fence demos
- 1.2.3. Procure material & delivery to site
- 1.2.4. Construct demo fences

- 1.3.1. Identify 14 x Monitoring and Research Department Staff to be trained on GIS/SMART
- 1.3.2. Identify 14 x Community Conservation Department Staff to be trained on Scout Training Guidelines
- 1.3.3. Identify 30 x UWA Staff to be trained on Electric Fence Construction

- 1.4.1. Training Schedule Development

- 1.5.1. Electric Fence Construction - Basic Course (15 pax) (2 x 5-day courses total)
- 1.5.2. Electric Fence Construction - Advanced Course (15 pax) (2 x 5 day courses total)
- 1.5.3. SMART/Cyber-tracker/ER Training Course (4 x 7-day courses total)
- 1.5.4. ARCGIS Training Course (4 x 7-day courses total)
- 1.5.5. Community Conservation Scout Training Course (2 x 10-day courses total)

- 1.6.1. Develop a mentorship template/format
- 1.6.2. Develop a mentorship schedule
- 1.6.3. Delivery of ongoing mentorship

- 2.1.1. Develop and Trial Standardised methodology (both via SMART/Cybertracker and paper-based)
- 2.1.2. Developing Reporting Templates
- 2.1.3. Train staff in use of equipment and data collection software

- 2.2.1. Purchase CA Equipment (140 x smartphones, 70 x GPS Units, 14 x laptops)
- 2.2.2. Purchase 4 x ARCGis Licences
- 2.2.3. Purchase UWA Scouts Field Equipment

- 3.1.1. Monthly compilation of data collection from CAs

Important Assumptions

1. Trained UWA staff will not leave their employment with UWA during the next 3 years
2. Training of UWA staff will improve their proactive management and application of skills at CA level
3. Improvements in CWS operations helps to secure CAs in Uganda through improved research and monitoring and engagement with community on HWC
4. Data and analysis allows for understanding of HWC dynamics and helps inform management interventions
6. The Covid pandemic will not adversely affect delivery of the project, including in-person training of participants and travelling into and within Uganda
7. Political stability and political support for national HEC strategy remains strong

Annex 2 Report of progress and achievements against final project indicators of success for the life of the project

Project summary	SMART Indicators	Progress and Achievements
<p>Outcome Improved HWC management by UWA in and around its conservation area estate</p>	<p>0.1 25% increase in no of parish households within 3km of new electric fences constructed, benefiting from UWA HWC interventions, by the end of year 2.</p> <p>0.2 50% increase in trained staff ability to perform tasks related to HWC management</p>	<p>There was an increase of 109% in the number of households that benefited from construction of electric fences in 2/7 CAs managed by UWA. At the beginning of the project in April 2022, 16,973 households were benefiting from 102 km of electric fence. By March 2024, the number of households had increased to 35,403 households after an additional 44 km were constructed both in QECA and MFCA conducted by staff trained under this grant.</p> <p>The 60 UWA staff trained (original target was 58) in various courses gained different knowledge and skills in the management of human-wildlife conflict. There was a 76% aggregated average increase in knowledge and skills among the 30 staff trained in electric fence construction. In EarthRanger, there was a 142% aggregated average increase in knowledge and skills among 15 participants. For ArcGIS, the aggregated average increase in knowledge and skills was 77% at the end of all the courses among the 15 participants, while the CWS trainers gained an aggregated average increase of 93% among 15 participants. Overall the increase was a 93% increase across the board.</p>
<p>Output 1. Improved technical capacity of UWA staff to address HWC (through training and mentorship)</p>	<p>1.1 14 Individuals trained on GIS/SMART/ER by the end of Year 2 (broken down by CA, Gender)</p> <p>1.2 14 Individuals trained on Community Scout Training Guidelines by the end of Year 2 (broken down by CA, Gender)</p> <p>1.3 30 Individuals trained on electric fence construction by the end of Year 2 (broken down by CA, Gender)</p> <p>1.4 50% self-improvement scores for all trained individuals by the end of Year 2</p>	<p>15 individuals (1 female, 14 males) were trained in Earth Ranger in two separate sessions which took place between 17th April- 2nd May 2023 and while the second was from 20th - 30th September, 2023. Each CA was represented by 2 individuals with 1 individual from UWA headquarters who was to be a super administrator for EarthRanger with UWA (Annex 2, 3, 4, 5).</p> <p>15 individuals (the same group of UWA staff who were trained in EarthRanger) (1 female, 14 males) were also trained in ArcGIS in two separate sessions between 9th–13th October, 2023 and 20th February–2nd March, 2023 (Annex 2, 3, 4, 5).</p> <p>Another group of 15 individuals (4 females, 11 males) selected from the 7 CAs were trained as trainers' of community wildlife scouts in two separate sessions between 20th February–2nd March, 2023 and 26th October–5th November, 2023. (Annex 2, 3, 4, 5)</p> <p>30 individuals (1 female, 29 males) with representatives from each of the 7CAs were trained in basic and advanced fence construction and monitoring between 24–29 October, 2022 and 28 February–6 March, 2023 for basic courses and 30th October–2nd November 2022 and 7–11 March, 2023 for advanced fence construction courses (Annex 2, 3, 4, 5).</p>

Project summary	SMART Indicators	Progress and Achievements
		Overall personal improvement scores were an average of 93% across the board (Annex 5)
<p>Activity 1.0 Develop short courses for electric fence construction, GIS training and SMART Training</p> <p>1.1.1 Identify Consultants to develop training courses & Sign Contracts</p> <p>1.1.2 Fence Construction Training Outline/Overview</p> <p>1.1.3 GIS Training Outline/Overview.</p> <p>1.1.4 SMART/Cyber-tracker/ER Training Outline</p> <p>1.1.5 Executive Committee Sign Off on all training content</p> <p>Activity 1.2 Construct electric fence demos at UWRTI</p> <p>1.2.1 Develop designs based on various needs for 15 - 20 types of demos</p> <p>1.2.2 Agree location for the construction of 15 - 20 fence demos</p> <p>1.2.3 Procure material & delivery to site</p> <p>1.2.4 Construct demo fences</p>		<p>1.1.1 Contracts were signed with 5 identified consultants (Instarect, ESRI, Banura Fred, St John Ambulance and Jonan Muhindo).</p> <p>1.1.2 The consultant (Instarect) developed a training outline which was shared and accepted (Annex 2: training course outlines).</p> <p>1.1.3 The consultant (ESRI - East Africa) developed a training outline which was shared and accepted (Annex 2: training course outlines).</p> <p>1.1.4 SFG developed a training outline which was shared and accepted Annex 2: training outlines).</p> <p>1.1.5 Partners of the project (SFG, UWRTI, and UWA) formed an executive committee, which held a total of eight meetings to review project progress (Annex 1: Darwin Executive committee minutes).</p> <p>1.2.1 The designs of the different fence types to be constructed at the fence demonstration site were compiled (evidence in Annex 7: Fence catalogue).</p> <p>1.2.2 After discussions between the Executive Committee and the top management of UWA, it was decided that the project site be relocated from UWRTI to QECA headquarters. This decision was made to ensure that QECA staff, who play a leading role in demonstrating the use of the fences to users, would be available.</p> <p>1.2.3 Materials for fence construction were procured both locally (for those which were available) and from Kenya.</p> <p>1.2.4 A fence demonstration site was established at Queen Elizabeth Conservation Area headquarters, where seventeen (17) different types of fences were constructed. This was handed over to QECA management for maintenance and demonstration to others (evidence in Annex 8: handover of completed fence to QECA management).</p>

Project summary	SMART Indicators	Progress and Achievements
<p>1.3 Identify and select target individuals from all of UWA's 7 CAs</p> <p>1.3.1 Identify 14 x Monitoring and Research Department Staff to be trained on GIS/SMART</p> <p>1.3.2 Identify 14 x Community Conservation Department Staff to be trained on Scout Training Guidelines</p> <p>1.3.3 Identify 30 x UWA Staff to be trained on Electric Fence Construction</p> <p>Activity 1.4 Understanding availability of training venues (UWRTI), Consultant availability and UWA Activities</p> <p>1.4.1 Training Schedule Development</p> <p>Activity 1.5 Delivery of training courses</p> <p>1.5.1. Electric Fence Construction - Basic Course (15 pax) (2 x 5-day courses total)</p> <p>1.5.2. Electric Fence Construction - Advanced Course (15 pax) (2 x 5 day courses total)</p> <p>1.5.3. SMART/Cyber-tracker/ER Training Course (4 x 7-day courses total)</p> <p>1.5.4. ARCGIS Training Course (4 x 7-day courses total)</p> <p>1.5.5. Community Conservation Scout Training Course (2 x 10-day courses total)</p> <p>1.6 Delivery of mentorship to all project participants</p> <p>1.6.1. Develop a mentorship template/format</p> <p>1.6.2. Develop a mentorship schedule</p>		<p>1.3.1 15 UWA staff were identified by UWA with guidance from SFG. These included Ecological Monitoring and Research and Community Conservation staff as preferred by the UWA management</p> <p>1.3.2 15 Community Conservation staff were identified by UWA management with guidance from SFG.</p> <p>1.3.3 30 UWA staff were identified by UWA management with guidance from SFG.</p> <p>Annex 3 for all names</p> <p>1.4.1 A training schedule was developed in consultation with UWA (for the availability of the staff) and UWRTI (for the availability of space during the training).</p> <p>1.5.1 15 UWA staff selected from 7 Conservation Areas were trained for 10 days at UWRTI.</p> <p>1.5.2 15 UWA staff selected from 6 Conservation Areas were trained for 10 days at UWRTI.</p> <p>1.5.3 15 UWA staff from 7CAs were trained for 20 days at UWRTI</p> <p>1.5.4 15 UWA staff from 7 CAs were trained for 20 days at UWRTI</p> <p>1.5.5 15 UWA staff from were trained for 20 days at UWRTI (Annex 3, 4, 5 for all)</p> <p>1.6.1 The mentoring log templates were developed and used (Annex 6a)</p> <p>1.6.2 Mentorship schedules were developed for ArcGIS, Fence construction and CWS trainers to take place monthly via google meet. However, the dates vary according to the availability of staff. These would be adjusted according to availability of the UWA staff.</p> <p>1.6.3 Mentorship sessions were conducted for GIS, Electric Fence construction, trainers of community wildlife scouts and EarthRanger. One physical mentoring exercise was conducted by SFG staff in the last quarter of the project period which involved visiting all the 7CAs. (Annexes: 6 (a&b)</p>

Project summary	SMART Indicators	Progress and Achievements
1.6.3. Delivery of ongoing mentorship		Online mentoring sessions for all the courses started in December, 2022. These were further augmented by one physical mentoring to the 7 CAs and UWA headquarters conducted by SFG staff. A total of 136 UWA staff were interacted with during this exercise. The exercise mainly focused on EarthRanger with other disciplines (Evidence in Annexes 2,3,4,5 and 6).
Output 2. Improved HWC data collection and reporting around CAs (through the provision of equipment, standardised data collection, and templates)	2.1 25% increase in data collected by Community Wildlife Scouts and UWA Staff around CAs by the end of Year 2. 2.2 75% of CA's consistently produce monthly reports using agreed upon templates by the end of Year 2. 2.3 All equipment is handed over to UWA by the end of Year 1	Prior to the implementation of the project there was no data being collected digitally in a standardised reporting framework (standardised data collection model across all the CAs). Following the implementation of this project Since July 2023 - CAs across Uganda have collected a total of 1,981 HWC Cases. As such it is hard to truly compare the increase of cases reported but we can say that its the 1st time in Uganda that a standardised digital model has been used across Uganda. We would therefore call it a 100% improvement. The HWC data was collected by both rangers and community wildlife scouts in the & CAs (Annex 22: Collated HWC CA cases) 79% of HWC reports made using the agreed template were received for the CAs for the period October 2022 - March 2024 were received from CAs (evidence in Annex 10: CA HWC reports) SFG purchased 15 laptops, 20 GPS units, and 168 smartphones with power banks. The 15 laptops are being utilised by UWA staff members who were trained in GIS for continuous learning during and after the training through the mentoring sessions. The smartphones were given to UWA for distribution to staff members who frequently report cases of human-wildlife conflict (HWC) and to active community scouts for collecting data related to HWC. Additionally, 300 raincoats, gumboots, water bottles, torches, and vuvuzelas were procured by SFG and handed over to UWA for distribution to active community wildlife scouts. 14 ArcGIS licences were purchased for the full project year (Annex 9: equipment and handover report).
Activity 2.1 Implement standardised data collection protocols, reporting templates, reporting mechanisms 2.1.1 Develop and Trial Standardised methodology (both via SMART/Cybertracker and paper-based) 2.1.2 Developing Reporting Templates 2.1.3 Train staff in use of equipment and data collection software		2.1.1 Data collection templates(both manual and automated) were developed and are to be used within 2 years of the project(Annex 10a:HWC templates) 2.1.2 Reporting templates were developed in Year 2 of the project (Annex 10b: CA Monthly HWC reports) 2.1.3 SFG worked with the UWA headquarters team oriented over 420 UWA staff in all the CAs on using EarthRanger (Evidence: Annex 13)

Project summary	SMART Indicators	Progress and Achievements
<p>2.2 Equip all CAs with necessary tools & software</p> <p>2.2.1 Purchase CA Equipment (140 x smartphones, 70 x GPS Units, 14 x laptops)</p> <p>2.2.2 Purchase 4 x ARCGis Licences</p> <p>2.2.3 Purchase UWA Scouts Field Equipment</p>		<p>2.2.1 15 laptops were procured and given to UWA for use by UWA staff trained in GIS. 168 smartphones were procured and given to UWA for HWC data collection in CAs. UWA was able to acquire sim cards for all the smartphones. 20 GPS units were procured and handed over to UWA</p> <p>2.2.2 14 licences were procured from ESRI and installed on laptops used by UWA staff trained in GIS. The licences will expire in October 2024.</p> <p>2.2.3 300 each of the following was procured and handed over to UWA - raincoats, water bottles, vuvuzela and torches. UWA consequently distributed the equipment to all the CAs for use by the wildlife scouts (Annex 9).</p>
<p>Output 3. Increased involvement of communities in preventing HWC through the CWS</p>	<p>300 CWS benefitting from skills transfer from UWA trainers by the end of year 2</p>	<p>1,530 CWS benefitted from skills transfer by UWA trainers trained under this project (Annex 19: CWS re-evaluation report).</p>
<p>3.1 Monitoring of activities conducted by UWA (including quality control of HWC databases etc.)</p> <p>3.1.1 Monthly compilation of data collection from CAs</p>		<p>3.1.1. This was achieved with CA HWC monthly reports which were done using the HWC template developed under Annex 10b.</p>

Annex 3 Standard Indicators

Table 1 Project Standard Indicators

Indicator number	Darwin Initiative Standard Indicator	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-A01	Number of people from key national and local stakeholders completing structured and relevant training	Number of UWA staff attending GIS, electric fence and community scout training	People	Gender	6 female, 54 male	6 female, 54 male		60	58
DI-A03	Number of local/national organisations with improved capability and capacity as a result of the project.	Number of local/national organisations with improved capability and capacity as a result of project	Number	Organisation	1	1		1	1
DI-A04	Number of people reporting that they are applying new capabilities (skills and knowledge) 6 (or more) months after training.	Number of UWA trained staff reporting that they are applying new capabilities (skills and knowledge) 6 (or more) months after training.	People	Course/gender GIS/EarthRanger CWS Electric fence construction	1 female, 14 male 4 female, 11 male 1 female, 29 male	1 female, 14 male 4 female, 11 male		15 15 30	14 14 30
DI-A05	Number of trainers reported to have delivered further training by the end of the project.	Number of CWS trainers reported to have delivered further training by the end of the project.	People	Gender	4 female, 11 male	4 female, 11 male		15	14

Indicator number	Darwin Initiative Standard Indicator	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-B05	Number of people with increased participation in local communities / local management organisations (i.e., participation in Governance/citizen engagement).	Number of community wildlife scouts participating in HWC interventions	People	Conservation Area/Gender BMCA QECA KCA LMCA MFCA MECA KVCA	0 376m, 0f 30m, 20f 61m, 33f 425m, 50f 85m, 50f 394m, 6f	0		1,530	300
DI-D02	Number of people whose disaster/climate resilience has been improved.	Number of households benefiting from active HWC interventions	Households	QECA MFCA Total	10,590 6,383 16,973	5,492 12,938 18,430		35,403	18,188

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)
2023 Impact Report	Impact Report	2023	Blended	Blended	Space for Giants	Report
2022 Impact Report	Impact Report	2022	Blended	Blended	Space for Giants	Report

Annex 5 Supplementary material

Annex Number	Description
Annex 1	Darwin Executive community minutes
Annex 2	Training Course outlines
Annex 3	Attendance list for various courses
Annex 4 a	Training Reports
Annex 4 b	Sample certificate awarded to participants
Annex 4 c	Sample photos of training sessions
Annex 5	Summary of Pre and Post Scores of training evaluations
Annex 6 a	Mentoring logs
Annex 6 b	ArcGIS mentorship reports
Annex 7	Fence demo catalogue
Annex 8	Handover document of fence demo site
Annex 9	Copy of equipment register & handover to UWA
Annex 10 a	HWC data collection and reporting templates
Annex 10 b	CA monthly HWC reports
Annex 11	Uganda Wildlife Policy 2014 & National HWC strategy
Annex 12	Photo evidence of CWS training
Annex 13	Evidence of UWA training CA staff in EarthRanger
Annex 14	Uganda HEC Impact Report 2022
Annex 15	Gender analysis of UWA
Annex 16	Evidence of some CWS trainers activities
Annex 17	Photo of community working on the electric fence with UWA staff
Annex 18	Project Monthly and Quarterly reports
Annex 19	Course re-evaluation reports
Annex 20	Risk Register
Annex 21	Darwin Identity
Annex 22	Uganda Collated HWC Incidents 2023 - 2024
Annex 23	Photos : Some of Darwin Project activities
Annex 24	Course retention evaluation report
Annex 25	Computed statistics of household benefiting from electric fence
Annex 26	Electric fence monthly construction and maintenance report

2. Checklist for submission

	Check
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the Subject line.	Yes
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.	No
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 13)?	No
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
Do you have hard copies of material you need to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	No
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	