Darwin Initiative Main & Extra Annual Report

To be completed with reference to the "Project Reporting Information Note":
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It is expected that this report will be a **maximum of 20 pages** in length, excluding annexes)

Submission Deadline: 30th April 2025

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Darwin Initiative Project Information

Scheme (Main or Extra)	Main
Project reference	**DAR31009**
Project title	**Fostering human-wildlife coexistence in a biodiversity hotspot in southern Guinea-Bissau**
Country/ies	Guinea-Bissau
Lead Organisation	University of Exeter (UK)
Project partner(s)	Institute for Biodiversity and Protected Areas (IBAP, Guinea-Bissau) ONG Palmeirinha (Guinea-Bissau) Universidade NOVA de Lisboa (Portugal) Centre for Research in Anthropology (CRIA, Portugal)
Darwin Initiative grant value	£ 551,280
Start/end dates of project	01/07/2024 – 30/06/2027
Reporting period (e.g. Apr 2024 – Mar 2025) and number (e.g. Annual Report 1, 2, 3)	July 2024 – March 2025 Annual Report 1
Project Leader name	Dr. Kimberley Hockings
Project website/blog/social media	https://cantanhezchimpanzeeproject.com/
Report author(s) and date	Dr E Bersacola and Dr K Hockings, 24th April 2025

1. Project summary

Rapid and widespread deforestation is leading to increased contact and conflict between humans and threatened wildlife. Human-wildlife conflicts, including social conflicts fuelled by land, resource, and wildlife management regulations imposed on local communities, undermine conservation efforts and compromise the livelihoods, safety and wellbeing of local people, eroding public support for protected areas and biodiversity conservation. For humans to share landscapes and resources with wildlife sustainably, coexistence requires agreement and/or cooperation between groups of people about wildlife. Facilitating human-wildlife coexistence is integral to achieving biodiversity conservation and sustainable development goals.

Guinea-Bissau, West Africa, is among the most socio-economically vulnerable countries, with 68% of its population living below $1.90/day. Cantanhez National Park (CNP, 1067km2)

comprises a diverse ecosystem of forest-mangrove-savannah-agriculture, including some of the last remaining sub-humid forests in the country. CNP is critical for the survival of threatened species [Figure 1], including the Critically Endangered western chimpanzee and the near locally extinct Temminck's red colobus (EN) and king colobus (EN), African golden cat (VU), and giant ground pangolin (EN). As an IUCN Category V Protected Area, CNP is home to ~25,000 people, most of whom rely on subsistence agriculture and access to natural resources.

In the last decade, CNP has undergone rapid land-use changes, with core 'protected' forest areas converted to cashew plantations. The high dependence on cashew revenues among 80% of the country's population is driving biodiversity loss, exacerbating economic vulnerability and social conflicts, and causing the loss of culturally important and climate-resilient crop types. Ineffective surveillance, unclear land-use boundaries, and ambiguous resource-use regulations hinder the ability to curb illegal activities, fuelling human-wildlife conflicts.

This project aims to foster human-wildlife coexistence in CNP by: (i) improving collaborative processes between local and national stakeholders, (ii) establishing a conservation surveillance system, (iii) promoting local livelihoods, and (iv) increasing national expertise and capacity to identify and alleviate conflicts.

Through DI Project 26-018 and recent IUCN guidelines on best practice principles and processes for managing human-wildlife conflict for coexistence, IBAP and UoE co-developed the "Action Plan for the conservation of medium- and large-sized terrestrial mammals in Cantanhez National Park, Guinea-Bissau (2024-2034)". We identified an urgent need for collaborative processes with stakeholders to address these challenges and promote sustainable livelihoods.

In April 2023, PI/DRF and Institute for Biodiversity and Protected Areas (IBAP) discussed which Action Plan strategies to prioritise for this application based on urgent threats. Outputs build on in-depth understanding of feasibility and predicted effectiveness, with strong consideration of the local cultural context and recent environmental and social-ecological changes. Throughout the development and implementation of this project we have ensured that outputs align with conservation priorities of relevant National and International conservation bodies (e.g. IUCN specialist groups; conservation organisations in Guinea-Bissau) and are scalable.

PI/DRF have worked closely with IBAP for 15 years, including the organisation of skills-based training workshops and co-authored publications in scientific journals and management plans. Our team has extensive experience working with local communities in CNP, and DRF conducted initial livelihood consultations with local communities. IBAP, NOVA/CRIA, NGO partner Palmeirinha have long-standing collaborations, with expertise in women's livelihood diversification in CNP and other sites in Guinea-Bissau. Our project's approach thus reflects the interdisciplinary nature of our team, with capacity building, community participation, gender-responsive measures, adaptive management, and robust social and environmental safeguards underpinning all project components.

Figure 1. Cantanhez National Park in Guinea-Bissau is a biodiversity hotspot, including coastal forest-mangrove-savannah-agricultural mosaics, with a human population of approximately 25,000 people, most of whom are involved in cashew farming and shifting cultivation.

2. Project stakeholders/ partners

Following the identification of the need for this project, we held further discussions of the situation with the Institute for Biodiversity and Protected Areas (IBAP), Guinea-Bissau, who are in charge of managing biodiversity and Protected Areas in Guinea-Bissau. This collaborative project was consequently developed at the invitation of IBAP to respond to a conservation emergency resulting from land use change and conflicts over problematic wildlife behaviour. Several representatives from partner Institutions and Organisations in Guinea-Bissau and Europe were involved in identifying and designing research, conservation, and development priorities. All partners are directly involved in planning and making decisions about project activities, with UoE coordinating the research, monitoring and evaluation activities.

IBAP is our main host partner, and we have worked closely with Aissa Regalla de Barros (IBAP Director), Queba Quecuta (Director of Cantanhez NP) and Americo Sanha (vice-Director of Cantanhez NP, and former Darwin Project Officer, DPO, 2019-2022) to ensure the timely completion of activities implemented in situ by the two DPOs (N'dei Tchuda and Elisio Domingos Mandim, **Evidence 1**), eight Darwin Field Officers (DFOs) and 2 local researchers. IBAP provided essential logistical support in-country including transport to and within Cantanhez NP; advised on surveillance protocols; facilitated meetings; received funds to pay staff and complete project activities; assisted and advised on day-to-day activities on the ground.

We have worked with our Guinean partner NGO Palmeirinha, including Nicolau Mendes (Palmeirinha Director) and Suncar Pinto Sambu (Palmeirinha Communications Director), to interview and employ two DPOs (Irondina Januario Natori and Euclides Gonçalves Monteiro, **Evidence 1**) and subsequently to adapt, develop and implement a locally appropriate social science data collection, including semi-structured interviews, focus groups and workshops, in Cantanhez NP and gather background information required for the development of the initiatives.

Our partners, the Centro em Rede de Investigação em Antropologia (CRIA) and Universidade NOVA de Lisboa (NOVA), including Ana Nuno and Amélia Frazão-Moreira, have worked with UoE and Palmeirinha to develop social science methods. CRIA/NOVA have been working alongside Palmeirinha to ensure a culturally sensitive approach when collecting interview data and have advised on participatory approaches to ensure that women's opinions are included in the development of our project Output 1 and 3. CRIA/NOVA have provided theoretical context to understand human behaviour in human-wildlife conflict situations, and the impact on wellbeing and livelihoods, which recognises that better knowledge of the causes and consequences of certain human activities, perceptions and behaviours in ecosystems is crucial for a rigorous interpretation of human-wildlife dynamics.

While not formal project partners, local people in Cantanhez (represented by Nalu chieftains, Women's Associations, Land Management Committee, Youth Associations and elders) are playing a crucial role in supporting and advising on biodiversity conservation and coexistence matters in Cantanhez NP. IBAP, including Queba Quecuta and Americo Sanha, and the DPOs, have remained in consultation with local communities throughout Year 1. IBAP selected 8 new DFOs and continued to employ 2 local researchers from local communities to support collaboration and ongoing activities (**Evidence 2**).

A fundamental part of our project is the consolidation of a multi-stakeholder, cross-disciplinary multi-institutional collaborative approach to promote conservation and human wellbeing in Cantanhez NP. Maintaining and strengthening the collaborative environment for project partners is therefore crucial for every aspect of our project.

3. Project progress

3.1 Progress in carrying out project Activities

Output 1 Enhanced understanding of the drivers of human-wildlife coexistence, including conflict levels, through socio-ecological research across CNP

Activities Y1

1.1 Design and deliver semi-structured interviews with resident households to determine drivers and levels of conflicts over wildlife and conservation.

1.2 Data analysis and report write up.

1.3 Training and camera trap monitoring across CNP.

1.4 Training and monthly phenology monitoring and vegetation plots across forest and cultivated areas.

1.5 Retrieve remote sensing data monthly to generate land use and forest cover covariates.

1.6 Participatory mapping with stakeholders to continuously record human-wildlife interactions with a focus on chimpanzee crop foraging and aggressive encounters.

We (PI, DRF, Dr A Nuno) completed the design of semi-structured interviews and focus groups (part of **Activities 1.1** and **3.1**) in September 2024. Four DPOs were selected in October 2025 (**Evidence 1 and 2**). From October to December, the four DPOs conducted 67 interviews with resident households (36 women and 31 men) in 18 communities to assess the drivers and levels of conflicts related to wildlife and conservation (**Evidence 3;** see Output 4 for details on social science training). The original plan was to conduct semi-structured interviews with 300 households. However, we decided to adapt our approach to the social science data collection including target sample sizes for the following reasons (we have emailed BCF-Reports@niras.com to enquire whether this change requires formal approval): (1) we reached information saturation with 1:1 semi-structured questionnaires with no new information arising; (2) each questionnaire took over one hour to complete and we became concerned with the time commitment we were requesting from respondents and that interviewee fatigue might impact future requests for participation; (3) transcribing and translating from Creole to Portuguese by the

DPOs, and typing up interviews, took much longer than previously foreseen. Project partners discussed and decided on a revised approach for some of the next data collection, which uses the information gathered to ask key questions in a group setting, which is more time-efficient for participants and generates debate to provide more useful context. To this end, we incorporated human-wildlife interaction and conservation-related questions into wellbeing focus groups (**Activity 3.1**) and participatory workshops (**Activity 3.2**) designed to develop the initiatives of Output 3.

The semi-structured interview responses from 67 households and data from 160 individuals that participated in focus groups and workshops have provided sufficient insights to identify **the types and drivers of human-wildlife and conservation conflicts**. Data were analysed by A Nuno and written up in a report (**Activity 1.2**; **Evidence 3**). The consultations with resident households through participatory mapping (**Activity 1.6**) in Y2 will provide further information on human-wildlife and conservation conflict dynamics throughout the year, considering the seasonal variations of human activities and wild and cultivated plant resources.

Table 1 A summary of the social science methods used in Year 1, including project Outputs, Indicators and Activities.

Output	Aim	Method	Sample size	Dates
Output 1 **Output 2** **Output 3**	Identify conflict levels (**Indicator 1.1, Activity 1.1**) Preliminary assessment of knowledge of rules and regulations (**Indicator 2.4**) Identify wellbeing indicators (**Indicator 3.1, Activity 3.1**)	**Semi-structured interviews**	67 households across 18 villages	October-December 2024
Output 1 **Output 3**	Identify conflict levels (**Indicator 1.1**) and potential coexistence solutions (**Indicator 1.3**) Identify and assess wellbeing indicators (**0.3** and **3.1**) Develop women's livelihood diversification strategies (**Activity 3.2**)	**Focus groups and participatory workshops**	160 individuals across 10 villages (20 focus groups/participatory workshops)	October-December 2024
Output 3	Evaluate previous development initiatives carried out in Cantanhez (**Activity 3.2**)	**Semi-structured individual interviews and djumbai's (group interviews)**	3 NGO staff members (individual) and 30 park residents (group interviews) across 9 villages	January-February 2025
Output 3	Develop women's livelihood diversification strategies (**Activity 3.2**)	**Semi-structured and unstructured interviews during**	29 women and one man across 9 villages	January-February 2025

		visits to vegetable gardens		
Output 3	Develop women's livelihood diversification strategies (**Activity 3.2**)	**Questionnaires and calendar**	38 women leading vegetable garden activities across 10 villages	February-March 2025
Outcome	Develop ways to facilitate human-wildlife coexistence (**Indicator 0.1**)	**Informal consultations with stakeholders**	2 park directors, 2 park guards, 3 local researchers, four park residents	January-February 2025

Eight local field assistants (DFOs) were newly selected in February 2025 (**Evidence 2**). DRF trained four DPOs and eight DFOs and 2 long-term local researchers IT Camará and M Cassamá) in ecological research design and digital data collection using KoboCollect mobile app on Blackview BV6200 Pro rugged smartphones (**Activities 1.3**, **1.4** and **1.6**). The **KoboToolBox toolkit** was selected over other software (e.g., SMART Conservation software) to ensure consistency, as IBAP has already adopted this toolkit for data collection across the country's Protected Areas (Evidence provided in Output 2 section). For the socio-ecological research of **Output 1**, six KoboToolBox data collection forms were designed and tested: (1) deploy camera traps and (2) check and/or remove camera traps (**Activity 1.3**); (3) monitor wild and cultivated plant phenology (**Activity 1.4**); (4) participatory map human-wildlife interactions (**Activity 1.6**) including crop damage, wildlife aggressive behaviour or attacks towards humans, human retaliatory killings, and road accidents/kills; (5) information at the start of the working day, and (6) information at the end of the working day. KoboToolBox does not record tracks while walking. Therefore, the local research team was trained to use Garmin GPS devices, including map navigation, saving GPS coordinates and tracks, and measuring distances. The daily research effort (e.g., kilometres walked, areas surveyed) will be linked from the GPS tracks recorded by the Garmin devices to the KoboCollect forms via information sheets (6) and (7). Additionally, training was provided on selecting camera trap locations based on a grid system and wildlife signs, as well as on programming, deploying, and maintaining camera traps (**Activity 1.3**).

Camera trap deployment began in March 2025 (**Activity 1.3**), following intensive training and reconnaissance surveys across the home range of five focal chimpanzee communities characterised by different landscape compositions and interactions with people (**Evidence 4**). As of the end of Y1, forty camera traps have been established across two chimpanzee communities; 180 wild and 41 cultivated individual trees have been tagged for phenology monitoring across five chimpanzee communities (**Activities 1.3**, **1.4**). Though some participatory mapping data on human-wildlife interactions have already been recorded, regular data collection by DFOs and local residents (**Activity 1.6**) will begin in Y2Q1, once all 100 camera traps have been deployed. Retrieval of remote sensing data began in March 2025 (**Activity 1.5, Evidence 5**) and will continue throughout Y2.

Progress in carrying out Project Activities

Output 2 Strengthened biodiversity conservation capacity through improved multi-stakeholder understanding of laws and regulations and the establishment of a systematic conservation surveillance system

Activities Y1

2.1 Retrieval and analysis of satellite imagery (high-resolution Planet data, 10m resolution 2016-2024 ESA Sentinel 2 data, CTrees LUCA).

2.2 Workshop to develop a conservation surveillance strategy including a communication chain.

2.3 Drafting and finalising the conservation surveillance system protocol and communication plan. Surveillance team finalised.

2.10 M&E: Pre- and post-intervention household interviews to measure changes in access to information. Data analysis and report.

Project DRF assessed the state of the 17 core zones in Cantanhez National Park using annual deforestation data from Global Forest Watch (2001–2024) and monthly land use change alerts from CTrees' LUCA system (January 2018 – March 2025) (**Activity 2.1**, **Evidence 5**), and information was shared with IBAP. Each core zone is co-managed by IBAP in collaboration with different local communities (villages).

The analysis of annual deforestation revealed the following: (1) Annual average deforestation rates (2001–2024) varied across core zones, ranging from 0.1% to 2.1% forest loss. (2) In 12 out of 17 core zones, deforestation rates increased between 2016–2024 compared to the 2008–2016 period. (3) Four core zones have lost over 40% of their forest cover since 2000.

Monthly patterns showed: (4) Higher rates of land use change (2018-2024) generally occurred in May. (5) Land use change slowed considerably in 2023, coinciding with the collapse of the cashew market chain during the harvest season (typically March–June) and in the months that followed. (6) In 2024, four core zones experienced a higher extent of land use change than the 7-year average.

These findings help to identify deforestation drivers and priority areas for conservation surveillance and guide outreach efforts with local communities to strengthen awareness and understanding of boundary areas (all components of Output 2).

In July 2024, UoE and IBAP staff carried out a workshop to develop a **conservation surveillance (CS)** strategy including ground patrols, remote sensing and a communication chain (**Activity 2.2**). As a result, a pathway was established to guide the development of a ***CS Protocol***, which was drafted by the DRF (**Activity 2.3**) and presented to IBAP in January 2025. For the ***CS Protocol***, the DRF developed seven KoboCollect datasheets to be used during patrols (**Evidence 6**). The datasheets record evidence of (1) hunting, (2) habitat alteration, (3) human-wildlife negative interactions/conflicts, (4) encounters with animal carcasses, and (5) encounters with locally threatened species (red colobus, king colobus, Guinea baboon, pangolin). To account for patrolling effort and help with data management, a (6) start and (7) end time of patrol KoboCollect were included. Since KoboCollect does not record movement tracks, the patrol team will use a Garmin GPS device (GPSMAP models). The Garmin GPS tracks will be linked to the KoboCollect datasheets through entries in the patrol KoboCollect forms.

The communication chain, which is part of the ***CS Protocol***, was developed further with IBAP staff (technician Eliseu Benante, Cantanhez Park directors and guards) and local IBAP collaborators (**Evidence 7**). The surveillance team was established in March 2025 and will consist of IBAP park directors Q Quecuta and A Sanhá, eight park guards, five National Guards, and five local IBAP collaborators, as well as the two IBAP DPOs.

An updated *Cantanhez National Park Management Plan* is currently being developed by IBAP and external consultants. A full draft outlining proposed new rules and regulations is now expected to be available in May 2025, following unexpected delays from the original March 2025 timeline (Q Quecuta, pers. comm.). The *Management Plan* will incorporate actions and strategies from the **Cantanhez Mammal Action Plan** (Bersacola and Hockings, 2023), which was developed using our previous Darwin Initiative project (DAR26018).

Throughout Y1, the DRF has actively engaged with the consultants and IBAP staff involved in revising the *Management Plan*, considering potential updates to rules, regulations, and the management committee structure. However, we anticipate making slight amendments to the ***CS Protocol*** to ensure alignment with the *Management Plan* once a full draft is available. In Y2Q1, the ***CS Protocol*** will be presented at IBAP and in Cantanhez and implemented following training for the surveillance team.

The ***CS Protocol*** will be implemented alongside a locally tailored awareness campaign in Y2 that aims to provide access to information on park rules and regulations. An initial pilot assessment of household awareness regarding park rules and regulations (**Activity 2.10**) was

conducted between October and December 2024 (**Evidence 3**). This assessment will be completed with input from 150 households in Y2Q2.

Output 3 Co-developed and community-led sustainable livelihood initiatives

Activities Y1

3.1 Identify wellbeing indicators.

3.2 Participatory workshops to identify, assess and design ways to evaluate previous sustainable livelihood approaches, and develop women's livelihood diversification strategies.

3.6 M&E: Pre- and post-intervention interviews to measure changes in household wellbeing indicators. Data analysis and report.

In October-December 2024, the four DPOs carried out twenty focus groups across 10 villages to identify locally-relevant wellbeing indicators (Table 1 for a summary of social science methods). The findings were summarised in a report (**Evidence 3**), with 25 indicators identified (**Activity 3.1**).

Each focus group carried out in October-December 2024 (N=20, **Activity 3.1**) was immediately followed by a participatory workshop (**Activity 3.2**) to start the development of the initiatives. This ensured that we avoided group interview fatigue and minimised the time required from participants. Based on the workshop findings, two locally-led women's initiatives were identified: (1) Sustainable vegetable gardens through knowledge sharing on seed keeping and gardening; and (2) Engaging women in key conservation roles through leadership in forest restoration.

In February 2025, we employed a qualitative participatory approach with key informants and potential initiative members to assess and co-develop previous sustainable livelihood approaches (**Activity 3.2, Evidence 8**). This qualitative approach involved: (i) semi-structured group and individual interviews with men and women key informants and beneficiaries of past community development initiatives, and (ii) semi-structured/unstructured interviews and visits to local vegetable gardens with women engaged, or previously engaged, in vegetable garden activities. These activities took place in February 2025, carried out by four DPOs, two local researchers (ITC and MC), the DRF, and Prof. Amélia Frazão-Moreira (CRIA).

Semi-structured individual interviews were conducted with three NGO staff members operating in Cantanhez (Palmeirinha, Ação para o Desenvolvimento, and Ianda Guiné) to explore challenges and opportunities arising from previously implemented sustainable development initiatives. These interviews also mapped the operational structures of these initiatives and assessed their sustainability beyond the project's end. In addition, we used semi-structured group interviews across nine villages to ask residents about previous development initiatives, and their perceptions of their success and continuation beyond project end.

A total of 30 households (29 women and one man involved in vegetable garden keeping) across nine villages participated in interviews during visits to their vegetable gardens. Our qualitative, informal approach to co-develop initiatives followed a ***djumbai*** approach (get together to chat, exchange stories and ideas), which is culturally embedded in local daily life and used for initiative development. This method allowed us to understand, from the perspective of beneficiary communities, the reasons for the success or underachievement of past development programs, particularly those involving women's livelihood activities. It also guided us in designing livelihood initiatives that are sustainable and adapted to local social and economic realities.

Following these activities, villages considered suitable for developing sustainable livelihood initiatives were selected based on the following criteria: **(A)** Limited or no history of development projects, particularly projects targeting women's activities, in the past, to guarantee equity in the support of the villages. **(B)** Noticeable conflict situations with wildlife or the presence of certain species that are expected to cause greater damage in the future to agricultural activities, particularly chimpanzees and African buffalo. **(C)** The urgency of forest conservation, based on the remaining forest adjacent to the community being one of the last refuges in the country for

Temminck's red colobus and king colobus, and/or a key conservation hotspot for the Guinea baboon.

Based on the final list of villages and identified initiatives, two DPOs conducted 10 follow-up questionnaires with women who had organised vegetable production. These interviews aimed to understand the realities of vegetable production, such as the activity calendar and commercialisation possibilities, along with the difficulties and needs of the women. This will help us outline successful women's livelihood diversification strategies based on vegetable production. During the same interviews, we also asked about the feasibility of establishing wild tree nurseries under their responsibility, what equipment would be needed to support this effort and where the tree nurseries should be established (such as individual backyards vs. vicinity of communal vegetable gardens).

Activity 3.6 will be moved to Y2, as the initiatives have not yet been fully developed, and the complete list of beneficiaries (at least 150 households) has not been identified. This slight adjustment to the timeline is due to a typographical error in the logframe and does not reflect a delay (we have emailed BCF-Reports@niras.com enquire whether this change requires formal approval).

Progress in carrying out Project Activities

Output 4 Building national expertise and promoting collaborative processes in conservation decision-making

Activities Y1

4.1 Four Bissau-Guinean DPOs undertake training in project data collection, data management, report writing and scientific communication.

4.2 DPOs undertake scientific research skills training (20% of their time, including in literature search, English and scientific writing, summarise papers / annotated bibliography).

4.5 Meetings and development of protocol to include Bissau-Guinean researchers and students into foreign-led research projects.

Four DPOs were selected and employed in October 2024 (**Evidence 1**). The first training sessions were conducted from 11 to 17 October 2024 and focused on the application of social sciences in conservation. Training included interview data collection for the project (**Activity 4.1**), and social sciences research skills and data management (**Activity 4.2**, **Evidence 2 and 3**). Further practical training was carried out in the field, from 21 October to 4 November 2024, by DRF, PI and social sciences PhD student Chloe Chesney. Training in summarising social sciences data and report writing was carried out in January 2025 by DRF, along with discussions on science communication for conservation, including social media.

Between the 5th and 21st of February 2025, the four DPOs were trained by the DRF in the ecological research part of the project, including on the research design, data collection methods and biomonitoring strategy (**Activity 4.1, Evidence 2**). Technical training included learning to collect data digitally on KoboCollect on Blackview devices and manage the data on KoboToolBox, such as editing and deploying KoboCollect forms (datasheets), accessing and downloading data in Excel format. The four DPOs were also trained to collect data using Garmin GPS devices, managing GPS data using BaseCamp software, and operating camera traps. DPOs held discussions on the research of English-speaking UoE PhD students, including biodiversity monitoring using acoustic devices and the applicability of AI for image and audio data processing. From 2 to 4 April 2025, the DPOs undertook training provided by IBAP staff (GIS technicians Eliseu Benante and Samuel Ledo Pontes) in the use of drones for land cover monitoring, which also included hands-on practice in operating the drone. Formal English lessons will commence in Y2Q2.

Currently, all foreign researchers who wish to conduct research in Protected Areas in Guinea-Bissau must obtain formal research permission from IBAP. However, there is no formal protocol or requirement to include national researchers. The PI and DRF met with IBAP General Director Aissa Regalla de Barros in Bissau to discuss the development of a protocol to include Bissau-

Guinean researchers and students in foreign-led research projects. We agreed that a formal and compulsory mentorship and training scheme would be needed to support the development of a well-trained and proactive next generation of Bissau-Guinean conservation scientists. We are reviewing other national protocols that involve the allocation of national researchers to projects and are extracting information on the duty of care toward students that projects must agree to, including mentorship and training targets, as well as pathways for basic funding for the students. We have discussed this with the IUCN Western Chimpanzee Action Plan Implementation Committee and whether a general protocol can be developed that can be tailored by individual countries across West Africa. We are working on a draft protocol with IBAP for presentation in Y2.

3.2 Progress towards project Outputs

Output 1 Enhanced understanding of the drivers of human-wildlife coexistence, including conflict levels, through socio-ecological research across CNP

Indicators Y1

1.1 The drivers and levels of conflict, ranging from minor disputes over wildlife crop damage, e.g. chimpanzees, buffaloes, to deep rooted conflicts over identity, following IUCN human-wildlife conflict & coexistence guidelines, are assessed and synthesised in a report (baseline zero. Project target semi-structured interviews with 300 households across 30 villages by end of Y1Q4).
Please note: we have emailed BCF-Reports@niras.com enquire whether the change in social science approach and methods requires formal approval

1.2 The socio-ecological factors influencing spatiotemporal variation in wildlife habitat use and behaviour towards humans across CNP, including problematic behaviours such as crop foraging by chimpanzees, and important areas for biodiversity are identified and synthesised in a report **[DI-C08]** (baseline established from one chimpanzee community in central CNP (Bersacola et al. 2021). Project target 612 km^2 camera trapping including 12 months of fine-resolution surveys across 100 km^2 by end of Y2Q4).
Please note: we have emailed BCF-Reports@niras.com enquire whether this can be changed to Y3Q1 (see explanation below) requires formal approval

Progress was made towards Output 1 with social sciences research on human-wildlife and conservation conflicts (**Indicator 1.1**) and the start of ecological data collection in five focal chimpanzee communities (**Indicator 1.2**).

Social science data were synthetised in a report (**Evidence 3**). In Cantanhez, local communities report a wide range of negative impacts from various wildlife species, especially chimpanzees, cane rats, birds, and African buffalo. The main issues cited are crop and fruit damage, but other concerns include income loss, food insecurity, fear of attacks, injuries, and inability to support children and their education. While some residents acknowledge benefits from wildlife, for example, chimpanzees aiding reforestation or baboons reducing pests, positive views were less frequently mentioned. Based on the IUCN framework, the overall situation in Cantanhez can be classified as “Level 2: Underlying conflict,” as there is evidence of empathy toward wildlife, yet ongoing unresolved issues and resentment towards park authorities persist.

The home range of five chimpanzee communities were selected to monitor socio-ecological factors affecting their behaviour towards humans (**Indicator 1.2**, **Evidence 2 and 4**). These behaviours include increased use of cultivated areas and areas in proximity to villages, as well as aggressive behaviour and attacks on people.

These five chimpanzee home ranges are characterised by different landscape compositions, including from highly anthropogenic (Flack N'Djan, where none of the habitat in the home range is protected and most of it is cultivated) to low anthropogenic (Cambeque, where 1122 ha of forest in the home range is protected and ~90% of it remains intact). **Indicator 1.2** baseline data from one community (Cadique-Caiquene, 631 ha of habitat in the home range is protected, ~66% of forest within it remains), showed that chimpanzees increase their use of village orchards in periods of wild fruit scarcity (Bersacola et al. 2021).

Progress towards socio-ecological data collection in the five focal chimpanzee communities achieved in Y1 includes: semi-structured interviews and focus groups in villages (N=40 and 14, respectively, within the five focal study areas) to understand human-wildlife coexistence

dynamics, including conflict levels (**Evidence 2 and 3**); training a full team, including eight DFOs and two local researchers (n=two persons per focal study area) on data collection (**Evidence 2**); initiating ecological monitoring, including tree tagging for phenology and deployment of camera traps (**Evidence 2 and 4**). We experienced a two-month delay in the start of camera trap deployment compared to the original timeline. This was due to the equipment being delayed at customs in Bissau as was outside of our control (in previous years we did not experience this issue). To obtain a full 12-month of socio-ecological monitoring, the completion of data collection will now occur in Y3Q1 (compared to the original timeline of Y2Q4). We have emailed BCF-Reports@niras.com enquire whether this change requires formal approval. However, we do not expect that this delay will affect the overall achievement of Output 1 by Y3Q4, as the UoE team is ready with the data analysis framework that will be applied.

Initial data obtained in Y1, including interviews and reconnaissance surveys, indicate that all five chimpanzee communities use cultivated areas, though coexistence dynamics vary. Chimpanzees from Flack N'Djan were reported by informants to frequently display aggressive behaviour towards people, including men, women and children. In December 2024 at Cadique-Caiquene, a local informant reported that an adult chimpanzee displayed aggressive behaviour towards a child. There were no reports of aggressive behaviour by the other three chimpanzee communities. The socio-ecological data that will be collected in Y2-3 of this project will shed light on potential habitat thresholds for shifts in chimpanzee behaviour towards humans, including increased boldness (measured by the frequency of using areas within/in proximity to villages), and aggressive behaviour, including attacks on people.

Consultations with residents in Y1 have provided us with preliminary information on human-chimpanzee conflicts and potential conflict alleviation strategies (**Evidence 3 and 8**). African buffaloes are present in three of the five focal study areas (Cadique-Caiquene, Madina-Catomboi, and Medjo-Quebo Sutuba), with human-buffalo interactions varying seasonally according to local informants. In some areas**,** habitat conversion into cultivated fields within the buffaloes' seasonal corridors has reportedly led to increased crop destruction, as the animals search for alternative routes to access feeding and drinking areas. Crop damage mitigation strategies reported by local participants included fencing; however, this is often infeasible due to the shifting nature of the agricultural system, as well as the scale and labour required. Smaller-scale measures to deter buffaloes were also reported, though participants noted mixed results. Long-term solutions will need to involve land-use planning and the regeneration of forest and savannah corridors.

Output 2 Strengthened biodiversity conservation capacity through improved multi-stakeholder understanding of laws and regulations and the establishment of a systematic conservation surveillance system

Indicators Y1

2.1 The state of the core and buffer zones in CNP, including percentage of forest remaining and land use composition within each zone, is assessed and published **[DI-C03]** (baseline 10% from available 2019 data across 1067km^2, Pereira et al 2022. Project target 100% using data from 2016 to 2024 by end of Y1Q3).

2.2 A systematic surveillance system protocol for CNP is developed by stakeholders, incorporating remote sensing, on-the-ground patrols, including continuous monitoring of habitat critical for forest specialists (such as red colobus), and a communication chain **[DI-C01]** (baseline zero. Project target protocol developed by end of Y1Q4).

The current state of the core zones across the park has been identified (**Indicator 2.1**, **Evidence 5**). The revision of the *Park Management Plan* has already considered the condition of these core zones, and IBAP is revising the zoning boundaries accordingly. This revision is expected to be fully drafted by Y2Q2. The new core zones will be reanalysed and will inform the development of our **conservation surveillance (CS) system**.

The ***CS Protocol***, which includes terrestrial patrols and the communication chain, is complete and ready for implementation in Y2 (**Evidence 6 and 7**). As a working document, it will continue to be updated (e.g., once the *Management Plan* is finalised, as new technologies and tools become available for data processing such as forest change alerts, drones, etc.), and as the **CS system** is monitored and evaluated throughout Y2-Y4.

The surveillance team has been selected, and training in data collection tools, including KoboToolBox, is currently underway (April 2025) and will continue through Y2Q1. The **CS system** will be crucial for ensuring a systematic approach to conservation surveillance by IBAP and its collaborators. No such protocol or strategy has ever been developed for terrestrial conservation in Guinea-Bissau (baseline zero, **Indicator 2.2**). Our **CS system** will be fully evaluated by Y4 and will have the potential to be scaled across the country's terrestrial Protected Areas (~6000 km²).

Output 3 Co-developed and community-led sustainable livelihood initiatives

Indicator Y1

3.1 Locally relevant wellbeing indicators, including those related to health, access to natural resources, social and gender equality, autonomy, food and economic security, are identified in 150 households (baseline is zero. Project target achieved by end of Y1Q3 via focus groups).

3.2 Sustainable livelihood initiatives (based on crops and non-timber forest products that promote livelihood diversification) are identified, co-developed and agreed with stakeholders (baseline is 10% through initial consultations by DRF in 2023. Project target: 10 participatory workshops across 10 villages in CNP, with at least two initiatives co-developed with 150 households by end of Y2Q2).

Progress towards **Output 3** in Y1 was made by the identification of locally relevant indicators (**Indicator 3.1**) and the start of the development of the initiatives (**Indicator 3.2**). In total, 25 locally-relevant wellbeing indicators (**WI**) were identified (**Evidence 3**). These WI's belong to five dimensions: (1) freedom, (2) health, (3) material wellbeing, (4) security, and (5) social relations. Key **WI**'s include (1.4) Livelihood satisfaction; (2.3) Food security; (3.3) Commercial agriculture; (3.5) Income; (4.1) Occupational diversity; (4.2) Provision for dependants; (5.1) Community cohesion; (5.2) Labour support to others; (5.3) Traditional/family connections to land or practices. These indicators will be assessed in Y2 and Y3 to evaluate Output 3 initiatives using questionnaires to 150 participating households.

Two women-led initiatives were identified based on results from **Activities 3.1**, **3.2** and follow-up meetings with key stakeholders in Y1Q4 (**Evidence 2, 3, 8 and 9**). These initiatives are:

(1) Sustainable vegetable gardens through knowledge sharing on seed keeping and gardening and provision of essential materials (**Evidence 8 and 9**). This initiative will contribute to increasing self-sufficiency and livelihood satisfaction (**WI 1.4**), as well as supporting commercial agriculture (**WI 3.3**), occupational diversity (**WI 4.1**), household income (**WI 3.5**), and provision for dependents (**WI 4.2**) (**Evidence 3**).

(2) Women Reforestation Leaders (**Evidence 8 and 9**), with the short-term goal of increasing local women's leadership in conservation (related to **WI's 5.1, 5.2, 5.3**) and the long-term vision of reducing human-wildlife competition over cultivated resources, particularly near villages (related to **WI 2.3**) **Evidence 3**).

The baseline condition for the implementation of our initiative to **support vegetable gardens** was assessed in Y1Q4 (**Activity 3.2**). All selected villages are engaged in vegetable gardening, with women as the primary participants. Of the 10 villages chosen, two received previous support in the form of fencing and water wells, but none had received assistance related to seed keeping or knowledge sharing. Building capacity and capability was identified as a key gap, as it is considered crucial for sustainability by local women (**Evidence 8**).

Additionally, we identified issues with previous approaches, particularly the practice of selecting one large area (0.5 ha or more) to be fenced for use by all women. One challenge is the difficulty in agreeing on a single, large common area, especially when fertile soil and shade are limited. Traditionally, garden areas are selected each year based on women's needs and the condition

of the soil and water. By focusing on providing knowledge related to seed keeping and vegetable growing, we aim to improve conservation efforts through the promotion of traditional varieties and low-environmental-impact livelihood activities, all while respecting the flexibility that women require in their gardening practices (**Evidence 8**).

The baseline condition for the implementation of the **Women Reforestation Leaders** initiative is zero, as identified in Y1Q4, since no such initiative has been specifically carried out for local women in Cantanhez NP. Two previous initiatives focused on mangrove restoration, led by men, and one ongoing IBAP initiative is centred around reforestation but is fully managed by IBAP, with no involvement from local women (**Evidence 9**). Our initiative will create an opportunity to encourage greater involvement and decision-making of women in conservation efforts, a goal expressed by many of our women informants. Additionally, the initiative aligns with IBAP's long-term objectives, providing a chance for direct collaboration.

In Y2, during the development of the initiative, women will work with the project team, including local experts in botany and wildlife behaviour, to select wild plant species and establish a plan for the tree nurseries, which will be created with project funds. The tree nurseries will use local materials, like those employed in the women's vegetable garden initiatives, requiring limited external purchases (**Evidence 9**). Subsequent phases will include the collection of wild seeds, maintenance of the tree nurseries, and the creation of a planting map and plan for Y3.

Members of the initiative will be regularly featured in social media posts by the CCP, interviewed on local radio, and will participate in regular meetings with IBAP during Y3-Y4. We anticipate that this initiative will establish a continuous cycle of activities and will continue beyond the project's conclusion, provided that initiative members perceive tangible benefits in terms of their capabilities, capacity (**Indicator 3.3**), and overall wellbeing (**Indicator 3.1**, **0.3**).

As planned, **Output 3** indicators will be measured via a report showing a full strategy for the initiatives (**Indicator 3.2**), self-reported change in knowledge and capacity following training and the implementation of the initiatives (**Indicator 3.3**) and full evaluation based on wellbeing indicators (**Indicator 0.3**) and scale-up plan of the initiatives (**Indicator 3.4**).

Output 4 Building national expertise and promoting collaborative processes in conservation decision-making

Indicator Y1 **4.1** Bissau-Guinean conservation scientists undertake bespoke training programme in the art of conservation science, primate conservation, scientific writing, data analysis skills including GIS, statistical modelling, and scientific communication; writing and submission of publication to peer-reviewed journal with PI and DRF mentorship **[DI-C17]** (baseline of DPO skills established in Y1. Project target 4 Bissau-Guinean researchers trained and mentored by end of Y3Q4).

We evaluated the social and biological skills of each of the 4 DPOs (**Evidence 1**) on a scale of 1-5 for pre- and post-training skill level (1 for no skills, 5 for extremely skilled). Each DPO showed significant progress from the baseline (**Indicator 4.1**) with an increase in their reported skills across different categories in social data collection and analysis (SSI, focus groups, participatory mapping) from a baseline of 1-2 for each category to 4-5 post-training for each DPO. The same pattern was shown for biological data collection and analysis (wildlife monitoring, terrestrial mammal monitoring, camera traps, phenology, digital data collection (SMART/KoboToolBox), GPS and BaseCamp, and GIS) from a baseline of 1 to 4-5 for each category and each DPO.

DPOs were trained in social sciences in Y1Q3 (**Evidence 2 and 3**). Specifically, the four DPOs were trained on: (i) The importance of social data for informing and evaluating conservation projects; (ii) Types and sources of social data; (iii) Data collection methods, focusing on questionnaires, participatory mapping and focus group discussions; (iv) Key considerations for questionnaire design (including practical exercises); (v) Key considerations for designing and conducting focus group discussions (including practical exercises); (vi) Best practices for robust and ethical social data collection (including scenario/role-play exercises); (vii) Sampling

approaches and inclusion/exclusion criteria for participants; (viii) Testing of survey tools among the team and further development based on their feedback, including translation from Portuguese into Guinea-Bissau Creole.

DPOs were trained in biological sciences in Y1Q4 (**Evidence 2**). Specifically, the four DPOs were trained on: (i) Designs of biological surveys; (ii) Reconnaissance surveys of terrestrial mammals; (iii) Camera trap deployment and sampling strategy (**Evidence 4**); (iv) Technical use of GPS and managing data on BaseCamp; (v) Plant phenology monitoring; (vi) Data collection and management using KoboToolBox; (vii) Participatory mapping on human-wildlife interactions. Camera trap data management and classification training will be provided in Y2Q1 once the first data are retrieved. GIS data analysis training will be carried out in Y2Q3 using preliminary socio-ecological survey data.

3.3 Progress towards the project Outcome

Outcome **Facilitate human-wildlife coexistence in CNP through strengthened collaborative processes and stakeholder expertise that improves habitat and species conservation, human wellbeing, and capacity to manage conflicts**

Indicators

0.1 A long-term coexistence toolkit that incorporates scientific and local knowledge on the drivers and levels of conflicts and ways to manage and mitigate conflicts **[DI-C01]** benefitting CNP people and wildlife, particularly conflict-prone species such as western chimpanzee and African buffalo (baseline zero. Project target toolkit developed, published, endorsed and disseminated by end of Y4Q1)

0.2 Local and institutional stakeholders report improved capability and capacity to conserve core areas, including forest blocks and buffer zones **[DI-A04]** (baseline established in Y1 [*change to Y2Q1*]. Project target 80% of people report an increase by end of Y3Q1)

0.3 Participants report improved wellbeing in their household as a result of this project's sustainable livelihood initiatives (baseline established in Y1 *[change to Y2Q3]* from 150 households, at least 80% women. Project target at least 10% average improvement across 150 households by end of Y4Q1)

0.4 Key conservation stakeholders (IBAP, national guards, local collaborators) report enhanced capacity to co-manage human-wildlife conflicts as a result of the training and collaborative processes, including trust-building and knowledge sharing activities **[DI-A04]** (baseline established in Y1 [*change to Y2]*. Project target capacity scores of 30 participants improved by at least 20% by end of Y3Q3)

We have emailed BCF-Reports@niras.com to ask whether a formal change request needs to be made for the minor modifications to the timeline.

Progress towards the project **Outcome** has been achieved through the collection of data from focus groups and consultations with institutional and local stakeholders to identify human-wildlife coexistence solutions, which will contribute towards the development of a coexistence toolkit (**Indicator 0.1**). Stakeholders consulted thus far included two park directors, two park guards, three local researchers and four park residents (**Evidence 9**). Data on human-wildlife interactions, including negative (e.g., crop foraging, aggressive behaviours towards humans, retaliatory killings, wildlife road accidents/kills) and positive (e.g., encounters with key forest indicator species such as red colobus and king colobus) were collected during a pilot phase in Y1Q4. The final data collection strategy (participatory mapping) will be implemented in Y2Q1 following a review with 8 DFOs, 2 local researchers, and four DPOs. Camera trap deployment has already begun, and monitoring will continue for 12 months at least. These data will be essential to understand how human-wildlife competition over space and resources varies spatially (across different anthropogenic landscape compositions) and temporally (across seasons). Additional consultations with the conservation surveillance team (22 people), knowledge sharing sessions with local stakeholders from across the five focal study areas (**Activity 1.7**) and socio-ecological data from **Output 1** are expected to be completed by Y3Q2.

These socio-ecological data will be essential for understanding the drivers of variation in human-wildlife coexistence, including conflict dynamics. The development of the coexistence toolkit (**Indicator 0.1**) is a key component of achieving the project Outcome. The toolkit will be co-developed by key stakeholders (including local women and men representatives, the project team and project partners) through participatory, interdisciplinary research and information sharing throughout Y2-Y3. This co-development process will provide a comprehensive understanding of coexistence and realistic measures for conflict alleviation, while also fostering collaboration between IBAP and local stakeholders.

The conservation surveillance system protocol (***CS Protocol***) was completed (**Evidence 7**) and is ready to be finalised and validated by UoE and IBAP in Y2Q1. Pre-implementation questionnaires to measure changes in capability and capacity to conserve core areas (**Indicator 0.2**) are under development and the baseline will be established by the end of Y2Q1 instead of Y1Q4. This slight delay will not affect the achievement of **Indicator 0.2**. Training will be provided to the surveillance team by the DRF in Y2Q1.

Indicator 0.2 remains adequate to achieve our project **Outcome**, as many issues related to managing human-wildlife conflicts are linked to limited capacity to carry out law enforcement across the park's terrestrial habitats. These issues were recently raised by key local informants, who noted that some communities were dissatisfied with the absence of, or limited, visits by park guards into the forests, which has resulted in increased illegal hunting, particularly by residents from outside the park. Local informants also expressed frustration with inconsistent law enforcement, where some communities are committed to following park regulations, while others do not and face no/little consequences.

All of these issues contribute to increased tensions between local communities and IBAP staff. The implementation of the conservation surveillance system (**Output 2**), as well as training (**Activities 2.5**, **2.6**, **4.7**) and collaborative processes (**Activities 1.7**, **2.7**-**2.10**, **4.8**-**4.9**) planned for Y2-Y4, will directly address these issues and facilitate human-wildlife coexistence through improved conservation and conflict management (**Outcome**), provided that local and institutional stakeholders perceive a significant improvement in capacity and capability to do so (**Indicators 0.2** and **0.4**). Increasing national expertise in conservation science and practice, and conflict management (**Output 4**) remains an essential component of our project Outcome.

The initiatives (**Output 3**) are still under development and are expected to be fully designed by the end of Y2Q2. Therefore, the baseline for this indicator will be established once the initiatives are in place and the specific individuals or households involved are confirmed. Demonstrating improvements in local people's wellbeing indicators will be important for achieving the project Outcome.

3.4 Monitoring of assumptions

Outcome level assumptions

Assumption 1: *best practices developed by diverse conservation scientists and practitioners remain unchanged. We follow the IUCN SSC guidelines on human-wildlife conflict and coexistence [1]. Human-wildlife conflict and coexistence are understood as "struggles that emerge when the presence or behaviour of wildlife poses actual or perceived, direct and recurring threats to human interests or needs, leading to disagreements between groups of people and negative impacts on people and/or wildlife. At the most basic level, coexistence suggests that at some level and in some form a choice is being made by humans to share landscapes and natural resources with wildlife in sustainable ways. It follows that, in order to do so, coexistence generally also requires agreement – or at the very least, cooperation – between different groups of people about the wildlife in question".*

Comment: Best practices developed by diverse conservation scientists and practitioners have remained unchanged.

Assumption 2: *Stakeholders, including partners and key local collaborators such as the women's associations, farmers, the management committee and village chiefs remain engaged in project activities and committed to the project's goals.*

Comment: Stakeholders remain committed to the project's goals, as evidenced by their continuous involvement in project activities (Y1: all Outputs for project partners and Outputs 1, 2 and 3 for local collaborators).

Assumption 3: *Guinea-Bissau's political situation does not affect project activities (since its inception IBAP has remained unaffected by political instability and our research team has experienced no problems working in CNP).*

Comment: The project has remained unaffected by political instability. New legislative and presidential elections are supposed to be held in 2025. We do not expect any impact on project activities.

Assumption 4: *The global geopolitical situation does not impact the project.*

Comment: The global geopolitical situation has not impacted the project.

Assumption 5: *No new global pandemic or local epidemics that stop project partners from conducting activities.*

Comment: No pandemics or epidemics have prevented the work from continuing.

Output level assumptions

Output 1

Assumption 1: *Local communities are willing to dedicate time and engage in research activities throughout the duration of this project.*

Comment: This assumption is upheld but to avoid interviewee fatigue we adapted our social science approach.

Assumption 2: *Local communities continue to allow our research team to use camera traps to monitor wildlife behaviour. Our team speaks with village leaders and as many community members as possible to describe our work and explain how no data on people is collected/stored, and to show footage of wildlife species to aid conservation.*

Comment: Local communities remain supportive of our use of camera traps and use of data. The home range of one of the five chimpanzee communities (Flack N'Djan-Kuanghan) is located in an area previously unsurveyed with camera traps. DRF, DPOs and Park vice-director A Sanhá have carried out multiple visits to the villages within this new study area (**Evidence 2**) and local people have granted permission to carry out the research.

Assumption 3: *All roles and responsibilities are agreed amongst researchers including UoE, Nova, IBAP and Palmeirinha, including DPOs and DFOs, including in response to potential instability (political, pandemic).*

Comment: All roles and responsibilities have been agreed and adhered to.

Output 2

Assumption 1: *IBAP staff (including CNP director and vice-director, GIS expert, programme coordinator, and eight park guards) continue to be employed during and beyond the completion of this project or find substitutes when necessary.*

Comment: IBAP staff have remained employed.

Assumption 2: *IBAP guards and local stakeholders, including farmers and group representatives, remain committed to maintain and enhance dialogue and participate in project activities including co-developing a communication approach.*

Comment: IBAP guards and stakeholders are committed to enhancing dialogue and participating in project activities planned for Y2.

Assumption 3: *Roles and responsibilities for the conservation surveillance system are fully agreed amongst institutional stakeholders*

Comment: We have identified the surveillance team, and the roles and responsibilities are on course to be agreed in early Y2.

Output 3

Assumption 1: *Partners (Palmeirinha, IBAP) and local stakeholders remain committed to engage in project activities, including interviews, meetings, appraisals and training, and initiative co-development.*

Comment: Partners and local stakeholders remain committed to project activities, but we have adapted social science methods to ensure continued engagement.

Assumption 2: *Roles and responsibilities are universally agreed amongst initiative participants.*

Comment: Roles and responsibilities are on course to be agreed in Y2.

Assumption 3: *Members of the livelihood initiatives are committed to the MOU, and in the event of unforeseen circumstances necessitating adjustments, they are able to actively engage and work together to reach a consensus in order to adapt the MOU.*

Comment: It is too early to assess this.

Assumption 4: *Members of the livelihood initiatives remain active participants.*

Comment: It is too early to assess this.

Output 4

Assumption 1: *Institutional stakeholders, including the Ministry of Education, remain committed to invest efforts to develop the 'Bissau-Guinean conservation training scheme'.*

Comment: Stakeholders remain committed to developing the Bissau-Guinean conservation training scheme with efforts ongoing.

Assumption 2: *Roles and responsibilities in human-wildlife conflict management and trust-building activities are fully accepted and recognised by partners and stakeholders.*

Comment: This is ongoing, and it is too early to assess.

Assumption 3: *Community conservation management committee meetings continue to be carried out regularly throughout the project.*

Comment: Management committee meetings were carried out in Y1.

Assumption 4: *Stakeholders recognise the long-term importance of human-wildlife conflict management and remain engaged in meetings and activities throughout and beyond the completion of this project.*

Comment: Stakeholders recognise the importance of conflict management with continued engagement (**Evidence 2, 3 and 9**).

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

This project will support more effective CNP management and sustainable human-wildlife coexistence, including identifying and addressing human-wildlife and conservation conflicts, through increased institutional capacity (via technical and communication training, a coexistence toolkit, and engagement of community members and law enforcement agencies in patrols and surveillance); improved social-ecological data and real-time surveillance for informed decision-making; and multi-stakeholder dialogue and collaboration. Consultative collaborative conservation decision-making processes, including local communities, will strengthen relations with conservation institutions. Beyond building collaborative relationships and local capacity building, it is too early to claim potential project impacts, these will be determined as the project progresses.

In the longer term, human-wildlife conflict solutions will incorporate dynamic landscape-scale ecological, economic, and sociopolitical planning, with inclusive processes to build and maintain co-management via trust-building training and integration in management committee meetings, including women. The systematic surveillance monitoring framework will benefit IBAP with scaling-up to other terrestrial PAs to achieve national conservation goals, with potential to scale across West Africa. Conservation core zones will be maintained facilitating viable wildlife populations. Increased capacity to adapt to economic uncertainties from cashew over-reliance and preservation of culturally important crop varieties, promoting women's autonomy, leadership and community resilience. A fully costed scale-up sustainable livelihood proposal across Southern Guinea-Bissau will be produced by the end of the project. Bissau-Guinean conservation training scheme will ensure foreign-led research projects invest in scientific capability and capacity building for environmental leaders.

4. Project support to the Conventions, Treaties or Agreements

The work undertaken in this project is intended to help Guinea-Bissau meet obligations under CBD's core principles for the programme of Work on Forest Biodiversity and in particular by supporting the CBD's Global Biodiversity Framework vision to ensure "Humanity lives in harmony with nature and in which wildlife and other living species are protected" and Target 4 of the Kunming-Montreal Global Biodiversity Framework to "Ensure urgent management actions to halt human-induced extinction of known threatened species….and effectively manage human-wildlife interactions to minimize human-wildlife conflict for coexistence" . Aissa Regalla de Barros is both named as IBAP project partner and CBD focal point in Guinea-Bissau. Aissa has attended all Darwin workshops and meetings and is in regular email contact with all team members.

In Y1 our project has informed the *Cantanhez Management Plan* through direct consultation (Section 3.1, Output 2) and addresses multiple strategies in the Action Plan for the conservation of medium- and large-sized terrestrial mammals in Cantanhez National Park (2024-2034)"

including Strategies (1) Address research gaps (through the start of Output 1 socio-ecological research, **Evidence 2, 3, 4**); (2) Increase law enforcement capacity to encourage sustainable resource use (through the development of the ***CS Protocol***, **Evidence 7**); (3) enhance human livelihoods & wellbeing (through Output 3 progress, **Evidence 3, 8, 9**); and (4) Raise conservation awareness (through a local radio outreach by DRF and Cantanhez vice-director A Sanhá in Y1Q3, highlighting the importance of conservation particularly for red colobus and king colobus that are hovering on the edge of local extinction, **Evidence 10**).

As outlined in Section 4 this project has been designed to ensure that women are integral to the development of the sustainable livelihoods initiatives, and women have been key to the data collection stage of the project. We have also trained two women DPOs in social and biological data collection. As such, our project is contributing to the following SDGs: Goal 1- through improving access to sustainable livelihoods to address the disproportionate impact of poverty on women; Goal 3- through tackling the impacts of human-wildlife conflict on wellbeing; Goal 5- through providing sustainable livelihood schemes for women for strengthened decision-making processes, reducing human-wildlife conflict that disproportionately impacts women, and training female Bissau-Guinean conservation scientists; Goal 15- through improved habitat protection, promoting sustainable use of forest products, halting biodiversity loss through law enforcement and reducing human-wildlife conflict. This project will support farmers, especially women, to maintain crop diversity, protect traditional knowledge, and improve resilience to climate and economic risks (Output 3).

This project supports the IUCN Western Chimpanzee Action Plan (WCAP) and the PI, DRF and Aissa Regalla de Barros have contributed to a children's book to reduce aggressive interactions between chimpanzees and children, including presentation to the WCAP implementation committee (**Evidence 11**). The PI co-authored the plan and is part of the human-chimpanzee conflict implementation committee, and DRF Bersacola is Guinea-Bissau's focal point with Aissa Regalla de Barros. This project responds to Strategies 1- best practices for mitigating human-chimpanzee conflict; 2- eliminating research gaps; 5- understanding human-chimpanzee interactions for disease risks; 6- land use planning and reducing forest conversion to cashew plantations; 7- maintaining and strengthening of PAs; and 8- increasing awareness of the impact of human-chimpanzee conflicts. The DRF is a member of the Red Colobus Action Plan implementation committee. CNP is a priority red colobus conservation site, and this project targets priority actions to train the park guards to enforce hunting laws and increase government support for the conservation of red colobus and their habitats. The conservation of red colobus and king colobus in CNP is critical to the global viability of these species, and all project partners remain committed to supporting this effort. We (IBAP, UoE and Palmeirinha) are currently implementing and developing activities to raise awareness in CNP on the importance of red colobus and king colobus conservation. Both species face significant pressure from habitat loss and hunting globally, including within Cantanhez. So far, we have produced a 9-minute audio segment (**Evidence 10**) in collaboration with the local radio station (Radio Lamparam), which is now being broadcast regularly. Additionally, the four DPOs have begun engaging Bissau-Guinean musicians to create a song focussed on colobus monkeys and their conservation. Further outreach activities are planned to be carried out by the DPOs in Y2-4.

5. Project support for multidimensional poverty reduction

Positive impacts on poverty alleviation are expected in the long-term through more sustainable human-wildlife coexistence and reduced conservation conflicts. Given the early phase of the project, baseline social and ecological data are being collected to advance knowledge and strengthen the knowledge base of human-wildlife interactions in Cantanhez NP in Guinea-Bissau. We will monitor impacts as the project progresses, but it is currently too early to claim impacts.

The beneficiaries include:

- **Residents of 10 partner villages** who will participate in livelihood strategies (**Output 3**), majority of whom are women. Impacts to at least 150 women participants will include: (i)

increased self-sufficiency and livelihood satisfaction (ii) improved commercial agriculture, (iii) higher occupational diversity, (iv) increased household income and (v) provision for dependents, as well as (vi) recognition of local women as leaders in conservation.

- **IBAP DPOs** involved in this project are expected to benefit in the long term through enhanced professional skills as a direct result of this project (**Output 4**) and increased household income via a regular monthly salary.
- **Local researchers and IBAP collaborators (DFOs)** across CNP. Impacts are expected via increased technical skills in wildlife monitoring (**Output 1**), monthly salary for at least 14 months (8 DFOs) and 3 years (local researchers), as well as a greater collaboration with IBAP and a more active role in conservation (**Output 2**).
- **The wider local population in CNP** will benefit from evidence-based multi-stakeholder policies to improve human-wildlife interactions and human wellbeing in Cantanhez NP. These outcomes will be expected through the co-development and implementation of the coexistence toolkit (**Indicator 0.1**), the scaling-up of livelihood diversification initiatives (**Indicator 3.4**), and improved capacity to co-manage human-wildlife conflicts (**Indicator 0.4**).

6. Gender Equality and Social Inclusion (GESI)

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

Structural inequalities between men and women in Guinea-Bissau are rooted in specific socio-cultural norms, the dominance of patriarchal power and socio-economically disadvantaged rural settings. In the context of conservation and livelihoods, women face high vulnerability to marginalisation, limited decision-making power, and low resilience to conflict and climate change. Women and children are disproportionately impacted by the presence of wildlife and conservation activities, but their fears and concerns are rarely acknowledged. Gendered divisions in the context of rural livelihoods in Guinea-Bissau often manifest in distinct agricultural and household responsibilities. Women commonly focus on activities such as tending vegetable gardens, producing palm oil, child-rearing, daily food preparation, house cleaning, fetching water, and gathering firewood. Additionally, they share responsibilities with men in cashew orchards and cultivated fields.Our project has considered GESI at every stage, including its design and implementation.

We are working closely with Aissa Regalla (Bissau-Guinean, IBAP's General Director), who strongly advocates for women's inclusion in conservation and development. This project has and will continue to:

We implemented gender equality strategies in the recruitment of DPOs (**Evidence 1, 2**), and we will make gender an integral part of the Bissau-Guinean conservation training scheme;

We have identified and continue to identify barriers to women's participation to conservation decision-making including cultural, psychological and practical (e.g. venue accessibility, gender of facilitator) barriers, and find ways to overcome them in culturally sensitive ways (**Evidence 3**);

We are actively encouraging women's participation in wellbeing and conflict research to ensure gender and socially disaggregated data collection and analysis for monitoring and evaluation (**Evidence 3, 8**);

We continually ensure that female stakeholders, participants, and project staff can attend project meetings, training sessions, and activities to guarantee their full and effective participation in the decision-making process. This may involve organising additional or separate meetings if required (**Evidence 2, 3, 8, 9**);

We have raised awareness and provided training to local and partner staff around gender equality, safeguarding issues, and human rights (**Evidence 3**);

We are working to generate opportunities for socio-economic autonomy for women through training and the implementation of women-led, co-developed livelihood interventions (**Evidence 8**).

7. Monitoring and evaluation

As reported throughout this report, monitoring and evaluation is an intrinsic component of this project and we are continually responding to new developments with our project partners, including making adjustments to the project in response to MTR feedback. We have committed to many M&E best practices, including SMART indicators; annual M&E meetings, regular assessment of any changing risks, and workplans; meetings and reporting to all partners; activities to establish baselines and measure change; the routine monitoring of key project activities; and half-year and annual reports.

To ensure targets have been met on-time and on-budget, in-country partners produce an annual workplan with agreed activities to support objectives and the approved budget. We hold quarterly meetings, and share updates. Members of the UoE project team met face to face with all project partners during an opening meeting at the beginning of Year1 as well as during M&E meetings in Q3 of Year1 to conduct project planning, monitoring and evaluation, and generate an annual review. DPOs presented the main activities and results from their work. Progress in project activities and completion of key milestones have been monitored through the above-mentioned reports. This process ensures timely completion of activities, and quickly flags up any issues for attention. Outside these formalised management and evaluation procedures and meetings, there was regular communication between project partners in-country and the UK via email, WhatsApp and Zoom. The DRF spent most of their time between CNP and Bissau, and regularly met with Guinean project partners, staff and local communities to share new developments and to ensure any problems were resolved quickly.

8. Lessons learnt

We have emailed BCF-Reports@niras.com to enquire whether changes to the logframe require formal approval. These changes have been highlighted throughout this document and are: (i) changes in some of the social sciences data collection approaches (**Output 1** and **3**) and sample size (**Indicator 1.1**); and (ii) moving three activities to establish baseline for **Indicators 0.2**, **0.3**, and **2.4** to Y2Q1-2 instead of Y1Q4.

The whole team is thrilled with how engaged the DPOs are with the interdisciplinary and participatory work they have been given, and how the team has cultivated a motivating and thriving environment. In part this was due to the very careful selection process conducted at the beginning of the project and strong engagement from all partners.

One lesson learnt relates to workload considerations associated with the social sciences research component. While interview data collection is a significant task, the subsequent management and translation of social science data, particularly given our emphasis on qualitative analysis, required considerably more time. We underestimate the amount of time required for typing up interviews. A questionnaire-based approach at an early project phase was intentionally avoided, as it often fails to provide an accurate representation of the complexities of human-wildlife coexistence and conservation dynamics. Thus, additional time was needed by the DPOs to enter the data, and this required us to reduce the number of surveyed households in Output 1 from 300 to 67 (or 227 including the focus group households) in Y1, so that other planned project activities could be carried out on time. Our recommendation for similar projects is to carefully account for the time demands associated with qualitative social science data processing and entry to a computer, as the latter can take over three times longer than the data collection itself.

Another lesson learnt relates to some aspects of the project timeline. Specifically, the baseline assessments for **Indicators 0.3**, **2.4**, were originally planned for Y1Q4 but had to be postponed to Y2Q1/Y2Q2 to ensure more strategic timing. For instance, the wellbeing baseline for the initiatives (**Indicator 0.3**, **Activity 3.6**) cannot be established without identifying all initiative members (at least 150 households) and therefore must wait until the initiatives themselves are fully developed or nearly fully developed.

Some aspects of our timeline for Output 2 must also align with external timelines. Specifically, the **Conservation Surveillance System** (**Output 2**) must be coordinated with key aspects of the revised *Cantanhez National Park Management Plan*. While IBAP and UoE designed the **CS System** with the *Management Plan* in mind (and vice versa), the completion timeline of the *Management Plan* is beyond our control, and some unexpected delays have occurred.

Though preliminary data with 67 households has been collected by the DPOs, an additional 150 interviews will be conducted in Y2Q1 to obtain a comprehensive baseline for **Indicator 2.4** (Increased stakeholder access to co-designed, audience-targeted information on the boundary zones, and rules and regulations of each conservation zone). These interviews will inform the design of the public outreach component of the **CS System** (**Activities 2.7**-**2.9**).

We emphasise that these delays have had no impact on our project progress beyond moving part of an activity to Y2. Our continuous engagement with IBAP has enabled us to adapt efficiently and incorporate relevant elements of the *Management Plan* into our strategies, including the ***CS Protocol***. Nevertheless, we will ensure the ***CS Protocol*** remains flexible, as originally planned in our M&E framework, by monitoring its effectiveness through consultations with the surveillance team and key local stakeholders (**Activity 2.13**, Y2-4).

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

N/A

10. Risk Management

No new risks have arisen in the last 12 months. We are submitting the existing risk register with this application.

11. Scalability and durability

The project partners are engaged in every step of the project, including its design, with a clear understanding of the costs, benefits and steps involved. This project is a direct results of discussions with IBAP on their needs so activities are attractive to key stakeholders. Partners are working together to impact policy for the management of Cantanhez including key policy documents. We are working to change behaviours to facilitate the project's conservation objectives. During the project, advanced training in surveillance establishment and human-wildlife conflict mitigation, and data entry, analysis and storage will be given to IBAP team members, and detailed protocols will be written up to ensure knowledge and skills remain available, and to facilitate training to future new employees. Training offered by Palmeirinha to key members of local communities will be written up into a training document and included in the sustainable livelihood proposal to ensure livelihood benefits are sustained.

IBAP is committed to replication-scaling of our approach. Key personnel (including managers of other NPs) will be invited to some training sessions, including human-wildlife conflict training, facilitating scaling to the national level. The multi-stakeholder livelihood initiatives plan to enhance the wellbeing of communities living alongside wildlife and promote positive conservation attitudes will include a scaling-up plan applicable to other conservation areas in Guinea-Bissau. Our team's membership/collaborations with IUCN expert groups, and planned taxa-specific IUCN guidelines on human-wildlife conflict/coexistence, will enhance the replication/scaling of our coexistence approach. This project will establish a legacy of increased

conservation capacity and equal opportunities through the Bissau-Guinean conservation training scheme', run by IBAP, to ensure foreign-led research projects invest in scientific capability/capacity building for Bissau-Guinean environmental leaders, with systems change and capacitation scaling benefiting 10 students/year (i.e. 50% annual graduates from the only environmental programme in Guinea-Bissau, Lusofona University).

12. Darwin Initiative identity

This project is recognised as a distinct project with a clear identity. It is the only project to be funded by the Darwin Initiative in Guinea-Bissau, it is Nationally and locally known as "Projecto Darwin". All project documents include a Darwin Initiative logo, which is used in National and International conference/meeting/workshop presentations (including **Evidence 11**). We have include the Darwin logo as a major funder on our new project website: https://cantanhezchimpanzeeproject.com/project/ The PI, Hockings, and DPO, Elisio Domingos Mandim, have posted project activities and updates on LinkedIn (**Evidence 12**). The team decided that they would no longer be posting on Twitter/X.

13. Safeguarding

14. Project expenditure

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

Project spend (indicative) since last Annual Report	2024/25 Grant (£)	2024/25 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
M&E				
Capital items (see below)				
Other Costs				
TOTAL	**170272**			

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

	Secured to date	Expected by end of project	Sources
Matched funding leveraged by the partners to deliver the project (£)			Partner staff costs, overhead costs, travel & subsistence, operating costs, other costs
Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project (£)			

15. Other comments on progress not covered elsewhere

We feel we have been able to include all information on Y1 progress in dedicated sections of this report.

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

We feel that progress is ongoing and will aim to have outstanding achievements for publicity in Y2 & 3.

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

This Table does not include minor changes as highlighted throughout this report. We are waiting for confirmation on whether a formal change request is required.

Project summary	Progress and Achievements July 2024 - March 2025	Actions required/planned for next period
Impact A sustainable state of human-wildlife coexistence through strengthened habitat management, multi-stakeholder collaboration, and livelihood diversification resulting in conflict alleviation, benefiting people and threatened wildlife in Guinea-Bissau's shared agroforest landscapes.	This project is working towards strengthening biodiversity conservation and promoting sustainable human-wildlife coexistence by building institutional and community capacity through training (embedded across all Outputs), enhanced conservation surveillance (Output 2), and inclusive co-management (Output 4). Through livelihood initiatives (Output 3), it fosters equitable stakeholder engagement, particularly of local women, in conservation decision-making, while supporting resilient livelihoods and reducing economic dependence on cashew. Our multi-stakeholder, collaborative approach to habitat conservation and human-wildlife conflict management lays the foundation for long-term, landscape-scale planning and scalable conservation strategies across Guinea-Bissau and West Africa.	
Outcome **Facilitate human-wildlife coexistence in CNP through strengthened collaborative processes and stakeholder expertise that improves habitat and species conservation, human wellbeing, and capacity to manage conflicts.**		
Outcome indicator 0.1 A long-term coexistence toolkit that incorporates scientific and local knowledge on the drivers and levels of conflicts and ways to manage and mitigate conflicts **[DI-C01]** benefitting CNP people and wildlife, particularly conflict-prone species such as western chimpanzee and African buffalo (baseline zero. Project target toolkit developed, published, endorsed and disseminated by end of Y4Q1).	20 focus groups/participatory workshops with 160 participants and 67 semi-structured interviews in Y1Q3 provided information on human-wildlife conflicts across CNP, with potential measures to alleviate conflicts discussed (**Evidence 3**). Additional consultations with institutional and local stakeholders were carried out in Y1Q4 (Table 1, **Evidence 9**). Ecological data collection to understand chimpanzee spatiotemporal behaviour in relation to resource availability started in Y1Q4 (**Evidence 4** and **6**). Training on participatory mapping to record human-wildlife interactions was carried out to 10 local collaborators and four DPOs in	Continue with data collection (camera trap, phenology, participatory mapping) (Y2); Regular consultations with local stakeholders (Y2); Knowledge sharing activities to identify coexistence solutions (start Y2Q4)

	February 2025, with the pilot phase of participatory mapping already started.	
Outcome indicator 0.2 Local and institutional stakeholders report improved capability and capacity to conserve core areas, including forest blocks and buffer zones **[DI-A04]** (baseline established in Y1. Project target 80% of people report an increase by end of Y3Q1).	Conservation surveillance (CS) system protocol completed (**Evidence 7**). Pre-implementation of the CS system questionnaires are under development and training to the CS team (22 people) will be implemented in Y2Q1.	Pre implementation questionnaires and training in Y2Q1.
Outcome indicator 0.3 Participants report improved wellbeing in their household as a result of this project's sustainable livelihood initiatives (baseline established in Y1 from 150 households, at least 80% women. Project target at least 10% average improvement across 150 households by end of Y4Q1)	Twenty-five locally-relevant wellbeing indicators have been identified using data from 160 households. Baseline will be established once all initiative participants are identified in Y2 (see **Section 8**).	Finalise initiatives (Y2Q2); Training sessions and implementation of initiatives (Y2-Y3); Evaluation of initiatives (Baseline achieved in Y2Q2 and evaluation in Y3).
Outcome indicator 0.4 Key conservation stakeholders (IBAP, national guards, local collaborators) report enhanced capacity to co-manage human-wildlife conflicts as a result of the training and collaborative processes, including trust-building and knowledge sharing activities **[DI-A04]** (baseline established in Y1. Project target capacity scores of 30 participants improved by at least 20% by end of Y3Q3)	Too early to report progress for this. The conservation surveillance protocol, which includes a data collection strategy for human-wildlife conflicts has been finalised (**Evidence 7**) and is ready for implementation in Y2.	Training for IBAP staff and national guards on the surveillance protocol and human rights in conservation (Y2Q1); CS team to conduct knowledge sharing activities and training with local stakeholders on rules and regulations, importance of conservation, communication chain and how to report an illegal activity or conservation incidence (start Y2Q2); Pre-training evaluation and conflict resolution training (Y2Q4).
Output 1 **Enhanced understanding of the drivers of human-wildlife coexistence, including conflict levels, through socio-ecological research across CNP.**		
Output indicator 1.1		

The drivers and levels of conflict, ranging from minor disputes over wildlife crop damage, e.g. chimpanzees, buffaloes, to deep rooted conflicts over identity, following IUCN human-wildlife conflict & coexistence guidelines, are assessed and synthesised in a report (baseline zero. Project target semi-structured interviews with 300 households across 30 villages by end of Y1Q4)	Semi-structured interviews and focus groups to understand levels and drivers of conflicts were carried out across 18 villages involving 227 participants. Fully anonymised dataset available, report completed (**Evidence 3**).	Regular consultations with local stakeholders via participatory mapping (Y2).
Output indicator 1.2 The socio-ecological factors influencing spatiotemporal variation in wildlife habitat use and behaviour towards humans across CNP, including problematic behaviours such as crop foraging by chimpanzees, and important areas for biodiversity are identified and synthesised in a report **[DI-C08]** (baseline established from one chimpanzee community in central CNP (Bersacola et al. 2021). Project target 612 km^2 camera trapping including 12 months of fine-resolution surveys across 100 km^2 by end of Y2Q4)	Eight local DFOs selected and employed by IBAP. Eight DFOs, two local researchers (ITC, MC) and four DPOs were fully trained in GPS use, KoboCollect, camera trap deployment, and phenology monitoring in February 2025. Reconnaissance surveys in two previously unstudied chimpanzee communities were carried out in February 2025. Identification and recording of individual trees for phenology monitoring began in February 2025 (**Evidence 2**). As of the end of Y1, forty camera traps have been deployed, and 221 individual trees have been tagged across five chimpanzee communities **Evidence 4** and **6**). All data collection sheets, including camera trap deployment and maintenance, phenology monitoring, human-wildlife interactions mapping, have been developed in KoboToolBox and all team members (four DPOs and 10 local researchers) have been fully trained by DRF.	By end of Y2Q1: All camera traps deployed, phenology monitoring and participatory mapping of human-wildlife interactions fully established across the five chimpanzee communities.
Output indicator 1.3 Potential solutions to alleviate different conflict levels and facilitate sustainable coexistence between humans and wildlife, including chimpanzees, are identified through participatory knowledge-sharing activities in focus groups in key communities (baseline zero. Project target 150 households across 10 villages by end of Y3Q1)	Focus groups/participatory workshops involving residents across 10 villages (7 within the five focal chimpanzee communities) have been carried out in November-December 2024 (**Evidence 3**). Additional interviews and informal consultations with stakeholders were carried out in January-February 2025 (**Evidence 8** and **9**).	Knowledge-sharing focus groups across 10 key communities (Y2Q4-Y3Q1).
Output indicator 1.4 The social-ecological mechanisms and changing dynamics of coexistence in CNP are identified, written-up, and submitted for publication **[DI-C17]** (baseline zero publications that adopt a social-ecological approach to measure coexistence in CNP. Project target one publication submitted by end of Y3Q2).	Data collection ongoing (see indicators above).	Data analysis (wildlife distribution, plant phenology, spatiotemporal dynamics of

		human-chimpanzee conflicts) starting in Y2.
Output 2 **Strengthened biodiversity conservation capacity through improved multi-stakeholder understanding of laws and regulations and the establishment of a systematic conservation surveillance system.**		
Output indicator 2.1 The state of the core and buffer zones in CNP, including percentage of forest remaining and land use composition within each zone, is assessed and published **[DI-C03]** (baseline 10% from available 2019 data across 1067km^2, Pereira et al 2022. Project target 100% using data from 2016 to 2024 by end of Y1Q3).	The report presenting an analysis of annual forest loss since 2001 and monthly land use change since 2018 was completed in Y1Q4 with data up to March 2025 (**Evidence 5**).	Additional analysis to match with updated core and buffer zones once the new *CNP Management Plan* is published by IBAP (expected in Y2).
Output indicator 2.2 A systematic surveillance system protocol for CNP is developed by stakeholders, incorporating remote sensing, on-the-ground patrols, including continuous monitoring of habitat critical for forest specialists (such as red colobus), and a communication chain **[DI-C01]** (baseline zero. Project target protocol developed by end of Y1Q4).	In July 2017 UoE and IBAP began developing a terrestrial conservation surveillance strategy. Based on the meeting and follow-up discussions in Bissau, the DRF produced a first draft of the protocol which was discussed among project partners. The CS Protocol was updated in March 2025 (Version 2), based on reviews with IBAP in Bissau and local collaborators in Cantanhez (**Evidence 7**). KoboCollect datasheets to record information during patrols, including hunting, habitat alteration, human-wildlife conflicts incidences were produced by DRF and IBAP GIS technician E Benante (**Evidence 6**). **Please note that this is a working draft, meaning that the protocol will be updated as the CS system is implemented, monitored and evaluated throughout Y2 and Y3.**	UoE and IBAP present and validate protocol with the surveillance team (Y2Q1). Begin implementation and revise protocol when necessary, in Y2.
Output indicator 2.3 A conservation surveillance team, including park guards, IBAP management and key national guards, are fully trained in the **rules, regulations and borders of conservation zones**, conducting patrols, recording the presence of key threatened species (such as chimpanzees, red colobus), reporting through the **communication chain**, and **human rights in law**	Not yet implemented. Training material is currently being produced (80% complete). Training material for the surveillance team to implement the protocol – including carrying out terrestrial patrols, using land use change alerts from remote sensing, reporting on the communication chain, conducting M&E activities – is complete. The development of	Complete training material and carry out training in Y2Q1.

enforcement [DI-A01] (baseline zero. Project target 16 out of 16 institutional staff in Cantanhez by the end of Y2Q1).	additional training material, including on rules and regulations and human rights in conservation is currently under development. Conservation rules and regulations are currently being revised by IBAP and will be incorporated in the training in Y2Q1.	
Output indicator 2.4 Increased stakeholder access to co-designed, audience-targeted information on the boundary zones, and rules and regulations of each conservation zone in at least 800 households across 80 villages, with access to information evaluated in 150 households (baseline: established in Y1 via semi-structured interviews with 150 households. Project target 50% of respondents across 150 households in 10 villages report increased access to sources of information on rules/regulations by end of Y3Q3).	Preliminary data was collected with semi-structured interviews with 67 households. Baseline will be established in early Y2 (see **Section 8**).	Questionnaires to 150 households to establish baseline and co-design of materials with key stakeholders in Y2.
Output indicator 2.5 A terrestrial conservation surveillance system is implemented and evaluated across CNP (baseline zero as no systematic terrestrial conservation surveillance is implemented). Project target: surveillance system covering 540 km^2, 80% of the terrestrial accessible land (660 km^2), see *Figure 2b*, patrolled every 3 months by Y2Q3. Surveillance system fully evaluated by end of Y4Q1.	The terrestrial conservation surveillance system protocol has been developed and revised (Version 2) and is ready for implementation (**Evidence 7**). KoboCollect datasheets are completed and ready to be used (**Evidence 6**). DPOs have been trained in KoboCollect and use of GPS. Training material for the surveillance team to implement the protocol is nearly complete (see **indicator 2.3**). Pre-implementation questionnaires and knowledge assessments are under development.	Questionnaires and knowledge assessments with the surveillance team planned for Y2Q1. Surveillance team trained; patrols start; DPOs and IBAP directors trained in retrieving remote sensing data (by Y2Q3).
Output 3 **Co-developed and community-led sustainable livelihood initiatives.**		
Output indicator 3.1 Locally relevant wellbeing indicators, including those related to health, access to natural resources, social and gender equality, autonomy, food and economic security, are identified in 150 households (baseline is zero. Project target achieved by end of Y1Q3 via focus groups).	Completed. 20 focus groups involving 160 participants were carried out by DPOs in October-December 2024. Twenty-five wellbeing indicators were identified (**Evidence 3**).	
Output indicator 3.2 Sustainable livelihood initiatives (based on crops and non-timber forest products that promote livelihood diversification) are	The sustainability and impact of previous sustainable livelihood initiatives were analysed via semi-structured	Identify at least 150 initiative members across 10 villages (by

identified, co-developed and agreed with stakeholders (baseline is 10% through initial consultations by DRF in 2023. Project target: 10 participatory workshops across 10 villages in CNP, with at least two initiatives co-developed with 150 households by end of Y2Q2).	interviews with key informants (local and institutional) in January-February 2025 (**Evidence 8**). Two sustainable livelihood initiatives to be implemented under this project have been identified in Y1Q4 using data from twenty focus groups and follow-up unstructured/semi-structured interviews across CNP (**Evidence 8** and **9**).	Y2Q2); Follow-up meetings with initiative members and institutional partners to develop the structure of the initiatives, including establishing roles and responsibilities, partnerships with institutions, timeline and budget, MoU (by Y2Q3).
Output indicator 3.3 Initiative members report increased knowledge on sustainable livelihood project leadership, management and coordination and/or technical skills in livelihood diversification as a result of the training, and community-led livelihood initiatives are implemented and evaluated **[DI-A04]** (baseline zero. Project target 150 household members across 10 villages, with at least 80% of members reporting a 50% increase in knowledge by end of Y3Q2).	NA	Training to be developed and implemented; Initiatives implemented by beginning of Y2Q3. Consultations with initiative members every two months (Y2-Y3).
Output indicator 3.4 Effective multi-stakeholder livelihood initiatives plan to enhance the wellbeing of communities living alongside wildlife, including chimpanzees, and promote positive conservation attitudes including scaling-up plan is published and endorsed by stakeholders **[DI-B04]** (baseline zero as no conservation-facing livelihood initiatives in place in CNP. Project target plan developed, evaluated, including a fully costed proposal for scaling up to southern Guinea-Bissau by end of Y4Q1).	NA	Initiatives full evaluation and scaling up strategy planned for Y3Q4-Y4Q1.
Output 4 **Building national expertise and promoting collaborative processes in conservation decision-making.**		
Output indicator 4.1 Bissau-Guinean conservation scientists undertake bespoke training programme in the art of conservation science, primate conservation, scientific writing, data analysis skills including GIS, statistical modelling, and scientific communication; writing and submission of publication to peer-reviewed journal with PI and DRF mentorship **[DI-C17]** (baseline of DPO skills established in	Four DPOs were selected and employed in October 2024. Baseline skills established (see **Section 3.2** Output 4). Training carried out included: (a) **social sciences data collection** training with Dr Ana Nuno and first two weeks of implementation of focus groups, participatory workshops and semi-structured interviews data collection with DRF and PI	Training in surveillance system protocol (Y2Q1); training in ecological survey data analysis and GIS (Y2Q3-4).

Y1. Project target 4 Bissau-Guinean researchers trained and mentored by end of Y3Q4).	(Y1Q3); (b) **biological sciences data collection training** with DRF, including technical training on GPS, BaseCamp, KoboToolBox, plant phenology, camera trap use and maintenance, and grid-based camera trap deployment strategy.	Further scientific research skills, including accessing and summarising research articles, structuring research manuscripts and English language training planned in Y2.
Output indicator 4.2 Four early career Bissau-Guinean conservation scientists present research outputs at conferences and continuously participate in public outreach activities, including radio interviews, to promote chimpanzee and colobus conservation, among other wildlife **[DI-C15]** (baseline zero. Project target is at least one conference and two outreach activities by the end of Y4Q1).		Radio interviews and local school visits planned for Y2; conference presentations planned for Y3.
Output indicator 4.3 A 'Bissau-Guinean conservation training scheme' is made a requisite of all foreign-led research projects and MOU is developed and endorsed **[DI-B12]** (baseline zero as no such scheme currently exists. Project target protocol developed and endorsed by end of Y4Q1).	UoE and IBAP discussed the development of the protocol in Y1 (See **Section 3.1 Output 4**). Review of other national protocols ongoing.	Present draft of protocol during project partners annual meeting in Y2.
Output indicator 4.4 Key conservation stakeholders (IBAP, national guards, local collaborators) comprising at least 30 members trained in conflict mitigation and alleviation, including in specific challenges of coexisting with great apes **[DI-A01]** (baseline zero. Project target all 30 members by end of Y3Q3).	NA	Planned for Y2Q4.
Output indicator 4.5 Trust-building activities and other conflict-mitigating tools are designed and integrated into community conservation management meetings (baseline zero conflict tools integrated into current meeting structure. Project target 1hr allocated to conflict mitigation and trust-building activities in each Y3 meeting, achieved by Y4Q1).	NA	Planned for Y3 and Y4.

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

Project Summary	SMART Indicators	Means of Verification	Important Assumptions
Impact: A sustainable state of human-wildlife coexistence through strengthened habitat management, multi-stakeholder collaboration, and livelihood diversification resulting in conflict alleviation, benefiting people and threatened wildlife in Guinea-Bissau's shared agroforest landscapes.			
Outcome: Facilitate human-wildlife coexistence in CNP through strengthened collaborative processes and stakeholder expertise that improves habitat and species conservation, human wellbeing, and capacity to manage conflicts.	**0.1** A long-term coexistence toolkit that incorporates scientific and local knowledge on the drivers and levels of conflicts and ways to manage and mitigate conflicts **[DI-C01]** benefitting CNP people and wildlife, particularly conflict-prone species such as western chimpanzee and African buffalo (baseline zero. Project target toolkit developed, published, endorsed and disseminated by end of Y4Q1). **0.2** Local and institutional stakeholders report improved capability and capacity to conserve core areas, including forest blocks and buffer zones **[DI-A04]** (baseline established in Y1. Project target 80% of people report an increase by end of Y3Q1).	**All relevant measures of verification will be disaggregated by gender and stakeholder group.** **0.1** Toolkit finalised and endorsed by stakeholders. Evidence of participation through attendance sheets and feedback records. **0.2** Pre-and post-conservation surveillance system implementation questionnaires. Number of people reporting that they are applying new skills and knowledge.	*IUCN best practices developed by diverse conservation scientists and practitioners remain unchanged. We follow the IUCN SSC guidelines on human-wildlife conflict and coexistence [1]. Human-wildlife conflict and coexistence are understood as "struggles that emerge when the presence or behaviour of wildlife poses actual or perceived, direct and recurring threats to human interests or needs, leading to disagreements between groups of people and negative impacts on people and/or wildlife. At the most basic level, coexistence suggests that at some level and in some form a choice is being made by humans to share landscapes and natural resources with wildlife in sustainable ways. It follows that, in order to do so, coexistence generally also requires*

	0.3 Participants report improved wellbeing in their household as a result of this project's sustainable livelihood initiatives (baseline established in Y1 from 150 households, at least 80% women. Project target at least 10% average improvement across 150 households by end of Y4Q1) **0.4** Key conservation stakeholders (IBAP, national guards, local collaborators) report enhanced capacity to co-manage human-wildlife conflicts as a result of the training and collaborative processes, including trust-building and knowledge sharing activities **[DI-A04]** (baseline established in Y1. Project target capacity scores of 30 participants improved by at least 20% by end of Y3Q3)	**0.3** Fully anonymised datasets and disaggregated summary statistics available in project report and database. **0.4** Datasets and summary statistics available in project report and database. Attendance sheets.	*agreement – or at the very least, cooperation – between different groups of people about the wildlife in question".* *Stakeholders, including partners and key local collaborators such as the women's associations, farmers, the management committee and village chiefs remain engaged in project activities and committed to the project's goals.* *Guinea-Bissau's political situation does not affect project activities (since its inception IBAP has remained unaffected by political instability and our research team has experienced no problems working in CNP).* *The global geopolitical situation does not impact the project.* *No new global pandemic or local epidemics that stop project partners from conducting activities.*
Output 1. Enhanced understanding of the drivers of human-wildlife coexistence, including conflict levels, through socio-ecological research across CNP.	**1.1** The drivers and levels of conflict, ranging from minor disputes over wildlife crop damage, e.g. chimpanzees, buffaloes, to deep rooted conflicts over identity, following IUCN human-wildlife conflict & coexistence guidelines, are	**1.1** Project report and fully anonymised datasets in database.	*Local communities are willing to dedicate time and engage in research activities throughout the duration of this project.* *Local communities continue to allow our research team to use camera traps to monitor wildlife behaviour. Our team speaks with*

	assessed and synthesised in a report (baseline zero. Project target semi-structured interviews with 300 households across 30 villages by end of Y1Q4) **1.2** The socio-ecological factors influencing spatiotemporal variation in wildlife habitat use and behaviour towards humans across CNP, including problematic behaviours such as crop foraging by chimpanzees, and important areas for biodiversity are identified and synthesised in a report **[DI-C08]** (baseline established from one chimpanzee community in central CNP (Bersacola et al. 2021). Project target 612 km^2 camera trapping including 12 months of fine-resolution surveys across 100 km^2 by end of Y2Q4) **1.3** Potential solutions to alleviate different conflict levels and facilitate sustainable coexistence between humans and wildlife, including chimpanzees, are identified through participatory knowledge-sharing activities in focus groups in key communities (baseline zero. Project target 150 households across 10 villages by end of Y3Q1)	**1.2** Report containing data from camera traps, plant phenology, remote sensing and participatory mapping. **1.3** Report with consolidation of data from knowledge sharing activities.	*village leaders and as many community members as possible to describe our work and explain how no data on people is collected/stored, and to show footage of wildlife species to aid conservation.* *All roles and responsibilities are agreed amongst researchers including UoE, Nova, IBAP and Palmeirinha, including DPOs and DFOs, including in response to potential instability (political, pandemic).*

	1.4 The social-ecological mechanisms and changing dynamics of coexistence in CNP are identified, written-up, and submitted for publication **[DI-C17]** (baseline zero publications that adopt a social-ecological approach to measure coexistence in CNP. Project target one publication submitted by end of Y3Q2).	**1.4** Article submitted for publication in OA journal. Models and output maps of wildlife distribution, plant phenology and chimpanzee spatiotemporal behaviour available in project report and database. *Note: Although it seems relevant to our project, we are not quantifying 'net changes' in incidences of human-wildlife conflict **[DI-D15]** such as crop foraging events. We collect data on wildlife space and resource use including shared resources, and people's reports of problematic wildlife behaviour and socio-political issues as part of research on drivers/levels of conflict.*	
Output 2. Strengthened biodiversity conservation capacity through improved multi-stakeholder understanding of laws and regulations and the establishment of a systematic conservation surveillance system.	**2.1** The state of the core and buffer zones in CNP, including percentage of forest remaining and land use composition within each zone, is assessed and published **[DI-C03]** (baseline 10% from available 2019 data across 1067km^2, Pereira et al 2022. Project target 100% using data from 2016 to 2024 by end of Y1Q3). **2.2** A systematic surveillance system protocol for CNP is	**2.1** Report with analysis of satellite imagery (including ESA Sentinel 2, years 2016 to 2024, Planet data, CTrees LUCA). **2.2** Workshop participant list. Roles and responsibilities are	*IBAP staff (including CNP director and vice-director, GIS expert, programme coordinator, and eight park guards) continue to be employed during and beyond the completion of this project or find substitutes when necessary.* *IBAP guards and local stakeholders, including farmers and group representatives, remain committed to maintain and enhance dialogue and*

	developed by stakeholders, incorporating remote sensing, on-the-ground patrols, including continuous monitoring of habitat critical for forest specialists (such as red colobus), and a communication chain **[DI-C01]** (baseline zero. Project target protocol developed by end of Y1Q4). **2.3** A conservation surveillance team, including park guards, IBAP management and key national guards, are fully trained in the rules, regulations and borders of conservation zones, conducting patrols, recording the presence of key threatened species (such as chimpanzees, red colobus), reporting through the communication chain, and human rights in law enforcement **[DI-A01]** (baseline zero. Project target 16 out of 16 institutional staff in Cantanhez by the end of Y2Q1). **2.4** Increased stakeholder access to co-designed, audience-targeted information on the boundary zones, and rules and regulations of each conservation zone in at least 800 households across 80 villages, with access to information evaluated in 150 households (baseline: established in Y1 via	established amongst stakeholders (UoE, IBAP, National Guard, Ministry of Environment, Forestry Department), and surveillance system protocol developed. Protocol finalised and endorsed by stakeholders. **2.3** Training materials, including technical manuals, presentations. Pre-training questionnaires. Number and list of names and organisation of persons trained. Training certificate. **2.4** Map of villages and anonymised list of households reached made available in project reports. Summary data on reported access to information obtained together with livelihood related social survey.	*participate in project activities including co-developing a communication approach.* *Roles and responsibilities for the conservation surveillance system are fully agreed amongst institutional stakeholders.*

	semi-structured interviews with 150 households. Project target 50% of respondents across 150 households in 10 villages report increased access to sources of information on rules/regulations by end of Y3Q3). **2.5** A terrestrial conservation surveillance system is implemented and evaluated across CNP (baseline zero as no systematic terrestrial conservation surveillance is implemented). Project target: surveillance system covering 540 km^2, 80% of the terrestrial accessible land (660 km^2), see *Figure 2b*, patrolled every 3 months by Y2Q3. Surveillance system fully evaluated by end of Y4Q1.	**2.5** Map of CNP showing patrol routes and area covered by the park guards. Retrieval of satellite imagery and analysis, land cover change assessments every month. Evaluation of the surveillance system via interviews and consultations with the surveillance team and relevant stakeholders (including IBAP director and local communities). Report shared with project partners every three months. Final protocol presented and shared with stakeholders.	
Output 3. Co-developed and community-led sustainable livelihood initiatives.	**3.1** Locally relevant wellbeing indicators, including those related to health, access to natural resources, social and gender equality, autonomy, food and economic security, are identified in 150 households (baseline is zero. Project target achieved by end of Y1Q3 via focus groups). **3.2** Sustainable livelihood initiatives (based on crops and	**3.1** Summary information available in project report and database. **3.2** Report with a list of workshop participants (at least 80%	*Partners (Palmeirinha, IBAP) and local stakeholders remain committed to engage in project activities, including interviews, meetings, appraisals and training, and initiative co-development.* *Roles and responsibilities are universally agreed amongst initiative participants.*

	non-timber forest products that promote livelihood diversification) are identified, co-developed and agreed with stakeholders (baseline is 10% through initial consultations by DRF in 2023. Project target: 10 participatory workshops across 10 villages in CNP, with at least two initiatives co-developed with 150 households by end of Y2Q2). **3.3** Initiative members report increased knowledge on sustainable livelihood project leadership, management and coordination and/or technical skills in livelihood diversification as a result of the training, and community-led livelihood initiatives are implemented and evaluated **[DI-A04]** (baseline zero. Project target 150 household members across 10 villages, with at least 80% of members reporting a 50% increase in knowledge by end of Y3Q2). **3.4** Effective multi-stakeholder livelihood initiatives plan to enhance the wellbeing of communities living alongside wildlife, including chimpanzees, and promote positive conservation attitudes including scaling-up plan is published and endorsed by stakeholders **[DI-**	women) and report. Roles and responsibilities are defined amongst initiative members. Memorandum of understanding (MOU), timeline and strategy, membership enrollment in the initiative, and document distributed and presented to members. **3.3** Training activities, list of participants and certificates. Guidelines finalised and shared with project members. Regular M&E activities involving consultations with initiative participants every two months (Y2-3). **3.4** Livelihood initiatives fully evaluated via data on pre- and post- wellbeing questionnaires and regular M&E activities involving consultations with initiative participants every two months (Y2-3). Plan including fully costed initiatives for scaling	*Members of the livelihood initiatives are committed to the MOU, and in the event of unforeseen circumstances necessitating adjustments, they are able to actively engage and work together to reach a consensus in order to adapt the MOU.* *Members of the livelihood initiatives remain active participants.*

	B04] (baseline zero as no conservation-facing livelihood initiatives in place in CNP. Project target plan developed, evaluated, including a fully costed proposal for scaling up to southern Guinea-Bissau by end of Y4Q1).	up written up, distributed to and endorsed by stakeholders by end of project.	
Output 4. Building national expertise and promoting collaborative processes in conservation decision-making.	**4.1** Bissau-Guinean conservation scientists undertake bespoke training programme in the art of conservation science, primate conservation, scientific writing, data analysis skills including GIS, statistical modelling, and scientific communication; writing and submission of publication to peer-reviewed journal with PI and DRF mentorship **[DI-C17]** (baseline of DPO skills established in Y1. Project target 4 Bissau-Guinean researchers trained and mentored by end of Y3Q4). **4.2** Four early career Bissau-Guinean conservation scientists present research outputs at conferences and continuously participate in public outreach activities, including radio interviews, to promote chimpanzee and colobus conservation, among other wildlife **[DI-C15]** (baseline zero.	**4.1** Reports every three months, course outputs, and publication submitted. **4.2** Conference presentations, radio interviews, public event presentations by the four DPOs.	*Institutional stakeholders, including the Ministry of Education, remain committed to invest efforts to develop the 'Bissau-Guinean conservation training scheme'.* *Roles and responsibilities in human-wildlife conflict management and trust-building activities are fully accepted and recognised by partners and stakeholders.* *Community conservation management committee meetings continue to be carried out regularly throughout the project.* *Stakeholders recognise the long-term importance of human-wildlife conflict management and remain engaged in meetings and activities throughout and beyond the completion of this project.*

	Project target is at least one conference and two outreach activities by the end of Y4Q1). **4.3** A 'Bissau-Guinean conservation training scheme' is made a requisite of all foreign-led research projects and MOU is developed and endorsed **[DI-B12]** (baseline zero as no such scheme currently exists. Project target protocol developed and endorsed by end of Y4Q1). **4.4** Key conservation stakeholders (IBAP, national guards, local collaborators) comprising at least 30 members trained in conflict mitigation and alleviation, including in specific challenges of coexisting with great apes **[DI-A01]** (baseline zero. Project target all 30 members by end of Y3Q3). **4.5** Trust-building activities and other conflict-mitigating tools are designed and integrated into community conservation management meetings (baseline zero conflict tools integrated into current meeting structure. Project target 1hr allocated to conflict mitigation and trust-building	**4.3** Meetings with IBAP, UoE and relevant stakeholders including Universities and the Ministry of Education in Guinea-Bissau to discuss protocol, define roles and responsibilities. MOU finalised and endorsed by IBAP. **4.4** Conflict resolution training carried out (to coincide with beginning of toolkit development). Trust-building activities, guidelines distributed. List of participants and certificates. Pre- and post-training questionnaire data. **4.5** Meetings minutes/reports with reported time allocation to trust-building and other conflict mitigation activities. Reports every six months.	

	activities in each Y3 meeting, achieved by Y4Q1).		

Activities

Output 1

1.1 Design and deliver semi-structured interviews with resident households to determine drivers and levels of conflicts over wildlife and conservation.
1.2 Data analysis and report write up.
1.3 Training and camera trap monitoring across CNP.
1.4 Training and monthly phenology monitoring and vegetation plots across forest and cultivated areas.
1.5 Retrieve remote sensing data monthly to generate land use and forest cover covariates.
1.6 Participatory mapping with stakeholders to continuously record human-wildlife interactions, with a focus on chimpanzee crop foraging and aggressive encounters.
1.7 Knowledge sharing activities (via focus groups) in key communities to identify coexistence solutions.
1.8 Social-ecological data analysis and write-up. Paper submitted for publication. Coexistence toolkit drafted.
1.9 Meetings with stakeholders, including local representatives and conservation staff, to discuss and validate coexistence toolkit.
1.10 Toolkit training and dissemination with stakeholders.

Output 2

2.1 Retrieval and analysis of satellite imagery (high-resolution Planet data, 10m resolution 2016-2024 ESA Sentinel 2 data, CTrees LUCA).
2.2 Workshop to develop a conservation surveillance strategy including a communication chain.
2.3 Drafting and finalising the conservation surveillance system protocol and communication plan. Surveillance team finalised.
2.4 M&E: Pre- and post-surveillance system skills and knowledge assessment with the surveillance team.
2.5 Training of conservation surveillance system team on on-the ground patrolling and reporting through the communication chain, laws and regulations within conservation zones.
2.6 Training on remote sensing and monitoring for habitat change to IBAP management staff and DPOs.
2.7 Surveillance team to hold discussions with the local management committee and community authorities and show boundaries of different conservation zones.
2.8 Park guards to conduct outreach communication activities with resident households across CNP.
2.9 Infographic design. Posters printed and distributed.
2.10 M&E: Pre- and post-intervention household interviews to measure changes in access to information. Data analysis and report.
2.11 Surveillance system: on-the-ground patrols and reporting through the communication chain. Data and reports shared every 3 months.
2.12 Surveillance system: Analysis of satellite data to monitor habitat change. Reporting through the communication chain. Data and reports shared every 3 months.
2.13 Surveillance system M&E: Consultations with the surveillance team and relevant stakeholders (including IBAP director and local communities)
2.14 Finalise terrestrial conservation surveillance system protocol, present and share protocol with stakeholders.

Output 3
3.1 Identify wellbeing indicators using interviews.
3.2 Participatory workshops to identify, assess and design ways to evaluate previous sustainable livelihood approaches, and develop women's livelihood diversification strategies.
3.3 Finalise initiatives, develop and sign memorandum of understanding, acquire equipment and materials.
3.4 Training, including equipment maintenance and repair. Guidelines finalised and distributed.
3.5 Initiatives implemented. Palmeirinha DPOs to consult initiative members every 2 months and include in a report.
3.6 M&E: Pre- and post-intervention interviews to measure changes in household wellbeing indicators. Data analysis and report.
3.7 Final report with initiative strategies and recommendations for scaling up written up and distributed to stakeholders.

Output 4
4.1 Four Guinean DPOs undertake training in project data collection, data management, report writing and scientific communication.
4.2 DPOs undertake scientific research skills training (20% of their time, including in literature search, English and scientific writing, summarise papers / annotated bibliography).
4.3 Statistical data analysis training to four DPOs using data collected.
4.4 DPOs to carry out public outreach (radio, social media) and presentations at conferences.
4.5 Meetings and development of protocol to include Guinean researchers and students into foreign-led research projects.
4.6 Finalise protocol and MOU to include Guinean researchers and students into foreign-led research projects.
4.7 Conflict resolution training and hand out of trust-building activities guidelines.
4.8 Pre- and post-evaluation to evaluate change in knowledge & skills in conflict mitigation and alleviation.
4.9 Integrate trust-building activities into regular meetings amongst national and local stakeholders (at least one hour per meeting).

19. Checklist for submission

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