

Darwin Initiative Main and Post Project Annual Report

To be completed with reference to the “Writing a Darwin Report” guidance: (<http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms>). It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

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Darwin Project Information

Project reference	25-002
Project title	A model for conservation, stabilisation and development in South Sudan
Country/ies	South Sudan
Lead organisation	Fauna & Flora International
Partner institution(s)	Caritas Austria, Community Organisation for Development (COD), Bucknell University, South Sudan Ministry of Wildlife Conservation and Tourism
Darwin grant value	£356,076
Start/end dates of project	1st July 2018-31 st March 2021
Reporting period (e.g. Apr 2019 – Mar 2020) and number (e.g. Annual Report 1, 2, 3)	1st May 2019-29 th April 2020. Annual Report 2
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1. Project summary

As agreed with the Darwin Initiative and since this document will be made publically available, details of exact locations are purposefully omitted from this report for security reasons. Exact locations are included in the Annexes which is why should not be made public.

South Sudan contains rich but little known biodiversity and habitats, but is hampered by political and economic crises. In Western Equatoria, tropical forests contain chimpanzees (EN), elephants (VU) and other threatened forest species. Here, in two Game Reserves (GRs), FFI has created a nationally unique model of protected area management involving government and community stakeholders, against a national backdrop of mistrust and conflict. This active reconciliation and community stabilisation model supports resilient livelihoods development, enabling the disenfranchised, including young people, to build assets, which will enhance social cohesion whilst protecting natural resources.

Direct threats to biodiversity include illegal extraction of resources, including poaching and logging, all for high market value resources driven by pressure from local stakeholders facing

severe poverty and food insecurity. Subsistence activities disregarding the natural resources upon which communities rely for their livelihoods also represent a direct threat to biodiversity. Furthermore, other threats result from the instability in the region which has driven cross-border encroachment. Indirectly, instability has also hindered long-term planning and the protected area network suffers from a lack of active management, zero institutional resources and severe capacity gaps.

However, a recent re-scoping survey in one of the Game Reserves following the elimination of rebel activity confirmed former personnel are ready for redeployment and that populations of wildlife remain. Men's and women's focus group meetings at one of the Game Reserves in 2017 highlighted that local people are committed to the conservation of biodiversity for future generations and are supportive of sustainable management, yet face huge issues including damage to agricultural yields by wildlife.

There is a great lack of stable and sustainable examples of development projects in South Sudan, so in this relatively peaceful and unique region of the country, this collaborative and holistic initiative will be an exemplar project for other regions when peace returns nationwide.

2. Project partnerships

The partnership between FFI and Caritas Austria, Community Organisation for Development (COD), Bucknell University and the South Sudan Ministry of Wildlife Conservation and Tourism has been positive over the past year.

FFI, Caritas Austria and COD have kept in regular contact both formally and informally to keep each other updated and to see to combine efforts whenever possible. We remain very aware that FFI on the one hand and Caritas Austria plus COD on the other see this project through very different lenses, yet we all recognise value added in our partnership and especially how this multipronged approach is of much greater benefit and therefore impact to the communities living at the edge of the Game Reserve. Worth noting that Caritas Austria and COD decided not to take part in the household survey, seeing it to be too extensive, preferring softer, qualitative and more informal monitoring. FFI and Bucknell University proceeded with the joint design and roll out of this survey, seeing it to be critical in the (systematic and transparent) monitoring and evaluation of this project. The partnership sees the two approaches to monitoring and evaluation to be complimentary. All results are shared with all project partners.

3. Project progress

3.1 Progress in carrying out project Activities

Activity 1.1, 1.2. Completed (See AR1). Additionally, during this period, frequent meetings were held to keep socialising the process with stakeholders and further secure government backing at relevant levels, especially considering the recent changes resulting in the Transition Government being sworn in and the change in states. Our project area is no longer working in two states, but it is now back to operating in one state, Western Equatoria, just like it was historically. Despite these changes and the repercussions on government structures and staffing, we none the less saw to an agreed boundary demarcation for Game Reserve I (GRI) materialise, which was signed off by the Wildlife Service within the South Sudan Ministry of Wildlife Conservation and Tourism. For Game Reserve II (GRII), the boundary demarcation is almost completed, after some extensive demarcation field efforts and community consultations during this period. See Annex 4.

Activity 1.3, 1.4. Completed for Game Reserve I (See AR1)/In progress for Game Reserve II. All historical boundary information was collected and collated, flagging discrepancies to stakeholders for both Game Reserves. This was done in parallel to the ground-truthing and mapping exercise which was completed (Yr1 Q4 for GRI, Yr2 Q4 for GRII). The two Game Reserves have therefore been entirely ground-truthed. Worth considering that part of each Game Reserve's boundary is shared with the international boundary with the Democratic Republic of the Congo. Considering the discrepancies in the latter between various trusted international

sources, we decided not to demarcate that particular section and instead refer to the international border agreed to between the two nations instead. Yr2 saw particular effort given to GRII's boundary demarcation because it rapidly became apparent that historical efforts to demarcate this boundary actually resulted in two boundaries: one for the Game Reserve and the other for a Forest Reserve. Our task and challenge has therefore been to ensure a single boundary. There is a remaining and additional strip to be added to GRII after the communities requested to do more community boundary demarcation with another set of elders. This will be completed during the next reporting period. See Annex 4.

Activity 1.5. Completed for Game Reserve I (See AR1)/In progress for Game Reserve II. As previously reported, no boundary conflicts arose concerning GRI and the actual area was extended compared to what was expected based on historical boundary information. As to GRII, extensive consultations and numerous meetings took place during this reporting period with decision makers. This resulted in the community boundary being agreed to by the Wildlife Service, on the understanding that both Areas A and C (See Annex 4) see a heightened conservation status within the community managed area. The Wildlife Service was expecting A and C to form part of the gazetted boundary. Communities also expressed the wish to extend the North Western Boundary beyond the River. Historically, the River was understood to be a natural boundary. The field team therefore needs to demarcate what we foresee to be a short additional strip of land which will fall then within the Game Reserve's Boundary. Furthermore, though not directly funded by the Darwin Initiative (but cofounded), worth reporting there was extended discussions between the GRII communities and the Wildlife Service over the location of the ranger post for GRII, which were facilitated by FFI and resulted in a well-documented and agreed location.

Activity 1.6. Completed for Game Reserve I (See AR1)/In progress for Game Reserve II. GRI was physically demarcated during this reporting period. All necessary materials for GRII's physical demarcation were procured. GRII's physical demarcation will be completed before the next half year report is due.

Activity 1.7, 1.20. Completed for Game Reserve I/In progress for Game Reserve II. See Maps provided in Annex 4.

Activity 1.8. Completed (See ARI).

Activity 1.9, 2.13, 3.1, 3.2, 3.4, 3.6, 3.8. In progress. The detailed household survey was rolled out in both Game Reserves (n=53 in GRI and n=131 in GRII). >99% of respondents (in GRI and in GRII) recognise their land to be important for wildlife. 22% and 26.7% of respondents for GRI and GRII respectively can list a wildlife law. 97% of who in GRII knew hunting was illegal for example. Further results and highlights in Annex 5.

Activity 1.10. In progress. Key conservation messaging for awareness raising materials was developed with support from FFI's communication team and resulted in a series of billboards being put up at the edge of each Game Reserve and with local communities. We also hope these will help build a sense of pride. We plan to communicate these same messages on the local radio during the next reporting period, but would like to do so in conjunction with our efforts for Community Managed Area designation.

Activity 1.11, 1.12 N/A for this reporting period.

Activity 1.13, 1.14, 1.15, 1.16, 1.17. In progress. An extensive and iterative document specifically relating to the Community Managed Area (CMA) and its governance is under development, drawing on expert advice and input, as well as regional examples since no such examples are available in country. The concept and principles of CMAs have been discussed with all stakeholders, highlighting the difference in governance and

legislation between CMA and the GRs. The CMAs are not designated/demarcated as such yet. This concept is new for all local stakeholders and will therefore require particular effort from the project team during the next period.

Activity 2.1, 2.2, 2.3. In progress. Regular patrols in both Game Reserves were rolled out throughout this period, involving Community Wildlife Ambassadors and Rangers. Worth noting the sharp increase in frequency of patrols compared to what was reported in the previous period. Furthermore, patrol effectiveness was significantly improved through the use of SMART software into which data is systematically entered. See Annex 6

Activity 2.1, 2.2, 2.3, 2.4, 2.5. In progress.

See Annex 6 for the full details and break down of the patrol data collected during the lifetime of the project. To date, in GRI it totals 61 patrols covering 382km and representing 1890hrs of patrol, while in GRII it totals 57 patrols, covering 1431.2 km and representing 1693hrs of patrol. During this reporting period, the use of SMART software for all patrol data has been rolled out and all historical data entered. As a result, it appears that patrols in GRI are recording all sightings but not all tracks, hence the discrepancy with GRII. This drove us to revise SOPs so that all patrols now need to enter a GPS points at the start of each day, at lunch time and at the end of the day, as a minimum. As effort increased (=no. of days on patrol) so did the count of wildlife observations. In GRI, encounter rate (live sightings/signs per no. of days on patrol) increased for live animal sighting but the recording of signs has remained the same over the past two years. Instead, we would expect that combining an increase in patrolling with a decrease in poaching, would result in wildlife sightings to increase as a trend over time. GRI patrols record 1.4 times fewer live sightings and 6 times fewer tracks than GRII: this suggests that patrol teams are inconsistent with recording wildlife sightings. This is something we will see to remedy to during the next period. Corrective measure were put in place early 2020, which seems to bear fruit as we're already recording an increase in detection rate for live sightings and signs.

Activity 2.6, 2.7, 2.12, 2.13, 2.14, 2.16. In progress.

Directly linked to the above, a series of SOPs have been finalised. The ongoing field work and the centralised SMART data base provides the opportunity for these to be refined. All data is being regularly entered and centralised in a database specifically designed. Digital records of patrol findings are therefore starting to be used to support adaptive management of patrol routes. All historical data has also been entered. Community Wildlife Ambassadors and Rangers are supported predominantly through on the job training. As detailed in Annex 6, both GRs are relatively high in abundance with high detection rates of wildlife species on patrol. Also, we are starting to pick up wildlife sign and presence hotspots for both Game Reserves, dotted across the protected areas. The number of Eastern Chimpanzee sightings seems reliable, both GRI and GRII recording the same over time. GRI is richer in Eastern Chimpanzee observations, which will need to be confirmed during the next reporting period. In comparison, Giant Pangolins are detected equally across both Game Reserves. GRI however has seen a decline in rate of African Elephant detection (live sightings/signs per no of days on patrol) which could be explained by the fact of them being transbordering with DRC, yet this will need monitoring during this upcoming period.

Activity 2.8, 2.15. In progress.

Even though the main platform to share and centralise information and data was expected to be a GEF funded programme through UNEP (which FFI is not formally part of but was planning to make all its programme data available to), this project is undergoing delays. None the less, we have shared all relevant data using external drives with the Wildlife Service for example. The project team also meets with these stakeholders regularly to keep them updated on the progress of our work and latest impacts/achievements.

Activity 2.9, 2.10, 2.11. In progress.

The very first patrols in the community managed area (CMA) were undertaken during this reporting period in GRII. In GRI, the CMA is regularly patrolled as part of regular Game Reserve

patrols, yet this effort needs to be disaggregated and we plan to see standalone CMA patrols in GRI undertaken during the next reporting period.

Activity 2.16. In progress.

A one-day training course was run for 22 Officers and Warrant Officers of the South Sudan Wildlife Service, based at the State Headquarters in Yambio. This location was chosen because it is the main urban centre for the region and represents by far the main consumer base – the hub – of the lucrative bushmeat trade in this area. A Bushmeat Questionnaire was developed and completed as part of the training. (See Annex 8).

This was the initial step in the rolling-out of a series of such trainings focusing on different aspects of bushmeat (and the interaction with zoonotic diseases), including: handling practices, local preferences, the extent of the bushmeat trade, the range of wildlife species.

To gather the necessary data, the Wildlife Service will be required to safely collect bushmeat samples and to provide expertise to those handling bushmeat.

Due to its proximity with the DRC, this area is at substantial risk of human-human transmission of Ebola due to the current outbreak in the Kivus. The National Task Force for Ebola Preparedness has limited capacity especially especially when it comes to reaching more rural areas. An ill-advised emphasis on 'banning bushmeat' has simply forced the trade underground.

With that in mind, the course focused on two specific areas: (i) Training in gathering specific information about bushmeat so to develop a more accurate and up-to-date snapshot of the trade (sources of origin, quantities, individuals involved along the entire chain) so to gather formal information; (ii) Training in bushmeat safe handling protocols. Briefings previously given to the Wildlife Service by the National Task Force for Ebola Preparedness were limited in scope and somewhat contradictory. At this stage, the training focused on protocols for basic handling of bushmeat, including sampling, and messaging that the Wildlife Service can give to poachers and handlers within the bushmeat trade.

The training covered using gloves, tweezers, vials, and labelling samples. It highlighted tht those with open sores or wounds should not take part and emphasis was placed on taking soap and water bottles. It became very apparent that the Wildlife Service knew very little about Ebola transmission and risks. Hence why we then covered the role of body fluids in transmitting disease.

Activity 3.1, 3.2, 3.3 Completed.

An extensive household survey was completed at both Game Reserves, providing an insight on the socio-economics of the target communities. This survey included 7 modules, focusing on themes including human-wildlife conflict, natural resource use, specifically hunting, cultural practices, market access and youth and male/female dynamics. For example, the survey revealed that the vast majority of respondents consume wildmeat less than once a week (47% in GRI and 85% in GRII); 15% and 11% 1-2times/week in GRI and GRII respectively. Yet, wildmeat is the predominant source of meat, with 38% (GRI) and 53% (GRII) of the meat consumed. After Ungulates being the most common species seen at the market (35%-GRI and 36%-GRII), it is worth flagging Primates represent 25%-GRI and 15%-GRII and Pangolins 6%-GRI and 4%-GRII. Further results and highlights are in Annex 5.

Activity 3.4, 3.5, 3.6

84% of respondents report farming to be their prime source of income, 34% report having lost 8-15 bags of food to animals (not to insects). 64% of respondents report crops raided/destroyed by primates, 59% by ungulates, 32% by rodents. Yet, 57% of the respondents report doing nothing to prevent/mitigate crop raiding, only 17% put some form of barrier and 21% prefer to chase the crop raiders away. Therefore, we concluded one of the most efficient and effective strategy is for us to focus on supporting fencing to tackle the impact of wildlife on household assets. Further results and highlights are in Annex 5.

Activity 3.7.

A total of 298 households (134 Males, 164 Females) directly benefitted from our action (across 16 Groups), representing almost 200% against our 150 households target.

Following on from the day to day support from the project's two community facilitators and building on the PRA (see AR1), and through monthly field monitoring visits, the Ndoromo

Development Committee was established during this period so to coordinate livelihoods activities and also see to provide basic primary and adult education services (see AR1 for unforeseen benefits and impact). A strong emphasis was put on self-mobilisation, self-responsibility, accountability and awareness about resources to see to support the long term transition from a mainly hunter society towards a farming and small-scale business orientated community.

Specific support and trainings were given to five women groups (97 members) for initiatives in small-scale business, savings and loan schemes, microfinance, basic records keeping, leadership and leadership skills. This included providing start-up kits for each group (i.e. sewing machines, vegetable seeds, bicycles and utensils for small food businesses).

An exchange visit for 2 representatives to a Solidarity Sustainable Agriculture Project and they also attended a local agriculture fair show. To date, individual members have managed to save between 10,000-50,000 SSP as a direct result, which is said to go towards school fees. Further monitoring is required here.

Particular focus was given to integrated livestock keeping (mainly goats, pigs and poultry), beekeeping, fish farming and sustainable agriculture, including agro-forestry and horticulture. A local borehole was repaired and 2 fishponds with 1,000 fingerlings were established, one for each fishing group. 6 agriculture groups (127 members, 83 male, 44 female) benefitted from series of trainings in land preparations and environmentally friendly agriculture, planting methods, early weeding, crop rotation, farm hygiene, harvesting, handling and land enrichment. Groups were also supported with start-up kits (including tools, rice, maize, groundnuts and bean seeds). The agriculture groups recorded >70 MT harvest of maize with 50MT sold in local markets and 17MT for household consumption. Further monitoring is required here to see how this compares to previous years.

Additionally, 5 Livestock groups (85 members, 21 female and 64 male) were trained in livestock management (rearing, housing, feeding practices, diseases, and treatment), and similarly to other groups, start-up support consisted in purchasing 32 goats and 10 pigs which were treated with the relevant drugs and vaccines. Some of these were kept by COD for demonstration and re-stocking purposes. Livestock pens were carefully designed and constructed to mitigate human-wildlife conflict. Unfortunately, due to inadequate feeding, 8 pigs died, hence more training on that particular component will be the focus of the next period.

2 beekeeping groups (29 members, 21 males, 8 females) were established and received trainings in group beekeeping, types of bees, bee colonization, site/area selections, bee products, honey harvesting and handling. 167 traditional beehives were built, 33 initially colonized. It is worth noting the dynamic local honey trade, including the local honey being traded with Uganda.

Through co-funding, an extensive women's centre was built comprising of 6 training halls, 2 offices, 4 guesthouse rooms, 3 washrooms, and furnished with 4 beds, 4 mattresses, 5 plastic chairs, 6 cooking saucepans, bedsheets, solar system and security lights. 2 community members were subsidised to attend Solidarity Teacher Training College. A Parent Teacher Association was established and trained in school management. See Annex 7.

3.2 Progress towards project Outputs

Output 1: 430km² of Game reserve (GR) and Community Managed Area (CMA) habitat is under stronger conservation management, with local women and men better informed about biodiversity and engaged in decision-making

This output is close to being met in full with substantial progress made during this reporting period in strengthening conservation management of both Game Reserves (equivalent to ~270km² and we would anticipate CMAs to amount to 270km² bringing the total to 540km², surpassing the 430km² target) considering there is broad consensus, buy in and support on their entire boundaries, including physical demarcation being completed for GRI and GRII is close to finalisation (Indicator 1.1). The concept of a CMA has been presented and discussed with local stakeholders, though we recognise this will be a key focus for the next period and that CMA patrols need to be strengthened and systematised so these can be comparable to the patrols

inside the Game Reserves (Indicator 1.4). See Annex 4. The household survey shows that though it remains ambitious, we are on track to meeting Indicator 1.2 targeting 3000 trained people of which 75% will be able to articulate wildlife laws, with 22% and 26.7% of respondents today for GRI and GRII respectively. Both Game Reserves are under stronger conservation management with agreed SOPs (Indicator 1.3) as we're recording an increased effort (=no. of days on patrol) resulting in an increase in the count of wildlife observations, both sites evidencing relatively high wildlife abundance with high detection rates of wildlife species on patrol (Annex 7). Regarding more endangered species this may not be the case as the sightings here can be inflated by common species.

Output2: Collaborative routine intelligence-led patrols in Game Reserves and community ranger teams in Community Managed Areas are deterring and responding to wildlife crime

Regular patrols in both Game Reserves were rolled out throughout this period and CMA patrols were initiated, involving Community Wildlife Ambassadors and Rangers. Worth noting that patrols are now significantly more frequent and effective but are also systematic compared to the last reporting period. To date, in GRI it totals 61 patrols covering 382km and representing 1890hrs of patrol, while in GRII it totals 57 patrols, covering 1431.2 km and representing 1693hrs of patrol (Indicator 2.1 and 2.2). As patrols are following SOPs (which can all be made available upon request), we are now able to collate and take stock of how effective our patrols are; effort has increased for both Game Reserves (=number of days on patrol) and poaching signs have declined suggesting that our patrols are making a difference to overall deterring and responding to wildlife crime (Indicator 2.3) (Annex 6). Poaching incidences are more frequently recorded within GRII and poaching hotspots are being identified (Annex6). One hotspot is along a major river course while the other is on the boundary. Going forward, anti-poaching patrols will be aimed at boundaries and major river courses for both Game Reserves. All data has been shared with Government Authorities and handed on an external hard drive (Indicator 2.4)

Output3: Livelihoods activities appropriate to existing local norms and constraints to wellbeing are strengthening the assets of 900 people (150 households) against external shocks

Significant progress has been made against this output with the 150 households target being surpassed by almost 200% since 298 households have benefitted from this project (Indicator 3.4). Relying on the household survey, extensive information on cultural and non-cultural practices of communities around hunting and natural resource use is now available (Indicator 3.1). 84% of respondents report farming to be their prime source of income, 34% report having lost 8-15 bags of food to animals (not to insects). 57% of the respondents report doing nothing to prevent/mitigate crop raiding, only 17% put some form of barrier and 21% prefer to chase the crop raiders away. Therefore, we concluded one of the most efficient and effective strategy is for us to focus on supporting fencing to tackle the impact of wildlife on household assets in combination with improving yields (Indicator 3.2). Further results and highlights are in Annex 5. We recognise that deep long term change is required for sustainably improving these communities' wellbeing. The next period will focus on strengthening, refining and gap filling the work undertaken during this past period. See Annex 5.

3.3 Progress towards the project Outcome

The project outcome is “ Integrated conservation and development provide benefits to over 900 direct and 3000 indirect beneficiaries in South Sudan and protects 430km² of nationally important tropical forest habitat”. There has been substantial progress towards the livelihood indicators 0.1 and 0.2 during this reporting period, recognising these interventions need time to bare sustainable fruit but these indicators remain adequate for measuring the intended outcome and the project team remains confident that the project will deliver these. Indicator 0.3 is well on track to being met in full. This can be evidenced by the completion, agreement and legal recognition of the boundary of GRI and that GRII is tantalisingly close to being completed also. Furthermore, patrols are deployed in both game reserves regularly, systematically and effectively.

3.4 Monitoring of assumptions

Strictly speaking, there are no changes in risks and assumptions to be reported for the past period, all still hold true. However, this report is being compiled as the Covid-19 pandemic is rife, the situation (globally) is fast evolving and the impact on South Sudan and therefore this project remains to be ascertained. The next weeks are going to be critical. We propose to stay in close communication with the Darwin Initiative team to keep everyone well informed and before the next Half Year report is due.

3.5 Impact: achievement of positive impact on biodiversity and poverty alleviation

This project is directly contributing to a higher impact of biodiversity conservation considering how rare but little-known wildlife is in conflict affected South Sudan. We are working to bring 430km² of critically threatened forest, including habitat for endangered species (particularly elephants and chimpanzees) under more effective management. We are also seeing to mitigate direct threats to biodiversity which include illegal extraction of resources, including poaching and logging, all for high market value resources driven by pressure from local stakeholders facing severe poverty and food insecurity.

Relevant indicators: 0.3, 0.4, 0.6, 1.1. As per the detailed patrol data (See Annex 6), we can evidence that the systematic and effective patrols inside each of the Game Reserves are having the desired effect and serving as a strong deterrent with a decrease in incidences of illegal activity with no person illegally encountered in 9 months and signs of illegal activities have decreased (Annex 6). The boundaries to GRI are now physically demarcated and legally recognised, whilst GRII is very close to being in the same position. As a result, recognised maps for each Game Reserve have been produced and there is no evidence of any shift/change in forest cover in either Game Reserve, hence surpassing the indicator which was focusing on GRI only (See Annex 4).

In the midst of insecurity and food insecurity in South Sudan, our contribution towards human development and well-being revolves around addressing subsistence activities which disregard the natural resources upon which communities rely for their livelihoods also represent a direct threat to biodiversity. Hence we are committed to improving the well-being of 900 women, men and children with 75% of them articulating at least five wildlife laws and Game Reserve regulations and the same percentage reporting an increase reliance on sustainable livelihood options.

Relevant indicators: 0.1, 0.2, 0.5, 3.4, 3.5. The household survey has provided substantial insight on the social dynamics and the economic situation for the targeted communities. 22% and 26.7% of respondents for GRI and GRII respectively can list a wildlife law. 97% of who in GRII knew hunting was illegal for example. This survey was rolled out in 2019 and it's only once we've repeated the household survey (late 2020) that we will be in a position to report direct attributable impact from the project. None the less, we've managed to directly support 298 households (represented by a membership of 134 Males and 164 Females) which equates to an estimated 1788 people through our livelihood interventions, as evidenced by the detailed membership in Annex 7. Further results and highlights in Annex 5.

4. Contribution to the Global Goals for Sustainable Development (SDGs)

South Sudan is one of the least developed countries in the world, ranked at 181 of 188 on the Human Development Index. 89% of the population are living in multi-dimensional poverty, with 69% in severe poverty – the highest of any country.

This project contributes to **SDG1**, particularly **target 1.2** by addressing people affected by multiple dimensions of poverty in South Sudan, and **targets 1.4 and 1.5** by strengthening community decision-making over resources and reducing vulnerabilities to economic and natural shocks. The focus on wellbeing ensures information will be generated on health barriers (**target 3.3**) that affect sustainable development, and shared with relevant NGOs.

It supports **target 2.3** by improving the productivity of agricultural practices through inputs of knowledge and reducing losses to human-wildlife conflict. Women and youth are actively involved

in management and encouraged to participate in patrol units, which contributes to **targets 5.5 and 8.6**. Support for transparent and inclusive local governance structures assists with **targets 16.6 and 16.7**.

These positive social developments contribute to the conservation objective of protecting this vulnerable, biodiverse area of South Sudan. The project contributes to **SDG15**, specifically **target 15.1** by promoting the conservation of forested areas, **15.2** by establishing and supporting sustainable management of forest resources and **15.5** by protecting endangered species including chimpanzees and elephants. The project also contributes to target **15.7** by producing and sharing information about wildlife poaching and trade.

5. Project support to the Conventions, Treaties or Agreements

Under the CBD, the project supports Aichi Strategic Goal B by reducing forest pressure and fostering sustainability. The project aims to lessen the impact of communities and other actors on forest habitats and develop robust and diversified livelihoods away from core forest zones, addressing targets 5 and 7. The project also aims to ensure wider society, beginning with local poor communities, can benefit from ecosystem services and healthy ecosystems (Goal D, Target 14).

South Sudan acceded to the United Nations Convention on Biological Diversity in 2014 and submitted its first National Report to the CBD in 2015, although it had produced four earlier reports. The report recognises the lowland forest around Yambio within its scope (the focal area for this project). It identifies eight threats to forests including deforestation and degradation caused by grazing and over-extraction; poor governance and lack of agreement on forest ownership, and gender inequality. This project addresses these three threats by enabling clarity of forest ownership, establishing terms of use for the forest, and increasing women's participation in planning, management as well as understanding their specific use of forest resources. The report also recommends that *'women should be encouraged to take a more active role in conservation activities at all levels'* (page 36), which this project responds to by including specific activities and targets to promote and measure women's participation.

A major threat to wildlife is identified as the viability and rehabilitation of protected areas (PAs), recognising the need to assess and respond to the needs of PAs to ensure they provide protection for biodiversity; actions this project will directly deliver in two protected areas. The need for community-based conservation is also explicitly articulated (page 32), and this project will address this by working with communities to define and manage protected areas and pioneer a community-conserved area.

The project team inputted to South Sudan's SIXTH NATIONAL REPORT TO THE CONVENTION ON BIOLOGICAL DIVERSITY (November, 2019) which provided the opportunity to profile this work.

The project focal area is critically important for key CITES-listed species, such as forest elephant, eastern chimpanzee and two pangolin species (tree and giant). South Sudan is not a full CITES party, so the project is engaging with authorities to improve the information base with the anticipation of the country becoming a signatory. The authority named as able to provide comparable information to CITES is the Ministry of Wildlife Conservation and Tourism, the national representation of the main government project partner in this project. Regular meetings and briefings are provided to the Wildlife Service so all are abreast of the project, its implementation and challenges. The project is amassing new information on the prevalence of wildlife crime involving key species and is sharing data among national and international intelligence networks and actors. This is predominantly done on WhatsApp (for security purposes) with the United Nations and individuals affiliated to the United Nations. Worth noting that the project leader is in regular contact with the CITES MIKE programme about this project in particular, and both the Project Leader and the field team have had regular contact and interactions with the Ministry of Environment (including with the CBD focal point). All are therefore kept well abreast of project developments.

As previously reported, the project is in line with the UNOCHA Humanitarian Response Plan that underlines the importance of supporting at-risk communities to manage threats resulting from the inter-locking crises in South Sudan. We keep holding regular meetings with DFID in Juba and in

London since this project began to share information and lessons learned since DFID identified stabilisation, livelihoods and youth as priority strategies for future programming in South Sudan. Upon DFID's request, we completed additional deliverables for this project, including a Conflict Analysis and an Overseas Security and Justice Assistance (OSJA) Human Rights Guidance.

The Project Leader was due to meet with the UK Ambassador to South Sudan, however this was pre-empted by the Covid-19 pandemic.

6. Project support to poverty alleviation

Amidst the socio-political challenges in South Sudan, this project is working to support the livelihoods of forest edge communities, with a particular consideration for food security. Out of the 150 households being targeted, we've surpassed this target by directly engaging 298 households. The direct impacts of this project have begun to materialise with 127 households reporting a harvest of 70MT of maize, of which 50MT were sold at local markets. Similarly, savings for individual members to women saving groups range between 10,000-50,000SSP (equivalent to 76-384 USD). This amount may seem modest, but one needs to stress that the communities we're targeting do not operate in a cash economy much. Other impact of our work on poverty alleviation will bear fruit over a longer term, whether it be for livestock rearing, fishponds or small business creation.

7. Consideration of gender equality issues

FFI recognises gender as the socially-ascribed differences between men and women, that are particularly important in natural resource management as men and women frequently take differing roles and responsibilities in relation to resource extraction and stewardship. Accounting only for the perspective of men or women in a given location will result in a partial, incomplete project unlikely to safeguard biodiversity or engage all local stakeholders.

The project was designed to respond to the information from focus group sessions (as part of the project development), and seeks to move beyond 'Do No Harm' and take steps to improve gender equity. Activities are respectful of the usual roles taken by women and men, and activities are targeted to the culturally appropriate member of the household. The locations and timings of activities are being planned to enable men and women to participate. Women are being supported to take decision-making roles in community institutions as well as in patrol units, with the number of participating women set to increase.

A Participatory Rural Appraisal is currently taking place in the project area. It will reveal specific information on gender norms and the results will inform this project's start-up phase and implementation.

It is worth flagging here the high number of women benefiting from our livelihood interventions, with the various groups totalling 164 women members, equivalent to 55% of the total membership (an increase to last year's 48%).

8. Monitoring and evaluation

As previously reported (in ARI and in previous sections of this report), the household survey rolled out during this reporting period is at the very core of this project's Monitoring and Evaluation. It has allowed to go into great depth, but also pick up nuances between both Game Reserves and attributions. This survey was translated into Azande and received approval from Bucknell's Ethics Committee. This survey, combined with the mapping and the patrol data are believed to meet all indicators.

Worth adding here that the project team are the sole external support these communities are receiving, hence attribution is fairly straight forward. Overarching indicators relate to the patrol data (which relies on the use of GPS) and on the livelihoods data gathered during the surveys (by FFI) and more informally (by Caritas/COD). All results and deliverables for the entire project are shared across the entire project team.

9. Lessons learnt

Compared to our previous report, we are pleased to have experienced staff continuity here despite a particularly challenging context. Caritas Austria and COD declined wanting to take part in the household survey as they believe in more qualitative monitoring, much relying on discussions with communities. Worth noting they are more used to working with soft-restricted funding. Yet, as a science-based organisation and in compliance with our commitment to the Darwin Initiative, we see the need for more evidence-based monitoring and evaluation. This is why, like in any healthy partnership, we agreed to disagree and have maintained both approaches to this project's M&E as they are not mutually exclusive; they are instead complimentary. The lessons learnt here are therefore that a healthy partnership needs to provide space for disagreements and different approaches to be communicated and shared, but also needs to factor the possibility of multi-pronged approaches like the one we've take here on M&E which is to the benefit of the project.

We've learned of the great benefit and asset of having a centralised database in place with SMART. This is how we've picked up on the inconsistent data gathering for GRI which then allowed us to adapt SOPs and carry out refreshers with patrol team members.

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

Comment 1: While activity level reporting is excellent, the project is not reporting against output and outcome level indicators. During the next reporting period, reporting should clearly identify progress towards each indicator, identifying both progress and delays.

→ This comment was addressed by providing more detail and evidence (including through referencing specific Annexes) in sections 3.2, 3.3 and 3.5 and specifying indicators.

Comment 2: Evidence to corroborate progress towards the outputs and outcome has not been submitted so progress cannot be corroborated. Please include supporting evidence in future reports.

→ Supporting evidence was provided in Annexes 4, 5 and 6 in particular. SOPs can be provided upon request since these can be very lengthy and large file sizes.

Comment 3: Since the project has not reported against output level indicators, it is unclear if the target number of patrolling days (target = patrol units active on 50% of available patrol days by end year 1) has been achieved in either of the game reserves and how many patrolling units are following the SOPs (target = 50% by end year 1). Furthermore, no evidence of ranger patrols, data collection or SOPs has been submitted to corroborate the progress reported. Please specifically address this in the next annual report.

→ These targets have been met if not surpassed as evidenced in Sections 3.1 and 3.2 but also in Annex 6. SOPs can be provided upon request since these can be very lengthy and large file sizes. We can now rely on the centralised database (using SMART) and all historical data has also been entered during this period; we can now evidence the number of patrolling days and the following of SOPs (See Annex 6).

11. Other comments on progress not covered elsewhere

This report is being compiled as the Covid-19 pandemic is rife, the situation (globally) is fast evolving and the impact on South Sudan and therefore this project remains to be ascertained. The next weeks are going to be critical. We propose to stay in close communication with the Darwin Initiative team to keep everyone well informed and before the next Half Year report is due in case any special mitigating measures need to be put in place.

12. Sustainability and legacy

The Project Leader has met with numerous government officials and bilateral agency representatives to present and highlight the nature of our work in South Sudan. This was done in country, but not only (i.e. series of bilateral meetings with UNEP for example organised on the

side to business trips the Project Leader has had to Kenya for other projects). We have also supported UNEP (in South Sudan) and the Ministry of the Environment by reviewing and inputting to the latest South Sudan Outlook (2019, available here).

FFI has worked in South Sudan since 2010, during the ongoing conflict, and is committed for the long term. This project is expanding, building on important groundwork to establish broader partnerships, identify human needs and biodiversity threats and undertake holistic project design. So in terms of exit strategy, the envisaged end point is that the government takes responsibility and ownership of all aspects of protected area management and financing, with community-level finance (e.g. saving and lending groups or micro-loan schemes) playing an important role in sustainable use and mitigating human-wildlife conflict. While a distant goal, this project is a critical catalyst, supporting community members' capacities for conservation and livelihoods development whilst simultaneously addressing the risk of disenfranchised young people returning to conflict. While still refining the protected area management model, in South Sudan the project is still uniquely progressive as elsewhere programming is focused on emergency response.

13. Darwin identity

The project leader has been using Twitter actively to promote and showcase the project, always linking it back to the Darwin Initiative Twitter account. These have been frequently relayed by Fauna & Flora International's own twitter account.

Furthermore, during this reporting period a journalist visited the project team and also had the opportunity to visit one of the Game Reserves. This resulted in several articles, including in the Washington Post and the New York Times (See Annex 3 Table2). Unexpectedly, this programme of work was also captured in Forbes Magazine.

This project received distinct recognition with a clear identity on the project's equipment and on documentation with the Darwin Initiative Logo.

14. Safeguarding

FFI's **Safeguarding Children and Adults at Risk Policy & Procedure** was developed in December 2014 and last updated in March 2018. The policy applies to Members of Council and its sub-committees, FFI employees, temporary staff provided through agencies, volunteers and interns, contractors, consultants, service providers and any third parties who carry out work on behalf of FFI, in partnership with FFI or in conjunction with FFI. The policy demonstrates the organisation's commitment to safeguarding children and adults at risk and to complying with the United Nations Convention on the Rights of the Child; confirms the arrangements and procedures in place to safeguard children and adults at risk, including FFI's code of conduct; and provides clear guidance on how to raise, and how FFI responds to, concerns and allegations regarding the maltreatment of children and adults at risk. The policy expressly states that FFI does not tolerate sexual exploitation and abuse of any kind.

FFI's **Anti-bullying and Anti-harassment Policy** was developed in March 2018. The policy applies to Members of Council and its sub-committees, FFI employees, temporary staff provided through agencies, volunteers and interns, contractors, consultants and any other third parties who carry out work on FFI's behalf. The stated purpose of the policy is to ensure a safe, welcoming and inclusive working environment, which is free from intimidation, threats, discrimination, bullying or harassment; to communicate clearly FFI's zero-tolerance of any form of bullying or harassment; to define the terms 'bullying' and 'harassment' and provide examples, so that there is a clear understanding of the types of conduct that are prohibited; to communicate the importance of reporting incidents of bullying and harassment; and to communicate the procedures in place to manage incidents of bullying and harassment. The policy expressly states that bullying or harassment of any kind against a person or group of people, whether persistent or an isolated incident, will not be tolerated under any circumstances.

FFI's **Whistleblowing Policy** was developed in June 2013 and last updated in December 2019. The policy applies to FFI employees. The stated purpose of the policy is to encourage

employees to report suspected wrongdoing in the organisation as soon as possible, in the knowledge that their concerns will be taken seriously and investigated as appropriate, and that their confidentiality will be respected. It provides guidance on how to raise those concerns and aims to reassure employees that they can raise genuine concerns in good faith without fear of reprisals, even if they turn out to be mistaken.

FFI’s partner due diligence procedures include checking whether any safeguarding concerns have arisen with the partner concerned and the Safeguarding Children and Adults at Risk Policy & Procedure forms part of contracts and agreements with third party contractors and sub-grantees. We are also currently researching LMS platforms (Learning Management Systems) which would enable online training in policies & procedures.

We monitor updates in Government and Charity Commission guidance and review our policies and procedures accordingly.
 No safeguarding issues have been reported during the reporting year.

In terms of **social safeguards**, FFI has publically available position papers on our approach to [Free, Prior and Informed Consent Position](#), [Gender in Conservation](#), [Displacement and Restrictions on Access to Resources](#) and [Conservation, Livelihoods and Governance](#). Our Senior Technical Specialist in Livelihoods and Governance provides dedicated support to this project and to FFI staff and partners working on this project to take a holistic, people-centred approach to biodiversity conservation, and to ensure all project activity is strongly aligned with these principles.

15. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2019 – 31 March 2020)

Project spend (indicative) since last annual report	2019/20 Grant (£)	2019/20 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Monitoring & Evaluation (M&E)				
Others (see below)				
TOTAL				

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2019-2020

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
<p>Impact</p> <p>Integrated conservation and sustainable livelihoods strategies boost protected areas, forest habitats and endangered species, and enhance aspects of wellbeing as a model of engagement with rural communities in South Sudan</p>		<p>Significant strides have been made during this reporting period towards this impact with a holistic approach to natural resources management being showcased here with livelihood interventions and protected areas management</p>	
<p>Outcome</p> <p>Integrated conservation and development provide benefits to over 900 direct and 3,000 indirect beneficiaries in South Sudan and protects 430km² of nationally important tropical forest habitat</p>	<p>0.1 By project end 900 women, men and children report an improvement in their wellbeing in one or more areas of social, natural, physical, human or financial capital, compared to project baseline (indicator of direct benefit)</p> <p>0.2 Following training, 75% of a representative sample of 3,000 people can articulate at least five wildlife laws and GR regulations, compared to pre-training baseline (indicator of indirect benefit)</p> <p>0.3 2 Game Reserves (GRs) are demarcated and 1 Community Managed Area (CMA) is pioneered and has recognised boundaries, regulations and a governance structure by project end (<i>indicator of protection</i>)</p> <p>0.4 By project end there is a reduction in the incidence of illegal activity in 2 GRs, from baseline (<i>indicator of direct benefit</i>)</p> <p>0.5 75% of direct beneficiaries report</p>	<p>-The boundary demarcation and gazettment of GRI is completed and that to GRII is close to completion.</p> <p>-Delivery, completion and analysis of the first extensive household survey</p> <p>-Awareness raising using basic messaging</p> <p>-Patrol monitoring effort strengthened and increased.</p> <p>-Livelihood activities strengthened with particular consideration for the agricultural calendar</p>	<p>-Completion of the boundary demarcation for GRII</p> <p>-Delivery, completion and analysis of the repeated extensive household survey</p> <p>-Awareness raising through other mediums</p> <p>-Refining and strengthening patrol monitoring effort</p> <p>-Refining and strengthening the livelihood activities as per the agricultural calendar in particular</p>

	<p>an increased reliance on sustainable livelihoods options between project start and end <i>(indicator of direct benefit)</i></p> <p>0.6 Forest cover does not decrease in Bire Kpatuos Game Reserve between 2018 and 2021 <i>(indicator of protection)</i></p>		
<p>Output 1.</p> <p>1. 430km² of Game Reserve (GR) and Community Managed Area (CMA) habitat is under stronger conservation management, with local women and men better informed about biodiversity and engaged in decision-making</p>	<p>1.1 Both Game Reserves have clear boundaries, physically demarcated and recognised as part of the national protected area network. Target: first Game Reserve by end of Y2; second Game Reserve by project end</p> <p>1.2 The proportion of men and women in local communities who are able to articulate at least five relevant wildlife laws and/or Game Reserve regulations. Target: of a trained number of 3,000, 75% are able to articulate by project end</p> <p>1.3 Two Game Reserves have agreed SOPs and adaptive management structures in which local men and women are in decision-making roles and relevant agreement(s) are in place by project end (linked to 2.5)</p> <p>1.4 At least one Community Managed Area has a governance structure in which local men and women are in decision-making roles, and has proposed boundaries, recognised by local government and with draft zones, rules, regulations and a draft operational management plan by project end</p>	<p>Substantial progress has been made towards strengthening conservation management of Bire Kpatuos Game Reserve considering the entire boundary has been physically demarcated and gazetted and legally recognised by authorities.</p>	

Activity 1.1 Undertake stakeholder mapping exercise to identify all key stakeholders (and their roles) to be involved in demarcation roadmap	Completed.
Activity 1.2 Socialise process with stakeholders and securing of government backing at relevant levels	Completed.
Activity 1.3 Gather evidence of historical boundary information including discrepancies in the literature and clarity on land tenure and any customary rights	Completed.
Activity 1.4 Undertake ground-truthing and mapping exercise and present information to decision-makers	Completed.
Activity 1.5 Facilitate discussions on and resolve boundary conflicts and other issues	Completed for GRI/IN progress for GRII
Activity 1.6 Identify appropriate physical demarcation materials and methods (track cutting, signboards etc.) and conduct demarcation exercise alongside stakeholders	Completed for GRI/IN progress for GRII. The entire boundary was physically demarcated and legally recognised for GRI. An additional strip needs to be demarcated by the community for GRII, after what this process can see to get finalised with authorities and for the boundary to be physically demarcated and legally recognised.
Activity 1.7 Produce maps and clear information on demarcated sites to inform the national protected area estate	Completed for Game Reserve I/In progress for Game Reserve II. Maps produced and included as an Annex.
Activity 1.8 Review government wildlife legislation (draft and final), and clauses/loopholes, to understand up-to-date national policies on wildlife management	Completed.
Activity 1.9 Assess stakeholder (government and community) attitudes and knowledge of conservation and protected areas through a KAP survey	Completed. Baseline Survey completed, to be repeated during next period.
Activity 1.10 Design content and appropriate channels (e.g. Yambio FM) for dissemination of conservation messaging, drawing on existing stakeholder knowledge, relevant cultural values and known information about ecosystems and wildlife (also linked with Activity 3.7 and Farmer Field School messaging)	Completed. Additional effort through other means (local radio) for the next period
Activity 1.11 Assess take-up of conservation messaging through follow up KAP survey	Completed. Baseline Survey completed, to be repeated during next period.
Activity 1.12 Identify legislative needs/barriers to enable governance agreements for Game Reserves to be created and implemented	Completed
Activity 1.13 Seek exemplars of governance agreement to learn from nationally/regionally, especially with regard to sustainability planning	In progress.
Activity 1.14 Discuss and agree on governance structures, roles, responsibilities and SOPs	Completed. Next period used to refine/strengthen these.

Activity 1.15 Facilitate and socialise governance agreements and relevant approvals/endorsements	In progress. Particular focus on the CMA.
Activity 1.16 Identify legislative needs/barriers to enable Community Managed Areas (CMAs) to be developed and supported	In progress.
Activity 1.17 Follow FPIC principles to determine approach to develop CMA as buffer zone to Bire Kpatuos GR and establish draft structure, roles, activity zoning, regulations and management plan/SOPs	In progress.
Activity 1.18 Consider options for sustainably financing CMA operations following establishment and discuss with community actors and CBO partners	N/A for this reporting period.
Activity 1.19 Facilitate evidence of government support for CMA establishment	N/A for this reporting period.
Activity 1.20 Develop GIS materials to document progress with CMA development	N/A for this reporting period.
<p>Output 2.</p> <p>2. Collaborative routine and intelligence-led patrols in Game Reserves and community ranger teams in Community Managed Areas are deterring and responding to wildlife crime</p>	<p>2.1 4 Fully trained collaborative patrol units are providing patrol coverage and generating patrol data. Target: 2 Game Reserve patrol units active on 50% of available patrol days by end of Y1; 2 further units by project end. 2 CMA ranger units active on 25% of available patrol days by project End</p> <p>2.2 Collaborative patrol and monitoring units are composed of diverse members. Target: 50 individuals of whom at least 10% are women and 50% are under age of 25, by project end</p> <p>2.3 Collaborative patrol units for the Game Reserves and community ranger units for the Community Managed Areas are following established and agreed Standard Operating Procedures. Target: 2 patrol units (50%) following SOPs by end of Y1; 2 further patrol units (total 100%) by project end; 2 community ranger units following SOPs by project end</p> <p>Regular, systematic and effective patrols in the Game Reserve were rolled out throughout this period, involving Community Wildlife Ambassadors and Rangers. Worth noting the high number of hours on patrol and the km² covered, all detailed in Annex 6.</p>

	<p>2.4 Data are available and shared with government and civil society partners (South Sudan government, TRAFFIC, IUCN Pangolin Specialist Group) on community involvement in and market mapping of wildlife trade in target species originating from target area encompassing Community Managed Areas and Game Reserves. Target: Preliminary data available by end of Y2; final data available and sharing complete by project end</p> <p>2.5 Information on wildlife crime from community members informs patrolling effort and increases threat detection. Target: at least one report per month is made on average to a patrol team member, and all reports are logged and shared with national and international partners between end of Y1 and project end</p>	
<p>Activity 2.1. Engage the Wildlife Service to increase the patrol intensity in two Game Reserves, through structure of patrol teams (Biodiversity Data Collection and Law Enforcement teams) and design of routes, including option for night time patrol work (flexible to security situation)</p>		<p>In progress (because ongoing). Regular patrols in both Game Reserves were rolled out throughout this period, involving Community Wildlife Ambassadors and Rangers.</p>
<p>Activity 2.2. Identify trained Wildlife Service rangers and Community Wildlife Ambassadors to join increased frequency of patrols in two Game Reserves</p>		<p>In progress. See Above 2.1.</p>
<p>Activity 2.3 Equip all patrol teams with adequate provisions, kit, health and safety equipment and patrol gear</p>		<p>In progress. See Above 2.1.</p>
<p>Activity 2.4 Ensure logistics and project operations (vehicles, communications, personnel) are in place to support patrol activities</p>		<p>In progress.</p>
<p>Activity 2.5 Roll out patrol SOPs for a) biodiversity data collection and b) law enforcement and ensure a rigorous system of data collection, collation in a centralised location and system for continual feedback to patrol team members to improve understanding of how data collection is linked to patrol planning</p>		<p>In progress. SOPs developed and being refined in the field.</p>
<p>Activity 2.6 Use digital records of patrol findings to adaptively manage patrol routes</p>		<p>In progress. All patrol findings to date digitised. These can be made available upon request.</p>

Activity 2.7 Mentor Wildlife Service personnel at state level to increase capacity for data management and analysis	In progress. See 2.6.
Activity 2.8 Liaise with key actors, such as WCS, the Ministry of Wildlife Conservation and Tourism and the MIKE Programme to share information sensitively on species monitoring, to add to repositories and inform tracking of trends	Ongoing.
Activity 2.9 Identify trained Community Wildlife Ambassadors, including previously trained women, to initiate patrols in proposed CMA area around Bire Kpatuos Game Reserve	N/A for this reporting period.
Activity 2.10 Train additional CWA patrol team members if needed, with a focus on increasing participation and youth	N/A for this reporting period.
Activity 2.11 Initiate system of data collection and facilitate agreement on SOPs for CMA patrols	N/A for this reporting period.
Activity 2.12 Review literature, data gaps and successful models of community-level illegal wildlife trade tracking prior to initiating discussion with community leaders (2.13)	SOP dedicated to illegal activities and information partly gathered by the Household survey. This has proven to be very sensitive and caution is required.
Activity 2.13 Discuss with community leaders on an informal system for collection of information about community involvement in wildlife trade, linked to governance structures for both GRs and CMA and issues emerging as a result of Activity 3.1	Completed. Information gathered through the household survey which will be repeated again during the upcoming period.
Activity 2.14 Centralise both qualitative and quantitative information and review data to inform patrol routes (linked with Activity 2.6)	In progress. See 2.6.
Activity 2.15 Share findings sensitively and periodically with government and local and international civil society partners to inform increasing body of knowledge on IWT especially from under-studied areas	In progress. Shared all information with government.
Activity 2.16 Provide advice to government counterparts on the protocols for handling confiscated meat, in line with national wildlife regulations	Completed.
Output 3. 3. Livelihoods activities appropriate to existing local norms and constraints to wellbeing are strengthening the assets of 900 people (150 households) against external shocks	3.1 Information on cultural and noncultural practices of communities around hunting and natural resource use is available by end of Y1 3.2 By the end of Y2, 150 households have plans in place to mitigate wildlife impact on household assets 3.3 75% of households with a wildlife
	Significant progress has been made against this output considering 298 households already directly actively engaged and livelihood activities well underway with agricultural support, microloans, small businesses, etc.

	<p>impact mitigation plan report a decrease in the number of incidents by project end</p> <p>3.4 By end of Y2, 150 households are engaged in assets development strategies (e.g. agriculture or animal husbandry) according to the results of 3.1.</p> <p>3.5 By project end 75% of households in receipt of assets development support report a positive change in wellbeing</p>	
Activity 3.1 Finalise socio-economic baseline design with local partners, building on existing knowledge of communities		Completed.
Activity 3.2 Undertake socio-economic baseline assessment at the household level focusing on key themes of human-wildlife conflict, natural resource use, specifically hunting, cultural practices, market access and youth and male/female dynamics		Completed.
Activity 3.3 Research human-wildlife conflict mitigation methods involving identified problem species to assess successful/non-successful methods		Completed.
Activity 3.4 Work with individual households to decide practical plans and provide equipment and advice to tackle impact of wildlife on household assets		Completed
Activity 3.5 Advise government counterparts on developing clear regulations for mitigating and compensating for human-wildlife conflict		Completed
Activity 3.6 Monitor impact of human-wildlife conflict mitigation on household assets and wellbeing		In progress. Completed the baseline, the household survey will be repeated during the upcoming period.
Activity 3.7 Support households to develop assets development strategies based on results of PRA and socio-economic baseline surveys (*note that if improvements to agricultural practices are noted as a key priority, the Farmer Field School model will be adopted, which will be able to incorporate environmental awareness raising and take-up of wildlife friendly practices – also linked to Activity 1.10 on channels for conservation messaging)		<p>In progress. 2 Community Facilitators recruited.</p> <ul style="list-style-type: none"> -5 women groups mobilized, 97 members in total -Training of 97 members in leadership, group dynamics and micro-finance. Savings ranging between 10,000-50,000 SSP/member. -35 members trained in fish farming, handling and management -2 Fish ponds constructed, 1000 fingerlings ->70MT maize harvested -167 Beehive built, 33 initially colonized. 32 goats, 10 pigs (8 died). -16 groups mobilised in total, 298 members, 134 men, 164 women.
Activity 3.8 Monitor impact of assets development support on household and community assets and wellbeing		In progress. Household survey completed for baseline, to be repeated during this period.

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

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Impact:</p> <p>Integrated conservation and sustainable livelihoods strategies boost protected areas, forest habitats and endangered species, and enhance aspects of wellbeing as a model of engagement with rural communities in South Sudan</p>			
<p>Outcome:</p> <p>Integrated conservation and development provide benefits to over 900 direct and 3,000 indirect beneficiaries in South Sudan and protects 430km² of nationally important tropical forest habitat</p>	<p>0.1 By project end 900 women, men and children report an improvement in their wellbeing in one or more areas of social, natural, physical, human or financial capital, compared to project baseline (<i>indicator of direct benefit</i>)</p> <p>0.2 Following training, 75% of a representative sample of 3,000 people can articulate at least five wildlife laws and GR regulations, compared to pre-training baseline (<i>indicator of indirect benefit</i>)</p> <p>0.3 2 Game Reserves (GRs) are demarcated and 1 Community Managed Area (CMA) is pioneered and has recognised boundaries, regulations and a governance structure by project end (<i>indicator of protection</i>)</p> <p>0.4 By project end there is a reduction in the incidence of illegal activity in 2 GRs, from baseline (<i>indicator of direct benefit</i>)</p> <p>0.5 75% of direct beneficiaries report an increased reliance on sustainable livelihoods options between project start and end (<i>indicator of direct benefit</i>)</p>	<p>0.1 Baseline, annual and project end community survey Additional community focus group notes</p> <p>0.2 Post-training assessment of knowledge uptake</p> <p>0.3 Documentation of the process from approval to physical demarcation Images of demarcation process Updated maps of the national protected area estate Documentation of the process from FPIC to stakeholder consultation meetings to agreement on rules, regulations and zoning Evidence of government support for CMA GIS maps</p> <p>0.4 Patrol-based threat monitoring data from Game Reserves Patrol records</p> <p>0.5 Baseline, annual and project end community surveys Additional community focus group</p>	<p>Conflict in other parts of the country does not spread and cause any movements of people or critical changes within government</p> <p>Government counterparts at county level continue to be supportive of awareness-raising activities outside of the immediate project focus area</p> <p>No undue delays are experienced in the demarcation process, and the government continues to be supportive at community, county, state and national levels</p> <p>No unexpected and new serious threats affect the Game Reserves</p> <p>No large-scale deforestation occurs, such as through corporate actions, forest fires etc.</p> <p>Community actors continue to be supportive of collaboration on patrolling and wider community engagement by the project</p>

	0.6 Forest cover does not decrease in Bire Kpatuos Game Reserve between 2018 and 2021 <i>(indicator of protection)</i>	Notes 0.6 GIS analysis and mapping	
Output 1 1. 430km ² of Game Reserve (GR) and Community Managed Area (CMA) habitat is under stronger conservation management, with local women and men better informed about biodiversity and engaged in decision-making	<p>1.1 Both Game Reserves have clear boundaries, physically demarcated and recognised as part of the national protected area network. Target: first Game Reserve by end of Y2; second Game Reserve by project end</p> <p>1.2 The proportion of men and women in local communities who are able to articulate at least five relevant wildlife laws and/or Game Reserve regulations. Target: of a trained number of 3,000, 75% are able to articulate by project end</p> <p>1.3 Two Game Reserves have agreed SOPs and adaptive management structures in which local men and women are in decision-making roles and relevant agreement(s) are in place by project end (linked to 2.5)</p> <p>1.4 At least one Community Managed Area has a governance structure in which local men and women are in decision-making roles, and has proposed boundaries, recognised by local government and with draft zones, rules, regulations and a draft operational management plan by project end</p>	<p>1.1 Documentation of the process from approval to physical demarcation Images of demarcation process Updated maps of the national protected area estate GIS maps</p> <p>1.2 KAP study of stakeholders Documentation of awareness-raising modules, materials, images and videos, focusing on demarcation and wildlife regulations</p> <p>1.3 Endorsed financial and technical SOPs for effective and adaptive governance Governance agreements signed by relevant stakeholders</p> <p>1.4 Documentation of the process from FPIC to stakeholder consultation meetings to agreement on rules, regulations and zoning Evidence of government support GIS maps Draft SOPs for effective operational management and governance of management board Draft management plans discussed by relevant stakeholders Review of sustainable financing options for CMA operations</p>	<p>No undue delays are experienced in the demarcation process, and the government continues to be supportive at community, county, state and national levels National, state and county level government personnel support and recognise the development of Community Managed Areas No unexpected and new serious threats affect the Game Reserves Government counterparts at county level continue to be supportive of awareness-raising activities outside of the immediate project focus area Conflict in other parts of the country does not spread and cause any critical changes within government Definitive records of the international boundary can be accessed Women's status isn't a barrier to involvement in decision-making</p>

<p>Output 2</p> <p>2. Collaborative routine and intelligence-led patrols in Game Reserves and community ranger teams in Community Managed Areas are deterring and responding to wildlife crime</p>	<p>2.1 4 Fully trained collaborative patrol units are providing patrol coverage and generating patrol data. Target: 2 Game Reserve patrol units active on 50% of available patrol days by end of Y1; 2 further units by project end. 2 CMA ranger units active on 25% of available patrol days by project end</p> <p>2.2 Collaborative patrol and monitoring units are composed of diverse members. Target: 50 individuals of whom at least 10% are women and 50% are under age of 25, by project end</p> <p>2.3 Collaborative patrol units for the Game Reserves and community ranger units for the Community Managed Areas are following established and agreed Standard Operating Procedures. Target: 2 patrol units (50%) following SOPs by end of Y1; 2 further patrol units (total 100%) by project end; 2 community ranger units following SOPs by project end</p> <p>2.4 Data are available and shared with government and civil society partners (South Sudan government, TRAFFIC, IUCN Pangolin Specialist Group) on community involvement in and market mapping of wildlife trade in target species originating from target area encompassing Community Managed Areas and Game Reserves. Target: Preliminary data available by end of Y2; final data available and sharing complete by project</p>	<p>2.1 Patrol-based biodiversity and threat monitoring data from Game Reserves and CMA Patrol records, maps and records of meetings and decisions Records of patrol group operations and Attendance</p> <p>2.2 Records and images of patrol group registers and routine planning documents</p> <p>2.3 SOP documents and collaborative agreements signed by relevant stakeholders</p> <p>2.4 Report on extent of sourcing of wildlife and products for the domestic and international wildlife trade Evidence of collaboration with wildlife trade partners over new data, and contribution to data repositories</p>	<p>Conflict in other parts of the country does not spread and cause any critical changes within government</p> <p>Community actors continue to be supportive of collaboration on patrolling and wider community engagement by the project</p> <p>Women and youth are willing to be trained for patrols, and receive recognition from existing patrol team members</p> <p>Information on wildlife trade and crime is willingly shared by community-level actors and external actors e.g. county town markets</p> <p>SOPs are agreed by key stakeholders with no untimely delays</p> <p>Co-management patrolling model continues to be the most appropriate method for protected area management, and continues to carry low financial risk and exposure</p>
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	<p>end</p> <p>2.5 Information on wildlife crime from community members informs patrolling effort and increases threat detection. Target: at least one report per month is made on average to a patrol team member, and all reports are logged and shared with national and international partners between end of Y1 and project end</p>	<p>2.5 Database of community-derived information on wildlife crime</p> <p>Meeting minutes/email correspondence regarding the sharing of wildlife crime data</p> <p>Evidence of population of national platforms with biodiversity information</p>	
<p>Output 3</p> <p>3. Livelihoods activities appropriate to existing local norms and constraints to wellbeing are strengthening the assets of 900 people (150 households) against external shocks</p>	<p>3.1 Information on cultural and noncultural practices of communities around hunting and natural resource use is available by end of Y1</p> <p>3.2 By the end of Y2, 150 households have plans in place to mitigate wildlife impact on household assets</p> <p>3.3 75% of households with a wildlife impact mitigation plan report a decrease in the number of incidents by project end</p> <p>3.4 By end of Y2, 150 households are engaged in assets development strategies (e.g. agriculture or animal husbandry) according to the results of 3.1.</p> <p>3.5 By project end 75% of households in receipt of assets development support report a positive change in wellbeing</p>	<p>3.1 Socio-economic baseline survey</p> <p>Records of community meetings focusing on natural resource use</p> <p>3.2 Agreed conflict mitigation plans</p> <p>Evidence of human-wildlife conflict</p> <p>Annual household/community surveys and focus group notes</p> <p>3.3 Annual household/community surveys and focus group notes</p> <p>3.4 Annual household level/community Surveys</p> <p>3.5 Annual household level/community surveys</p>	<p>Conflict in other parts of the country does not spread and cause any movements of people</p> <p>Tools and materials necessary for mitigating wildlife damage are locally available</p> <p>Tools, materials and expertise necessary for piloting livelihoods and agricultural activities are locally available</p> <p>Community actors continue to be supportive of collaboration on patrolling and wider community engagement by the project</p> <p>Women and youth are willing to engage in assets development strategies</p>

Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

Output 1: 430km² of Game Reserve (GR) and Community Managed Area (CMA) habitat is under stronger conservation management, with local women and men

better informed about biodiversity and engaged in decision-making

- 1.1 Undertake stakeholder mapping exercise to identify all key stakeholders (and their roles) to be involved in demarcation roadmap
- 1.2 Socialise process with stakeholders and securing of government backing at relevant levels
- 1.3 Gather evidence of historical boundary information including discrepancies in the literature and clarity on land tenure and any customary rights
- 1.4 Undertake ground-truthing and mapping exercise and present information to decision-makers
- 1.5 Facilitate discussions on and resolve boundary conflicts and other issues
- 1.6 Identify appropriate physical demarcation materials and methods (track cutting, signboards etc.) and conduct demarcation exercise alongside stakeholders
- 1.7 Produce maps and clear information on demarcated sites to inform the national protected area estate
- 1.8 Review government wildlife legislation (draft and final), and clauses/loopholes, to understand up-to-date national policies on wildlife management
- 1.9 Assess stakeholder (government and community) attitudes and knowledge of conservation and protected areas through a KAP survey
- 1.10 Design content and appropriate channels (e.g. Yambio FM) for dissemination of conservation messaging, drawing on existing stakeholder knowledge, relevant cultural values and known information about ecosystems and wildlife (also linked with Activity 3.7 and Farmer Field School messaging)
- 1.11 Assess take-up of conservation messaging through follow up KAP survey
- 1.12 Identify legislative needs/barriers to enable governance agreements for Game Reserves to be created and implemented
- 1.13 Seek exemplars of governance agreement to learn from nationally/regionally, especially with regard to sustainability planning
- 1.14 Discuss and agree on governance structures, roles, responsibilities and SOPs
- 1.15 Facilitate and socialise governance agreements and relevant approvals/endorsements
- 1.16 Identify legislative needs/barriers to enable Community Managed Areas (CMAs) to be developed and supported
- 1.17 Follow FPIC principles to determine approach to develop CMA as buffer zone to Bire Kpatuos GR and establish draft structure, roles, activity zoning, regulations and management plan/SOPs
- 1.18 Consider options for sustainably financing CMA operations following establishment and discuss with community actors and CBO partners
- 1.19 Facilitate evidence of government support for CMA establishment
- 1.20 Develop GIS materials to document progress with CMA development

Output 2: Collaborative routine and intelligence-led patrols in Game Reserves and community ranger teams in Community Managed Areas are deterring and responding to wildlife crime

- 2.1 Engage the Wildlife Service to increase the patrol intensity in two Game Reserves, through structure of patrol teams (Biodiversity Data Collection and Law Enforcement teams) and design of routes, including option for night time patrol work (flexible to security situation)
- 2.2 Identify trained Wildlife Service rangers and Community Wildlife Ambassadors to join increased frequency of patrols in two Game Reserves
- 2.3 Equip all patrol teams with adequate provisions, kit, health and safety equipment and patrol gear
- 2.4 Ensure logistics and project operations (vehicles, communications, personnel) are in place to support patrol activities
- 2.5 Roll out patrol SOPs for a) biodiversity data collection and b) law enforcement and ensure a rigorous system of data collection, collation in a centralised location and system for continual feedback to patrol team members to improve understanding of how data collection is linked to patrol planning
- 2.6 Use digital records of patrol findings to adaptively manage patrol routes
- 2.7 Mentor Wildlife Service personnel at state level to increase capacity for data management and analysis
- 2.8 Liaise with key actors, such as WCS, the Ministry of Wildlife Conservation and Tourism and the MIKE Programme to share information sensitively on species monitoring, to add to repositories and inform tracking of trends
- 2.9 Identify trained Community Wildlife Ambassadors, including previously trained women, to initiate patrols in proposed CMA area around Bire Kpatuos Game Reserve
- 2.10 Train additional CWA patrol team members if needed, with a focus on increasing participation and youth
- 2.11 Initiate system of data collection and facilitate agreement on SOPs for CMA patrols

- 2.12 Review literature, data gaps and successful models of community-level illegal wildlife trade tracking prior to initiating discussion with community leaders (2.13)
- 2.13 Discuss with community leaders on an informal system for collection of information about community involvement in wildlife trade, linked to governance structures for both GRs and CMA and issues emerging as a result of Activity 3.1
- 2.14 Centralise both qualitative and quantitative information and review data to inform patrol routes (linked with Activity 2.6)
- 2.15 Share findings sensitively and periodically with government and local and international civil society partners to inform increasing body of knowledge on IWT especially from under-studied areas
- 2.16 Provide advice to government counterparts on the protocols for handling confiscated meat, in line with national wildlife regulations

Output 3: Livelihoods activities appropriate to existing local norms and constraints to wellbeing are strengthening the assets of 900 people (150 households)

against external shocks

- 3.1 Finalise socio-economic baseline design with local partners, building on existing knowledge of communities
- 3.2 Undertake socio-economic baseline assessment at the household level focusing on key themes of human-wildlife conflict, natural resource use, specifically hunting, cultural practices, market access and youth and male/female dynamics
- 3.3 Research human-wildlife conflict mitigation methods involving identified problem species to assess successful/non-successful methods
- 3.4 Work with individual households to decide practical plans and provide equipment and advice to tackle impact of wildlife on household assets
- 3.5 Advise government counterparts on developing clear regulations for mitigating and compensating for human-wildlife conflict
- 3.6 Monitor impact of human-wildlife conflict mitigation on household assets and wellbeing
- 3.7 Support households to develop assets development strategies based on results of PRA and socio-economic baseline surveys (*note that if improvements to agricultural practices are noted as a key priority, the Farmer Field School model will be adopted, which will be able to incorporate environmental awareness raising and take-up of wildlife friendly practices – also linked to Activity 1.10 on channels for conservation messaging)
- 3.8 Monitor impact of assets development support on household and community assets and wellbeing

Annex 3: Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Gender of people (if relevant)	Nationality of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
6A	Training Measure: Number of people to receive trainings on Biodiversity Data Collection, threat monitoring, Protected Area Management, patrolling, etc.	21M/7W	South Sudanese	20	28		48	40
6A	Training Measure: number of people/households to receive trainings on livelihood support, including agricultural practices and animal husbandry	134M/164W	South Sudanese	196 members equivalent to up to 196 households	298		298 members equivalent to up to 298 households	150
6B	Training Measure: Number of training weeks to be provided on Biodiversity Data Collection, threat monitoring, Protected Area Management, patrolling, etc. Worth noting that this is predominantly done through on the job training, hence specific figures are somewhat arbitrary.	n/a	n/a	3	+/- 50		53	14
7	Training Measure: Number of training materials to be produced for the dissemination of conservation messaging	n/a	n/a	0	4		4	5
9	Research Measure: Number of Standard Operating Procedures relating to species/habitat/protected area management to be produced for the Wildlife Authorities and Communities in South Sudan	n/a	n/a	21	15		36	21
12A	Research Measure: Database capturing all patrol data and	n/a	n/a	1	2		3	1

	made available to South Sudanese authorities							
14A	Dissemination measures: Number of conferences/seminars/ workshops to be organised to present/disseminate findings with partners and stakeholders	n/a	n/a	8	12		20	30
14B	Dissemination measures: Number of conferences/seminars/ workshops attended at which findings from Darwin project work will be presented/ disseminated.	n/a	n/a	8	2		10	30

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)
Unexpected Achievements, Adapting and innovating in South Sudan	Darwin Initiative Newsletter	Ivan De Klee & Nicolas Tubbs, 2018	Male	British	Darwin Initiative	here
Mystery monkey Rare red colobus caught on camera in South Sudan	News Article	Tim Knight, 2020	Male	British	FFI	here
Are aid groups ignoring South Sudan's climate crisis?	News Article	Sam Mednick, 2019	Female	Canadian	Devex	here
You (Yes, You) Can Help Scientists Identify Wildlife In South Sudan	News Article	Christine Ro, 2019	Female	Unknown	Forbes	here
South Sudan tries to protect wildlife after long conflict	News Article	Sam Mednick, 2019	Female	Canadian	New York Post, Washington Post, Associated Press (same article, several outlets)	Here Here Here
South Sudan's Sixth National Report to the	Publication	South Sudan Ministry of environment	n/a	South Sudanese	South Sudan Government, UN	Here

Convention on Biological Diversity		(DRAFT, 2019)			Environment, CBD, GEF	
South Sudan: latest images reveal a global hotspot for biodiversity	News Article	Nathan Williams	Male	British	FFI	Here

Annex 4. Maps of each Game Reserve and Boundary Demarcation Details

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	X
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	n/a
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	X
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	n/a
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.	