Darwin Initiative Main Annual Report

To be completed with reference to the "Writing a Darwin/IWT Report" Information Note:
(https://www.darwininitiative.org.uk/resources-for-projects/reporting-forms-change-request-forms-and-terms-and-conditions/).

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

Submission Deadline: 30th April 2021

Darwin Project Information

Project reference	26-006
Project title	Conserving Tsavo's wildlife by building community resilience and fostering coexistence
Country/ies	Kenya
Lead organisation	Zoological Society of London (ZSL)
Partner institution(s)	Kenya Wildlife Service; Tsavo Trust; Five Talents Kenya; Wildlife Works
Darwin grant value	£328,843
Start/end dates of project	01/06/2019 – 31/05/2022
Reporting period (e.g. Apr 2020 – Mar 2021) and number (e.g. Annual Report 1, 2, 3)	Apr 2020 – Mar 2021 Annual Report 2
Project Leader name	Previously Zeke Davidson (now left ZSL) and Rebecca Sennett Day (currently on maternity leave). Temporary project leader: Ana Pinto
Project website/blog/social media	https://www.zsl.org/conservation/regions/africa/kenya-conservation-work Twitter: @ZSLAfrica
Report author(s) and date	Ana Pinto; Hannah Klair; Fridah Mutili ; Moses Wekesa; Stephen Musau; Clarine Kigoli; Nelly Musyoka

1. Project summary

Human-wildlife conflict (HWC), bushmeat hunting and Illegal Wildlife Trade (IWT) threaten biodiversity in Kenya's largest protected area complex, the Tsavo Conservation Area (TCA). The TCA is home to Kenya's largest elephant and black rhino populations as well as important populations of lion, hyaena, African wild dog, and cheetah. Two communities (Mangalete and Kamungi) located either side of the Mombasa-Nairobi highway, form a buffer on the northern edge of Tsavo East and Tsavo West National Parks (NP) and eastern edge of Chyulu Hills (see map: Annex 4); they are subsistence arable farmers, with some livestock. They are poverty-stricken and highly vulnerable due to reliance on limited natural resources and poor climatic conditions.

Only c.10% of their population receive an income, mostly through casual employment, with no access to savings. People often resort to wildlife crime, including bushmeat hunting and poaching (in 2017, 92kg of ivory seized; 13 wildlife crime arrests in Mangalete). Human-elephant conflict (HEC; 245 incidences in Kamungi in 2018) and human-carnivore conflict (HCC - lion, hyaena, wild dog, leopard; 89 incidences in Kamungi in 2018) compound farmers' vulnerability in Kamungi in particular.

A 2015 survey found >85% of TCA communities held negative attitudes towards NPs. There have been no Non-Governmental Organization (NGO) engagement efforts in Mangalete, however Tsavo Trust have worked in Kamungi since 2014. Recently, a two-strand electric fence, erected along the border of Mangalete with Tsavo West National Park (TWNP) by Kenya Wildlife Service (KWS) has reduced HEC

by a reported 85%. This will require long term maintenance and is not a comprehensive solution as other wildlife still enter the community, and it does not deter wildlife crime.

These problems were identified through speaking to the Chiefs of both communities, local NGOs (particularly Tsavo Trust, who employ 44 Kamungi community members as casual labourers as well as implementing a number of community projects), KWS (Kenya Wildlife Service) Community Wildlife Service (KWS-CWS) and from relevant species management strategies.

2.   Project partnerships

We have advanced our collaborations with project partners Kenya Wildlife Service (KWS), Tsavo Trust (TT), Wildlife Works (WW) and Five Talents (5T) which has helped with the progress of the project over Y2. We have started to address communication challenges as described in Annual Report 1, through a streamlined approach to communication with our partners, utilising a main focal contact, our Community Technical Manager based in-country.

Partner Tsavo Trust (TT) has continued to be very involved in the project delivery in aerial support, wildlife monitoring, intelligence gathering to support KWS, monitoring and evaluation and in community outreach and liaising with Kamungi community due to their in-depth understanding of their and its needs.

Partner Wildlife Works (WW) had experienced delays in activities in Y1 of the project related to the livelihood identification workshops (as a result of COVID-19), which took place in Y2 instead. These have informed decision-making and implementation of livelihood initiatives with partner communities.

Partner Five Talents Kenya (5T) have been on hand to provide ad-hoc support to the team regarding the Village Savings and Loan Associations (VSLA) development, following Y1 training, as well as further training to ZSL community staff and support sessions delivered online/remotely due to the pandemic.

We continue collaborating with the two target communities, building positive relationships and remaining visible and accessible, even through the challenges relating to COVID-19 restrictions (described in Section 14). ZSL remained continually active in the communities and the community team have ensured a strong project presence, while ensuring safety guidelines are followed, continuing to enhance awareness of the project, meeting with Chiefs, delivering meetings and workshops, collecting data and catalysing the formation of VSLA groups and providing support to group members. Community bus trips into TWNP have been introduced (following suggestions from community members) in Y2 as described in Section 3 and have helped to further foster the relationship between our partner KWS and communities.

3.   Project progress

3.1   Progress in carrying out project Activities

Output 1

Activity 1.1: KWS Community Outreach Officers hold quarterly community meetings with the Chief and key community influencers, facilitated by ZSL, extending the attendee list as word spreads to other community members by the influencers.

During Y2 of this project, owing to country-wide lockdowns resulting from the COVID-19 pandemic, only two KWS-Community meetings were able to take place.

On October 6th 2020, one meeting took place in Kamungi Conservancy, with a total of 107 attendants. On October 23rd 2020, a second meeting took place in Mangalete community with a total of 44 persons in attendance. These meetings were attended by both VSLA members and non-VSLA members, as well as KWS education and community teams, the ZSL community team and a Tsavo Trust representative. Discussions led by the KWS Education Warden firstly covered wildlife user rights and how wildlife conservation and management could be practiced to benefit communities living in the vicinity of the park border. Different types of wildlife crime were also covered, as often, those who are arrested for wildlife crimes are unaware of the illegalities of their actions. Discussions around compensation for losses due to HWC (Annex 5) were also included.

Two further meetings were scheduled for March 24th and 25th 2021 (one in each community). However, we were advised by Area Chiefs that these open meetings had the potential to attract large crowds and become difficult to control. In the wake of renewed government calls for compliance with COVID-19 protocols, a decision was made to postpone these meetings, to reduce risk to communities or the project team. As Kenya was placed in a national lockdown starting on March 29th, this activity had to be postponed until Y3. Budget earmarked for the community outreach exercise was directed towards acquisition of HWC mitigation material (predator proof bomas) for households experiencing severe HWC.

To further underpin the relationship building between KWS and our target communities, members of the community suggested that it would be helpful for them to travel into TWNP accompanied by KWS. Throughout Y2, six bus trips have taken place (four in Mangalete, two in Kamungi), attended by Area Chiefs for each community, plus two village elders from Kamungi, as well as 160 of our VSLA members and 111 non-VSLA members from each community. Each trip was accompanied by KWS officers, including

an education officer who was able to relay the importance of the park, its wildlife and other natural resources and encourage the group to value the park and its conservation through giving communities living on its border an opportunity to enjoy it. Within TWNP, trips visited the Education Centre, Shetani Lava, Chaimu Hill and Mzima Springs, and groups were able to see a multitude of wildlife including elephants, buffalo, giraffes and several small antelope species (Annex 6). Feedback forms were used (Annex 7) to help the project team gain an understanding of the value of the trip, the learning opportunities and ways it could be improved.

Activity 1.2: ZSL Community Officer and Community Liaison trained by partner, 5T on VSLA establishment including an exchange visit for ZSL staff.

Initial training took place in Y1 of this project, with a refresher training session taking place (online) in Y2 (including new starter Nelly Musyoka – Community Liaison Officer, and two ZSL London staff). Peterson Karanja, Director of 5T Kenya, led the training on fundamentals of VSLAs, including promoting participation in savings groups, the VSLA model and its advantages and disadvantages (Annex 8). 5T have continued to support the team throughout the pandemic on a ad-hoc basis. Peterson has advised the ZSL community team on how to support VSLA groups remotely, how to ensure groups meet in a COVID-secure manner and providing support as the ZSL team have been training VSLA groups in loan taking (Annex 9).

Activity 1.3: ZSL community team then establishes 10 VSLA groups (150 households) in Mangalete and 3 VSLA groups in Kamungi (45 households) over the project period.

During Y1 of this project, two VSLAs had been established in each target community, totalling four overall. In Y2, a further VSLA was established in Kamungi and eight more established in Mangalete, bringing the cumulative total to ten VSLAs in Mangalete and three in Kamungi – reaching our overall project target of 13 VSLAs. There are a total of 48 VSLA members in Kamungi and 176 VSLA members in Mangalete. The project has now exceeded its number of target households (195) with a total of 224 households reached through VSLAs. Overall, there are 177 female members (33 in Kamungi and 144 in Mangalete) and 47 male members (15 in Kamungi and 32 in Mangalete), equating to a total female membership of 79% (Annex 10).

Activity 1.4: ZSL and TT community teams conduct surveys in Mangalete and Kamungi (with all VSLAs members at start of group establishment; total ~195 members) that include questions on socio-economics, wellbeing indicators, and perceived level of HWC incidences, mitigation techniques and perceived effectiveness. These surveys will be repeated annually.

In this second socio-economic survey, all VSLA members were interviewed as well as a random 10% sample from each target village (using the same random sampling technique as was developed last year), totalling 260 surveys. Interviews were conducted by 13 enumerators, trained by the ZSL community team in use of the SurveyCTO software and survey technique, including running pilot surveys. Data analysis started in Q4 Y2 (Annex 11).

Activity 1.5: Monthly meetings between ZSL community team and VSLA groups enables regular monitoring of economic metrics associated to VSLA participation. Meetings will also be used for conservation messaging and discussion on HWC issues, helping to identify priority needs for mitigation. Standardised ZSL organisational forms are completed four times annually to monitor group financials (at meetings held after the 1st, 12th, 24th and 52nd week (share-out) of savings).

Y2 of the project overlapped two national lockdowns (between March and July 2020 and again since March 2021), as well as restrictions relating to group gatherings. During this time, the community team were able to keep in contact with VSLA members via telephone and provide remote support.
As restrictions relaxed to allow larger groups to meet, the community team met with Area Chiefs to establish the safest way to resume meetings. Meetings with VSLAs resumed in July, taking place outside ensuring 1.5m spacing between participants (as per government social distancing rules) including splitting larger VSLAs into smaller groups, limiting cash handling amongst members and masks were provided for all participants. These meetings were also used to handout information materials on COVID-19 to minimise spreading of the virus and safety measures for members. The team are also equipped with temperature guns; all participants in meetings and workshops since July now have their temperature recorded before attending. To continue improvement of the relationship between KWS and the communities, the ZSL community team invited KWS to attend these VSLA meeting as a good opening for promoting and creating an understanding of wildlife, their habitats and need for conservation. Additionally, community members discussed the detrimental impacts of humans on ecosystems, including deforestation, charcoal burning and wildfires (these were occurring in Tsavo at the time) (Annex 12). Following meetings with the Area Chiefs of Mangalete and Kamungi in September, meetings of groups of up to 50 we able to take place.

Output 2

Activity 2.1: ZSL and TT community teams conduct socio-economic/wellbeing/HWC surveys in Mangalete and Kamungi (as mentioned in Activity 1.4).

This activity is reported on under Activity 1.4.

Activity 2.2: ZSL and TT hold 4x workshops in Kamungi (1) and Mangalete (3) for households experiencing significant levels of HWC to map HWC hotspots and agree priority mitigation strategies for each community taking factors such as perceived effectiveness, availability of materials, time and costs to set-up and maintain into account. The target participants will be VSLA members initially, however the workshop will not exclude non-VSLA members and will be focused on those that experience significant levels of HWC as identified through KWS-CWS meetings and HWC reports, VSLA meetings, surveys etc.

Upon the lifting of government restrictions in September, the HWC workshops were able to take place in Mtito Andei between October and November 2020. These workshops aimed to identify and map HWC hotspots within each target community; prioritise HWC issues and determine the most appropriate mitigation techniques selected by communities. Once identified, and based on findings from the workshop, strategies were developed in collaboration with the piloting households, and then training and implementation plans created for the recommended intervention.

The workshops were facilitated by Dr Tobias Nyumba, an expert in community-led conservation and implementing HWC interventions, and currently a Postdoctoral Research Associate and Lecturer, working on the Development Corridors Partnership Project run by the African Conservation Centre and the University of Nairobi and has extensive experience undertaking HWC mitigation projects.

At the time of the workshops, 9 VSLAs had been formed, totalling 165 members across both target communities who all participated in the HWC workshops. In addition to this, non-VSLA members from each village were invited to attend – Local Area Chiefs identified households who experienced acute HWC and recommended that they be included. Overall, there were 185 community members in attendance, 131 (71%) from Mangalete and 54 (29%) from Kamungi. In Kamungi, 15 non-VSLA members attended and 15 non-VSLA members also attended from Mangalete. Also in attendance, was one official from Tsavo Trust, two KWS officials and three members of the ZSL Kenya team. In total, three workshops took place in Kamungi and four took place in Mangalete – this was more than originally intended owing to COVID-19 government regulations.

In compliance with COVID-19 government guidelines (maximum 100 participants), and to ensure the safety of all workshop participants, attendance at each workshop was limited to a maximum of 50. Workshops were held in large, well aerated halls and social distancing was observed. Upon arrival, each person had their temperature taken which was recorded on the attendance sheets, and masks were provided to all, as well as handwashing stations.

The workshop provided a platform for the participants to highlight different types of HWC experienced, and then attendees undertook a pair-wise matrix ranking to determine which type of HWC was most common and severe in these communities. Workshops in the Kamungi community identified that damage to crops and property was the most common and severe HWC type, followed by livestock injury whilst participants in Mangalete identified killing of livestock as the most common and severe HWC type. Participants then identified the species responsible for each type of HWC as well as the season during which it occurs. The workshop then called for groups to map out HWC hotspots (Annex 35) and key wildlife corridors. Maps allowed four key HWC areas to be identified in Kamungi and three key HWC areas were also identified in Mangalete (Annex 13).

Following on from this, participants were asked to discuss current mitigation techniques available in their communities, most of which were traditional techniques such as taking watch, lighting fires at farm boundaries, reporting to KWS for action etc, although some included predator proof bomas and electric fences. Participants from Mangalete were able to identify stakeholders who were already using other techniques and were also able to comment on their relative efficacy – there were already farmers who were using chilli-based deterrents and beehives as well as spotlights and predator proof bomas. Discussion was held to enable community members to highlight challenges and advantages of each different alternate farm-based HWC mitigation types.

Attendants finally worked in groups to first identify and prioritize HWC mitigation techniques, taking into consideration efficacy, resource availability, timeframes, and internal and external support requirements. Based on this, participants created an implementation plan, broken down by short, medium and long-term plans. Kamungi identified chilli fences, chilli fires, palm thunder and reinforced bomas with spotlights as their chosen short-term mitigation. Longer term choices were for the 10% electric fence technique (supported by Tsavo Trust) and an electric fence along the boundary of TWNP. Similarly, in Mangalete, short-term interventions included chilli smoke, palm thunder and reinforced bomas with solar lights. For long-term interventions, participants opted for using chemicals to change the taste of crops as well as modifying the existing electric fence to keep out monkeys. These would be beyond the scope of this project, and so the decision was made to move forward with the chosen short-term implementation techniques.

Activity 2.3: ZSL and TT run 3-day training course in selected mitigation strategies for at least 40 priority households in HWC hotspots across both communities in Y2 and support households to pilot chosen strategies.

The training for implementation of chosen mitigation techniques was able to take place in Q4 Y2. In the intervening period between the initial HWC workshops and this training, the target communities had experienced sustained severe HEC, and one man was sadly killed by an elephant. This was a time of high stress and fear for our community members. KWS, TT and other stakeholders were working to push the elephants out of the community. The ZSL community team were in regular communication with the community to hear their perspective and understand what they believed would be best. Members of these communities, particularly Kamungi, were hesitant to implement any farm-based HEC techniques as they worried it would decrease the likelihood of an electric fence being built, as well as increase tensions amongst neighbours who disagreed with farm-based methods in lieu of the electric fence.

After communications with both the community and Dr Tobias, it was concluded that initially training the community in their chosen HCC mitigation technique would be most appropriate – which for both Kamungi and Mangalete was predator proof bomas with spotlights, as the tension surrounding HEC and mitigation techniques could risk no one implementing the technique following training. The ZSL community team facilitated the selection process for participants who would receive the bomas in each community. In Kamungi, ZSL and TT Community Officers worked with Community Liaison Officers and Conservancy leaders, and visited 11 households in the community that had been identified earlier by the VSLA members as the most at risk to frequent livestock predation. Five households were selected, four households were chosen from the three VSLAs in Kamungi and one household was chosen from outside of the VSLAs. All five were members of Kamungi Conservancy, were households which had experienced acute HCC in the last two years (and identified in the maps from the initial HWC workshop), households which had existing bomas in a poor state, households with over five animals for livestock. Households which had people living with disabilities were prioritised and those who had benefited from previous projects in the Conservancy (beehive fences, 10% fence plan) were not given priority. In Mangalete, five households were chosen from the seven VSLAs in this community, and again, households must experience acute HCC in the last two years (and identified in the maps from the initial HWC workshop), households which had existing bomas in a poor state, households with over five animals for livestock.

The first day of training took place in Kamungi in February and had 57 attendants. Following on from this, there were two days of training in Mangalete with the first day attended by 51, and the second day attended by 49. Each day contained a half day of theory, before participants broke off into their respective VSLAs and worked in teams to construct the bomas together. During each of these trainings, a *Fundi* (local mason) was present, to learn the technique and be able to keep this knowledge in the communities. Following on from these initial trainings, five pilot bomas were built in each community between February 15th and March 4th. Households who received the bomas were identified in the previous HWC workshops during the mapping exercise (Annex 14).

Activity 2.4: ZSL and TT community team monitor effectiveness of implemented HWC mitigation strategies by Q1 Y3 through monthly site-visits, VSLA meetings and reports. Household surveys will be repeated at project end to enable evaluation of effectiveness of pilot mitigation interventions for participating households.

With the 10 bomas having been successfully constructed (Annex 15), a simple questionnaire for monitoring the efficacy of these bomas has been developed. Theis covers audible, visual wildlife incidences as well as evidence of damage to the boma. It will be completed on a weekly basis by the household who has the boma and will be collected at the end of the month by the community officer for analysis. Guidelines for completing the questionnaire including photos of key species, their spoor and scat, were provided with the questionnaires. The data collection will begin in Q1 of Y3 and will be reported on in Y3.

Output 3

Activity 3.1: VSLA meetings and two three-day workshops run by partner WW will be used to identify livelihood opportunities and / or improved efficiencies to current livelihoods, with the aim to create a business plan for selected opportunities in each VSLA group. WW will advise on product demand and market accessibility to ensure the most feasible opportunity is selected.

These were scheduled for Q2 Y2, and as per Activity 2.2, in the interest of safety and in agreement with the area chiefs, workshop attendance remained at a maximum of 50 persons. As before, social distancing was observed throughout, temperatures of all participants were checked on arrival, handwashing stations were provided and participants were encouraged to sanitise their hands throughout the day, and each attendee also received a mask.

At the time of the workshops, seven VSLAs had been formed. The first workshops took place in Kamungi, in September, with two VSLAs in attendance (28 members in total), followed by a second workshop in with one VSLA attending – 20 members in total. Workshops then took place in Mangalete (also during September), with the first attended by two VSLAs (30 persons in total) and the second attended by the other two VLSAs in Mangalete (total of 37 attendants). Each workshop was facilitated by six personnel – three from our partner WW, one from TT and two from ZSL (Annex 16).

Project partners WW facilitated the workshop, first leading a discussion around identification and prioritisation of focal issues (social or biodiversity problems that are the most important for the project to address, or social issues which may prevent project success). Social issues which were identified as priorities in both Kamungi and Mangalete were HWC followed by low income. Kamungi considered poaching the biggest threat to biodiversity and Mangalete reported water scarcity, HWC and poaching as the most important issues in biodiversity. Based on this, groups then created problem flow diagrams in a way to analyse the situation and in doing so, understand what contributes to the focal issues identified. These then were used to enable groups to ascertain 'project entry points', i.e. activities or interventions that the project could undertake to resolve what is contributing to focal issues. The top five interventions chosen in Kamungi were livestock production, water harvesting, education bursaries, agricultural extension training and micro-financing and provision of seed capital. In Mangalete, the top four interventions were education bursaries, livestock production, tree planting and environmental awareness education.

When community members were asked to consider what project they would undertake if offered a small amount of seed money as a grant – and an overwhelming majority of participants (40 out of 54 attendants from Kamungi and 50 out of 68 participants from Mangalete) opted for livestock husbandry. As livestock production had consistently been ranked highly in both communities, this was chosen as the preferred livelihood intervention for the project. The workshop ended with a discussion on business plans and next steps. Participants cited access to markets as a major impediment to successful farming in this area, exacerbated by the poor prices offered by brokers, it was key that this was addressed in the model moving forward.

Findings from these workshops helped to develop tailored business plans for both improved goat and chicken production (Annex 17 and Annex 18). These detailed plans double up as a training manual for the VSLAs. Each plan covers details about the species and breeds available for production, appropriate housing, feeding and health care. It also explains the production and financial plans, business analysis, and a wealth of other issues including permits, marketing tips, record keeping, HWC and sustainability.

Activity 3.2: Four training workshops on selected livelihood opportunities, delivered to VSLA groups by technical partner WW and the ZSL community team. If capital investment necessary for selected livelihood, equipment/materials will be procured using loans from the VSLA groups and project funds at the relevant time. WW will run training follow-ups in Y2 and Y3.

Follow up workshops on chosen livelihood interventions took place in Q4 Y2, during which participants were trained on the business plans created. 115 VSLA members (the seven VSLAs which were established at the time) attended the workshops. In addition to these VSLA members, each workshop was attended by members of local administration (Chiefs and/or sub-Chiefs) and facilitated by three staff members from WW, one staff member from TT, four staff members from ZSL Kenya and a County Agricultural Extension Officer (Annex 19).

As before, workshops kept attendants to a maximum of 50 people. COVID-19 protocols as laid out in previous activities were followed. The first workshop included participation from two VSLAs from Kamungi (totalling 28 participants), and a second workshop took place the following day in Kamungi with the third VSLA (totalling 20 participants). Two VSLAs from Mangalete attended another workshop (total of 30 participants) and two VSLAs from Mangalete attended the last workshop (37 participants).

During the workshops, the handbooks and business plans were reviewed with the community participants, followed by a group discussion on key potential issues and actual implementation of the business plan, focussing on entrepreneurial issues including advice on product demand and market accessibility. Working groups were tasked with describing typical production systems for chicken and goats (including housing, feeding, health treatments and available market outlets), limiting factors for these chosen livestock ventures (answers of which included diseases, predation of livestock, food shortages and lack of skills and capital), aspects of livestock production which required external support, assumptions for each enterprise, breeds commonly reared and finally local available market centres.

Activity 3.3: Following training, at least 40 VSLA households in Mangalete and 12 households in Kamungi implement livelihood intervention with support from ZSL community team and WW, who will monitor pilot enterprises to ensure there are no negative consequences to any gender or vulnerable group.

This activity will begin in Q1 Y3. Planning for this implementation stage began after the second livelihood workshops took place. The project currently has 13 VSLAs reaching a total of 224 households, and had budgeted for 52 households to implement the livelihood options chosen. Objectively selecting implementation 52 households and potentially excluding 172 households from the livelihood activity posed a risk of destabilising and disintegration of VSLAs, therefore after some discussion with WW, the option of we a clustering approach became more appropriate for our context.

In this cluster method, the project has formed 52 livelihood clusters comprised of between three to five households within a VSLA group. Each VSLA is divided into a given number of clusters (dependent on number of members in group) and were allowed to self-select to be organised based on distance from

each other, as well as ability to work together. Further the cluster members were allowed to nominate the homestead to host the livestock enterprise, although care, management and capital investment and returns, will be the responsibility of all members of a cluster.

The cluster members will contribute 25% of the total cost of the project cost e.g., for chicken enterprise, where the start-up stock per cluster is 40 chicks, community members contribute the cost of 10 chicks. The cluster method, along with contribution towards the cost, enhances collective ownership of the enterprise and incentive for its success. This model is in the process of being finalised and will be fully reported on under the Y3 reports (Annex 31).

Activity 3.4: ZSL community team monitors and evaluates success of livelihood interventions through socio-economic surveys and regular communication, conducted around VSLA meetings, with at least 90% of target households, providing 6-monthly reports from Y2.

This activity will begin in Y3.

Output 4

Activity 4.1: ZSL delivers training course for all eight TT community scouts in data collection and analysis using SMART by end of Y1 and supports on the production of quarterly patrol maps in QGIS.

This activity is complete and was reported on under the Y1 Annual Report.

Activity 4.2: Daily SMART patrols will be conducted (foot and vehicle) by TT community scouts and KWS to record and remove snares, record signs of illegal activities and intercept and arrest suspected poachers/hunters along the park boundary with Kamungi.

In Y2 of this project, TT Kamungi Scouts (who often operate as a joint team with KWS rangers) covered a total of 200km by vehicle, 2,959km on foot and have spent a total of 334 field days on patrol. During the reporting period, a total of 333 snares (299 for small game, 21 for medium game and 13 for large game) were recovered. This is a 2% reduction in snares collected from Y1 to Y2. In addition, 14 arrests were made (10 bushmeat poachers, 2 charcoal burning and 2 ivory dealers). From this, 57kg of bushmeat was confiscated – 34 dikdiks, 1 hare, 5kg of buffalo meat and 90kg of eland meat, as well as 8 pieces of ivory (Annex 20-23).

One of the TT scout teams, Tembo 5, was on hold from April to November (owing to COVID-19), but since December 2020, the team has conducted frequent patrols in the northern area of TWNP covering a total of 6,630km by vehicle, 482km by foot and spent 78 field days on patrol. The Tembo 3 anti-poaching team has also conducted frequent anti-poaching patrols in this area as well as assisted in HEC incidents (driving elephants out of the Kamungi Conservancy) for the first quarter of 2021, and have driven out more than 722 elephants from the Kamungi Conservancy. During the reporting period, this team has covered 27,097km by vehicle, 2,071km by foot and spent 334 field days on patrol. This represents a total combined effort of 34,927km of vehicle patrols carried out and 2,562km of foot patrols carried out.
NB. Please treat data on illegal activity as confidential.

Activity 4.3: TT will conduct weekly patrols across the northern sector of the TCA monitoring signs of illegal activity, including poacher camps and animal carcasses, producing monthly reports that detail aerial patrol coverage and data on illegal activity.

TT also conducts regular anti-poaching aerial reconnaissance patrols over the entire TCA in conjunction with KWS. During the reporting period, a total of 304.9 hours (25.4 hours per month) of low-level aerial surveillance was conducted over the northern boundary of TWNP including the Mangalete and Kamungi Conservancy areas. An average of 2,897km of aerial patrol coverage was maintained over the northern sector of the TCA (total of 34,760km) (Annex 24).
NB. Please treat data on illegal activity as confidential.

Activity 4.4: TT will produce quarterly reports including patrol maps to enable monitoring of patrol coverage by TT community scouts and KWS along community borders and inform patrol strategy by end of Y1.

TT has produced four quarterly patrol maps displaying patrol coverage of community scouts and KWS (Annex 25).

NB. Please treat data on illegal activity as confidential.

3.2   Progress towards project Outputs

Output 1. VSLAs established in Mangalete and Kamungi communities, providing gender-equitable access to savings and an incentive to support conservation/human-wildlife coexistence and disengage from wildlife crime

Despite some delays in activities, progress towards this output is mostly going according to plan. The quarterly community meetings with KWS (*Indicator 1.1*) have suffered delays during Y2 due to covid restrictions, with only two meetings taking place (one in Kamungi, and one in Mangalete). Two further meetings were planned for March 2021; however, the second national lockdown did not allow for these to go ahead.

During Y2 a further 9 VSLAs were formed, 1 additional VSLA in Kamungi and 8 in Mangalete, bringing the overall project total to 13 VSLAs exceeding our Y2 target and reaching the overall target for the project (*Indicator 1.2*). There are a total of 224 VSLA members, (48 in Kamungi and 176 in Mangalete), 177 of which are females and 47 of which are male, which exceeds our target of 50% minimum percentage of women members (average overall female membership is 79%). Kamungi has a 69% women membership and Mangalete has an 82% women membership.

From the Y2 socio-economic survey data, 83% of VSLA households in Kamungi reported saving 0 Kenyan shillings (KES) each year, whilst the remaining 17% had an average annual savings of 10,562 KES. In Mangalete, 88% of VSLA households reported saving 0 KES each year, whilst the remaining 12% had average household savings of 10,070 KES (*Indicator 1.3*). In Y1, Kamungi had a similar 77% of households with 0 KES of average annual savings, whereas Mangalete has increased from 53% in Y1 to the present 88% - likely due to the impact the COVID-19 pandemic has had on communities, as shown by our COVID-19 Impact Survey carried out in October (Annex 26). ZSL is also collecting data on the impact of COVID-19 on VSLAs across other programmes, we will discuss this further and exchange learnings with other teams and aim to capture information relating to this from our VSLA groups by project end (also as per comments from Annual report 1).

Through the Y1 socio-economic survey, we established women's priorities for spending by asking them to rank the top five items most important to them and how much on average they spend on these items (*Indicator 1*.4). Reviewing the results of the Y1 survey on female spending, the indicator target was found to not be appropriate as some of the items that were selected may be capped at a certain monthly spend e.g., education. Therefore, we suggested that the target of '25% increase' be reduced to a more realistic figure of 10%. The Y2 socio-economic survey, showed that 75% of women in Kamungi cited food as their top priority for spending (average monthly spend of ▆▆▆ KES), 56% of women cited education as their second priority for spending (average monthly spend of ▆▆▆ KES) and 28% of women reported healthcare as their third spending for priority (average monthly spend of ▆▆ KES). This is an increase of ▆▆ KES for money spent on food (2%). In Mangalete, 54% of women cited food as their top priority for spending (average monthly spend of ▆▆▆ KES), 41% of women reported education as their second priority for spending (average monthly spend of ▆▆ KES) and 45% of women cited healthcare as their third spending priority (average monthly spending of ▆▆ KES). There has been a decrease in spending on women's top priority in Mangalete of ▆▆ KES (9%). In addition, in Y1, women cited social activities as their third priority, but this has now been replaced by healthcare. Again, this reduction and change in priorities is likely due to the reported loss of jobs and income resulting from the pandemic.

The project has continued to raise awareness about the importance of the local environment, conservation and wildlife through meetings with KWS and using VSLA meetings as a platform, during which on occasion the groups would also meet the KWS Education Warden for discussions on environmental topics (Annex 27). To underpin these activities, in Y2 of this project community bus trips into TWNP with KWS were implemented, following requests from the community, which are working to improve relationships between the community and KWS and foster positive attitudes towards conservation. Feedback collected from bus trip participants shows that 95% of participants learnt something new about the wildlife at TWNP and 100% of participants strongly agreed or agreed with feeling positive about the conservation work by KWS and ZSL as a result of their visit (Annex 7). Data from our Y2 socio-economic survey showed that in Kamungi, 6% of respondents had a strongly positive attitude towards conservation, 40% had a positive attitude, 28% were neutral and 26% had a negative attitude. In Mangalete, 4% had a strongly positive attitude, 56% had a positive attitude, 32% were neutral, 6% were negative and 1% was strongly negative (*Indicator 1.5*). There has been a slight decrease in positive attitudes towards conservation since Y1, likely due to the timing of Y2 data collection being at the height of a period of extremely severe HEC and following the death of a man who was unfortunately killed by an elephant. Consequently, the project is responding to this through VSLAs being a platform for enhancing human-wildlife coexistence and will continue to implement community bus trips into the Park as this has proved to be very positive.

Output 2. HWC mitigation strategies implemented in priority sites in Mangalete and Kamungi community areas

Progress towards this output had previously been delayed due to the postponement of the workshops due to COVID-19. However, workshops for identification of HWC hotspots, scale, and types as well as possible mitigation techniques, was able to take place in Q3 Y2 (*Indicator 2.1*). During these workshops, which are fully described in Section 3.1 Activity 2.2, participants (who were primarily VSLA members, plus additional households selected by Area Chiefs as households known to suffer acute HWC), took part in participatory map drawing activities. Key hotspots for HWC were marked on these maps, as were corridors used for access by wildlife. Participants in Kamungi identified four key areas and three key areas were identified in

Mangalete. The largest area identified was located on the border of Tsavo East and Tsavo West National Park where animals cross the Mtito River into the community areas. Maps also identified hotspots by species linked to the conflict, verified through Area Chief knowledge as well as KWS reports. To complement this mapping, participants also identified the different types of HWC and used a pairwise ranking method to identify the HWC type which had the greatest impact, which was damage to crops and destruction of property in Kamungi and killing of livestock in Mangalete. Finally, workshops facilitated community-led discussions on mitigation techniques to identify preferred choice of implementation, which was established to be chilli fences and reinforced bomas for short term implementation techniques (i.e., within the life of this project).

Following the extended period of acute HEC and consultation with target communities, it was agreed to focus the follow-up training workshops on HCC mitigation, as the communities' focus for HEC mitigation was redirected towards the implementation of an electric fence, which was felt to be beyond the scope of this project and resources (which had envisaged small-scale farm-based deterrents). An electric fence will require government direction and will be a multi-stakeholder effort over an extended period of time. Community interest in farm-based deterrents for HEC decreased considerably, due to preference towards electric fence and government action related to that. The project has therefore adapted to this, which will have an impact on the HEC indicator (*Indicator 2.2*) as we focus only on HCC mitigation. Hence, the follow-up training workshops focussed exclusively on the implementation of the predator proof bomas.

Follow up training workshops (*fully described in Section 3.1 Activity 2.3*) were attended by VSLA members (plus additional community members experiencing acute HWC), with 57 trained in Kamungi and 100 trained in Mangalete (*Indicator 2.3*). Each workshop covered the theory of HCC and livestock predation before a practical demonstration of the predator proof bomas (reinforced livestock bomas). Following on from these workshops in each community, during which a *Fundi* (local mason) was trained in the construction, five bomas were constructed by the community members ZSL community team and *fundi* in each community (10 in total) (Annex 30). Households receiving these reinforced bomas were selected during the first HWC workshops as households who experience particularly severe HWC.

Bomas will be monitored (*Indicator 2.4*) in Y3 of the project (see Section 3.1 Activity 2.4).

Output 3. Gender-equitable, sustainable livelihood strategies/efficient agricultural practices established in Mangalete and Kamungi communities, increasing monthly income and reducing the need to engage in bushmeat hunting and other forms of wildlife crime

After activities for this output were postponed in Y1 (due to COVID-19 restrictions, as per approved change request), progress is now on schedule. The livelihood data collected from the Y1 socio-economic survey were important in informing the workshops delivered by WW in Y2. The livelihood workshops took place in Q2 Y2, which 7 VSLAs attended, 33 of 48 attendees in Kamungi were women and 59 of 67 attendees in Mangalete were women. As outlined in described in Section 3.1 Activity 3.1, both communities identified improved livestock production as their chosen enterprise activities (*Indicator 3.1*) and detailed business plans have been developed and reviewed with participants in Q4 Y2 (*Indicator 3.2 – detailed under Section 3.1 Activity 3.2*).

Planning for the implementation process is underway for uptake of livelihood interventions which will take place from Q1 Y3 (*Indicator 3.3*). So far, the clustering approach has been pitched and undertaken in VSLAs (*description in Section 3.1 Activity 3.3*).

Output 4. Enhanced patrolling and enforcement in place along the NP borders with Kamungi

Progress towards this output is on schedule following the Cybertracker data collection training and establishment of a SMART database in Y1 (*Indicator 4.1*) by ZSL's data analyst, and baselines were set up for monthly patrol coverage in Q1 Y2, enabling ZSL to measure improvements in patrolling over the project. ZSL has continued supporting the team to produce SMART reports and develop quarterly patrol maps. During Y2, four quarterly patrol maps have been produced (*Indicator 4.2*) (Annexes 20-23).

In Q1 Y2 the baseline for monthly strategic patrol coverage (*Indicator 4.3*) was 391km. By Q4 Y2 the average monthly patrol coverage was 404km, representing a 3% increase since Q1 of this year. The reason for this relatively small increase partly resulted from the fact that one of the TT patrol teams was temporarily halted due to the pandemic between April and October and also as another patrol team has been heavily involved in supporting TT control the severe HEC which our target communities have been experiencing since December.

TT has maintained aerial patrol coverage (*Indicator 4.4*) over the northern sector of Tsavo West National Park and bordering communities, monthly average of Y2 is 2,897km. This has been lower than the intended 3,500km/month as since the start of the pandemic, TT has had to reduce its total monthly aerial operations from 70 hours to 50 hours due to funding shortfalls. *NB. Please treat patrol data as confidential.*

3.3   Progress towards the project Outcome

Outcome: Threats to wildlife in TCA's northern sector significantly reduced through HWC mitigation, law enforcement, and increased resilience and wellbeing of Mangalete and Kamungi buffer-zone communities, who disengage from wildlife crime.

In Y2 of this project, the trust established between KWS and target communities has been built upon, and it is this foundation for positive relationships that will enable our work towards the outcome. Through the implementation of chosen HWC mitigation techniques, there is progression to reducing this pressure on target communities and in turn increasing wellbeing through preventing loss of livestock and livelihood. Complementing this, livelihood interventions are now underway, community members have been trained in and will be piloting improved livestock production in Y3.

However, this is only what is officially recorded. The socio-economic surveys conducted in Y1 highlighted some knowledge by respondents of people from the village recently killing or poisoning wildlife (e.g. in Kamungi, one respondent knew of an incident of someone entering the national park and of someone setting a snare in the park, and in Mangalete 25% of respondents knew of people in their community entering the national park, including for laying snares and also small % for hunting elephants, rhino, buffalo and antelope). In the Y2 survey, in Kamungi 3% of respondents reported knowledge of persons in their village collecting firewood from the Park, 2% reported knowledge of person setting a snare in the Park. In Mangalete, 6% reported knowledge of persons entering the Park and collecting firewood, medicinal plants, honey and timber. 3% knew of persons laying snares in the Park. 10% of respondents knew of consumption of wildlife; 17 knew of dik-diks, 6 knew of kudus, 4 knew of buffalo, 8 knew of porcupine and 5 knew of impala being consumed. Although obtaining truthful answers about illegal activity may be challenging, it is still interesting to note the contrast between the two communities, which may be related to the fact that Kamungi is a registered Conservancy and has had significant support from TT for the last six years that is linked to conservation. Our target villages in Mangalete have had no engagement from conservation NGOs previously and therefore this project has the potential for significant impact here.

NB: Please treat data on wildlife crime as confidential.

Indicator 0.1: Progress is on track for annual incident of illegal killing for key species, with the exception of two lions which were poisoned in Y2 in retaliation after they had killed a goat and a domestic dog (having been 0 in Y1). Annual incidences of illegal killing for bushmeat in TCA remained at 0 for key listed species both in Y1 and Y2. There was a decrease in incidences for other species from 102 incidences in Y1 (100 dik-dik and 2 lesser kudu), to 34 incidences for dik-dik, one hare and two arrests where bushmeat was seized (5kg buffalo meat and 90kg eland meat) in Y2. Illegal incidences of killing for IWT have also decreased from one for key species (elephant) and two live pangolins to 0 for key species in Y2.

Indicator 0.2: Annual incidences of HWC in Kamungi in Y2 increased from Y1. In Y1, there were 134 HEC incidences and 90 HCC incidences (HEC prior to this: 245 in 2018; 66 in 2017; 105 in 2016 and HCC prior to this 89 in 2018; 127 in 2017; 88 in 2016). During Y2 of the project, there have been 334 incidences of HEC and 78 incidences of HCC in Kamungi. There has been a serious increase in HEC in the Kamungi Conservancy, and the community's perception towards wildlife is fragile with the ongoing incidents and following the death of a man in December 2020 (who was a TT employee). In February 2021 TT, KWS and partners drove 722 elephants out of the Conservancy and surrounding areas. The sharp increase in HEC is possibly a result of a spill-over effect – initially, before the installation of the electric fence at the Mangalete-TWNP border and southern Chyulu border (February 2020), the communities used to share HEC incidents equally. Additional boundaries mean that Kamungi is now the only outlet from the Park for elephants, and so is exposed to acute HEC. The increase in HEC seen since particularly in the past two years is possibly due to elephant's natural behaviour in response to interacting with a new boundary. Now that they have established this is the exit point of the Park, it is likely to be used more often, which could explain the increasing trend in HEC being experienced by the two communities. Additionally, between June and August of 2020, the TCA experienced several extremely damaging and extensive wildfires resulting in resulting in large areas of bushes and shrubs lost and increased competition between browsers. Hence, elephants are moving into community areas to seek available browse there. Following discussions as part of the project's Mid-term Review and its recommendations (Recommendation 1, see draft in Annex 28), the project team will be reviewing the indicators specifically for HEC, aligning more with the community's preference towards the electric fence currently in discussion (dissuading progress towards the implementation of chilli fences as planned), and consider how we can contribute and support this option, while having a stronger focus on HCC mitigation and corresponding indicators for Y3 of the project. The project team will discuss this further with the Darwin team in due course.

Indicator 0.3: Annual incidences of HWC in Mangalete in Y2 have changed from Y1. During Y2 of the project, there have been 5 incidences of HEC and 9 incidences of HCC. In Y1, there were 16 HEC incidences and 2 HCC incidences. This reduction in HEC incidences is likely testament to the efficacy of the electric fence which twas installed in Mangalete in 2020. The reason for the slight increase in HCC is unclear, although possibly due to reasons explained under Section 3.2, Output 2. Through the predator proof bomas implemented this year and under Y3, the project will work to mitigate HCC experienced in Mangalete and reduce incidences.

Indicator 0.4: In order to measure the wellbeing of the project's target communities over time, the ZSL community team ran focus groups to define specific wellbeing metrics with community members in Y1. From the Y2 socio-economic survey, the average wellbeing index of VSLA members was reported to be 2.18 in Kamungi and 2.53 in Mangalete (where 1 is not satisfied and 5 is very satisfied). This is an increase in each community from 2.00 in Kamungi and 2.48 in Mangalete respectively. These were based on subjective questions asked on overall life satisfaction, financial satisfaction and overall happiness. Additionally, when asked about perceived livelihood security, we had previously seen an overwhelming number of respondents felt that their livelihood was not at all secure (86% in Y1), in Y2 72% of respondents in Kamungi reported having insecure livelihoods, with only 13% citing their livelihood to be secure. In Mangalete, 49% cited having insecure livelihoods and 49% reported having secure livelihoods, compared to 66% of respondents reporting their livelihood to be insecure in Y1. When asked to rank themselves on a scale of 1 to 4, where 1 is wealthy and 4 is very poor, the average score in Kamungi was 2.6 and in Mangalete the average score was 2.55.

In Y2, livelihood workshops took place, and once the VSLAs members are in a position to take loans out to support new enterprises, we are optimistic that VSLA members in particular will see an improvement in both objective and subjective wellbeing by the end of the project. Currently, there is very minimal evidence for any difference in subjective wellbeing between VSLA members and non-VSLA members, which is what is to be expected at the current stage of VSLAs. One difference noted, is that of VSLA members in Kamungi, 72% reported that they felt their livelihood was insecure, and 13% said it was insecure. Amongst non-VSLA members, 93% reported that their livelihood was insecure.

Indicator 0.5: In Y2 law enforcement capacity and patrol efficacy have been improved through utilising Cybertracker and SMART (Spatial Monitoring and Reporting Tool) as established in Y1, and now have improved data collection and analysis which enables adaptive patrols. This has been reflected in arrest statistics. In 2017 the baseline was 13 in Mangalete and 25 in Kamungi. In Y1, there were 32 arrests in Kamungi and 5 in Mangalete. During Y2 of this project, there were 14 arrests in Kamungi (representing a 63% reduction between Y1 and Y2) and 6 in Mangalete (representing a 25% reduction between Y1 and Y2). With these patrols as a deterrent, and in conjunction with improved livelihood opportunities and reduced HWC, we are optimistic that this will contribute to the reduction of threats to wildlife along the border of these two communities by the end of the project.

Indicator 0.6: The baseline in Y1, on joint patrols with KWS, TT community scouts recorded a total of 339 bushmeat snares. In Y2, a total of 333 snares (299 for small game, 21 medium game and 13 large game) were recovered from Kamungi. This is a reduction of 2% in snares collected from Y1 to Y2 end.

3.4   Monitoring of assumptions

Assumption 1: A reduction in arrests of community members and number of snares encountered and removed indicates disengagement from wildlife crime.
This still holds true to an extent, however, there are still concerns about the extent of the impact of COVID-19 on these two vulnerable communities. Based on anecdotal information from project staff well as data from the COVID-19 Impact Surveys (Annex 26), due to cessation of movement, disruption in supply chains, loss of livelihood and income and inflation, it was expected that there would be an increase in wildlife crime as community members become even more vulnerable with even fewer options for income and sustenance, exacerbated by delays to activities of projects such as ours. Based on arrest and snare data for Y2, so far it seems that this assumption remains true and has not been detrimentally impacted by the pandemic: number of snares collected reduced by 2% from Y1 to Y2 and compared to Y1, in Y2 there were 63% fewer arrests in Kamungi and two less arrests this year in Mangalete, representing a 25% reduction. The community team is continuing to support this community as much as possible to ensure the stresses of COVID-19 are relieved where possible.

Assumption 2: The number of arrests of Mangalete and Kamungi community members may increase initially due to enhanced enforcement but will fall towards the end of the project as community engagement is strengthened and levels of poaching decrease.
This still holds true and is the pattern seen in Kamungi so far. In 2017, the baseline was 13 arrests in Mangalete and 25 in Kamungi. In Y1, arrests in Mangalete decreased to five whereas arrests in Kamungi increased to 32. In Y2, arrests in Mangalete increased by one to a total of six whereas Kamungi arrests reduced by 63% to a total of 14.

Assumption 3: Improved income and wellbeing of local communities, resulting from declining HWC and enhanced livelihoods, reflects reduced costs of living with wildlife and – coupled with regular outreach that reinforces that these benefits are dependent on supporting wildlife conservation - incentivises disengagement from wildlife crime (including poaching for bushmeat, retaliatory killings, and participating in/enabling/facilitating IWT).
This assumption remains true, although even as planned livelihood activities and HWC mitigation are implemented, these communities may be worse off than at the start of the project due to loss of income from not being able to travel for work or go to markets or losing key working family members to the virus. It is still a very uncertain time and difficult to predict.

Assumption 4: VSLA establishment rate and uptake is similar to situation experienced from ZSL VSLA projects in Cameroon and Mozambique.
This assumption has proven to be an underestimate. Nine more VSLAs were formed this year (Annexes 10 and 29) and the community members already have strong cohesion and trust in their social groups which is a key prerequisite for successful VSLAs.

Assumption 5: Community members understand that VSLAs and enterprise activities are directly linked to their engagement in conservation, human-wildlife coexistence and voluntary reporting of illegal activity, as they have under previous implementations in Cameroon. This includes community members who are not direct beneficiaries, through word of mouth from the Mangalete and Kamungi Chief and fellow community neighbours.
Links between support for sustainable livelihoods and protecting natural resources and wildlife are reinforced though all engagement opportunities with VSLA members. From the socio-economic survey, an overwhelming majority of respondents reported positive attitudes towards conservation (in fact, 35% in Kamungi reported 'strongly positive') (Annex 11) and thus we are optimistic that this assumption will hold true. These interventions have been coupled with community bus trips into TWNP, which from feedback forms (Annex 7) has proved an invaluable opportunity for VSLA members (and wider community members) in realising the value of conservation.

Assumption 6: Aimed-for levels of female participation are achieved based on pre-project understanding of community socio-economics and demographics and results from previous/ongoing VSLA implementation in Cameroon and Mozambique. Percentage thresholds will be reviewed and adjusted as necessary following socio-economic surveys to be conducted during Yr1.
This assumption is certainly accurate; we have already seen in the 13 VSLAs established that the majority of members are women (79%) (Annex 10). Therefore, the aimed-for percentage thresholds will remain the same in the logframe since all planned VSLAs have been formed (min. 60% female membership by project end).

Assumption 7: Increased spend on household items and increase in number of VSLA loans being withdrawn by women indicates enhanced role in financial decision making at household-level and increase in gender-equity
We believe this assumption to still be correct, however VSLA groups are not yet loaning due to financial uncertainties and delays in training resulting from COVID-19, and so we will be in a position at project end to comment on this as VSLAs will have be in the loaning phase.

Assumption 8: HWC will be discussed during VSLA meetings and although these households will be the initial target for mitigation interventions, the mitigation workshop (2.2) will also be open to non-VSLA members who are experiencing high levels of HWC in both communities.
HWC is a major challenge, particularly in Kamungi community (224 incidents of HWC in Y1 of the project, and 412 incidents in Y2 (Annex 20-25) and therefore it is regularly discussed with community members during VSLA meetings and KWS quarterly meetings (which are also open to the wider communities). The mitigation workshops targeted VSLA members, but also open to others, overall, there were 185 community members in attendance, 131 from Mangalete and 54 from Kamungi. In Kamungi, 15 non-VSLA members attended and 15 non-VSLA members also attended from Mangalete. This assumption was proven to be true.

Assumption 9: Levels of commitment towards proposed mitigation strategies are maintained throughout the project, based on current commitment of five farms with pilot beehive fences in Kamungi.
This assumption remains true, and as bomas have been built in target households community members are showing keen interest and commitment to the success of these implementations and the project. It is clear from the socio-economic survey (Annex 11) and TT reports (Annexes 20-23), that HWC is a significant issue for these communities and it is expected that interest in committing to piloting mitigation interventions will be sustained.

Assumption 10: Access to enhanced and diversified livelihoods (in conjunction with VSLAs and HWC mitigation interventions if appropriate) will reduce the need to engage in illegal, environmentally-damaging activities for income supplementation.
This holds true at present, although as mentioned above participants may be affected by the impact of COVID-19 and households may be worse off than when the project started, and this could lead to an increase in wildlife crime for income supplementation. The initial livelihood workshops suffered delays due to COVID-19 restrictions, however these have now been delivered, and through continued positive engagement with communities and support for diversified livelihoods this year, we hope we can ensure that there is a reduction in engagement in illegal activity and for this assumption to remain correct.

Assumption 11: By increasing capacity of community scouts through training in SMART and reporting/mapping, they are more effective at disrupting illegal activities on the border of the park and thus act as a strong deterrent to community members engaging in wildlife crime.

The community scouts were trained in the use of Cybertracker and SMART and have continued to receive support from ZSL to produce SMART reports and GIS maps of patrol effort. As the team became more comfortable with this software, adaptive patrol management has been implemented which is hoped to lead to increased disruption of illegal activities, as initially indicated by the reduction in arrests in Kamungi. Therefore, this assumption still holds true.

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

The overall impact in our original application form is 'TCA communities benefit from reduced poverty and improved human-wildlife coexistence, whilst human pressures are reduced in a secured protected area complex and with population growth of threatened species maintained.'

Impact on biodiversity conservation: In the past year, the project has progressed towards a positive impact on biodiversity by building upon our increased understanding of the type and level of HWC experienced in our target communities Kamungi and Mangalete, both through our socio-economic surveys as well as through HWC workshops which took place in Y2 which have informed the development and implementation of mitigation strategies that will improve human-wildlife coexistence.

Even through delays relating to COVID-19 restrictions, project partner KWS-CWS was still able to engage with the communities through meetings and attending project trainings in Y2 to encourage support for conservation efforts and improve KWS-community relations. To underpin this work, the project also expanded to include community bus trips into TWNP, accompanied by KWS rangers and Education Wardens, allowing community members to enjoy the value of the Park and the opportunity to learn about wildlife, conservation and its benefits to communities living on the border of TWNP. The ZSL and TT community teams are using VSLA meetings as a platform for dialogue on the importance of biodiversity conservation and the vital ecosystem services that Tsavo provides these communities.

Community scouts have enhanced capacity to improve law enforcement and patrol coverage along the border of the National Park moving into Y2, following training by ZSL in the use of Cybertracker and SMART in Q4 Y1, and Kamungi Scouts patrolled 2.959km on foot and 200km by vehicle during 334 field days in Y2. The project has seen a reduction in arrests in Kamungi (63%) in Y2 compared to Y1, which is likely a result of the activities of this patrol team. During Y3, this will help to further disrupt and deter wildlife crime, reducing the threat to wildlife in the TCA.

Impact on human development and wellbeing: The project has also progressed towards contributing to positive impact in human development and wellbeing (poverty alleviation) through supporting the creation of VSLAs (see Output 1) that contribute to improving the well-being and financial security of members, as well as providing a financial buffer against loss of crops or livestock. The Kamba tribe residents of Mangalete and Kamungi have very few, low-paying and temporary work opportunities, and no access to savings. To date, the project has established 13 VSLAs (3 in Kamungi and 10 in Mangalete), providing households and in particular women with access to savings (79% women membership, with average savings of ▇▇▇▇ KES in Kamungi and ▇▇▇▇ KES in Mangalete per member). The development of livelihood enterprises has been underpinned by VSLAs, and when fully established, will impact human development and wellbeing. As the project progresses and VSLAs mature, we aim to improve members' financial satisfaction, therefore contributing towards overall wellbeing.

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

SDGs 1&2: No Poverty & Zero Hunger – To reduce poverty, the project has helped to establish VSLAs providing families with access to basic financial services (savings and credit). Information from ZSL Philippines team of post-Typhoon Haiyan VSLA accounts showed that poor families that are linked to VSLAs rebuilt damaged houses faster than those who were not linked to VSLAs. The 13 VSLAs we have catalysed provide 224 individuals with access to saving and credit facilities. The members have thus far managed average savings of ▇▇▇▇ KES and ▇▇▇▇ KES per person in Kamungi and Mangalete respectively. Through the VSLAs, the project has established sustainable livelihood opportunities to increase financial resilience of the two target communities.

SDG 5: Gender Equality – The two target communities are typically patriarchal and women, although playing important socio-economic roles, often have little opportunity for income generation. This project's contribution to address this includes open access VSLAs which have 79% female membership, enabling women to access their own savings and increase their involvement in decision-making in spending for their family. Since the start of the project, we have established 13 VSLAs. Women have saved an average of ▇▇▇▇ KES per person to date in Kamungi and ▇▇▇▇ KES in Mangalete (minimum savings of ▇▇▇ KES in a VSLA which began saving in February and maximum of 8800 from a VSLA which began saving in January 2020). These efforts have been combined with training and support to establish sustainable enterprises to increase opportunities for women to generate income. From the socio-economic surveys, we have also identified the items that women feel are most important to spend money on (see Section 3.2 Output 1) and have tracked the spend on these items through Y2.

SDG 11: Sustainable Cities and Communities – This project is aiming to protect the TCA through community engagement, implementing HWC mitigation as well as strengthening capacity for law

enforcement within target communities. During Y2, the KWS-CWS have held two formal community meetings and attended project trainings, helping to build trust and a positive relationship with the target communities (see Section 3.1 Output 1). VSLAs are contributing towards building financial resilience of members over time, combined with conservation outreach and sustainable livelihood development, whilst simultaneously encouraging the disengagement from wildlife crime. HWC data collected in Y1 helped to inform the HWC workshops in Y2 and provided a greater understanding of HWC in the landscape. Data collection and management capacity by TT community scouts has helped to improve adaptive patrol strategy and law enforcement as the project progresses.

SDG 15: Life on Land – Through training delivered to community scouts in Kamungi and continued support in producing patrol reports, this project has and will continue to increase efficacy of law enforcement through enabling adaptive patrol management and as a result, increase the protection of key species in the TCA. Community-led HWC workshops in Y2 led to participants choosing to implement predator-proof bomas as a way to reduce conflict. Constructed bomas will act to both improve human-wildlife coexistence and reduce incidences of retaliatory killing of key species, but also preventing livestock predation will improve livelihood security and prevent acute and sudden loss of livelihood and ultimately improve livelihoods. This HWC intervention, coupled with the chosen sustainable livelihood intervention of improved chicken and goat farming, will also increase successful production outputs of small-scale farming, and improve the financial position of target households.

5. Project support to the Conventions, Treaties or Agreements

CBD 7, Aichi A1, Aichi A2, Aichi C11, CMS - During Y2, engagement with the two partner communities has been maintained through community meetings, VSLA meetings and focus groups, which have acted as a platform to discuss wildlife conservation *(Indicator 1.1 & 1.5)*. This has been key groundwork for building trust and relationships with these communities as we implement HWC mitigation and livelihood strategies. These communities are the gateway to the park, and it is vital that they are able to coexist with wildlife and protect the vital ecosystem services that the TCA provides.

Aichi C11, Aichi C12 – Threats to wildlife in the TCA are mainly HWC, bushmeat hunting and IWT as well as overexploitation of natural resources. In order to address these threats, the project has developed and implemented community-identified HWC mitigation techniques to support vulnerable communities living on the park borders *(Indicator 2.2 & 2.3)*. Data from the Y1 socio-economic survey as well as data on wildlife crime has helped the project's understanding of HWC experienced by target communities, and informed workshops facilitating HWC mitigation technique identification *(Indicator 2.1)*. The project is also enhancing the capacity of law enforcement to help protect species within the park and deter poachers through training community scouts in effective data collection and management, SMART and through providing ongoing support for adaptive patrol management *(Indicator 4.1, 4.2 & 4.3)*.

CBD 8, Aichi D14 – This project is addressing threats to and promoting the protection of TCA wildlife through implementing HWC mitigation techniques (Annex 30) *(Indicator 2.3)* and by reducing wildlife crime both through enhancing law enforcement capacity *(Indicator 4.1 & 4.2)* but also by fostering human-wildlife coexistence through reducing HWC and by providing opportunities to engage in alternative sustainable livelihoods and VSLAs to increase financial security of households and ultimately creating the enabling environment for the disengagement from wildlife crime. So far, we have established 13 VSLAs, with a majority female membership *(Indicator 1.2)*. In Y2, we have delivered livelihood workshops, training 122 of the project's VSLA members, to develop sustainable enterprises (improved chicken and goat farming), helping build financial resilience and encourage disengagement from wildlife crime *(Indicator 3.1 & 3.2)*.

CBD 10, CBD 11 – VSLAs will help to build financial resilience as the project progresses, with members already having average savings of 3,955.35 KES and 2,271.55 KES per person in Kamungi and Mangalete respectively so far *(Indicator 1.3)*. VSLA members are able to take out loans and use savings to invest in livelihoods options that were explored and developed in Y2. This coupled with HWC mitigation, will help to reduce the cost of living alongside wildlife and incentivise disengagement from wildlife crime *(Indicator 0.5 & 0.6)*.

6. Project support to poverty alleviation

The expected beneficiaries of this project are the Kamba tribal residents of Mangalete and Kamungi; two communities located either side of the Mombasa-Nairobi highway, that form a buffer on the northern edge of Tsavo East and Tsavo West National Parks. The project is targeting 15 villages located within 5km of the park borders, with a total population of 4,004 people distributed in 906 households. These communities have very few, low-paying and temporary work opportunities and no access to savings. They rely heavily on natural resources for their lives and livelihoods and are vulnerable to the effects of HWC and climatic conditions on crops and livestock.

Following the end of Y1, this project has gained a clearer understanding of the socio-economic status of these two buffer-zone communities following socio-economic and wellbeing surveys and focus groups (see Section 3.1, Output 1&2). Using this information as a baseline, the project has started to contribute

towards building financial resilience and improve wellbeing of 224 households (176 households in Mangalete; 48 households in Kamungi) in these two marginalised communities. The 13 VSLAs across the 2 communities have been saving for up to 14 months, with a total of 469,650 KES (~£3,138) saved to date. The majority (79%) of members are women which will contribute towards women's capacity for self-determination when it comes to household spending. The socio-economic survey has identified those items which are most important to women to spend money on in the household and we will track spend on these items annually through the project as the VSLAs develop, as well as the number of loans taken out by female members.

The VSLAs are underpinned by training and support for development of livelihood enterprises with WW, and this has been progressed in Y2 (see Section 3.1 Output 3) using the 'cluster' method, ensuring that all higher inclusivity of project VSLA members (224 in total) in livelihood interventions. Hence, the aim for c.40 households in Mangalete and 12 in Kamungi to establish enterprises engaging women has been met, and it is hoped that beyond the project, these households will see an increase in household income. HWC workshops (postponed from Y1) have now taken place, informing the development of HWC mitigation strategies for priority households and the implementation of pilot predator proof bomas, contributing further to financial resilience and helping to reduce the cost of living alongside wildlife. We have also directly supported community members with opportunities for capacity building and employment through the project including our Community Officer and 13 enumerators for the socio-economic survey, as well as contributing to staff costs of TT community scouts as part of the project.

With regards to indirect poverty impacts, our community team have continued to deliver conservation outreach at VSLA meetings to increase understanding of the importance of conservation and sustainable resource use. The project has also implemented community bus trips into TWNP during Y2, which has encouraged community members to experience and learn more about the value of the park, its wildlife and the community benefits of conservation. The project is measuring the proportion of members reporting positive attitudes towards conservation, and from the Y2 socio-economic survey it was found that that in Kamungi, 6% of respondents had a strongly positive attitude towards conservation, 40% had a positive attitude, 28% were neutral and 26% had a negative attitude. In Mangalete, 4% had a strongly positive attitude, 56% had a positive attitude, 32% were neutral, 6% were negative and 1% was strongly negative. There has been a decrease in positive attitudes towards conservation compared to our Y1 baseline of: 36.4% reporting strongly positive and 48% positive in Kamungi and 12.5% strongly positive and 71.9% positive in Mangalete. It is likely that this is a result of the acute HEC experienced by the communities at the time of the Y2 survey (it also followed the death of a community man as the result of conflict with an elephant). The project will continue to foster human-wildlife coexistence through KWS-community meetings, further HWC mitigation implementation, community bus trips and continued education outreach through VSLA meetings.

7.   Consideration of gender equality issues

This project aims to deliver a gender-integrated approach, ensuring equal access, participation and opportunities to both men and women throughout the project cycle. Women are important socio-economic actors in typically patriarchal Kenyan societies. Mangalete and Kamungi are Kamba tribe predominantly and women and men participate in livelihood activities (mainly agriculture). Of 10% employed, 70% are men, with jobs often manual labour. The female Chief of Mangalete has stated women in Mangalete are involved in decision-making but do not currently have many income-generating opportunities and this could be improved.

Globally, women form 78% of VSLA membership; within ZSL groups, women form >88%. The VSLAs established as part of this project are open access, with all community members eligible. For the 13 groups established across both target communities in this project, 79% of the membership is female (Annex 10). Representation from all genders (women in particular) and vulnerable groups (as identified by the community leaders) in the community is encouraged. There are currently limited savings or loan facilities available and therefore the VSLAs enable women to access their own savings and increase their involvement in decision-making on spending for their family, increasing their capacity for self-determination. Training of Village Agents has started in Y2, which will help us build women's influence on biodiversity outcomes within social networks, and as communicators (leading awareness-raising) and entrepreneurs (livelihood enterprises).

The Area Chief for Mangalete, and a senior stakeholder in the project, is a woman and so has played a key role in mobilising women. Additionally, we also have a gender-balanced team; two of the three ZSL community team are women and the KWS Education Warden is also a woman, which have been important pathways for encouraging women from the community to be a part of the project.

Enterprise development has been decided by community members in Y2 and facilitated by ZSL and WW (who have significant experience in developing enterprises that benefit women), ensuring all genders were represented during the decision process (75% women attendance for the livelihood identification workshops and 81% women attendance at the follow up livelihood training workshops described in Section 3.1 Output 3), with opportunities developed for both women and men. Pilot enterprises will be monitored

by ZSL ensuring there are no negative consequences preventing participation from members of any sex, age or grouping.

8.   Monitoring and evaluation

The project team has maintained oversight of project progress using the logframe and implementation timetable, which is reviewed weekly through calls, emails and meetings between the Kenya team and UK team, and regularly with project partners. An 'indicator tracker' workbook was established at the start of Y2 and has enabled us to keep a live tracker of data relevant to our logframe indicators and this has been extremely helpful in identifying gaps in data collection and work with partners to try to obtain data.

ZSL has continued to conduct most of the M&E work, but TT also contributes significantly through monitoring wildlife crime in the target area (snares collected, arrests, illegal killing of wildlife) as well as HWC in Kamungi (the community which TT has worked with since 2014). This information is shared through monthly reports, but also through using our 'indicator tracker'. The relationship between KWS and Mangalete community has continued to improve in Y2, which has allowed for easier data collection on HWC incidences and illegal killing of wildlife for Mangalete.

ZSL and TT's community team have continued to monitor and evaluate the progress of VSLA groups through standardised VSLA forms (organisational: quarterly, and socio-economic surveys) using SurveyCTO, as well as collating data at each VSLA meeting using SMART (such as number and value of shares, loans, and trainings) and writing meeting notes to capture qualitative data that can support quantitative data being collected. Once chosen livelihood interventions are implemented in Y3, monitoring of the success of these will be monitored and techniques, reported under Y3.

Weekly monitoring of constructed bomas' efficiency (described in section 3.1, Activity 2.4) will take place and reported in Y3.

Application of skills from Cybertracker and SMART training in Y1 have led to improvement of patrol coverage and management, as well as production of detailed monthly reports including GIS maps in Y2. TT provide monthly reports on foot, vehicle and aerial patrol coverage and enforcement effort (including snare collection, detection of illegal activities/human presence, carcass sightings etc) in Kamungi.

9.   Lessons learnt

In Y2 of the project, we were able to form more VSLAs than in Y1, and more than Y2 target (three VSLAs Y1 and five in Y2 and five in Y3). However, the staggered recruitment of VSLA groups into Y2 meant that as groups formed later into the project, they experienced less time engaging with and receiving support from the project team than the groups formed earlier on. More recently formed groups also were not able to engage in the group process of livelihood identification, selection and business plan training as this had been scheduled as a one-off activity. Given another chance, we would plan to recruit all the VSLA groups in Y1 of the project.

The project also experienced much higher interest in the livelihood enterprise development by VSLA members and households than expected (115 households -those who attended the training- initially interested in engaging, compared to the 52 households we had envisioned to target). This led us to adapt our household selection method using a clustering approach as described in Section 3.1 Activity 3.3, to ensure engagement was maximised, while maintaining group cohesion and avoiding potential conflict, within the project's financial resource limits.

Although progress was made in our collaboration with project partners, some challenges in communication with partners were still experienced in Y2, likely to have been exacerbated by the changeover of people/new starters at ZSL and reduced opportunities for face-to-face contact (due to COVID-19), hindering plans for more effective communication. A streamlined approach to communication with our partners with clear points of contact, and more regular partner meetings have been in place since Q4 Y2 to overcome this and are built into Y3 workplans.

Y2 allowed us to understand more about the needs for strengthened relationships between KWS and communities and work to address these. We were able to respond to community requests of community bus trips into TWNP (Annex 6). As highlighted by community Chiefs, more frequent community meetings would have helped further with this challenge, allowing for more engagement through a trusted platform, where important wildlife conflict issues can be raised and discussed openly. We would therefore recommend planning for monthly (or more frequent as issues arise) meetings instead of quarterly.

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

We have addressed the comments from the project's Annual Report 1 as below:
-    Section 3: narratives of progress under Outputs aligned to specific indicators
-    Section 4: livelihood opportunities explored in uncertainty of COVID-19, and additional ways of identifying HWC hotspots explored (workshops and key informant interviews)
-    Section 7: equitable gender representation in Mangalete VSLA groups

- Section 9: lessons related to achievement of project objectives and useful insights
- Section 11: exit strategy considerations
- Section 14: measures for health and safety of project staff and beneficiaries in relation to COVID-19

We have gathered information to help us review our indicators and assumptions and will be considering this into Y3 planning and delivery.

11. Other comments on progress not covered elsewhere.

Beyond the adaptations needed in response to COVID-19 impacts on project activities, over the last year we have been able to refine our approach, based on learnings from Y1 and Y2 of the project.

Upon discussions and interest expressed by the communities, in Y2 we introduced and facilitated the community bus trips as described in Section 3.1, Activity 1.1 (and Annex 6). Although an additional activity, we have found they have provided an important platform for engagement with community members and have added positively to relationships with KWS and to further foster positive perspectives of conservation by the communities. This has been even more important as KWS community meetings have taken place less frequent than planned, as explained in Section 14.

During Q4 Y2 as the team began to plan the implementation of livelihood interventions, external support services were identified for aiding in the success of the improved farming business models. Initially, the ZSL team engaged with the County Livestock Department and their training capabilities to onboard them as a support mechanism for the community. They will advise on good husbandry practices, vaccinations (advice on administration and linking communities with available vaccine) and other essential services. One drawback of this County-wide service is the strain of high demand. Whilst maintaining this broad support, the ZSL Community Officer who is originally from this community, was able to use his unique position to identify a local farmer who has already implemented a very similar enterprise and has found huge success and was even reported about in the news (Annex 36). The project have engaged him as a *Paravet* in the improved farming enterprise business model and as a super trainer for community participants. Additionally, and very importantly, he uses groups which he connects with as a *Paravet* to supplement demand which he is unable to meet and so will be acting as a broker in these enterprises, which addresses a key recommendation from the Mid-term Review which was carried out in March 2021 (Annex 28). This onboarding of stakeholders has acted as a refinement and improvement of our current implementation plan and additionally a key element of our exit strategy; the training received from this farmer as a *Paravet* will allow VSLA members and participants in the improved chicken and goat farming to be recruited as *Paravets* – filtering knowledge and skills into the community beyond the project life (Annex 31).

During Y3, exit plans for the VSLAs will be reinforced. Although, as discussions around our exit strategy began towards the end of Y2, the role of the Village Agent model was highlighted as a key strategy to ensure the sustainability of the VSLAs already established. ZSL also kicked-off a UK Aid Match (UKAM) project in the TCA in November, being implemented in the same target communities, strategically to ensure that our presence continues, and support will remain available. However, it is important that these efforts are coupled with the use of the Village Agent model, to enhance the replicability and sustainability of VSLAs. So far, two VSLA members have been identified, and throughout Y3 this training will take place and further Village Agents will be recruited. This is also a model which has been successfully implemented in other programmes at ZSL and so key lessons learned will be considered and applied to this context.

12. Sustainability and legacy

The profile of the project has continued to be raised within the two target communities through multiple community meetings facilitated by the Chiefs of those communities (as mentioned in Section 3.1, Output 1) as well as the VSLA meetings. In Y2, we have seen community members who are not participants of this project, replicating the VSLA model and forming their own. We have been able to support more social groups that were interested in joining a VSLA, and have started to train 'village agents/trainers' (two have already been identified) that can then go on to train other groups, creating a self-replicating effect. Typically, VSLAs need one year of support; 89% of VSLAs continue operating five years after initiation, normally doubling their capitalisation and average loan sizes. The VSLA model is self-replicating, beyond project life, and has been established in conjunction with development of appropriate sustainable livelihoods.

Sharing of project progress has also been disseminated via social media (Twitter), where appropriate as part of the project's open access plan. We have continued to communicate the project via Twitter.

Our planned exit strategy is still valid and by the end of this project, we will have engaged 224 households in VSLAs, increasing the capacity of people to secure finances for household needs and food when agricultural yield is affected by climate or wildlife. Appropriate training and support for development of new sustainable enterprises has been delivered to c.51% of these households in Q4 of Y2, with further training of the remaining VSLA groups planned for Y3 (which is likely to take place group by group to ensure government COVID-19 restrictions around larger group meetings do not delay this from happening). In

addition, livelihoods have been implemented using the cluster method, ensuring participants have ownership over and a strong sense of commitment to implementation as 3-5 members of a VSLA group all have a stake in the livestock production and will each benefit from its success in the future. Moreover, WW have ensured that livelihood materials are locally available and affordable for community members and efforts are made to improve market access to help ensure sustainability. Priority households affected by HWC have been targeted for training in constructing appropriate mitigation techniques using locally available materials to ensure this capacity is secured for the future. Training was also given to a *Fundi* (local mason) to ensure the replicability of building the predator proof bomas in the future. These permanent structures also ensure longevity of protection of livestock beyond project life. It is also planned that the improved livelihoods (as well as continued commitment to VSLAs) will enable households to be financially able to build improved bomas as needed after this project ends.

TT community scouts have received specialist training from ZSL in the use of Cybertracker and SMART, benefitting eight community scouts, and TT and KWS institutionally through providing information to enhance patrol strategy and improve law enforcement. TT is a local NGO, which is committed to supporting this landscape, and the community scouts are employed from the local area, therefore this project is helping to build capacity of and provide employment for local people who have few educational and employment opportunities.

Regular engagement between KWS-CWS, Mangalete and Kamungi was established through support for transport and field allowances. Recognising the importance of this for de-risking Tsavo, ZSL will continue fundraising to support KWS-CWS beyond this project. The project has already laid down the foundations of positive relations between KWS and the communities (through KWS quarterly meetings as well as community bus trips) and this will continue into Y3 to ensure that the positive attitude towards positive PA management staff is maintained and built upon and will be intrinsic within communities beyond project implementation timeline.

As mentioned in Section 11, ZSL will remain present in the TCA, as we implement the UKAM project in these same communities, expanding to also include a third community. The presence of our community team will allow VSLAs in these communities to continue to be monitored and supported. ZSL will continue to fundraise from other sources to expand the community work beyond this project, building community support for conservation and working towards sustainable natural resource.

13.　　Darwin identity

ZSL has 8 social media channels covering the major social platforms (Twitter, Facebook, Instagram, YouTube) with 17 accounts in total, including a dedicated 'ZSL Africa' Twitter account. Via their online presence, ZSL has a total reach of 64.9 million (Facebook) with 4 million unique users to the ZSL website per annum. @ZSLConservation has over 26,200 followers on Twitter, which regularly features Africa-specific posts on ZSL's overseas conservation work, complemented by @ZSLAfrica, which posts about ZSL's Africa conservation work around 10 times per month and has 1,503 followers.

We use this extensive social media reach to publicise our donors' support (including Darwin). All social media posts reporting on project activities credit the donors responsible (whereby DEFRA/Darwin Initiative and the UK Government are recognised and logos added to images where possible) or via the use of a hashtag (following guidelines presented at LTS' grantee workshop in 2019). In addition to crediting donors in social media, each ZSL Africa country programme has a page on the ZSL Conservation website where all donors are listed next to the project they support. ZSL's external communications to its Fellows, Members and supporters list DEFRA Darwin Initiative as a key supporter of our Conservation and Policy work.

As further funds have been secured for the community work in this landscape (UKAM), DEFRA will continue to be recognised as a key contributor to the activities for which they are responsible. All reports and training material produced from the project so far has featured the Darwin Initiative logo or credited Darwin Initiative in the narrative. ZSL keeps the British High Commission in Kenya informed on project progress (both formally and informally) and the BHC in-country social media account is also tagged to raise the profile of the fund's work to those at a national level.

However, ZSL also exercises caution on communications around sensitive activities (like arrests and illegal wildlife crime etc.) and publication of information or pictures that could put some people in danger, which limits ZSL's capacity to publish publicly on law enforcement issues.

14.　　Impact of COVID-19 on project delivery

Unfortunately, the project experienced considerable impacts related to COVID-19. National restrictions imposed by the Kenyan Government in response to the pandemic have presented huge challenges to our fieldwork and to our partner communities. Varying levels of restrictions throughout Y2 of the project have led to delays in our community-based activities as described in Section 3, including:

- Implementing previously postponed workshops from Y1 (e.g., livelihood identification workshops and HWC workshops)

- Postponing planned meetings or group events to Y3 (e.g., community meetings and KWS-community meetings)
- Reduced number of face-to-face contact time with partners; limited to mostly remote contact e.g., refresher VSLA training in early Y2 taking place remotely;
- Reduced contact time with partner communities, limited to remote support to project beneficiaries e.g., support to VSLAs through regular phone calls
- Reduced number of participants permitted in meetings and events, as per social distancing guidelines. As three VSLAs still require livelihood training, to ensure that government COVID restrictions do not delay, instead of training as one large group, the ZSL community team will deliver training to each individual VSLA.

In response to this, we have adjusted our Y2 workplan to accommodate postponed events from Y1, as well as restricting the number of participants at meetings and trainings which required additional time (and budget) to engage with all groups and maintain the same level of social inclusion; we've adapted the type of support we provide for the communities such as the provision of PPE and handwashing stations (Annex 32 & 33). The team maintained remote support to project beneficiaries when community visits were not possible, and we partnered with the Subcounty COVID-19 Emergency Committee, to support the distribution of posters in our partner communities to raise awareness about the virus and prevention of transmission. Health and safety of project team and beneficiaries was ensured through PPE and following COVID-19 protocols at all times, including temperature checks at project meetings, and quarantine of staff upon noticing symptoms/suspecting positive COVID-19 cases (as per comment Number 8 in Y1 AR).

The pre-existing vulnerabilities of the communities we work with (poverty, lack of access to secure income-generating opportunities, lack of financial buffer), exacerbated by restriction of movement for people and goods and loss of livelihoods resulting from the pandemic, has significantly heightened the risk of becoming less resilient to COVID-19 related shocks, and its socioeconomic and humanitarian impacts. On a local context, the community team reported increased petrol prices, impacting price of basic commodities, and even shortage of critical goods. Job losses and possible negative impacts on young girls as schools closed were also reported. Additionally, to gain a better understanding of how our VSLAs members were impacted by the pandemic, we also developed a COVID-19 Impact Survey which was undertaken in October, and reflected what the community team reported: job losses, inaccessibility to market and consequent loss of income, people ate less as a result and people also reported impacts on their wellbeing (Annex 26).

As VSLA's continue to mature and become more established and members are able to build up their savings, participants will have more financial stability and higher resilience to shocks such as COVID-19. This will also be coupled with the benefits and stability gained from a livelihood which is more resilient to HWC (reduction of livestock predation through implementation of predator proof bomas) and through better access to markets, vaccinations and training, an improved source of income.

The aforementioned effects of COVID-19 on livelihoods have also impacted savings, which has in turn (exacerbated by continued uncertainty) prevented groups from beginning the loan phase, even though they have received the training to do so. The community team undertook a survey with the VSLA groups to assess if they felt confident to start loaning – it was found that no one wanted to borrow money as they feared they would be unable to pay it back and the trust in the group would be broken. Respondents did say that with the prospect of the livelihood intervention, once they had a steady income, they would feel confident to begin loaning.

15.   Safeguarding

Please tick this box if any safeguarding or human rights violations have occurred during this financial year. ☐

If you have ticked the box, please ensure these are reported to ODA.safeguarding@defra.gov.uk as indicated in the T&Cs.

ZSL has invested heavily in its safeguarding policies and procedures both in the UK and globally. The Council of Trustees and Executive Management Committee have formally recognised safeguarding as a key area of responsibility and are fully committed to strengthening and rolling out ZSL safeguarding approach. Where necessary these efforts are applicable to staff, partners and other stakeholders ZSL works with. Relevant policies have been updated and new policies and procedures implemented and aligned to this commitment including; Dignity and Respect at Work, Global Safeguarding Policy; Safeguarding Policy for UK staff; Global Whistleblowing Policy and Procedure; Global Code of Conduct; DBS and Criminal Convictions Policy; Employing Younger Workers Policy; Disciplinary Policy and Procedure; Reference Request Policy; Violence and Aggressive Behaviour Policy; The 4 Rs safeguarding procedure; Staff handbook.

These policies are easily accessible on ZSL's internal intranet and have been translated into languages relevant to our work. Existing and newly joined staff, consultants and partners are made aware of the

requirements of these policies and ZSL standards. They participate in an induction into the policies, related procedures and implications irrespective of the length of time they will be working/collaborating with ZSL. ZSL has also implemented measures to ensure the effective delivery of these policies by:

- Designating a Safeguarding Lead (DSL) (Head of Legal, Governance and Risk Management, Simon Lee).
- A number of Designated Safeguarding Officers (DSO) and Deputies (DSD).
- DSL meets DSOs and DSDs quarterly & with the DG monthly to consider the rollout of safeguarding and to provide direction. Our Safeguarding Trustee, Designated Safeguarding Lead, along with a wider working group to help lead implementation.
- Receiving updated global safeguarding training from independent experts including 'train the trainer' sessions to allow safeguarding leads to provide this training in-house in ZSL; and
- Raising awareness of the updated Global Whistleblowing Policy by creating posters in different languages to be distributed amongst ZSL staff.
- Rolling out more formal feedback mechanisms to report any safeguarding issues as part of international programming.

In Kenya formal grievances mechanisms and feedback are currently not yet in place, but the community team is receiving formal training for this in May, as it is required for our UKAM project. In addition, since the UKAM project was launched in November (it is a project with two implementation sites – one is Tsavo and the other is in Nepal) there has been opportunities for shared learning between the two country teams, as Nepal has had grievance and feedback mechanisms in place for several years. Although, the team in Kenya, through relationship building with the target communities, have ensured open channels of communication and it is through this informal feedback mechanisms that communities were able to express that they felt they would benefit from bus trips into TWNP with KWS.

[1] FPIC is legally recognised under the following international regulations which many ZSL implementing countries will have recognised or ratified: The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), The International Labour Organization Convention 169 (ILO 169), The Convention on Biological Diversity (CBD) and relevant national laws.

16. Project expenditure

Table 1: Project expenditure <u>during the reporting period</u> (1 April 2020 – 31 March 2021)

Project spend (indicative) since last annual report	2020/21 Grant (£)	2020/21 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				

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

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2020-2021

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
Impact TCA communities benefit from reduced poverty and improved human-wildlife coexistence, whilst human pressures are reduced in a secured protected area complex ad with population growth of threatened species maintained.		Based on the increased understanding of the type and level of HWC experienced in Kamungi and Mangalete and needs of the communities, training workshops have focussed on HCC mitigation, in particular building predator-proof bomas. ZSL and TT community teams are using VSLA meetings and workshops as a platform for dialogue on the importance of biodiversity conservation and the vital ecosystem services that Tsavo provides, adding community bus trips into Tsavo West NP with our partner KWS to increase understanding of the local wildlife and engage the community in its protection. Community scouts have enhanced capacity to improve law enforcement and patrol coverage following and have continued to receive remote mentoring over the last year from ZSL. Nine VSLAs have been established in Y2, bringing the total to 13 since project inception, providing households, and in particular, women with access to savings (79% female membership, who thus far have saved an average of ▮▮▮▮ KES per person in Kamungi and ▮▮▮▮ KES per person in Mangalete). This is the initial stage of reducing poverty for these communities.	

Outcome	0.1 Annual incidences of illegal killing (poisoning, spearing/shooting, snaring – disaggregated by motive, where possible - retaliatory, bushmeat, IWT, etc.) of key species in TCA northern sector (elephant, lion, cheetah, wild dog, leopard, hyaena, rhino) decreases by a minimum of 20% by end of Y3 (from baseline established in Y1)	0.1 Baseline for Y1: Annual incidences of illegal killing in retaliation was 0 for key species. In Y2, it was 2 for key species after two lions were poisoned.	• Incidences of illegal killing will continue to be monitored by our partners, TT and KWS to enable us to compare to the Y1 baseline now established.
Threats to wildlife in TCA's northern sector significantly reduced through HWC mitigation, law enforcement, and increased resilience and wellbeing of Mangalete and Kamungi buffer-zone communities, who disengage from wildlife crime.		Annual incidences of illegal killing for bushmeat in TCA was 0 for key listed species in Y1 and Y2. In Y1, there were 102 incidences for other species (100 dik-dik and 2 lesser kudu). In Y2, there was 57kg of bushmeat confiscated which consisted of 34 dikdiks, 1 hare, 5kg of buffalo meat and 90kg of eland meat.	• Following HWC mitigation workshops and construction of demonstration sites in Q4 Y2, ZSL and TT will continue to implement mitigation in community-selected priority households from identified hotspot locations. Incidences of HWC will continue to be monitored by our partners, TT and KWS as well as through the socio-economic survey in Y3.
	0.2 Annual incidences of HWC decrease by a minimum of 25% by end of Y3 in Kamungi (baseline HEC: 245 so far in 2018; 66 in 2017; 105 in 2016); baseline HCC: 89 so far in 2018; 127 in 2017; 88 in 2016)	In Y1, illegal incidences of killing for IWT was 1 for key species (elephant). 2 live pangolin were also confiscated by KWS. In Y2, illegal incidences of killing for IWT is 0 for key species.	
	0.3 Annual incidences of HWC in Mangalete decrease by a minimum of 25% by end of Y3 (baseline to be established in Y1)	0.2 In Y1, there were 134 HEC incidences in Kamungi from June 2019-Mar 2020 and 90 HCC incidences in Kamungi from June 2019-Mar 2020. In Y2, there have been 334 HEC incidences in Kamungi and 78 HCC incidences.	• At least 3 more VSLAs will be established in Mangalete to reach our project target of 13 VSLAs in total. Support and seed funds will be provided for households to start piloting selected livelihoods. Wellbeing metrics will be measured again during the socio-economic survey towards the end of Y3, as well as qualitative data recorded during VSLA meetings.
	0.4 VSLA members see a minimum of 20% improvement in locally co-defined wellbeing metrics by end of Y3 (e.g. material style of life, income, food security and subjective wellbeing), from baseline established in Y1 surveys.		
	0.5 Total arrests of Mangalete and Kamungi community members for wildlife crime decreases by minimum 40% by end of Y3 (2017 baseline: Mangalete:13; Kamungi: 25)	0.3 16 HEC incidences in Mangalete from June 2019-Mar 2020. 2 HCC incidences in Mangalete from June 2019-Mar 2020. *Please see note in section 3.2 about reasons for underreporting in Y1 which will skew the baseline for Mangalete.*	Kamungi community scouts will continue to conduct SMART patrols and quarterly reporting to enable monitoring of patrol coverage. TT and KWS will continue to record arrests, incidences of wildlife crime and snare collection.
		In Y2, there has been 5 HEC incident in Mangalete and 9 HCC incidences.	
	0.6 Total no. of bushmeat snares encountered and collected by community scouts and KWS rangers in Kamungi over full year decreases by minimum 20% by end of Y3 (baseline: 1,008 in 2017)	0.4 Baseline for Y1: VSLA members in Kamungi had a wellbeing index of 2.00. VSLA members in Mangalete had a	

		wellbeing index of 2.48. (Likert scale of satisfaction, with least satisfied at 1 and most satisfied at 5).	
		Average wealth ranking of VSLA members in Kamungi: 2.97; in Mangalete: 2.38 (scale where 1 is 'very poor', 2 is 'poor', 3 is 'rich' and 4 is 'very rich').	
		Average livelihood security of VSLA members in Kamungi: 1.14; in Mangalete: 1.34 (scale where 1 is 'not secure', 2 is 'secure' and 3 is 'very secure').	
		From the Y2 socio-economic survey: VSLA members in Kamungi had a wellbeing index of 2.18. VSLA members in Mangalete had a wellbeing index of 2.53. (Likert scale of satisfaction, with least satisfied at 1 and most satisfied at 5).	
		Average wealth ranking of VSLA members in Kamungi is 2.60; in Mangalete: 2.55 (scale where 1 is 'very poor', 2 is 'poor', 3 is 'rich' and 4 is 'very rich').	
		Average livelihood security of VSLA members in Kamungi: 1.28; in Mangalete: 1.54 (scale where 1 is 'not secure', 2 is 'secure' and 3 is 'very secure'). In Kamungi, 72% of respondents said their livelihood was insecure. In Mangalete, 49% of respondents said their livelihood was insecure.	
		0.5 In Y1 total arrests in Kamungi: 32; in Mangalete: 8.	
		In Y2, total arrests in Kamungi were 14 and Mangalete was 6.	

		0.6 In Y1, total number of bushmeat snares collected in Kamungi from June 2019-March 2020 was 339 (308 snares for small game, 30 for medium game and 1 large game). In Y2, 333 bushmeat snares have been collected in Kamungi (299 recorded as small game snares, 21 for medium game and 13 for large game).	
Output 1. VSLAs established in Mangalete and Kamungi communities, providing gender-equitable access to savings and an incentive to support conservation/human-wildlife coexistence and disengage from wildlife crime.	1.1 KWS-CWS Community Outreach Officers establish quarterly community meetings in Kamungi and Mangalete by Q2 Y1 to provide a platform to build trust, discuss wildlife conflict mitigation and other wildlife issues. 1.2 At least 2 VSLA groups established in Mangalete and 1 in Kamungi by end of Y1 by ZSL/TT community staff, with 15-20 members in each (minimum of 50% women), increasing to a total of 6 VSLAs in Mangalete and 2 in Kamungi by end of Y2, and 10 in Mangalete and 3 in Kamungi by end of Y3 with at least 150 households in Mangalete and 45 in Kamungi participating (with minimum of 60% female membership. Total 13 VSLAs by end of project). 1.3 Households engaged in VSLAs saving at least ▮▮▮▮▮▮ on average per year by end of Y3 from Y1 baseline of an average of 0 KES in savings. 1.4 Female VSLA participants (across both communities) demonstrate increased access to funds to spend on items important to them (items identified, and baseline set following socio-economic surveys completed in Y1), with a minimum of 10% increase in average monthly spend by end of Y3;	1.1 In Y1, 4 formal community meetings were facilitated between KWS and the community to lay the foundations for open and honest discussion and relationship-building between the stakeholders. These mostly focussed on Mangalete in Y1 due to some conflict with this community prior to project start. In Y2, owing to COVID-19 we were unable to resume quarterly community meetings until September where one took place in Kamungi and one took place in Mangalete in October. Two more were planned for Q4 Y2, however also had to be postponed into Y3 as a result of a national lockdown. In addition, we have implemented community bus trips into TWNP with KWS, helping to build relations between the community and KWS and foster positive attitudes towards conservation. In Y2, six community bus trips have happened, to which 111 non-VSLA members, as well as 160 of our VSLA members. 1.2. In Y1 of this project, 2 VSLAs were established in Mangalete and 2 VSLAs were established in Kamungi. In Y2 of this project, 9 VSLAs were established, 1 in Kamungi and 8 in Mangalete, bringing the total in Kamungi to 3 VSLAs and 10 in Mangalete – 13 overall, exceeding our Y2 target and achieving our project total. Groups in Kamungi have a total of 48 members and groups in Mangalete have a total of 176 members – reaching a total of 224 households. Of the 48 members in Kamungi, 33 (69%) are women and of the 176 VSLA members in Mangalete, 133 (82%) are women with an average overall female membership of 79%. 1.3. During the Y1 socio-economic survey, the VSLA households in Kamungi were found to have average annual savings of 4,128 KES and 6,313 KES in Mangalete. As we only had 4 VSLA groups at the end of Y1, it should also be noted that in Kamungi, 77% of respondents of our socio-economic survey reported having average annual savings of 0 KES, and in Mangalete, a comparably lower 53% of people reported average annual savings of 0 KES. From the Y2 socio-economic survey, it was found that VSLA households in Kamungi had an average annual savings of ▮▮▮▮ KES (although note that 83% of households reported having average annual savings of ▮ KES). In Mangalete, average household savings were ▮▮▮▮ KES (and note that 88% of households reported having average annual savings of ▮ KES).	

and with annual number of VSLA loans taken by female members (at minimum) 50% of all loans by end of Y3 (from project baseline of 0)

1.5 Conservation outreach during monthly VSLA meetings between ZSL/TT community officers and VSLA members (implemented from Q4 Y1 as VSLAs are established) leads to increased understanding of the importance of conservation and human-wildlife coexistence, with proportion of members reporting positive attitudes towards conservation increasing by a minimum of 30% by end of Y3 from baseline established in Y1.

1.4. In Y1 in Kamungi, 95% of women said their first priority for spending was food, with an average monthly spend of ███ KES. 48% reported education as their second priority, with an average monthly spend of ███ KES. The third spending priority was clothing for 29% of women (average monthly spend of 601 KES) and agricultural items for 24% (average monthly spend of ███ KES).

In Mangalete, 50% of women said food was their top priority for spending, with an average monthly spend of ███ KES and 36% of women chose education as their first priority (average monthly spend of ███ KES). The second priority for spending was education (36% of women, average monthly spend=███ KES), as well as food (32% of women, average monthly spend = ███ KES). Finally, the third priority for women was social activities for 21% (average monthly spend=███ KES) and household items by a further 21% (average monthly spend=███ KES).

Reviewing the results of the Y1 survey on female spending, the indicator target was found to not be appropriate as some of the items that were selected may be capped at a certain monthly spend e.g., education. Therefore, we suggested that the target of '25% increase' be reduced to a more realistic figure of 10%.

According to the Y2 socio-economic survey, in Kamungi, 75% of women said food was their top priority for spending, with an average monthly spend of ███ KES, 9% said healthcare was also their top spending priority, with an average monthly spend of ███ KES. 56% reported education as their second priority, with an average monthly spend of ███ KES and 34% reported healthcare as a second priority, with an average monthly spend of ███ KES. The third spending priority was healthcare for 28% of women, with an average monthly spend of ███ KES, clothing for 19% of women (average monthly spend of ███ KES) and food for 13% (average monthly spend of ███ KES).

In Mangalete, 54% of women said food was their top priority for spending, with an average monthly spend of ███ KES, 28% of women chose education as their first priority (average monthly spend of ███ KES) and 12% of women chose healthcare as their first spending priority (███ KES). The second priority for spending was education (41% of women, average monthly spend = ███ KES), as well as food (24% of women, average monthly spend = ███ KES) and healthcare (19% of women, average monthly spend = ███ KES). Finally, the third priority for women was healthcare for 41% (average monthly spend = ███ KES), food for 18% (average monthly spend = ███ KES) and finally 9% of women chose school (███ KES) and 9% chose clothes (███ KES).

1.5. Our Y1 socio-economic survey showed attitudes towards conservation to be largely positive in both communities. In Kamungi, 34.5% of respondents said they felt 'strongly positive' about wildlife conservation, and 48.3% of people were positive. In Mangalete, 12.5% of people felt strongly positive towards wildlife and 71.9% felt positive towards wildlife. Conservation outreach began in Y1 in VSLA

		meetings and through conservation video screenings. During Y2, this was underpinned through community bus trips into TWNP and KWS community meetings once COVID-19 restrictions were eased in September. ZSL's community team has reported anecdotally from spending significant time in both communities that Mangalete community members are generally less positive than Kamungi towards conservation and the National Park and this corresponds to the survey data.	
		From our Y2 socioeconomic survey data, it was found that in Kamungi 6% of respondents felt strongly positive about wildlife conservation, 40% felt positive, 28% felt neutral and 26% felt negative. In Mangalete, 4% of respondents felt strongly positive about wildlife conservation, 56% felt positive, 32% felt neutral, 6% felt negative and 1% felt strongly negative.	
Activity 1.1 KWS Community Outreach Officers hold quarterly community meetings with the Chief and key community influencers, facilitated by ZSL, extending the attendee list as word spreads to other community members by the influencers.		In Y1, 4 meetings were held between KWS and the target communities, although focussed on Mangalete for Y1. In Y2, owing to COVID-19, only 2 community meetings took place (one in Mangalete and one in Kamungi)	Quarterly meetings will continue in both Kamungi and Mangalete each quarter.
Activity 1.2 ZSL Community Officer and Community Liaison trained by partner, 5T on VSLA establishment including an exchange visit for ZSL staff.		Following on from the training received by our partners 5T in Y1, the ZSL Community team have received ongoing support from this partner in Y2, in particular with how to manage group communications during lockdown and advice on how to support groups remotely. The team also received refresher VSLA training in Q1 Y2, which took place online due to COVID-19.	During Y3, 5T will continue to provide ongoing support to our community team as well as providing training online.
Activity 1.3 ZSL community team then establishes 10 VSLA groups (150 households) in Mangalete and 3 VSLA groups in Kamungi (45 households) over the project period.		In Y1, ZSL Community team established 2 VSLAs in Kamungi and 2 in Mangalete. In Y2, they have established 1 additional VSLA in Kamungi and 8 VSLAs in Mangalete bringing the total to 13 VSLAs since project inception, totalling 224 households. The target for Kamungi has been reached, with 3 VSLAs reaching 48 households and the target	This activity is now complete. During Y3, the team will continue to monitor all 13 VSLAs and deliver training to VSLAs on taking out loans to enable remaining groups to progress to this next stage (five VSLAs have been trained so far), as they have now received their alternative livelihood training.

		for Mangalete has been reached, with 10 VSLAs reaching 176 households.	
Activity 1.4 ZSL and TT community teams conduct surveys in Mangalete and Kamungi (with all VSLAs members at start of group establishment; total ~195 members) that include questions on socio-economics, wellbeing indicators, and perceived level of HWC incidences, mitigation techniques and perceived effectiveness. These surveys will be repeated annually.		ZSL & TT Community teams conducted the second annual socio-economic survey (the same questionnaire as delivered last year) using SurveyCTO, with a total of 260 respondents (10% of households in target villages, plus all VSLA members).	This survey is to be repeated in Y3.
Activity 1.5 Monthly meetings between ZSL community team and VSLA groups enables regular monitoring of economic metrics associated to VSLA participation. Meetings will also be used for conservation messaging and discussion on HWC issues, helping to identify priority needs for mitigation. Standardised ZSL organisational forms are completed four times annually to monitor group financials (at meetings held after the 1st, 12th, 24th and 52nd week (share-out) of savings).		Community officers have collected savings and loans data to monitor economic metrics at monthly meetings, as well as completing the standardised organisational monitoring forms using SurveyCTO software. Conservation messaging has been central to the dialogue and reasoning behind supporting communities to establish VSLAs and is discussed at every meeting that the team attend.	Community officers will complete the relevant organisational monitoring forms during Y3 for the 13 VSLAs already established and continue to monitor the progress of VSLAs on a monthly basis. They will also continue to deliver training to VSLAs on taking out loans to enable remaining groups to progress to this next stage (five VSLAs have been trained so far).
Output 2. HWC mitigation strategies implemented in priority sites in Mangalete and Kamungi community areas.	2.1 HWC types, hotspot locations and scale understood in both communities with priorities for mitigation determined by Q3 Y2 2.2 Appropriate, priority HWC mitigation strategies for each community are identified and agreed by end of Q3 Y2 (e.g. beehive fences for HEC or predator-proof bomas in hotspot locations for HCC) 2.3 At least 40 priority households in HWC hotspots across both communities trained and equipped in mitigation strategies by Q4 Y2 and a minimum of 25% of these have capacity and resources to begin implementation of pilot interventions by Q1 Y3. Another 25% begin implementation by end of project.	2.1. HWC types and scale have been identified through the Y1 socio-economic survey and HWC data collected by our partners TT and KWS. The partner data suggests that Kamungi experiences a higher level of HWC than Mangalete (in Y1 TT recorded 134 incidences of HEC and 90 incidences of HCC in Kamungi; KWS recorded 16 HEC incidents and 2 HCC incidents in Mangalete). The Y1 survey showed that 100% of respondents experienced HWC in Kamungi and 88% in Mangalete. Hotspot locations within the project area have now been identified in the initial HWC workshops which took place in November 2020 once regulations surrounding group meetings had been lifted. 2.2 Due to the COVID-19 outbreak, the HWC workshops which were scheduled for March 2020 were postponed (as agreed with DEFRA) to November. During these workshops, community participants selected predator-proof bomas as the chosen mitigation technique to pilot for HCC and chilli fences/bricks as the chosen mitigation technique for HEC. 2.3 Following an extended period of acute HEC from December and consultation with target communities, it was agreed to focus the training workshops on HCC mitigation, as the communities focus for HEC mitigation was redirected towards the implementation of an electric fence, which was felt to be beyond the scope of this project and its budget – which is focussed on small-scale farm-based deterrents. An electric fence will require government direction and will be a multi-stakeholder effort over an extended period of time. Our target communities no	

| | 2.4 Monthly monitoring of effectiveness of implemented HWC mitigation strategies in place by Q1 Y3 through site-visits, data collection and reporting by ZSL/TT community officers, informing and facilitating adaptation of strategies, if required. | longer wanted to pilot farm-based deterrents for HEC and would prefer to wait for the government to take forward the electric fence. Therefore, the project had to adapt to the communities' wishes. This will have an impact on our HEC indicator as we are no longer implementing HEC mitigation. However, we hope to have an impact on HCC over the next year of the project for households piloting the predator-proof bomas. In Q4 Y2, 10 pilot bomas were built, 5 in each community.

2.4 is not relevant for this period. | |
|---|---|---|---|
| Activity 2.1.

ZSL and TT community teams conduct socio-economic/wellbeing/HWC surveys in Mangalete and Kamungi (as mentioned in Activity 1.4). | | In Y1, the socioeconomic survey was completed with 160 respondents, including 10% of households in target villages, plus all VSLA members).

These surveys were completed again in Q4 of Y2 with 260 respondents (10% of target households, plus all VSLA members) (see Activity 1.4). | This socio-economic survey will be repeated towards the end of Y3. |
| Activity 2.2.

ZSL and TT hold 4x workshops in Kamungi (1) and Mangalete (3) for households experiencing significant levels of HWC to map HWC hotspots and agree priority mitigation strategies for each community taking factors such as perceived effectiveness, availability of materials, time and costs to set-up and maintain into account. The target participants will be VSLA members initially, however the workshop will not exclude non-VSLA members and will be focused on those that experience significant levels of HWC as identified through KWS-CWS meetings and HWC reports, VSLA meetings, surveys etc. | | The outbreak of COVID-19 resulted in these workshops being postponed from March (as agreed with DEFRA) and took place in November. 4 workshops were held in Mangalete and 3 workshops took place in Kamungi. In Mangalete, 131 people attended in total and in Kamungi 54 people attended, overall total being 185 (165 of which were VSLA members). The community identified HWC hotspots, and chilli fences/bricks and predator proof bomas were chosen as mitigation techniques for HEC and HCC respectively. | |
| Activity 2.3

ZSL and TT run 3-day training course in selected mitigation strategies for at least 40 priority households in HWC hotspots across both communities in Y2 and support households to pilot chosen strategies. | | Following on from workshops described in Activity 2.2 and taking into consideration the acute HEC the community was experiencing at the time resulting in their focus for HEC mitigation being redirected towards the implementation of an electric fence, it was decided with community members that the training would focus on HCC | Into Y3, the community team will support the building of the predator-proof bomas in at least a further 30 households. |

		mitigation techniques. With our workshop facilitator, the ZSL community team built one demonstration boma in Mangalete and one in Kamungi, during which a local Fundi (mason) was trained in building the specific requirements of the bomas. 5 bomas have now been constructed in each community, reaching 10 households in total by the end of Y2.	
Activity 2.4 ZSL and TT community team monitor effectiveness of implemented HWC mitigation strategies by Q1 Y3 through monthly site-visits, VSLA meetings and reports. Household surveys will be repeated at project end to enable evaluation of effectiveness of pilot mitigation interventions for participating households.		Not relevant for this period.	Assuming the project reaches its target of at least 40 households in Y3, the community team will start to monitor households that pilot HWC strategies from Q4.
Output 3. Gender-equitable, sustainable livelihood strategies/efficient agricultural practices established in Mangalete and Kamungi communities, increasing monthly income and reducing the need to engage in bushmeat hunting and other forms of wildlife crime.	3.1 Appropriate, gender-sensitive livelihood development/enterprise opportunities identified and scoped, and with business plans produced at participatory workshops with all VSLA groups in both communities (total of 13 VSLA groups by end of Y3). 3.2 Four training workshops for all VSLA groups delivered on community-identified livelihood / enterprise opportunities in Kamungi and Mangalete, attended by at least 40% of 150 VSLA households in Mangalete and 40% of 45 households in Kamungi by project end. 3.3 At least 40 households in Mangalete and 12 households in Kamungi engaged in uptake of livelihood/enterprise activities through VSLAs and project funds (e.g. capital investment in a seed press or in farming materials) by end of Y3	3.1. The outbreak of COVID-19 resulted in these workshops being postponed as agreed with DEFRA. However, through focus groups and the socio-economic survey in Y1, we had already gained useful baseline information to inform these workshops. In terms of livelihood preference, livestock production ranked top for both communities during our focus groups. In Kamungi, employment as a scout ranked 2nd, small business ranked 3rd, crop production 4th and finally casual labour ranked 5th. In Mangalete, conversely, crop production ranked 2nd, small business 3rd, casual labour 4th and charcoal burning ranked as least desirable. Data collected during the socio-economic survey showed average income from each source was low. In Kamungi, an average of 25% of income was generated through livestock production, 19% through casual labour, 15% through crop production and 15% in an 'other' category. In Mangalete, the average income coming from crop production was 41% and an average of 22% came from livestock production. The livelihood workshops were able to take place in September, which 7 of our VSLAs attended, 33 of 48 attendees in Kamungi were women and 59 of 67 attendees in Mangalete were women. During these workshops, both communities identified livestock production as their chosen enterprise activities. This livelihood training would focus on improving the productivity and economic returns of small-scale farming, achieved through improved husbandry, disease and parasite control and provision of appropriate food. From these workshops, business plans were developed for improved goat and chicken farming, which were then used in the follow up training workshop by Wildlife Works. 3.2 The training workshops took place in February and 115 VSLA members attended this training which was split across four different workshop days, two in

	each community. Participants were trained in the business plan for each enterprise.	
	3.3 is not relevant for this period.	
Activity 3.1 VSLA meetings and two three-day workshops run by partner WW will be used to identify livelihood opportunities and / or improved efficiencies to current livelihoods, with the aim to create a business plan for selected opportunities in each VSLA group. WW will advise on product demand and market accessibility to ensure the most feasible opportunity is selected.	These livelihood opportunity workshops were scheduled for March, one in each community. However, these were postponed due to COVID-19. They were able to take place in September, two two-day workshops took place in each community. Detailed business plans for goat and chicken farming (community selected interventions) were developed by WW following the workshop. Business plans on goat and chicken farming were used for the training workshops that took place in Q4 Y2.	
Activity 3.2 Four training workshops on selected livelihood opportunities, delivered to VSLA groups by technical partner WW and the ZSL community team. If capital investment necessary for selected livelihood, equipment/materials will be procured using loans from the VSLA groups and project funds at the relevant time. WW will run training follow-ups in Y2 and Y3.	Livelihood training workshops were held in Q4 Y2, during which 115 households were trained in the business plans. Two workshop days took place in each community.	
Activity 3.3 Following training, at least 40 VSLA households in Mangalete and 12 households in Kamungi implement livelihood intervention with support from ZSL community team and WW, who will monitor pilot enterprises to ensure there are no negative consequences to any gender or vulnerable group.	Following the training, identified materials and equipment have begun to be procured. It was determined that utilising the cluster method was the best approach, and VSLAs have organised into clusters and implementation will begin in Y3.	The ZSL team will continue to support piloting households to implement in Q1Y3 and being monitoring.
Activity 3.4 ZSL community team monitors and evaluates success of livelihood interventions through socio-economic surveys and regular communication, conducted around VSLA meetings, with at least 90% of target households, providing 6-monthly reports from Y2.	Piloting households have successfully up taken chosen livelihoods as scheduled following the training in Q4Y2 and implementation is set to begin in Q1 Y3.	Monitoring to be undertaken from Q1Y3.

Output 4. Enhanced patrolling and enforcement in place along the NP borders with Kamungi	4.1 All TT community scouts in Kamungi (8) trained and capable in the use of the SMART approach (including data collection using handheld digital devices and CyberTracker), basic SMART data analysis and production of patrol maps by Q4 Y1 4.2 SMART database established, and quarterly patrol maps produced to enable monitoring of patrol coverage by TT community scouts and KWS along community borders and inform patrol strategy by Q1 Y2 4.3 Monthly strategic patrol coverage (total distance) by community scouts improved by at least 30% by end of Y3 using SMART, with baseline set in Q1 Y2. 4.4 A minimum of 3,500km/month of aerial patrol coverage maintained across the northern sector of the TCA and bordering communities from Q1 Y1 through to end Y3, from baseline 2017 average of 3,000km	4.1 In Q4 Y1, 8 TT Kamungi community scouts were successfully trained in using SMART and CyberTracker to enable effective data collection and analysis to inform patrol strategy. 4.2 In Q4 Y1, ZSL's data analyst also supported TT to establish a SMART database. Following on from the training under 4.1, she has continued supporting the team to produce SMART reports and develop quarterly patrol maps. In Y2, 4 quarterly patrol maps have been produced. 4.3. In Q1 Y2 the baseline for monthly strategic patrol coverage was 391km. By Q4 Y2, average monthly patrol coverage was 404km, representing a 3% increase. The reason for this relatively small increase in patrol coverage resulted from the fact that one of the TT patrol teams was temporarily halted due to the pandemic between April and October and following this, the Kamungi scouts have been heavily involved in supporting TT control the severe HEC which our target communities have been experiencing since December. 4.4.During Y1, TT maintained aerial patrol coverage over the northern sector of Tsavo West National Park and bordering communities, with a monthly average of 3778.4km. During Y2, the monthly average for aerial patrol coverage of the northern sector is 2,897km. This has been lower than the intended 3,500km/month as since the start of the pandemic, TT has had to reduce its total monthly aerial operations from 70 hours to 50 hours due to funding shortfalls.	
Activity 4.1 ZSL delivers training course for all eight TT community scouts in data collection and analysis using SMART by end of Y1 and supports on the production of quarterly patrol maps in QGIS.		In Y1, ZSL's data analyst, Clarine Kigoli delivered Cybertracker data collection training to 8 TT community scouts in Kamungi to enable the use of the SMART approach for patrolling in Y2.	ZSL will continue to support the TT scouts with their SMART database and production of quarterly patrol maps over Y3.
Activity 4.2 Daily SMART patrols will be conducted (foot and vehicle) by TT community scouts and KWS to record and remove snares, record signs of illegal activities and intercept and arrest suspected poachers/hunters along the park boundary with Kamungi.		In Y1, ZSL's data analyst also supported TT to establish a SMART database and following the training, will now support the TT scouts to produce quarterly patrol maps to inform patrol strategy. During Y1, TT and KWS carried out daily joint patrols covering a total of 29,687km by vehicle and 2,150km by foot, and recorded and removed snares, recovered bushmeat and made arrests for wildlife crime around Kamungi (total 339 snares; 102	The baseline for monthly patrol coverage using SMART was set in Q1 Y2 and will enable ZSL to measure improvements in patrolling over the project. Daily SMART patrols will continue to be conducted by TT community scouts and KWS into Y3.

	bushmeat items; 7 pieces of ivory; 32 arrests).	
	In Y2, TT and KWS continued to carry out daily patrols and patrolled a total of 34,927km by vehicle and 2,562km by foot. TT Kamungi scouts collected a total of 333 snares (299 for small game, 21 for medium game and 13 for large game), performed 14 arrests and collected 57kg of bushmeat (34 dikdiks, 1 hare, 5kg of buffalo meat and 90kg of eland meat, as well as 8 pieces of ivory).	
Activity 4.3 TT will conduct weekly patrols across the northern sector of the TCA monitoring signs of illegal activity, including poacher camps and animal carcasses, producing monthly reports that detail aerial patrol coverage and data on illegal activity.	In Y1, a total of 10 hours of low-level aerial surveillance was conducted specifically over the Mangalete area and approximately 33 hours over the Kamungi Conservancy. Patrols over the northern sector of Tsavo West National Park and bordering communities, covered a monthly average of 3778.4km, which is detailed in monthly TT reports. Information collected on illegal activity informs ground patrol follow up, the results of which are detailed above under Activity 4.2. In Y2, TT conducted 304.9 hours (25.4 hours per month) of low-level aerial surveillance over the northern boundary of TWNP including the Mangalete and Kamungi Conservancy area. A monthly average of 2,897km of aerial patrols was achieved, with an annual total of 34,760km..	TT will continue to conduct weekly aerial patrols across the northern sector, reporting on a monthly basis that will feed into the SMART database.
Activity 4.4 TT will produce quarterly reports including patrol maps to enable monitoring of patrol coverage by TT community scouts and KWS along community borders and inform patrol strategy by end of Y1.	ZSL trained TT community scouts in the use of Cybertracker and SMART as reported under Activity 4.1 and has supported TT to produce SMART reports that have informed strategic	TT will continue to produce quarterly reports using SMART to inform patrol strategy.

		patrolling. In Y2, 4 quarterly maps were produced.	

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
Impact: TCA communities benefit from reduced poverty and improved human-wildlife coexistence, whilst human pressures are reduced in a secured protected area complex and with population growth of threatened species maintained. (Max 30 words) .			
Outcome: Threats to wildlife in TCA's northern sector significantly reduced through HWC mitigation, law enforcement, and increased resilience and wellbeing of Mangalete and Kamungi buffer-zone communities, who disengage from wildlife crime.	0.1 Annual incidences of illegal killing (poisoning, spearing/shooting, snaring – disaggregated by motive, where possible - retaliatory, bushmeat, IWT, etc.) of key species in TCA northern sector (elephant, lion, cheetah, wild dog, leopard, hyaena, rhino) decreases by a minimum of 20% by end of Y3 (from baseline established in Y1) 0.2 Annual incidences of HWC decrease by a minimum of 25% by end of Y3 in Kamungi (baseline HEC: 245 so far in 2018; 66 in 2017; 105 in 2016); baseline HCC: 89 so far in 2018; 127 in 2017; 88 in 2016) 0.3 Annual incidences of HWC in Mangalete decrease by a minimum of 25% by end of Y3 (baseline to be established in Y1) 0.4 VSLA members see a minimum of 20% improvement in locally co-defined wellbeing metrics by end of Y3 (e.g. material style of life, income, food security and subjective wellbeing), from baseline established in Y1 surveys. 0.5 Total arrests of Mangalete and Kamungi community members for wildlife crime decreases by minimum 40% by end of Y3 (2017 baseline: Mangalete:13; Kamungi: 25)	0.1 TT and KWS monthly reports 0.2 TT and KWS monthly reports – data disaggregated by conflict type 0.3 ZSL and KWS monthly reports – data disaggregated by conflict type 0.4 ZSL's VSLA Socio-economic and wellbeing surveys 0.5 KWS and TT arrest reports	• A reduction in arrests of community members and number of snares encountered and removed indicates disengagement from wildlife crime. • The number of arrests of Mangalete and Kamungi community members may increase initially due to enhanced enforcement but will fall towards the end of the project as community engagement is strengthened and levels of poaching decrease. • Improved income and wellbeing of local communities, resulting from declining HWC and enhanced livelihoods, reflects reduced costs of living with wildlife and – coupled with regular outreach that reinforces that these benefits are dependent on supporting wildlife conservation - incentivises disengagement from wildlife crime (including poaching for bushmeat, retaliatory killings, and participating in/enabling/facilitating IWT).

	0.6 Total no. of bushmeat snares encountered and collected by community scouts and KWS rangers in Kamungi over full year decreases by minimum 20% by end of Y3 (baseline: 1,008 in 2017)	0.6 TT monthly reports	
Output 1 VSLAs established in Mangalete and Kamungi communities, providing gender-equitable access to savings and an incentive to support conservation/human-wildlife coexistence and disengage from wildlife crime.	1.1 KWS-CWS Community Outreach Officers establish quarterly community meetings in Kamungi and Mangalete by Q2 Y1 to provide a platform to build trust, discuss wildlife conflict mitigation and other wildlife issues. 1.2 At least 2 VSLA groups established in Mangalete and 1 in Kamungi by end of Y1 by ZSL/TT community staff, with 15-20 members in each (minimum of 50% women), increasing to a total of 6 VSLAs in Mangalete and 2 in Kamungi by end of Y2, and 10 in Mangalete and 3 in Kamungi by end of Y3 with at least 150 households in Mangalete and 45 in Kamungi participating (with minimum of 60% female membership. Total 13 VSLAs by end of project). 1.3 Households engaged in VSLAs saving at least ▆▆▆ KES (£▆▆ on average per year by end of Y3 from Y1 baseline of an average of ▆ KES in savings. 1.4 Female VSLA participants (across both communities) demonstrate increased access to funds to spend on items important to them (items identified, and baseline set following socio-economic surveys completed in Y1), with a minimum of 25% increase in average monthly spend by end of Y3; and with annual number of VSLA loans taken by female members (at minimum)	1.1 KWS-CWS community meeting minutes 1.2 ZSL's VSLA summary reports; VSLA membership rosters disaggregated by gender. 1.3 Community VSLA record books and organisational surveys. 1.4 ZSL's VSLA socio-economic and wellbeing surveys.	• VSLA establishment rate and uptake is similar to situation experienced from ZSL VSLA projects in Cameroon and Mozambique. • Community members understand that VSLAs and enterprise activities are directly linked to their engagement in conservation, human-wildlife coexistence and voluntary reporting of illegal activity, as they have under previous implementations in Cameroon. This includes community members who are not direct beneficiaries, through word of mouth from the Mangalete and Kamungi Chief and fellow community neighbours. • Aimed-for levels of female participation are achieved based on pre-project understanding of community socio-economics and demographics and results from previous/ongoing VSLA implementation in Cameroon and Mozambique. Percentage thresholds will be reviewed and adjusted as necessary following socio-economic surveys to be conducted during Yr1. • Increased spend on household items and increase in number of VSLA loans being withdrawn by women indicates enhanced role in financial decision making at household-level and increase in gender-equity

	50% of all loans by end of Y3 (from project baseline of 0) 1.5 Conservation outreach during monthly VSLA meetings between ZSL/TT community officers and VSLA members (implemented from Q4 Y1 as VSLAs are established) leads to increased understanding of the importance of conservation and human-wildlife coexistence, with proportion of members reporting positive attitudes towards conservation increasing by a minimum of 30% by end of Y3 from baseline established in Y1.	1.5 VSLA meeting minutes; socio-economic and wellbeing surveys	
Output 2 HWC mitigation strategies implemented in priority sites in Mangalete and Kamungi community areas	2.1 HWC types, hotspot locations and scale understood in both communities with priorities for mitigation determined by Q3Y2 2.2 Appropriate, priority HWC mitigation strategies for each community are identified and agreed by end of Q3Y2 (e.g. beehive fences for HEC or predator-proof bomas in hotspot locations for HCC) 2.3 At least 40 priority households in HWC hotspots across both communities trained and equipped in mitigation strategies by Q4 Y2 and a minimum of 25% of these have capacity and resources to begin implementation of pilot interventions by Q1 Y3. Another 25% begin implementation by end of project. 2.4 Monthly monitoring of effectiveness of implemented HWC mitigation strategies in place by Q1 Y3 through site-visits, data collection and reporting	2.1 VSLA meeting minutes; Socio-economic and wellbeing surveys; TT and KWS-CWS monthly reports on HWC 2.2 Minutes from community-led workshops in Kamungi and Mangalete, including attendance list; HWC mitigation strategy for each community including recommended interventions 2.3 Training and implementation materials; Training workshop reports by ZSL/TT; VSLA monthly meetings; project end socio-economic surveys. 2.4 ZSL/TT HWC monthly reports	• HWC will be discussed during VSLA meetings and although these households will be the initial target for mitigation interventions, the mitigation workshop (2.2) will also be open to non-VSLA members who are experiencing high levels of HWC in both communities. • Levels of commitment towards proposed mitigation strategies are maintained throughout the project, based on current commitment of five farms with pilot beehive fences in Kamungi.

	by ZSL/TT community officers, informing and facilitating adaptation of strategies, if required.		
Output 3 Gender-equitable, sustainable livelihood strategies/efficient agricultural practices established in Mangalete and Kamungi communities, increasing monthly income and reducing the need to engage in bushmeat hunting and other forms of wildlife crime	3.1 Appropriate, gender-sensitive livelihood development/enterprise opportunities identified and scoped, and with business plans produced at participatory workshops with all VSLA groups in both communities (total of 13 VSLA groups by end of Y3). 3.2 Four training workshops for all VSLA groups delivered on community-identified livelihood / enterprise opportunities in Kamungi and Mangalete, attended by at least 40% of 150 VSLA households in Mangalete and 40% of 45 households in Kamungi by project end. 3.3 At least 40 households in Mangalete and 12 households in Kamungi engaged in uptake of livelihood/enterprise activities through VSLAs and project funds (e.g., capital investment in a seed press or in farming materials) by end of Y3	3.1 Workshop minutes including attendance list; Business plans. 3.2 Training materials; Training workshop reports. 3.3 Agreements with individuals for enterprise support; Monthly ZSL community team reports.	• Access to enhanced and diversified livelihoods (in conjunction with VSLAs and HWC mitigation interventions if appropriate) will reduce the need to engage in illegal, environmentally-damaging activities for income supplementation.
Output 4 Enhanced patrolling and enforcement in place along the NP borders with Kamungi	4.1 All TT community scouts in Kamungi (8) trained and capable in the use of the SMART approach (including data collection using handheld digital devices and CyberTracker), basic SMART data analysis and production of patrol maps by Q4 Y1 4.2 SMART database established, and quarterly patrol maps produced to enable monitoring of patrol coverage by TT community scouts and KWS along	4.1 Training reports; participant lists; pre- and post-knowledge survey assessment; improved metrics for patrol effort and sightings data. 4.2 SMART database; TT monthly patrol reports; quarterly patrol maps	• By increasing capacity of community scouts through training in SMART and reporting/mapping, they are more effective at disrupting illegal activities on the border of the park and thus act as a strong deterrent to community members engaging in wildlife crime.

	community borders and inform patrol strategy by Q1 Y2	4.3 TT monthly patrol reports; quarterly patrol maps	
	4.3 Monthly strategic patrol coverage (total distance) by community scouts improved by at least 30% by end of Y3 using SMART, with baseline set in Q1 Y2.	4.4 TT monthly reports	
	4.4 A minimum of 3,500km/month of aerial patrol coverage maintained across the northern sector of the TCA and bordering communities from Q1 Y1 through to end Y3, from baseline 2017 average of 3,000km.		

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

1.1 KWS Community Outreach Officers hold quarterly community meetings with the Chief and key community influencers, facilitated by ZSL, extending the attendee list as word spreads to other community members by the influencers.
1.2 ZSL Community Officer and Community Liaison trained by partner, 5T on VSLA establishment including an exchange visit for ZSL staff
1.3 ZSL community team then establishes 10 VSLA groups (150 households) in Mangalete and 3 VSLA groups in Kamungi (45 households) over the project period.
1.4 ZSL and TT community teams conduct surveys in Mangalete and Kamungi (with all VSLAs members at start of group establishment; total ~195 members) that include questions on socio-economics, wellbeing indicators, and perceived level of HWC incidences, mitigation techniques and perceived effectiveness. These surveys will be repeated at project end.
1.5 Monthly meetings between ZSL community team and VSLA groups enables regular monitoring of economic metrics associated to VSLA participation. Meetings will also be used for conservation messaging and discussion on HWC issues, helping to identify priority needs for mitigation. Standardised ZSL organisational forms are completed four times annually to monitor group financials (at meetings held after the 1st, 12th, 24th and 52nd week (share-out) of savings).

2.1 ZSL and TT community teams conduct socio-economic/wellbeing/HWC surveys in Mangalete and Kamungi (as mentioned in Activity 1.4).
2.2 ZSL and TT hold 4x workshops in Kamungi (1) and Mangalete (3) for households experiencing significant levels of HWC to map HWC hotspots and agree priority mitigation strategies for each community taking factors such as perceived effectiveness, availability of materials, time and costs to set-up and maintain into account. The target participants will be VSLA members initially, however the workshop will not exclude non-VSLA members and will be focused on those that experience significant levels of HWC as identified through KWS-CWS meetings and HWC reports, VSLA meetings, surveys etc.
2.3 ZSL and TT run 3-day training course in selected mitigation strategies for at least 40 priority households in HWC hotspots across both communities in Y2 and support households to pilot chosen strategies.
2.4 ZSL and TT community team monitor effectiveness of implemented HWC mitigation strategies by Q1 Y3 through monthly site-visits, VSLA meetings and reports. Household surveys will be repeated at project end to enable evaluation of effectiveness of pilot mitigation interventions for participating households.

3.1 VSLA meetings and two three-day workshops run by partner WW will be used to identify livelihood opportunities and / or improved efficiencies to current livelihoods, with the aim to create a business plan for selected opportunities in each VSLA group. WW will advise on product demand and market accessibility to ensure the most feasible opportunity is selected.

3.2 Four training workshops on selected livelihood opportunities, delivered to VSLA groups by technical partner WW and the ZSL community team. If capital investment necessary for selected livelihood, equipment/materials will be procured using loans from the VSLA groups and project funds at the relevant time. WW will run training follow-ups in Y2 and Y3.

3.3 Following training, at least 40 VSLA households in Mangalete and 12 households in Kamungi implement livelihood intervention with support from ZSL community team and WW, who will monitor pilot enterprises to ensure there are no negative consequences to any gender or vulnerable group.

3.4 ZSL community team monitors and evaluates success of livelihood interventions through socio-economic surveys and regular communication, conducted around VSLA meetings, with at least 90% of target households, providing 6-monthly reports from Y3.

4.1 ZSL delivers training course for all eight TT community scouts in data collection and analysis using SMART by end of Y1 and supports on the production of quarterly patrol maps in QGIS.

4.2 Daily SMART patrols will be conducted (foot and vehicle) by TT community scouts and KWS to record and remove snares, record signs of illegal activities and intercept and arrest suspected poachers/hunters along the park boundary with Kamungi.

4.3 TT will conduct weekly patrols across the northern sector of the TCA monitoring signs of illegal activity, including poacher camps and animal carcasses, producing monthly reports that detail aerial patrol coverage and data on illegal activity.

4.4 TT will produce quarterly reports including patrol maps to enable monitoring of patrol coverage by TT community scouts and KWS along community borders and inform patrol strategy by Q1Y2.

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
Established codes								
6a	Training of community scouts in the use of Cybertracker and SMART approach	Male	Kenyan	8	0		8	8
	Training in livelihood development in two communities	Mixed	Kenyan	0	115		115	c.70
	Training in HWC mitigation in two communities	Mixed	Kenyan	0	157		157	c.40
6b	3-day training of community scouts			1	0		1	1
	Training in livelihood development in two communities			0	2		2	2
7	Training manual and presentation on use of SMART approach for community scouts			2	0		2	2
	Presentations for HWC and livelihood development trainings			0	2		2	2
20	2x laptops, 2 x motorbike			£█████	███		████	█████
23	UK Aid Match (2020-23) for Kenya & Nepal			████	██			██

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)

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.	
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.	
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
Do you have hard copies of material you need to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	No
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	