

Darwin Initiative Main Annual Report

To be completed with reference to the “Project Reporting Information Note”:
(<https://www.darwininitiative.org.uk/resources-for-projects/information-notes-learning-notes-briefing-papers-and-reviews/>).

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

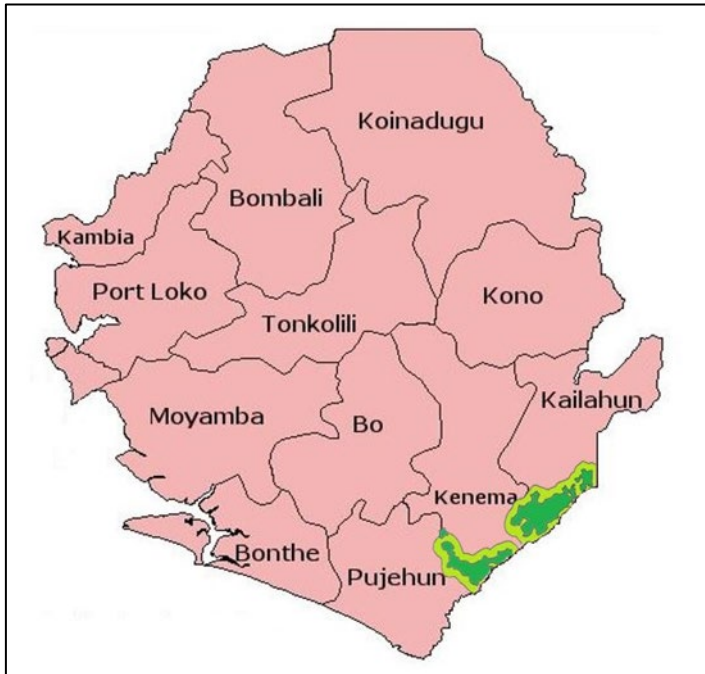
Submission Deadline: 30th April 2022

Darwin Initiative Project Information

Project reference	26-004
Project title	Linking food security and forest conservation under REDD+
Country/ies	Sierra Leone
Lead partner	Royal Society for the Protection of Birds (RSPB)
Project partner(s)	Gola Rainforest Conservation (GRC), Conservation Society of Sierra Leone (CSSL), National Protected Area Authority (NPAA), Malema Communities in Sierra Leone
Darwin grant value	£347,758
Start/end dates of project	01 May 2019 - 31 Oct 2022
Reporting period (e.g., Apr 2021 – Mar 2022) & number (e.g., Annual Report 1, 2, 3)	Annual Report 3 (April 2021 - Mar 2022)
Project Leader name	Richard Dixon
Project website/blog/social media	https://golarainforest.org/new-page @RSPBScience Twitter
Report author(s) and date	Richard Dixon (RSPB) with key contributions from: Lahai Keifala, Aminata Berewa, Christian Lansana, and Fomba Kanneh (GRC-LG); Andrew Inglis, Sorrel Jones, Björn Horvath, Jenna Barker, Fiona Sanderson, and Felicity Edwards (RSPB); Bobson Kobba, and Sheku Kamara (CSSL). May 2022.

1. Project summary

Gola Rainforest National Park (GRNP), 68,515ha of the Upper Guinea biodiversity hotspot (see Map 1) supports 60 globally threatened species (GTS), including the regionally important western chimpanzee (CR) population, the largest known pygmy hippo (EN) population, forest elephant (EN), white-breasted guineafowl (VU) and white-necked Picathartes (VU).



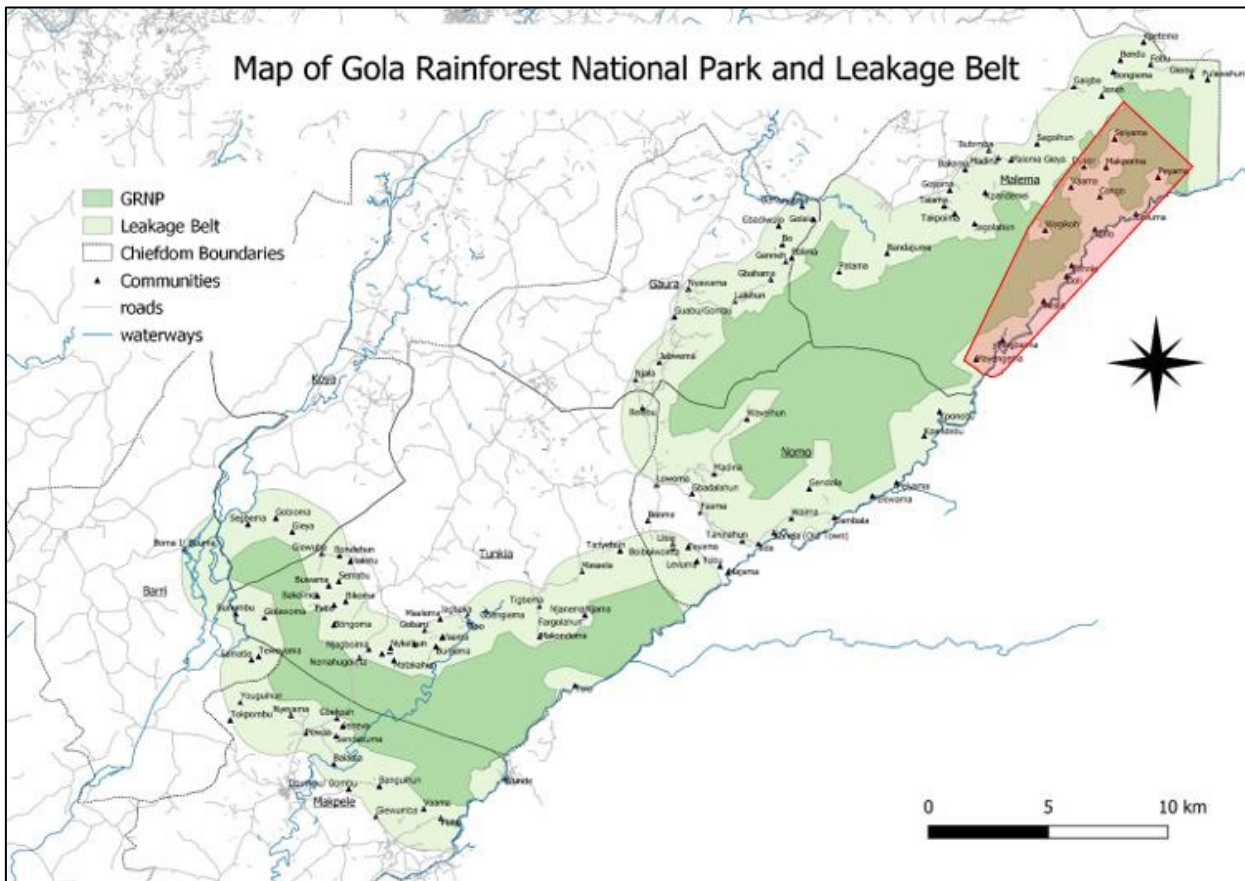
Map 1. Position of Gola Rainforest National Park in Sierra Leone

The first REDD+ project in West Africa, it protects GRNP and surrounds by working with forest communities. A 4km leakage-belt encompasses 122 settlements and inhabitants are amongst the poorest in Sierra Leone. At the time the proposal was written the latest available data identified that the average annual household income was \$150 with 77% of households relying on subsistence agriculture and 85% deriving income from one livelihood. Furthermore only 4% produced enough rice to meet their annual needs. Problems encountered included low yields, storage losses, poor market-access, and gender-inequality (of the 19% female-headed households, only 42% had access to land) *State of Food Security in Sierra Leone 2015 Comprehensive Food Security and Vulnerability Analysis Data collected September - October 2015*. Increasing population and poor soil fertility drives agricultural encroachment into community forest which has no formal protection but provides vital habitat for GTS and may link blocks of GRNP and Gola Forest National Park (GFNP) in Liberia.

Currently, communities receive REDD+ payments in exchange for not encroaching on GRNP. Under MOUs (2015-2021), communities also receive agricultural training, environmental education, and training in establishing savings and loan schemes designed to improve livelihoods and reduce the need to exploit community forest. However, MOUs lack targets, and since 2015, deforestation-rates in community forests have risen relative to the baseline.

Whilst some deforestation is inevitable, identifying and protecting High Conservation Value Community Forest (HCV-CF) would reduce negative biodiversity impacts of it. Linking HCV-CF protection to tailored support and increased yields on existing farmland through revised MOUs (Conservation Agreements) could benefit both livelihoods and GTS. Embedding HCV-CF into Community Forest Management Plans (post-project) would secure an effective mechanism for reducing deforestation.

Project communities (see Map 2), are ‘squeezed’ between GRNP and GFNP, threatening to encroach on important GTS habitat and corridors. This project will enable communities to demonstrate how the REDD+ project can help them conserve HCV-CF while meeting livelihood needs.



Map 2. Map of Gola Forest Edge Communities including Darwin Project communities (in red shaded area)

2. Project stakeholders/ partners

Gola Rainforest Conservation (GRC) is a collaborative venture between all of the partners to this project: the Royal Society for the Protection of Birds (RSPB); the Conservation Society of Sierra Leone (CSSL); the government of Sierra Leone (previously through the National Protected Area Authority (NPAA) and now also the Ministry of The Environment), and the 122 local communities around Gola Rainforest National Park (including the 14 communities in Malema Chiefdom who are the focus of this project).

GRC implements the Gola REDD+ project and the Directors (one from each partner) guide implementation by GRC of all REDD+ and project work. From a technical perspective GRC have staff trained in agricultural development, community development and ecological monitoring, who work on a daily basis in partnership with 2 RSPB Technical Advisors and on the Darwin project with an RSPB Project Social Scientist. As the leading conservation organisation in Sierra Leone and as a partner in GRC, CSSL work on the ground alongside GRC in a number of projects including this one.

GRC works in close collaboration with the 7 chiefdoms around Gola and has Community Development Relationship Officers working within each of the Chiefdoms. The philosophy and approach is one of inclusivity, with funding for community projects decided by the communities themselves as well as the way in which funds are used from Village Savings and Loan Associations (VSLAs).

A key strength of the partnership comes from the fact that RSPB, CSSL, GRC and NPAA have worked together for a significant period of time and have brought this understanding and different strengths to the delivery of the project.

3. Project progress

3.1 Progress in carrying out project Activities

Output 1: Areas of community forest of High Conservation Value (HCV-CF) in target area are identified and current rate of loss quantified, and future deforestation risk modelled

1.1 Use existing species records and landcover data to map and assess target area (4,000-6,000 ha) to identify focused area in which to undertake on the ground surveys to identify potential HCV-CF sites used by globally threatened species and present results in a baseline report.

No activity scheduled for Year 3 - Work completed in Year 1.

1.2 Use remote sensing data to assess deforestation rates in potential areas for HCV-CF sites and present results in a deforestation survey report.

No activity scheduled for Year 3 - Work completed in Year 1.

1.3 Conduct surveys of forest birds and GTS mammals and forest species in the target area (in particular chimpanzee, pygmy hippo and elephant) and habitat surveys to quantify sites that support GTS and model species-habitat relationships to help guide identification and prioritisation of potential HCV-CF sites.

No activity scheduled for Year 3 - Work completed in Year 2. Species report will be presented with the Final Project Report.

1.4 Capture local communities' knowledge of globally threatened species (GTS) in target area and participatory mapping of globally threatened species / community conflict 'hotspots'.

Due to Covid-related limitations to what was able to be achieved in Year 2, it was decided to address this in Year 3 by undertaking a participatory mapping exercise conducted by the Species Champions in each community to gather further information from a wider section of the village population. The exercise consisted of interviewing focus groups of community members to capture local communities' knowledge of GTS and community conflict 'hotspots', by using semi-structured interview models and participatory maps. As well as producing more information, this activity increased community participation, enhanced a sense of stewardship within communities of their areas of community forest and emphasised the role that the Species Champions can play. This activity started in February/March 2021 and was followed up in May/June 2021 as scheduled. During this time, the Species Champions were successful in gathering information from a wider section of the village population (e.g., NRM members, older persons, ex-hunters and other forest users). Responding to Species Champions feedback, we scheduled additional training for the participatory mapping exercise, and after three months, in August/September 2021, the GRC Research & Monitoring (R&M) Department facilitated the transfer of all local communities' knowledge of GTS and community conflict 'hotspots' by assisting the Species Champions in finalising the participatory mapping exercise (see Annex 4, Fig. 1 for examples).

1.5 Undertake camera trapping study of key biodiversity hotspots along the Malema / Liberian border to establish pygmy hippo areas of activity and elephant and chimpanzee migration routes to identify sites vital to connectivity

This activity consisted of deploying 37 camera traps, one kilometre apart, along the Malema/Liberian border and retrieving them every three months for a year (replacing rechargeable batteries and SD cards) in assist with the identification of GTS areas of activity and migration routes. It is important to stress the active role of the Species Champions in this activity, who collaborated in the selection of the deployment sites based on detection of animal signs. In the first quarter, the R&M Department successfully collected images from 33 camera

traps, while the number of camera traps decreased to 32 in the second quarter and reduced further in the third quarter, due to the theft of SD cards and camera traps, and camera traps failing after deployment. The final camera trap collection was conducted during April 2022.

During the reporting period, four camera traps successfully captured images of African forest elephants, for the first time after many years (see Annex 4, Fig. 2), seven successfully captured images of Pygmy hippos (see Annex 4, Fig. 3), and two successfully captured images of Western chimpanzees (see Annex 4, Fig. 4). Information on GTS areas of activity and possible migratory routes have been disseminated across the eight southern communities (i.e., Mayengema, Mogbaima, Misila, Goli, Bannie, Yollo, Levuma, Peyama) to allow the Natural Resource Management Committees (NRMCs) to identify further areas of interest for connectivity with GFNP and are currently being studied to shed light on the possible migration routes of elephants in the Greater Gola Landscape.

1.6 Use joint species distribution modelling to combine biodiversity and habitat data, deforestation risk data and data on HCV-CF patch size and connectivity generated in Output 1 and map potential HCV-CF areas and their priority for conservation, refining modelling and maps if required when data from Activity 1.5 becomes available.

After an internal project review in Year 2, it was proposed that the identification of specific HCV-CF areas needed to have a more bottom-up approach if it was to be truly sustainable and 'owned' by communities, and this change in approach was identified in the Change Request submitted in Year 2. As such, during Year 3, the 14 NRMCs identified and produced 14 HCV-CF areas maps, which included information collected and disseminated by the R&M Department and by the Species Champions.

It is planned, in Year 4, to undertake more comprehensive joint species distribution modelling to assess the conservation value of the HCV-CF areas identified and mapped by the NRMCs, and to try and better align the bottom-up community lead approach to the top-down scientific approach.

1.7 Assess deforestation rates in HCV-CF sites, other protected community forest areas and the control area through a before and after control intervention comparison, supported by GRC ground truthing, and present results in a report.

No activity scheduled for Year 3 - Work due to be undertaken in Year 4

Output 2: Malema communities have increased awareness of the importance of maintaining forest and biodiversity for the REDD+ project and take an active role in their conservation and monitoring as a tool for long-term sustainability

2.1 Run a total of 6 education roadshows and 10 radio broadcasts in the project area during the course of the project

The final two roadshows were undertaken from the 21st - 24th February 2022 in the Darwin project communities (see Annex 4, Fig. 5). These engagements were done in 2 'cluster' locations: with members of 8 communities in one event in Makpoima and 6 in Takpoima, reaching 116 members of the 14 forest edge communities (FECs). Following a survey conducted by the Project Social Scientist which found that messages from roadshows and meetings do not always flow to the wider community, new methods for the roadshows were implemented in Year 3, including the use of drama delivered by community cultural groups. The prior inclusion of Nature Clubs in roadshows continued to be important for demonstrating to community stakeholders that their children can be a part of conservation efforts. However, in Year 3 cultural groups were also included in the roadshows because school exams and the graduation of Nature Club pupils who had been trained in delivering the conservation messages limited the availability of Nature Club representatives. The decision to use cultural groups as an alternative to training new Nature Club students was taken to avoid delays in project implementation while still creating meaningful impact in the final Darwin roadshows.

These cultural groups used drama to effectively convey conservation messages incorporated within local culture and values.

From September 2021, all the relevant workstream leads provided field updates and activity plans to the Community Outreach workstream which fed into the themes of the roadshows and radio programmes. The use of other workstream leads in roadshow implementation was important to avoid misinformation and misrepresentation during the delivery of roadshow messages. Some workstream leads participated in the roadshows to clearly explain their activities, which was also an efficient means of responding to community questions and hesitations about project activities. Specifically, the GRC Co-Management and Land Use Planning (LUP) Officer and the Community Development Relation Officer to Kailahun were supportive during CSSL's roadshow implementation. The other workstream leads participated in developing themes for the roadshows and informed Workstream E of the challenges and opinions of community stakeholders related to their workstreams during monthly Darwin management meetings. This ensured a bridge of communication with other workstreams and the implementation of the roadshows.

Key messages and topics discussed in the final roadshows were:

- Reiteration of the relevance of the project to the communities,
- Project benefits received by the targeted communities so far,
- Views of communities about what has worked well and what the challenges have been,
- Improvements needed to ensure the sustainable protection and management of the forest beyond the project,
- Strategies to maintain project livelihoods.

Alongside the roadshows, CSSL in collaboration with GRC conducted 2 radio talk shows on Moa Radio 101.5 FM in Kailahun district in the form of panel-based discussions with the opportunity for community members to submit questions. A key improvement of this activity in Year 3 was the change in broadcast location. Mao Radio was selected as it broadcasts further which increased the ability for the Darwin FECs to access and listen to the project discussion. The radio shows provided updates on both the previous and recent activities implemented in project communities.

Although this activity was delayed slightly, this allowed for the challenges discussed above to be addressed and it is now complete.

2.2 Train 1 or 2 (depending on village size) Species Champions for globally threatened species (Pygmy Hippo, Forest Elephant or Western Chimpanzee depending on species present) in each village to undertake surveys & patrols to identify species signs in community forests and deforestation in HCV-CF sites.

Following Memorandums of Understanding (MoUs) being signed in Year 2 with the 28 Species Champions in the 14 Darwin communities, stipulating their working schedule and remuneration, further training was provided by the R&M team to instruct the Species Champions on how to identify GTS presence and signs of deforestation in their community forests and how to fill in the data sheet (see Annex 4, Fig. 6 for an example of training material). During the reporting period, the R&M team visited the 14 Darwin FECs every quarter, with the last visit being conducted in April 2022. During each visit, refresher training was provided by the R&M team for the less literate Species Champions who had reported difficulties using the data sheets. In the third quarter, further training was conducted in such a way that Species Champions identified a method of symbols to capture information on the data sheet about the High Conservation Value (HCV) species and deforestation within their HCV-CF areas. The symbols worked well, and this method signified a notable improvement in the fourth quarter.

2.3 Support Species Champions to undertake monthly surveys & patrols to identify species signs in community forests and deforestation in HCV-CF areas.

The 28 Species Champions are contracted for 4 days per month and after the initial training received under Activity 2.2, they started patrolling their community forests and collecting data on GTS presence and deforestation. The first data set was collected and collated by the R&M team in May/June 2021 and from then on, every 3 months, with the last collection due in April 2022. During each visit, the R&M team retrieved information on GTS presence and signs of deforestation collected by Species Champions during patrols, including GPS coordinates of the locations that were previously flagged by the Species Champions. As well as producing important data, the exercise contributed to building the communities' sense of ownership (and stewardship) of the areas of community forests that have HCV species and highlighted the role that the Species Champions are playing in those areas. The data is currently stored in the R&M Department (see Annex 4, Fig. 7 for an example of data sheet).

2.4 RSPB Forest cover analyst tests forest patrol efficacy against satellite-detected deforestation and GRNP spot-checks at end of Y2 and EOP.

No activity scheduled for Year 3 - Work due to be undertaken in Year 4

2.5 Perform EOP assessment in control/intervention villages to assess project impact on local communities' knowledge of the importance of maintaining HCV-CF to the REDD+ project.

No activity scheduled for Year 3 - Work due to be undertaken in Year 4. However, a survey was also conducted in March 2022 which aimed to give appropriate context with which the end of project results can be interpreted, and also as a pilot of PRA-based methodology. A PRA-based approach was used to gauge knowledge and understanding of the importance of community forest across 5 target and 5 non-target villages. Results show that the basic concepts - that community forests benefit livelihoods, and that GRC is in favour of communities setting aside a portion of their forest for conservation - are well understood in both target and non-target communities.

Output 3: Communities in target area develop village land use and agricultural training plans to regulate natural resource use in HCV-CF sites / other community forest areas being protected whilst increasing yields in existing farmland to meet community food needs and prevent encroachment on community forests

3.1 Hold consultative meetings with villages at the beginning of the project to agree to the undertaking of project activities.

No activity was scheduled for Year 3 - work was completed in Year 1.

3.2 Map land use zones using satellite imagery as well as community boundaries and HCV-CF area / other community forest areas being protection using GPS and PRA techniques in 14 villages

Existing community boundaries were transposed into weighted Voronoi polygons to assist with land use zoning. As reported in Year 2, the best way to ensure that land use zone mapping was sustainable and owned by the communities was to establish NRMCS in each community before beginning the mapping. NRMCS were established in Year 2 Q4 in all 14 Darwin communities, each one comprised of 2 female and 3 male members.

As identified in the 2021 Half Year Report, there was a need to increase the technical staff capacity within GRC with regard to community forestry. In March 2022, a Community Forestry Officer was recruited and the seniority of the GRC LUP Officer was raised to manage the team. With this increased capacity, the mapping activities progressed effectively.

The mapping of the HCV-CFs was completed in February 2022 in all the 14 FECs (see Annex 4, Fig. 8).

3.3 Facilitate focus groups in each village to set and review specific agricultural targets

As identified in the Year 2 Change Request, this activity was reformulated from being a one-off activity to an annual activity, so that agricultural targets can be revisited based on community feedback. In the Year 3 agricultural targets review, in addition to continuing Year 2 plans, beekeeping, organic/compost fertilizer (Vaama), and intercropping with agricultural crops were identified as targets.

In Year 3, it was planned that 8 communities would be involved in the establishment of Cocoa Agroforestry, intercropping with multipurpose trees, banana, plantain, and seasonal crops. Intercropping with bananas and plantain was implemented in 7 of the communities, while in one village, intercropping cocoa with banana, plantain, and pineapple was piloted.

In Year 4, it is planned that the remaining budget for seeds will be used for establishing bean crops by a women's group. Additionally, a beekeeping pilot will be implemented in one community and an organic fertilizer pilot will be implemented in Vaama as proposed by the review.

3.4 Facilitate development of village specific land use plans (including potential HCV-CFs / other community forest to be protected) through a participatory, inclusive gender sensitive process

As identified in Year 2, the LUP Officer has undertaken a series of stakeholder meetings to ensure that there is alignment in the land use planning process between Gola with other areas in Sierra Leone. In Year 3, a meeting was held which included national partners, and government ministries, departments, and agencies (MDAs) to agree steps for community forest and LUP road maps.

3.5 Facilitate development of village level agricultural training plans through a participatory, inclusive gender sensitive process

As identified in the Year 2 Change Request, this training plan has been revised along with the identification of agricultural targets for Year 3.

In Year 3 the Community Outreach workstream trained :

- 16 participants on ginger cultivation in Vaama community (see Annex 4, Fig. 9),
- 66 participants on nursery establishment and IVS production in Dukor, Makpoima, Seiyama and Mogboima,
- 64 participants on cocoa and multipurpose tree out planting, intercropped with banana and plantain in Mayengema, Misila, Goli, Bani, Wangikor, Congo, Peyama and Dukor. In Dukor also pineapple was planted.
- 94 cocoa farmers (39 F/55 M) on cocoa quality harvesting, processing, and storing.

In all these trainings, a minimum of 40% female participants was planned, and in most cases adhered to.

In addition, marketing on cocoa is ongoing and Malema Cocoa Farmer's Association (MACFA) is currently buying cocoa in the 'Darwin FECs'.

3.6 Use qualitative social science techniques to understand key social science issues including factors that constrain participation in project

Further data collection was carried out from April to December 2021, which built on the work in Year 2, and aimed to generate more in-depth insight into key issues such as women's perceptions of food insecurity, decision-making processes around selective logging, and the factors linked to participation of individuals and of town chiefs in livelihood support interventions. Methods included field visits to communities with semi-structured interviews and focus group discussions with women. A series of focus group discussions were also held with project staff to identify perceived strengths, weaknesses, opportunities and threats from the first 2 years of the project. Data collection was led by the Project Social Scientist and the GRC

social scientist (a position that was recruited in November 2021). Details of data collection activities from April 2021 – March 2022 are given below.

Taken together, the social science research in Years 2-3 has produced a fairly substantial, largely qualitative, dataset which sheds light on some key participation issues and the wider social-political context in which they play out. This dataset is currently being analysed by the Project Social Scientist, with a view to publishing the results in the near future. Preliminary findings suggest that: participation is mediated not only by the perceived costs-benefits to individuals, but also by social factors such as compliance with decisions made by authorities and as a mechanism to strengthen ties with GRC or to express dissatisfaction with the organization. Frustrations tended to arise from unmet expectations or dissatisfaction with the benefit sharing agreement, although the overwhelming majority of respondents also expressed satisfaction with aspects of their relationship with GRC. In specific instances, local authorities may attempt to leverage negotiating power through non-participation decisions. In these cases, the close working relationship between GRC and chieftom-level authorities was instrumental in resolving the issues.

The work confirms that pathways towards effective livelihood and conservation outcomes necessitate: effective community engagement, based on sound communication channels; more bottom-up oriented approaches to design of support packages, with greater emphasis on tailoring inputs where possible to account for community variability; strengthening of communication channels within the organization and ensuring field staff across departments are well informed and empowered to shape development of future proposals; and development of clearer understanding of actors' various aspirations and expectations in terms of social development and GRCs role.

The follow specific data collection activities took place from April 2021- March 2022

- GRC staff focus group discussions to assess Strengths, Weaknesses, Opportunities and Threats learned from the Darwin project in Years 1 and 2 (20th-22nd, 25th April 2021).
 - o 3 focus group discussions were held with staff from across departments who had been involved in Darwin implementation. This was followed by a discussion among workstream leads and heads of departments, reflecting on the key issues identified by the focus groups.
 - o A report was produced and disseminated among project staff
- Field trip 6 (02 May – 09 May 2021, Project Social Scientist and GRC staff)
 - o Focus Group Discussions were held with women in 9 communities to discuss topics surrounding livelihood project participation and the wider context of food security. Participants carried out a listing and ranking exercise on food security issues. Each focus group had about 7 to 12 participants.
- Field trip 7 (16 Nov – 19 Nov 2021, Project Social Scientist and GRC staff)
 - o A semi-structured interview was conducted with Gola Community Development Committee members about their role, experiences, and insights into participation issues.
 - o Observations were made of a meeting involving chieftom leaders in which illegal extractive activities were discussed.
 - o Informal conversations were held with leaders of two communities to understand logging arrangements for their community forests.
 - o Informal conversations were held with the chairpersons of agriculture training groups in 4 communities to understand impact and participation in the agricultural projects.
- Field trip 8 (08 Dec 21 – 13 Dec 21, Project Social Scientist and GRC staff)
 - o Observations were made of a Village Savings and Loans Group share-out meeting.
 - o Conversations were held with the chairpersons of agriculture training groups in 5 further communities to understand impact and participation in the agricultural projects.
 - o Conversations were held in three further communities to understand logging arrangements in the community forests.
- Survey to Gauge Knowledge of Darwin Messages and Attitudes to Benefit Sharing Mechanisms (2nd-14^h March 2022, GRC social scientist, GRC monitoring officer)

- 5 Darwin project villages and 5 non-project villages were visited. A general meeting was held in each village, followed by PRA activities that were conducted in smaller groups of participants, with 3-4 groups per village. Activities aimed to gauge people's understanding of the forest protection messages being delivered through GRC and the Darwin project, and to gain insight into how benefit sharing mechanisms experienced under REDD+ have been viewed. The latter was a key topic relating to participation that had been identified through the prior qualitative research.

3.7 Carry out baseline / EOP sample household surveys on food insecurity/dietary diversity (using the Food Insecurity Access Scale and Household Diet Diversity Score) in control and intervention villages.

No activity scheduled in Year 3 - Work due to be undertaken in Year 4

Output 4: Target communities trial implementation of land use and agricultural training plans which regulate natural resource use in HCV-CFs sites / other community forests being protected whilst increasing crop production / diversification in existing farmland to meet community food needs and prevent encroachment on HCV-CF sites / other community forests being protected

4.1 Establish managed nurseries (where required and community demonstration plots (1 per village) and supply essential inputs (e.g., seeds for target value chain crops like rice, cassava, groundnuts, vegetables, and cocoa) through Farmer Field Schools (FFS)

2,435 cocoa seedlings were out planted in 9 demonstration plots in Mayengema, Misila, Goli, Bani, Wangikor, Congo, Peyama and 2 plots in Dukor, alongside 1,800 mixture of plantain/banana suckers, 200 pineapples were planted in Dukor. 84 indigenous multipurpose trees, and 120 improved cocoa seedlings was established in 7 of the Demo-plots. Eight bushels of NERICA L19 variety husk rice was procured and distributed in Dukor, Makpoima, Seiyama and Mogboima for establishing 4 inland valley swamp (IVS) production sites. Two out of 4 developed IVS plots have been established in Dukor and Makpoima, while Seiyama and Mogboima out planted the nursed rice seedlings in an undeveloped swamp.

Input and materials were provided to the Vaama community to establish one acre of ginger including:

- 3 50kg bags of ginger
- 15 'native' hoes
- 10 head pans
- 5 garden liners

4.2 Train farmers from target households (50% men, 50% women) in improved agricultural production / marketing techniques and skills through gender sensitive FFS training and support them to put at least two of these techniques into practice on their own farms.

Members from all 14 villages, 39 Female and 55 Male, were trained on quality cocoa processing including harvesting, sorting, fermentation, drying and storage. 2 Male local cocoa buying officers participated in a 3-day season review meeting in June 2021, that included additional training on quality and cocoa buying procedures, overview of the past cocoa season and planning and target setting for coming cocoa season. One of the buying officers also participated in training on marketing and export processes.

Yields harvested during the 2021-2022 season from the Demo plots:

- Wetland rice: average 7 bushel per acre (relative low yield due to late establishment)
- Ginger: Not yet harvested, expected to be harvested in August 2022
- Banana/Plantain: Harvest 2023
- Pineapple: 250 Pineapples per acre were harvested in Dukor.
- Cocoa: Harvest August 2024 onwards

4.3 Train farmers in new forest-based livelihoods and support implementation (at least one in each target village).

No activity scheduled in Year 3 – Work due to be undertaken in Year 4.

4.4 Establish a savings and loan scheme in each village to fund new enterprises with participation of men and women, with women in leadership roles in the majority of groups.

No activity scheduled in Year 3 or 4, this work was implemented in Year 1 and 2.

4.5 Undertake crop production / diversification 'food / cash for work' schemes in villages

The Community Outreach workstream mobilized working groups and trained them on ginger cultivation and out planting of rice seedlings in the IVS plots (see activity 3.5). Cash for work schemes were implemented in 5 villages for clearing of canals on IVS demo-plots, out-planting of rice seedlings and harvesting of rice (10 people per community). Brushing, clearing, digging, and planting of ginger (20 people). A total of 60 people participated in the schemes.

Again, a minimum of 40% female participants was planned for all these activities and events, and in most cases adhered to.

Two of the communities will use part of the rice harvested as food for work Year 4 as they together will continue the work on the IVS plots.

4.6 Undertake access trial 'food/cash for work' schemes that improve access to local markets

In Year 3, there was a concentrated effort on improving cocoa storage facilities. Local stores were renovated/improved in 3 logistical important communities in Dukor, Congo, and Mogboima. The reason for improving stores is that cocoa from the 14 Darwin villages, bought by the cooperatives buying officers, can be stored dry and safe from contamination, so the quality remains high until transported to the Warehouse in Kenema. The storage facilities were completed in the fourth quarter of Year 3 (see Annex 4, Fig. 10).

Output 5: 14 Target communities have committed to protect HCV-CF sites / protect other areas of community forests in return for tailored agricultural training and equipment to increase yields sustainably through the GRC REDD+ programme and this will be embedded in Conservation Agreements.

5.1: Support communities establish Natural Resource Management committees that represent the breadth of forest users within each village to manage HCV-CF sites / other community forest areas being protected.

No activity scheduled in Year 3 - Work completed in Year 2.

5.2: Support village communities develop by-laws to protect HCV-CF and other community forest areas being protected within each village.

Cluster level meetings were held in Makpoima and Mogbaima inviting community members from surrounding villages to support the development of a series of by-laws based on the circumstances specific to each community (see Annex 4, Fig. 11). Around 70 participants were present at each cluster meeting. NRCM members, women and young people were primarily involved in the establishment of the by-laws as women are more engaged in the harvesting of non-timber forest products (NTFP) and fishing, while young people are involved in almost all farming, mining, logging, and other activities. Meetings were designed at the Cluster level to ensure that by-laws set by neighbouring villages could be harmonised and agreed due to community proximity, for example the sharing of boundaries, similar ways of life, and inter-marriages.

By-laws were placed under the following headings:

- Plantations either owned by individual, family, or group
- Community forest which included demarcated HCV/CF Areas, grave sites etc
- Farming
- Harvesting NTFP
- The use of the River Moa
- Village assets such as pumps, schools, health centres, rice milling machines, blacksmith points etc.
- Communal work
- Logging
- Mining
- Swamps
- Drinking water sources

The rationale behind the by-law formation is to help integrate conservation regulations which focus on the sustainable use of forest resources into the village communities' day-to-day lives and mindsets. By-laws were developed across the 14 Darwin communities.

The final stage of this activity is to hold familiarization meetings with all relevant stakeholders to mitigate future claims of not knowing about the existence of the by-laws. This stage is vital for the ability of town chiefs, section chiefs, and native administration (law structures set by central government accountable to local governments) to endorse and enforce the by-laws on behalf of the Paramount Chief. This will be undertaken in Year 4.

5.3: Facilitate the development and agreement of forest management plans within each village.

No activity scheduled in Year 3 - Work due to be undertaken in Year 4.

5.4: Sign off by-laws, land use plans and management plans including HCF-CV areas and other protected community forest areas at village, section, chiefdom, and District level

NRMCs were established in Year 2 as a means of ensuring the involvement of community members in the implementation process. In Year 3, we worked via these NRMCs to gain the consent and endorsement of the people in the 14 targeted communities for the effective implementation of the project. Due to the delay in the identification and mapping of the HCV-CFs, and the establishment of by-laws, land use plans, and forest management plans, these are yet to be signed. This will be undertaken in Year 4.

5.5: Facilitate development and agreement of Conservation Agreements between the 14 target communities and GRC.

The delay in the identification and mapping of the HCV-CFs that occurred in 2020-2021 also delayed the development of Conservation Agreements between the 14 target communities and GRC. This will be undertaken in Year 4.

5.6: Write and disseminate paper to the Forestry Department and other relevant audiences.

No activity scheduled in Year 3 – Work due to be undertaken in Year 4.

Output 6: GRC (proponent of the Gola REDD+ project) reviews/refines their model for providing livelihood support to communities in the REDD+ leakage belt to deliver greater impact for biodiversity and livelihoods

6.1: Facilitate visits by representatives from all 6 neighbouring chiefdoms to Darwin project villages.

No activity scheduled in Year 3 - Work due to be undertaken in Year 4.

6.2: GRC organises and holds a Darwin project review meeting that reviews/refines their model for providing livelihood support to communities in the REDD+ leakage belt to deliver greater impact for biodiversity and livelihoods.

No activity scheduled in Year 3 - Work due to be undertaken in Year 4.

Output 7 Project partners increase their capacity to implement the Gola programme

7.1: CSSL in partnership with GRC staff develop a post project plan for community development in Malema chiefdom.

No activity scheduled in Year 3 - Work due to be undertaken in Year 4.

7.2: CSSL in partnership with GRC staff build Gola project activities into their annual workplans.

No activity scheduled in Year 3 – Work due to be undertaken in Year 4.

7.3: RSPB finance staff continue to build GRC staff capacity in financial reporting

Since his deployment to GRC in March 2021, the new Finance Technical Adviser has been working with GRC staff to support the improvement of financial reporting, as well as of processes, governance, and controls. Changes to the Finance operating model have been agreed and implemented. The input of a new finance system was postponed to the next financial year/Year 4 when additional GRC staffing will be in place.

7.4: Presentations on the importance of measuring social impact of conservation projects/ value of social science to conservation projects made to project/RSPB/CCI staff.

A panel was organised as part of the Anthropology and Conservation Conference, held online in 25th – 29th October, with presentations from the Project Social Scientist, GRC staff and affiliates from Wageningen University. The panel topic focussed on how carbon financing mechanisms deliver livelihood support to communities, with a focus on work in the Gola landscape, and the Darwin project in particular which was highlighted as a case-study.

The Project Social Scientist presented findings at the RSPB's annual science meeting (1st – 3rd Feb 2022), an online event attended by around 150 participants including RSPB scientists and external collaborators. The recorded presentation remains available for RSPB staff to watch.

The Project Social Scientist delivered a social science skills workshop to 15 CSSL staff (15th - 16th March 2022) which included a presentation on the uses of social science in conservation.

7.5: GRC/CSSL staff trained in the use of social science techniques

From Feb-Mar 2022 the Project Social Scientist ran a series of tutorials for GRC staff, covering a range of skills and techniques for social sciences in applied conservation. Approximately 15 staff and volunteers regularly attended tutorials, while others attended only irregularly based on their availability.

The following topics were covered during the 12, 3-hour tutorials:

15 th Feb 22	Lesson 1. The research process. Desk-study skills –online resources
16 th Feb 22	Lesson 2. Principles of research design. Sampling strategies
17 th Feb 22	Participatory Tools in social sciences, workshop led by A. Inglis.
22 nd Feb 22	Lesson 3a. Questionnaire Design part 1
23 rd Feb 22	Lesson 3b. Questionnaire Design part 2
24 th Feb 22	One-to-one recap sessions

22 nd Mar 22	Lesson 4. Research Ethics, obtaining Free, Prior and Informed Consent
23 rd Mar 22	Lesson 5a. Basics of Data Storage and Management 1
24 th Mar 22	Lesson 5b. Basics of Data Storage and Management 2
29 th Mar 22	Lesson 6a. Data exploration, summarising data in excel 1
30 th Mar 22	Lesson 6b. Data exploration, summarising data in excel 2
31 st Mar 22	Lesson 7. Presenting Data using PowerPoint

3.2 Progress towards project Outputs

1. Areas of community forest of High Conservation Value (HCV-CF) in target area are identified and current rate of loss quantified

Areas of HCV-CF were identified or confirmed by the Species Champions' patrolling results and camera trap survey and there was evidence that the recent losses of HCV-CF forest have abated in these areas.

Data is still being analysed and the current rate(s) of loss will be presented in the Project Final Report.

2. Malema communities have increased awareness of the importance of maintaining forest and biodiversity for the REDD+ project and take an active role in their conservation and monitoring as a tool for long-term sustainability

The 28 FEC members selected to become Species Champions plus the NRM members helped to deliver messages to their communities of the conservation importance of their community forest. In addition to this, there have been observations by community members of water shortages and first-time dried-out streams that they have linked to loss of forest in catchment areas.

Species Champions have played an active role in sensitizing their community members about the importance of HCV Species e.g., Chimpanzee, Leopard, and Pygmy Hippo. This increased awareness will assist efforts to monitor the populations of HCV species in community forests around Malema.

3. Communities in the target area develop village community land use and agricultural training plans to regulate natural resource use in HCV-CF areas whilst increasing yields in existing farmland to meet community food needs and prevent encroachment on community forests

After areas of HCV-CF were identified or confirmed by the Species Champions, they and other community members proceeded to identify low conservation value areas more suitable for their farming, and also earmarked portions of land for conservation

4. Target communities trial implementation of land use and agricultural training plans which regulate natural resource use in HCV-community forest whilst increasing crop production/diversification in existing farmland to meet community food needs and prevent encroachment on HCV-community forest

A Cocoa Agroforestry Demonstration plot of one acre had been established in Year 2 in Dukor and an additional 8 plots were established in Year 3 making the total 9. The Agroforestry systems includes different local tree species, cocoa, bananas, plantain and in one community also pineapple. Wetland rice was established in 4 Communities and ginger in one community (see yield under 4.2). The demonstrations will contribute to crop diversification and management trainings to in increased yields over time.

Agroforestry trainings included the importance of sites selection to avoid negative environmental impacts.

5. 14 Target communities have committed to protect HCV-CF in return for tailored agricultural training/ equipment to increase yields sustainably provided by the GRC REDD+ project through Conservation Agreements (revised MOUs) which will be embedded, post-project, in Sierra Leone's Community Forest Laws

NRMC members developed by-laws guiding management of community forest, agricultural areas, plantation, and village assets. The rationale behind the by-law's formation is to help the integration of conservation regulation which focuses on sustainable use of forest resources.

In addition, minutes of meetings and correspondence with the Cocoa Farmers' Cooperative have shown that members have become more aware and are positive to the market potential for forest friendly production, which is now mainstreamed in the trainings provided to them.

6. The GRC (proponent of the Gola REDD+ project) reviews/refines their model for providing livelihood support to communities in the REDD+ leakage belt to deliver greater impact for biodiversity and livelihoods

Awareness and capacity have been enhanced in GRC with regard to community forest management, the need to incorporate women in decision making in relation to land use planning, how forest protection promotes healthy communities, and best practices to derive livelihoods from harvesting of non-timber forest products (NTFPs). Additionally, the relevance of NMRCs/Community Forest Management Committees (CFMCs), community stakeholders, and forest rangers as collaborating actors for the sustainable management of the National Park as well as the REDD+ leakage belt (as has been experienced in this Project) has been demonstrated to and been noted by GRC senior management.

7. Project partners increase their capacity to implement the Gola programme

The capacity of both GRC and CSSL to implement the Gola programme has been enhanced – for GRC new positions have been created, for CSSL, increased experience of working with FECs. The FECs, probably the most important project partners in the long-term, also had their Gola programme implementation capacities increased, in particular through the Species Champions programme.

3.3 Progress towards the project Outcome Please report on progress made towards the project Outcome. You should make specific reference to the Outcome indicators including baseline condition and progress to date and provide evidence against them. Consider the following:

0.1. By EOP deforestation rates fall to zero in 1,000-1,500ha of HCV community forest (ca.25% of target leakage belt area) and remains below 2.5% (REDD+ threshold) in the rest

With the patrols from the Species Champions and the awareness raising by the NRMCS in the 14 Darwin FECs, preliminary findings indicate that the deforestation rate has decreased, with less sites within the HCV-CF areas being used for subsistence farming. Although ad hoc artisanal logging has been conducted in some community forests (e.g., Mayengema, Missila, Goli, Vaama and Wangekoh) interventions by the Species Champions and community stakeholders, especially the Paramount Chief and Town Chiefs, have resulted in these logging activities being reduced.

0.2. By EOP 70% of 182 target households (127 households, 1,045 people, 50% Female, 50% male) are engaged in forest-protection activities compared to a baseline of less than 10% (to be confirmed by baseline (Year 1) Household survey)

In Year 3, the process of establishing conservation zones and by-laws has directly involved NRMC members, village leadership, community members and Species Champions.

Species Champions have conducted regular patrols in community forests and have worked closely with the R&M Department to help map biodiversity and human activities (Annex 4,

Fig. 1 & 7). Community members are engaging in conservation-friendly farming practices, especially agroforestry and inland valley swamp rice cultivation as a direct result of project inputs. The establishment of by-laws, which have been drafted in year 3, will further involve all community members. It is expected that by-laws for community forest protection will be widely respected and followed, as they will be legitimised by the appropriate authorities (e.g., section chiefs, paramount chief). In Mende culture, strong social norms ensure there is widespread compliance with by-laws.

This indicator is considered appropriate to measure the intended outcome, and it is considered likely that the outcome will have been achieved or exceeded by the end of project.

0.3. By EOP 70% of target households in the highest quartile (i.e., the 25% of households with the highest food insecurity) have improved their HFIAS score by 3 points or more and that the overall level of improvement is higher in target villages than in control villages.

This will be finalised in Year 4 and presented in the Final Report

0.4. By EOP 70% of target households in the lowest quartile (i.e., the 25% of households with the lowest dietary diversity) have improved their Household Dietary Diversity Score by 1 point or more and that the overall level of improvement is higher in target villages than in control villages.

The qualitative research conducted in years 2-3 showed that the key issues relating to food security are financial management issues – as rice is sold to cover income gaps. The findings revealed several pathways by which project activities may reduce food insecurity (see below), but that many of these involve a time-lag such that the impacts may only be measurable after the end of the project. For instance, new agricultural production systems may take several cycles to reach their potential, as individuals adjust their livelihood strategies, time and labour budgets to accommodate new activities. Producers may need to first build enough capital to be able to afford the labour needed for larger-scale production. Cocoa seedlings take several years to mature and provide income to farmers. The establishment of VSLA can produce relatively immediate impacts on food security, as individuals gain access to savings and loans which helps ensure rice is preserved rather than sold. However, benefits will be expected to increase in the years after groups are initially set up, as savings increase, as individuals build credit to access larger loans, and as the committee members gain administrative experience and trust can build in the group. The rehabilitation of roads is also expected to improve the income that can be gained from agricultural produce, and at baseline, transportation costs were identified as a major constraint on profitability of livelihoods. However, the full extent of economic benefits will likely be felt after a time lag, as producers respond to new market opportunities by planting crops for commercial sale, and as buyers link up with producers.

The qualitative research findings from years 2-3 indicate the following pathways by which project activities can be expected to improve household food security measures:

1. Respondents reported that access to loans from the VSLA groups were used to fill income gaps that would otherwise necessitate selling the household rice supply, such as to cover costs of a burial.
2. Cocoa played an important role in mitigating food insecurity by enabling some households to fill the hunger gap via loans from cocoa buyers. The project has increased access to cocoa seedlings which will, in the long run, be expected to improve food security.
3. Groundnut project participants reported that the project resulted in increased availability of groundnuts to eat, and that it provided opportunities for a sustainable income source that would help ensure rice stocks are preserved and not sold. Although widespread income benefits were not yet being recorded at the end of year 3, there was anecdotal evidence from previous REDD+ groundnut projects that showed individuals still

maintained groundnut income 4-5 years after the initial distribution. The same was reported for swamp rice inputs.

4. Swamp rice project participants reported they were able to maintain seed for re-planting which is expected to benefit the group members by supplementing their rice stocks and enabling seed rice to be replanted. In the case of community groupwork, some harvested rice was planned to be used by the community so that individuals would not be required to provide rice for visitors or other social events. This is expected to reduce demands on households' rice supplies.
5. Cash for work schemes to improve road access to markets will likely improve income generating opportunities, including for women, who currently face constraints in the costs of transporting produce to the market. Several respondents highlighted market access as a key constraint for generating income. Direct income will also have been gained by community members partaking in cash for work schemes. This income may have eased pressure on rice stocks for the most vulnerable households or provided some capital to reinvest into rice production or other income generating activities.

For the food security and diet diversity indicators (0.3, 0.4) to be achieved, project impacts must translate into changes in rice stock availability for households that had lowest food security within the timeframe of the project. The pathways above suggest mechanisms by which this is likely to be taking place, but with a caveat that there will be an expected time-lag before most impacts are fully achieved.

A second consideration is the extent to which impacts can target the most insecure households. The qualitative research explored participation in VSLA and agriculture groups, finding that participation was generally high, but that there are potential constraints for some groups due to the wider social setting. For instance, participation in group project work, and appointment of committee members, was determined by consensus within the community, with oversight of community leaders and facilitation by GRC field staff. In smaller villages, all households in a community participated. However, in larger communities, it is possible that people with higher social standing, who reside permanently in the community, and who can commit their time and labour, may have had greater opportunity to participate. Participation was often at household level, so women without participating husbands may have had less access to participate. Similarly, people who are only temporary residents, those who are too elderly or infirm to do the work, who lack social standing or who are unable to meet the time commitments, may be less likely to be involved. Consequently, although participation was seen to be high, there will inevitably remain a proportion of vulnerable households who will not have directly benefitted from the group-based interventions by the end of project.

Given these considerations, while the project has certainly made progress towards the outcome, it is difficult to judge at this stage whether the food security indicators will be reached within the lifetime of the project. External factors affecting harvests or income such as weather patterns, or change in food/fuel prices, could have short-term impacts on food security indicators that overwhelm the short-term impacts attributable to the project.

0.5. By EOP 70% of 182 target households (127 households, 1045 people, 50% Female, 50% male) are aware of the 'forest protection for increased food security' concept and wish to continue forest protection through the REDD+ project compared to a baseline of less than 5% (to be confirmed by a baseline (Yr1) Household survey)

A survey was conducted in March 2022 to gauge understanding of forest protection concepts. A PRA-based approach was used across a random sample of 5 target and 5 non-target villages, which assessed understanding through 30 focus groups. Messages about forest protection were presented to groups who were asked to discuss them and determine if they were genuine messages from GRC. Namely, that community forests can directly benefit livelihoods of community members, and that GRC is in favour of communities setting aside a portion of their forest for conservation. Results show that these messages were near-universally understood across both target and non-target villages. We therefore expect that the end of project survey will find a high proportion of households understand the forest

protection link to food security, but there may not be a measurable difference between target and non-target villages.

0.6. By EOP GRC directors (including the Paramount Chief representative) hold a Darwin project review meeting at which they agree to a) roll out the 'forest-protection for increased food security' concept across the remaining 19 villages in Malema chiefdom. b) pilot the concept across 3 other chiefdoms

This will be a Year 4 activity

3.4 Monitoring of assumptions

a) Malema communities willing to engage in this project.

We believe this assumption has held and will hold true since throughout year 3 communities and their leaders have shown increased participation and engagement with the project. This is evidenced by the participation in community conservation zone mapping and by-law establishment, as well as reconciliation of previous non-participation decisions by specific leaders (i.e., in Makpoima and Mayengema). Communities have received ongoing inputs for agriculture group projects, demonstration sites and VSLA support, coinciding with more engagement with field staff and better understanding of what they can expect from the project. The ongoing improvement in participation is likely to be underpinned by several factors:

- Communities that had previously been frustrated by their perceived exclusion from the community development fund (CDF) are now receiving inputs from CDF projects, so overall relations and trust in GRC is improved. Earlier frustrations had been largely due to misunderstanding of the timeframe for the enactment of projects, underpinned by the difficulties of maintaining effective communication channels for very remote communities. Two communities, Dukor and Levuma have now received confirmation of CDF projects, while Mogbaima has received substantial support for construction of a school. Communities have close relationships between each other, so the provision of these benefits has ripple effects across the remaining communities and helps create goodwill toward GRC in general.
- Outreach and sensitisation work by the LUP Officer has served to reassure community leaders of the intent behind forest protection in community forests. Previously, community leaders hoping to make arrangements with selective loggers may have perceived the Darwin project as a potential threat to this ambition, and this had contributed to non-participation decisions (i.e., in Makpoima and Mayengema). Community leaders now have better understanding that participation will not mean giving up their rights to govern their forests, facilitating their participation.
- Similarly, research and monitoring activities that were previously viewed with suspicion are likely to be better understood since the results have been shared with communities, and research and monitoring staff have had regular visits to communities. Nevertheless, camera traps are not universally accepted, and a few issues still persist, particularly around communities close to the Liberian border where hunting may be more prevalent.

b) Agricultural yields can be increased enough, along with other support and messaging through the Darwin project and REDD+ programme, to enable communities to protect 25% of their forest

As previously reported, the promotion of improved agricultural practices in other has led to an increase in yields (the figures will be presented in the Final Report) and FECs are already being influenced by this when discussing future farming and (increased) forest conservation plans (which will also be presented in the Final Report) and by-laws.

c) Exchange rates do not devalue the grant/co-funding available such that the project cannot meet its objectives

There have been some budgeting challenges but in Year 3 these have mainly been due to the 50% increase in fuel prices (and the knock-on effects of these on the national and local economies) and not due to exchange rate fluctuations.

- d) *No external influences on deforestation – e.g., immigration, external development pressures*

No evidence of external influences on deforestation emerged during Year 3

- e) *GRC and Malema communities willing to revise MOUs.*

We think this will hold true because the planned revision of MOUs has been well received by all actors involved.

- f) *Survey methods/equipment are appropriate to terrain. We have already trialled survey techniques and equipment as part of REDD+ monitoring and under Darwin Initiative project 20-022 (e.g., chimpanzee nest counts, camera trapping, pygmy hippo surveys, bird point counts).*

Our survey techniques were based on those previously used, successfully, by the R&M Department under the REDD+ monitoring programme and Darwin project 20-022. Where we made small modifications to the methods, we trialled and refined these in the field to ensure the use of methods and equipment are appropriate to the terrain. As such this assumption holds true. The one-kilometre distance used by the R&M Department (SOP) is maintained and camera traps deployed in community forests and along the Moro River. Opportunistic data is collected by R&M Department.

- g) *Community members willing to engage in awareness raising and conservation/monitoring activities*

Species Champions have been successfully trained and NRMC have been established across all the communities. All community members directly or indirectly involved in the Darwin project were willing to engage in awareness raising and conservation/monitoring activities, as such a significant step has been achieved in relation to this risk in Year 3. Based on this, we expect this assumption to hold true.

- h) *Inputs provided by project e.g., rice mills can be replaced with no further donor funding*

Revenue from the REDD+ programme will cover replacement costs.

- i) *Training can be maintained i.e., passed on to other farmers in the community Farmer Field School model and particularly the role of master farmers promotes this*

It has continued to be observed that the community Farmer Field School model and particularly the role of master farmers is proving to be an effective training model. In addition, the improved governance, which is a by-product of this model, has helped to create 'ownership' and knowledge transfer in the communities. As such we expect this assumption to hold true.

- j) *Security does not deteriorate significantly, and the rural population maintains access to land*

We think this will hold true because the political situation remains stable.

- k) *Communities respect by-laws*

We think this will hold true because the planned steps to establishing by-laws includes their legitimisation through the traditional authorities as well as bottom-up community engagement. By following the traditional governance structures and practices in this way, we expect that by-laws will be fully respected, in line with the social-cultural norms. Experience in Year 3 has shown that establishment of by-laws has been well received by communities and leadership alike.

- l) *Communities are willing to and have the opportunity to engage in the Community Forestry process as it develops in Sierra Leone, to the extent that this is needed*

We think this will hold true because the community forestry process is being led by the LUP Officer, in collaboration with project partners CSSL. As one of the most advanced examples of a community forest management project in the country, the 'Darwin communities' are at the centre of the process. GRC staff are working closely with partners and stakeholders to develop the national process, so this situation is unlikely to change. Communities have

demonstrated their motivation and willingness to engage with development of community forestry processes throughout Year 3.

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

The Malema chiefdom Darwin Project is very likely to have a positive impact on biodiversity. Preliminary analysis of camera trap images shows that there is an increase in biodiversity, indicated by, for example, the presence of more HCV species being 'found' via the camera traps in the last two sets of deployment than in the first.

The project has focussed on food security as a key component of poverty alleviation. The baseline survey provided strong evidence that food insecurity levels are extremely high in the project communities, reflecting the situation elsewhere in the region. Research in years 2 and 3 has improved understanding of the linkages between food insecurity and other manifestations of poverty. For instance, findings indicate that the perceived causes of hunger relate to income and financial demands, many of which are exacerbated by lack of infrastructure such as health facilities, schools, and roads. For many, food production is constrained by access to labour. The qualitative data further suggests several pathways by which project interventions can be expected to positively address food security issues (see details in 3.3).

At a higher level, the strengthening of natural resource governance structures is expected to contribute to long-term poverty reduction. The social science research highlighted that logging agreements and arrangements with commercial fishers or NTFP extractors in the project villages accrue minimal benefits to communities. The training and establishment of NRMCs, and the process of creating conservation zones and by-laws is considered a crucial step in empowering communities to seek tangible, sustainable benefits from their resources.

By increasing our understanding of participation constraints, it is hoped that the social science elements of the project will contribute to the ongoing development of effective livelihood support mechanisms in the REDD+ programme. The planned publication of the results will make these insights available to the wider conservation-development community, and findings have already been shared at an international conference that was attended by practitioners from development and conservation fields.

4. Project support to the Conventions, Treaties or Agreements

The project has continued to directly contribute to the following conventions, treaties, and agreements:

The second National Biodiversity Strategy and Action Plan (NBSAP) (2017-2026) of Sierra Leone - Strategic Objective B1 which states that "Practical Methods and Mechanisms are Enhanced and Functioning to Safeguard Biodiversity Resulting in Improving Conservation Status of Threatened and Rare Species" (and appears in response to the Convention on Biological Diversity Strategic Goal 2 which is to "Reduce the Direct Pressure on Biodiversity and Promote Sustainable Use").

The UN Framework Convention on Climate Change (UNFCCC) / The Convention on Biological Diversity collaboration on REDD+ projects, and in particular the application of safeguards for biodiversity, indicators to assess the contribution of REDD+ to the objectives of the CBD and monitor the impacts of REDD+ projects on biodiversity.

5. Project support to poverty reduction

The key beneficiaries of the project in terms of poverty alleviation are community members in the 14 project villages. In particular the project benefits some of the most marginalised in these communities including:

- Households with the greatest food insecurity and lowest dietary diversity,

- Women, through a gender inclusive approach and an emphasis on inclusion in leadership and governance roles,
- Farmers, through direct agricultural training to increase yields, diversification in crops, improvement in techniques around production and improving access to markets to increase income,
- Youths and others in the project communities with the lowest income, through food / cash for work schemes.

The project also contributes to the alleviation of poverty across whole community by:

- Improving access to communities and to markets,
- Protecting access to ecosystem services through protecting community forest and through developing more inclusive governance,
- Increasing access to finance through the establishment of saving and loans schemes to develop enterprises and diversify income,
- Facilitating improved governance including increasing the voice of different parts of the community in decision making and training in the development of democratic organisations.
- Cocoa income has increased over the last years due to better marketing uniform prices and better agriculture practices and quality processing. Lesson learnt from cocoa can be transferred to other cash and subsistence crops.
- In addition, the stipends received by the Species Champions has directly reduced poverty. The communities and family members of Species Champions are project beneficiaries and this has motivated community members

The project has been designed and implemented so that direct benefits will be realised during the course of the project specifically for the project communities but also to a degree to surrounding communities through increased trade. The project also provides indirect benefits through the commitment to review and understand the outcomes and apply them as appropriate to the other 108 communities supported by GRC around GRNP.

We expect the project's participatory approach will create ownership and gender inclusive governance structures and the "training of trainers" approach is expected to create long term sustainable impact on food security and income.

6. Consideration of gender equality issues

As previously reported, both GRC and CSSL undertook gender training in Sep 2019 and as a result of that GRC drafted a gender policy and is currently going through the process of approval, including being presented to all GRC staff members, so that it can be embedded in the organisation. GRC has hired a Gender & Safeguarding Policy Officer to lead on gender equality issues within the organisation. Based in the HR Department, she works closely with the former Gender Co-ordinator who works with the Access to Gender Action Learning System (AGALS) and is also the supervisor for the work of the cocoa team in the field. As such a gender inclusive approach is embedded in both the overall institutional architecture and all the community work undertaken by GRC and is also a cornerstone of this project given the critical role of women in terms of food security in the project communities.

As well as addressing gender equality issues through the focus of the project work on food security, the project has also directly addressed gender inequality through some key activities and indicators such as through: (i) establishing land use plans through a participatory, gender sensitive approach (Indicator 3.4); (ii) training farmers in improved agricultural production and marketing techniques and skills with at least 40% of the targeted 182 farmers being female (Indicator 4.2); (iii) establishing village savings and loan schemes in the 14 communities to support both men and women, with at least 2 women in leadership positions (Indicator 4.4); (iv) supporting communities to establish HCV-CF committees with representation from all user groups (Indicator 5.1). This includes women as one of the key user groups.

The research to improve understanding of food security issues has had a focus on issues affecting women. Focus group discussions with women were held in 9 'Darwin communities', in

which livelihood issues and food security causes were discussed. The findings will support development of livelihood support work going forward and have contributed to development of project proposals which specifically target the needs of women.

The Cocoa farmers in the 14 Darwin communities are part of Malema Cocoa Farmers' Cooperative (MACFCO) consisting of 42 communities in Malema Chiefdom. MACFCO is a Gender inclusive cooperative where females are encouraged to be members and also have leadership positions. The Darwin communities have 3 leadership positions in the board including Chairlady, Women's leader, and the Youth leader. The elected leaders received trainings 2021 on their roles and responsibilities that includes women's and youth inclusion. MACFCO is part of an Apex organization called "Ngoleagorbu Cocoa Farmers Union" (NGOCFU) together with 2 other cooperatives. NGOCFU who is Fairtrade certified have their own draft gender policy

GRC together with Starline radio produced a participatory radio program called "Farmers Voice Radio" among other topics, one program addressed gender issues including landownership, leadership, and benefit sharing. This was followed up by a question and answering program including some Gender Action learning System (GALS) champions and Female farmer leaders. In Makpoima a radio listening group was created consisting of 20 cocoa farmers they were provided with a radio one of them trained as a radio guardian to lead discussions on aired topics and collect questions and feedback to GRC.

7. Monitoring and evaluation

- Project reporting: to-date two half year reports and two annual reports have been submitted. This will be the third annual report to be submitted. A separate detailed financial report will also be submitted for Year 3. In addition, a Change Request was submitted and approved in year two. No change request was submitted in this reporting period.
- Monthly meetings are held with all workstream leaders and M&E staff. All workstream leaders submit monthly reports to the project manager. These regular meetings have led to a greater understanding of the project as a whole and has enabled us to build a strong and cohesive team, with a greater understanding, by team members, of the links between different activities across workstreams. This allowed for closer and more effective project monitoring, we are now working on improving the quality of outputs.
- Standardised data recording and reporting sheets are compiled at the end of each field trip, associated Excel training and mentoring is provided to support this data collection process.
- Participatory Rural Appraisal (PRA): training has been held for all staff and processes designed and conducted in line with M&E indicator requirements.
- During this reporting period the new project management framework was implemented and tested. The main result/findings were that the workstream leads in GRC and CSSL have been working very well together, keeping the annual plan on track. Regular detailed tracking of the plan, during management meetings, has meant that there has been less timeline slippage.
- At the end of the year a project review was held with field-based staff not normally in the management meetings. This proved to be invaluable in picking up additional information missed during regular monitoring. This feedback will be integrated into the final year workplan.
- As previously mentioned, a specific project Monitoring & Evaluation Plan has not been developed, as the project utilises the REDD+ monitoring framework because of the link to activities implemented through the REDD e.g., VSLA groups, important agricultural staple, and cash crop training, developing research and demonstration plots, and food for work schemes.
- A REDD verification audit report was produced during this reporting period which covered the whole of the REDD+ programme including Darwin activities. As part of this

process a field audit was also carried out by two independent experts. Evidence for the verification was compiled in the Monitoring Implementation Report and an updated Project Design Document collated under the REDD+ monitoring protocols.

- There is currently a push, in terms of building capacity, ownership and sustainability, to increase the level of monitoring undertaken by the communities themselves. To this end a Best Master Farmers Monitoring Tool on Rehabilitation has now been well established to allow Master Farmers to monitor the implementation of training in their areas. This tool incorporates the use of pictures and is working well for people who cannot read or write.

8. Lessons learnt

1. Issues are discussed at monthly management meetings allowing lessons to be learned in a timely manner that allows relatively quick adjustments.
2. The Species Champions scheme has been very effective, cost effective and popular with community members and leaders, although we would like even more women to be involved in the scheme.
3. As with the previous year, a series of lessons learned sessions were held with staff members to identify what worked well and what did not, these sessions led to:
 - a. Improvements to project planning and adjustments to the final year workplan, e.g., to continue exchange visits for Natural Resource Management Committee members to visit communities where community forests have been well managed.
 - b. To use lessons learnt to develop a new project proposal and to change the existing REDD strategy, with the aim of scaling up the work carried out by the Darwin project throughout the wider landscape.

What worked well:

- PRA and data collection training to improve social science capacity.
- Completion of camera-trap deployment, data collection and data analysis.
- Establishment of IVS rice demonstration plots.
- The management of the cocoa nurseries in readiness for seedling distributions.
- Regular patrolling, data collection and initial analysis by Species Champions.
- Project management through workstream leads taking ownership, working together as a team and running monthly management meetings. Understanding constraints each lead has and offering solutions to overcome these constraints.

What did not work well:

- The complexity of identifying HCV-CF sites in the communities and negotiating/building trust with community leadership.
- VSLA is a lengthy process of building trust between members and requires considerable time, coaching, and monitoring. It is a long-term endeavour to build strong new groups, the link with the REDD project will help in this effort and continue this work.
- Reporting and financial management still requires continued work and coaching, but improvements are being made.
- New project management positions have helped project implementation but tracking project progress still needs to be improved in some areas.

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

Seeds: All seeds used in the establishment of nurseries are from local sources with clearance from the national agricultural research institute (SLARI), e.g., they are indigenous shade grown,

disease resistant, and marketable varieties. The project team is working with SLARI re: grafting with the improved yielding varieties to see the potential for improving yields.

Cocoa market: there is definitely demand for Gola cocoa varieties in international markets, bolstered by the Gola Fairtrade certification. International chocolate producers have also requested that we obtain organic certification, which is in the workplan and should happen in the coming year (Gola cocoa is presently grown organically). Regarding the global cocoa sector, there are different market segments with different prices and opportunities. Quality and storytelling are important elements to reach higher paying markets. The Gola cocoa has an interesting story, and capacity building projects to improve the quality of the beans. Several containers of the cocoa have reached Europe, USA and UK, so there are already insights on the quality and validation of the cocoa and its story. All this increases the potential to reach more chocolate makers in the premium market segment. Currently, there is a trend where deforestation and agroforestry receive more attention in the industry. One of the main questions underpinning this project, is how cocoa production can play a positive role in restoring the forest and biodiversity.

The cocoa component relies on indigenous varieties that prefer to be grown in the shade of other trees, thus protecting the forest and preserving biodiversity. The aim is, through marketing, to obtain a 'forest friendly' premium for farmers through the negotiation of good prices for produce and to leverage improved farmer incomes. The AR2 described demonstration plots being planted and in addition to nurseries, there is a demand for improved agroforestry intercropping with cocoa, to the extent that a project has been developed with the Jersey Overseas Aid (JOA) to pilot four promising intercropping demonstrations with support from ICRAF. There is also a demand from farmers for cocoa producer and processing training to expand the cocoa component and to participate in the farmer association and apex organisation, which exports cocoa internationally.

As it takes 4 years to first fruit production, we have established a well-managed process of replacement through the nursery network as old stock is retired, this improving yields. With training focusing on sustainable crop husbandry techniques for the existing mature stock.

As pointed out in the review indigenous trees usually grow much more slowly than the cacao and consequently do not produce shade within a meaningful time scale. We therefore grow cocoa in nurseries and plant them out into young secondary forest that has been established for a number of years selecting locations that have clearings or where an old tree has died leaving room to replant out cocoa seedlings. Farmers are very familiar with the seed of the indigenous species of cocoa used and are able to select seeds of high quality. We also used varieties and selection from SLARI. Both local farmers and researchers are experienced in seed and plant selection of both cocoa and timber varieties. There are also varieties of timber trees, specifically grown for construction, that mature more rapidly which can be grown alongside cocoa.

10. Other comments on progress not covered elsewhere Please use this section to provide any further comments on progress that have not been covered elsewhere in this report. Issues that might be covered in this section include:

There have not been any major changes in the design or strategy of the project this year. Most of the constraints and how these have been overcome have already been discussed earlier in the report.

The main risks remain financial reporting delays, although accurate it takes time to put the reports together and process information.

11. Sustainability and legacy

Rainforest Trust proposal re extending 'Darwin' to more FECs.

Using REDD+ resources to do same.

This project will result in the establishment of corridors made up of community conservation zones within 37,427 ha (92,483 acres) of the REDD+ leakage belt surrounding the Gola Rainforest National Park (GRNP) in Sierra Leone, connecting GRNP, Gola Forest National Park (GFNP), Foya Proposed Protected Area and the community forests on the Liberian side of the border, a total of 383,714 ha (948,176 acres). Main goal: Create and protect community conservation zones to connect 383,714 ha (948,176 acres) of protected areas in the transboundary Greater Gola Landscape. Principle objectives and activities include:

1. Use existing relationships at national, chiefdom and community level to support policy and legislative development for community conservation zones within community forestry in Sierra Leone.
2. Develop relationships with communities of 33 villages not previously worked with and identify their needs, map community land use, and understand its historical profile, including biodiversity value and areas that could form corridors.
3. Using local knowledge as well as rapid survey techniques, survey potential community conservation zones/corridors.
4. Set up Natural Resource Management Committees (with good representation of women) in each of 33 villages and train members in literacy, numeracy, and good governance. Support them to identify community livelihood strategies to be supported by REDD+ funding.
5. Negotiate MoUs with communities identifying areas that could form community conservation zones/corridors in return for REDD+ support.
6. Work with 47 villages (33 plus 14 Darwin villages) to implement MoUs including establishing community conservation zones (funded by RT) and community livelihood strategies (funded by REDD+).

Gola Rainforest National Park in Sierra Leone is made up of three blocks. A REDD+ project (2012-2042) protects GRNP and aims to keep deforestation in the leakage belt below project baseline levels (2.5%). This is to demonstrate that deforestation that would have taken place in GRNP is not displaced into the leakage belt. However, deforestation even below 2.5% will soon result in isolation of the three blocks of GRNP from one another and from the PAs over the border in Liberia (see Map 1).

To reduce deforestation in the leakage belt, communities receive REDD+ funded agricultural training designed to improve livelihoods/reduce the need to exploit community forest. Even so, deforestation continues (In 2018-2019 deforestation of extant forest across the chiefdoms which the Rainforest Trust Proposal Areas straddle varied between 5.8% and 38.5%.

Learning from a pilot project funded by the UK Darwin Initiative we will work with communities in the designated Areas to (i) identify forest (or other habitats e.g., swamp or river) in the leakage belt which form corridors between GRNP blocks or GRNP and GFNP or Foya. We will link protection of corridors to tailored support to increase yields on existing farmland through revised MOUs (Conservation Agreements) funded sustainably by REDD+.

Unlike Liberia, where land is officially owned by the government, in Sierra Leone it is customarily held by family lineages and administered via the Paramount Chiefs – in this case of the seven chiefdoms which surround GRNP.

Land to be designated as community conservation zones will be identified through consultations with communities as areas of high conservation value and may be community forest or other key habitat e.g., swamp. Community land ownership is based on where people have cleared forest for farming. For community forests that have never been cleared, ownership is based historical conquest by ancestral warriors. In practice, whichever family has the nearby farmland is likely to also claim the community forest land. However, community forests are considered 'for the community', and resources are treated as communal. From our current experience (Darwin project) each community comprises 1-5 land-owning families, depending on size and history (median in the Darwin communities is 3.5). The family heads are generally embedded within the decision-making elites, e.g., as quarter-chiefs of a town. As such they are already part of town leadership councils and will automatically be involved in decisions like establishing community forest conservation zones.

The leakage belt is most threatened by small scale logging carried out by individuals with chainsaws supported by rich people from outside (Kenema, Bo, and Freetown). We have no knowledge of concessions being given for oil gas or minerals within the buffer zone. We know of one small scale logging agreement being discussed by families in Malema chiefdom and rumours of others in Nomo chiefdom. If we can deliver this project, i.e., work with communities to help them plan land use and conservation around the GRNP we can minimize impact of small-scale logging on the protected areas and create corridors between them through creation of community conservation zones.

12. Darwin identity

This is not the first Darwin grant that RSPB-Gola has received and as the UK is the biggest bi-lateral donor in Sierra Leone it is likely that there is a higher-than-average recognition of the Darwin Initiative in Sierra Leone.

The following audiences are now likely to be more familiar with Darwin:

High Level of Recognition: (i) community leaders (e.g. Paramount Chief, village and section chiefs, Women Leaders, Youth Leaders, VSLA Committees and Farmers of the 14 local communities in Malema Chiefdom that are the direct recipients of Darwin funding); (ii) local government officials (e.g. the Resident Minister, local MPs and Forestry Development Officer through participation in Darwin project meetings); (iii) GRC Directors, Senior Management Team and GRC / CSSL staff directly involved in the project; (iv) INGOs in Sierra Leone.

Probable Medium Level of Recognition: (i) the rest of the members of the 14 local communities in Malema Chiefdom that are the direct recipients of Darwin funding; (ii) Ministry officials within the Ministry of Environment; (iii) GRC and CSSL staff not involved directly in the project.

Probable Lower Level of Recognition: (i) NGOs in Kenema; (ii) forest edge communities in the 7 chiefdoms and communities on the way to Malema (through day-to-day visual sighting of the Darwin project vehicle); (iii) CSSL members through meetings and newsletter.

GRC's social media presence and platforms are currently being 'refreshed' and when fully operational again will make due reference to and highlight the DI project.

13. Impact of COVID-19 on project delivery

We had to replan and re-budget the whole project in response to the delay cumulated as an effect of the repatriation and furlough of RSPB staff based in Sierra Leone, and of the limitation in some of the fieldwork due to movement restrictions, reduced working hours, and curfew. There is a residual impact on the project in terms of the speed in which some activities could be implemented, but we are fairly in line with the timetable submitted alongside the 2020 Half Year Report in a change request, and that included a request for a 6 month no-cost extension to the project. No change request was submitted in December 2021, as we are now on track with the revised timetable.

14. Safeguarding

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

The RSPB Safeguarding policy was last updated in Dec 2019. All staff (and appropriate volunteers) who join RSPB are required to undertake and pass Safeguarding Level 1 training within the first three months of joining and must refresh their training every 3 years. This includes the development of a plan of action around their jobs that needs to be agreed with their line managers. Staff who are in regular contact with children and vulnerable groups are required to undertake and pass Safeguarding Level 2 training. All RSPB staff involved in this project have undertaken and passed their Safeguarding Level 1 training but are not required to undertake Safeguarding Level 2 training. RSPB is also committed to ensuring that the partners it works with also have clear safeguarding policies and procedures in place. To this end a policy on safeguarding was developed for GRC in Mar 2019. In Year 3 a safeguarding policy was adopted and in Year 4 a stand-alone gender policy (drafted) will be adopted by GRC

15. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2021 – 31 March 2022)

Project spend (indicative) since last Annual Report	2021/22 Grant (£)	2021/22 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)	██████	██████	0%	n/a
Consultancy costs	██████	██████	0%	n/a
Overhead Costs	██████	██████	0%	n/a
Travel and subsistence	██████	██████	0%	n/a
Operating Costs	██████	██████	0%	n/a
Capital items (see below)	██████	██████	0%	n/a
Monitoring & Evaluation (M&E)	0.00	0.00	0%	n/a
Others (see below)	██████	██████	0%	n/a
TOTAL	133,482	133,482 (draft)*		

*Table completed on basis of change request submitted in December 2021. All financial figures are currently being compiled as part of the final 21/22 financial report due, for which an extension until the end of July 22 has been requested. We anticipate that there may be a small underspend under the Staff Costs/Overheads categories but will confirm actual figures once all paperwork has been reviewed and compiled.

16. **OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes**