

Darwin Initiative Main and Post Project Annual Report

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

Submission Deadline: 30th April 2020

Darwin Project Information

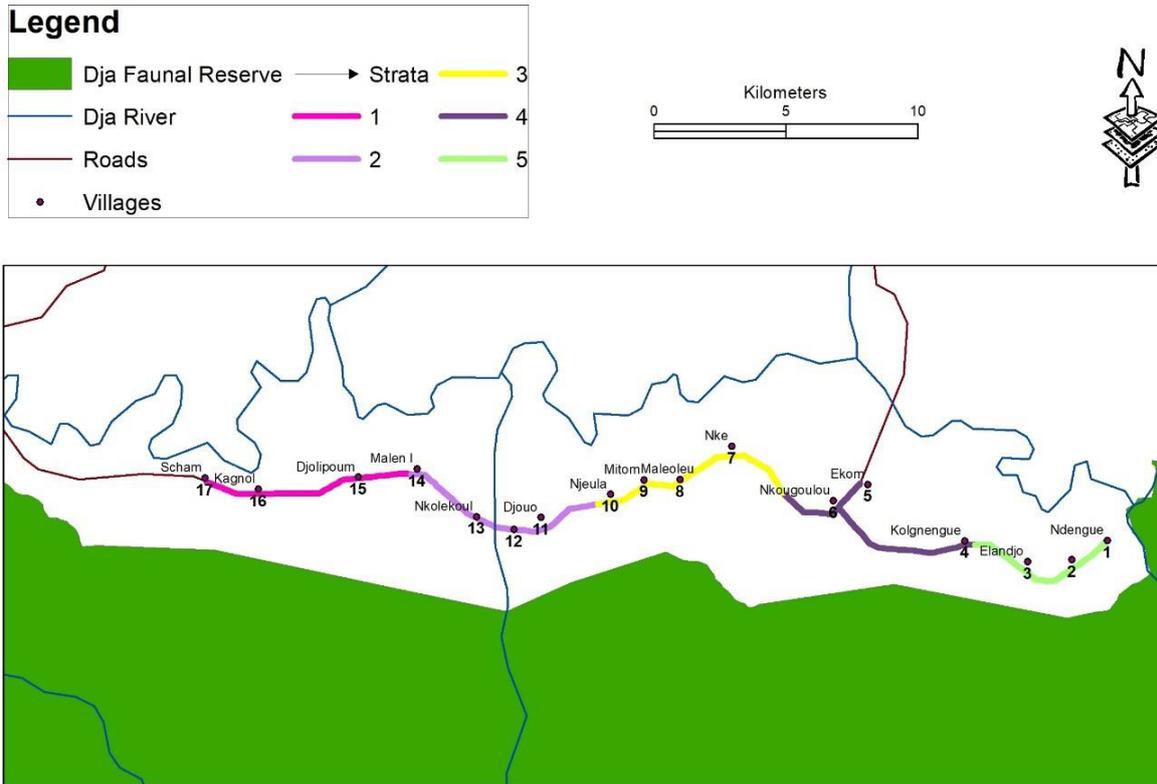
Project reference	24-005
Project title	Enabling rural poor to help protect biodiversity of Dja, Cameroon
Host country/ies	Cameroon
Contract holder institution	Antwerp Zoo Centre for Research & Conservation (CRC), Royal Zoological Society of Antwerp (RZSA)
Partner institution(s)	African Wildlife Foundation (AWF), Living Earth Limited (LEL), Association de la Protection de Grands Singes (APGS), Tropical Forest & Rural Development (TF-RD), Fondation Camerounaise de la Terre Vivante (FCTV)
Darwin grant value	273,678 GBP
Start/end dates of project	1/4/2017 – 31/3/2021
Reporting period (e.g., Apr 2018 – Mar 2019) and number (e.g., Annual Report 1, 2, 3)	1/4/2019 – 31/3/2020 Annual Report 3
Project Leader name	Nikki Tagg
Project website/blog/Twitter	http://www.landscapeconservation.org.uk/darwin-project
Report author(s) and date	Neil Maddison, Adi Nwafi, Donald Mbohli, Mama Mouamfon, Nikki Tagg, 30/4/2019

1. Project rationale

Working alongside law enforcement efforts, which are funded separately, we empower local communities to play an increased, critical role in natural resource management of the Dja landscape, Cameroon, and enable them to generate alternative protein sources and income, incentivising behavioural change, and delivering practical benefits to conservation and development in poor rural communities.

The northern Dja buffer zone is home to 17 main communities; the region’s poorest and first to be negatively-impacted by the decline in health of the Dja Faunal Reserve (DFR, map below). Hunting by men and bushmeat trading by women play important livelihood and cultural roles, providing income-generating opportunities and access to protein. Overhunting and illegal exploitation promotes unsustainable offtake, threatening long-term food security and ecosystem viability. As hunters are pushed further into DFR to source meat, and outsiders hunt/purchase in the area, biodiversity is lost, and the DFR’s UNESCO World Heritage Site status is severely threatened. People live in poverty, without the skills and support required to change from subsistence→trade, and with no affordable alternative source of animal protein other than unsustainable hunting.

NORTHERN PERIPHERY OF DJA FAUNAL RESERVE



We face a choice: cancel the DFR's status (decreasing law enforcement, and the food security for rural poor will plummet), or protect the Reserve so that it can act as a sustainable source for replenishing non-threatened species outside of the Reserve, thus providing wild-caught meat protein for local communities and preserving traditional ways of life. Hunting inside the Reserve is illegal, it is increasingly difficult to meet family demands and therefore a proportion of local communities respond to incentives. This project maximises on this desire to change to encourage cultural change (hunting production/sustainable, legal access to protein). A locally-managed sustainable-trade model recently revealed positive attitude changes and increased community ownership through participatory learning (mid-term evaluation, Darwin 20-007).

However, such models cannot address high wild-caught meat dependency alone: simultaneous livelihood alternatives (income/protein) are required to avoid a food security crisis. We collaborate with partners specialising in cocoa-farming to develop old fallow and seek certification for previously-established cocoa programmes and externally-funded new programmes to work as long-term financial-income alternatives. For intermediate, short-term protein, sustainable fishing in the nearby River Dja and its tributaries has arisen as a potential option from discussions with communities.

In the absence of conditionality/sanction mechanisms, alternatives can become additional rather than substitutional. To prevent additionality, and address those people not susceptible to behavioural change, simultaneous law enforcement/anti-poaching is underway (CAWHFI and ECOFAC: AWF, Zoological Society of London [ZSL], together with Services of Conservation of the Dja [SC-Dja]).

2. Project partnerships

CRC assumes overall responsibility for project leadership and management, reporting and administration, and data analysis. CRC has been supporting, financially and technically, the Cameroonian association APGS since 2001, a collaboration which has focussed on conservation research and small-scale development investments in the northern periphery of the DFR. Thus, both an expert team of conservation scientists at CRC, and an experienced and skilled team of technical and logistic staff in Cameroon, enables the provision of excellent technical leadership,

mentoring and development support needed for local partners (APGS, FCTV and TF-RD) to excel in the design and delivery of community-focused outputs. Based on this structure, Y2 of the project has continued to build on the good progress made in Year 1.

Externally, CRC, AWF and LEF have held quarterly meetings in Antwerp to discuss all aspects of the project, including the remote management of in country partners, year planning and reviewing, etc. Each of these partners has a close collaboration with one of the in-country partners, respectively, therefore ensuring that all plans/decisions/discussions had in Antwerp are clearly communicated and translated to Cameroon and the project on the ground. Similarly, in country partners (APGS, TF-RD and FCTV) have held monthly meetings in Cameroon for all personnel involved in rolling out Darwin activities in the field. All meetings have been thoroughly minuted, and distributed to all partners, who are then invited to comment, respond, contribute to discussions, etc.

To some degree, all partners are involved in the decision-making processes, and all are also concerned with some aspects of M&E relating to the outputs towards which they are focused. For example, although the overall M&E programme is being overseen by CRC and carried out on the ground by APGS, both the other in country partners (TF-RD and FCTV) are also conducting additional, targeting M&E regarding specific baseline information or measurement of indicators related to outputs 1 and 2, respectively.

One area we are aware of, and is being analysed, is that there is the potential for conflict of interest between some of the partners activities, notably the establishment of a private sector organisation that could benefit preferentially from donor investment after public funding has finished. The involvement of the private sector to help ensure sustainability is welcomed, but it is recognised that the process of assigning benefit must be clear, transparent and implemented with donor agreement rather than being 'assumed' to be the case. During a mid-term review of the project by Darwin representatives, this issue was highlighted, recommendation given and is now being assessed by one of the project partners (Living Earth), with a report due back by mid-term Year 3.

3. Project progress

This section (3.1- 3.5) is the main narrative report on project progress in the last year, and should be a flowing paragraphed presentation written in a formal style. Sub-sections reflect the progress against the project's logic. We do not require a summary at the start, just clear reporting under 3.1 to 3.5. Please ensure that you clearly refer to evidence to support the narrative.

Annex 1 requires you to provide a condensed version of this narrative against the logframe. In this section and in Annex 1 please report against the latest approved version of the logframe. Please also include your full project logical framework in Annex 2.

3.1 Progress in carrying out project Activities

Monitoring and Evaluation (APGS)

Bushmeat Offtake data collection

The aim of this survey is to investigate bushmeat off take and hunting efforts of hunters in the Dja reserve. The bushmeat offtake survey questionnaire (C 1.1) was written by project staff. Six local villages were chosen for data collection and georeferenced information (C 1.2) of each was recorded. Six meetings were organised by project staffs in each of the villages. Six local workers (anqueteurs) and six assistants who are all base in the villages were selected - two from each of the six villages. Selection criteria include availability in the village, good collaboration with other villagers, knowledge of the different animals and hunting methods used, and educational level (able to read and write). Local workers and assistants were trained on data collection. Hunters were sensitised to present all bushmeat brought from the forest to anqueteurs who recorded the data on sheets. Assistants continued to collect data in the absence of local workers. The 4th, 5th and 6th set of data have been collected, some of it entered in excel and the rest being entered. Bushmeat offtake data in 2019 was collected as planned.

Fish offtake from river Dja

The aim of this survey is to measure the quantity of fish caught from river Dja by fishermen. Villagers were sensitised and given questionnaire to record their fishing efforts – quantity of fresh and dry fish caught, fishing period and quantity consumed and sold. Data collection is currently going on in the villages.

Alternative income (TF-RD)

Discussion with cocoa farming technicians on cocoa planting for the 2019/2020 seasons

The aim was to plan cocoa farming activities with cocoa farmers in 2019. 5 meetings were organised in the five zones and a total of 98 villagers (75 men and 23 women) participated and the work plan for the 2019 cocoa session was established.

Setup of a new cocoa nursery in Maleoleu

The aim of this activity was to setup a new nursery in Maleoleu to produce more cocoa plants to plant in the 25 hectares that were created in year two (see previous report). The nursery was created and 15,500 young cocoa plants were nursed.

Follow-up of the nursery created in Maleoleu

A follow-up campaign was setup by project staffs in collaboration with local cocoa farmers to ensure a good evolution of young cocoa plants in the nursery. The follow-up approach together with local cocoa technicians was successful and young cocoa plants have grown well in the nursery.

Follow up of newly created cocoa farms in the 17 villages

Three follow-up missions were carried out in the 17 villages by project team. 56 cocoa farms were visited and the evolution of cocoa farms was satisfactory. Advice was given to cocoa farmers on the state of their farms to improve evolution.

Geo-localisation and mapping of new cocoa farms in the 17 villages

New cocoa farms created were geo-localised and mapped out. The result indicated a good land use pattern by villagers. All cocoa farms created were found around the villages and not in the buffer zones, confirming the agreement in the reciprocal environmental agreement (REA, see previous reports).

Cocoa tree planting

A cocoa tree campaign was organised in one of the villages. 78 cocoa farmers participated and received 4,500 plants. These plants were planted in the new cocoa farms created.

Alternative Protein (FCTV)

Community engagement in fishing

The focus during the last six months of year three was on supporting self-management of the common initiative group ('GIC') by its members, with technical assistance from FCTV. Common initiative groups in four sectors take the lead in managing fishing activities by the villagers. This strategy will be continued during year 4 (final year), to sustain activities after end of project, through building self-mobilisation of the GIC.

Improve fishing in the Dja river and tributaries

The last set of fish farming material was handed to management members of the GIC; they will continue to distribute the equipment to regular fish farmers in the four sectors in the Dja. The new fishing materials, safety equipment and preserving processes is being utilised by fishermen and women in fishing.

FCTV collected samples of fish in collaboration with Master degree students from University of Douala. The aim of this study is to improve the storage and marketing of fish. The data is being analysed.

Organisation of communities in fishing valorisation groups

Three capacity building sessions were organised by the project staff in the villages in collaboration with a community expert. The focus was on organisation of fishermen and commercialisation of fishing products. The local expert gave advice based on the local context. The UNFAO approach – “analyse et développement des marchés (ADM)”, which is adapted to local contexts, will be used.

Outreach on fishing and marketing of fishing products regulations

Fishing rules and regulation have been discussed with villagers in the 17 villages and their views were considered. Booklets and postal containing these rules and regulation have been produced, distributed, and again explained to them. They are currently applying them in fishing.

FCTV staff again worked closely with the MINFOF conservation unit of the DFR to deliver the outreach topic team to villagers. This was led by the MINFOF head of the northern sector of the DFR and his sensitisation team.

Participation in national conferences on fishing

The project staff participated in the 26th BIOSCIENCE annual conference in Maroua Cameroon, and presented a poster on “*contrainte liées à la pratique du stockage du poisson fume dans la boucle nord de la Reserve du dja (Est-Cameroon)*” which was later published in the *International Journal of Biology, Chemistry and Science* 8392, concerning the techniques used for maximising the preservation of fish using a smokery.

3.2 Progress towards project Outputs

Output 1 Alternative income (TF-RD)

Baseline condition;

Poaching of wildlife was the main income generating activities for villagers in the 17 communities. They hunt unsustainably, killing endangered species including gorillas, chimpanzees, elephants, pangolins, etc for commercialisation. Middle men from urban towns visit the villages on a regular basis and provide poaching material; these interns then buy the illegally obtained bushmeat and transport it - mostly on motor bikes - to the nearby towns for sale.

Change recorded to date;

1. 15,500 additional cocoa plants were planted in the recently created cocoa plantations
2. Increased capacities of local cocoa farming technicians on nursery follow-up
3. Increase capacities of cocoa farmers in the 17 villages on cocoa cultivation
4. 4,500 trees planted in cocoa plantations

Source of evidence;

Evidence of additional cocoa plants are pictures of young cocoa plants in the nursery in Maleoleu. Evidence of trees planted in cocoa plantations are pictures and those of local capacity buildings are pictures taken during workshops

Output 2 Alternative Protein (FCTV)

Baseline condition;

The initial source of proteins to the local population in the 17 villages was bushmeat hunted in the surrounding forest. They hunt unsustainably for income and protein, with endangered species being threatened locally with extinction. Villagers also fish in the Dja river, with no measures put in place for sustainability owing to limited expertise in fishing. The local fishing method was used - fishing nets with very small holes. These caught all fish, including the young fish that should be allowed for populations to recover. The non-fishing season was not respected, and fish was caught during the reproduction season. The local smoking method was detrimental to the environment and the fisherpeople's health. The firewood was obtained illegally from the forest to provide the material for the smokery. The method was not effective in that the crudely made smokeries burned at uncontrollable temperature and required significant amounts of wood per

session. The result was that fish would not be conserved for long and had to be consumed quickly – limiting the use of fish. Human lives were also lost during the local fishing method due to a lack of knowledge on effective fishing techniques (e.g. size of nets making them difficult to land in the small pirogues) and the use of safety equipment.

Change recorded to date;

- 1. Improved capacity of members of the common initiative group on managing fishing activities*
- 2. More fishing material distributed to fisherpeople in the 17 villages*
- 3. Improved capacity of fisherpeople on commercialisation of fishing products*

Source of evidence

Sources of evidence are pictures taken during capacity building of members of the common initiative group and pictures of fishing material distribution.

Output 3 Bushmeat offtake data collection

The 4th, 5th and 6th sets of bushmeat offtake data have been collected in the villages. Some of it has been entered in excel file and the rest is being entered. Bushmeat offtake data in 2019 was collected as planned.

Data on fish offtake in the Dja river is being collected by villagers on an ongoing basis so as to measure the amount of fish being taken.

Output 4 Policy and best practice (All)

Some of the best practices expected from villagers in this project are to actively involve them in conserving wildlife resources in the surrounding forest. Villagers in the 17 local villages where the Darwin project is targeting have accepted to fish sustainably along the Dja river as defined in the REA. However, many of them are unhappy because of the unsustainable exploitation of this river by villagers on the other side – north of the river. They have called on the Darwin partners executing the Darwin project to sensitise villagers on the other side of river Dja or possibly involve them in the project to ensure the river is used sustainably on both sides. This is one of the positive outcomes of this project which should be encouraged.

3.3 Progress towards the project Outcome

- Indicators are adequate for measuring outcome. An increase in household proteins will be confirmed by the household socioeconomic survey. Prior to this survey, the common initiative group of fish farmers will be organised by project staffs to record data on fish consumed in households. This ongoing data together with the survey will constitute adequate indicators. Similarly, an increase in household income will be confirmed by the household socioeconomic survey. Also, cocoa farmers cooperative will record data on their yields and sales to improve on indicators.
- The project will achieve its outcome by the end end of funding. Alternative proteins source will be installed and functioning. The alternative income source will equally be setup and functioning. However, cocoa plantations will not all be matured to yield income. This means income will come in after this funding. Measures taken now to improve this situation include the setup of a cooperative of cocoa farmers that will continue to manage cocoa farming after funding. Same with fish farming that will be managed by the common initiative group. Indicators are adequate for measuring outcome. In most cases, these indicators are pictures taken during project execution. These are good evidence to confirm that the activities were executed in the field. There has been some disruption in admin from CRC, given the Covid-19 pandemic, as most CRC staff were put on temporary unemployment, and then only a skeletal staff have been re-hired and only part-time. This has meant delays in accounting of Y3 expenses. We are doing all we can to make sure that this does not disrupt or delay Y4 activities.

3.4 Monitoring of assumptions

Monitoring of critical conditions (risks and assumptions) is crucial to project success. Report on whether Outcome and Output level assumptions still hold true. If there have been changes in assumptions, in what ways is the project meeting or managing these? Please support comments with evidence.

Assumption: That fish farming would prove to be attractive to the local people as a way of obtaining protein

Comments: Due to the presence of the Dja river, and the abundance of fish, the villagers determined to increase fishing efficacy from wild fishing as oppose to fish framing. This was identified early in the project and the project was amended

Assumption: That fish would be used predominantly for local consumption

Comments: Local people welcomed the idea of fishing rather than illegally hunting, but showed a preference for utilising the increased amount of fish obtained as a form of revenue, selling locally at first, but looking to expand as their expertise in preserving the product (smokerries and solar powered freezers) increases

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

Please see below – contribution to SDG

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

Briefly comment on which SDGs are relevant to your project and what contribution your project has made to these SDGs in the 2019-20 Financial Year.

The project makes a contribution to the following SDG:

1. No Poverty: through the creation of revenue from cocoa growing and sales of fish
2. Zero Hunger: by providing access to sustainable, accessible sources of protein (fish)
3. Good Health and Well Being: by supporting food security
5. Gender Equality: through supporting trade in new products, which are carried out principally by women and thus increasing the importance of women in the communities
12. Responsible Consumption and Production: of two key commodities produced by people living in the buffer zone of a protected area: cocoa and fish
13. Climate Action: although not a main focus for the project, cocoa grows better as an under-storey crop, which encourages reforestation and the case for deforestation; fishing smokerries are being made more effective, thus cutting the amount of forest wood needed, and supported by the introduction of frozen products as an alternative to smoking for preservation
17. Life on land: one of the main drivers of illegal hunting is to generate revenue for poor people. The introduction of sustainable, legal alternatives is already showing signs that the strategy is shifting behaviour, to the benefit of threatened and protected wildlife

Project support to the Conventions, Treaties or Agreements

The project is supporting Cameroon to meet its commitments to the CBD, principally by addressing pressures on threatened species from hunting for food and trade. Notable species that will benefit from additional protection include *Gorilla gorilla gorilla*, *Pan troglodytes troglodytes*, *Loxodonta cyclotis*, *Smutsia gigantea*, *Phataginus tricuspis*.

The project is still on course to give additional support as laid out in the final application i.e. the project contributes to the first two objectives of the Convention on Biological Diversity,

particularly the conservation of biological diversity and the sustainable use of its components. The project contributes to the implementation of the following articles of the CBD: 8c, 8d, 8i, 8j, 10a, 10c, 17.1, 17.2. It will also contribute to the implementation of Cameroon's National Biodiversity Strategy and Action Plan revised in 2012 which highlights the threat of illegal exploitation of wildlife for food and commercial purposes and calls for changes in behaviour (Goal A) from local to national level and the generation of wealth from biodiversity to incentivise conservation and sustainable use (Goal C).

The project enables Cameroon to deliver on Aichi Goals B by reducing the direct pressure on protected species in Dja from hunting, C improving the status of biodiversity by safeguarding the ecosystems and species of the Dja landscape, and E by enhancing implementation through participation, planning, knowledge management and capacity building among the reserve managers and communities and specifically Aichi Targets 12 (longer-term goal: extinction of known threatened species prevented and conservation status improved) and 18 (indigenous knowledge and innovative practices of local communities are respected and integrated into implementation of the convention).

Within Cameroon, the project contributes the following programmes of work:

- National Millennium Village Framework: The framework builds on the strategic approaches expounded within the Action Plan of Strategy for Growth and Employment (SGE/PRSP II)

- Country programme (CP) Outputs:

- 3. Community based organisation financial self-capacity is empowered
- 4. Capacity of local community strengthened in terms of poverty reduction

Project support to poverty alleviation

There is evidence that the project is working to alleviate poverty: the project has supported improvements in fishing practices by the local population and have provided appropriate fishing material, and have reinforced local capacities on the local production of some of these material to ensure sustainability, so as to enable both an increase in availability and longevity of animal protein, villagers have started having enough fish for local consumption and will be able to sell surplus (legally). Cocoa plantations rehabilitated have started yielding income to villagers for livelihood amelioration, more cocoa plantations being setup will add to existing ones to increase income sources for poor people. Villagers will be helped to meet their needs with income raised from cocoa.

The expected beneficiaries of this work are: the local population in the project area will benefit from alternative income sources and eventual livelihood amelioration. Wildlife populations in the surrounding forest will benefit from reduce human pressure on them and on their habitats. The government will benefit from improved anti-poaching systems and local capacity for self-determination is being supported.

We expect direct impacts from this project: there will be reduced human pressure (conservation) on wildlife population in the surrounding forest that will be confirmed by the ongoing bushmeat offtake, as well as improved local knowledge on cocoa cultivation and sustainable fishing. This will result in ameliorated local livelihoods. Some current direct impacts include cocoa plantations rehabilitated that have started yielding coca and is currently an alternative income activity. There is fishing in the Dja river with the use of fishing material that fishermen received. These impacts are not only direct; new cocoa farms will soon start yielding to add to rehabilitated ones to constitute a good long-term source of income for villagers. The common initiative group of fishermen currently receiving training on future ownership and management will guarantee continues impact on fishing along the Dja river.

We have had some notable achievements this year: More cocoa plants have been nursed and distributed to cocoa farmers to plant on new cocoa plantations created, local capacities on follow-up of cocoa nursery has been improved from many training sessions organised, more fishing material has been distributed to villagers, capacities of members of the common initiative group has been reinforced towards ownership and self-management, the 4th, 5th and 6th sets of bushmeat data has been collected to eventually evaluate the trend in the change in

human pressure on wildlife population, there is ongoing data collection on fish offtake in the surrounding villages.

5. Consideration of gender equality issues

There is evidence that the project is working to address gender equality: the signature of REA to benefit from this project was a free and voluntarily decision opened to men and women. Many women signed to be part of the project. cocoa and improved fishing are both for men and women. Also, all training sessions, meetings, etc organised by project partners are attained by men and women.

The expected direct gender equality impacts include; women have received training on improved fishing and cocoa farming. They have received recommended fishing material and some have ameliorated and created new cocoa farms. The improved fishing knowledge is currently being applied in fishing with the help of material provided and will continue at the end of the Darwin project. Women with rehabilitated cocoa farms have started harvesting cocoa and together with those who created new plantations will continue at the end of this project to harvest cocoa and sell for livelihood amelioration.

As noted above, the role of women in trading food products has been identified previously through research undertaken by several of the partners. As such, we are focussed in Year 3 on building the ability of women to trade in three main animal protein products: fresh fish (which is fundamentally already established from traditional ways of working); preserved fish produced from the use of smokeries; frozen fish through the provision and training in the maintenance of solar powered freezers

6. Monitoring and evaluation

At this stage of the project, it is difficult to confirm achievements with figures from the two systems above since data collection is ongoing. A proper confirmation is when the initial situation, the current situation and the final situation are put together. This will be confirmed at the end of year 4. However, the successful evolution of newly created and improved cocoa plantation is and efforts of the local members in management of the common initiative group of fish farmers are indication of success.

More fishing material distributed to villagers to add to the existing ones that are currently being properly used, and the production of local fishing life jackets by villagers' indicators of achievement and are sustainable. Villagers received working material and actively participated in the production of local life jackets.

Cocoa farms created/rehabilitated that have started yielding cocoa and smoking sites constructed and currently being used by villagers in smoking fish are indicators of achievement.

No change has been made in the M&E plan.

7. Lessons learnt

What did not work well include;

The project continues to face the risk from the Conservation Service 'insisting' that eco guards must accompany the project team, and pay accordingly. This is due to the fact that historically MINFOF staff have always taken interventions funded by international donors as a potential source of money.

Rehabilitated cocoa farms have started yielding cocoa and fish farmers have started using material received to fish. However, commercialisation of these products by villagers is facing challenges owing to illegal tax requested by some government authorities in Somalomo. This tax reduces the profit made by these farmers and at the end, their efforts are not compensated.

The budget received by each project partner in year 3 for project activities was less than what was planned and consequently all activities planned were not fully executed.

Villagers south of river Dja who are the target in the project and are keeping to rules and regulations stated in REA (for example fishing sustainably in river Dja) are in conflict with those north of the river who are not involved in the project and are fishing unsustainably.

The application of REA by villagers immediately after signing was not realistic since alternative income activity (cocoa) at the initial stage of the project was not productive to replace wildlife poaching for income.

What worked well include;

To ensure sustainability on the alternative income and proteins sources for villagers, this project should train and empower villagers to eventually take over management before the end of year 4. This training and empowerment have been quite successful during year 3 of the project both on cocoa and fish farming. The common initiative group on fish farming was managed by it managing tam with less involvement of FCTV.

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

Sensitise government authorities in Somalomo to ensure that illegal tax on products are removed to allow villagers sell their products at good prices

A part-time project coordinator based in Somalomo alongside the conservation service will help to liaise with the local communities in project execution and to capture all information about project success and difficulties.

- What recommendations would you make to others doing similar projects?

When working with a number of partners, the use of project team regular meetings has proved very useful to ensure coordination of activities, sharing of lessons and ensuring a joint approach to managing challenges such as the demand of 'motivation' (i.e. bribes) from government staff.

Introducing many short-term income activities in the project will enable villagers raise income to meet their needs while long term projects such as cocoa matures to yield income. This will enable villagers who were initially relying on wildlife for income to stop.

- How are you going to build this learning into the project and future plans?

Sensitise local government authorities to recognise negative consequences of illegal tax on agricultural products and to stop it, to allow villagers raise income from alternative income sources to poaching.

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

The main view of project partners is the illegal tax placed on agricultural products by local government authorities in Somalomo which is taking part of the profit from villagers. Sensitisation of these authorities by project staffs to explain the negative impacts of this tax on conservation and local livelihoods was planned but was postponed due to the covid 19 pandemic.

9. Other comments on progress not covered elsewhere

- Has the design of the project been enhanced over the last year, e.g. refining methods, or exit strategy?

The design and effectiveness of fish smokeries has been a focus for attention, with an analysis of the loss of product due to insect and other invertebrate pests being particularly important. The findings of the research (see attached journal article) has resulted in an amendment of the process such that the smoked fish product stays preserved for longer whilst retaining water content and hence attractiveness of the product (which consequently results in the product having a higher sale price)

- Discuss any significant difficulties encountered during the year and steps taken to overcome these if not already discussed elsewhere.

Please see above re trade barriers

- Does the project face any particular risks?

There is a risk that cocoa prices may fall, making growing the crop less attractive. Diversification of businesses is therefore an important consideration.

There is also a risk that with more effective fishing the recovery rate will be below offtake. This is addressed naturally due to seasonal variations (heavy rains make it impossible to fish and hence populations can recover), and the change in small mesh nets to larger mesh nets.

10. Sustainability and legacy

The project team have maintained dialogue with other principal actors working to help conserve the biodiversity living within the Dja Faunal Reserve, notably through the Dja Actors' Forum, and informal meetings with MINFOF and ZSL.

The project website (www.landscapeconservation.org.uk/darwin-project) is the depository of key information accrued from the project. All of the project reports and findings will be accessible through either the website referred to above, or one of the other project partners' websites in due course, and this process has already begun.

As previously stated, and outlined in the original application, the outcome of the project is to provide *sustainable* sources of income and animal protein such that the pressure from illegal trade in, and consumption of, threatened species and their habitat is reduced. As such environmental sustainability is inherent in the project design. Social changes will be maintained by adoption of new paradigms of livelihood in the project intervention area. Training in cocoa production, trading, improved technologies (e.g. ability to build solar-powered freezers) will also ensure that the action is sustained beyond the life of the project. Changes in government policy (that may occur outside of the project timescale) will also have considerable positive impact on sustainability of action e.g. designation of a sustainable, community fishing zone (CFZ), and the establishment of the parameters for a CFZ is a focus for year 4 (discussions with the Ministry of Livestock and Fisheries has already begun in year 3)

11. Darwin identity

- What effort has the project made to publicise the Darwin Initiative, e.g. where did the project use the Darwin Initiative logo and promote Darwin funding opportunities or projects?

Social media pieces have been put out regularly through the year, and the project website linked to the communication pieces

- How has the UK Government's contribution to your project's work been recognised?

All communication pieces and presentations have included acknowledgement to, and the logo of, the Darwin Initiative as being part of the UK Government's support for achieving the UN SDG

- Was the Darwin Initiative funding recognised as a distinct project with a clear identity or did it form part of a larger programme?

Distinct project. Please see www.landscapeconservation.org.uk/darwin-project

- To what extent is there an understanding of the Darwin Initiative within in the host country and who is likely to be familiar with it?

We are in close contact with the British High Commission in Yaoundé (regional office for west central Africa) and the project was featured in the launch of Darwin Project 25-015 'Why Eat Wild Meat' in April 2019, therefore demonstrating the extent to which there is an understanding and collaborations of the Darwin Initiative project within in the host country.

12. Safeguarding

It is currently not possible to access RZSA Human Resources policies due to furloughing of staff due to coronavirus, but institution safeguarding policies are available or in development, including some or all of the following: anti-fraud and bribery policy, anti-harassment and anti-bullying policy, complaints policy, disciplinary procedure, staff code of conduct, whistleblowing policy. These policies will guide our approaches to zero tolerance for bullying, harassment, sexual exploitation and abuse, protection for whistleblowing, safeguarding and the code of conduct staff are obliged to uphold to ensure high quality work and partnerships. The policies are also designed to detail the process of how to register, investigate and respond appropriately and sensibly to issues raised that are related to safeguarding, disciplinary procedures, and whistleblowing. Although not possible to present in detail here, it will be possible to access (translate from Dutch) and share the respective RZSA safeguarding policies in due course, most likely in the Darwin Y4 half-year report.

13. Project expenditure

Please expand and complete Table 1. If all receipts have not yet been received, please provide indicative figures and clearly mark them as Draft. The Actual claim form will be taken as the final accounting for funds.

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

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

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

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
<p>Impact</p> <p>Insert agreed project Impact statement</p> <p>A biodiversity benefit for Dja landscape, Cameroon, through addressing the main pressures on the ecosystem and species by an improvement in livelihoods, welfare and food security for forest-dependent rural poor.</p>		<p>(Report on any contribution towards positive impact on biodiversity or positive changes in the conditions of human communities associated with biodiversity e.g. steps towards sustainable use or equitable sharing of costs or benefits)</p> <p>Fish farmers have started applying the knowledge gained and material received and produced locally to fish in river Dja. There is availability of alternative protein sources in households (quantity to be confirmed by the ongoing fish offtake survey) and this will reduce human pressure on wildlife. Also, rehabilitated cocoa farms have started yielding cocoa, an alternative income source to poaching to villagers</p>	
<p>Outcome (Insert agreed project Outcome statement)</p> <p>Rural-living people in 22 northern-Dja communities generate protein and income through non-hunting means, contributing to food security and poverty alleviation, enabling less hunting and leading to protection of threatened biodiversity</p>	<p>(Insert agreed Outcome level indicators)</p> <p>0.1 Up to 5000 people in 22 communities in northern Dja periphery exhibit an increase in food security: a 20% increase in grams of meat consumed by household (baseline to be established in 2017)</p> <p>0.2 Up to 5000 people/500 households in 22 communities exhibit a reduction in degree of poverty: net monthly financial income increases by 20% from baseline (to be established in 2017)</p> <p>0.3 Up to 5000 people in 22 communities report % lower proportion of net monthly</p>	<p>(Report against the indicators on progress towards achieving the project Outcome)</p> <p>0.1 Fish farmers received training on fish farming and recommended material for fishing, and have constructed smoking sites in the forest for drying of fish for preservation. They have started fishing and a fish offtake survey was launched in year 3 of the project. Initial data was collected and is ongoing. Will be analysed at end of year 4 to calculate the increase in gram of meat consumed/commercialised by fishermen.</p> <p>0.2 Rehabilitated cocoa farms have started yielding cocoa but newly created cocoa farms are yet to start. Additional farms were created in year 3. Data is</p>	<p>(Highlight key actions planned for next period)</p> <p>0.1 Calculate the increase in gram of meat consumed/commercialised by fishermen.</p> <p>0.2 Calculate the monthly financial income increase from sales of cocoa.</p> <p>0.3 Collect the last 7th and 8th sets of bushmeat offtake data, put all 8 sets of data together to confirm reduction in quantity hunted as alternative income and protein sources from the project matures.</p> <p>0.4 Collect the second set of wildlife inventory to add to the first one that was collected in year 1, compare the two and bring out increases in</p>

	<p>income coming from sale of bushmeat (baseline to be established in 2017)</p> <p>0.4 Abundance of small mammals in surrounding forest shows an annual 5% increase from baseline and that of large mammals shows stabilisation of baseline (to be established in 2017)</p> <p>0.5 Up to 5000 people in 22 communities exhibit a 10% decrease in hunting effort in hunting zones from baseline (to be established in 2017) and no hunting reported in no-take zones</p>	<p>collected on sales of cocoa from rehabilitated farms and in year 4, this will be put together to calculate the monthly financial income increase.</p> <p>0.3 The 4th, 5th and 6th set of bushmeat offtake data was collected in year 3. As alternative protein and income sources mature in the project, the quantity of bushmeat hunted and income raise from sales decreases. The last two sets of bushmeat offtake data will be collected year 4 and the trend in its reduction will be confirmed</p> <p>0.4 Baseline data on wildlife inventory was collected in 2017. The second set of data is plan in year 4 of the project. These two sets of data will be compared to bring out the annual increase in the abundance of small mammals and the stabled number of large mammals</p> <p>0.5 Data on hunting effort is collected simultaneously with bushmeat offtake data. Data sets 7 and 8 are planned in year 4 and at the end, all 8 sets of data will be combined to bring out the trend in hunting efforts as alternative income and protein sources matures.</p>	<p>abundance of small mammals and stability in large mammals.</p> <p>0.5 Collect the 7th and 8th sets of data on hunting efforts, combine all 8 sets and calculate the trend in hunting effort.</p>
<p>Output 1. (Insert agreed Outputs with activities relevant to that Outputs in lines below. Activities relevant to more than one Output should be cross-referenced rather than repeated)</p> <p>A participatory process for training and capacity building made available to 22 rural poor communities, to establish sustainable sources of non-hunting financial income</p>	<p>(Insert original Output level indicators)</p> <p>1.0 Up to 3000 adults with families (40% women) attend 2-day workshops (7 workshops held across northern periphery in year 1) by year 2</p> <p>1.2 75% of trainees (>30% women) register for the activity by year 3.</p> <p>1.3 80% of registered adults report spending >25% of their</p>	<p>(Report general progress against indicators, comment on their appropriateness, and reference where evidence is provided e.g. <i>Evidence provided in section 3.2 of report and Annex X</i>)</p> <p>Five meetings were organised in the villages to plan work on cocoa farming in year 3. 98 villagers (75 men and 23 women) participated. Several other meetings were organised to setup new cocoa nursery in Maleoleu, follow-up the nursery, follow up cocoa farms and to plant trees in cocoa farms. Several meetings were equally organised to train and empower the managing team of the common initiative group of fish farmers</p>	

	'working' time working towards the protein-generating activity by end of year 4		
Activity 1.1 Discussion with cocoa farming technicians on cocoa planting for the 2019 session		5 meetings were organised in the five zones and a total of 98 villagers (75 men and 23 women) participated and the work plan for year 3 cocoa session was established.	Continue with follow-up of cocoa plantations, sensitise local government authorities to take off illegal tax on sales
Activity 1.2, Setup of a new cocoa nursery in Maleoleu		The nursery was setup and 15500 young cocoa plants were nursed and have been distributed to cocoa farmers to plant in the newly created cocoa plantations.	Continue with follow-up of cocoa plantations, sensitise local government authorities to take off illegal tax on sales
Activity 1.3, Follow-up of the nursery created in Maleoleu		A follow-up campaign was setup by project staffs in collaboration with local cocoa farmers to ensure a good evolution of young cocoa plants in the nursery. The follow-up approach together with local cocoa technicians was successful and young cocoa plants grew well in the nursery.	Continue with follow-up of cocoa plantations, sensitise local government authorities to take off illegal tax on sales
Activity 1.4, Follow up of newly created cocoa farms in the 17 villages		Three follow-up missions were carried out in the 17 villages by project team. 56 cocoa farms were visited and the evolution of cocoa farms was satisfactory. Advice was given to cocoa farmers on the state of their farms to improve evolution.	Continue with follow-up of cocoa plantations, sensitise local government authorities to take off illegal tax on sales
Activity 1.5, Geo-localisation and mapping of new cocoa farms in the 17 villages		New cocoa farms created were geo-localised and mapped out. The result indicated a good land use patten by villagers. All cocoa farms created were found around the villages and not in the buffer zones, confirming the agreement in the reciprocal environmental agreement.	Continue with follow-up of cocoa plantations, sensitise local government authorities to take off illegal tax on sales
Activity 1.6, Cocoa tree planting		A cocoa tree campaign was organised in one of the villages. 78 cocoa farmers participated and received 4500 plants. Plants were planted in the new cocoa farms created.	Continue with follow-up of cocoa plantations, sensitise local government authorities to take off illegal tax on sales

<p>Output 2. (Insert agreed Output) Rural-living people in 22 northern-Dja communities generate protein and income through non-hunting means, contributing to food security and poverty alleviation, enabling less hunting and leading to protection of threatened biodiversity</p>	<p>(Insert agreed Output level indicators)</p> <p>0.1 Up to 5000 people in 22 communities in northern Dja periphery exhibit an increase in food security: a 20% increase in grams of meat consumed by household (baseline to be established in 2017)</p> <p>0.2 Up to 5000 people/500 households in 22 communities exhibit a reduction in degree of poverty: net monthly financial income increases by 20% from baseline (to be established in 2017)</p> <p>0.3 Up to 5000 people in 22 communities report % lower proportion of net monthly income coming from sale of bushmeat (baseline to be established in 2017)</p> <p>0.4 Abundance of small mammals in surrounding forest shows an annual 5% increase from baseline and that of large mammals shows stabilisation of baseline (to be established in 2017)</p> <p>0.5 Up to 5000 people in 22 communities exhibit a 10% decrease in hunting effort in hunting zones from baseline (to be established in 2017) and no hunting reported in no-take zones</p>	<p>(Report against the indicators on progress towards achieving the Output)</p> <p>Ownership and management of fishing activities in the 17 communities will eventually be handed to the local population under the leadership of the management team of the common initiative group. Focus in year 3 was on the training and empowerment of this management team to take over from the Darwin project team at the end of year 4. The management team received little assistance from the project staffs in year 3, indicating sustainability in this alternative protein source.</p>	
<p>Activity 2.1. Community engagement in fishing</p>		<p>Focus during the last six months of year three was on self-management of the common initiative group by its members with technical assistant from project partners.</p>	<p>Continue to assist the management team of the common initiative group to increase their managing capacity.</p>

	Common initiative group represented project partners in managing fishing activities in the field. This allows empowerment of the management team of the common initiative group before the end of the project in year 4 to ensure sustainability.	
Activity 2.2. Improve fishing in the Dja river and tributaries	<p>More fishing material was distributed to fish farmers. This material is currently used by fishermen and women in fishing.</p> <p>Samples of fish were collected to analyse to improve storage and marketing of fish. The data is being analysed.</p>	Analyse data to recommend on improve storage and marketing of fish
Activity 2.3. Organise communities in fishing valorisation groups	Three capacity building sessions were organised by the project staff in the villages in collaboration with a community expert. Focus was on organisation of fishermen and commercialisation of fishing products. Orientations base on local context were given by the local expert.	Apply orientations to improve organisation and sales of fish products
Activity 2.4. Outreach on fishing and marketing of fishing products regulations	<p>Fishing rules and regulation have been discussed with villagers in the 17 villages and their views were considered. Booklets and postal containing these rules and regulation have been produced, distributed, and again explained to villagers.</p> <p>FCTV staff again worked closely with the conservation unit of the Dja reserve to deliver the outreach topic team to villagers.</p>	Project partners will continue to accompany villagers to apply fishing rules and regulation
Activity 2.5. Participation in national conferences on fishing	The project staffs participated in the 26th BIOSCIENCE annual conference in Maroua Cameroon, and presented a poster on "contrainte liées à la pratique du stockage du poisson fume dans la boucle nord de la Reserve du dja (Est-Cameroon) which was later on published at 8392-IJBCS. Views of participants were recorded, will be applied to improve fishing in the Dja	Apply inputs of participants to improve management and commercialisation of fish in the Dja

<p>Output 3. Official programmes for behavioural modification (REAs) established, accepted and respected by hunters and meat traders in 22 communities (covering an area of 2500km²)</p>	<p>1 Model of REA officially submitted to national and local government bodies and specific REAs for each of 22 communities presented in year 1</p> <p>3.2 Representatives of 22 communities (40% of number of households of 80% of number of communities represented at each stage) attend series of workshops (21 workshops in 7 locations over first 3 years) in which local authorities attend</p> <p>3.3 Greater understanding of cultural barriers that need to be overcome to shift from hunting based to sustainably-managed resource communities</p> <p>3.4 Communities achieve REA completion (signed, launched) by end of year 4 (up to 6 by end year 2, up to 7 by end year 3, up to 7 by end year 4)</p>	<p>The overall approach with REA is to enable villagers conserve wildlife in the surrounding while benefiting from project activities for livelihood amelioration. A proper implementation of REA by villagers will result to increase abundance of wildlife population in the surrounding forest due to reduce human pressure and ameliorated local livelihoods.</p> <p>A reduce human pressure on wildlife population will be confirmed by mammalian inventory and bushmeat offtake. Baseline data on mammalian inventory was collected in year 1. The second one is planned in year 4. Bushmeat offtake data collection started in year 1. The first 6 sets of data have been collected. The last two are planned in year 4.</p> <p>Ameliorated local livelihoods will be confirmed by fish offtake and socio-economic data. Fish offtake data collection began in year 3 and is continuing. The first set of socio-economic data was collected in year 1. The second set will be collected in year 4 and will be followed by analysis and interpretation.</p>	
<p>Activity 3.1 Bushmeat offtake data collection</p>		<p>The 4th, 5th and 6th set of bushmeat offtake data have been collected in the villages. Some of it has been entered in excel file and the rest is being entered. Bushmeat offtake data in 2019 was collected as planned.</p>	<p>Collect the 7th and 8 sets of data, analyse and interpret, and bring out the trend in human pressure on wildlife in the surrounding forest</p>
<p>Activity 3.2 Fish offtake data data collection</p>		<p>Data on fish offtake in the Dja river is being collected by villagers. Evidence of bushmeat offtake data sets 4, 5 and 6 is initial data in excel file and data sheets and that of fish offtake are data sheets with data.</p>	<p>Collect more data on fish offtake, analyse and interpret and bring out the trend in fish offtake and confirm the level of increase of proteins in households</p>

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

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: A biodiversity benefit for Dja landscape, Cameroon, through addressing the main pressures on the ecosystem and species by an improvement in livelihoods, welfare and food security for forest-dependent rural poor.			
Outcome: Rural-living people in 22 northern-Dja communities generate protein and income through non-hunting means, contributing to food security and poverty alleviation, enabling less hunting and leading to protection of threatened biodiversity.			
Output 1 New livelihood paradigms established in 22 rural poor communities for the provision of sustainable non-wild meat protein sources for the short- to long-term	1.1 Up to 3000 adults with families (40% women) attend 2-day workshops (7 workshops held across northern periphery in year 1) by year 2 1.2 75% of trainees (>30% women) register for the activity by year 3 1.3 80% of registered adults report spending >25% of their 'working' time working towards the protein-generating activity by end of year 4	1.1 Workshop attendance registers; surveys before and after on understanding of conservation benefits, purpose of training, capacities for activities, etc 1.2 Signed agreements 1.3 Survey data; interviews; field reports, etc...	75% of population of 22 communities are present in locality/healthy/available and are thus able to attend the workshops Registered members of the scheme do not abandon the activity within the first year
Output 2 A participatory process for training and capacity building made available to 22 rural poor communities, to establish sustainable sources of non-hunting financial income	2.1 Up to 3000 adults with families (40% women) attend 3-day workshops (7 workshops held annually across northern periphery in years 1 and 2) by year 3 2.2 50% of trainees (>30% women) apply to participate in scheme and pay small registration fee by year 3; and an additional 25% by year 4 2.3 75% of registered adults report launch of income-generating activity by end of year 4	2.1 Workshop attendance registers; surveys before and after on understanding of conservation benefits, purpose of training, capacities for activities, etc 2.2 Signed agreements 2.3 Knowledge, attitude and practice surveys (KAP), using semi-structured interviews	75% of population of 22 communities are present in locality/healthy/available and are thus able to attend the workshops That the registration fee remains low enough to be accessible to rural poor, but high enough to ensure dedication to the scheme and to prevent abandonment of the activity within the first year

<p>Output 3</p> <p>Official programmes for behavioural modification (REAs) established, accepted and respected by hunters and meat traders in 22 communities (covering an area of 2500km²)</p>	<p>3.1 Model of REA officially submitted to national and local government bodies and specific REAs for each of 22 communities presented in year 1</p> <p>3.2 Representatives of 22 communities (40% of number of households of 80% of number of communities represented at each stage) attend series of workshops (21 workshops in 7 locations over first 3 years) in which local authorities attend</p> <p>3.3 Greater understanding of cultural barriers that need to be overcome to shift from hunting based to sustainably-managed resource communities</p> <p>3.4 Communities achieve REA completion (signed, launched) by end of year 4 (up to 6 by end year 2, up to 7 by end year 3, up to 7 by end year 4)</p>	<p>3.1 Receipt from MINFOF of official submission of model</p> <p>3.2 Attendance registers; and Knowledge, attitude and practice surveys (KAP), using semi-structured interviews</p> <p>3.3 Knowledge, attitude and practice surveys (KAP), using semi-structured interviews</p> <p>3.4 Completed and signed REAs (20 by end year 4)</p>	<p>That the government remains open to submission and discussion of such schemes</p> <p>Full participation of community members enlisted</p>
<p>Output 4</p> <p>Project learning influencing regional/national level policy formation leading to integration of identified best practice and activities into Dja Management Plan and national policy</p>	<p>4.1 Integration of REA model and project lessons learnt in Dja Management Plan, revised National Biodiversity Strategy and Action Plan</p> <p>4.2 >10 media, popular science and peer-reviewed publications of data and results arising from project</p> <p>4.3 >10 references to critical project findings in third party publications, media reports and policy papers</p>	<p>4.1 Excerpts of management plan, strategies and action plan</p> <p>4.2 Journal confirmation emails; published articles; DOIs</p> <p>4.3 Google scholar citation statistics</p>	<p>That the government accepts and approves of the REA scheme</p>
<p>Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)</p>			

Annex 3: Standard Measures

Data still being collected.

Table 1 Project Standard Output Measures

Code No.	Description	Gender of people (if relevant)	Nationality of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
Established codes								

In Table 2, provide full details of all publications and material produced over the last year that can be publicly accessed, e.g. title, name of publisher, contact details, cost. Mark (*) all publications and other material that you have included with this report.

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author Male	Nationality of Lead Author Cameroonian	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)
Insectes ravageurs des poissons fumés au cours du stockage et dégâts occasionnés dans la boucle Nord de la Réserve de Biosphère du Dja (Est-Cameroun)	Journal	Béranger Raoul TAMGNO, Hervé TEKOU NGUNTE, Nectaire Lié NYAMSI TCHATCHO, Mama MOUAMFON et Léonard Simon NGAMO TINKEU 2020			International Journal of Biology, Chemistry and Sciences (in press)	www.landscapeconservation.org.uk/darwin-project

Annex 4 Onwards – supplementary material (optional but encouraged as evidence of project achievement)



Department
for Environment
Food & Rural Affairs

Checklist for



submission



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