

Darwin Initiative Main 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 2018

Darwin Project Information

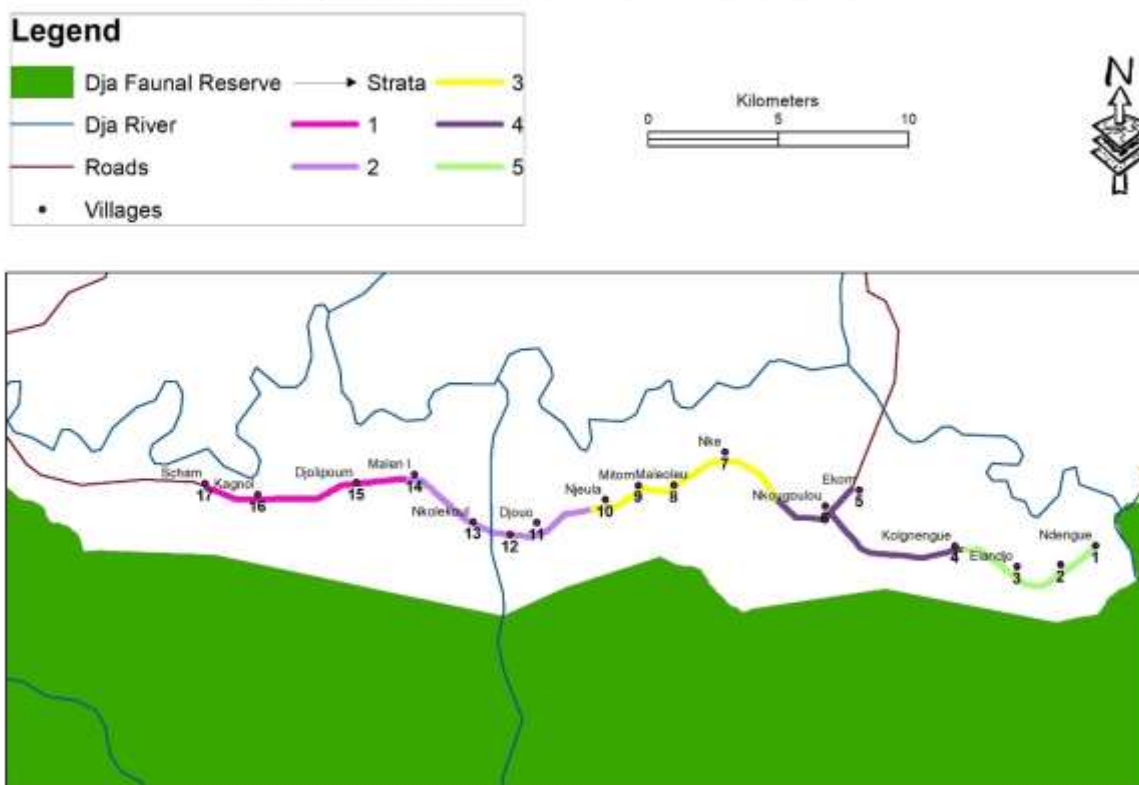
Project reference	24-005
Project title	Enabling rural poor to help protect biodiversity of Dja, Cameroon
Host country/ies	Cameroon
Contract holder institution	Antwerp Zoo Centre for Research & Conservation (CRC), Royal Zoological Society of Antwerp (RZSA)
Partner institution(s)	African Wildlife Foundation (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 2017 – Mar 2018) and number (e.g., Annual Report 1, 2, 3)	1/4/2017 – 31/3/2018 Annual Report 1
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, 26/4/2018

1. Project rationale

Working alongside law enforcement efforts, we will 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.

Northern Dja is home to 22 Bantu/Baka communities; the region’s poorest and first to be negatively-impacted by the decline in health of the Dja Reserve (map below) . Hunting by men and bushmeat trading by women play important livelihood and cultural roles, providing income-generating opportunities and vital protein. Overhunting and illegal exploitation promotes unsustainable offtake, threatening long-term food security and ecosystem viability. As hunters are pushed further into Dja, and outsiders hunt/purchase in the area, biodiversity is lost and Dja values and UNESCO world-heritage-site status are severely threatened. People live in poverty, without the skills required to change from subsistence→trade and no affordable alternative source of animal protein to unsustainable hunting.

NORTHERN PERIPHERY OF DJA FAUNAL RESERVE



We face a choice: cancel the Dja's status (food security for rural poor will plummet), or protect the reserve as a sustainable source for hunting, providing protein for local communities and preserving traditional ways of life. Hunting is increasingly arduous and a proportion of local communities respond to incentives: this project maximises on this to encourage cultural change (hunting→production). 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 bushmeat 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 (eg, RZSA funding, Arcus Foundation 2011) to work as long-term financial-income alternatives. For intermediate, short-term protein, fish farming 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: 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 Dja Biosphere Reserve. Thus, both an expert team of conservation scientists at CRC, and an experienced and skilled team of technical and logistic staff in Cameroon, will enable 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, Y1 of the project has progressed well. 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 to which as many in country Darwin personnel would attend as possible, and also welcome for other individuals (eg, admin support, technical support, etc) 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.

3. Project progress

3.1 Progress in carrying out project Activities

Progress on Activities towards Output 1 – Alternative Protein

It is important to note that during project shaping discussions with adjacent DFR periphery communities, a plan was proposed to provide alternative protein sources mainly through the provision of fish (a preferred legal-protein source) produced through aquaculture.

During the early in-depth engagement process (based on participatory learning and action methodology, as detailed in the project LogFrame), the project team gained the information that the proximity of the Dja river – which provided a locally abundant source of wild-caught protein - meant that the communities in the intervention area were not favourable to the concept of fish farming as a sustainable source and protein. As a consequence of review and reflection with the communities, the project team engaged in a number of participatory sessions in Year 1 in order to identify alternative, suitable activities for the provision of a sustainable source of protein. The process included brainstorming and discussions to identify potential alternatives, followed by a preference choice process (pair-wise comparison).

Wild caught meat emerged as having the highest preference, with wild-caught fishing ranking initially second (to farming domesticated animals (3rd) and aquaculture (4th)). Increasing the availability of a sustainable source of wild-caught meat is clearly impractical however, due to the constraints of the locality: The communities live in a buffer zone of a protected area and the potential off-take of legally available species in the buffer zone is obviously insufficient. During subsequent discussions, the community elected to look at focussing on increasing the amount of protein obtained from wild-caught fishing in the Dja river and surrounding tributaries. A change request was therefore submitted to the Darwin Initiative and accepted in February 2018 for amending the strategy from aquaculture to developing a fishery that could provide alternative, sustainable sources of animal protein.

Once the principal strategy became the provision of a sustainable source of wild caught fish, the team initiated a registration process in February 2018 with 4 meetings to cover 4 main groups of fishermen in the area. We also undertook discussions with experts in the Fishery Department at the University of Douala and stated collaborating with 3 students undertaking Master degree thesis, supervised by 3 University lecturers. This activity also enabled the project team to have some baseline information about constraints affecting fishing activity in the target area.

As detailed in the project LogFrame, reciprocal environmental agreements need to be in place before the provision of any materials to enable increased take of wild-caught fish. The draft agreement is now under discussion in the villages since this is prior to concrete activity in the field (e.g. distribution of materials). The project is also in the process of creating GIC of Fishermen (Draft of Statutes and internal regulation are under discussion in the field).

A critical analysis of Year 1 strategy and activities has identified several key issues that need to be addressed before roll out (and it is accepted that several of these could be major challenges, nevertheless we are committed to overcoming them). These key issues include:

1. There is currently no information available on the potentially exploitable fish in the Dja river adjacent to the target communities
2. Without obtaining information such as species type, number, reproductive rate and other limiting factors it is not possible to set off-take numbers
3. There is no information available on vulnerable species in the Dja river in the locality; we need to avoid increasing activities that could threaten biodiversity loss
4. If fishery take is controlled, the fishermen need to be made aware of the limitations and given tools to manage their catch. Whilst this is deemed possible with the target communities, the Dja river is open to fishermen who live outside the area.
5. Within Cameroon (and as yet unidentified internationally), there are no rules, regulations or processes for initiating a Community Sustainable Fishing Zone (CFZ)
6. Without initiating a CFZ (or equivalent) there is danger that individuals from outside of the target benefit communities (i.e. those that are constrained by living inside the buffer zone of a fully protected area) will impact on the CFZ in much the same way that Community Hunting Zones in the region are impacted by the illegal commercial bushmeat traders

Year 2 activities will therefore concentrate on working with the communities to devise and implement strategies to address the above critical success factors.

Progress on Activities towards Output 2 – Alternative income

Four main activities have been underway in Y1, and each have run according to plan. First (2.1), workshops in Kabilone II including open-ended interviews/discussions with communities were held to familiarize them in the process of setting up agro-forest based on cocoa and other fruit trees. The main objective of this workshop was to create awareness on the over-all income benefits from different schemes put in place through TF-RD approach for alternative income generating activities leading to long-term accessibility of cash for improvement of livelihood of rural poor. Forty-eight farmers attended and agreed to participate, all target villages expressed a desire to be included, and the village chiefs offered a land of 5 hectares for the setting up of nurseries of plants. This shows a voluntary commitment of the communities to agree to participate in desired income alternatives. It equally presents an action of agreement towards establishing of REA.

Second (2.2), restitution meetings were held with farmers, in order to discuss and explain more about the approach for valorising agro-forests and NTFPs as presented during the previous workshop in Kabilone II and to follow up the recommendations made; to identify the farmers who want to create new farms or those to rehabilitate their old cocoa farms, geolocalise the different farms to be rehabilitated and map out the geolocalised farms. Also, a functional nursery for Cocoa Plants was set up in Kagnol village. Different groups of people (cocoa farmers and women collecting NTFP) attended, resulting in 357 people in total (190 men, 53%; 167 women, 37%), who understood the relevant points concerning the process for registering to the scheme that will contribute towards establishing the quid pro quo and adhering to the conditions till the time of signing the REA. A total of 174 farmers with a total of 87 hectares of cocoa opted to register for the creation of new farms while 56 with a total of 144.5 hectares are willing to rehabilitate their old farms. A data base of GPS points and map of the geolocalised farms in the villages is available. Also, a functional nursery of 12000 plants was set up in Kagnol Village. While two technical field agents have been recruited to manage and follow up the maintenance of these nurseries on a daily basis

Third (2.3), the process of leading the local groups to sign REA is currently going on in the 17 villages. The method used include open-end discussions with groups, organising sensitisation meetings to present the 10 principles of Rainforest Alliance, its advantages, the economic, environmental and social benefits to the farmers engaging in this process. The Rainforest Alliance principles have been written up and the draft of REA document is available. Also, a workshop was organised in each of the 3 zones to present the 10 criteria for certification and conditions for registration, discussions and recommendations and to present the 10 principles

of Rainforest Alliance and its importance. The participatory method was adopted and an analysis of the agricultural practices in terms of cocoa cultivation by the farmers in each zone was done through a questionnaire. 178 people attended (8 women, 04%; 177 men, 96%), 70 of which are ready to sign the established REA that govern the ten Rainforest Alliance criteria and the fight against poaching. Some village chiefs have already taken anti-poaching measures, banning hunters from entering their forest to hunt, through letters addressed to the SDO of the Somalomo district. Six 'Farmers Field' schools have been identified and cleaned, waiting for future training to be done inside to better apply the approach of TF-RD. Also, surveys were carried out on the current situation of agricultural practices by cocoa farmers with respect to certification norms and a report was written.

Fourth (2.6), cocoa farmers were introduced to the training on appropriate techniques for rehabilitation of their old cocoa farms and the best practises to adopt in the rehabilitation process (clearing of plantations, adjustments of shade, standardization of planting densities, maintenance and renovation size, control of pests, black pods, replanting, diversification). 178 farmers were trained on such techniques, while 10 farms of 6 hectares were rehabilitated in the 3 zones.

Progress on Activities towards Output 3 – REAs

Several in country meetings have been organised by partners and discussions on the appropriate approach for REA were some of the topics of concern. The main conclusions to date included the following:

- Partners should carry on project activities to the point where villagers are able to see what they will eventually benefit before REA is introduced. This conclusion is based on some past experience in working with villagers in the project area – they do not get involved if they do not see what they will benefit in return, villagers efforts are mostly for individual benefit and not for the entire community or village.
- During activity trips in the villages, partners will continue to sensitise villagers on REA, and on the need for them to go into this agreement to benefit from the project. This has been done and will continue to be carried out (sensitisation process).

Evidence of these two conclusions is in in-country meeting reports. Partners have produced final drafts of REA – one from FCTV and the other from TFRD (available if required). The partners have also met and examined these drafts and produced final drafts named "Final REA Cocoa Farming TFRD" and "Final REA pêche FCTV". Comments and inputs are awaited from project authorities and will be followed by the presentation of the documents to government authorities (for non-formal acceptance) and to villagers and eventually signing and application.

Regarding Output 2, 34 resource people received training and sensitisation on the quid pro quo (17 men, 17 women). As a result of this session, the farmers equally understood more about the entire approach of agro-forestry system of cocoa and the best practises required to do engage into certification. The farmer's attitude and perception was equally evaluated through observation, close interview and one-to-one discussions. It is evident that the approach to lead them towards REA is very accepted and appreciated by all the resources persons present. The first quid pro quo will be signed by some farmers by the end of June.

Progress on Activities towards Output 4 – Policy and best practice

During Year 1 it has emerged that there is no current policy with the Cameroon government for the gazetting of legal, sustainable river fisheries. The Dja river forms the greater part of the boundary for the Dja Faunal Reserve, yet there are no rules and regulations in place for governing which activities and which are not. Identifying this gap in policy, the project team are now in discussions with the Minister of Forestry and Wildlife (MINFOF, who have the authority for managing the Faunal Reserve), and the Ministry of Livestock, Fisheries and Animal Industries (MINEPIA) in order for a policy to emerge.

The identification of best practice guidelines for utilising a low nutrient, 'black water' river system in order to increase access to animal protein for rural communities will be a key output for the project.

3.2 Progress towards project Outputs

Output 1 – Alternative Protein

The project is working with 17 villages and five satellite villages to develop a sustainable fishery. The two first meetings were informal and open to the entire villages without attendance list; an average of 60 people per village attended each meeting. Approximately 1,000 people attended 37 villages meetings to discuss potential pathways to change, between July 2017 to March 2018. Meetings in December and February shows respectively on the attendance list:

- December: 191 people (142 men and 49 women)
- February: 85 people (65 men and 22 women)

The local organisation of ‘fisherpeople’ - GIC des pêcheurs - is under development; it will be the first one to bring together all the fishing people in the area. The 42-km road, along where the villages are established, has been divided into 4 sectors to make project management more effective. The GIC will be an interface between the fishing community and external actors, such as traders, government administration, NGOs etc.). Reciprocal environmental agreements are a main component of the process, and communities are involved in defining a working model that delivers benefit within certain limitations and commitments.

In addition, the manufacture of life jackets will be undertaken locally¹, as will training in safety and the laws relating to sustainable fishery in the river. Terms of Reference for training are under development, as well as training on how to manage efficiently the “GIC des pêcheurs”, how to commercialise fish products and how to organise benefit sharing.

Important note 1: Between January to March 2018, three fishermen (one woman and two men) were drowned in the Dja river due to adverse conditions, their inability to swim and having no buoyancy aides. As a consequence, the importance of awareness-raising, training and the provision of safety equipment will be a project focus for early year 2.

Important note 2: The tragedies occurring above have resulted in an unforeseen challenge that has the potential to threaten the viability of the project in its current form, unless it can be overcome. Several groups of villagers in the target area are declaring that the project is ‘cursed by spirits’. They argue that promoting (unsafe) fishing instead of (illegal) hunting has resulted in ‘spirits’ taking revenge by killing local people fishing on the river. In order to overcome this ‘curse’, the project will have to devise a strategy and activities to either dismiss or ‘banish’ the ‘curse’. This is an unforeseen cost to the project.

Output 2 – Alternative income

The main progress made towards the project outcomes till date include a major participation of 190 men (53%) and 167 women (37%) of the total population in attending 12 workshops organised; 48 adults representing 48 household attending the first workshop held in Kabilone II; 357 people participating in the restitution meetings. It should be noted that over 70% of the participants in the training were men while 30% were women.

In total 174 farmers having a total of 87 hectares of cocoa have registered for the creation of new farms while 56 with a total of 144.5 hectares are willing to rehabilitate their old farms.

A first draft of the REA for group of Cocoa Farmers has been written up and workshops to present the 10 principles of Rainforest Alliance certification organised. 178 cocoa farmers participated, and 17 Village chiefs attended the meetings. Five letters written by the villages’ chiefs to the SDO of Somalomo to band poachers from entering the 17 villages.

02 workshops have been organised at the TF-RD research centre in Kabilone to present the draft of REA, in which 34 resources persons participated, 17 men and 17 women. The first draft of REA has been presented and about 30 people are willing to sign by June.

The project is likely to achieve the outcome by the end of the funding because much work is being done with community involvement to agree to participate in desired income alternatives, to address poverty issue.

Output 3 – REAs

The baseline condition here is that villagers are relying on wildlife in the forest for income. They hunt unsustainable mostly for income and wildlife species are threatened. No changes have been recorded so far at the level of villagers with regard to REA. Changes can be noticed in the setup of REA – partners meetings to discuss on REA, drafts produced, etc. This is at the level of partners and is ongoing. Progress towards this outcome is structured based on past experience with the villagers. It is a slow process to eventually change their behaviours and get them involve in conservation but before this, villagers should acknowledge what they will have in return. Consequently, partners have advanced in project activities with the integration of villagers and sensitising them on benefits that awaits those involved. At this level, villagers are aware of the benefits and this will be their motivating factor to go into the agreement.

Measurement of output indicators; a proper implementation of REA by villagers (more focus on alternative income activities and proteins) will reduce human pressure on wildlife. This will be confirmed by a series of project activities that have been setup. These include the following:

- Wildlife survey in the surrounding forest will confirm an increase in wildlife population
- Bushmeat offtake will confirm a reduction on commercial poaching
- Hunting efforts will confirm reduce efforts of villagers on hunting
- Household socioeconomic survey will confirm improved livelihoods.

These measurement approaches so far are still the best as they can indicate changes in villagers activities as the result of the ongoing project. However, more time is needed for some of the approaches such as wildlife survey to indicate a change. It will eventually take time for animal population in the forest to increase to the level that can be noticed in survey results.

Output 4 – Policy and best practice

Meetings with MINFOF and MINEPIA have commenced, with minutes of the meeting being part of the process to identify what policy changes are recommended in order to utilise the Dja river as a sustainable source of animal protein for people living with the buffer zone of the Dja Faunal Reserve.

Lessons learned in Year 1 have been well-documented and will form part of Theory of Change model, based on recommendations of best practice, by end of project.

3.3 Progress towards the project Outcome

Progress towards the main project outcome is in two parts:

- Income from cocoa farming. Several training sessions on cocoa farming have been organised. A list of potential cocoa farmers has been established. Some farmers wish to create new cocoa plantations and others wish to have their old plantations rehabilitated. Cocoa nurseries have been setup in some of the villages. Young cocoa plants are growing in nurseries and will eventually be distributed to cocoa farmers to plant in plantation. At maturity, cocoa will serve as an alternative income activity for villagers and the degree of poverty will reduce. The specific indicator for this is an increase in household income. It is adequate for measuring the outcome as it indicates the change in the revenue of farmers.
- Proteins from fish farming; several meetings have been organised in the villages, there has been exchange of ideas between the project team and villagers. The appropriate approach for increasing the availability of protein from fish has been chosen through a participatory process, taking into account local conditions and attitudes. It involves amelioration of fishing along the Dja river. Materials to modify the existing supply chain for villagers have been identified and have been bought for distribution under REA. The specific indicator for this is a 20% increase in grams of meat consumed by household. Actually, villagers fish for local consumption and for income. In many cases, fishing is regarded as a source of income. Considering this, the indicator will not only be the quantity consumed (although this is still critical). It will also focus on the quantity of fish caught and then the destination i.e. for local consumption, local sale of for sale out of the project intervention area. Baseline data has been obtained from chiefs of households on this in socioeconomic survey. Unlike cocoa, fishing is a

short-term activity that will start yielding results in year 2. This indicator is therefore adequate for measuring the outcome and the project will achieve the outcome by end of funding.

3.4 Monitoring of assumptions

Assumption 1: External pressure continues to create sustainable use concern for local hunters and wildlife traders.

Comments: This assumption still holds. External pressure will come from the conservation service (MINFOF) of the Dja reserve. This assumption continues to be applicable and will be enforced with the ECOFAC 6 project (law enforcement component)

Assumption 2: Improved enforcement of wildlife laws and sanctions in Dja landscape address hunters and wildlife traders who refuse to participate in the scheme.

Comments: This assumption still holds. Conservation partners – ZSL, AWF, PGS, FCTV, TFRD, etc will continue to sensitise villagers on wildlife law. The conservation service of the Dja reserve will continue to ensure sanctions. This is a reality since in the field communities are not really opened to project team, because of the last conflict between communities and conservation unit. Project team is working to bring back confidence but this will depend on conservation unit attitude. For field activity, project is not involving directly conservation unit to avoid any resistance to the project by local communities.

Assumption 3: National government remains amenable to policy dialogue and reform.

Comments: It holds; the national government remains open to policy dialogue. This was seen during the launch of this project. Local government authorities were happy to allow the project launch in the villages in their presence.

Assumption 4; 75% of population of 22 communities are present in locality/healthy/available and are thus able to attend the workshops.

Comments: for both Outputs 1 and 2, 22 communities (17 main villages and 5 satellite villages) are involved. Yes 75% are quite motivated and happy to attend workshops. They are very anxious to be involved in the project and to benefit from all what is available.

Assumption 5: Registered members of the scheme do not abandon the activity within the first year.

Comments: The local people will almost certainly not abandon the activity. They will go into an agreement (REA) with the project to allow them benefit from activities. REA stress the need for a proper management of the activity. All villagers are highly motivated to receive these benefits.

Assumption 6: 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.

Comments: This still holds. There is no registration fee so rural poor can all be involved. REA will ensure dedication to the scheme.

Assumption 7; That the government remains open to submission and discussion of such schemes.

Comments: This assumption holds. The government is open to suggestions and modifications if appropriate. This is confirmed by the fact that local government authorities were happy with this project right from the beginning. Also, they are informed each time team members go to the field and have never been against (although request for motivation in most cases!).

Assumption 8; Full participation of community members enlisted.

Comments: Villagers are very motivated and have been waiting for such project for a long period of time. Their full participation is assured.

Assumption 9; That the government accepts and approves of the REA scheme.

Comments: Project staffs are still to present REA scheme to the government (mostly local government authorities in Somalomo) for 'approval'; it was assumed that a legal process would

be needed to ratify REA, but the project team are assured that this is not necessary, and that agreements at the individual and GIC level are adequate. Government staff (informally) approve the use of agreements because REA are aimed at supporting conservation by villagers in return to benefiting from the project. Conservation is one the main objectives of government authorities in this area and consequently they are fully supportive.

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

This is a conservation and development project. It directly contributes to a higher impact of biodiversity conservation and poverty alleviation. The main reason why villagers hunt unsustainably in this area is for income (although the law permits only for a certain level of take for personal consumption). Villagers rely on wildlife hunting often because they have little in the way of alternative sources of income. An objective of the project is to establish sustainable sources of income to replace poaching. The assumption is that when villagers gain from alternative income sources, the pressure on wildlife will reduce. The process is well structured with the implication of REA to impose conservation. This project will therefore contribute to a higher impact of biodiversity conservation.

The income activity – cocoa farming considered is sustainable and highly income yielding. In addition to setting it up, the project is taking measures to ensure its commercialisation. Villagers will be able to raise income from the activity to ameliorate their livelihoods.

The project is contributing to human development and their well-being in the following ways:

- The approach to cocoa farming is based on sustainable agriculture through the implementation of Rainforest Alliance principles that puts more emphasis on the environment and nature protection. Through the Rainforest Alliance certification norms, the human and social wellbeing of the farmers is being taken into consideration.
- Establishing food security is critical in an area where there is significant investment by the government and international donors to reduce the impact of hunting on wildlife.

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

Sustainable Development Goal 1: End poverty in all its forms everywhere

The communities in the project intervention area are now organised into working groups and committees ('GIC') in order to perform effectively to grow and sell cocoa; this will bring in sustainable sources of income by EOP.

Sustainable Development Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

The identification of a potential model to enable poor people to access sustainable sources of legal animal protein has been achieved by the community, assisted by the project team

Sustainable Development Goal 5: Achieve gender equality and empower all women and girls

Engagement processes have targeted women and girls to ensure that their opinion and requirements help shape interventions. Specifically, women are going to be the principal actors in a more effective fishing system in the tributaries of the Dja river, as well as being main traders of smoked and frozen fish for trade or consumption over an extended time-period (than current)

Sustainable Development Goal 12: Ensure sustainable consumption and production patterns

A main output of the project will be the establishment of a sustainable fishery to benefit the poor people living in the project intervention area

Sustainable Development Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

The pressure on threatened species living in and around the DFR will be reduced due to the provision of alternative income sources (helping to counteract the illegal bushmeat trade), and the availability of legal sources of protein (helping to counteract hunting of threatened species for local consumption).

5. 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*, *Pan troglodytes*, *Loxodonta cyclotis*, *Smutsia gigantea*

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).

The project contributes to the Global Sustainable Development Goals (SDG) 1, 2, 3, 5, 11 & 15. 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

6. Project support to poverty alleviation

There is evidence that the project is working to alleviate poverty: the project is setting up improvements in fishing practices so as to enable both an increase in availability and longevity of product, villagers will have enough fish for local consumption (proteins) in households and will be able to sell surplus. Cocoa plantations being setup are 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 reduced human pressure on them. The government will benefit from improved anti-poaching systems

We expect direct impacts from this project: there will be reduced human pressure (conservation) on wildlife population in the surrounding forest, as well as improved local knowledge on cocoa cultivation and fishing. This will result in ameliorated local livelihoods

We have had some notable achievements this year: local capacities on cocoa farming has been improved from many training sessions organised, cocoa nurseries with many young cocoa plants have been setup in the villages, the appropriate access to alternative protein

(fishing) has been identified, fishing material is being bought, baseline data on bushmeat offtake, household socioeconomic survey have been collected. The Darwin Initiative has produced a Learning Note on Poverty which may help projects understand the multi-dimensional aspects of poverty that can be reported on.

7. Project support to gender equality issues

There is evidence that the project is working to address gender equality: cocoa and improved fishing are both for men and women. Men and women are free to be involved and benefit. Also, all training sessions, meetings, etc organised by project partners are attained by men and women, see pictures (entitled “gender equality” of one of the exchange visits on cocoa farming.

There are notable achievements this year: women’s capacities on cocoa farming have been improved from many training sessions organised, the appropriate fishing approach was identified by both men and women, has been identified.

As noted above, the project approach has been to have discrete sessions with both women and young women in order to help shape project interventions and empowerment through decision-making. Specifically, the role of women and girls in fishing for food in the tributaries of the main river, during wet season (when it is dangerous to fish in the main river) was recognised and has helped shaped the intervention. New equipment and new procedures will be introduced during Year 2 to women and girl fishing groups to increase availability of a sustainable source of animal protein. In addition, women and girls are the main traders in fish products; by extending the consumable life of fish through the introduction of low tech, solar powered freezers that can be produced in-situ (mainly by men), and building low-health risk smokeries, women and girls will have the ability to gain extra revenue to help meet family needs.

8. Monitoring and evaluation

There was a delay in the implementation of M&E activities this year. This is due to two main points:

- The delay in the start date of the project and subsequently in the availability of funds at the level of partners because of formalities required (eg, Darwin paperwork).
- The project team agreed initially was not available during the implementation phase, which required involving someone else and this caused a short delay.

Despite this delay, the plan for M&E did not change, and project activities begun. More than half of the M&E baseline survey has been carried out. The first set of data on bushmeat offtake and hunting pressure has been collected. The second set is planned in September and October 2018. Household socioeconomic survey data has been collected in the target villages, two are left to complete (anticipated May 2018). Mammalian inventory data collection in the surrounding forest is planned in April and May 2018. Evidence on progress of M&E activities include pictures taken during training meetings and data collection, and data on data sheets (currently being entered in Excel file). Furthermore, additional targeted data are being collected on methods of fishing in the Dja (for Output 2) and also regarding the current situation of cocoa farming in the target villages (for Output 1). For the former purpose, University Master’s students have been hired to collect data which will serve to inform the Darwin, but will also lead to standalone Master’s theses for these Cameroonian students.

Indicators will not yet demonstrate achievements, as so far only baseline data are being collected; these will be compared against data collected in subsequent years of the project to assess change against the chosen indicators.

9. Lessons learnt

Generally, everything worked well. Minor difficulties included the late start of the project due to delays in budget, unavailability of project staff for project execution and limited budget that made us to review project activities. Also, much has been spent to arrive at the appropriate fish farming approach – to ameliorate fishing along the Dja river. This is the same approach that

was recommended to us (by the chef d'antenne nord) and villagers during the first visit to the villages. There is nothing we would do different if we were to do it again.

Regarding recommendations we would make to others doing similar projects: it should be noted that executing a conservation project in such a rural area is a very big challenge, because it is very hard for rural living villagers to change their actions or attitudes regarding the negative impact of their activities on the environment. The challenge is to bring them to acknowledge that their activities are destroying the environment and to convince them to change. Projects should not give up due to obstacles or difficulties.

To build our learning into the project and future plans, we shall produce a theory of change model for use in project design and development.

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

NA

11. Other comments on progress not covered elsewhere

The design of the project has been enhanced over the last year: in particular, the fish farming approach was modified. The initial idea was to set up fish ponds but the limiting factors imposed by local conditions suggest that there will be insufficient buy-in, plus a readily available alternative indicates that ponds will not work. A new approach has come up – ameliorating fishing along the Dja river.

Regarding significant difficulties encountered during the year and steps taken to overcome these, we wish to mention two important notes: between January to March 2018, three fisher-people (one woman and two men) drowned in the Dja river due to adverse conditions, their inability to swim and having no buoyancy aides. As a consequence, the importance of awareness-raising, training and the provision of safety equipment will be a project focus for early year 2. Secondly, these tragedies have resulted in an unforeseen challenge that has the potential to threaten the viability of the project in its current form, unless it can be overcome. Several groups of villagers in the target area are declaring that the project is 'cursed by spirits'. They argue that promoting (unsafe) fishing instead of (illegal) hunting has resulted in 'spirits' taking revenge by killing local people fishing on the river. In order to overcome this 'curse', the project will have to devise a strategy and activities to either dismiss or 'banish' the 'curse'. This is an unforeseen cost to the project.

12. 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. It is intended that 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.

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.

13. Darwin identity

The UK Government's contribution to our project's work been recognised via the project website www.landscapeconservation.org.uk/darwin-project, where the Darwin Initiative funding has been recognised as a distinct project with a clear identity.

We are in close contact with the British High Commission in Yaoundé (regional office for west central Africa) and have been invited to attend an event to highlight the issues of the illegal wildlife trade on species (June 2018); therefore demonstrating the extent to which there is an understanding of the Darwin Initiative within in the host country.

Blogs are posted on the temporary website (www.landscapeconservation.org.uk), which connects to social media through Facebook. Increased media profile is an (informal) objective for Years 2, 3, and 4, including via other partner websites, news articles, press releases, etc.

14. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2017 – 31 March 2018)

Project spend (indicative) since last annual report	2017/18 Grant (£)	2017/18 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)			-2	This is a minor variance due to the exchange rate between GBP/EUR/XAF
Consultancy costs			NA	NA
Overhead Costs			-1	This is a minor variance due to the exchange rate between GBP/EUR/XAF
Travel and subsistence			-1	This is a minor variance due to the exchange rate between GBP/EUR/XAF
Operating Costs			2	This is a minor variance due to the exchange rate between GBP/EUR/XAF
Capital items (see below)			46	This reflects a transfer of 10,000.00 GBP to Y2, as agreed with Darwin (change request approved)
Monitoring & Evaluation (M&E)			0	NA
Others (see below)			NA	NA
TOTAL			11	

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2017-2018

Project summary	Measurable Indicators	Progress and Achievements April 2017 - March 2018	Actions required/planned for next period
<p>Impact</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>A key finding from Year 1 activities has been the identification of the need for a sustainable, community fishing zone (or equivalent). Current policy in Cameroon does not cover the use of a river fishery for community management, therefore the issues surrounding development, and potential use of such a system will be explored fully in Year 2.</p> <p>The welfare of the farmers has greatly improved in that they have received technical support through the project and benefits farming equipment to help improve their farming techniques. The cost of rehabilitation of old cocoa farms have been relatively reduced to about 40% and the cost of creation of new farms is very low</p>	
<p>Outcome</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>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</p>	<p>Baseline data on bushmeat offtake and hunting effort and on socioeconomic household survey have been collected in the villages. Data entry in excel is going on and will soon be analysed.</p> <p>Initial baseline data on household income has been collected. Another set of data collection is planned in future. This will be compared with the baseline data and percentage increase in household income will be calculated.</p> <p>Baseline data on quantity of bushmeat kill per week and month for commercial purposes has been collected. The same data is planned in future and the proportion of net monthly income</p>	<p>Fisheries: plan how to manage efficiently the “GIC des pêcheurs”; devise a strategy to dismiss or ‘banish’ the ‘curse’; concentrate on working with the communities to devise and implement strategies to address the critical success factors; Propose new logframe to Darwin.</p> <p>Cocoa: Planting of saplings will take, training of farmers, exchange visits, roll out will continue as per the activities in the logframe.</p> <p>REAs: organise meetings in the communities and explain REAs to villagers; followed by signing of REAs by villagers and application</p>

	<p>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>coming from sale of bushmeat will be calculated.</p> <p>Baseline data collection on mammalian inventory in the surrounding forest is currently being collected. Another set of data collection is planned in future and will be compared to confirm 5% increase.</p> <p>Baseline data on hunting effort (time spent on hunting activities) has been collected. Subsequent data collections are planned in future. These will be compared to determine the % decrease in hunting effort.</p>	<p>Additional baseline data will be collected (bushmeat offtake and hunting pressure, socioeconomic household survey, mammalian inventory in the surrounding forest)</p> <p>Step up the publicity of the project via various channels.</p>
<p>Output 1.</p> <p>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</p>	<p>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</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 'working' time working towards the protein-generating activity by end of year 4</p>	<p>Decision made to develop a sustainable fishery. An average of 60 people per village attended each meeting; approximately 1,000 people attended 37 villages meetings (December: 191 people, 142 men and 49 women; February: 85 people, 65 men and 22 women). 'GIC des pêcheurs' under development. Data being collected on current situation of fishing in the Dja. Theory of change being developed for sustainable fisheries. Therefore, indicators remain appropriate.</p>	
<p>Activity 1.1</p> <p>1.1 Organisation and running of 7 2-day workshops across the northern periphery – to include open-ended interviews/discussions with communities to agree to participate in the scheme to achieve practical protein alternatives, to address food security issue</p> <p>1.2 Individuals and village associations encouraged to register for scheme; process put in place for registration; regular review of registration statistics</p> <p>1.3 Agreements defined, agreed and written up for individuals and village associations registering for scheme</p> <p>1.4 Discussions with pisciculture technicians for planning for fish-farming (previously emerged as the desired protein-generating activity in the region)</p>		<p>Workshops were held. During such discussions, people expressed their issues with fish farming. Therefore, a number of participatory sessions were held in order to identify alternative, suitable activities for the provision of a sustainable source of protein (see 3.1). Decision to look at focussing on increasing the amount of protein obtained from wild-caught fishing in the Dja river and surrounding tributaries. Registration process initiated in February 2018 with 4 meetings to cover 4 main groups of fishermen in the area. We also undertook discussions with experts in the Fishery Department at the University of Douala, started collecting additional, targeted baseline data about current fishing situation.</p>	

<p>1.5 Construction (building and stocking) of fish farms in target communities (leading to launch of protein-generating activity in up to 22 communities by end of year 4)</p> <p>1.6 Workshops and groups meetings, as well as on the ground demonstrations, one-to-one sessions and ongoing support by technicians available for individuals and village associations in 22 communities (in years 2 and 3) for training and capacity building for fish farming</p> <p>1.7 Monitoring and maintenance of fish farms (with pisciculture technicians) for productivity, husbandry, control of pests/disease, marketing, (building of management skills), etc</p> <p>1.8 Technical support at all stages</p> <p>1.9 Regular monitoring surveys and data analysis of socio-economic and biological indicators to assess progress against indicators including how much time adults spend working towards protein-generating activity by end of year 4</p>		
<p>Output 2.</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>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</p> <p>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</p> <p>2.3 75% of registered adults report launch of income-generating activity by end of year 4</p>	<p>The main progress made towards the project outcomes till date include a major participation of 190 men (53%) and 167 women (37%) of the total population in attending 12 workshops organised; 48 adults representing 48 household attending the first workshop held in Kabilone II; 357 people participating in the restitution meetings. It should be noted that over 70% of the participants in the training were men while 30% were women. In total 174 farmers having a total of 87 hectares of cocoa have registered for the creation of new farms while 56 with a total of 144.5 hectares are willing to rehabilitate their old farms. A first draft of the REA for group of Cocoa Farmers has been written up and workshops to present the 10 principles of Rainforest Alliance certification organised. 178 cocoa farmers participated, and 17 Village chiefs attended the meetings. Five letters written by the villages' chiefs to the SDO of Somalomo to band poachers from entering the 17 villages. 02 workshops have been organised at the TF-RD research centre in Kabilone to present the draft of REA, in which 34 resources persons participated, 17 men and 17 women. The first draft of REA has been presented and about 30 people are willing to sign by June. Therefore, indicators remain appropriate.</p>
<p>Activity 2.1.</p> <p>2.1 Organisation and running of 7 3-day workshops in across the northern periphery (in years 1 and 2) – to include open-ended interviews/discussions with communities to agree to participate in desired income alternatives, to address poverty issue.</p> <p>2.2 Individuals and village associations encouraged to register for scheme; process put in place for registration; regular review of registration statistics</p>		<p>Workshops were held (48 farmers attended, all target villages expressed a desire to be included, and the village chiefs offered a land of 5 hectares for the setting up of nurseries of plants). Restitution meetings held with farmers. Also, a functional nursery for Cocoa Plants was set up. Different groups of people (cocoa farmers and women collecting NTFP) attended, resulting in 357 people in total (190 men, 53%; 167 women, 37%), who understood the relevant points concerning the process for registering to the scheme that will contribute towards establishing the quid pro quo and adhering to the conditions till the time of signing</p>

<p>2.3 Agreements defined, agreed and written up for individuals and village associations registering for scheme</p> <p>2.4 Discussions with cocoa farming technicians for planning for cocoa farming (previously emerged as the desired income-generating activity in the region)</p> <p>2.5 Cocoa farming initiated in target communities (planting, growing, harvesting, etc) leading to launch of income-generating activity in up to 22 communities by end of year 4</p> <p>2.6 Workshops and groups meetings, as well as on the ground demonstrations, one-to-one sessions and ongoing support by technicians available for individuals and village associations in 22 communities (in years 2 and 3) for training and capacity building for cocoa farming (previously emerged as the desired income-generating activity in the region)</p> <p>2.7 Monitoring and maintenance of cocoa farms (with cocoa farming technicians) for productivity, control of pests/disease, marketing, (building of management skills), etc</p> <p>2.8 Technical support at all stages</p> <p>2.9 Regular monitoring surveys and data analysis of socio-economic and biological indicators to assess progress against indicators including how many adults report launch of income-generating activity by end of year 4</p>	<p>the REA. A total of 174 farmers with a total of 87 hectares of cocoa opted to register for the creation of new farms while 56 with a total of 144.5 hectares are willing to rehabilitate their old farms. Also, a functional nursery of 12000 plants was set up in Kagnol Village. The process of leading the local groups to sign REA is currently going on in the 17 villages. A workshop was organised in each of the 3 cocoa zones (178 people attended: 8 women, 4%; 177 men, 96%), 70 of which are ready to sign the established REA that govern the ten Rainforest Alliance criteria and the fight against poaching. Six 'Farmers Field' schools identified and cleaned, waiting for future training to be done inside to better apply the approach of TF-RD. Also, surveys were carried out on the current situation of agricultural practices by cocoa farmers with respect to certification norms and a report was written. Cocoa farmers were introduced to the training on appropriate techniques for rehabilitation of their old cocoa farms and the best practises to adopt in the rehabilitation process (clearing of plantations, adjustments of shade, standardization of planting densities, maintenance and renovation size, control of pests, black pods, replanting, diversification). 178 farmers were trained on such techniques, while 10 farms of 6 hectares were rehabilitated in the 3 zones.</p>	
<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>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>Two copies of REA are being produced by partners. One copy is on fishing farming and the other on cocoa farming in the Dja:</p> <p>Fisheries: REAs are a main component of the process of developing sustainable fisheries, and communities are involved in defining a working model that delivers benefit within certain limitations and commitments. The draft agreement is now under discussion in the villages since this is prior to concrete activity in the field (e.g. distribution of materials).</p> <p>Cocoa: A first draft of the REA for group of Cocoa Farmers has been written up; 6 workshops have been held in the 17 villages to present the 10 principles of Rainforest Alliance; 6 workshops to present the 10 principles of Rainforest Alliance certification organised. 178 cocoa farmers participated. 17 Village chiefs attended the meetings. 5 Letters written by the village chiefs to the SDO of Somalomo to ban poachers. The Rainforest Alliance principles have been written up and the draft of REA document is available.</p> <p>Therefore, indicators remain appropriate.</p>

<p>Output 4. 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>Intensive engagement with the project beneficiaries has led to the production of draft REA. These will be the basis for individuals (and/or GIC) taking part in, and benefitting from, the project interventions i.e. supply of cocoa seedlings, training; supply of fishing equipment, training in new technologies. It is envisaged that the start of signing REA will commence in Year 2.</p> <p>The identification of a gap in Cameroon policy and laws relating to utilising river systems as 'community fishing zones' has been identified. Addressing this gap, in order to define a legalised, sustainable river fishery system is a priority for Year 2 activities. Discussions have already commenced with MINFOF and MINEPIA (see above), the main Government authorities that will oversee the production of any new policy.</p> <p>Through discussions with the Conservator of the DFR, other MINFOF staff and NGOs involved in the Dja Actors' Forum, the management plan for the DFR will be shaped by outputs from the project.</p>
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Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Impact: 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>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.</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>0.1a Consumption surveys 2017, 2019 and 2021</p> <p>0.1b Annual estimates of total household incomes and food prices, 2017-2021</p> <p>0.1c Comparison with least-cost diets that meet energy and nutrient needs</p> <p>0.1d A series of questions to assess perceptions, past experiences, and food acquisition and allocation behaviour within the household, 2017, 2019 and 2021</p> <p>0.2 Empirical household socio-economic surveys (primary and secondary income and expenditure), 2017, 2019 and 2021</p> <p>0.3 Empirical household socio-economic surveys (primary and secondary income and expenditure), 2017, 2019 and 2021</p> <p>0.4 Bi-annual (rainy & dry season) small and large mammal abundance surveys, 2017-2021</p> <p>0.5a Annual hunting effort surveys (trap and gun hunting follows; hunter timelogging), 2017-2021</p> <p>0.5b Annual bushmeat offtake surveys, 2017-2021</p>	<p>External pressure continues to create sustainable use concern for local hunters and wildlife traders</p> <p>Improved enforcement of wildlife laws and sanctions in Dja landscape address hunters and wildlife traders who refuse to participate in the scheme</p> <p>National government remains amenable to policy dialogue and reform</p>

		0.5c Reports from anti-poaching committees facilitated by NGO facilitators	
<p>Outputs:</p> <p>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</p>	<p>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</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 'working' time working towards the protein-generating activity by end of year 4</p>	<p>1.1 Workshop attendance registers; surveys before and after on understanding of conservation benefits, purpose of training, capacities for activities, etc</p> <p>1.2 Signed agreements</p> <p>1.3 Survey data; interviews; field reports, etc...</p>	<p>75% of population of 22 communities are present in locality/healthy/available and are thus able to attend the workshops</p> <p>Registered members of the scheme do not abandon the activity within the first year</p>
<p>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</p>	<p>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</p> <p>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</p> <p>2.3 75% of registered adults report launch of income-generating activity by end of year 4</p>	<p>2.1 Workshop attendance registers; surveys before and after on understanding of conservation benefits, purpose of training, capacities for activities, etc</p> <p>2.2 Signed agreements</p> <p>2.3 Knowledge, attitude and practice surveys (KAP), using semi-structured interviews</p>	<p>75% of population of 22 communities are present in locality/healthy/available and are thus able to attend the workshops</p> <p>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>
<p>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>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</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>That the government remains open to submission and discussion of such schemes</p> <p>Full participation of community members enlisted</p>

	<p>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>	3.4 Completed and signed REAs (20 by end year 4)	
4. 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>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>	That the government accepts and approves of the REA scheme
<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> <p>0.1 Partner inception planning meeting and project launch meeting with key partners and stakeholder groups (Somalamo - Dja)</p> <p>0.2 Verification of selection of target 22 villages (self-selection process) through follow up dialogues by community facilitators with villages previously engaged in sustainable development activities in the Dja periphery</p> <p>0.3 Baseline review for socio-economic and biological indicators (baseline socioeconomic survey/faunal survey of target zone)</p> <p>1.1 Organisation and running of 7 2-day workshops across the northern periphery – to include open-ended interviews/discussions with communities to agree to participate in the scheme to achieve practical protein alternatives, to address food security issue</p> <p>1.2 Individuals and village associations encouraged to register for scheme; process put in place for registration; regular review of registration statistics</p> <p>1.3 Agreements defined, agreed and written up for individuals and village associations registering for scheme</p> <p>1.4 Discussions with pisciculture technicians for planning for fish-farming (previously emerged as the desired protein-generating activity in the region)</p> <p>1.5 Construction (building and stocking) of fish farms in target communities (leading to launch of protein-generating activity in up to 22 communities by end of year 4)</p> <p>1.6 Workshops and groups meetings, as well as on the ground demonstrations, one-to-one sessions and ongoing support by technicians available for individuals and village associations in 22 communities (in years 2 and 3) for training and capacity building for fish farming</p> <p>1.7 Monitoring and maintenance of fish farms (with pisciculture technicians) for productivity, husbandry, control of pests/disease, marketing, (building of management skills), etc</p> <p>1.8 Technical support at all stages</p>			

- 1.9 Regular monitoring surveys and data analysis of socio-economic and biological indicators to assess progress against indicators including how much time adults spend working towards protein-generating activity by end of year 4
- 2.1 Organisation and running of 7 3-day workshops in across the northern periphery (in years 1 and 2) – to include open-ended interviews/discussions with communities to agree to participate in desired income alternatives, to address poverty issue.
- 2.2 Individuals and village associations encouraged to register for scheme; process put in place for registration; regular review of registration statistics
- 2.3 Agreements defined, agreed and written up for individuals and village associations registering for scheme
- 2.4 Discussions with cocoa farming technicians for planning for cocoa farming (previously emerged as the desired income-generating activity in the region)
- 2.5 Cocoa farming initiated in target communities (planting, growing, harvesting, etc) leading to launch of income-generating activity in up to 22 communities by end of year 4
- 2.6 Workshops and groups meetings, as well as on the ground demonstrations, one-to-one sessions and ongoing support by technicians available for individuals and village associations in 22 communities (in years 2 and 3) for training and capacity building for cocoa farming (previously emerged as the desired income-generating activity in the region)
- 2.7 Monitoring and maintenance of cocoa farms (with cocoa farming technicians) for productivity, control of pests/disease, marketing, (building of management skills), etc
- 2.8 Technical support at all stages
- 2.9 Regular monitoring surveys and data analysis of socio-economic and biological indicators to assess progress against indicators including how many adults report launch of income-generating activity by end of year 4
- 3.1 Review, verification and/or adjustment of agreed parameters for the sustainable wildlife-harvesting model established under Darwin 20-007 (community consultation; MINFOF consultation; review of literature and best practice)
- 3.2 Focus group discussions with representatives from 22 villages joining the scheme to verify and establish parameters (agree equitable/transparent management structure/system, information sharing mechanisms/monitoring system) – increase understanding of benefits/roles, impacts of cultural changes
- 3.3 Drafting/translation of sample REA (Consolidation of findings from village discussions on desired scheme parameters; Review and feedback from community representatives)
- 3.4 Joint village (up to 22 participating villages represented) meeting for signing REAs
- 3.5 One-day workshop for relevant government agencies for final agreement and signing of REAs (7x1-day)
- 3.6 Monitoring of implementation of REAs (data collection and local partner reports)
- 3.7 Regular monitoring surveys and data analysis of socio-economic and biological indicators to assess progress against indicators including measures of knowledge and attitude to assess understanding of the barriers to cultural change
- 4.1 Bimonthly reports of local partners published on project partner webpages and disseminated through project partner newsletters/soundbites, etc
- 4.2 At least 4 issue-based webinars and e-newsletters to feedback and receive inputs from Community of Practice (CoP) and project partner network members
- 4.3 Drafting of technical paper for review by CoP (CoP will primarily peer review emerging REA data and design, help identify impact pathways, promote learning and facilitate the dissemination of project learning to national and subnational policy makers)
- 4.4 Dissemination of final project reports and technical paper amongst project partner networks, on project partner websites, and in at least 6 appropriate news/popular science bulletins/articles or reports.
- 4.5 Publication in peer-reviewed and popular science journals of main evidence-based project results (at least 4 publications).

Annex 3: Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Gender of people (if relevant)	Nationality of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
6A	Number of people to receive other forms of education/training	M:F 60:40%	Cameroonian	500	1500	0	500	2000
6B	Number of training weeks to be provided	NA	NA	8	14	TBC	8	22+
9	Number of species/habitat management plans (or action plans) to be produced for Governments, public authorities, or other implementing agencies in the host country	NA	NA	0	0	2 (1 produced and 1 amended)	0	2
10	Number of individual field guides/manuals to be produced to assist work related to species identification, classification and recording	NA	NA	0	1	0	0	1
11A	Number of papers to be published in peer reviewed journals	NA	NA	0	0	5	0	5
11B	Number of papers to be submitted to peer reviewed journals	NA	NA	0	2	3	0	5
14A	Number of conferences/seminars/workshops to be organised to present/disseminate findings	NA	NA	0	1	1	0	2
14B	Number of conferences/seminars/workshops attended at which findings from Darwin project work will be presented/ disseminated	NA	NA	0	1	1	0	3 (funding dependent)

20	Estimated value (£'s) of physical assets to be handed over to host country(ies)	NA	NA	2,000	5,000	3,000	2,000	10,000
22	Number of permanent field plots and sites to be established during the project and continued after Darwin funding has ceased	NA	NA	0	12	0	0	12 (6 cocoa and 6 fisheries)
23	Value of resources raised from other sources (i.e., in addition to Darwin funding) for project work	NA	NA	0	5-10,000 (required)	5-10,000 (required)	0	10-20,000 (required)

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)
NA						

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.	-
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.	