

Darwin Initiative Main Project Annual Report

Important note: To be completed with reference to the Reporting Guidance Notes for Project Leaders:

it is expected that this report will be no more than 10 pages in length, excluding annexes

Submission Deadline: 30 April

Darwin Project Information

Project Reference	21-016
Project Title	Alternative sustainable livelihood sources for forest edge hunting communities
Host Country/ies	Uganda
Contract Holder Institution	Royal Zoological Society of Scotland
Partner institutions	Budongo Conservation Field Station
Darwin Grant Value	£123,000
Funder (DFID/Defra)	DFID
Start/end dates of project	1st April 2014 - 30th March 2017
Reporting period	Apr 2015 – Mar 2016; Annual Report 2
Project Leader name	Dr. Fred Babweteera
Project website/blog/Twitter	www.budongo.org
Report author(s) and date	Fred Babweteera and Sarah Robinson; 29th April, 2016

1. Project Rationale

Hunters and forest edge community members set snares to catch antelopes for subsistence and commercial purposes. This has long-term effects on forest fauna populations. In addition, endangered species like chimpanzees are accidentally caught by the snares. For instance, in a chimpanzee community habituated for research in Budongo, over 45% of adult chimpanzees have snare related injuries and in extreme cases some chimpanzees have died. Consequently, snaring is one of the major threats to chimpanzees and other wild fauna in protected forests. Moreover, these forests and the fauna therein are major tourist attractions. Most hunters, who are often the lowest income earners, lack alternative livelihood sources. In addition, farms of these hunters and other forest adjacent communities are often raided by wildlife because of their proximity to the forest edge. This has led to increased human-wildlife conflicts. This project was designed to address the need for alternative livelihood sources to enhance household incomes of the most vulnerable households. In addition, the project targets improving buffer zone farming to minimize crop raids. The alternative livelihood sources are expected to increase house hold incomes of the poorest members of the target community. The alternatives will ensure that the community is less dependant on the forest resources

2. Project Partnerships

This project is implemented through the Budongo Conservation Field Station (BCFS) situated in Budongo Forest, western Uganda. The key partner in implementing this project is the Budongo Sub-county Local Government. The local government welcomed the activities under this project as complementary to its development initiatives. The Community Development Officer based at the sub-county has been the link person on this project. The local government staff have been involved in identification and mobilisation of beneficiaries. In addition, they have registered the

groups formed at the sub-county and are now in the process of registering the beneficiary groups at the district level. Additional partnerships have been developed with National Forestry Authority (NFA) and Masindi District Farmers Association (MADFA). NFA is a government agency charged with custody of central forest reserves such as Budongo Forest, MADFA is an association that provides technical support to local farmers in addition to providing marketing avenues for their produce.

3. Project Progress

3.1 Progress in carrying out project activities

Output 1

1.1 Identify and register forest dependant community members including hunters in 12 target villages: We identified an additional one hundred thirty two (132) households that were direct beneficiaries who received agricultural seed in 12 villages adjacent to Budongo Forest Reserve. In addition, 13 individuals were supported to undertake vocational training. The beneficiary families support over 600 dependants and were either affected by negative human-wildlife interactions, especially crop raiding by wildlife and or extracted forest resources illegally. Given the additional households identified in year 2, the total number of households supported by the project to-date is 429 and over 2,000 dependants. The beneficiaries belong to 12 villages which are the administrative units. However, to ease the project implementation, BCFS is working with the beneficiaries based on the eight associations they formed. This was a result of multiple villages forming one association due to historical factors. The new beneficiaries are included as an addendum to the respective agreements. Although hunters were the intended project beneficiaries, feedback from communities led to the inclusion of pit-sawyers who also set snares in the forest. Furthermore, poor non-illegal forest users were also included to avoid incentivising illegal forest users (see list of year 2 beneficiaries, Annex 4).

The initial timeline for this activity was Quarter 1 of Year 1 (2014) but, its implementation has been modified into phases as the field team progressively identifies project beneficiaries per crop season to allow effective delivery of project outputs to small, easy-to-engage beneficiary groups.

Output 2

2.1 Confidence building meetings with ex-hunters: Twenty one (21) confidence building meetings were conducted in the villages where the project worked during Year 2. This brings to 67 the total number of confidence building meetings held since the inception of the project. Project stakeholders including community members, the BCFS conservation team, Local Government leaders, the National Forestry Authority (NFA) and Masindi District Farmers' Association (MADFA) were involved. Winning the confidence of the new beneficiaries was faster as they had witnessed how the project worked and has positively impacted the project beneficiaries in the neighbouring households/communities. Peer relations among beneficiaries were also helpful in gaining the trust of the new beneficiaries. (See sample photo of participants in a confidence building meeting in Annex 5).

2.2 Training seminars and workshops: Ten training sessions were conducted in which beneficiaries received knowledge in group formation and dynamics, small business selection and management, as well as environmental conservation, and its associated policies. This brings to 50 the total number of seminars held since the inception of the project. The training approach included oral and pictorial presentations, and the sessions were attended by project partner institutions too. Local government leaders facilitated the sessions on leadership structures, constitution making and registration of groups. (See photos of participants attending a training workshop in Annex 5).

2.3 Joint snare patrol sessions

A total of 44 joint snare patrol days were conducted between April 2015 and March 2016. As a result of both the joint patrols and the daily patrol work by BCFS snare patrol team, 4,798 snares were recovered from the forest. The increase in the number of snares recovered from the forest could be attributed to the increase in patrol effort (joint snare patrol efforts) and the increase in spatial coverage i.e. extension of snare patrols to compartments not previously

patrolled. This brings to 50 the total number of joint patrols held since the inception of the project and over 8,000 snares recovered.

2.4 Formation and registration of ex-hunter associations: All beneficiaries who received project support during the second year joined the existing eight associations in their respective villages. One hundred twenty five (125) individuals from the associations signed conservation agreements in which the National Forestry Authority, Budongo Sub-county Local Government, Uganda Wildlife Authority and BCFS are co-signatories.

The groups are formally recognised by Budongo Sub-county Local Government but there is need to have the groups registered at the District Local Government. This is recommended as the groups would then be entitled to obtaining more benefits from the District Local Government and thus would enhance continuity beyond project time. In liaison with the Sub-county Community Development Officer, the process of registration at the district is in advanced stages and is expected to be complete by end of Q2 Year 3.

2.5 Biological surveys of wildlife species

A survey of wild fauna will be done in Year 3. However, using the transects that were earlier established to monitor the presence and abundance of fauna preferred for hunting, a survey of illegal activities in compartments neighbouring BCFS supported communities was carried out. The survey team recorded all signs of illegal human use of the forest including snaring, charcoal burning, illegal logging, pole cutting, animal grazing and cultivation. 144 signs of illegal forest use were encountered and charcoal burning incidences were the majority accounting for 50% of all the records of illegal activities. Other illegal activities included pit-sawing (38%), snaring (8%) and pole cutting (4%). No incidences of animal grazing and cultivation in the forest were noted. In general, most incidences of illegal forest use activities were within 1 km from the forest edge.

Output 3

3.1 Training in animal husbandry, improved agronomy and vocational skills: Training sessions to provide and consolidate knowledge gained by project beneficiaries in improved livestock and crop husbandry during year 1 continued. Emphasis was placed on housing, feeding and disease monitoring and control for livestock.

Training sessions in agronomy focused on seed-bed preparation, planting and recommended spacing, weed management, pest/disease control. Other training sessions focused on soil and water conservation following the excessive rains and soil erosion experienced during the second farming season. Annex 5 shows a MADFA agronomist advising farmers on site preparation and seed bed construction.

In this reporting period, 13 trainees completed vocational skills training (see Annex 4). Eight trained in brick laying and concrete practice whereas five trained in horticulture. Ten trainees earlier reported (Year 1 report) completed training in tailoring and hair dressing. The training institutions tailored the courses to suit the needs of the illiterate and semi-illiterate beneficiaries, emphasising hands-on skills (see Annex 6). Implementation of the activity is on schedule.

3.2 Procurement and distribution of seed capital including pigs, goats and improved seed varieties:

Following recommendations from community members, high value crop varieties, alongside those that are less vulnerable to wildlife raids were procured and distributed to 132 households (see sample list showing beneficiaries and crop received in Annex 7). Less-vulnerable varieties included soya bean, onions, rice, eggplant and green pepper and were planted on over 35 acres around the forest edge. BCFS also supported the beneficiaries with spray pumps and approved agrochemicals.

Distribution of seed had been planned for implementation until Q4 Year 2 but some of the crops will not be harvested till Q3 of Year 3. Distribution of seed capital was scheduled to end in Q4 of Year 2, but 25 beneficiaries whose crop yield was affected by adverse weather conditions received additional seed by reporting time (Q1 of Year 3).

3.3 Technical support services to beneficiary farms: We have continued providing technical assistance to project beneficiaries as well as other community members in conjunction with

BSLG and MADFA, our partners. Beneficiaries received technical support through farm visits to reinforce their knowledge in improved agronomic practices, livestock husbandry, and managing alternative livelihood projects sustainably. BCFS veterinarians treated 2,880 livestock belonging to over 260 households. In addition, poultry was treated against an outbreak of Newcastle disease during the year. In addition to treatment of the livestock, follow-up visits to individual households emphasised good hygiene and sanitation practices in the beneficiary homesteads. No change has been made to this activity's schedule, and offering technical support to beneficiaries will continue till Q2 of Year 3.

3.4 Improved homestead sanitation activities: Sensitisation of beneficiaries, alongside technical guidance and access of materials from the forest reserve for construction of sanitation facilities ensured that coverage of pit-latrines, bath shelters, utensil racks and rubbish pits reached 100% among project beneficiaries. It is a pre-requisite for the project beneficiaries to have these facilities in place before receiving project support.

3.5 Economic surveys of household incomes: We conducted a household income assessment targeting project beneficiaries. Preliminary analysis of the survey data showed that all households relied on farming as a major source of livelihood. Fifty percent of homesteads supplemented their income with off-farm activities e.g. unskilled casual labour, small retail businesses and services such as motorbike transport. Majority (95%) of the beneficiaries derived their livelihoods from forest-friendly sources, including cultivation of less-palatable buffer crops that minimise human-wildlife conflict and threats to conservation. A small proportion (5%) of beneficiaries still rely on sale of forest products which suggests that these individuals are not yet fully dependent on the alternative livelihood sources that we are promoting. The combination of on-farm and off-farm strategies employed by beneficiaries when pooled earned the average household \$1.35 per day, with the former contributing \$0.64 and the latter \$0.71 per day respectively. The project therefore exceeded the target increase in household income (\$1.2 per day), and achieved an average 69% increase (from \$0.8 per day to \$1.35 per day) among beneficiaries. The survey was delayed and conducted at the end of the cropping season in order to capture information on sales from the second farming season (survey questionnaire attached in Annex 8).

Output 4

4.1 Establish and manage demonstration sites for buffer zone farming: BCFS continued demonstrating improved farming practices to farmers through practical sessions at the 3 (three) BCFS demonstration sites (see Annex 5). However, 7 (seven) well-maintained farms belonging to select farmers were also used for demonstration purposes through peer networks among beneficiaries. Over 160 beneficiaries visited the BCFS demonstration sites. Crops demonstrated were those selected by and distributed to farmers, who identified them as less vulnerable to wildlife raids but of high economic value.

Experimental data on suitability of various selected crops as deterrents against crop raiding wildlife was collected from the BCFS demonstration sites. Results indicated that soya bean and eggplant are moderately vulnerable to raids by forest wildlife, notably baboons but are most vulnerable during the fruiting/seeding stage which would require farmers to spend less time guarding against wildlife. On the other hand, extreme weather interrupted the establishment and performance of the vegetables on the demonstration farms. Consequently, we did not obtain sufficient data regarding suitability of these crops.

4.2 Data collection and analysis of agricultural yield and household income: Following the close of the second farming season, a survey of household agricultural yield and income was conducted and preliminary analysis of the data by the field team revealed up to 22 crop varieties were cultivated by beneficiary households. Among these, 12 varieties including cabbage, eggplant, onions, rice, soya beans and other horticultural crops, had been introduced and/or promoted by BCFS after discussions with community members indicated they were of high economic value and/or less vulnerable to raids by wildlife. Generally low acreages were planted by beneficiaries and a comparison showed more land (0.3 acres on average) was dedicated to traditional crops than non-traditional crops (0.2 acres on average). Yields were similarly low, especially among non-traditional crops. Extreme weather conditions, late planting and raids by wildlife were most frequently cited as the possible explanatory factors for reduced yield.

In the typical beneficiary household, traditional crops were mainly reserved for consumptive uses as they are critical staple foods for the local communities, while non-traditional crops were mainly sold given their high economic value. Income earned from consumption within and trade outside the household were similar, both were estimated to be \$0.32 per day bringing it to a total of \$0.64 per day from on-farm strategies. Land hiring was the most expensive farm input and polystyrene sacks were the most common storage item which had further implications on the profit realised. Findings from the survey suggest that households have a high potential for improving their incomes from agriculture, provided favourable weather conditions prevail, proper agronomic practices and timely planting are done. The findings of the survey were shared with Budongo Sub-county Local Government Council in order to support the planning process of the council and the production sector of the Local Government. (See Annex 8 Survey questionnaire and Annex 9; BSLG invitation letter).

4.3 Develop and distribute buffer zone farming guidelines: The first draft of the buffer zone farming guidelines has been made and will be finalised in Year 3 as we continue to collect more information from the farmers and the demonstration gardens. The guidelines will be discussed with farmers, MADFA and BSLG for their input and sense of ownership. Preliminary findings from buffer zone cropping were also shared with the BSLG council.

3.2 Progress towards project outputs

Output 1:	Individual forest dependant community members including hunters, their respective household dependants and livelihood analysis conducted			Comments (if necessary)
	Baseline	Change recorded by 2016	Source of evidence	
Indicator 1.1	None	Livelihoods analysis report submitted in May 2015.	Baseline Survey Report	Beneficiary livelihoods will be assessed again during Q3 of Year 3
Output 2:	Conservation agreement/framework to support forest dependant community members including hunters and their dependents established in 12 villages			
Indicator 2.1	None	A register of beneficiaries including 90 ex-hunters, 58 pit-sawyers and 281 poor non-illegal forest users families in 12 villages completed	Annex 4, and Section 3.1, Output 1 of this report	22 pitsawyers, 15 hunter and 108 poor non-illegal forest users families were enlisted during Yr 2
Indicator 2.2	None	Sixty seven confidence building meetings and fifty training seminars held	Annex 5	21 confidence building meetings and 10 training seminars were held in Yr 2
Indicator 2.3	None	Eight conservation agreements between project beneficiaries, BCFS, and BSLG, NFA and UWA formally signed.	Annex 10	One more conservation agreement is yet to be signed by beneficiaries that participated in Horticulture.
Indicator 2.4	Twenty snares recovered from the forest per patrol day by the BCFS snare patrol team	A total of 8098 snares recovered by snare patrol team and ex-hunters in joint patrol sessions by March 2016. An average of eight		A total of 4,798 snares recovered by snare patrol team and ex-hunters in joint patrol sessions in Yr 2

		snare are recovered from the forest per day by the BCFS snare patrol team		
Indicator 2.5	At-least five chimpanzees recorded trapped by snares annually	Only 1 chimpanzee was recorded caught in a snare in Yr 2		This chimp was reported in an area that is not regularly patrolled.
Output 3:	Household specific alternative livelihoods sources selected through participatory methods with individual beneficiary households; Understanding of economic potential of improved agricultural practice as opposed to illegal hunting practice.			
Indicator 3.1	Agronomic practices heavily relied on indigenous knowledge and revolved around traditional crops	First draft guidelines on improved agronomic practices compiled basing on the two crop seasons and shared with local government		Compilation and distribution will concluded in Yr 3 as more trials are being carried out and add additional data collected
Indicator 3.2	Forest dependant communities including hunters earned \$0.8 per day	Project beneficiaries including hunters, pit sawyers and vulnerable households earning \$1.35 per day	Alternative livelihood beneficiaries survey report will be available in July, 2016	
Indicator 3.3	None	23 persons received training in vocational skills Training institutions developed specific curriculum for the project beneficiaries to suit their training needs	Annex 4, 5, 6	13 beneficiaries enrolled for training in horticulture (5) and brick laying and concrete practice (8)
Output 4:	Agricultural demonstration farms established to promote adoption of buffer-zone cropping systems that minimize crop loss to wildlife			
Indicator 4.1	None	Three buffer zone cropping demonstration farms established	Annex 11; Land use agreement	
Indicator 4.2	None	Guidelines on buffer zone farming were drafted and additional data and information is being collected to further inform the practice		Guidelines on buffer zone farming to be published and distributed in year 3
Indicator 4.3	Raids on crops by wildlife including endangered chimpanzees increasing in frequency and intensity accounting for at least 10% of the reductions in crop yield in addition	Observations suggest a 30% reduction in crop raiding.		Final report to be published by end of Year 3

	to spending lots of time guarding the garden against attacks from wildlife			
--	--	--	--	--

3.3 Progress towards the project Outcome

Outcome:	Hunters and their dependants, in twelve forest edge communities supported to develop alternative sustainable livelihoods that are compatible with wildlife conservation.			Comments (if necessary)
	Baseline	Change by 2016	Source of evidence	
Indicator 1	None	Eight conservation agreements between project beneficiaries, BCFS, and BSLG, NFA and UWA formally signed	Annex 10	
Indicator 2	Average livestock herd size in ex-hunter households was 0	Average livestock herd size in beneficiary households was at least 5 goats	Alternative livelihood beneficiaries survey report	
Indicator 3	Household incomes in forest dependant communities including hunting communities estimated at 0.8\$ per day	Household incomes of project beneficiaries including hunters, other illegal forest users and vulnerable households increased to \$1.35 per day	Alternative livelihood beneficiaries survey report	
Indicator 4	Forest dependant communities including hunters not trained in vocational skills, with an average income estimated at \$0.8 a day	Twenty three beneficiaries have acquired vocational skills and started working.	Annex 4 and 5	Income to be analysed in Q2 Yr3
Indicator 5	Households mainly cultivate traditional crops, even at the forest edge	50 beneficiary households prefer and are willing to continue growing soya bean, cabbage and rice	Alternative livelihood beneficiaries survey report	
Indicator 6	Twenty snares recovered from the forest per day	An average of 8 snares recovered from the forest per day		
Indicator 7	20% of forest edge community households have functional sanitation facilities	100% of beneficiary households have functional sanitation facilities.	Alternative livelihood beneficiaries survey report	
Indicator 8	5% community members' livestock receiving periodic veterinary care	Livestock belonging to 406 households (1.5% improvement) receiving periodic	Alternative livelihood beneficiaries survey report	

		veterinary care		
--	--	-----------------	--	--

3.4 Monitoring of assumptions

Assumption 1: Full cooperation by project beneficiaries and commitment to sustain the selected livelihoods projects.

Comments: To a great extent the assumption is valid as project beneficiaries are making commitments to work together under local government and farmer associations with plans beyond project time.

Assumption 2: Hunters will be willing to donate two female goats/pigs for the expansion of the scheme to other villages.

Comments: There is evidence that one group has already resolved to share seed in a revolving cycle. Beneficiaries who received seed will return same quality, same quantity which will then be distributed to new members that will also be admitted to the groups as beneficiaries (see Annex 12).

Assumption 3: Quality of farm produce is good and competitive on the market.

Comments: The assumption is still valid as there has not been any complaint from the buyers who bought the agricultural produce. However there is a risk that the seed quality could be compromised by getting mixed varieties because beneficiaries subsequently get seed from various sources

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

The number of snares recovered from the forest have reduced to 8 snares per patrol day from the earlier recorded 20 snares per patrol day before this project was implemented. Snare patrol efforts have been enhanced and now cover a wider area and engage ex-hunters that benefit from the project in joint snare patrol sessions over which an even higher number of snares set in the forest are recovered. Consequently, the risk to wild fauna including the iconic chimpanzees is reducing.

By supporting forest dependant communities including hunters to engage in alternative livelihood practices such as cultivation of high value crops that are also less prone to raids by wild fauna, livestock rearing and acquiring vocational skills, a 69% increase in beneficiary household incomes has been recorded from \$0.8 a day to \$1.35 during the second year of the project (Alternative livelihood beneficiaries survey report)

4. Contribution to SDGs

SDG 1 (No Poverty) and SDG15 (Life on land, Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss) are relevant to this project. To SDG1, the project has contributed by providing forest dependant communities including hunters an alternative source of income by encouraging cultivation of high value non traditional crops, livestock rearing and vocational training. A 69% increase in beneficiary household incomes has been recorded from \$0.8 to \$1.35 a day which is higher than the presumed \$1.25 a day for extreme poverty by the World Bank. Furthermore, the rate of illegal activities such as pit sawing and hunting have reduced over the project area which in turn reduces the threats to forest biodiversity contributing to SDG15. We have recorded a reduction in the number of snares recovered from the forest from approximately 20 snares per day before the project started to now approximately 8 snares a day.

5. Project support to the Conventions, Treaties or Agreements

This project is tackling the key threat of bush meat hunting on chimpanzees (a highly endangered species). Much as chimpanzees are not the target species for hunters, the indiscriminate method of hunting affects chimpanzee populations. The project is working

towards reducing the number of snares set in the forest, in addition to reducing acts of illegal timber harvesting that provides access to other illegal forest users. We have recorded a reduction in the number of snares recovered by the snare patrol team from approximately 20 per day to approximately 8 per day in the second year. In addition, the project is promoting the use of buffer crops that are less palatable to crop raiding wildlife. Observations are on-going around farmlands to document the frequencies of crop raiding following the introduction of the less palatable crops and guidelines on buffer zone farming have been drafted and will be published and distributed to the BSLG and the community members in year 3 of the project life cycle.

6. Project support to poverty alleviation

Around the project area, there is a tendency for farmers to grow traditional crops such as maize and cassava. These traditional crops often contribute little to household income because they tend to be harvested at the same time thus increasing supplies leading to a reduction in farm produce prices. The introduction of non-traditional crops, has enabled the farmers to diversify their farm produce thus increasing prospects for increased household income. Based on a few pilot/demonstration farmers whom we engaged to grow vegetables (non-traditional high value crops) during the first planting season of this project, the farmers recorded a 30% rise in farm produce income using the same farm acreage. In the main growing season, farmers were engaged in growing of soy bean and vegetables and following a household survey of the project beneficiaries, farmers recorded a 68% rise in household incomes from \$0.8 to \$1.35 a day. (Alternative livelihood beneficiaries survey report)

7. Project support to Gender equity issues

The project has endeavoured to involve the most vulnerable community members on the project, especially women. An additional 40 direct beneficiary households in year 2 are women led which brings the total of over 100 women led beneficiary households. Alongside this, the project emphasises that although the majority household heads are male led, the support provided to each beneficiary household is towards the family members including women and children.

8. Monitoring and evaluation

The outcome and output indicators are good tools for monitoring the progress of this project. The progress towards the project activities and outputs reported in the previous sections is adequate for the project monitoring and evaluation.

9. Lessons learnt

The use of ex-hunters and other beneficiaries from the previous phase of this scheme enabled smooth dialogues during the confidence building meetings. It is often difficult to get hunters and other illegal forest users admitting their acts due to fear of being victimised and arrested. Consequently, we give credit to beneficiaries from the previous phase in getting other hunters and pit sawyers on the scheme.

The most difficult part of the project was selection of representative sites for the demonstration farms. Many individuals were keen on hosting the demonstration farms, whereas the selection criteria (especially the minimum size of the land required) implied that the selected farms did not belong to the poorest of the community members. It was desirable to locate some demonstration farms on smaller parcels of land given that the small land holdings are representative of the average community landholdings. To this effect, we propose to establish additional demonstration plots on smaller land holdings to mimic the typical farming conditions of this community.

We also observed that when beneficiaries farmers realised an unprecedented rise in household income, many did not know how to manage the success and in many cases they misused the additional income. It is therefore important for projects that target poverty reduction to plan for management of increased household incomes.

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

The project adaptation included hunters, pit sawyers and the low income community members that are not involved with illegal forest activities in 12 villages. As such, the wording of output 1&2 in the logical framework have been adjusted to include these changes. However, 8 conservation agreements have been signed so far and one more by the beneficiaries that benefited from horticulture is yet to be signed. The conservation agreements are not necessarily a reflection of the villages in which the project was adopted but rather the associations beneficiaries formed due to their historical background. Information dissemination with other stakeholders has been enhanced by engaging in workshops where we share our experience and are positive that the elements that have catalyzed the success of this project will be useful lessons to other protected areas facing similar conservation challenges.

Submission dates of the evidence and other source materials to verify the project outputs and outcomes have not been defined as these are authored and produced by the Masindi Local Government. The Local Government has over the years had a record of inconsistencies regarding the publication of the Annual district development reports hence committing to the time when these will be available is beyond our scope.

11. Other comments on progress not covered elsewhere

The design of the project has not significantly changed, the project was adapted in 12 villages but rather 8 conservation agreements have been signed to include all the beneficiaries in the 12 villages as originally proposed. Pit sawyers and low income community members in the were also included in the selection process as beneficiaries of this project. The inclusion of pit sawyers followed the realisation that pit sawyers frequently set snares during the illegal pit sawing ventures. In addition, we included the poorest households in the community following concerns raised by local leaders and community members that our initiatives were targeting the 'wrong doers' (hunters and pit sawyers) with an aim of providing alternative livelihood sources. Consequently, they urged the project to include the poorest community members as beneficiaries of the alternative livelihoods project since they too depend on the forest.

12. Sustainability and legacy

Through this project, we have joined the Poverty and Conservation Learning Group(PCLG) in Uganda. Through the PCLG forum we have attended meetings and workshops organised to share experiences of the poverty alleviation strategies. The project has also attracted local and international intern students to get hands on experience of the poverty and conservation linkages. We plan to provide more internship opportunities to the growing number of applicants wishing to take up internship opportunities on this project. Through providing technical support in partnership with MADFA to the farmers, and vocational training, beneficiaries are able to acquire skills and competencies that they can pass on to other community members as well as the younger generation. A proposal to amend conservation agreements has been amended to include a clause on re-investment in the project by project beneficiaries donating two breeding goats and/or some of their crop harvest back into the project that will benefit even more community members. See annex 12 on minutes by one of the farmers' association meeting were they agree to this proposal.

13. Darwin Identity

The Darwin Initiative is part of the community conservation programme implemented by the Budongo Conservation Field Station. During presentations to various visitors to Budongo Conservation Field Station, this project is presented with specific reference to the grant form Darwin Initiative. The demonstration sites are clearly marked with sign posts indicating that they were established with support from the Darwin Initiative. The Darwin Initiative logo also appears on BCFS website and this Initiative is clearly spelt out as our key funder on this project.

14. Project Expenditure

Table 1 Project expenditure during the reporting period (1 April 2015 – 31 March 2016)

Project spend (indicative) since last annual report	2015/16 Grant (£)	2015/16 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)			0	
Consultancy costs	0	0	0	
Overhead Costs			-6.9	
Travel and subsistence			+1.8	
Operating Costs			+2.1	
Capital items (see below)			-7.0	
Others (see below)	0	0	0	
TOTAL			-0.7	

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

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2015-2016

Project summary	Measurable Indicators	Progress and Achievements April 2015 - March 2016	Actions required/planned for next period
<p>Impact: Household incomes and food security improved among forest edge communities as a result of access to skills and diversified agricultural products that provide alternatives to indiscriminate hunting that threatens iconic wildlife species</p>		<p>The introduction of non-traditional crops, has enabled the farmers to diversify their farm produce thus increasing household income by 68% (from \$0.8 a day to \$1.35 a day) by the time of the economic household survey.</p>	
<p>Outcome: Forest dependant communities including hunters and their dependants, in twelve forest edge communities supported to develop alternative sustainable livelihoods that are compatible with wildlife conservation.</p>	<ul style="list-style-type: none"> • Signed Conservation Agreements with a list of beneficiary signatories • Household agricultural output survey, Local Government agricultural output reports • Household income surveys • Household agricultural output survey, Local Government agricultural output reports; Video footage and photographs of homesteads before and after project implementation • Number of ex-hunters with vocational training and their household incomes; Quality and quantity of commodities (especially wood-based items) produced by the beneficiaries • Spatial and temporal variations in snare recovery data; Number of new snare injured chimpanzees; Periodic large mammal survey reports by BCFS • Household sanitary facilities' survey; Video footage and photographs of homestead sanitary 	<p>Seed capital including pigs, goats and improved seed varieties were procured and distributed to beneficiary farmers. In order to consolidate the livelihoods project, we have continued to mentor beneficiary farmers through training in crop and animal husbandry and providing technical support. In addition household agricultural output and income surveys to assess changes in household incomes/welfare were successfully conducted and we recorded a 68% increase in household incomes.</p> <p>Snare recovery data compiled and a comprehensive data base is being developed.</p>	<p>The main activities shall include continued training in animal husbandry, improved agronomy and vocational skills and the development and distribution of the buffer zone farming guidelines to enhance the sustainability of the project. In addition we will conduct economic surveys of households to assess changes in household incomes/welfare.</p>

	<p>facilities before and after project implementation</p> <ul style="list-style-type: none"> • Reports capturing statistics of veterinary rounds and the number of livestock treated; Local government veterinary report 		
Output 1: List of individual forest dependant community members including hunters, their respective household dependants and livelihood analysis conducted.	Report of a livelihood analysis of beneficiary households. Parameters assessed to include level of education and income, family size, assets including land, number of snares possessed and hunting frequency	Data collection for the livelihoods baseline study in twelve villages was completed. An expert socio-economists was recruited to support the field team write up the report. Final report was published in May, 2015.	
Activity 1.1: Identify and register hunters in 12 target villages		165 beneficiaries registered; 15 hunters; 22 Pit-sawyers; 128 Low income earners registered	
Activity 1.2: Conduct livelihood analysis of ex-hunters' households		Data collection for the livelihoods baseline study in twelve villages was completed	
Output 2: Conservation agreement/framework to support forest dependant communities including hunters and their dependants established in 12 villages.	<ul style="list-style-type: none"> • Register of all ex-hunters and their household members in the 12 villages. • Fourty confidence building meetings and 48 training seminars held with ex-hunters' groups • Formally signed conservation agreements between BCFS and hunters' associations. • Collections of snares recovered from ex-hunters and within the forest • No new record of chimpanzees maimed or killed by snares 	Twenty one confidence building meetings and 10 training seminars have been conducted in the second year and all beneficiaries participated in the sessions. The official signing of the agreements was done in May 2015 and the implementation of the agreement is on-going. An amendment to the conservation agreement was done to include a clause on the willingness of the project beneficiaries to re-invest in the project by giving back two breeding goats and/or some of their crop produce to the project to benefit new project beneficiaries	
Activity 2.1: Confidence building meetings with ex-hunters		<ul style="list-style-type: none"> • 21 confidence building meetings conducted in the second year 	
Activity 2.2: Training seminars and workshops		<ul style="list-style-type: none"> • 10 training seminars/workshops conducted in the second year 	
Activity 2.3: Joint snare patrol sessions		<ul style="list-style-type: none"> • Forty four joint snare patrols were sessions were conducted leading to recovery of over 4,750 snares 	
Activity 2.4: Formation and registration of ex-hunter associations		<ul style="list-style-type: none"> • Content of conservation agreement was discussed and agreed upon. Agreements were signed in May 2015 	

<p>Activity 2.5: Biological surveys of wildlife species</p>	<ul style="list-style-type: none"> • 24 transects measuring 3 km each were systematically established to run from the forest edge bordering with human settlements into the forest interior and monitoring of proxy indicators of animal populations along the transects is ongoing and a survey of illegal forest use was conducted
<p>Output 3: Household specific alternative livelihoods sources selected through participatory methods with individual beneficiary households; Understanding of economic potential of improved agricultural practice as opposed to illegal hunting practice</p>	<ul style="list-style-type: none"> • Guidelines for improved agronomic practices accepted by the local government production department • Income levels of beneficiaries increase from \$0.8 to at least \$1.2 per day • Vocational training curriculum tailored for illiterate or semi-illiterate community members developed by end of year 1 <p>A variety of alternative livelihood sources were identified. Although majority of beneficiaries opted for livestock rearing as was anticipated, a number of beneficiaries opted for crop production projects. Changes in income levels were assessed and 68% increase in household incomes was recorded from \$0.8 a day to \$1.35 a day. In general the indicators are appropriate for the project outputs</p>
<p>Activity 3.1: Training in animal husbandry, improved agronomy and vocational skills</p>	<ul style="list-style-type: none"> • The veterinary and crop production teams have conducted over 10 training sessions at various pre-determined venues. In addition, the teams have made on-spot household visits and mentored farmers. • Ten beneficiaries (including 8 women) concluded a six month training course in tailoring and/or hair dressing. Thirteen other beneficiaries successfully concluded their training in horticulture and brick laying.
<p>Activity 3.2: Procurement and distribution of seed capital including pigs, goats and improved seed varieties</p>	<ul style="list-style-type: none"> • Improved seed of high value crops to establish 35 acres of farmland was procured and distributed.
<p>Activity 3.3: Technical support services to beneficiary farms</p>	<ul style="list-style-type: none"> • Pesticides and fungicides were procured to facilitate on-farm technical training (Refer to activity 3.1). The support will continue during the duration of this project.
<p>Activity 3.4: Improved homestead sanitation activities</p>	<ul style="list-style-type: none"> • 100% of beneficiary households have functional pit latrines, garbage disposal pits, livestock pens and kitchen ware drying racks
<p>Activity 3.5: Economic surveys of household incomes</p>	<ul style="list-style-type: none"> • Economic surveys of household incomes were successfully conducted and concluded in March, 2016 cater for the changes in household incomes after the two main cropping seasons. The report will be available in July, 2016.
<p>Output 4: Agricultural demonstration farms established to promote adoption of buffer-zone cropping systems that minimize crop loss to wildlife</p>	<ul style="list-style-type: none"> • 12 demonstration farms of 12 acres minimum established by end of year 1 • Working paper on buffer zone cropping systems accepted by <p>Three demonstration farms were established and a number of buffer zone crops are currently being tried. Over 160 farmers have attended training sessions on buffer zone cropping. The buffer zone guidelines have been drafted and will be published and distributed in year 3</p>

	local government production department <ul style="list-style-type: none"> • Frequency and intensity of crop raiding by wildlife reduced by 30% by year 3 	
Activity 4.1: Establish and manage demonstration sites for buffer zone farming		<ul style="list-style-type: none"> • Three buffer zone demonstration farms covering 7 acres have been established
Activity 4.2: Data collection and analysis of agricultural yield and household income		<ul style="list-style-type: none"> • Data on agricultural yield and household income was collected and analysed and the report will be available in July 2016.
Activity 4.3: Develop and distribute buffer zone farming guidelines		<ul style="list-style-type: none"> • The development of the buffer zone farming guidelines is still ongoing as we continue to learn more from our demonstration gardens

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: Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained in resources.</p>			
<p>Outcome: Hunters and their dependants, in twelve forest edge communities supported to develop alternative sustainable livelihoods that are compatible with wildlife conservation.</p>	<ul style="list-style-type: none"> • Twelve conservation agreements signed and implemented between ex-hunters' associations and Budongo Conservation Field Station/Budongo Sub-county Local Government • Increased farm production of 250 hunting community households with livestock herds increased from 0 to 12 by year 3; The increased farm production shall be a joint effort of all household members including wives and children • House hold incomes of hunting communities increased from \$0.8 per day to \$1.2 per day by year 3 • A minimum of 8 ex-hunters complete vocational skills development programme per year; Household incomes of the trained ex-hunters increased from \$0.8 per day to \$2 per day • A minimum of three non-traditional agricultural crops used for buffer zone cropping adopted by 100 forest edge community households, including ex-hunter households by end of year 3. • The number of snares surrendered by ex-hunters; The number of snares recovered in the forest per day 	<ul style="list-style-type: none"> • Signed Conservation Agreements with a list of beneficiary signatories • Household agricultural output survey, Local Government agricultural output reports • Household income surveys • Number of ex-hunters with vocational training and their household incomes; Quality and quantity of commodities (especially wood-based items) produced by the beneficiaries • Household agricultural output survey, Local Government agricultural output reports; Video footage and photographs of homesteads before and after project implementation • Spatial and temporal variations in snare recovery data; Number of new snare injured chimpanzees; Periodic large mammal survey reports by BCFS • Household sanitary facilities' survey; Video footage and photographs of homestead sanitary facilities before and after project implementation • Reports capturing statistics of veterinary rounds and the number of livestock treated; Local government 	<ul style="list-style-type: none"> • Full cooperation by the ex-hunters and commitment to sustain the selected livelihoods projects. • Hunters will be willing to donate 2 female goats/pigs for the expansion of the scheme to other villages • Quality of farm produce is good and competitive on the market.

	<p>reduced from over 20 to less than 5 in the first year; No new records of snare injured chimpanzees and increases in the population of hunted fauna in years two and three of the project</p> <ul style="list-style-type: none"> • 250 ex-hunter's households establish and maintain pit latrines, waste disposal sites and livestock cages/sty; The percentage of beneficiary households with proper homestead sanitary facilities increased from 20% to 100% by year 3; • Livestock for 250 households receiving periodic veterinary care to increase productivity and minimise the risk of zoonotic diseases; The proportion of beneficiaries livestock receiving veterinary care increased from 5% to 75% by year 3. 	veterinary report	
Outputs 1: List of forest dependant communities including hunters, their respective household dependants and livelihood analysis conducted.	1a: Report of a livelihood analysis of beneficiary households. Parameters assessed to include level of education and income, family size, assets including land, number of snares possessed and hunting frequency.	1a: Report of a livelihoods analysis.	
Output 2: Conservation agreement/framework to support forest dependant communities including hunting communities and their dependants established in 12 villages.	<p>2a: Register of all ex-hunters and their household members in the 12 villages.</p> <p>2b: Forty confidence building meetings and 48 training seminars held with ex-hunters' groups</p> <p>2c: Formally signed conservation agreements between BCFS and hunters' associations.</p> <p>2d: Collections of snares recovered from ex-hunters and within the forest</p> <p>2e: No new record of chimpanzees maimed or killed by snares</p>	<p>2a: Register of all forest dependant community members including ex-hunters and their household members in the 12 villages</p> <p>2b: Report of confidence building meetings and training seminars; Photos of participants in session.</p> <p>2c: Signed agreements</p> <p>2d: Storage facility of recovered snares</p> <p>2e: Records of snare injured chimpanzees.</p>	<ul style="list-style-type: none"> • Beneficiaries will denounce the previous illegal activities and the alternative livelihoods projects provided will be an incentive not to return to the past practices

<p>Output 3: Household specific alternative livelihoods sources selected through participatory methods with individual beneficiary households; Understanding of economic potential of improved agricultural practice as opposed to illegal hunting practice.</p>	<p>3a: Guidelines for improved agronomic practices accepted by the local government production department</p> <p>3b: Income levels of beneficiaries increase from \$ 0.8 to at least \$ 1.2 per day</p> <p>3c: Vocational training admissions per year</p>	<p>3a: Brochures of improved agronomic practices</p> <p>3b: Household agricultural output survey; Video footage and photographs of homesteads before and after project implementation</p> <p>3c: Number of beneficiaries enrolled for vocational training</p>	<ul style="list-style-type: none"> • The selected alternative livelihoods projects provide better economic returns and farmers are willing to sustain the projects
<p>Output 4: Agricultural demonstration farms established to promote adoption of buffer-zone cropping systems that minimize crop loss to wildlife.</p>	<p>4a: 12 demonstration farms of 12 acres minimum established by end of year 1</p> <p>4b: Working paper on buffer zone cropping systems accepted by local government production department</p> <p>4c: Frequency and intensity of crop raiding by wildlife reduced by 30% by year 3</p>	<p>4a: Number and/or acreage of demonstration farms. Photos of demonstration farms</p> <p>4b: Print of working paper on buffer zone cropping systems</p> <p>4c: Report of crop raiding dynamics in project area</p>	<ul style="list-style-type: none"> • Selected buffer zone crops are culturally acceptable and can
<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>Activity 1.1 Identify and register hunters in 10 target villages</p> <p>Activity 1.2 Conduct livelihood analysis of ex-hunter households</p> <p>Activity 2.1 Confidence building meetings with ex-hunters in their respective villages</p> <p>Activity 2.2 Training seminars and workshops</p> <p>Activity 2.3 Snare patrol exercises</p> <p>Activity 2.4 Formation and registration of ex-hunters associations; Signing of conservation agreements</p> <p>Activity 2.5 Biological surveys of spatial and temporal distribution of wildlife especially the hunted species and chimpanzees</p> <p>Activity 3.1 Training of ex-hunters in animal husbandry, improved agronomic practices and vocational skills</p> <p>Activity 3.2 Procurement and distribution of seed capital including pigs, goats and improved seed varieties</p> <p>Activity 3.3 Technical support services to beneficiaries including veterinary rounds and on-farm extension services</p> <p>Activity 3.4 Campaign to establish improved homestead sanitations</p> <p>Activity 3.5 Economic surveys of household incomes</p> <p>Activity 4.1 Sign agreements with 8 farmers for the lease of land and establish demonstrations for buffer zone cropping</p> <p>Activity 4.2 Data collection and analysis of yield and income</p> <p>Activity 4.3 Develop and submit buffer zone cropping guidelines</p>			