

DARWIN INITIATIVE APPLICATION FOR GRANT FOR ROUND 20: STAGE 2

Please read the Guidance Notes before completing this form. Where no word limits are given, the size of the box is a guide to the amount of information required.

Information to be extracted to the database is highlighted blue.

ELIGIBILITY

1. Name and address of organisation (NB: Notification of results will be by email to the Project Leader)

Name of organisation: Royal Zoological Society of Scotland	Address: Edinburgh Zoo, 134 Corstorphine Road Edinburgh EH12 6TS, SCOTLAND Email: fbabweteera@rzss.org.uk Tel: +256 (0)772 466 336
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2. Stage 1 reference and Project title

Ref: 2337: Alternative sustainable livelihood sources for forest edge hunting communities

3. Project dates, and budget summary

Start date: April 2014		End date: March 2017		Duration: 3 Years
Darwin request	2014/15 £49,895	2015/16 £41,540	2016/17 £31,565	Total £123,000
Proposed (confirmed and unconfirmed) matched funding as percentage of total Project cost: 60%				
Are you applying for DFID or Defra funding? (Note you cannot apply for both)		DFID Yes	Defra No	

4. Define the outcome of the project. This should be a repetition of Question 24, Outcome Statement.

(max 30 words)

Household incomes and food security improved among forest edge communities as a result of access to vocational skills and diversified agricultural products that provide alternatives to hunting that threatens wildlife species.

5. Country(ies)

Which eligible host country(ies) will your project be working in. You may copy and paste this table if you need to provide details of more than four countries.

Country 1: UGANDA	Country 2:
Country 3:	Country 4:

6. Biodiversity Conventions

Which of the three conventions supported by the Darwin Initiative will your project be supporting? Note: projects supporting more than one convention will not achieve a higher scoring

Convention On Biological Diversity (CBD)	Yes
Convention on Migratory Species (CMS)	No
Convention on International Trade in Endangered Species (CITES)	No

6b. Biodiversity Conventions

Please detail how your project will contribute to the objectives of the convention(s) your project is targeting. You may wish to refer to Articles or Programmes of Work here.

Note: No additional significance will be ascribed for projects that report contributions to more than one convention

(Max 200 words)

This project will tackle key threats identified in the CBD Programme of Work for Protected Areas in Uganda (POWPA): particularly indiscriminate hunting and Human-Wildlife Conflict and its impact on people living close to the forest edge. As Uganda's protected areas have become islands surrounded by people, indiscriminate hunting and human-wildlife conflicts have increased and become key management problems.

The project will contribute to Aichi strategic goals B (reducing pressures on biodiversity targets); C (improving the status of biodiversity targets); D (enhance benefits to biodiversity and ecosystem services) and specifically Targets 1 (improving awareness of biodiversity values), 5 (rate of loss or degradation of habitats reduced), 7 (areas under agriculture are managed sustainably), 12 (extinction of threatened species prevented), and 19 (scientific knowledge relating to biodiversity loss and value increased).

The Action Plan for the Conservation of Eastern Chimpanzees (2011) identified habitat degradation, illegal hunting and high poverty levels as the major threats to chimpanzee conservation. This project is targeting these threats.

Is any liaison proposed with the CBD/CITES/CMS focal point in the host country?

Yes **No** **if yes, please give details:**

We work closely with the national CBD focal point for protected areas for Uganda, Mr Aggrey Rwetsiba, who is based in the Uganda Wildlife Authority (UWA). He reports to Mr Francis Ogwal who is the national CBD focal point in the country and with whom we also work and plan activities together.

7. Principals in project. Please identify and provide a one page CV for each of these named individuals. You may copy and paste this table if you need to provide details of more personnel or more than one project partner.

Details	Project Leader	Project Partner 1 - Main	Project Partner 2
Surname	BABWETEERA	MUHANGUZI	
Forename (s)	Fred	Geoffrey	
Post held	Regional Coordinator - AFRICA	Field Station Manager	
Institution (if different to above)	Royal Zoological Society of Scotland	Budongo Conservation Field Station	
Department	Conservation	N/A	
Telephone			
Email			

8. Has your organisation been awarded a Darwin Initiative award before (for the purposes of this question, being a partner does not count)? **If so, please provide details of the most recent awards (up to 6 examples). NO**

Reference No	Project Leader	Title

9a. If you answered 'NO' to Question 8 please complete Question 9a, b and c.

If you answered 'YES', please go to Question 10 (and delete the boxes for Q9a, 9b and 9c)

What year was your organisation established/ incorporated/ registered?	FOUNDED IN 1909, INCORPORATED BY ROYAL CHARTER 1913.
What is the legal status of your organisation?	NGO Yes Government No University No Other (explain)
Type of organisation (e.g. University, NGO, private sector, Government Department etc)	REGISTERED CHARITY (SC004064)
Have you unsuccessfully applied to the Darwin Initiative before? If yes please provide the application reference number(s)	Yes, Round 13 reference number 519 Round 14 reference number 747 Round 19 reference number 2122
How is your organisation currently funded?	As an independent Scottish Charity, RZSS receives no core funding from local or national government. The revenue costs of all of our work are met through commercial income, philanthropic support and funding grants.
Have you provided the requested audited/independently examined accounts?	Yes

9b. DO NOT COMPLETE IF YOU ANSWERED 'YES' TO QUESTION 8.

Provide detail of 3 contracts previously held by your institution that demonstrate your credibility as a research organisation and provide track record relevant to the project proposed. These contracts should have been held in the last 5 years and be of a similar size to the grant requested in your Darwin application.

Contract 1 Title	Establishment of a chimpanzee disease and health monitoring programme in the Albertine Rift Region, Western Uganda
Contract Value	\$ 158,384
Contract Duration	2 years
Role of institution in project	Lead agency in implementing the project in collaboration with the Budongo Conservation Field Station, Uganda.
Brief summary of the aims, objectives and outcomes of the contract.	Chimpanzees habituated for research and tourism are particularly prone to human diseases. This project is spearheading a coordinated effort to build capacity and establish mechanisms to detect and minimize the threat of disease transmission between humans and chimpanzees to ensure long term survival of viable chimpanzee populations in Uganda.

Client reference contact details (Name, e-mail, address, phone number).	Helga Rainer helga@arcusfoundation.org Wellington House, East Road Cambridge CB1 1BH United Kingdom Tel: +44 1223 451050
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Contract 2 Title	Scottish Beaver Reintroduction Trial
Contract Value	£152,522.54 (within total project cost of £2,000,000)
Contract Duration	1 Year (within a five year project)
Role of institution in project	RZSS partnered with the Scottish Wildlife Trust and the Forestry Commission Scotland in delivering the Scottish Beaver Trial (currently in year five of five) in accordance with Government requirements stipulated by Scottish Natural Heritage. RZSS leads on delivering the field ecology research and dissemination through our education team.
Brief summary of the aims, objectives and outcomes of the contract.	Study the ecology and biology of reintroduced European beaver in the Scottish environment; Assess the effects of beaver activities on the natural and socio-economic environment; Generate information to inform potential further release of beavers at other sites; Determine the extent and impact on tourism; Explore the environmental educational opportunities that may arise from the trial.
Client reference contact details (Name, e-mail, address, phone number)	Biffaward Reference Number: 5614 ENTRUST registration number: 824043.095 Mr Steven Gardner, Grants fundraising Manager, Scottish Wildlife Trust, Harbourside House 110 Commercial Street Edinburgh EH6 6NF. Tel. 0131 312 7765 email sgardner@swt.org.uk

Contract 3 Title	Genetic Analysis of Scimitar Horned Oryx
Contract Value	\$ 119,667.00
Contract Duration	18 months from the date of receiving the blood samples
Role of institution in project	RZSS is contracted through their WildGenes lab to carry out the genetic analysis including reporting and providing advice based on results.
Brief summary of the aims, objectives and outcomes of the contract.	To develop SNP markers for the Scimitar Horned Oryx to enable rapid and comprehensive screening of genetic diversity in the herd. Using this and mitochondrial DNA markers screen approximately 480 individual oryx. Assess genetic diversity relative to other populations. Create a database for future management.
Client reference contact details (Name, e-mail, address, phone number).	Environment Agency – Abu Dhabi WSO No: 10 (15/10/12) Dr Rob Ogden, WildGenes Laboratory, RZSS, Edinburgh, EH12 6TS Tel: 0131 3140376 email: rogden@rzss.org.uk

9c. DO NOT COMPLETE IF YOU ANSWERED 'YES' TO QUESTION 8.

Describe briefly the aims, activities and achievements of your organisation. (Large institutions please note that this should describe your unit or department)

Aims: The Conservation and Research Department of RZSS aims to promote, facilitate, conduct and encourage the study of zoology and the conservation of threatened species and habitats.

Activities: RZSS conservation and research work focuses on both national native species restoration and international species conservation. The work is largely delivered in partnership

with likeminded organisations. We have established programmes in Brazil, the UK and Uganda and have contributed in 2012 to projects in Cameroon and Morocco.

Achievements: First formal reintroduction of a mammal in the UK through the Scottish Beaver Trial.

Interactive tool developed to assist Brazilian cattle ranchers in making decisions that benefit livelihoods and the environment.

Establishing an alternative livelihood scheme for hunters surrounding Budongo Forest, Uganda.

Establishment of a national chimpanzee health monitoring programme in Uganda

10. Please list all the partners involved (including the Lead Institution) and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development. This section should illustrate the capacity of partners to be involved in the project. Please provide written evidence of partnerships. Please copy/delete boxes for more or fewer partnerships.

<p>Lead institution and website:</p> <p>Royal Zoological Society of Scotland (RZSS)</p> <p>www.rzss.org.uk</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>RZSS has supported and developed wildlife research and conservation in Uganda for the last 10 years. Our activities continue to include ecological research, community education, disease surveillance at the human-wildlife interface and working with ex-hunters to establish alternative sources of livelihood. RZSS' activities in Uganda are implemented through the Budongo Conservation Field Station (BCFS) situated in Budongo Forest, western Uganda. BCFS was established in 1992, becoming registered as an NGO in Uganda in 2007 and has strong working relations with local communities and government agencies including National Forestry Authority, Local Governments and Uganda wildlife Authority among others. BCFS has an established infrastructure that will facilitate and support the implementation of the project. Fred Babweteera will be guiding and leading the project drawing on his respected knowledge of and work in the Budongo Forest and its surrounding communities over the last 15 years. Geoffrey Muhanguzi, is based in the forest and regularly interacts with the communities surrounding it, he implemented the pilot ex-hunter scheme. Staff at BCFS including the veterinarian, community conservation educators and snare patrol team will conduct the day to day activities of the project.</p>
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<p>Partner Name and website where available:</p> <p>Budongo Sub-county Local Government (BSLG)</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>All government development programmes are implemented through the local government structure. Budongo Sub-county Local Government (BSLG) administration will support local community mobilisation. In particular, BSLG will participate in identifying and registering ex-hunters in the project area. The conservation agreement signed between BCFS and ex-hunters' associations will be witnessed by BSLG to ensure compatibility with local by-laws and government statutes. In addition, BSLG will undertake the formal registration of the ex-hunters' associations as community based organisation with the higher Local government authorities. The registration of ex-hunters' associations as CBO's will provide a link to central and local government funded programmes aimed at poverty alleviation, education and health.</p>
<p>Have you included a Letter of Support from this institution?</p>	<p>Yes</p>

11. Have you provided CVs for the senior team including the Project Leader	Yes
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12. Problem the project is trying to address

Please describe the problem your project is trying to address. For example, what biodiversity and challenges will the project address? Why are they relevant, for whom? How did you identify these problems?

(Max 200 words)

Hunters around forest reserves 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 are often raided by wildlife because of their proximity to the forest edge. This has led to increased human-wildlife conflicts. Over the years, BCFS has made attempts to confiscate snares found in the forest with mixed success. A pilot project with a group of hunters indicates a willingness by hunters to abandon hunting if provided with alternative sources of livelihoods. There is a need to provide alternative livelihood sources to enhance household incomes of the most vulnerable households. In addition, there is need for improved buffer zone farming to minimize crop raids.

13. Methodology

Describe the methods and approach you will use to achieve your intended outcomes and impact. Provide information on how you will undertake the work (materials and methods) and how you will manage the work (roles and responsibilities, project management tools etc.).

(Max 500 words – repeat from Stage 1 with changes highlighted)

Previous research conducted by BCFS has enabled us develop a good understanding of the dynamics of the hunting communities around Budongo Forest and other forest reserves. We estimate the hunting community to be composed of approximately 350 hunters residing in 18 villages around Budongo. The proposed method is identical to the method used during the pilot scheme of 110 ex-hunters' from six villages. First, we will identify all hunters in the remaining 12 villages and conduct a livelihoods analysis. We estimate to work with close to 250 hunters in 12 villages. The hunter identification will be done through a network of ex-hunter informers and the Budongo Sub-county Local Government leadership. Often hunters in each village are well known by the local leaders as well as their fellow hunters. The identification will be followed by a series of confidence building meetings designed to 'break the ice' and assure the hunters that the scheme is aimed at establishing alternative sources of livelihoods that are compatible with wildlife conservation. We anticipate to convene 40-50 confidence building meetings (approximately 4 meetings per village). The beneficiaries of the ex-hunters' pilot scheme will participate in the meetings to speak about the challenges/successful experiences with the scheme. At this stage the ex-hunters will surrender their snares and work alongside the BCFS snare patrol team to mop up remnant snares in their former hunting grounds. Hunters and their dependants will then undergo a series of training sessions to equip the ex-hunters with basic entrepreneurship skills, improved farming practices as well as an understanding of the legal and health consequences for hunting. Skilled individuals will undertake vocational training to acquire basic skills in carpentry and wood works. At the end of the training sessions, the ex-hunters will form an association (one per village). Each association will be registered with the local authorities followed by the signing of a conservation agreement between the ex-hunters' association and BCFS together with BSLG. Demonstration farms will be established in each village to promote buffer zone cropping systems that emphasize high value crops that are less

palatable to crop raiding animals. The demonstration farms will be part of the action research to determine suitability of non-traditional cash crops such as ginger and the appropriate width of the buffer strip. Each household will be supplied with basic farm inputs including improved seed and two breeding goats/pigs. Each association will be provided with two hybrid male goats/pigs for breeding. Each household will be required to donate back into the scheme two goats/pigs over a period of 3 years. The donated goats/pigs will be used in the revolving scheme to support hunters around other forest reserves. The resident veterinarians at BCFS will provide periodic on-farm training in animal husbandry. Throughout the project duration BCFS snare patrol team will conduct periodic joint patrols with ex-hunters in selected parts of the forest. The team will geo-reference snares recovered. This data will be used to develop spatial and temporal distribution trends of snares to guide management decisions and provide an index of the success of this project.

14. Change Expected

Detail what the expected changes this work will deliver. You should identify what will change and who will benefit.

- If you are applying for Defra funding this should specifically focus on the changes expected for biodiversity conservation and its sustainable use.
- If you are applying for DFID funding you should in addition refer to how the project will contribute to reducing poverty. Q19 provides more space for elaboration on this.

(Max 250 words)

We expect over 250 hunters and their dependants to improve their household income levels and reliability through improved agricultural practices, livestock rearing and vocational skills development. We expect increased adoption of improved buffer zone cropping systems that mitigate the human-wildlife conflicts. The buffer zone crops are expected to enhance household incomes. In addition, we expect a decrease in snare setting which will eventually lead to reduced risk of chimpanzee injuries and death. We also expect an improvement in populations of wildlife species especially the hunted species that will in turn support the local tourism industry. We also expect behavioural changes such as an understanding of the negative impact of snare setting on wildlife populations and the ecosystem in general. Similarly, we expect hunters to develop a better understanding of the risk of zoonotic diseases and ways of minimising the risk. This will eventually improve the working relationship between forest reserve managers, policy makers and ex-hunters. Improved working relation between forest managers and the ex-hunters will minimise the law enforcement costs. The success of this model will encourage replication in other protected areas. Particularly, the establishment of a livestock revolving scheme to support other hunting communities to start up similar projects in other forest reserves.

15a. Is this a new initiative or a development of existing work (funded through any source)? Please give details (Max 200 words):

This project is part of the progressing campaign at Budongo aimed at eradicating hunting that is threatening wild life populations including chimpanzees. The project started with an anti-snare setting campaign involving four patrol men whose job was to recover snares set in the forest. This approach did not deter hunters from setting more snares. This was followed by a pilot project that engaged hunters to denounce hunting through an alternative livelihoods project. The success of the pilot project won the initiative a grant from Flora and Fauna International/DEFRA to expand the initiative. Through this grant 87 hunters were supported and over 5,700 snares recovered. We are now applying for a bigger grant with the intent to expand the ex-hunters scheme to cover 250 more hunters around Budongo Forest. The working principles will remain the same although we propose to include other livelihood schemes that were recently identified and recommended by pilot ex-hunters' group. A parallel initiative to be supported by ARCUS Foundation will support alternative livelihood schemes among illegal timber harvesters.

15b. Are you aware of any other individuals/organisations/projects carrying out or applying for funding for similar work? Yes No

If yes, please give details explaining similarities and differences, and explaining how your work will be

additional to this work and what attempts have been/will be made to co-operate with and learn lessons from such work for mutual benefits:

15c. Are you applying for funding relating to the proposed project from other sources?

Yes No

If yes, please give brief details including when you expect to hear the result. Please ensure you include the figures requested in the spreadsheet as Unconfirmed funding.

This project is closely linked to a project initiated by RZSS to establish a chimpanzee disease and health monitoring programme in the Albertine Rift Region, Western Uganda. A component of this project includes establishment of an eco-health monitoring program to assess the impact of habitat alteration/degradation on chimpanzee populations. The project is working with illegal timber harvesters to minimise habitat degradation. Illegal timber harvesters will be supported to set up alternative livelihood sources with a view that reduced forest degradation will equally reduce the risk of zoonotic diseases that are a threat to chimpanzees. This project was supported by ARCUS Foundation for the first two years (ending December 2013). The primary focus of the first phase was the establishment of standardised chimpanzee health monitoring in Uganda. This was done among sites where wild chimpanzees are habituated for research and/or tourism. The second phase (whose proposal has already been submitted to ARCUS Foundation) seeks to consolidate the programme with a focus on working with local communities, especially low income community members to develop alternative livelihood sources that reduce their dependence on the forest. We will get a feedback on this grant application by the end of December 2013.

An application was made to Oakland Zoo for continued support for the salaries of the snare patrol team and the community conservation education team for one year. The funds have been approved starting January 2014. Oakland has been supporting the salaries of these teams over the past 8 years and we will continue to make annual application to Oakland Zoo for this support.

16. Value for money

Please describe why you consider your application to be good value for money including justification of why the measures you will adopt will secure value for money?

(Max 250 words)

The approach we are taking here is based on the learning of a successful pilot project to provide alternative livelihood sources ensuring we get the best value for our inputs.

All previous approaches to eradicate hunting that centred on law enforcement ignored the fundamental needs of the vulnerable communities that forced them into the hunting practice.

To ensure efficiency, this project is selecting livelihood initiatives that are culturally acceptable to the communities. The livestock scheme requires limited maintenance input except for the initial cost of procuring the breeding stock. Goats and pigs can be reared over a small piece of land and most beneficiaries already have the land. The project is thus supplementing the resources that the beneficiaries already possess.

The use of improved seed and introduction of other non-traditional crops is envisaged to diversify agricultural produce to avoid mass production of a single crop (currently maize) that often leads to low commodity prices.

Furthermore, most hunters have not attained any formal education but are skilled in many ways. The project proposes to provide vocational training in carpentry that can enable them add value to the wood resources around them to increase their household incomes. This would also provide skills that can be passed on to family members as is the practice by many families.

We hope that because this project is to support sustainable livelihood strategies, developed with and relevant to the local communities our outputs will be transformed into lasting

outcomes.

17. Ethics

Outline your approach to meeting the Darwin Initiative's key principles for research ethics as outlined in the guidance notes.

(Max 300 words)

We are already supporting initiatives to help the hunters around Budongo Forest and have thereby created good relations with them and their community leaders. Selection of the livelihood alternatives involves the beneficiaries identifying the preferred alternatives. The involvement of local leaders ensures that the project is in line with government development plans in the area. The research component of the project will involve experiments on selected farmlands to determine the potential of non-traditional crops that are not palatable to raiding primates and bush pigs. Research permissions will also be obtained from the National Council for Science and Technology in Kampala as well as the local community members on whose farms the action research will be conducted. All rights and privacy of individuals participating in surveys will be respected and names and locations of houses will be kept confidential. The project leader has undertaken socioeconomic research in the past and can design objective and appropriate questions and analyses that are not leading. In addition, he has built a good reputation with the local communities over the past 15 years that he has worked in this region.

18. Legacy

Please describe what you expect will change as a result of this project with regards to biodiversity conservation/sustainable use and poverty alleviation (for DFID funded projects). For example, what will be the long term benefits (particularly for biodiversity and poor people) of the project in the host country or region and have you identified any potential problems to achieving these benefits?

(Max 300 words)

The status survey and conservation action plan for the Eastern chimpanzee (2010 - 2020) identified diseases, hunting and habitat degradation as the major threats. The ARCUS supported project is addressing the disease and habitat degradation threat whereas this application is targeting the hunting threat. We expect to reduce the rate of snare setting that maims and kills chimpanzees and other valuable wildlife. By targeting the conservation of an iconic species (chimpanzees) we expect other wildlife in the forest to benefit from the safe habitat created.

Through the introduction of non-traditional agricultural crops as buffer zone crops, we expect to minimise the human-wildlife conflicts thus increasing household food security as well as creating a community that is less hostile to wildlife. And with a greater understanding of the forest and the role of wildlife in the ecosystem we hope to create a generation of people that will promote and sustain ecological integrity.

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. The vocational skills acquired will provide contribute to job creation in the community and enhance value addition to commodities.

19. Pathway to poverty alleviation

Please describe how your project will benefit poor people living in low-income countries. All projects funded through DFID in Round 20 must be compliant with the OECD Overseas Development Assistance criteria. Projects are therefore required to indicate how they will have a positive impact on poverty alleviation in low-income countries.

(Max 300 words)

Over 90% of community members in the proposed project area are subsistence farmers. The average household income is £10 per month largely from the sale of surplus agricultural crops.

The dependence on one or two crops implies that there is always a peak harvest/production that advantages the middlemen/traders to pay low prices for the farmers' crops.

This project proposes a diversification of agricultural crops to provide alternatives. In particular there are high value non-traditional crops such as ginger that are not grown in the region but can potentially be grown. The project will promote cash crops that are less palatable to wildlife to limit crop losses thus increasing farm production. In addition, farmers rely on local seed and traditional agronomic practices that provide low yields. This project will contribute to poverty alleviation by providing seed capital (breeding animals), improved seed and training to spur increased agricultural production based on improved agronomic practices and access to seed capital.

There are efforts under a USAID funded programme to enhance tourism development for biodiversity conservation around Budongo. This programme aims at marketing and developing infrastructure for tourism development. This project will provide vocational skills development among the poorest community members so that they can benefit from the growing tourism industry. More specifically, development of vocational skills in carpentry and wood works to take advantage of the wood resources available.

20. Exit strategy

State whether or not the project will reach a stable and sustainable end point. If the project is not discrete, but is part of a progressive approach, give details of the exit strategy and show how relevant activities will be continued to secure the benefits from the project. Where individuals receive advanced training, for example, what will happen should that individual leave?

(Max 200 words)

The proposed activities are in line with government plans to alleviate poverty through modernisation of agriculture. Given that the project will work closely with the local leaders it is envisaged that the beneficiaries will be linked with other government initiatives such as National Agricultural Advisory Services to ensure continued support. RZSS through its field station in Budongo (Budongo Conservation Field Station) will continue to provide veterinary expertise to the livestock keepers. By the end of the project at least 25 members of the community will have gained vocational skills to engage in alternative livelihood sources such as carpentry. With all of these interventions completed, we believe that the project will have achieved a sustainable end point whereby income from improved agriculture, livestock keeping and vocational skills will provide the incentive to stop engaging in hunting and other illegal activities but focus on the alternative livelihood sources.

21. Raising awareness of the potential worth of biodiversity

If your project contains an element of communications, knowledge sharing and/or dissemination please provide a description of your intended audience, how you intend to engage them, what the expected products/materials there will be and what you expect to achieve as a result. For example, are you expecting to directly influence policy in your host country or is your project a community advocacy project to support better management of biodiversity?

(Max 300 words)

Locally, the results of this project will be disseminated through the BCFS community conservation education programme. This scheme is run by two experienced community educators who give scheduled talks to schools and at village meetings on topical issues. The programme is run on a weekly basis. In addition, BCFS often organises local radio talk shows to discuss current conservation challenges. Alongside this, BCFS produces policy briefs for each conservation and research project undertaken. These policy briefs are widely distributed to local conservation organisations, National Forestry Authority, Uganda Wildlife Authority, political administrative units and legislators. An information sharing workshop will be held to disseminate the results of this project. The workshop participants will include civil society, local community leaders, representatives of the ex-hunters, conservation organisations and statutory institutions. BCFS is a field station utilized by local universities to train students in

conservation biology. Every year BCFS hosts over 300 university students over a period of 10 weeks. During this period students get applied training in various aspects of conservation biology. This project will be a great opportunity for us to conduct these practical training sessions whereby students get firsthand experience on engaging local communities in conservation. Through these annual practical training sessions, we expect to disseminate the results of the project while training the future conservation leaders in the region. Internationally, we intend to publish the results of this project in a peer reviewed conservation biology journal. In addition, we will provide information through the chimpanzee exhibit named Budongo Trail at Edinburgh Zoo, to engage visitors to learn about the practical conservation initiatives we undertake for in-situ conservation of chimpanzees and their habitats.

22. Access to project information

Please describe the project's open access plan and detail any specific costs you are seeking from Darwin to fund this. (See Section 9 of the Guidance Notes for further information)

(Max 250 words)

Peer reviewed publications from this project will preferably be made in open access journals. Information in form of reports and policy briefs will be made available through the BCFS website (www.burdongo.org). In addition, project data relating to spatial and temporal distribution of snares that will be collected during the monitoring process will be made available to researchers who may wish to relate this data to other studies. In the past, BCFS has availed researchers long-term data that augments short term research projects.

23. Importance of subject focus for this project

If your project is working on an area of biodiversity or biodiversity-development linkages that has had limited attention (both in the Darwin Initiative portfolio and in conservation in general) please give details.

(Max 250 words)

Chimpanzee conservation has received a significant amount of focus from many conservation agencies. However, many initiatives have focused on law enforcement and awareness raising. This project will tackle practical issues that compel forest edge communities to engage in illegal activities (especially hunting) well knowing the negative consequences of their actions on wildlife populations. The project will target the most vulnerable members among the forest edge communities that often suffer the consequences of wildlife crop raiding but benefit least from the forest resources around them.

24. Leverage

a) Secured

Provide details of all funding successfully levered (and identified in the Budget) towards the costs of the project, including any income from other public bodies, private sponsorship, donations, trusts, fees or trading activity.

Confirmed:

GBP 7,950 - Oakland Zoo

GBP 76,645 - RZSS

b) Unsecured

Provide details of any matched funding where an application has been submitted, or that you intend applying for during the course of the project. This could include matched funding from the private sector, charitable organisations or other public sector schemes.

Date applied for	Donor organisation	Amount	Comments
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October 2013	ARCUS Foundation	GBP 79,670	The grant will cover the continuation of the chimpanzee disease and health monitoring programme. There are aspects of alternative livelihood sources for illegal timber harvesters.
Applied annually	for Oakland Zoo	GBP 17,145	Oakland Zoo has been funding the snare removal programme for the past 7 years. We make annual applications for a grant averaging £8,000.

PROJECT MONITORING AND EVALUATION

MEASURING IMPACT

25. LOGICAL FRAMEWORK

Darwin projects will be required to report against their progress towards their expected outputs and outcomes if funded. This section sets out the expected outputs and outcomes of your project, how you expect to measure progress against these and how we can verify this. Further detail is provided in Annex C of the guidance notes which you are encouraged to refer to. The information provided here will be transposed into a logframe should your project be successful in gaining funding from the Darwin Initiative. The use of the logframe is sometimes described in terms of the Logical Framework Approach, which is about applying clear, logical thought when seeking to tackle the complex and ever-changing challenges of poverty and need. In other words, it is about sensible planning.

Impact

The Impact is not intended to be achieved solely by the project. This is a higher-level situation that the project will contribute towards achieving. All Darwin projects are expected to contribute to poverty alleviation and sustainable use of biodiversity and its products.

(Max 30 words)

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.

Outcome

There can only be one Outcome for the project. The Outcome should identify what will change, and who will benefit. The Outcome should refer to how the project will contribute to reducing poverty and contribute to the sustainable use/conservation of biodiversity and its products. This should be a summary statement derived from the answer given to question 14.

(Max 30 words)

Hunters and their dependants, in twelve forest edge communities supported to develop alternative sustainable livelihoods that are compatible with wildlife conservation.

Measuring outcomes - indicators

Provide detail of what you will measure to assess your progress towards achieving this outcome. You should also be able to state what the change you expect to achieve as a result of this project i.e. the difference between the existing state and the expected end state. You may require multiple indicators to measure the outcome – if you have more than 3 indicators please just insert a row(s).

Indicator 1	Twelve conservation agreements signed and implemented between ex-hunters' associations and Budongo Conservation Field Station/Budongo Sub-county Local Government
Indicator 2	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
Indicator 3	House hold incomes of hunting communities increased from \$0.8 per day to \$1.2 per day by year 3
Indicator 4	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
Indicator 5	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.
Indicator 6	The number of snares surrendered by ex-hunters; The number of snares recovered in the forest per day 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
Indicator 7	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;
Indicator 8	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.

Verifying outcomes

Identify the source material the Darwin Initiative (and you) can use to verify the indicators provided. These are generally recorded details such as publications, surveys, project notes, reports, tapes, videos etc.

Indicator 1	Signed Conservation Agreements with a list of beneficiary signatories
Indicator 2	Household agricultural output survey, Local Government agricultural output reports
Indicator 3	Household income surveys
Indicator 4	Number of ex-hunters with vocational training and their household incomes; Quality and quantity of commodities (especially wood-based items) produced by the beneficiaries
Indicator 5	Household agricultural output survey, Local Government agricultural output reports; Video footage and photographs of homesteads before and after project implementation
Indicator 6	Spatial and temporal variations in snare recovery data; Number of new snare injured chimpanzees; Periodic large mammal survey reports by BCFS
Indicator 7	Household sanitary facilities' survey; Video footage and photographs of homestead sanitary facilities before and after project implementation
Indicator 8	Reports capturing statistics of veterinary rounds and the number of livestock treated; Local government veterinary report

Outcome risks and important assumptions

You will need to define the important assumptions, which are critical to the realisation of the *outcome and impact* of the project. It is important at this stage to ensure that these assumptions can be monitored since if these assumptions change, it may prevent you from achieving your expected outcome. If there are more than 3 assumptions please insert a row(s).

Assumption 1	Full cooperation by the ex-hunters to breed the goats/pigs rather than sell them off immediately.
Assumption 2	Hunters will be willing to donate 2 female goats/pigs for the expansion of the scheme to other villages
Assumption 3	Quality of wood-based products (such as wood carvings) is acceptable to the tourist craft shops.

Outputs

Outputs are the specific, direct deliverables of the project. These will provide the conditions necessary to achieve the Outcome. The logic of the chain from Output to Outcome therefore needs to be clear. If you have more than 3 outputs insert a row(s). It is advised to have less than 6 outputs since this level of detail can be provided at the activity level.

Output 1	List of individual hunters, their respective household dependants and livelihood analysis conducted
Output 2	Conservation agreement/framework to support hunting communities and their dependants established in 12 villages.
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.
Output 4	Agricultural demonstration farms established to promote adoption of buffer-zone cropping systems that minimize crop loss to wildlife

Measuring outputs

Provide detail of what you will measure to assess your progress towards achieving these outputs. You should also be able to state what the change you expect to achieve as a result of this project i.e. the difference between the existing state and the expected end state. You may require multiple indicators to measure each output – if you have more than 3 indicators please just insert a row(s).

Output 1: List of individual hunters, their respective household dependants and livelihood analysis conducted	
Indicator 1	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.

Output 2: Conservation agreement/framework to support hunting communities and their dependants established in 12 villages	
Indicator 1	Register of all ex-hunters and their household members in the 12 villages.
Indicator 2	Fourty confidence building meetings and 48 training seminars held with ex-hunters' groups
Indicator 3	Formally signed conservation agreements between BCFS and hunters'

	associations.
Indicator 4	Collections of snares recovered from ex-hunters and within the forest
Indicator 5	No new record of chimpanzees maimed or killed by snares

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 1	Guidelines for improved agronomic practices accepted by the local government production department
Indicator 2	Income levels of beneficiaries increase from \$ 0.8 to at least \$ 1.2 per day
Indicator 3	Vocational training curriculum tailored for illiterate or semi-illiterate community members developed by end of year 1

Output 4: Agricultural demonstration farms established to promote adoption of buffer-zone cropping systems that minimize crop loss to wildlife

Indicator 1	12 demonstration farms of 12 acres minimum established by end of year 1
Indicator 2	Working paper on buffer zone cropping systems accepted by local government production department
Indicator 3	Frequency and intensity of crop raiding by wildlife reduced by 30% by year 3

Verifying outputs

Identify the source material the Darwin Initiative (and you) can use to verify the indicators provided. These are generally recorded details such as publications, surveys, project notes, reports, tapes, videos etc.

Indicator 1	Survey data of large mammals
Indicator 2	Monthly update reports of snare recovery trends and household incomes
Indicator 3	Field farms to demonstrate adoption rates

Output risks and important assumptions

You will need to define the important assumptions, which are critical to the realisation of the achievement of your outputs. It is important at this stage to ensure that these assumptions can be monitored since if these assumptions change, it may prevent you from achieving your expected outcome. If there are more than 3 assumptions please insert a row(s).

Assumption 1	The hunters are willing to take part in the initiative
Assumption 2	The non-traditional agricultural crops are culturally acceptable to the ex-hunters
Assumption 3	

Activities

Define the tasks to be undertaken by the research team to produce the outputs. Activities should be designed in a way that their completion should be sufficient and indicators should not be necessary. Risks and assumptions should also be taken into account during project design.

Output 1: List of individual hunters, their respective household dependants and livelihood analysis conducted	
Activity 1.1	Identify and register hunters in 12 target villages
Activity 1.2	Conduct livelihood analysis of ex-hunter households

Output 2: Conservation agreement/framework to support hunting communities and their dependants established in 12 villages	
Activity 2.1	Confidence building meetings with ex-hunters in their respective villages
Activity 2.2	Training seminars and workshops
Activity 2.3	Snare patrol exercises
Activity 2.4	Formation and registration of ex-hunters associations; Signing of conservation agreements
Activity 2.5	Biological surveys of spatial and temporal distribution of wildlife especially the hunted species and chimpanzees

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	
Activity 3.1	Training of ex-hunters in animal husbandry, improved agronomic practices and vocational skills
Activity 3.2	Procurement and distribution of seed capital including pigs, goats and improved seed varieties
Activity 3.3	Technical support services to beneficiaries including veterinary rounds and on-farm extension services
Activity 3.4	Campaign to establish improved homestead sanitations
Activity 3.5	Economic surveys of household incomes

Output 4: Agricultural demonstration farms established to promote adoption of buffer-zone cropping systems that minimize crop loss to wildlife	
Activity 4.1	Sign agreements with 12 farmers for the lease of land and establish demonstrations for buffer zone cropping
Activity 4.2	Data collection and analysis of yield and income
Activity 4.3	Develop and submit buffer zone cropping guidelines

26. Provide a project implementation timetable that shows the key milestones in project activities. Complete the following table as appropriate to describe the intended workplan for your project.

Activity	No of Months	Year 1				Year 2				Year 3			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1													
1.1 Identify and register hunters in 12 target villages		X											
1.2 Conduct livelihood analysis of ex-hunters' households		X	X								X	X	
Output 2													
2.1 Confidence building meetings with ex-hunters			X	X	X								
2.2 Training seminars and workshops			X	X	X								
2.3 Joint snare patrol sessions					X	X	X	X	X	X	X	X	X
2.4 Formation and registration of ex-hunter associations					X								
2.5 Biological surveys of wildlife species		X	X								X	X	
Output 3													
3.1 Training in animal husbandry, improved agronomy and vocational skills				X	X	X	X	X	X	X	X	X	X
3.2 Procurement and distribution of seed capital including pigs, goats and improved seed varieties				X	X	X	X	X	X				
3.3 Technical support services to beneficiary farms				X	X	X	X	X	X	X	X		
3.4 Improved homestead sanitation activities			X	X	X	X	X	X	X				
3.5 Economic surveys of household incomes					X	X	X	X	X	X	X	X	X
Output 4													
4.1 Establish and management demonstration sites for buffer zone farming				X	X	X	X	X	X	X	X		
4.2 Data collection and analysis of agricultural yield and household income				X	X	X	X	X	X	X	X	X	
4.3 Develop and distribute buffer zone farming guidelines								X	X	X			

27. Project based monitoring and evaluation (M&E)

Describe, referring to the Indicators above, how the progress of the project will be monitored and evaluated, making reference to who is responsible for the projects M&E. Darwin Initiative projects are expected to be adaptive and you should detail how the monitoring and evaluation will feed into the delivery of the project including its management. M&E is expected to be built into the project and not an 'add' on. It is as important to measure for negative impacts as it is for positive impact.

(Max 500 words)

A key quantitative indicator to be used in monitoring and evaluating the progress of this project is the snare recovery trend before and after the initiative. Currently, the four-man snare patrol team recovers an average of 20 snares per day around the hunting grounds of the target hunters. It is predicted that the rate of snare recovery will reduce significantly after the initiative. We will specifically monitor the spatial distribution of snare recovery trends to determine whether beneficiary communities are no longer setting snares around their former hunting grounds. Monitoring of snare setting trends will not be done exclusively by BCFS snare patrol team. Instead, each ex-hunters' association (through its leadership) will be assigned a forest block to patrol. This self policing approach will be counter checked by the BCFS field patrol team.

Following the reduction in snares set, we expect to observe a corresponding reduction in the number of chimpanzees maimed or killed by snares. We will monitor habituated chimpanzee communities in the forest to determine if there are any chimpanzees picking up new snare injuries. These indicators should be realised within the first two years of the project. In the long-term we expect to see a stable or an increase in chimpanzee numbers following the eradication of the hunting threat. In addition, BCFS is running a long term monitoring programme for bush pigs and duikers in Budongo. These are the widely hunted species in the forest. Surveys based on pellet counts are conducted every months in selected parts of the forest. We will continue with this monitoring to assess any changes in the population of the hunted species.

Parallel to the reduction in snare setting, we will evaluate the breeding success of the goat/piggery scheme and how this is reducing the dependency of the beneficiaries on the forest for bush meat. The number of goats/pigs reared, changes in farm produce and the contribution of the scheme to the income of the beneficiaries will be a key quantitative indicator. Each village ex-hunters' association will elect its leadership who will be the liaison between BCFS and the association. The association leadership will also be responsible for conducting economic surveys to generate data on agricultural productivity and how this translates into changes in household income and alternative livelihood adoption patterns. In addition, the beneficiaries who will acquire vocational skills will be monitored through the crafts and other wood items fabricated and the income generated.

Qualitatively, we shall evaluate the success of the project based on the collaboration with the ex-hunters. The quarterly meetings organised between the ex-hunters and other stakeholders will provide a good indicator of the change in attitude among the ex-hunters and their willingness to support the National Forestry Authority in curbing other illegalities in the forest reserve.

It should be noted that as much as National Forestry Authority is a key stakeholder in this initiative, the implementation and M&E will maintain NFA at the peripheral of the scheme to avoid any misinterpretations by the local communities who do not trust NFA. This was observed during the pilot phase.

FUNDING AND BUDGET

Please complete the separate Excel spreadsheet which provides the Budget for this application. Some of the questions earlier and below refer to the information in this spreadsheet.

NB: Please state all costs by financial year (1 April to 31 March) and in GBP. **Budgets submitted in other currencies will not be accepted.** Use current prices – and include anticipated inflation, as appropriate, up to 3% per annum. The Darwin Initiative cannot agree any increase in grants once awarded.

28. Value for Money

Please explain how you worked out your budget and how you will provide value for money through managing a cost effective and efficient project. You should also discuss any significant assumptions you have made when working out your budget.

(max 300 words)

RZSS administrative costs will be kept to a minimum by working within the existing administrative structure of RZSS and BCFS. In addition, we will utilise existing equipment and resources such as vehicles to facilitate the implementation of this project. RZSS and its partner field station at Budongo has a long history of working with local communities in Uganda to establish sustainable conservation projects based on the values, trust and enthusiasm built among the beneficiary communities.

Seventy seven percent of staff salaries are to be met by the lead organisation, Arcus Foundation and Oakland Zoo.

The bulk of the grant support will cover the operational costs that include training (both vocational and entrepreneurship skills development); purchase and supply of farm inputs such as pigs, goats and improved seed; lease and establishment of demonstration sites; production of buffer-cropping guidelines; and surveys of large mammals in the forest to monitor populations of native species. All operational costs will be towards the lead agency given that the partner agency will participate largely at the community mobilisation stage.

Limited equipment will be acquired by the grant support. This is because the project will use the existing equipment at the Budongo Conservation Field Station. However, some carpentry equipment will be acquired and distributed to the beneficiaries undertaking vocational training.

Extensive travel is expected during the implantation of this project. The project will use the vehicles and motorcycles at BCFS. Costs included in this grant application will cover fuel, maintenance and insurance. All staff linked to this project live in Uganda, they have a good understanding of cost of delivery and we also have no international travel cost.

In addition, RZSS receives financial field reports from BCFS every quarter enabling us to track actual expenditures relative to original estimations. Furthermore, RZSS's accounts get audited annually by external independent auditors.

Most important, the piloting undertaken for this project has allowed us to consider different alternatives for delivering the project and to budget realistically

FCO NOTIFICATIONS

Please check the box if you think that there are sensitivities that the Foreign and Commonwealth Office will need to be aware of should they want to publicise the project's success in the Darwin competition in the host country.

Please indicate whether you have contacted your Foreign Ministry or the local embassy or High Commission (or equivalent) directly to discuss security issues (see Guidance Notes) and attach details of any advice you have received from them.

Yes (no written advice)

Yes, advice attached

No

CERTIFICATION

On behalf of the trustees of The Royal Zoological Society of Scotland
 I apply for a grant of **£123,000** in respect of **all expenditure** to be incurred during the
 lifetime of this project based on the activities and dates specified in the above application.


I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

(This form should be signed by an individual authorised by the applicant institution to submit applications and sign contracts on their behalf.)

- I enclose CVs for project principals and letters of support.
- Our most recent audited accounts and annual report can be found at:
<http://www.edinburghzoo.org.uk/about/report/index.html>

Name (block capitals)	SARAH ROBINSON
Position in the organisation	Head of Conservation Programmes

Signed



Date:

14/03/2014

Stage 2 Application - Checklist for submission

	Check
Have you read the Guidance Notes ?	X
Have you provided actual start and end dates for your project?	X
Have you indicated whether you are applying for DFID or Defra funding. NB: you cannot apply for both	X
Have you provided your budget based on UK government financial years i.e. 1 April – 31 March and in GBP?	X
Have you checked that your budget is complete , correctly adds up and that you have included the correct final total on the top page of the application?	X
Has your application been signed by a suitably authorised individual? (clear electronic or scanned signatures are acceptable in the email)	X
Have you included a 1 page CV for all the Principals identified at Question 7?	X
Have you included a letter of support from the <u>main</u> partner(s) organisations identified at Question 10?	X
Have you been in contact with the FCO in the project country/ies and have you included any evidence of this?	
Have you included a copy of the last 2 years annual report and accounts for the lead organisation? An electronic link to a website is acceptable.	X
Have you checked the Darwin website immediately prior to submission to ensure there are no late updates?	X

Once you have answered the questions above, please submit the application, not later than midnight GMT on Monday 2 December 2013 to Darwin-Applications@ltsi.co.uk using the application number (from your Stage 1 feedback letter) and the first few words of the project title **as the subject of your email**. If you are e-mailing supporting documentation separately please include in the subject line an indication of the number of e-mails you are sending (eg whether the e-mail is 1 of 2, 2 of 3 etc). You are not required to send a hard copy.

DATA PROTECTION ACT 1998: Applicants for grant funding must agree to any disclosure or exchange of information supplied on the application form (including the content of a declaration or undertaking) which the Department considers necessary for the administration, evaluation, monitoring and publicising of the Darwin Initiative. Application form data will also be held by contractors dealing with Darwin Initiative monitoring and evaluation. It is the responsibility of applicants to ensure that personal data can be supplied to the Department for the uses described in this paragraph. A completed application form will be taken as an agreement by the applicant and the grant/award recipient also to the following:- putting certain details (ie name, contact details and location of project work) on the Darwin Initiative and Defra websites (details relating to financial awards will not be put on the websites if requested in writing by the grant/award recipient); using personal data for the Darwin Initiative postal circulation list; and sending data to Foreign and Commonwealth Office posts outside the United Kingdom, including posts outside the European Economic Area. Confidential information relating to the project or its results and any personal data may be released on request, including under the Environmental Information Regulations, the code of Practice on Access to Government Information and the Freedom of Information Act 2000.