



Submit by Tuesday 1 December 2015

DARWIN INITIATIVE APPLICATION FOR GRANT FOR ROUND 22: 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. Blank cells may render your application ineligible

ELIGIBILITY**1. Name and address of organisation**

(NB: Notification of results will be by email to the Project Leader in Question 6)

Applicant Organisation Name:	Conservation Through Public Health
Address:	Plot 3 Mapera Lane, Uring Crescent
City and Postcode:	Entebbe, 75298 Clock Towers, Kampala
Country:	Uganda
Email:	
Phone:	

2. Stage 1 reference and Project title

Stage 1 Ref: 2723	Title (max 10 words): Can health investments benefit conservation and sustainable development?
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3. Project description (not exceeding 50 words)

(max 50 words) This project is evaluating whether health investments have led to gorilla conservation and sustainable development outcomes. Results from the evaluation will be used to expand the integrated health and conservation approach to a mountain national park and by another conservation NGO working with great apes in a forest reserve.

4. 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:

5. Project dates, and budget summary

Start date: 1 st April 2016		End date: 31 st March 2019		Duration: 3 years	
Darwin request	2016/17 £ 90,553	2017/18 £ 101,177	2018/19 £ 103,270	Total request £ 295,000	
Proposed (confirmed & unconfirmed) matched funding as % of total Project cost					19%
Are you applying for DFID or Defra funding? (Note you cannot apply for both)			DFID		

6. Partners in project. Please provide details of the partners in this project and provide a CV for the individuals listed. You may copy and paste this table if necessary.

Details	Project Leader	Project Partner 1	Project Partner 2	Project Partner 3	Project Partner 4
Surname	Kalema-Zikusoka	Milner-Gulland	Roe	Seguya	Kasoma
Forename (s)	Gladys	E.J.	Dilys	Andrew	Panta
Post held	Chief Executive Officer	Tasso Leventis Chair in Biodiversity	Team Leader (Biodiversity)	Executive Director	Executive Director
Organisation (if different to above)	Conservation Through Public Health	Oxford University	International Institute of Environment and Development	Uganda Wildlife Authority	Jane Goodall Institute - Uganda
Department		Department of Zoology	Natural Resources Group		
Telephone					
Email					

7. 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

8a. If you answered 'NO' to Question 7 please complete Question 8a, b and c.

If you answered 'YES', please go to Question 9 (and delete the boxes for Q8a, 8b and 8c)

What year was your organisation established/ incorporated/ registered?	2003
What is the legal status of your organisation?	NGO

How is your organisation currently funded?	(Max 100 words) Conservation Through Public Health (CTPH) is primarily funded through grants from bilateral governments and foundations, and also from individual donors, research partnerships, student field training and volunteer fees. Our current sources of income include grants from United States Fish and Wildlife Service, Global Development Network, Tusk Trust, GalvMed, Rare Species Fund, individual donors and program service revenue through research partnerships, student field practical training and volunteer fees.
Have you provided the requested signed audited/independently examined accounts?	Yes

8b. DO NOT COMPLETE IF YOU ANSWERED 'YES' TO QUESTION 7.

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

1. Title	Wildlife, Landscapes and Development for Conservation Programme USAID Cooperative Agreement # 617-A-00-07-000080-00 with Wildlife Conservation Society
Value	\$270,000
Duration	17 months
Role of organisation in project	Biodiversity conservation strengthened through improved capacity to address Human-livestock-wildlife disease related threats
Brief summary of the aims, objectives and outcomes of the contract/award.	<p>Aims and Objectives: To contribute to maintaining and monitoring ecosystem health through grassroots interventions that promote community focused family planning in four of the highest human and gorilla conflict parishes of Bwindi and Mgahinga Conservation Area (BMCA) and conduct activities to reduce threats to biodiversity through prevention, treatment and control of preventable infectious zoonotic diseases prevalent in the BMCA and Queen Elizabeth National Park (QENP) communities.</p> <p>Outcomes: Expanded the integrated model to a new district, Kisoro and a) established an early warning system for cross species disease transmission; b) improved local capacity for pathogen analysis; c) strengthened community-based human health interventions among people bordering the Bwindi Impenetrable National Park; d) strengthened community based livestock health interventions; e) developed a preventative medicine employee health program for park staff working with great apes; f) educated surrounding communities on the risks of disease transmission between people and great apes; and livestock and wildlife; g) improved the capacity of Jane Goodall Institute to establish comparative chimpanzee health monitoring system as well as integrated community public health interventions; h) improved the use of wildlife health data for park management; i) increased community support for the park and wildlife conservation; j) increased the provision of reproductive health/family planning (RH/FP) in referral facilities; k) improved and expand access to and demand for RH/FP at the community level; l) and developed</p>

	supportive systems to advance the use of RH/FP.
Client/ independent reference contact details (Name, e-mail, address, phone number).	Jan F. Broekhuis Director, Wildlife, Landscapes and Development for Conservation Programme, Wildlife Conservation Society Plot 802 Mitala Road, Kampala, Uganda

2. Title	Improving Capacity for Long Term Health Monitoring In the Albertine Rift
Value	\$300,000
Duration	36 months
Role of organisation in project	Training park staff and community animal health volunteers to monitor the health of wildlife and livestock and conduct cross species disease surveillance at the human/wildlife/livestock interface
Brief summary of the aims, objectives and outcomes of the contract/award.	<p>Aims and Objectives: To refine sustainable long term wildlife health monitoring; scale up to another protected area in a neighboring country in the Albertine Rift, Democratic Republic of Congo (DRC); further identify and control potential zoonoses; establish a database on wildlife, livestock and human diseases at the interface; study the effects of climate change on wildlife disease patterns; share wildlife health information with human and livestock health authorities that will be used to influence public policy and design joint multidisciplinary education programmes for local communities at the human/wildlife/livestock interface; improve conservation attitudes and public health practices of communities bordering the protected areas, in particular, the cattle keeping pastoralist communities, through increased knowledge of disease issues at the wildlife/livestock/human interface; promote more effective advocacy through the increase in the amount and distribution of linked information on wildlife diseases around the Albertine Rift protected areas; and better monitor the health impact of the emerging ecotourism activities through proactive health monitoring of wildlife</p> <p>Outcomes: Scaled the integrated approach to Virunga National Park in DRC, strengthened partnerships with wildlife authorities and district health and veterinary offices through MOUs to train staff and conduct cross species disease investigation; trained park rangers, trackers and warden supervisors and research and field assistants and Human and Gorilla Conflict Resolution teams (HUGO) community volunteers to monitor gorilla health on community land and community animal health workers through treatment of over 4,000 livestock at Bwindi; Increased the capacity to detect diseases shared between gorillas, people and livestock through expanding the tests at the Gorilla Research Clinic from only intestinal helminths to include Giardia, Cryptosporidium and other protozoa, and obtaining a PCR machine for genetic analysis of disease pathogens to more accurately trace the direction of transmission; provided field research support for an MSc student in Primate Conservation at Oxford Brookes University whose research assessed whether tourists are willing to participate in carefully controlled gorilla tourism. She worked closely with UWA and her research indicated that tourists are willing to wear masks (like in DRC) and follow the 7 metre rule if they are given enough information prior to arriving Uganda and before trekking; Conducted disease surveillance of Tuberculosis, Brucellosis</p>

	and Rift Valley Fever in buffaloes and cattle in QENP to determine prevalence and direction of zoonotic disease infection in buffalo and cattle in and around QENP; Coordinated meetings of the Public Health and Conservation Technical Support Unit (PHCTSU) to enable local government, UWA, National Forestry Authority (NFA), Institute Congolais de Conservation de Nature (ICCN) and supporting NGOs to share experiences on disease issues at the human/wildlife/livestock interface, where Budongo Forest Conservation Station and Kibale Ecohealth Project were invited together with their local government counterparts; Improved community attitudes to conservation where CTPH trained QENP community animal health workers rescued a baby elephant that was drowning in their village and reported to UWA who took it to the Uganda Wildlife Education Centre and now playing a significant role in conservation education.
Client/independent reference contact details	Elizabeth Chadri Program Officer, Conservation and Sustainable Development (Africa), John D. and Catherine T. MacArthur Foundation Office of Grants Management, 140 S. Dearborn Street Chicago, IL 60603-5285

3 Title	Capacity building for Population, Health, and Environment (PHE) M&E and Advocacy in Uganda
Value	\$85,000
Duration	12 months
Role of organisation in project	Trained by FHI360 to build the capacity of CTPH to monitor and evaluate integrated Population, Health and Environment (PHE) projects and conduct PHE advocacy
Brief summary of the aims, objectives and outcomes of the contract/award.	<p>Aims: To increase the capacity of CTPH in monitoring and evaluation of their Population Health and Environment (PHE) program and utilize the information obtained for operational research and advocacy by key stakeholders levels.</p> <p>Objectives: Strengthen the capacity of CTPH in PHE monitoring and evaluation and advocacy</p> <p>Outcomes: Analysed and upgraded a monitoring and evaluation (M&E) data collection system for more effective database management, data collection and reporting from all 22 villages in Mukono and Bujengwe parishes in Kanungu district, and all 22 villages in Nteko and Rubuguri parishes in Kisoro District; Trained Village Health and Conservation Teams (VHCTs) in new data collection and expanded to Kisoro District; PHE data collection tools were modified and database established; 35 organizations (18 environment and 17 health) were oriented in PHE, where the Minister of State for the Environment and Ministry of Health (MOH) Community Health Commissioner became PHE champions; Strengthened CTPH's coordination of Uganda PHE Working Group and hosted study tour of 7 organizations to learn about CTPH's model at Bwindi Impenetrable National Park.</p>

Client/ independent reference contact details	Tricia Petruney FHI Technical Lead, FHI360, 2224 E. NC Hwy. 54, Durham, NC 27713;
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8c. DO NOT COMPLETE IF YOU ANSWERED 'YES' TO QUESTION 7.

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

Aims (50 words)

CTPH aims to promote biodiversity conservation by enabling the coexistence of people, wildlife and livestock through improving their health and livelihoods in and around protected areas in Africa. CTPH envisions people, wildlife and livestock living in balance, health and harmony with local communities acting as stewards of their environment.

Activities (50 words)

CTPH's three integrated programs are Wildlife Conservation, Community Health and Alternative Livelihoods including field laboratory cross species disease research of gorillas, livestock and people and Village Health and Conservation Teams who promote gorilla and forest conservation, hygiene, sanitation, infectious disease prevention and control, family planning, nutrition, sustainable agriculture and microfinance.

Achievements (50 words)

UWA adopted wildlife health monitoring in annual operational plans; reduced gorilla disease incidences; increased hand washing facilities by 50%; 11 fold increase TB suspects referred; three fold increase women on family planning to 60% above 28% national average; women more involved in conservation; increased tolerance to gorillas in community land.

9. 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>Conservation Through Public Health (CTPH)</p> <p>www.ctph.org</p>	<p>Details (including roles and responsibilities and capacity to lead the project): (max 200 words)</p> <p>Conservation Through Public Health (CTPH) (www.ctph.org), an award winning Ugandan-based NGO, promotes coexistence of people and wildlife through improving health and livelihoods. CTPH initiated this project based on ten years experience implementing One Health and conservation projects at Bwindi. CTPH will manage the project and take primary responsibility for collating existing data and collecting new information. CTPH will raise awareness of the potential of the approach and exchange lessons with other organizations through the Uganda Poverty and Conservation Learning Group (U-PCLG). CTPH will host forums for evidence informed outputs to be disseminated to national and international audiences.</p> <p>Since 2005, CTPH has gained relevant experience to implement this project as a lead organization through coordinating field based wildlife health, conservation, community health and development projects including research, health service provision, conservation education, capacity building workshops and stakeholder meetings. CTPH has organized and participated in advocacy forums since 2010 through coordinating activities of the Uganda Population Health and Environment advocacy-working group, as the secretariat, and serving on the Uganda Poverty and Conservation Learning Group committee. CTPH Founder and CEO has served as a Board member of Uganda Wildlife Authority, Uganda Wildlife Education Centre, Wildlife Clubs of Uganda and The Gorilla Organization.</p>
<p>Have you included a Letter of Support from this institution?</p>	<p>Yes</p>

<p>Partner Name and website where available:</p> <p>University of Oxford (OU)</p> <p>Department of Zoology</p> <p>http://www.ox.ac.uk</p> <p>www.iccs.org.uk</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>Based in the Zoology Department of Oxford University, E.J. Milner-Gulland's interdisciplinary research focuses on the interface between ecology and human behaviour. Her primary themes are understanding the incentives and attitudes of natural resource users, improving the design and evaluation of conservation interventions and management of natural resource use.</p> <p>E.J. is currently Research Lead on IIEDs IWT project building capacity for pro-poor responses to wildlife crime in Uganda, which aims to improve understanding of the interactions between wildlife crime and poverty. She was also Scientific Advisor to IIED's Darwin-funded project based at Bwindi National Park, Uganda, assisting with research into the impacts of conservation on poor people's livelihoods.</p> <p>As Research Lead, E.J. will coordinate and oversee delivery of the research components of this project to time and budget. She will provide technical support and guidance and coordinate research activities. Project researcher Ben Evans will lead the analysis of the ecological and social impacts of the CTPH project. E.J. will bring her expertise in natural and social sciences, impact evaluation and statistical modelling to the project and supervise the project's research outputs, ensuring robustness and credibility. E.J. has participated in the development of this proposal, in collaboration with the other partners.</p>
<p>Have you included a Letter of Support from this institution?</p>	<p>Yes</p>

<p>Partner Name and website where available:</p> <p>Institute for the Environment and Development (IIED) www.iied.org</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>The International Institute for Environment and Development (IIED) is an international, independent policy research institute working for a more sustainable and equitable global environment. IIED works globally through a wide range of long-standing relationships with partners across the developing world. Its partnerships generate close working relations with many key development actors at the grass roots, national and international level. This emphasis on collaboration with partners and networks enable IIED to link local development priorities to national and international policy making.</p> <p>IIED is the convener of Uganda Poverty and Conservation Learning Group, which all partners are members of; and spawned this collaboration. Dilys Roe leads IIED's biodiversity team and has been project leader on an earlier Darwin project (19-013) and on an existing IWT Fund project (IWT001) both in Uganda on which she has collaborated with EJ Milner-Gulland (Oxford University).</p> <p>As Policy Engagement lead, Dilys will coordinate the development of briefing papers from the research findings, research report, blogs and working paper, as well as, provide website updates on the project on the Uganda Poverty and Conservation Learning Group (U-PCLG) website.</p>
<p>Have you included a Letter of Support from this institution?</p>	<p>Yes</p>

<p>Partner Name and website where available:</p> <p>Uganda Wildlife Authority</p> <p>www.ugandawildlife.org</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>Uganda Wildlife Authority (UWA) is the government agency mandated to manage wildlife on behalf of the country. UWA's mission is to conserve, economically develop and sustainably manage the wildlife and protected areas of Uganda in partnership with neighboring communities and other stakeholders for the benefit of the people of Uganda and the global community.</p> <p>Human disease is one of the main threats to conservation of the gorillas due to their close genetic relatedness. UWA set up a veterinary department to effectively manage wildlife health and disease outbreaks and a community conservation department to improve the relations between the community and the park through conservation education, community development and livelihood improvement. Since 2003, CTPH has been working with UWA to promote the health of wildlife, protected area communities and their livestock and reduce pressure on the forest and natural resources through an integrated approach to community based family planning, health and the environment.</p> <p>UWA will be the primary stakeholder to adopt the research findings and actively participate in the roll out to Mount Elgon National Park through engaging the top management, Conservation Area Manager/Chief Park Wardens, community conservation and veterinary staff. This project will influence policy change within UWA to enable a smooth roll out and replication in other protected areas in Uganda.</p>
<p>Have you included a Letter of Support from this institution?</p>	<p>Yes</p>

<p>Partner Name and website where available:</p> <p>Jane Goodall Institute</p> <p>http://janegoodallug.org</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>Jane Goodall Institute (JGI)'s overall mission is to "conserve chimpanzees and their habitats." Objectives of JGI-Uganda include (i) Increasing conservation of chimpanzees and their habitats, (ii) increasing awareness of the environment and other animals, leading to positive behavior change (ii) Expanding noninvasive research on chimpanzees and other primates and (iv) Promoting activities that ensure the well-being of chimpanzees, other primates and all animals.</p> <p>JGI has previously invested in improvement of immunization services in health centres near Budongo Forest Reserve by providing solar fridges to store vaccines, but these interventions have not been followed up to determine impact.</p> <p>JGI through its Roots and Shoots Program implements a peer education activity. This is premised on the notion that educating the girl child has a long term impact on use of natural resources through reduction in girl child school drop out rates, early pregnancies and marriages. Girls are given training on reproductive health including STDs. They are provided with sanitary kits and scholastic materials. This is because it is known that female pupils lose school time and hence perform poorly because of frequent absence from class whenever they are in menstruation. Sanitary pads are too expensive for rural households and hence the affected pupils merely stay away from school during those menstrual periods. Intervention through provision of pads and associated materials keeps the girls at school and enhances their class performance. Better educated girls mature into more responsible and empowered women who can decide on issues such as family size and child spacing. This ultimately results in a lower human population growth and reduces pressure on natural resources.</p> <p>JGI's role will be a primary stakeholder to adopt the research findings and actively participate in the roll out to Budongo Forest Reserve through engaging the Country Director and staff. This project will influence institutional policy change within JGI for replication in Uganda and potentially other countries where JGI is working.</p> <p>JGI-Uganda as the secretariat for the Uganda Poverty and Conservation Learning Group (U-PCLG) has worked closely with CTPH in raising awareness of the health in conservation management and will continue to do so through providing a platform to disseminate result findings.</p>
<p>Have you included a Letter of Support from this institution?</p>	<p>Yes</p>

10. Key Project personnel

Please identify the key project personnel on this project, their role and what % of their time they will be working on the project. Please provide 1 page CVs for these staff, or a 1 page job description or Terms of Reference for roles yet to be filled. Please include more rows where necessary.

Name (First name, surname)	Role	Organisation	% time on project	1 page CV or job description attached?
Ben Evans	Project Researcher	Oxford University	100%	Yes
Charles Downing	Conservation Program Officer	CTPH	20%	Yes
Alex Ngabirano	Community Health Field Officer	CTPH	30%	Yes
Steven Rubanga	Animal Health Program Officer	CTPH	10%	Yes
TBC	Impact and Learning Officer	CTPH	20%	Yes

11. Problem the project is trying to address

Please describe the problem your project is trying to address in terms of biodiversity and (essential for DFID projects) its relationship with poverty. For example, what are the drivers of loss of biodiversity that the project will attempt to address? Why are they relevant, for whom? How did you identify these problems?

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 300 words)

Bwindi Impenetrable National Park (BINP) occurs within one of the poorest and most densely populated regions of Africa, yet is a critical conservation priority for its high level of endemism and biodiversity, including the Critically Endangered mountain gorilla. Local people have severe unmet health needs, which impact on conservation outcomes both directly and indirectly. Directly, frequent interactions between gorillas and local people lead to potentially fatal disease transmission to gorillas, including scabies, viruses, bacteria and intestinal parasites. Indirectly, poor health can lead to an inability to work effectively, poor school attendance and mortality, causing greater dependence on illegal harvesting of Park resources, such as, medicinal plants and inability to take up new livelihoods. Improving human health in communities adjacent to protected areas is likely therefore to be critical to achieving both conservation and poverty alleviation outcomes.

Conservation Through Public Health ([CTPH](#)) has undertaken a programme of primary health care and conservation education around BINP for the last eight years. This approach has reduced gender differences, with women getting more involved in conservation and men getting more involved in family planning. While the CTPH team has also seen more support for conservation as a result of the health program, the evidence for these results is largely anecdotal and the link between the two has not been proven. Neither has the potential general applicability of this approach been evaluated.

We therefore seek to evaluate this integrated approach to conservation and health as a holistic replicable model for sustainable development; and to test its potential for scalability within a great ape protected area - Budongo Forest, with Critically Endangered chimpanzees, and non great ape protected area - Mount Elgon National Park.

Health has not been a focus of Darwin; this project will bring new knowledge on the value of health investments to conservation.

12. Biodiversity Conventions, Treaties and Agreements

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

Convention On Biological Diversity (CBD)	Yes
Nagoya Protocol on Access and Benefit Sharing (ABS)	No
International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)	No
Convention on International Trade in Endangered Species (CITES)	No

12b. Biodiversity Conventions

Please detail how your project will contribute to the objectives of the convention(s), treaties and agreements 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 address CBDs strategic goals:

B: Reduce direct pressures on biodiversity and promote sustainable use: It will improve conservation attitudes and promote better health and family planning. This will address high human population growth, and enable people to take up new livelihoods, reducing poverty and dependence on the forest to meet basic needs;

C: Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity: Improved human health will reduce risks of disease transmission between people and gorillas, particularly those interfacing with mountain gorillas on community land;

D: Enhance the benefits to all from biodiversity and ecosystem services: Mountain gorillas bring in significant tourism revenues for Uganda, which are shared with local communities. Improving the health of mountain gorillas helps to protect a sustainable source of income from ecotourism.

In Uganda the main drivers of biodiversity loss include human-wildlife conflicts, encroachment and poverty, which are exacerbated by high human population growth rates. This project will highlight the value of health interventions as part of an integrated approach to reducing poverty and biodiversity loss. It particularly addresses Aichi target 1 (awareness of biodiversity value), 2 (integrating biodiversity into planning), 12 (preventing extinction) and 14 (safeguarding ecosystem services)

12c. Is any liaison proposed with the CBD/ABS/ITPGRFA/CITES focal point in the host country?

Yes No if yes, please give details:

CTPH has an MOU with the Uganda Wildlife Authority, under which CTPH contributes to wildlife and human health disease research to further understand the benefits of healthcare to wildlife management and conservation. The CBD focal point for Protected Areas in Uganda, Aggrey Rwetsiba, is the contact for CTPH at UWA regarding research implemented by CTPH staff, partners and university students gaining practical experience with CTPH. This project will build upon this existing partnership by translating the research results to policy, through greater engagement with key policy and decision makers, and by providing a framework for rolling out the approach to other Protected Areas.

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 – this may be a repeat from Stage 1, but you may update or refine as necessary. Tracked changes are **not** required.)

We will evaluate the effectiveness of CTPH's programmes, explore the evidence for relationships between apparent health improvements and conservation outcomes, and use the evidence to improve and roll out the approach to other sites within Uganda. We will establish causative relationships by using, as far as possible, a Before-After-Control-Intervention design to assess associations between CTPH activities, participant health, attitudes to conservation, forest resource use, and gorilla health.

Improvements in primary health care will be assessed using monthly household data collected by Village Health and Conservation Teams for all 2,600 participating households in Bujengwe and Mukono parishes over eight years. Indicators include improved household hygiene and sanitation, disease identification and referrals, and numbers of new family planning users. This will be compared with a matched control group of households in Mpungu Subcounty who have not had this investment in primary health care. Because there are no control time series, we will collect recall data from control and intervention groups; comparison with actual data from the intervention group will estimate recall reliability. Inaccuracies will be addressed by limiting the recall period, collection of corroborative secondary data (e.g. local hospital records) or where necessary by limiting the causative inferences drawn.

Conservation outcomes will be assessed as:

1. Perceived and observed changes in use of park resources to meet basic needs: surveying control and intervention households on their use of bushmeat, fuelwood and non timber forest products, using [indirect questioning](#) to reduce bias in reporting illegal activities, and carrying out 10 transects in each area to assess signs of human incursion.
2. Differences in attitudes towards the park and gorillas, and understanding of the need for basic health precautions when entering the forest or encountering gorillas, between control and treatment groups.
3. Change over time in gorilla faecal parasite loads and disease incidents (scabies, intestinal parasite infections, other clinical signs) in project and control sites.

We will assess local perceptions of the relationship between healthcare and conservation; the importance of human health for gorilla conservation; and social norms around health and conservation.

Using the evidence generated, we will transfer the approach to Mount Elgon National Park (with the Uganda Wildlife Authority) and Budongo Forest Reserve (with the Jane Goodall Institute). Baseline surveys will gather information on attitudes and behaviours towards the reserves (including use of forest products for food and medicines), household health status, and perceived links between conservation and health. These surveys, plus the Bwindi evaluation, will inform the design and implementation of new programmes in these locations, targeting 9,300 households split between the two sites.

CTPH will manage the project and take primary responsibility for collating existing data and collecting new information. The project will build the capacity of CTPH to evaluate conservation interventions through partnering with Oxford University. It will raise awareness of the potential of the approach and exchange lessons with other organisations through the Uganda Poverty and Conservation Learning Group ([U-PCLG](#)). IIED will translate results into policy briefs and training materials and communicate outcomes to an international audience.

14. Change Expected

Detail the expected changes this work will deliver. You should identify what will change and who will benefit a) in the short-term and b) in the long-term.

- 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. Q15 provides more space for elaboration on this.

(Max 300 words)

We will improve understanding of how to link primary health care for communities adjacent to protected areas with improved conservation status of biodiversity, particularly species vulnerable to human disease. Health is a critically important component of multi-dimensional poverty, and primary health care is a fundamental need, which is inadequately met for many poor people.

Although there is anecdotal evidence that the CTPH programme is highly effective in improving public health and conservation attitudes, reducing both the need and willingness to enter the Park to extract resources (hence reducing risks of disease transmission to gorillas), there is currently no quantitative evidence to support this, and no guidance on improving outcomes. Understanding the direct and indirect links between health-based interventions and conservation outcomes will improve programme implementation, gain international donor support, and support roll-out to other areas.

CTPH currently works to improve the health of 5,200 households in 2 districts around BINP. This project will support the expansion of the programme to Mount Elgon NP and Budongo Forest Reserve in Uganda, directly improving the health of a further 9,300 families. This will directly contribute to wellbeing in the short term, through increasing the number of households with adequate hygiene and sanitation, prevention and control of infectious diseases, good nutrition and access to family planning. In the medium term, more resilient, healthier, smaller families put less pressure on the forest, with less need to expand their lands and use forest products. This enables continued provision of ecosystem services such as safe water. Reduced threats to Uganda's wildlife supports ongoing tourism, thereby reducing poverty and conserving biodiversity into the long term.

We expect this project to change the mindset of conservationists in Uganda and worldwide towards recognising the potential of linking public health and conservation, and provide guidance for best practice in doing this.

15. Pathway to poverty alleviation – ESSENTIAL FOR DFID PROJECTS, OPTIONAL FOR DEFRA PROJECTS

Please describe how your project will benefit poor people living in low-income countries. Give details of who will benefit and the number of beneficiaries expected to be impacted by your project. The number of communities is insufficient detail – number of households should be the largest unit used. If possible, indicate the number of women who will be impacted.

(Max 300 words)

Protected areas are surrounded by some of the poorest and most marginalized human populations in Africa, typically living far from health centres, and lacking access to education and social services. The three protected areas that this project will benefit are representative of such locations.

CTPH currently works to improve the health status of 22,000 people from 5,200 households in 44 villages around BINP, in both Kanungu and Kisoro Districts. This project will support the expansion of the programme to Mount Elgon NP, with high poverty and intense human pressure on natural resources; and Budongo Forest Reserve, where resources for local people

are under pressure due to immigration and commercial agribusiness and risks of disease transmission between humans and chimpanzees are high. This will directly improve the health of a further 9,300 households within 4 districts, representing 46,500 people.

In rolling out the programme, the project will directly contribute to the wellbeing and resilience of new participants. The participants in the existing CTPH initiative will benefit from improved outcomes based on changes made as a result of the project, and from having their voices heard through the consultations and discussions, which form part of the evaluation. Their experiences and ongoing health needs will be highlighted to national policy-makers and international donors through our dissemination activities. Therefore a total of 14,500 households from Uganda, a low income country, will benefit from this project.

Women are especially vulnerable to a lack of healthcare and family planning, as primary household carers with additional maternity needs, and so will benefit particularly from the project. The Village Health and Conservation Teams (local people who implement the project) have a minimum 50% female enrollment, giving women more of a voice on conservation and forest resource use issues, and building their capacity and profile within the community.

16. 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 project is part of a progressive approach where Village Health and Conservation Teams (VHCTs) are trained to provide uninterrupted health and conservation outreach with minimal supervision by District Health Offices and UWA, while setting up Village Saving and Loan Associations (VSLAs) for longer-term support. The VHCT/VSLA model won CTPH a Global Development Network 2012 Japanese Most Innovative Project award for scaling up delivery of a social service beyond donor funding cycles. This approach will be adopted at Budongo Forest and Mount Elgon.

Training VHCTs to be financially self-sufficient includes building capacity to manage group enterprises and VSLAs, so as to meet basic family needs such as school fees, while continuing our conservation messaging and health provision. One or two VHCTs are selected from each village; if one drops out, other VHCTs in the same parish can pass on knowledge to new recruits. Park staff and health workers are also trained as a group to ensure continuity if one leaves.

This project will mark a step change, enabling CTPH to evaluate and improve delivery at Bwindi, roll out the approach, raise its national and international profile; thereby enhancing its long-term sustainability and ability to deliver integrated conservation and development outcomes.

17a. Harmonisation

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

This project is a development of existing work, started by CTPH on its foundation in 2003. Since then, CTPH has been designing and implementing projects to support its strategic programmes: wildlife health, community health and alternative livelihoods. CTPH is primarily

funded through grant funding, and is currently receiving funding from Tusk Trust, Global Development Network and GalvMed to strengthen the three programmes.

This Darwin project is a new initiative, which will provide the first opportunity to evaluate the conservation impact of health investments in communities surrounding Bwindi Impenetrable National Park. During our programme CTPH has been careful to collect detailed information about the health of project participants, and together with Uganda Wildlife Authority we have collected detailed information on gorilla health and forest use. The Darwin project will enable us to step back and look objectively at the results obtained so far, improve delivery at Bwindi, and inform our forthcoming scale-up of the project to two other areas and organisations. It will also enable us to share our approach more widely, nationally and internationally, and highlight the potential of linking public health with conservation as a conservation approach.

Hence the project is a development of existing work, but is transformative.

17b. Are you aware of any other individuals/organisations/projects carrying out or applying for funding for similar work? Yes

If yes, please give details explaining similarities and differences 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.

CTPH has, over the last few years, acted as an innovator and leader in combining conservation and public health within Uganda, and so is well placed to support and influence other organisations through this project.

For example, [Kibale Health and Conservation Center](#) (KHCC) is a health clinic established in 2008 at the edge of Kibale National Park in Uganda by McGill University, Canada, to reduce the human disease burden and improve community perceptions of protected areas, potentially reducing illegal extraction. The centre provides outpatient services to local communities and has an outreach programme to school children ([Chapman et al. 2015](#)). However the impact of this programme has not been evaluated, either on the health or conservation sides.

CTPH's Village Health and Conservation team model is based on the Ugandan Ministry of Health's Village Health Team approach, which conducts household-level behaviour change communication around sanitation, hygiene and basic health care as well as providing some basic health services. KHCC, on the other hand, provides health services through out-patient clinics and mobile outreach clinics, to which people have to travel, and which do not build capacity of local people through membership of a VHCT.

CTPH has visited KHCC and has engaged KHCC in the Uganda Population, Health and Environment Working Group (UPHEWG) forums. CTPH is the secretariat for UPHEWG, and coordinates UPHEWG's work on developing fact sheets and dissemination of experiences. CTPH will share experiences, research findings and lessons learned from the Darwin project with KHCC and others both directly and through this Working Group.

Our research will develop a methodology for measuring health and conservation links, and will provide a training platform to support others, including KHCC as well as other health care and conservation initiatives in Uganda and other countries, to improve their understanding of the impacts of their work. For example [Bwindi and Mgahinga Conservation Trust](#) is a member of both PHE and the Uganda Poverty and Conservation Learning Group. It has adopted CTPH's model and is conducting family planning education using community based distributors who also conduct conservation education in three additional parishes around Bwindi.

Other international organisations, such as [Gorilla Doctors](#), focus on the wildlife, rather than having a focus on meeting the needs of local people for basic health care and development. Internationally, there is a strong "[One Health](#)" movement growing, which recognises the links between healthy ecosystems and healthy people. However, at the moment, there is a lot of focus on emerging infectious diseases, rather than on the chronic diseases of human poverty. There is also a focus on the veterinary and medical sides, with conservation and development fields not well represented. Our project could provide the evidence to change this focus, and be a case study for a more grounded relationship between conservation and human health.

18. Ethics

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

(Max 300 words)

This project will comply with all legal and ethical obligations of both the UK and Uganda, including relevant ABS legislation and best practice according to the [CBD](#).

The project is led by a developing country organisation. CTPH staff will be involved in all aspects of research and policy engagement, and community volunteers will implement the project. This will ensure strong leadership and participation from developing countries and the communities directly involved and improve the chances that the perspectives, interests and wellbeing of those directly affected are properly included. UK partners Oxford and IIED's involvement will build in-country capacity for future similar activities, and provide access to international expertise and resources.

Project research involves analysing sensitive information on participants' health, including children, already routinely collected by CTPH, and gathering new information on control households. We will ask people about engagement in illegal activities (e.g. hunting in Bwindi). We will garner views on the CTPH project, which may lead to fear of losing access if they criticise the project. On the ecological side, we will not be interacting directly with wildlife or manipulating species or habitats.

Given these substantial ethical issues, all research protocols will be approved through Oxford University's [Central University Research Ethics Committee](#). This will give independent and challenging scrutiny of our questionnaires, consent procedures, data access and information use.

This project will respect the rights, privacy, and safety of all research subjects and project participants, and other intended beneficiaries, whether direct or indirect. We will obtain free, prior informed consent from all participants. We will protect the health and safety of all those working on the project. Any project staff involved in the design or conduct of research will be expected to maintain the independence and integrity of the research process, regardless of their personal views on the project.

19. 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)

The project has a strong focus on knowledge sharing, communications and dissemination at multiple levels.

At the local level, CTPH's mission is to communicate the value of biodiversity through the work of their Village Health and Conservation Teams. This will continue, with local community members sharing ideas and locally-tailored materials directly with their neighbours through discussions with participating households, as well as village meetings and events. The research findings will be fed back through this route, with researchers talking directly to VHCT and VSLA members, and visiting villages to share their insights and ask for feedback.

At the national level, CTPH will share their findings directly with partner organisations through their collaboration with Uganda Wildlife Authority (Mt Elgon NP) and Jane Goodall Institute (Budongo) to scale up and adapt the CTPH model in new sites. CTPH will also share through existing forums of which they are an active member; Uganda Poverty and Conservation Learning Group and Population Health and Environment forum. Project updates will be presented at biannual meetings, and feedback solicited. CTPH will write regular blogs to feature on the [U-PCLG website](#).

At the Ugandan government level, CTPH will share widely with interested parties including the National Forest Authority, National Environment Management Authority, Ministry of Health, Ministry of Water and Environment. They will organise workshops and produce briefing papers and a research report, to support policy and practical change towards the integration of conservation and health in these Ministries' activities.

Internationally, the project will share experiences and insights through a dedicated page on the IIED website, peer-reviewed research papers, a research report, blogs and presentations at both practitioner and academic workshops and conferences. The Program Director will travel to Oxford as a Biodiversity Fellow and further dissemination events will be organized during that time, including talks at Oxford University, IIED and at Zoological Society of London (ZSL). The ZSL talk will be livestreamed and available online at the Interdisciplinary Centre for Conservation Science (ICCS), ZSL, IIED and CTPH websites, for people to watch at any time in the future.

This model of sharing, with appropriate materials and personal discussions being developed for each target audience, has been very successfully implemented for [recent Darwin projects](#).

20. Capacity building

If your project will support capacity building at institutional or individual levels, please provide details of what form this will take and how this capacity will be secured for the future.

(Max 300 words)

The project will build capacity at both individual and institutional levels, both within the project sites and nationally.

At Bwindi, the individual capacity of community members from the Village Health and Conservation Teams (VHCTs) will be built through regular meetings and training workshops as well as on-the-job training and supervision. At the institutional level, staff from UWA, JGI and the Ministry of Health will be trained to supervise community volunteers who are implementing integrated conservation and health interventions, while also being given a platform to train the VHCTs with relevant conservation and health information.

CTPH's research capacity will be built through their partnership with Oxford University. The Oxford researcher will work alongside CTPH staff members at all stages from design, data collection, analysis and write-up of the study, thereby building capacity in all aspects of the research process. The Oxford researcher's capacity will also be built through this mutual learning process, a successful feature of EJMG's research approach. CTPH staff will be authors on research papers. Oxford will offer a Biodiversity Fellowship to enable a CTPH staff member to attend training courses, participate in analyses, give and attend seminars and build an international research network.

CTPH's capacity to disseminate information to a range of audiences will be built through the involvement of IIED, which has a highly successful track-record in influencing national and international policy through targeted, highly respected outputs including reports, blogs and policy briefings.

This capacity will be passed on to other individuals and organisations working on similar issues within Uganda. U-PCLG members will be encouraged to participate in our policy and dissemination work, and invited to training workshops on impact evaluation techniques. As a member of DEC, EJMG will hold an open training workshop in Kampala to support prospective applicants for Darwin projects in the application process.

21. 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.

(Max 250 words)

We will ensure that all appropriate outputs from the project are accessible to all target audiences and interested parties in appropriate formats, and we have a commitment to transparency.

Because of the sensitive nature of the datasets collected (see ethics statement), we will, however, not make raw information publicly available. Appropriately anonymised datasets will be made available to researchers and implementers on a case-by-case basis, following the principles of FPIC and confidentiality, and on signature of an MOU between CTPH, Oxford, any other owners of the intellectual property, and the interested party. No potentially identifying information will be attached to individual responses.

The research report, policy briefs and materials for the general public will be available via the CTPH and IIED websites, and advertised through social media. The materials for local audiences will be translated into local languages. The costs of this dissemination are included in the budget, and cover 6% of the total budget.

Research papers will be made available through Oxford University's [Research Archive](#), which hosts free-to-download accepted manuscripts, which are uploaded on acceptance of a paper. We therefore do not request separate funding for open access publications.

22. Match funding (co-finance)

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:

The Global Development Network through the Japanese Social Development Fund is providing funding for scaling up of the Village Health and Conservation Team (VHCT) approach sustained by group income generating projects and Village Saving and Loan Associations to Mount Elgon National Park in Uganda and Virunga National Park in Democratic Republic of Congo. GDN-JSDF funding will cover some of the project costs, which include salaries, overhead, national travel, meetings and a laptop, amounting to £XXX.

Oxford University is providing counterpart funding, which includes staff time for Prof EJ Milner-Gulland, overhead and a biodiversity fellowship towards CTPH staff training at Oxford University.

CTPH receives donations from individuals amounting to 8% of its budget; some of this will be used to support operational costs at Bwindi. CTPH also hosts university students to conduct research and field practical training on service delivery, data collection and monitoring and evaluation of human, animal and ecosystem health issues being addressed; fees from the students help to support field operation costs amounting to 3.5% of its budget. This counterpart funding will amount to £27,810.

UWA in kind staff time on the project

JGI in kind staff time on the project.

22b) 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
30 th November 2015	United States Fish and Wildlife Service Great Ape Conservation Fund	£66,000	To improve scaling of the VHCT approach among indigenous Batwa pygmies at Bwindi Impenetrable National Park, where lessons can be applied to the indigenous Ndorobo at Mount Elgon who were also displaced from the national park. The Darwin project is not reliant on this funding source, but if we receive the money, we will be able to expand our activities with a special focus on the Batwa community.

22c) None

If you are not intending to seek matched funding for this project, please explain why.

(max 100 words)

PROJECT MONITORING AND EVALUATION

MEASURING IMPACT

23. 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.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: (Max 30 words) Integration of conservation and development is mainstreamed through recognition that investments in primary health care can provide an entry point to alleviating poverty and improving biodiversity conservation outcomes.			
Outcome: (Max 30 words) The interactions between primary health care and biodiversity conservation are understood, the evidence-base strengthened, and the approach is rolled out, improving conservation and poverty outcomes in Uganda and internationally.	0.1 An assessment of the effectiveness of CTPH's Bwindi project in bringing about poverty alleviation and biodiversity conservation outcomes, using robust impact evaluation methodology 0.2 Recommendations for improvements to the Bwindi CTPH project are implemented. 0.3 The approach is rolled out to Mount Elgon National Park and Budongo Forest Reserve, based on the evidence from the evaluation. 0.4. Better recognition of the value of the CTPH approach, and how best to implement it, at national and international levels. 0.5 Analysis of data, production of	0.1 Minutes of project meetings, evaluation report, peer-reviewed publications, conference presentations 0.2. CTPH project documents showing approval and implementation of recommendations 0.3. Minutes of collaborative meetings with JGI and UWA, management plans for projects approved, results of preliminary baseline studies in project reports 0.4. Minutes of workshops and policy briefings to Ministries, discussion forums (U-PCLG, PHE), showing interest in taking up the approach, and international interest in the media, downloads of reports, and engagement with CTPH.	Evidence of health-conservation link accepted as sufficiently conclusive to warrant continued/expanded use of intervention [Given anecdotal evidence to date on the positive impact of the project we are confident that this will be the case] Continued supportive relationship and close partnership with UWA and the district local government at Bwindi means we are able to continue to implement and improve our project, based on the evaluation results. [CTPH is committed to acting on evaluation results. UWA is a project partner and we have eight years of close collaboration with local partners at Bwindi] Lessons learnt from Bwindi are applicable to Budongo and Mt Elgon, and partners remain keen to take the

	findings and recommendations in project report where agreed set of recommendations for action, based on research findings, developed into a 5-year prioritised Strategic Plan	0.5 Strategic Plan agreed at research workshop documented in workshop minutes.	<p>approach forward, and to adapt it based on our evaluation [CTPH works closely with the partners, and already has funding and commitments to scale up the programme to these locations]</p> <p>Other parties are interested in our findings and willing to use them in their own work. [We have close working relationships with national-level stakeholders, who have already expressed their interest to take on board our findings.]</p>
<p>Outputs:</p> <p>1. Evaluation to establish causative relationships between apparent health improvements and improved conservation outcomes, for 5,200 households in three frontline parishes at Bwindi, using a Before-After-Control-Intervention evaluative design</p>	<p>1.1 Agreement of variables to be assessed, and of sampling strategy, for BACI designed study, and collation of existing datasets (CTPH data, hospital referrals), by mid year 1.</p> <p>1.2. Collation and analysis of records of gorilla disease in space and time, for correlation with human health indicators, by mid year 1.</p> <p>1.3. Survey carried out of 5,200 households in Bujengwe and Mukono parishes (2,600 participating households; treatment) and Mpungu Subcounty (2,600 non-participants, control), looking at health status, uptake of CTPH activities, attitudes to the Park and the project,</p>	<p>1.1 Project meeting minutes of the Inception workshop, agreed research protocol document.</p> <p>1.2-1.4. Project meeting minutes from interim project workshop (end year 1), field reports, Darwin year 2 report, project research report at Research Workshop (end year 2).</p> <p>1.5. Evaluation report, meeting minutes of Research Workshop (end year 2), presentations to project partners and other stakeholders in Uganda, peer-reviewed paper, conference presentations internationally (in year 3).</p>	<p>Willingness of the community to participate in the study [Community feels positively towards CTPH and preliminary discussions have suggested they will be happy to participate]</p> <p>Quality of records for previous years, both ecological and social, is good enough for statistical comparisons to be made. [CTPH has worked hard to ensure robust data collection, and ecological datasets were collected with international partners; we have back-up options should the datasets be less robust than hoped]</p> <p>Surveys produce the necessary datasets, and analysis proceeds, in a timely fashion in order to inform</p>

	<p>understanding of health/conservation links, social norms around Park and health, and suggested improvements to the project, by mid year 2.</p> <p>1.4. Survey of human use of the Park (e.g. firewood, honey, bushmeat) and gorilla encounters; a) through indirect questioning as part of the household survey, and b) through direct observation of human signs on 10 transects in each of the control and treatment areas (by mid year 2)</p> <p>1.5 Analysis of data, production of findings and recommendations in project report (by end year 2).</p>		<p>action. [Experienced researchers with good track record, and strong oversight by project leader and core team.]</p>
<p>2. Change in the management of the Bwindi project by CTPH, based on evaluation findings, leading to improved project outcomes.</p>	<p>2.1. Agreed set of recommendations for action, based on research findings, developed into a 5-year prioritised Strategic Plan (with timescales) during the Research Workshop (end year 2)</p> <p>2.2. CTPH, UWA and local partners implement specific changes to their Bwindi project, based on the Strategic Plan (mid year 3).</p> <p>2.3. Village Health and Conservation Teams report improved attitudes towards the Park and the project, and improved uptake of healthcare</p>	<p>2.1. Strategic Plan agreed at research workshop (by end Year 2), documented in workshop minutes.</p> <p>2.2. Minutes of final workshop (end year 3) showing action against deliverables.</p> <p>2.3. Field reports from VHCT leaders, direct observation by CTPH staff, and discussions with local leaders in participating and neighbouring areas, presented at final workshop (end year 3).</p>	<p>There are clear recommendations for improvements coming out of the evaluation, which can be implemented easily and quickly, without major financial commitments. [Impact evaluations typically produce a range of recommendations of varying priority and timescale - we will take a progressive adaptive management approach in order to ensure CTPH can make short-term changes that are feasible with a high return on investment in the short run; longer term actions will be captured in the Strategic Plan]</p>

	<p>by 2,600 participants, as well as willingness to join by neighbouring communities, including control households (end year 3).</p>		<p>There is a will to act on the part of local stakeholders (including UWA and CTPH) based on the evaluation. [The fact that the initiative to do this evaluation comes from CTPH means there is a strong will to act on its conclusions]</p> <p>There will be time for VHCTs to register improvements in perceptions of the project in the last 6 months of the project [Robustly measurable improvements in outcomes and impact are not feasible, but short-term improvements in attitudes, perceptions and project team/participant activities should be discernable]</p>
<p>3. Community health programmes are included as part of conservation management by at least one additional national park in Uganda - Mount Elgon National Park - and one additional conservation agency in Uganda within the NGO sector - Jane Goodall Institute (in Budongo Forest Reserve), by end of year 3.</p>	<p>3.1 Inception workshop held to develop a theory of change for Bwindi and the two roll-out sites and associated monitoring and evaluation tasks (early year 1)</p> <p>3.2 Baseline survey of local people's health status, attitudes and social norms, local forest use, and wildlife health status performed in Budongo and Mount Elgon, led by partner organisations, using the surveys designed for Bwindi, in order to provide the Before-Control elements of a BACI design for future monitoring and evaluation in these</p>	<p>3.1. Minutes of project inception workshop.</p> <p>3.2 Documented evidence (project reports, conservation agency reports, meeting minutes) of design of new projects, including report of the Research Workshop at end of year 2, with the Theory of Change and planned project structure laid out.</p> <p>3.3 Presentations and reports by UWA/JGI to the Final Workshop of the project (end year 3), as well as published Project Plans, including</p>	<p>Continued commitment by JGI and UWA, who are partners on this project, and funding to roll out, remains secure.</p> <p>The lessons learnt at Bwindi can be translated to the situations of Budongo and Mount Elgon, and timely delivery of evaluation results enables these lessons to be integrated into their project designs by the end of year 2. [Timely delivery will be ensured by strong project leadership and clear milestones. Preliminary scoping meetings and site visits by CTPH, JGI and UWA</p>

	<p>locations (by mid year 2).</p> <p>3.3 Design completed of integrated conservation and health programme in Budongo and Mount Elgon, informed by the preliminary findings of the evaluation, and presented at Research Workshop (by end year 2).</p> <p>3.4. Recruitment and training of new VHCTs at Mt Elgon and Budongo, comprising 93 local people in 93 villages and 9 parishes with at least 50% women (by end year 2)</p> <p>3.5. New conservation through public health programmes implemented by UWA – Mount Elgon Conservation Area Management and JGI-Uganda - Budongo Forest Reserve, through new VHCT teams, aiming to improve health outcomes for 9,300 households, with appropriate monitoring and evaluation frameworks in place (by mid year 3).</p> <p>3.6 Follow-up survey at Mount Elgon and Budongo Forest to assess short-term changes in attitudes and health practices (by end year 3)</p>	<p>M&E strategy, for each of the new sites.</p> <p>3.4. Minutes of training workshops, lists of names of VHCT team members in each location.</p> <p>3.5. Programme reports, meeting minutes, websites.</p>	<p>suggests these two sites are suitable for the CTPH approach]</p> <p>The baseline surveys can be completed prior to programme roll-out, in order to get a true baseline for the project evaluations. [Project timetables will be agreed by all partners in advance; protocols will be prepared and tested at Bwindi in year 1. UWA/JGI will be included in the team developing and testing these protocols, so they are able to implement them swiftly, and make any necessary alterations for their circumstances]</p> <p>No unforeseen circumstances preclude the roll-out of the programme. [funding sources are already confirmed, and in principle agreement has already been given]</p> <p>The programme will produce measurable change in participants' attitudes and hygiene/health practices within a few months. [experience at Bwindi suggests this is realistic. Longer-term outcomes will be measured in future M&E]</p>
<p>4. Better understanding of linkages between primary healthcare and conservation among target audiences in Uganda and</p>	<p>4.1 At beginning of year 2, a workshop held in Uganda, with the Poverty and Conservation Learning Group, Uganda Wildlife Authority,</p>	<p>4.1, 4.2 Workshop proceedings</p> <p>4.2. Policy brief available online, list of organisations receiving the hard</p>	<p>National-level and international target audiences interested in learning about the potential of health as a conservation and sustainable</p>

internationally	<p>Jane Goodall Institute and the Ugandan government's National Environmental Management Authority and National Forestry Authority to share the research framework and preliminary findings from the Bwindi evaluation and Budongo/Mt Elgon baseline survey with national-level stakeholders in Uganda.</p> <p>4.2 By end of year 2, two Research Workshops will be held to present the results of the Bwindi impact evaluation with local stakeholders in Uganda and international stakeholders in London</p> <p>4.3 A Research Report and a Policy Brief are published, disseminated physically and virtually by IIED and CTPH, and uploaded on CTPH and IIED websites and mentioned on CTPH and IIED social media facebook and twitter pages (by end of year 2).</p> <p>4.4. By end of year 3, at least one paper submitted to a high impact peer-reviewed journal, describing the evaluation of the Bwindi project, and presented in at least one international conference.</p> <p>4.5. By mid-year 3, village-level dissemination carried out through the</p>	<p>copy.</p> <p>4.3. Paper accepted, abstract in conference proceedings</p> <p>4.4 and 4.5 Photographs, field team reports, final Darwin report.</p>	<p>development approach [there is increasing international interest in this approach, as evidenced by Darwin Initiative call priority; national-level audiences already interested in the CTPH project]</p>
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	<p>VHCTs in the 44 participating parishes at Bwindi to report back on research findings and planned changes to the project based on their input.</p> <p>4.6. In early Year 3, village-level dissemination in Budongo and Mt Elgon to launch the new CTPH programmes in their areas, featuring the newly appointed VHCTs.</p>		
<p>Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)</p> <p>1.1 Before-after control intervention strategy variables and data collection tool developed at inception workshop</p> <p>1.2 Collation of datasets on human and gorilla health from CTPH, gorilla conservation and health partners and from secondary data</p> <p>1.3 Data collected from 5,200 treatment and control households using household surveys</p> <p>1.4 Forest transects walked (10 per area), and data collected on forest use</p> <p>1.5 Datasets analysed and research report written</p> <p>2.1. Strategic plan developed for implementation of priority actions at Bwindi, based on research findings</p> <p>2.2. Implementation of priority actions at Bwindi</p> <p>2.3. VHCTs implement revised project with input from project participants, and report back to CTPH</p> <p>3.1 Inception workshop held to develop a theory of change and associated monitoring and evaluation tasks</p> <p>3.2. Baseline survey carried out at Mount Elgon and Budongo to understand health status, attitudes and forest use prior to intervention</p> <p>3.3. Design for CTPH roll-out agreed and action plan prepared for the two new sites</p> <p>3.4. Selection and training of 93 VHCT members in 9 parishes, minimum 30% women.</p> <p>3.5. Roll-out of CTPH model to Mount Elgon and Budongo, targeting 9,300 households for improved health care and reduced threat to the Parks</p> <p>3.6 Post survey of random sample at Mount Elgon and Budongo to assess changes in conservation attitudes and health behaviour change</p> <p>4.1 Sharing of preliminary findings through a workshop</p> <p>4.2. Sharing of research results through a Research Workshop.</p> <p>4.3. Write and publish Research Report and policy briefs, and online materials to share results</p>			

- 4.4. Submit a manuscript and conference abstract describing the evaluation and its results.
- 4.5. Sharing of results to local audience in Bwindi through VHCT meetings and dissemination to participants.
- 4.6. Meetings to launch new programmes with VHCTs in Mt Elgon and Budongo

24. 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 (Q1 starting April 2016)

Activity	No of months	Year 1				Year 2				Year 3			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1: Evaluation to establish causative relationships between apparent health improvements and improved conservation outcomes using a Before-After-Control-Intervention evaluative design													
1.1 Before-after control intervention strategy variables and data collection tool developed at inception workshop	1	x											
1.2 Collation of datasets on human and gorilla health from CTPH, gorilla conservation and health partners and from secondary data	3	x	x										
1.3 Data collected from 5,200 treatment and control households using household surveys	6			x	x								
1.4 Forest transects walked (10 per area), and data collected on forest use	6			x	x								
1.5 Datasets analysed and research report written	9					x	x	x					
Output 2: Change in the management of the Bwindi project by CTPH, based on evaluation findings, leading to improved project outcomes.													
2.1 Strategic plan developed for implementation of priority actions at Bwindi, based on research findings	1								x				
2.2 VHCTs implement revised project with input from project participants	12									x	x	x	x
2.3 VHCTs report back to CTPH on changes in attitudes	6											x	x
Output 3: Community health programmes included as part of conservation management at two new sites													
3.1 Inception workshop held to develop a theory of change and associated monitoring and evaluation tasks	1	x											
3.2 Baseline survey carried out at Mount Elgon and Budongo to understand health status, attitudes and forest use prior to intervention	6					x	x						
3.3 Design for CTPH roll-out agreed and action plan prepared for the two new sites	2							x					
3.4 Selection and training of 93 VHCT members in 9 parishes, minimum 50% women.	2								x				

3.5 Roll-out of CTPH model to Mount Elgon and Budongo, targeting 9,300 households for improved health care and reduced threat to the Parks	12										X	X	X	X
3.6 Post-survey of random sample at Mount Elgon and Budongo to assess changes in conservation attitudes and health behaviour change	3												X	
Output 4: Better understanding of linkages between primary healthcare and conservation among target audiences in Uganda and internationally														
4.1 Sharing of research framework and preliminary results through a workshop with PCLG, UWA, JGI, National Forestry Authority, National Environment Management Authority and other stakeholders	1					X								
4.2 Sharing of final evaluation results at a Research Workshop	1								X					
4.3 Write and publish Research Report and policy briefs, and online materials to share results	6							X	X	X				
4.4 Prepare and submit a manuscript and conference abstract describing the evaluation and its results.	9									X	X	X		
4.5 Sharing of results to local audiences in Bwindi through VHCT meetings and dissemination to participants.	6								X	X				
4.6 Launch of roll-out projects at Budongo and Mount Elgon through VHCT meetings and dissemination to participants	3									X				

25. 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 project's 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)

This project is rooted in the practice of adaptive management. The main aim of the project is to evaluate a well-monitored and innovative conservation and development project, in order to adapt it for improved future implementation. We also aim to support learning for the wider conservation community. We will use the lessons from our monitoring and evaluation of the existing CTPH project to design projects for new areas, which have robust M&E at their hearts: The roll-out projects will incorporate baseline surveys in treatment and control sites, and have ongoing monitoring integrated into their structure, so that the impact of these new projects can be properly assessed in the future. In this sense the project aims to act as a model for how integrated conservation and development projects should be designed and implemented with monitoring and evaluation for adaptive management built in.

The monitoring and evaluation of the project itself is designed to ensure that targets are met in a timely fashion, and that the project has a clear theory of change against which it will measure progress. At the Inception Workshop we will develop a Theory of Change both for the project as a whole, and for each of the three sites where we will operate, with associated monitoring and evaluation tasks. These tasks will be assigned to particular individuals within the team. The assumptions underlying the ToC, and progress against it, will be assessed at each of our annual project team workshops, and changes needed to the project will be agreed based upon this assessment.

The core team of the project, led by Gladys Kalema-Zikusoka, will comprise the leaders of each partner organisations. They will meet by skype on a monthly basis to check progress against agreed milestones, and agree actions in the event of the project falling behind schedule.

An Advisory Committee will be selected to give input about how we are doing from an independent perspective. The members will include the National Forest Authority (Levi Etwodu), National Environment Management Authority (Francis Ogwal), Ministry of Health (Miriam Namugere), a member of PCLG (Dr. Arthur Mugisha) and PHE (Charles Kabiswa). The Advisory Committee will meet once a year to review project progress and give their insights on how to improve our activities, which will be written up by the Chair of the Advisory Committee (Francis Ogwal) as a short evaluation report (to be made available to Darwin). The Advisory Committee will also be invited to attend our project workshops and dissemination events, and will be asked to review project outputs (such as the Research Report) in advance of publication.

Total budget for M&E	£19,350
Percentage of total budget set aside for M&E	5%

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. You should also ensure you have read the 'Finance for Darwin' document and considered the implications of payment points for cashflow purposes.

NB: The Darwin Initiative cannot agree any increase in grants once awarded.

26. 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)

The budget has been compiled based on CTPH's extensive previous experience in conducting public health and conservation interventions, and in carrying out household surveys. Cost savings will be made by integrating project activities as much as possible with ongoing activities. We will also minimise international travel costs by holding project workshops when international partners are in Uganda for other commitments.

The monthly skype meetings between project team leaders will discuss the expenditure against budget on each element of the project. Any emerging discrepancies will be discussed and a timely plan put in place to address them. CTPH has an accountant, and 5% of their time will be allocated to ensure proper oversight of the financial aspects of the project.

The involvement of UK organisations represents substantial in-kind matched funding, in that the costs of E.J. Milner-Gulland's time and Oxford's indirect and overhead costs are waived. The UK researcher, Ben Evans, is paid as a student, hence keeping salary costs very low compared to standard UK researcher salaries. This means that a substantial proportion of the budget is spent in Uganda by in-country organisations.

We will minimise costs by combining project activities, such as, surveys for both health observations and conservation attitudes and meetings to select VHCTs from different parishes, which will be held on one trip to the specific protected area.

27. Capital items

If you plan to purchase capital items with Darwin funding, please indicate what you anticipate will happen to the items following project end.

(max 150 words) We plan to purchase laptop computers. After the project ends the laptops, which after three years will have depreciated fully, will be retained by Conservation Through Public Health (CTPH).

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
Conservation Through Public Health
(*delete as appropriate)

I apply for a grant of £ 295,000 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 key project personnel and letters of support.
- I enclose our most recent signed audited/independently verified accounts and annual reports (if appropriate)

Name (block capitals)	GLADYS KALEMA-ZIKUSOKA
Position in the organisation	CHIEF EXECUTIVE OFFICER

Signed**

Gladys Kalema-Zikusoka

Date:

1st December 2015

If this section is incomplete or not completed correctly the entire application will be rejected. You must provide a real (not typed) signature. You may include a pdf of the signature page for security reasons if you wish. Please write PDF in the signature section above if you do so.

Stage 2 Application – Checklist for submission

	Check
Have you read the Guidance Notes ?	<input type="checkbox"/>
Have you provided actual start and end dates for your project?	<input type="checkbox"/>
Have you indicated whether you are applying for DFID or Defra funding? NB: you cannot apply for both	<input type="checkbox"/>
Have you provided your budget based on UK government financial years i.e. 1 April – 31 March and in GBP?	<input type="checkbox"/>
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?	<input type="checkbox"/>
Has your application been signed by a suitably authorised individual? (clear electronic or scanned signatures are acceptable)	<input type="checkbox"/>
Have you included a 1 page CV for all the key project personnel identified at Question 10?	<input type="checkbox"/>
Have you included a letter of support from the <u>main</u> partner organisations identified at Question 9?	<input type="checkbox"/>
Have you been in contact with the FCO in the project country/ies and have you included any evidence of this?	Not applicable because lead applicant is from the project country
Have you included a signed copy of the last 2 years annual report and accounts for the lead organisation?	<input type="checkbox"/>
Have you checked the Darwin website immediately prior to submission to ensure there are no late updates?	<input type="checkbox"/>

Once you have answered the questions above, please submit the application, not later than 2359 GMT on Tuesday 1 December 2015 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.