



Submit by Monday 5 December 2016

DARWIN INITIATIVE APPLICATION FOR GRANT FOR ROUND 23: STAGE 2

Please read the <u>Guidance</u> 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

24-015 ref 3805

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:	Zoological Society of London
Address:	ZSL London Zoo,
	Outer Circle,
	Regents Park
City and Postcode:	London, NW1 4RY
Country:	United Kingdom
Email:	
Phone:	

2. Stage 1 reference and Project title

Stage 1 Ref:	Title (max 10 words): Community conservation of Chitwan National
	Park's freshwater ecosystems and gharials
3805	(10 words)

3. Project description (not exceeding 50 words)

(max 50 words)

A four year project to safeguard the future of the critically endangered gharial population and the vital Narayani and Rapti river ecosystems, harnessing community engagement and support. Through these conservation efforts, local communities' access to clean water, food security, sustainable fisheries, agro-biodiversity and other livelihoods will be secured.

(48 words)

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: Nepal	Country 2:
Country 3:	Country 4:

5. Project dates, and budget summary

Start date: 1 April 2017		End date: 31 March 2021		Duration: 4 years	
Darwin funding request (Apr – Mar)	2017/18 £ 127,113	2018/19 £ 98,258	2019/20 £75,558	2020/2021 £ 96,826	Total £ 397,755
Proposed (confirmed & unconfirmed) matched funding as % of total Project cost 22%					

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	LIK Project	Nonal	Project	Project Partner	Project
Details	UK Project Leader	Nepal Project Leader	Project Partner 1	Project Partner 2	Project Partner 3
Surna me	Bhattacharya	Baral	Poudyal	Pokheral	Shah
Forena me (s)	Gitanjali	Hem Sagar	Laxman Prasad	Chiranjibi Prasad	Karan Bahadur
Post held	South and Central Asia Programme Manager	Nepal Country Manager	Ecologist	Head, Biodiversity Conservation Centre, Chitwan	Chairman
Organi sation (if differen t to above)	Zoological Society of London	Zoological Society of London	Department of National Parks and Wildlife Conservation	National Trust for Nature Conservation	Himalayan Nature
Depart ment	Conservation Programmes	Conservatio n Programme s	Ecology	Programmes	Biodiversity conservatio n
Teleph one					
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).

Reference No	Project Leader	Title
23 - 001	Paul De Ornellas	Protecting the Dja Conservation Complex in Cameroon
22-009	Hem Sagar Baral	Securing Suklaphanta Wildlife Reserve's grasslands and wellbeing of local communities
21-010	Heather Koldewey	Linking community resilience and sustainable coastal protection in the Philippines
21-017	Chris Ransom	Community-based conservation for livelihood development in Lake Ossa Manatee Reserve
21-020	Matthew Gollock	Eels – a flagship species for freshwater conservation in the Philippines
20-023	Nick Hill	An integrated approach to enhancing socio-ecological resilience in coastal Mozambique

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.

24-013 101 3803			
Lead institution and website:	Details (including roles and responsibilities and cather the project): (max 200 words)	apacity to lead	
Zoological Society of London (ZSL)	The Zoological Society of London (ZSL) is a UK-reg founded in 1826. ZSL has extensive experience r field-based projects effectively to achieve intended Conservation Programmes department is currently v 50 countries worldwide.	nanaging large outcomes. Our	
www.zsl.org	ZSL has had projects in Nepal for over 20 years. W supported the Government of Nepal in the mana- habitats and biological monitoring to support the of Nepal's iconic species. In 2014, we established a pe- under a MoU with the DPNWC and Social Welfare Co	gement of key conservation of ermanent office	
	ZSL has a proven track record of working success proposed project partners for over 20 years beg successful self-sustaining veterinary clinics around C Park (CNP) to address disease transmission betwee wildlife. Since this time ZSL has built strong ties with around CNP and the development of this project participatory process, involving households that he relied on fishing as a livelihood.	ginning with 5 hitwan National n livestock and th communities at has been a	
	ZSL will be responsible for the overall delivery and a this project. It will provide coordination, technical support, and implementation of key project activi committed significant matched funding to support project.	and logistical ities. ZSL has	
	(200 words)		
Have you included a Lette	er of Support from this institution?	Yes	

Partner Name and website where available:	Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)
Department of National Parks and Wildlife Conservation (DNPWC)	The Department of National Parks and Wildlife Conservation (DNPWC) is the government authority responsible for the overall management of Chitwan National Park, Nepal's oldest protected area with a focus on the conservation of Nepal's tigers, rhinos
http://www.dnpwc.gov.np/	and gharials. DNPWC is working with local people to uplift their economic status and engage them in conservation of wildlife through their programmes in the buffer zone through the Buffer Zone Council (BZC), an elected body of User Groups (UG) living around the reserve. DNPWC is the main in-country partner and will facilitate cooperation between communities, NGOs and other GOs, including the CBD focal point. ZSL has supported DNPWC in its conservation efforts for nearly 20 years. DNPWC has been instrumental in the development of this project and are fully supportive of all proposed activities. DNPWC will ensure administrative collaborations and necessary permissions as well as provide game scouts to support CBAPU training. DNPWC will ensure that the freshwater habitat guidelines and other recommendations produced by the project are put to best effect.
Have you included a Letter of Support from this institution?	Yes

24-015 ref 3805				
Partner Name and website where available:	Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)			
National Trust for Nature Conservation (NTNC) http://www.ntnc.org.np/	NTNC was established in 1982 as a not-for-profit organ mandated to work in nature conservation in Nepal. NTN successfully undertaken 200 projects on nature conservation biodiversity, as well as cultural heritage, protection econ and sustainable development. NTNC contributes to partnership with experience in setting up of community anti-poaching units (CBAPU), gender equality empowerment, community infrastructure development natural resource conservation.			
	ZSL and NTNC have worked together since the mid-1990s. This long standing partnership was formalised in 2006 through a MoU. This MoU is now being renewed, the recently expired MoU is with this proposal and the renewed MoU will be shared once signed.			
	NTNC has been involved in supporting biologic setting up of anti-poaching operations and the di livelihood options for people living on the edges of areas for last 30 years. NTNC has a permanent supporting biodiversity monitoring in CNP and deliv community development programmes to e livelihoods. NTNC has been involved in the design and will assist in implementing gharial and monitoring and developing community conserva- including the community-based anti-poaching units	iversification of if the protected office in CNP ver sustainable inhance local of this project river quality ation initiatives		
Have you included a Letter of Support from this institution? Yes				

24-015 ref 3	3805
--------------	------

Partner Name and website where available:	Details (including roles and responsibilities and capacity to lead the project): (max 200 words)		
Himalayan Nature (HN) http://himalayannature.org/	HN has worked with communities in the Terai since 2000, conducting projects focused on habitat management and conservation of threatened species such as fishing cat, vultures, and Bengal floricans. Experienced in promoting meaningful participation and awareness of local people in biodiversity and research conservation, as well as conducting scientific and participatory approaches to biodiversity surveys and monitoring. HN will be bringing to bear these skills to design, develop and supporting the implementation of appropriate aquaculture livelihood based intervention.		
	They will deliver capacity building and training program to key stakeholders, to ensure that the methods being developed are both scientifically robust, as well as locally appropriate. This will ensure that these methods are sustainable and will continue beyond the lifespan of this project.		
	HN will provide their team of social mobilization staff to support community conservation initiatives and livelihood focussed interventions		
	A MoU with ZSL is in progress and will be supplied as soon as possible.		
Have you included a Letter of Support from this institution? Yes			

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?
Gitanjali Bhattacharya	Project Leader	ZSL	10%	Yes
Hem Sagar Baral	Co-project leader & ZSL country head	ZSL	10%	Yes
Laxman Prasad Poudyal	DNPWC Lead	DNPWC	15%	Yes
Chiranjibi Prasad Pokheral	NTNC Lead	NTNC	10%	Yes
Karan Bahadur Shah	Himalayan Nature Lead	Himalayan Nature	15%	Yes
Bed Khadka DNPWC Gharial Specialist		DNPWC	15%	Yes
Craig Bruce	Community-based law enforcement specialist	ZSL	5%	Yes
Iri Gill	ZSL Conservation Breeding Specialist	ZSL	5%	Yes
Madhav Kumar Shrestha	Sustainable fisheries consultant	Agriculture and Forestry University	NA (consultant)	Yes

11. Problem the project is trying to address

Please describe the problem your project is trying to address in terms of biodiversity and 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)

Freshwater ecosystems have suffered catastrophic declines in biodiversity. Habitat loss, overexploitation and infectious diseases are recognised drivers of aquatic diversity decline (e.g. Collins and Storfer 2003; Cushman 2006). Nepal is typical in this, having over the last 50 years, lost almost twice as many freshwater species as terrestrial species (Living Planet Report 2016). Despite this disproportionate decline, and its importance to human health and wellbeing, freshwater conservation receives scant attention and funding relative to other ecosystems.

In Narayani and Rapti rivers, land-use change, river bank disturbance, and harmful and unsustainable fishing methods, have caused dramatic declines in water quality and fish stocks, significantly impacting the health, income and food security of local communities; and the near extinction of a critically endangered gharial (*Gavialis gangeticus*) ranked 15th out of 100 reptiles in the EDGE of Existence classification.

Now extinct throughout most of its historical range (Whitekar et al., 1974), Gharial populations in Nepal and India are critically important. With only approximately 150 individuals in Nepal, this fragile population is under threat from egg collection, poaching, deteriorating fish stocks and the decreasing heath of the river ecosystems. Despite an active breeding programme, lack of post-release management means there is no insurance against catastrophic extinctions of these iconic species in their natural habitat.

These rivers are also critical to the socioeconomic wellbeing of indigenous *Bote, Musahar* and *Tharu* communities around CNP. These communities are often marginalised from developing rights-based approaches to freshwater resources, despite being heavily reliant on them for food and income.

This project will target threats that implicitly connect the fate of gharials, to the health of the river and those communities heavily reliant on freshwater resources. The interventions planned in this project were highlighted in the gharial conservation action plan 2012-2016, and the Narayani and Rapti River Conservation plan 2016-2020.

(300 words)

12. Biodiversity Conventions, Treaties and Agreements

Your project must support the objectives of one or more of the agreements listed below. Please indicate which agreement(s) will be supported and describe which objectives your project will address and how. Note: projects supporting more than one will not achieve a higher score.

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)	Yes
Global Goals for Sustainable Development	Yes

12b. Biodiversity Conventions

Please detail how your project will contribute to the objectives of the agreement(s) your project is targeting and how your project will help to achieve the Global Goals for Sustainable Development (SDGs). You should refer to Articles or Programmes of Work here. Note: No additional significance will be ascribed for projects that report contributions to more than one agreement

(Max 500 words)

This project has been designed in conjunction with the DNPWC, to support the GoN commitments to the CBD as outlined in Nepal's National Biodiversity Strategic Action Plan (NBSAP). It will develop an integrated approach to biodiversity conservation by; (i) generating an evidence-based adaptive management approach (ii) involving riverine communities in the management and benefit-sharing from the sustainable use of biological diversity and (iii) supporting local populations to use biological diversity in a sustainable manner.

Inherent throughout the project is the support of <u>SDGs 3 and 6</u>, reducing pollution to river systems, through promoting environmentally friendly practices upstream it will contribute directly to improving health and wellbeing, and providing clean water and sanitation for thousands of people.

Furthermore gender equality, <u>SDG 5</u>, is implicit throughout the participatory approach in the design and development of this project. During implementation specific attention will be given to currently underrepresented groups in natural resource governance such as women, enabling them to become primary beneficiaries of some of the benefit sharing mechanisms being developed.

Aligned to <u>SDG 1, 6 and 12</u> those reliant on wild freshwater fish stocks, one of the most fragile, least resilient income streams, will receive a range of livelihood interventions. This will both remove direct pressures on biodiversity by promoting ecologically sustainable aquaculture and consumption of fish, and support the responsible consumption of wild fish stocks by instigating a more robust licencing scheme. This will require licence holders practicing wild fishing in the two rivers to practice sustainable fishing techniques including wild fish stock management.

To further futureproof adoption of these sustainable fishing practices, and to incentivise legal fishing, those currently reliant on wild fish for food and income who are directly impacted by depleted wild fish stocks, will be given preferential access to aquaculture enterprises. This will underpin more robust income streams for some of the most fragile and least resilient households in the community. This will present a clear link to biodiversity benefits as dependency on depleting river resources is reduced, so that fish stocks recover as a direct result of the interventions outlined in this proposal.

Aligned to <u>SDG's 11 and 15</u>, this project will support the development of sustainable community governance mechanisms and natural resources management approaches, to enable participatory natural resource management in the two rivers. Mainstreaming ecological data from CNP, will provide the framework for evidence-based participatory decision making at the community level, through to park managers and policy makers. This will ensure that biodiversity loss is addressed and the conservation of keystone species such as the Gharial is mainstreamed and fully integrated into operational norms.

Aligned to <u>SDG 6 and 17</u>, to sustain the improvement in river health and water quality, the project will build the capacity of communities, local NGOs and authorities responsible for riverine biodiversity and freshwater management. The enhancement of this capacity will safeguard the transition of the project outputs to be integrated into a robust, effective, and responsive governance process.

(489 words)

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

Yes No if yes, please give details:

The Environment Division, Ministry of Forests and Soil Conservation, Government of Nepal, is the focal point for the CBD in Nepal. ZSL has a working MoU with the Department of National Parks and Wildlife Conservation (DNPWC), which also falls under the same ministry. ZSL is in touch with the CBD focal point, Dr. Akhileshwar Karna, and will continue to liaise regularly with him throughout the project.

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.)

Project progress and work plans will be monitored using project management software (Asana).

1. Improved river ecosystem management delivered through monitoring

2 masters students, 1 PhD candidate and 1 EDGE Fellow will perform water quality, fish biodiversity, and gharial threat and population surveys. Annual gharial surveys will be conducted based on methods set out in Chowfin, S. M., & Leslie, A. J. (2014)¹. Annual questionnaire surveys will also be conducted targeting freshwater resource-users in riverside communities to gather standardised data on local ecological knowledge about gharial status, trends and mortality, conservation attitudes/awareness, and wider status of regional freshwater biodiversity. Water will be tested for nitrogen, dissolved oxygen, pH, electrical conductivity, temperature, phosphorous and heavy metals.

Workshops will be held with partners, other agencies and experts to develop ecosystem management plans and revise CNP management plans, strengthening their provisions on fresh water ecosystems and incorporating gharial conservation.

2. Establishing (CBAPUs)

Partners will identify vulnerable communities for inclusion in the CBAPUs based on socioeconomic data from Output 4. Workshops will be held to identify potential members of CBAPUs, with women involved in the selection process and ensuring non-field based roles are available for women and those in unpaid care roles. 10 CBAPU teams will be established and trained in SMART monitoring². Key gharial habitat for patrolling will be identified from threat assessments under Output 1. A patrol schedule will be developed, and monthly debriefs organised where patrol data will be gathered and analysed.

3. Improving the effectiveness of Chitwan GCBC

Initially an assessment of the GCBC facilities and procedures will be conducted to identify areas for improvement. Facilities will be upgraded as necessary. Workshops will be held with partners and crocodilian experts to revise husbandry, release, and egg collection protocols. A post-release monitoring programme will be implemented (including a pilot use of post-release tags, and data logging systems to capture environmental data to inform captive management), data will be analysed and the outputs will be fed back into updated protocols as part of an adaptive management approach.

¹ Chowfin, S. M. & Leslie, A. J. (2014). A multi-method approach for the inventory of the adult population of a critically endangered crocodilian, the Gharial (Gavialis gangeticus) at Dhikala, Corbett Tiger Reserve incorporating direct counts and trail cameras. International Journal of Biodiversity and Conservation, 6(2), 148-158 ² Spatial Monitoring and Reporting Tool

4. Improving the food security and wellbeing of local communities

Livelihood focussed interventions have been designed in collaboration with local communities, buffer zone committees and local partners to ensure public acceptance and fair benefits sharing.

- Fish ponds will be established to be run by indigenous fish-dependent tribes, particularly women's groups, and training will be provided, and supporting at least 160 households in CNP buffer zones.
- Training in sustainable fishing techniques, environmental awareness, and riverine and gharial ecology (including disentangling gharials from nets) will be provided to 200 holders of fishing licenses in fish-dependent communities, with required equipment provided.

Community members will be surveyed on perceived gharial threats. Local teachers will be provided with teaching materials on freshwater and gharial ecology to ensure continued education once the project ends.

Community Conservation Engagement Centres will be established in upstream communities, situated in existing community tea rooms, for awareness raising of the project and the long term benefits of gharial and freshwater conservation.

(499 words)

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.

(Max 300 words)

Fish populations in the Narayani and Rapti rivers will show signs of recovery, increasing access to food for the indigenous *Bote*, *Musahar*, and *Tharu* communities in the short term. The decline of the critically endangered gharials will be reversed. Increased biodiversity will improve food security for these communities in the long term.

The level of pollutants in the waters of the Narayani and Rapti rivers will reduce, through a reduction in mining, and industrial and domestic waste, making it cleaner and healthier for the local communities to wash, cook with and drink. In the long term, these changes will improve water quality downstream in the Ganges, a river that millions depend on.

160 households from the *Bote*, *Musahar*, and *Tharu* communities will gain more sustainable sources of income, reducing poverty and increasing quality of life in the short term, and reducing dependence on fragile river ecosystems in the long term.

CNP will be better protected, particularly its rivers, benefiting its full range of fresh water species including the smooth-coated otter and endangered turtles. In the long term, the restored ecosystem will benefit the local communities with increased revenue and improved wellbeing.

Early career Nepali conservationists will benefit from support for PhD and MSc projects, and will receive training in field conservation techniques through ZSL's EDGE Conservation Leadership Course and academic qualifications, which will in the long-term boost national capacity in Nepal in conservation science.

Staff from the GCBC will benefit from training, and in the short term this will result in an effective gharial conservation breeding programme, with high survival rates and post-release monitoring, ensuring the survival of the species. In the long term, the gharial population of the Narayani and Rapti river systems will begin to increase, and their recovery will galvanise local communities towards conservation measures.

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)

Around 260,000 people in the buffer zone of CNP are heavily dependent on the natural resources around them including those inside the park. Many local communities rely on fishing for their protein requirements. To ensure traditional rights are preserved CNP issues a limited number of fishing licences to these communities. Fish stocks in the rivers have become so depleted that fishing has become unproductive; a day's fishing no longer yields a viable amount of fish. These vulnerable communities are also threatened by human-wildlife conflict, including loss of human lives to wild animals when entering the forest. This has led to widespread community desire for alternative livelihood options, and for the proposed livelihood interventions in particular.

We aim to replicate the success of a previous award-winning Darwin Initiative project in Koshi, Eastern Nepal (Project Reference: 15014) to secure the livelihoods of marginalised fishing communities. We aim to establish 8 committees, each of 20 households and led by women to run fish ponds. We will set up the ponds in state-owned buffer zone lands which are classified as wetlands with support from the park, and local communities. These fish ponds will follow the successful model used in Koshi to minimise environmental disruption and the production of hazardous run-offs, and so prevent ecological harm or risks to wild fish stocks. Community members will be given training in aquaculture techniques. The project will ensure market access for aquaculture products, so that economic, as well as nutritional, benefits are realised and captured by the local communities.

The Chitwan National Park report *Increased nutrition and income. National health report* (2015) recognises the protein deficiency of people in these communities. The increased production of, and access to, fish driven by this project will help alleviate the protein deficiency, especially faced by women and children, in the area.

(300 words)

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)

ZSL has a permanent presence in Nepal. This provides a platform to implement the project and ensure its lasting legacy, providing ongoing technical advice and support when needed.

Gharial monitoring and freshwater ecosystem management. These activities will be taken over by CNP once the guidelines are developed and capacity training completed as per the CNP Management Plan. ZSL will work with DNPWC to ensure that these guidelines are included in the CNP Management Plan due to be updated in 2019/2020. The MSc, PhD students and EDGE fellow will build the local capacity for ecological monitoring in the long term.

Community based anti-poaching units. CBAPUs will be supported and linked to the Bufferzone User Committees (BZC). CBAPUs will act as subcommittees of the BZC. As the BZC is recognised as a permanent institution by the park authorities, this will ensure the functioning of the CBAPUs after the life of the project.

Sustainable livelihood initiatives: By adopting the successful model used in Koshi³ (this project was led by Hem Baral, co-project manager for this project), community ownership of the ponds will be strengthened before the project ends. The benefits produced by this project should encourage communities to continue these practices.

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 will be a new initiative for the area, though one of the proposed outputs is based on a previous and highly successful DI grant in Eastern Nepal³. Whilst the focus on freshwater and gharials in Chitwan is a new initiative, ZSL has had a presence in Chitwan since 1998, and has a record of successful community based conservation through its work on tiger and rhino conservation in the Chitwan-Parsa complex. ZSL has supported the establishment of CBAPU's and informer networks in the eastern buffer zone of CNP for the past 6 years.

ZSL has built a close working relationship with the partners for this proposed projects over the past 2 decades as well as stakeholders such as WWF-Nepal and other NGO's that are active in the project area. ZSL along with other NGO's presents its programme of work to the Director General and his staff at DNPWC at the beginning of each year to harmonize all conservation activities in joint areas of operation. The proposed project will complement the existing programme of work in the wider Chitwan-Parsa landscape including support for additional CBAPU's, systematic monitoring of gharials and the freshwater ecosystem and community support for conservation.

(199 words)

17b. Are you aware of any other individuals/organisations/projects carrying out or applying for funding for similar work? No

If yes, please give details explaining similarities and differences explaining how your work will be additional to tis work and what attempts have been/will be made to co-operate with and learn lessons from such work for mutual benefits.

18. Ethics

Outline your approach to meeting the Darwin Initiative's key principles for research ethics as outlined in the <u>Guidance</u>.

ZSL has been working in Nepal for the last 20 years and has an excellent track record regarding working principles. All project activities will be subject to review by ZSL's Ethics Committee, an external body of experts, to ensure that they meet ZSL's established ethical standards, which also cover the key principles required by the Darwin Initiative.

ZSL has a full set of Health and Safety procedures, including requirements for risk assessments prior to initiating any activities. The Project Leader will ensure that all project personnel adhere to these principles. Our partners on this project also have high standards of health and safety requirements to which they are bound. Additionally, as a registered international entity in Nepal, every project we implement must be audited by the Nepal Social Welfare Council. This independent assessment looks not only at project effectiveness and finances, but also focuses on ethical and equitable engagement with local communities and user groups.

ZSL and our partners all have existing experience at the proposed project site (i.e. Suklaphanta Wildlife Reserve and its buffer zone communities) and the support of the local community and government to undertake this project. When starting project activities, we will provide a full explanation of the principles and objectives behind the project and seek written Free, Prior Informed Consent (FPIC) from our target audiences, consulting the Social Welfare Council as appropriate. Prior to the collection of any socioeconomic/personal information, the aims of the project and confidentiality arrangements of resulting data will be explained to respondents. Respondents will be given the opportunity to opt out of the interview or survey should they desire. The Field Manager, with support from the Project Leader and Advisors, will ensure there are no adverse effects on any community members and that project interventions are pro-poor and gender aware.

³ Darwin initiative Project Reference: 15014 R23 St2 Form

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 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)

Communication and knowledge sharing will play a key role in achieving our desired outcome. Four key audience groups have been identified, with communication strategies outlined for each. Reports and outputs from the project will be tailored for each audience to increase engagement, such as verbal dissemination at workshops for illiterate communities, and executive briefs for senior government officials.

Intended audience: Fishing communities and local councils and committees

Method of engagement: village meetings, Community Conservation Engagement Centres, training workshops

Products/materials: Riverine ecosystem management guidelines, training materials, posters and radio advertisements.

Intended results: Increasing the local understanding of the long term impacts of activities in and around the rivers, to improve decision making and result in more sustainable decisions being made.

Intended audience: other conservation and development NGOs/groups/GOs/embassies not directly involved in project implementation

Method of engagement: workshops, conferences, scientific publications, websites

Products/materials: project reports, peer reviewed articles

Intended results: increased data sharing and wider dissemination of project results in order to inform conservation /management practice in similar freshwater dependent communities.

Intended audience: national and international media

Method of engagement: social media, press conferences,

Products/materials: press releases, project pages on ZSL and partners' websites

Intended results: wider dissemination of project results and increased global awareness of gharials and freshwater conservation, and the importance of these ecosystems to local communities, and the threats that they face.

Intended audience: Partners and local government

Method of engagement: Meetings, conferences, workshops, reports

Products/materials: Management plans, reports, survey results

Intended results: share the knowledge and work performed under the project to ensure the all the relevant information that is gathered is used and represented in the long term management plans of CNP and its buffer zones.

(279 words)

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)

Capacity building at all levels lies at the heart of this project and is built in to all project activities. All four outputs of the project involve building local capacity at a variety of levels to

carry out the relevant work.

Ecological survey work to monitor gharial populations, fish stocks, and water quality will be performed by training and developing local researchers through masters degrees, and a doctorate. This will greatly increase local academic capacity in freshwater ecology and will ensure that the capacity to continue long term monitoring of the Narayani and Rapti, and other freshwater ecosystems, exists in country in the long term.

ZSL will build grass-roots capacity through training and mentoring a local EDGE Fellow, empowering the next generation of in-country conservation leaders through in-depth training in the skills and techniques needed to participate in research activities and community engagement.

Training will be provided to CBAPUs to provide local communities with the capacity to manage and monitor their local ecosystem and natural resources. Support roles such as logistics, management, administration, and the associated training will be targeted at women and those in unpaid care roles.

BZCs will be consulted and involved in the project at all levels, building up their capacity to understand and act on the information that the project provides. They will be trained in freshwater ecology and riverine management. This will empower local communities to make sustainable decisions about their own environment that will benefit them in the long term.

The establishing of sustainable livelihood options is also centred around building local capacity. This work will provide training to empower members of the local community, focussing on women, to manage fish ponds as private enterprises. This allows these enterprises to be run locally in the long term without continued support.

(296 words)

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)

Internally, ZSL maintains an online database accessible to all staff which hosts project reports and outputs. Externally, all project outputs will be reported on ZSL and partner's websites and disseminated via social media (Facebook, Twitter, blogs). Content will be provided to ZSL and Darwin's press department for inclusion in newsletters and press releases, as relevant. Any publications resulting from the project will be through open access peer reviewed journals (e.g. PLOS ONE). These costs are covered by the overhead contributions requested.

We will disseminate the information further afield through associated organisations such as the relevant IUCN specialist groups, other conservation and development agencies working in Nepal, and at related events held at ZSL's London headquarters. Data will be shared to feed into global conservation initiatives such as the Living Planet Index as well as national needs, such as the regular reporting to the CBD. The draft management guidelines will be handed over to the DNPWC to complete via the standard Ministry approval process. The approved guidelines will be available through standard government channels. Project information will be provided in the form of executive summaries for presentation to senior government officials.

It is important that we share the project's outputs with those without access to digital media so we will provide Nepali language hard copies of reports to communities and other stakeholders. Results will also be communicated verbally to community members through holding workshops to ensure that everyone regardless of their literacy level has access to this information. Printing costs have been included in the budget requested to Darwin.

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 use of vehicles and staff time of DNPWC, NTNC, HN and ZSL will be provided to the project as matched funding, along with additional funding for anti-poaching activities in Chitwan National Park. The value of this matched funding will be £XXX.

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

22c) None

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

(max 100 words)

23) Risk

Explain how you have considered the risks and threats that may be relevant to the success of this project, including the risks of fraud or bribery.

(max 200 words)

Unstable socio-political situation—Strikes affecting access to services, transport, power and fuel would likely cause substantial delays, but existing in country policies and procedures, and experience in handling project disruption from these source will help to minimize these delays.

Frequent changes in park staff—Project management unit will be formed at the site and which will document project progress and key decisions. Project team member permanently based at the site will provide detailed project briefings to new staff. NTNC and other partners have permanent presence at the site and will ensure that knowledge is transferred to new staff.

Decline in tourist numbers/hotel business would have an impact on the fish market for the supported communities—the project is working with the hotels to ensure access to market.

Where cash in hand is given to community members a list of names is drawn up and published by sticking it to an outside building, listing beneficiaries and money received.

Conflict or grievances - Selection of community members would be transparent with project staff giving talks to the locals explaining clearly the selection process, criteria and grievances mechanism.

(185 Words)

14

PROJECT MONITORING AND EVALUATION

MEASURING IMPACT

24. 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
	Rapti river ecosystems are protected and res stem services to local fishing communities p		
Outcome: Health of the Naranyi and Rapti river	1. By Year 4 the UNEP Water Quality Indicator for Biodiversity score in each river will show a steady increase, particularly in pollution hotspots (baseline that will be set in Year 1)	1. Water quality test for conductivity, Nitrogen, Oxygen, pH, Phosphorous, Temperature results	Positive trend in these key indicators indicate an overall increase in the biodiversity value of these river ecosystems. This method has been used successfully in the Chambal river.
ecosystems restored, with improved water quality, increased fish stocks, and stabilised Gharial	2. By Year 4 100% of the fishermen in the Narayani and Rapti river system will have a valid Fishing licenses, will be recording and reporting the weight of each catch (Baseline to be set in Year 1)	2. Social survey results and Socioeconomic survey on livelihood composition, DNPWC records	• Positive results in all 3 ecological indicators (Gharial populations; fish populations; and water quality) indicate successful ecosystem restoration has taken place
population, supported by local communities benefiting from sustainable livelihoods	3. By Year 4 Fisherman's catches will show a 20% increase in weight per unit effort and with key high value fish species showing a population recovery (baseline to be set in Year 1)	3. Fisherman landing records	 Relevant authorities show continued commitment to implement robust management plans and monitoring programmes
	4. By the end of Year 4 there will be a 30% increase in the Gharial populations in the wild within Chitwan National Park (Baseline to be set in Year 1)	4. Gharial population monitoring records	

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	5. By the end of Year 4 adaptive management plans and participatory approaches have been adopted and are being implemented in the management of the wild and released Gharial population in Chitwan NP	5. DNPWC records showing iterative updates to Gharial management plans, and management plans	
	6. By the end of Year 4 there will be a 30% increase in the Gharial populations within Chitwan National Park (Baseline to be set in Year 1)	6. Gharial population monitoring records	
	7. By Year 4 120 fish-dependent Household are sustainably managing fish-ponds, and receiving a regular income from farmed fish	7. Fish pond records, socioeconomic survey results	
Output 1: Improved river ecosystem	' Voor tollowing that		 Monitoring programme sustainably institutionalised by DNPWC in the long term
management delivered through improved management plans and environmental policy based on a robust Gharial and	2. Gharial and river ecosystem monitoring guidelines finalised, on the basis of successful monitoring in year 1, by end of year 2	2. Guideline documents	• DNPWC continues to have adequate resources to implement the required changes in all the relevant areas affecting the riverine ecosystem in the Narayani and Rapti watersheds
robust Ghariai and riverine ecosystem monitoring programme	3. PhD student project underway and 2 Masters students projects completed on Gharials and the river ecosystem by year 3 to feed into management plans	3. PhD and MSc researcher producing at least 2 briefings written to inform decision makers. 1 technical work shop host each year for PA and partners staff. Data from field research is incorporated in to M&E system.	 Improved plans and policy are effectively translated into improved management

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	4. EDGE Fellow recruited with project focussed on gharial conservation to feed into management plans	4. Scientific Papers, survey reports, policy briefing	Management plan is effectively implemented by DNPWC
	5. Threats and impacts to Gharial population and fish biodiversity mapped across Narayani and Rapti ecosystems, including illegal fishing by year 2	5. Scientific Papers, survey reports, policy briefing	
	6. Management plan for CNP updated, including strengthened policies on sustainable use of riverine biodiversity and reducing industrial and domestic waste by year 4	6. Management plan, DNPWC strategic documents, CNP reports, workshop with senior DNPWC leaders	
Output 2: Threats to fish stocks and gharials are reduced through	1. 6-person CBAPUs established in 10 local communities with a total of 60 members trained in river patrolling, with support and enabling roles targeted at women by year 1	1. Training attendance records, results of post-training assessment	CBAPUs continue to be respected and influential within the community
protection provided by 10 Community- Based Anti- Poaching Units	2. Each CBAPU conducting 2 patrols of the river system per month in year 2	2. CBAPU reports, SMART reports showing prioritisation of sensitive riverine zones	 Sufficient number and diversity of community members are willing to participate in CBAPUs
(CBAPUs) patrolling sensitive riverine zones in the Narayani and Rapti watersheds to protect the area	3. Protected area authorities actively collaborating with CBAPUs and utilising intelligence gathered by year 2 to inform patrol planning	3. Monthly coordination meetings are being held between PA authorities and CBAPU leads, and intelligence-led patrols by DNPWC using intelligence gathered from CBAPU patrols taking place	• Fishing of prey fish and the killing of gharials, both unintentionally via fishing and through poaching, are the key threats for the Gharial population.
from unsustainable fishing, poaching and other damaging and unsustainable	unsustainable ig, poaching4. Each CBAPU conducting 3 patrols of the river systems per month in year 3 with 100% of identified sensitive riverine zones being4. CBAPU reports, SMART rep showing that 100% of identified riverine zones have been patro		
uses of the river.	5. Illegal fishing incidents down 50% from baseline in year 1 to year 4	5. DNPWC Records, CBAPU reports, SMART reports	

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	6. Zero gharial poaching incidents in year 4	6. DNPWC Records, CBAPU reports, SMART reports	
Output 3: Increased post-	 GCBC infrastructure improved and identified required equipment supplied by year 1 	1. Equipment records, installation records and GCBC reports	 Factors unrelated to the release procedures are not the primary cause of released gharial mortality
release survivial of Gharial's from the Chitwan Gharial Conservation Breeding Centre	 Gharial husbandry and release guidelines developed and implemented at GCBC by year 3 	2. Training attendance records, results of post-training assessment	Factors relating to post-release mortality are identified and adequately addressed through other project Outputs, specifically monitoring??
(GCBC) delivered through implementing	3. All 12 GCBC staff trained in herpetology husbandry and release by year 2	3. Gharial tagging and monitoring reports	
improved husbandry and release	4. 40 gharial tagged on release in year 2 as a pilot, and monitored from then on	4. Guideline document approved by GCBC, GCBC records	
protocols, and post- release monitoring.	5. Released gharial annual mortality reduced 20% by year 4 from year 1 baseline	5.Release reports, reports from post release monitoring	
Output 4: Food security of local communities improved through	1. 8 fish ponds, run by indigenous fish- dependent communities established of sufficient size to support at least 20 households each in the buffer zones of CNP, with a focus on management by women's groups by the end of year 1.	1. Fish pond management, environmental safeguarding guidelines on fishpond construction and management, and lease records	• Aquaculture combined with increased awareness and strengthened protected area management disincentives illegal, and harmful fishing practices
implementing sustainable fishing, and reducing the dependence of local communities on	2. 40% (60) of those households with a member trained in aquaculture are receiving aquaculture income higher that baseline fishing income recorded in year 1 by year 2	2. Partner reports, alternative livelihood records, social surveys	 Sustainable fishing increases the food security of local communities
fishing through generating sustainable	6. Zero gnarial poaching incidents in year 4 SMART 9: 1. GCBC infrastructure improved and identified required equipment supplied by year 1 1. Equip and GC 9: 1. GCBC infrastructure improved and identified required equipment supplied by year 1 1. Equip and GC 9: 2. Gharial husbandry and release guidelines developed and implemented at GCBC by year 3 2. Train post-tra 9: 3. All 12 GCBC staff trained in herpetology husbandry and release by year 2 3. Ghari 9: 4. 40 gharial tagged on release in year 2 as a pilot, and monitored from then on 4. Guide GCBC, 5. Released gharial annual mortality reduced 20% by year 4 from year 1 baseline 5. Released release 1. 8 fish ponds, run by indigenous fish- dependent communities established of sufficient size to support at least 20 households each in the buffer zones of CNP, with a focus on management by women's groups by the end of year 1. 1. Fish p safegua construct records 2. 40% (60) of those households with a member trained in aquaculture are receiving aquaculture income higher that baseline fishing income recorded in year 1 by year 2 2. Partn records 9. 3. 20 people per day visiting each of 5 community conservation engagement centres in upstream communities by year 2 3. Partn 9. 4. 80% (120) of those households with a member trained in aquaculture liveliboods 4. Partn	3. Partner reports of drop in centres	Communities have the will to manage their resources sustainably long-term
aquaculture livelihoods.	member trained in aquaculture livelihoods	4. Partner reports, alternative livelihood records, social surveys	Unequal benefit sharing, corruption and theft do not fundamentally undermine community aquaculture

Project summary	Measurable Indicators	Means of verification	Important Assumptions										
	5. 90% of practicing fishermen with valid licenses are using sustainable fishing methods by year 4	5. Fishing techniques survey at start of project and in year 4, and a reduction in the number of accidental deaths of gharials											
Activities (each activ	ity is numbered according to the output that it will	I contribute towards, for example 1.1, 1.2 and	1.3 are contributing to Output 1)										
1.1	Collect and collate relevant literature available f	or Gharial and riverine ecosystem research a	nd conservation										
1.2	Recruit 1 PhD candidate, 2 MSc student and on EDGE Fellow												
1.3	Organise 2 inception meetings with conservation stakeholders (including DNPWC, NTNC, HN and BZCs) and experts												
1.4	2 workshops with wider stakeholders, consultat	2 workshops with wider stakeholders, consultation meetings with experts and community members for developing guidelines											
1.5	Produce gharial/river monitoring guidelines												
1.6	1.6 Conduct field training courses to train participants for the use of monitoring guidelines for PA staff, CB/ and university students.												
1.7	Conduct baseline surveys for fish stock, amphili year 4. Annual monitoring of Gharial's will start	in year 2.	Chitwan National Park, these to repeat in										
1.8	Revise gharial/river monitoring guidelines as ne												
1.9	Share findings to park managers and stakehold	lers in a wider forum and agree on an annual	monitoring plan										
1.1													
1.11	Organise preliminary meeting with conservation in development of river ecosystem management	t plan for Chitwan National Park											
1.12	2 workshops with wider stakeholders, consultat plan	ion meetings with experts and community me	mbers to input into ecosystem managemer										
1.13	Conduct training workshop for the park staff and	d buffer zone community for river ecosystem r	management										
2.1	Assessment of status in the key locations for G	harial conservation for the establishment of C	BAPUs										
2.2		tional CBAPUs if needed											
2.3	Train and equip CBAPUs in river patrolling												
2.4	Support the CBAPU for yearly monitoring progr	ammes, linked with park authority to control ill	legal activities in the rivers										
3.1	Conduct assessment of the GCBC infrastructur												
3.2	Renovate GCBC infrastructure aiming to increa	se the egg laying, visitor experience, etc.											
3.3	Review GCBC's current egg collection practice	from the wild and revise guidelines as approp	vriate										
3.4													
3.5	Conduct training for GCBC staff on gharial hand												
3.6	Post-release monitoring of gharials with state of	f the art methods e.g. satellite tagging, data lo	ggers, etc. Include research on some										
3.0	existing wild populations for comparison												
3.7	Make recommendations to park managers and	stakeholders in a wider forum based on findir	nas										

Project summary	Measurable Indicators	Means of verification	Important Assumptions										
4.1	Meetings with park managers and buffer zone c												
	Conduct socioeconomic and livelihoods survey		4										
4.3	Prioritise households based on the wealth ranking	ng from the socioeconomic survey											
		ntify areas suitable for the establishment of community managed ponds											
4.5	Set up 5 women-led committees of 10 househol	t up 5 women-led committees of 10 households to manage and operate community fish ponds											
4.6	Organise 2 aquaculture training workshops for 1	50 households and 2 exposure visits for com	munity leaders of identified communities										
4.7	5 community conservation engagement centres benefits of gharial and freshwater conservation.		for awareness raising of the project and the										
4.8	Hold 10 community workshops on sustainable fi	shing and gharial conservation reaching 200	households										

25. 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 2017)

Please add/remove columns to reflect the length of your project. For each activity (add/remove rows as appropriate) indicate the number of months it will last, and shade only the quarters in which an activity will be carried out. The workplan can span multiple pages if necessary.

	Activity	No. of		Yea	ar 1			Yea	ar 2			Yea	ar 3		Year 4				
		months	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Output 1	Improved river ecosystem management delivered through improved management plans and environmental policy based on a robust Gharial and riverine ecosystem monitoring programme																		
1.1	Collect and collate relevant literature available for Gharial and riverine ecosystem research and conservation	2																	
1.2	Recruit 1 PhD candidate, 2 MSc student and on EDGE Fellow	2																	
1.3	Conduct large scale Local Ecological Knowledge survey	6																	
1.4	Organise 2 inception meetings with conservation stakeholders (including DNPWC, NTNC, HN and BZCs) and experts0	1																	
1.5	2 workshops with wider stakeholders, consultation meetings with experts and community members for developing guidelines	1																	
1.6	Produce gharial/river monitoring guidelines	1																	
1.7	Conduct field training courses to train participants for the use of monitoring guidelines for PA staff, CBAPUs, conservation stakeholders, and university students.	1																	
1.7	Conduct surveys for fish stock, macro-invertebrate diversity, and water quality in major rivers of Chitwan National Park, these to repeat in year 4. Annual monitoring of Gharial's will start in year 2.	4																	
1.8	Revise gharial/river monitoring guidelines as necessary according to survey findings.	1																	
1.9	Share findings to park managers and stakeholders	1																	

	Activity	No. of		Yea	ar 1			Ye	ar 2			Yea	ar 3		Year 4				
	-	months	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
	in a wider forum and agree on an annual monitoring plan																		
1.10.	Publish at least 2 peer reviewed papers	12																	
1.11	Organise preliminary meeting with conservation stakeholders (including DNPWC, NTNC, HN and BZCs) and experts to support DNPWC in development of river ecosystem management plan for Chitwan National Park	1																	
1.12	2 workshops with wider stakeholders, consultation meetings with experts and community members to input into ecosystem management plan	1																	
1.13	Conduct training workshop for the park staff and buffer zone community for river ecosystem management	4																	
Output 2	Threats to fish stocks and gharials are reduced through protection provided by 10 (CBAPUs) Community-Based Anti-Poaching Units patrolling sensitive riverine zones in the Narayani and Rapti watersheds to protect the area from unsustainable fishing, poaching and other damaging and unsustainable uses of the river.																		
2.1	Assessment of status in the key locations for Gharial conservation for the establishment of CBAPUs	6																	
2.2	Identify 10 CBAPUs and establish additional CBAPUs if needed	1																	
2.3	Train and equip CBAPUs in river patrolling	1																	
2.4	Support the CBAPU for monitoring programmes, linked with park authority to control illegal activities in the rivers	36																	
Output 3 R23 St2 Form	Increased post-release survival of Gharial's from the Chitwan Gharial Conservation Breeding Centre (GCBC) delivered through implementing improved husbandry and				efra – Ju													22	

	Activity	No. of						V-			Year 4									
	Activity	No. of		Yea					ar 2				ar 3							
-		months	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
	release protocols, and post-release monitoring.																			
3.1	Conduct assessment of the GCBC infrastructure and prioritise for improvement	3																		
3.2	Renovate GCBC infrastructure aiming to increase the egg laying, visitor experience, etc	6																		
3.3	Review GCBC's current egg collection practice from the wild and revise guidelines as appropriate	3																		
3.4	Prepare husbandry and release guidelines for gharials of Nepal	3																		
3.5	Conduct training for GCBC staff on gharial handling and release	1																		
3.6	Post-release monitoring of gharials with state of the art methods eg satellite tagging, data loggers, etc. Include research on some existing wild populations for comparison	30																		
3.7	Make recommendations to park managers and stakeholders in a wider forum based on findings	1																		
Output 4	Food security of local communities improved through implementing sustainable fishing, and reducing the dependence of local communities on fishing through generating sustainable aquaculture livelihoods.																			
4.1	Meetings with park managers and bufferzone committees to identify indigenous fish dependent communities and households	1																		
4.2	Conduct socioeconomic and livelihoods survey in fish-dependent communities in years 1 and 4	1																		
4.3	Prioritise households based on the wealth ranking from the socioeconomic survey	1																		
4.4	Identify areas suitable for the establishment of community managed ponds	4																		

r	· · · · · · · · · · · · · · · · · · ·	1				3803	1				1							
	Activity	No. of	No. of Yea				Year 2				Year 3				Year 4			I
		months	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
4.5	Set up 5 women-led committees of 10 households to manage and operate community fish ponds	5																
4.6	Organise 2 aquaculture training workshops for 150 households and 2 exposure visits for community leaders of identified communities	1																
4.7	5 drop in centres will be established in upstream communities for awareness raising of the project and the benefits of gharial and freshwater conservation.	12																
4.8	Hold 10 community workshops on sustainable fishing and gharial conservation reaching 200 households	30																

26. 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)

A project steering committee, consisting of the Project Leader and one representative from each partner organisation, will hold biannual meetings to evaluate progress towards indicators, adjusting work plans as needed. Communications will be maintained with monthly meetings and via email and Skype/phone between ZSL Nepal and ZSL HQ. Completion of milestones will be monitored through monthly reports submitted using ZSL's web-based system.

Progress towards the goals of output 1 will be monitored through partner consensus on the relevant guideline documents, and through the theses of the MSc and PhD students performing the survey work, and the peer review papers that they produce. The uptake of these documents will be monitored by their use and inclusion into the DNPWC and CNP action and management plans. Responsibility for M&E for output 1 will lie with the Project Leader.

The effects of the Community Based Anti-Poaching Units will be monitored through the initial training reports and the SMART reports produced from analysis of the data that they collect. Monthly SMART reports will allow monitoring of the both the activities of the CBAPU as well as effects that they are having on preventing illegal activity in the area. Monitoring the use of this information by protected area management will be through regular meetings, and measuring the number of patrols and actions that DNPWC staff undertake that are based on CBAPU gathered intelligence. Monitoring of progress towards output 2 will be the responsibility of the ZSL Monitoring and Surveillance Officer

Progress towards output 2 will be through GCBC reports on the updates to the infrastructure, and training records/assessments. The changes to protocols will be monitored through project partner consensus with the GCBC. The effect of this training on gharial post-release survival will be monitored through data logging tags attached to the gharials prior to release, and evaluated in year 4. Responsibility for monitoring output 2 will be the responsibility of the Project Leader.

Monitoring output 4 will be achieved through the records of the fish ponds management. Household surveys will be performed in year one to establish a baseline on income, and then yearly to monitor the effect of the fishponds on income, and to ensure that benefits are being distributed equally within the community. Responsibility for monitoring output 2 will be the responsibility of Himalayan Nature.

To ensure that the livelihood focussed interventions of the project will survive in the long term surveys of household income and living standards in the area will be performed before and after interventions. Monitoring of the gharials will show the direct impact of the project activities on the gharial and fish population, and using macro-invertebrate diversity and an indicator, the ecosystem health of the river will be surveyed at the end of the project and compared to a baseline taken in year 1.

Oversight of the M&E for the outcome will be the responsibility of the Project Leader, with support from the ZSL Monitoring and Evaluation Officer for Asia.

Number of days planned for M&E	40
Total project budget for M&E	£32,656
Percentage of total project budget set aside for M&E	6%

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.

27. 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)

ZSL has been working in Nepal for over twenty years. As such, we are very familiar with local costs and developing deliverable, cost-effective budgets. This budget was calculated using the preexisting knowledge and experience of ZSL and partners, and reduces costs further by using existing systems and infrastructure from ZSL work in the area. The sustainable nature of all the project outputs ensures that the project will continue to provide benefits in the long term, as previous ZSL projects have, without the need for further funding, increasing value for money.

Consultancy Costs. These costs will cover local consultants with expert knowledge of implementing livelihood intervention schemes.

Staff Costs. The majority of roles will be filled by local members of staff and 54% of total staffing needs will be provided in-kind by ZSL or our partners.

Overhead Costs. By using existing infrastructure and only including contributions where necessary, administrative costs are kept to a minimum but without risk to project implementation.

Travel & Subsistence. Fuel is expensive in Nepal and costs have been carefully estimated based on past experience. DNPWC will provide the use of vehicles within CNP, and NTNC will provide the use of vehicles in the surrounding areas, greatly reducing the travel costs. International travel will cover ZSL staff costs for training and M&E visits.

Operating Costs. Costs of workshops/trainings are based on past experience and where possible, venues will be provided in-kind by project partners.

Capital Equipment. Capital equipment will be sourced in-country when possible to avoid shipping/customs charges and standard procurement procedures followed. Only equipment that is not already available for use from DNPWC and NTNC are included.

Other Costs. Modest amounts have been requested for printing costs and field gear. Costs for the creation of fish ponds are based on similar previous projects in Nepal.

(299 words)

28. 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)

All capital equipment purchased during this project will remain the property of NTNC and DNPWC upon closure of the project. This equipment will allow for the many of the project activities that are established by the project such as the long term monitoring to be continued by NTNC/DNPC long after the closure of the project.

(55 words)

All capital equipment purchased during this project will remain the property of NTNC and DNPWC upon closure of the project. This equipment will allow for the many of the project activities that are established by the project such as the long term monitoring to be continued by NTNC/DNPC long after the closure of the project.

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) 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

Zoological Society of London I apply for a grant of £397,755 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

Name (block capitals)	Dr. Gitanjali Bhattacharya
Position in the	Programme Manager – South and Central Asia –
organisation	Conservation Programmes

Signed**

Bhattachan Date:

05/12/16

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?	Х
Have you read and can you meet the current Terms and Conditions for this fund?	
Have you provided actual start and end dates for your project?	
Have you provided your budget based on UK government financial years i.e. 1 April – 31 March and in GBP?	
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?	
Has your application been signed by a suitably authorised individual ? (clear electronic or scanned signatures are acceptable)	X
Have you included a 1 page CV for all the key project personnel identified at Question 10?	X
Have you included a letter of support from your key partner organisations identified at Question 9?	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 signed copy of the last 2 years annual report and accounts for the lead organisation?	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 2359 GMT on Monday 5 December 2016 to <u>Darwin-Applications@ltsi.co.uk</u> 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.