



#### Submit by Monday 2 December 2013

#### DARWIN INITIATIVE APPLICATION FOR GRANT FOR ROUND 20: STAGE 2

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

Information to be extracted to the database is highlighted blue.

ELIGIBILITY

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

Name of organisation:	Address: Regent's Park, London, NW1 4RY, UK
Zoological Society of London (ZSL)	Email: matthew.gollock@zsl.org

#### 2. Stage 1 reference and Project title

(max 10 words) Eels – A flagship species for freshwater conservation in the Philippines.

#### 3. Project dates, and budget summary

Start date: 1/4/2014		End date: 31	1/3/2017	Duratio	n: 3 years
Darwin request	2014/15	2015/16	2016/17	Total	
	£113,807	£94,120	£98,919	£306,84	45
Proposed (confirmed and unconfirmed) matched funding as percentage of total Project cost: 32% 17% according to budget table – LTS noted					
Are you applying for DFID or Defra		ra	DFID No	De	efra Yes
funding? (Note you cannot apply for both)					

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

(max 30 words) Conservation of eels measurably improves freshwater biodiversity in the Cagayan River as a result of ecologically sustainable, community-led management and exploitation, and equitable national and international trade. 27

#### 5. Country(ies)

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

Country 1: Philippines	Country 2:
Country 3:	Country 4:

#### 6. Biodiversity Conventions

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

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

#### 6b. Biodiversity Conventions

Please detail how your project will contribute to the objectives of the convention(s) your project is targeting. You may wish to refer to Articles or Programmes of Work here. Note: No additional significance will be ascribed for projects that report contributions to more than one convention

#### (Max 200 words)

The 2009 4<sup>th</sup> Philippine CBD Report (4NRCBD) stated "*inland waters are the most threatened of all ecosystem types*" due to "*physical alteration, habitat degradation, water withdrawal, overexploitation, pollution, and introduction of invasive alien species*". These threatened aquatic fauna – including eels - and impact human wellbeing; at present there are virtually no freshwater conservation initiatives nationally.

The 4NRCBD calls for:

- Enhancement and integration of existing and planned biodiversity conservation efforts with emphasis on in-situ activities
- Strengthening of capacities for integrating and institutionalizing biodiversity conservation and management.

This project, focussing on the Cagayan River, the nation's largest, would work towards these plus the following Aichi targets:

1. Facilitating communities conserving biodiversity.

**6.** Sustainable harvesting of freshwater fish stocks and generating a freshwater management plan.

**14.** Development of a management plan to restore and safeguard a key ecosystem service to local populations.

Since the European eel's CITES Appendix II listing, other eel species are being considered for listing due to a) concerns over international trade being a direct threat to their conservation status and/or b) 'look-a-like' reasons in order to facilitate enforcement efforts. This project will examine the Philippines role in global eel trade in the context of CITES. **196** 

Is any liaison proposed with the CBD/CITES/CMS focal point in the host country? Yes No if yes, please give details:

The Protected Areas and Wildlife Bureau (PAWB), within the Department of Environment and Natural Resources, is the CITES, CMS, Convention on Wetlands and CBD focal point in the Philippines and is presently conducting nationwide consultations prior to updating National Biodiversity Strategy and Action Plan (NBSAP); this is one of the reasons that we have partnered with them for the project. PAWB also requested ZSL's technical input in building freshwater conservation capacity within the Philippines during scoping meetings.

During the scoping trip for this project in May 2013, we met with Bureau of Fisheries and Aquatic Resources (BFAR) - Fisheries Regulatory and Quarantine Division which deals with CITES permitting. We have maintained links with staff in the division and will do so throughout the project.

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

Details	Project Leader	Project Partner 1 - Main	Project Partner 2
Surname	Gollock	Ame	Mendoza
Forename (s)	Matthew	Evelyn	Marlynn
Post held	Assistant Manager		
Institution (if different to above)		Bureau of Fisheries and Aquatic Resources (BFAR)	Protected Area and Wildlife Bureau (PAWB)
Department	International Marine and Freshwater Conservation Programme	Region 2	Department of Environment and Natural Resources
Telephone			
Email			

Details	Project Partner 3
Surname	Crook
Forename (s)	Vicki
Post held	Europe Programme Officer
<b>Institution</b> (if different to above)	TRAFFIC
Department	
Telephone	
Email	

8. Has your organisation been awarded a Darwin Initiative award before (for the purposes of this question, being a partner does not count)? If so, please provide details of the most recent awards (up to 6 examples).

Reference No	Project Leader	Title
2117	Nick Hill	An integrated approach to enhancing socio-ecological resilience in coastal Mozambique
19-003	Andrew Cunningham	A sustainable future for Chinese giant salamanders
19-006	Sarah Durant	The CUT plan for large carnivore management in Tanzania
18-006	Rajan Amin	Integrated river dolphin conservation for sustainable ecosystem services in the Brahmaputra
17-029	Laura D'Arcy	Berbak to the future: Harnessing carbon to conserve biodiversity, Indonesia
16-009	Raj Amin	Crisis to Biological Management: rhinoceros, Grassland and Public engagement

# 9a. If you answered 'NO' to Question 8 please complete Question 9a, b and c.If you answered 'YES', please go to Question 10 (and delete the boxes for Q9a, 9b and 9c)

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

Lead institution and website: Zoological Society of London	Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)	
http://www.zsl.org/	ZSL has considerable experience of developing projects with both biodiversity conservation and community needs at their core and of working in partnership with local NGOs, communities and GOs in the Philippines. We have a well-established, UK-based project management infrastructure specific to aquatic projects as well as support from in-house finance, communications and human resources teams. Further to this we have a locally registered ZSL-Philippines office whose staff - including a 'Country Manager' who oversees all Philippines projects - will be supporting the development of this project, ZSL have worked to conserve anguillid eels for nearly ten years and the project leader is the chair of the IUCN Anguillid Specialist Sub-Group (ASSG) - http://www.zsl.org/conservation/regions/uk- europe/iucnassg,1863,AR.html. This is a recently established group of global stakeholders from academia, NGOs, GOs and industry who's aim is to catalyse and co-ordinate research, conservation and communications related to anguillids	
	<ul><li>Specific roles and responsibilities of ZSL are:</li><li>To act as the main project manager and be</li></ul>	
	responsible for reporting and budget management.	
	<ul> <li>To mobilise experts who will provide technical input on social and biological aspects of the project, both as part of field visits and remotely.</li> </ul>	
	<ul> <li>To provide training in organisational skills, fisheries-dependent and -independent monitoring and eel farming. 200</li> </ul>	

Partner Name and website where	Details (including roles and responsibilities and
available:	capacity to engage with the project): (max 200
	words)
Bureau of Fisheries and Aquatic	The Bureau of Fisheries and Aquatic Resources (REAR)
Resources	is responsible for the development, improvement,
http://www.bfar.da.gov.ph/indox.html	management and conservation of the country's fishery
http://www.brar.da.gov.ph/mdex.ntm	and aquatic resources with the aim of alleviating poverty and providing supplementary livelihoods among
	municipal fisherfolk. It also aims to improve aquaculture
	productivity within ecological limits
	Specific roles and responsibilities:
	<ul> <li>To act as the main in-country project partner who</li> </ul>
	will guide and support ZSL and TRAFFIC's
	proposed activities.
	To facilitate communications between
	communities, NGOs and other GOs and implementation of project activities
	<ul> <li>To advise on the legal and trade aspects of the project.</li> </ul>
	<ul> <li>To host the pilot eel farming project at existing facilities.</li> </ul>
	To ensure data and recommendations produced
	during the project are utilised to best effect.
	BFAR is well placed to achieve these roles as it is the
	key government agency relating to fisheries has a
	structure that works on municipal, regional and national levels. BEAR has a range of facilities within Cagavan
	Province that are capable of serving as project
	management hubs for eels, thus allowing long-term,
	both during and after the project. <b>181</b>
Have you included a Letter of	Yes/No
Support from this institution?	

21-020			
Partner Name and website where available:	Details (including roles and responsibilities an engage with the project): (max 200 words)	id capacity to	
Protected Area and Wildlife Bureau (PAWB) http://www.pawb.gov.ph/	<ul> <li>PAWB, an agency of the Department of Environmer Resources (DENR), is mandated to conserve or country's biodiversity including inland wetlands (free mandate is key to the success of the project and PA will be invaluable.</li> <li>PAWB is the Philippine focal agency for the C Biological Diversity, Wetlands, Migratory Species and PA</li> </ul>	ent and Natural wisely use the eshwater). This WB's expertise Conventions on nd International	
	PAWB's specific roles and responsibilities in the imposed technical according to the project:	plementation of	
	<ul> <li>To provide support and technical assistance ZSL in the project implementation particul relating to biodiversity conservation and proter</li> <li>Technical assistance which includes or</li> </ul>	e to BFAR and arly on matter cted areas;	
	facilitating the participatory preparation conservation/management plan which will incl and ex-situ concerns; disseminating and im management plan with the involvement of P Wildlife and Coastal Zone Manager (PAWCZMS); baseline data collection and formulation; linking with key stakeholders.	of the eel ude both in-situ plementing the rotected Areas, ment Service analysis; policy	
	PAWB has counterparts in Cagayan (Regional, Community levels) who may provide additional as project implementation. Other DENR Offices in Cag the Environment Management Bureau and River Office, can also be requested to assist. <b>192</b>	Provincial and sistance in the Jayan, such as, Basin Control	
Have you included a Let	ter of Support from this institution?	Yes/No	

Partner Name and website where available:	Details (including roles and responsibilities an engage with the project): (max 200 words)	d capacity to
TRAFFIC	TRAFFIC has nearly 40 years' experience in wildlif Having researched anguillid trade for >10 years, T leading expert in global eel trade dynamics, provi	e trade issues. RAFFIC is the ding advice to
http://www.traffic.org/	TRAFFIC is a member of the ASSG.	mes.
	Specific roles and responsibilities:	
	<ul> <li>To perform trade data analysis, interviews wir and assessment of policy and regulation in fisheries and trade, resulting in recommendation makers.</li> </ul>	th stakeholders relevant to eel ons to decision-
	<ul> <li>To encourage dialogue between source (P consumer country authorities, increasing aw conservation and legal status of eel in the Phili</li> </ul>	hilippines) and areness of the ppines.
	<ul> <li>To carry out training in Philippines on data analysis, and enforcement.</li> </ul>	collection and
	Carrying out trade analysis at the beginning of the project will allow a thorough understanding of how the current fishery and international trade situation can be best managed and legislated for. TRAFFIC will offer support in relation to trade issues, including how to deal with illegal trade and improve enforcement capacity. Eel fisheries and trade expertise will be provided by three members of staff, one based in the UK, and two in East Asia - the main eel consuming region – thus offering appropriate regional coverage. <b>196</b>	
Have you included a Le	tter of Support from this institution?	Yes/No

#### 11. Have you provided CVs for the senior team including the Project Leader Yes/No

#### 12. Problem the project is trying to address

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

#### (Max 200 words)

Anguillid eel fisheries are locally, nationally and internationally important, but populations are declining. Of particular concern is the increase in illegal trade and export of poorly-understood and unmanaged tropical eels due to reduced availability of other eel species, including the Critically Endangered (IUCN) and CITES Appendix II-listed European eel.

Eel fisheries in the Philippines occur primarily in the Cagayan River (Luzon) where increased exploitation resulted in an export ban in 2012 - national fishing and trading remains permitted. However, online adverts for Philippines' exports, reported customs imports into East Asia and data from our scoping trip indicate intensive fishing effort and illegal international trade continue. Eel fishers are extremely poor and fluctuating prices due to variable demand along the supply chain have serious impacts, as many abandoned other work when eel fishing was more profitable. Additionally, methods used for eel fishing negatively impact other fish populations and associated livelihoods.

Of further concern, the 4<sup>th</sup> Philippine National Report to the CBD (4NRCBD) states "*inland waters are the most threatened ecosystem type*" and PAWB confirmed there are virtually no conservation initiatives for Philippines' freshwater ecosystems. As eels inhabit many freshwater habitats mitigating against threats specific to them will benefit the entire ecosystem. **200** 

#### 13. Methodology

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

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

An initial national and international trade analysis will identify the scale of legal and illegal trade and those actors benefitting most from eel fisheries in the region. This will be the basis for determining appropriate interventions to ensure that the future of this fishery is ecologically sustainable and locally equitable. This will be followed by the development of policy and management recommendations at the international, national and municipal level - including those applicable to ensure current or future CITES commitments - and training courses that will benefit government staff and fishers.

**Eel fisher interviews** will be carried out across the Cagayan River Basin to determine their socio-economic status and assess how exploitation varies temporally and geographically. This will be carried out in concert with fisheries-independent monitoring of eel populations to identify species distribution throughout the catchment and how this relates to freshwater biodiversity in the region, adding important information to the newly developed 'Integrated Cagayan River Basin Management and Development Master Plan' (ICRBMDMP). These activities will enable the development of an appropriate eel fisheries management plan that will ensure sustainable exploitation and minimises long-term impacts on eels and other aquatic species.

**Socio-economic and training needs assessments** of communities will be conducted by ZSL staff. The scoping trip highlighted a need for better community level organisation and as such fisherfolk People's Organisations (POs) will be established. Training will be given to the POs in collection of fisheries dependent and independent data and thus allow them to input to fisheries management and, working with BFAR staff, enforcement.

Key to the project will be a **full assessment of the threats to eel populations and the freshwater environment** as a whole. Habitat surveys and threat assessments of the Cagayan River basin will be informed by historical information gathered by BFAR and PAWB, and the ICRBMDMP. Specific threats, such as mining and agricultural run-off were identified during the scoping trip and once these assessments have been completed there will be focused efforts to engage with those carrying out damaging activities to implement remedial actions.

During the scoping trip there was much discussion regarding the **development of eel farming** in the region. There is interest in culturing eels from countries that illegally import eels from the Philippines prompting concern that if these states initiated farming they would not benefit local Filipino communities. We therefore propose a pilot feasibility study in eel farming with BFAR; a realistic approach considering the technical, economic and social challenges with such initiatives.

- **ZSL** will manage the project and mobilise a team of aquatic biologists and conservation educators, providing technical input and training in fisheries/habitat assessments and sustainable farming.
- **BFAR** will support fisheries-related project activities, provide facilities for ZSL staff, participate in monitoring and assessment, host the pilot farming project and develop the fisheries management plan.
- **PAWB** will support freshwater habitat monitoring and the development of mitigation strategies.
- TRAFFIC will perform the international trade assessment and provide recommendations to guide the policy amendments, fisheries management plan development and trademonitoring and enforcement training of local stakeholders. 498

#### 14. Change Expected

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

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

#### (Max 250 words)

The status of eels in the Cagayan River – the main stronghold for these species in the Philippines – will be secured through improved policy and fisheries and freshwater management, developed and implemented with relevant government agencies. This will provide long-term benefits for fishers that rely upon eels for their livelihoods and contribute to the development of sustainable international trade.

Communities will have improved capacity through the establishment and empowerment of People's Organisations (POs), through training in monitoring methods, data collection and enforcement. Combining government and community-led initiatives will help manage existing fisheries and an international trade that are ecologically sustainable and economically equitable.

While the ICRBMDMP provides an excellent framework for management of the Cagayan River, there has been no comprehensive fish or freshwater biodiversity assessments. This project will fill this knowledge gap and contribute to securing the future of this rich freshwater environment. By engaging actors carrying out activities that are impacting eel populations and changing their practices, we will provide a more stable future for both fish and fisher communities. The threats that face eel populations affect many other species, and mitigation of these will benefit many other aquatic species and this entire freshwater ecosystem.

As an alternative to the eel fishery, eel farming will be explored, which, to date, has been unsuccessful in the Philippines. However, the strong technical knowledge of collaborators will enable development of a small scale eel farm to determine the feasibility of sustainable farming of this species and its potential for roll-out in communities. **250** 

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

This project is fundamentally a new initiative; however, work by the project partners has laid important foundations for its implementation. ZSL have worked on the conservation of anguillid species for nearly 10 years - the project leader is chair of the ASSG. The ASSG recently assessed the status of all anguillids using the Red List criteria and identified the conservation of species in the Philippines as a priority. This is supported by TRAFFIC's work on anguillids identifying the Philippines as a hub of illegal trade in these species.

Both PAWB and BFAR have worked on the Cagayan River for many years and identified the region as a site of national importance for the development of biodiversity assessments and management plans – it is a candidate 'Key Biodiversity Area'. BFAR also developed the current national trade legislation for anguillids.

It is important to highlight that there is virtually no population data available for the tropical anguillid species that will be studied in this project and the proposed activities will hugely benefit our understanding and inform conservation actions in the Philippines and beyond. This was identified as a key data gap hampering international trade regulation of these species. **195** 

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

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

# 15c. Are you applying for funding relating to the proposed project from other sources? $\boxtimes$ Yes $\square$ No

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

In concert with this project we are proposing to have a PhD student who will carry out research related to the proposed DI project. This will complement and augment the work we are planning in this proposal, however, should the PhD not happen, this will not impact negatively on the DI project. We will be submitting a funding application (£54,270 over 3 years) to the Fisheries Society of the British Isles 13/12/2013 and would receive a response by 13/2/2014.

The ASSG recently received a small grant from Synchronicity Earth (SE) as part of their programme of work relating to the Red List assessment of anguillid eels. This has meant that ZSL's work with anguillid eels is presently part of SE's portfolio of work that is presented to interested funders. As such we have no secured funding at present, we would be in communication with SE during the project's life to identify ways of augmenting DI funding.

#### 16. Value for money

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

#### (Max 250 words)

Prior to our scoping trip for this project, we had identified the key government organisations that work in the fields that this project relates to. As a result this project is engaging with the main organisations – primarily BFAR and PAWB - that have a great deal of relevant infrastructure both regionally and nationally. This has allowed us to minimise the cost of certain elements of this project, particularly the development of a pilot eel farm which would have otherwise been prohibitive.

In addition, the project aims to invest in training of both local populations of fishers and regional/national governmental agencies. Socio-economic and needs assessments will identify particular areas that require bolstering and ZSL and TRAFFIC staff will lead the training that will help to fill the skills and capacity requirements. In taking this approach we aim to ensure that aspects of the project are self-sufficient and have longevity - and consequently, impact - beyond the project's endpoint. It will also ensure that further resources are not required to ensure external actors are constantly required to fill these capacity needs.

ZSL has been working in the Philippines for >15 years and as a consequence we have developed both an in country office and a team of staff and associated infrastructure. Having this support base means that the project will have both in-country management and a well-developed network of contacts. Having both UK and Philippines-based project management staff and mechanisms will ensure that the project can begin quickly and cost-effectively. **248** 

#### 17. Ethics

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

#### (Max 300 words)

The project has been designed to ensure that in-country partners and focal communities benefit from the proposed work. Our scoping trip highlighted that there were gaps in capacity at the community and government level. We have already made contact with local, regional and national level stakeholders and included them in the planning and design of the project to ensure they are supportive of the project's scope. During implementation we will provide full explanation of the principles and objectives behind the project and no work that will impact communities will be undertaken without the Free, Prior and Informed Consent of the communities. Regular stakeholder meetings will engage UK, East Asian, and Philippines stakeholders and allow feedback to be addressed as part of an iterative process. It will also allow those that live in the project's focal region to share their extensive knowledge.

ZSL is a long-established scientific and conservation organisation that is globally recognised as taking an objective approach to applied, community-lead conservation. We have considerable experience of developing projects with both biodiversity conservation and community needs at their core and of working in partnership with local NGOs, communities and GOs in the Philippines.

We have a rigorous internal process relating to both ethics – which applies to any questionnaire surveys – and health and safety. These processes apply irrespective of the projects location and any biological or sociological fieldwork that is carried out will have to be submitted to the internal assessment process to ensure it meets ethical and safety standards. We know and understand the permitting and ethical requirements of conducting projects such as this within the Philippines. Prior to the collection of any personal information, the aims of the research, and confidentiality arrangements of resulting data will be explained, and respondents will be given the opportunity to opt out. **299** 

#### 18. Legacy

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

#### (Max 300 words)

The project aims to work with government and communities to ensure anguillid fisheries are ecologically sustainable and economically equitable. We will address exploitation levels of local fisheries, freshwater biodiversity conservation, national and global trade, and governance relating to biodiversity and resource use.

We view the long-term benefits to be ensuring that exploitation of eels provides income to local communities and that the habitats that these species, and many others, rely upon are conserved to ensure a sustainable fishery. More specifically, we wish to increase government and local communities' capacity to better enforce and manage the fishery to avoid 'boom and bust' cycles that have been seen elsewhere. Additionally, most of the eels collected in the Philippines are exported illegally, resulting in large profits being made outside of the country. By assessing global trade and advising on governance and enforcement best practice, it is hoped that illegal activity will be reduced and greater economic benefits are reaped close to the fishery. To sustain the fishery it is essential that the freshwater habitat is conserved, and management actions that benefit eels will benefit other freshwater flora and fauna.

This project is not without potential barriers; trade in eel is lucrative and we are expecting resistance to changing trading from those outside the Philippines. However, we are confident TRAFFICs expertise in this field will facilitate these changes. We have also identified sand mining in the Cagayan River as a potential threat to the freshwater ecosystem. Again this is very lucrative for companies outside of the Philippines and at present there is little engagement in relation to biodiversity and Corporate Social Responsibility (CSR). As the effects of the sand mining are poorly understood, we aim to determine the impacts and work with the companies to encourage best practice and mitigate any severely damaging activities. **299** 

#### 19. Pathway to poverty alleviation

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

#### (Max 300 words)

The Philippines has been identified as a 'Lower Middle Income Country' however, there are still many parts of the Philippines that are suffering from poverty and an unstable economic future.

Globally, it is recognised that small-scale fisherfolk are often some of the poorest communities, living hand to mouth with no secure future, and those that we have engaged with in Luzon are no different. Over the past two years the price of glass eels has risen to ~\$1500 / kg and then dropped again in the past nine months when a cheaper source of fish was identified. In the short period when eels were lucrative a number of the fishers we interviewed indicated that they or people they knew had left secure jobs to fish eels as at the time it was more profitable. It also became clear that young children were also engaging in fishing activities during the night which mean that their education was very likely suffering. Such 'boom and bust' fisheries lead to financial insecurity, social disruption and uncertainty for people with low resilience and few alternatives. Exploring the feasibility of eel farming will provide one potential alternative.

Our approach to ensuring that fisheries become economically equitable is through the top down (introduction of legislation, management plans) and bottom up approaches (development and training of POs in focal communities). Through assessments of needs, resources and capacity in the fisher communities, and the surveys of freshwater resources, it will be possible to propose quotas of eels to ensure that the fishery is sustainable and can avoid a 'boom or bust' situation, stabilising the market. **266** 

#### 20. Exit strategy

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

#### (Max 200 words)

Due to the lack of previous conservation work related to freshwater, and by association, anguillid eels, this project is very much viewed as a first step to a wider programme of work. By working with in-country government organisations, we are ensuring that even after this project has finished there will be continuity in implementation. This translates, by the end of the project, to improved government and community capacity, scientifically-based fisheries management, a stronger ICRBMDMP and an improved legislative framework. Data on eels and associated freshwater biodiversity will inform CITES non-detriment findings and the NBSAP. The POs are legally ratified and will be trained to continue sustainable practices beyond the life of the project. A completed feasibility study on community eel farms will determine government/commercial implementation. The long-term organisational presence of ZSL-Philippines provides a continuity of the lead organisation beyond the life of the project that will help develop a wider programme of work.

In addition to ZSL's on-going interest, the IUCN ASSG identified increasing knowledge of tropical species as being a key work theme, and as such would develop projects that complement and build upon the work of this project both during and beyond its life. **196** 

#### 21. Raising awareness of the potential worth of biodiversity

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

#### (Max 300 words)

The scoping visit highlighted that one of the key barriers to safeguarding freshwater habitats and their associated flora and fauna was limited communication between and within key stakeholders in the Philippines – fishers and traders; local, regional and national government; and NGOs. This came down to limited capacity and the absence of an appropriate forum, and as such the stakeholder meeting that was organised as part of the scoping trip was enormously successful in opening a number of dialogues. By focussing on a single taxa that is key to a number of issues – trade, sustainable resource use, freshwater biodiversity, and community and government capacity – and establishing regular stakeholder meetings, we will ensure that both vertical and horizontal networks of communications are developed and maintained. This will be supported by the use of social media - a powerful communication tool in the Philippines - for ongoing external communications. In doing this we hope to ensure that enforcement, illegal trade reduction and mitigation of threats can be improved through information sharing and government working in collaboration with local communities using a collectively developed eel management plan.

Ultimately, a facet of the proposed project is to examine existing legislation relating to export of juvenile eels. While fishing for juvenile eels is not illegal, export is, however, analysis carried out by TRAFFIC indicates that trade in anguillds from the Philippines has not declined since the law was created. As such, we will be determining, in collaboration with stakeholders, what potential changes to legislation, management and enforcement are required to sustain livelihoods without compromising the populations of eels and other fish that are affected by the fishery. Any potential changes to legislation will take into account the present disparity between the national bodies that create the laws and local bodies that are charged with enforcing them. **300** 

#### 22. Access to project information

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

#### (Max 250 words)

ZSL has a well-established web presence – both with a website and social media outlets. It has been our previous aim to ensure that project outputs – be they Darwin or otherwise - that it was felt would be beneficial to the greater conservation community were made available by these means. We propose to take the same approach in this project and management plans, eel farming development plans, survey reports, and overall project reports would be uploaded to ZSL and all projects partner's websites.

We would disseminate the information further afield through associated organisations such as the ASSG and more generally the IUCN Freshwater Fish Specialist Group. Further, during the period that ZSL has been working on anguillid eels, we have built up a wide network of collaborators in academia, NGOs and GOs and would ensure information is shared with them. The data generated from the project would feed into trade databases, NBSAP, the Living Planet Index, and five-yearly species status reviews under the ASSG – scheduled for 2018. Where possible we would present this data at relevant conferences.

#### 23. Importance of subject focus for this project

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

#### (Max 250 words)

Freshwater is almost universally neglected and ignored in relation to conservation, frequently being stepped over for terrestrial, and to a lesser extent, marine initiatives. As already stated, the (4NRCBD) highlighted that *"inland waters are the most threatened of all ecosystem types"* in the Philippines. There are virtually no conservation initiatives for the biodiverse Cagayan River which across its catchment has five cities, 101 towns and 2,453 villages reliant upon it for ecosystem services. Without a healthy freshwater ecosystem, not only those that rely upon it for fisheries, but the many thousands of people that rely upon the river for agriculture, will be without income - 95% of water abstraction is for irrigation.

Anguillid eels are a group of fish that have a global coverage and have enormous economic, environmental and cultural significance. However, it is only in the past ten years that there has been any real scientific or political attention paid to them – primarily as a result of the European eel being listed as Critically Endangered on the IUCN Red List and in CITES Appendix II. While this has resulted in a number of management measures specific to this species and a ban in export outside of the EU, it has meant that fisheries pressure has shifted to other species and

regions – particularly the USA and the Philippines. It is essential that data are collected and management plans are implemented quickly in these areas to ensure a similar situation to the European eel doesn't arise in other species. **249** 

#### 24. Leverage

#### a) Secured

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

Confirmed:

£9,723 for office costs provided by BFAR.

£5,100 in staff costs by PAWB

£6,955 for staff costs provided by TRAFFIC

£6,182 in staff costs for in-country ZSL manager.

£25,627 in staff costs for ZSL UK project manager.

£6,426 in staff costs for ZSL UK financial administrator

#### b) Unsecured

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

Date applied for	Donor organisation	Amount	Comments
N/A	Synchronicity Earth (SE)	N/A	ZSL's work with anguillid eels is presently part of SE's portfolio of work that is presented to interested funders, as such we would be in communication with this organisation during the project's life to identify ways of augmenting funding.
7/12/13	Fisheries Society of the British Isles	£54,270	This is to fund a PhD student who would carry out supplementary work related to this project which relates to the economics of trade in anguillid species. This would complement the work of the project but should we not receive the PhD funding it would not impact on the aims of the proposed DI project.

#### PROJECT MONITORING AND EVALUATION

#### MEASURING IMPACT

#### 25. LOGICAL FRAMEWORK

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

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#### Impact

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

(Max 30 words)

To promote and facilitate the conservation and sustainable management of freshwater biodiversity in the Philippines supporting equitable community-level fisheries free from overexploitation and involvement in illegal international trade.

To promote conservation and sustainable management of freshwater biodiversity in the Philippines to meet CBD targets and support equitable community-level fisheries free from over-exploitation and involvement in illegal international trade. **30** 

#### Outcome

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

#### (Max 30 words)

Conservation of cels results in freshwater biodiversity in the Cagayan River being measurably improved as a result of equitable and ecologically sustainable community-lead management of the fishery.

Conservation of eels measurably improves freshwater biodiversity in the Cagayan River as a result of ecologically sustainable, community-led management and exploitation, and equitable national and international trade. **27** 

#### **Measuring outcomes - indicators**

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

Indicator 1	Local and national legislation is effective in managing the supply chain of eels, and local enforcement capacity is increased by 20% resulting in minimising illegal trade and CITES commitments being met.
	Local and national legislation is effective in managing the supply chain of eels, and local enforcement capacity is increased resulting in a reduction of illegal trade by 25% by the end of year 3.
Indicator 2	Eel fisheries are sustainably managed and equitable, as a result of the establishment of fisheries management plans and 4 POs and improved community capacity for inputting into the management of the resources they rely upon. Juvenile eel recruitment exhibit no further declines leading to stable eel populations.
	establishment and implementation of fisheries management plans by the end of year 3.
Indicator 3	Local stakeholder and government staff capacity to gather appropriate data is increased by 35% through training ensuring international trade in eels is

	21-020
	benefitting communities and the eel fishery management plan is effective.
	Four POs are established resulting in improved local stakeholder capacity, and government staff capacity is increased through training ensuring the eel fishery management plan is effective by the end of year 3.
Indicator 4	Key threats to the freshwater environment are identified and mitigated, resulting in a 5% increase in abiotic indicators of freshwater biodiversity and populations of keystone species along the length of the Cagayan River.
	Key threats to the freshwater environment are identified and mitigation plans in place resulting in a 5% improvement in abiotic indicators of freshwater biodiversity by the end of year 3.
Indicator 5	The pilot aquaculture project is successfully managed by local stakeholders and government staff. Yields of >75% of eels of a marketable size from seed stock are achieved and the benefits of scaling-up aquaculture to a community level, and its role in ensuring sustainability of wild eel populations, are demonstrated.
	The pilot farming project is managed by local stakeholders and government staff resulting in the development of farming methodology, costings and a feasibility study report - including a business plan for roll-out in the communities - by the end of year 3.

#### Verifying outcomes

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

Indicator 1	Trade analysis report; updated local and national legislation; improved customs data; import and export data; seizure reports; Increased number of trained enforcement staff
	and national legislation; Customs import and export data; Seizure reports; Increased number of trained / trainer enforcement staff; Enforcement reports; Stakeholder meeting minutes;
Indicator 2	Eel management plan; Socioeconomic survey reports; Existence of active, effective POs; POs meeting minutes; Aquatic survey reports
	Eel management plan; Training manuals; Stakeholder meeting minutes; fisheries-independent data sets
Indicator 3	Training materials; Fisheries datasets; Enforcement reports
	Socioeconomic survey reports; POs terms of reference; Legal ratification and registration of active, effective POs; POs meeting minutes; Training materials; Fisheries datasets;
Indicator 4	Freshwater survey reports; Stakeholder meeting minutes;
	Biodiversity and threat survey reports; Habitat mitigation plan; Abiotic indicator analysis dataset; Stakeholder meeting minutes;
Indicator 5	Aquaculture ponds in existence; Pilot study report; Aquaculture training materials.
	Farming ponds in existence; Farming training materials; Farming records; Feasibility study report – including business plan.

#### Outcome risks and important assumptions

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

Assumption 1	Riverine exploitation projects e.g. mining are not developed further.
Assumption 2	Currency rates/rate of inflation does not fluctuate to levels that
	compromise delivery of the project.
Assumption 3	Prices of eels in black market does not increase to such a high level that
	illegal fisheries proliferate and enforcement becomes impossible.
Assumption 4	Eel fishery does not collapse.
Assumption 5	Management plan is accepted by fisher communities.
Assumption 6	Supply-chain actors buy in to the long-term development of sustainable
	fisheries management.
Assumption 7	Pilot farming project is successful.
Assumption 8	Natural disaster does not affect project sites.

#### Outputs

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

Output 1	Local and national legislation and policy is amended to ensure any
	international trade is sustainable and CITES commitments are being met.
Output 2	Sustainable eel management plan for the Cagayan River Basin integrated
	from the community to the national level export nations.
Output 3	People's Organisations (POs) are managing eel fisheries and fisheries
	dependent data collection at the community level.
Output 4	Aquatic survey methods are established to monitor the freshwater biodiversity
	in the Cagayan River Basin and key threats are mitigated against.
Output 5	Successful pilot aquaculture farming project and long-term feasibility study for
	eel <del>culture</del> farming is complete.

#### Measuring outputs

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

Local and na	<b>Output 1</b> Itional legislation and policy is amended to ensure any international trade is sustainable and CITES commitments are being met.
Indicator 1	Trade analysis carried out to inform development of management plan and policy and legislation development by end of year 1.
Indicator 2	Enforcement capacity is increased to ensure sustainable management through training of government and communities (including appointment of local river wardens) through years 2 and 3.
Indicator 3	New, scientifically-informed, legislation developed through a consultative process is implemented at the local, regional and national level by the end of year 3.

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Indicator 4	Illegal exports are reduced by the end of year 3.

Output 2 Sustainable eel management plan for the Cagayan River Basin integrated from the community	
	to the national level.
Indicator 1	Eel management plan is developed with stakeholder engagement by middle of year 2.
Indicator 2	Collection of fisheries-independent data on eel species in the Cagayan is initiated by the end of year 1
Indicator 3	Eel population and fisheries data indicate that new management practices are ensuring stocks of the multiple anguillid species in the catchment are not impacted to their detriment by the end of year 3.

People's Or	Output 3 ganisations (POs) are managing eel fisheries and fisheries dependent data collection at the community level.
Indicator 1	Needs and socio-economic assessments identify key capacity issues to be addressed by POs by the end of year 1.
Indicator 2	Candidate POs are identified and the process of establishment is initiated by the end of year 1.
Indicator 3	Training courses are held to teach POs and other associated stakeholders about data collection, enforcement and fisheries management during years 2 and 3.
Indicator 4	Collection of fisheries-dependent and national trade data on the anguillid species of the Cagayan River is initiated and delivered to BFAR in-line with management plan recommendations by the middle of year 2.

Output 4 Aquatic survey methods are established to monitor the freshwater biodiversity in the Cagayan River Basin and key threats are mitigated against.	
Indicator 1	Baseline biodiversity assessment of the Cagayan River has been carried out by the end of year 1 and integrated into Department of Environment and Natural Resources river management plan by the middle of year 2.
Indicator 2	Threat assessment is carried out to prioritise mitigation activities by the middle of year 2.
Indicator 3	Threat mitigation actions are developed and implemented in collaboration with stakeholders responsible for potentially damaging activities by the end of year 3.
Indicator 4	A suite of biodiversity indicators is developed and regular monitoring at key sites on the Cagayan River is initiated by the end of year 2.

	Output 5	
Successful pilot farming project and long-term feasibility study for eel farming is complete.		
Indicator 1	Pilot farming project at BFAR facilities is initiated by the end of year 1.	
Indicator 2	Communities and other stakeholders are engaged, through site visits,	
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	throughout years 1 and 2.
Indicator 3	Feasibility study of the pilot project is completed by the end of year 3.

#### Verifying outputs

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

Indicators for Output 1	Trade analysis report; export/import logs; Stakeholder meeting minutes; policy advice documents; policy documents; enforcement records							
Indicators for Output 2	Eel management plan; fisheries-independent data sets; Training manuals; Stakeholder meeting minutes							
Indicators for Output 3	Socio-economic assessments reports; Training course records and materials; fisheries-dependent data sets; POs terms of reference;							
Indicator for Output 4	Biodiversity and threat assessment report; Habitat mitigation plan; Stakeholder meeting minutes; monitoring reports and datasets.							
Indicator for Output 5	Farming ponds in existence; Stakeholder meeting minutes; Farming training materials; Farming records; Feasibility study report.							

#### Output risks and important assumptions

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

Assumption 1	All key stakeholders are willing to engage in the fora for development of management plans and policy development, and associated training courses.
Assumption 2	There will be no resistance to proposals in changes in legislation locally, regionally and nationally.
Assumption 3	Changes in government at next election do not impact on the government partners and project objectives.
Assumption 4	Newly developed enforcement measures are effective.
Assumption 5	Fishers are willing to amend practices in line with management plan recommendations.
Assumption 6	Key stakeholders relating to potentially damaging activities on the Cagayan River engage with project staff to discuss mitigation and CSR.
Assumption 7	Local stakeholders do not view eel farming as a 'silver bullet' but part of an overall management strategy

#### Activities

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

Output 1							
Local and	Local and national legislation and policy is amended to ensure any international trade is sustainable and CITES commitments are being met.						
Activity 1.1	Trade policy, enforcement and existing data review, and policy and legislation development document is drafted and agreed.						

Activity 1.2	Regular national, regional and municipal eel stakeholder meetings and associated engagement relating to policy development are initiated.
Activity 1.3	Governmental policy development and implementation process is supported.
Activity 1.4	Enforcement training courses are run in fisher communities and river wardens deputised.
Activity 1.5	Relevant CITES authorities are engaged to ensure existing and future legislation relating to trade in anguillid eels is fully implemented.

Output 2							
Sustainable	to the national level.						
Activity 2.1	Regular national, regional and municipal eel stakeholder meetings and associated engagement relating to management plan and policy development are initiated.						
Activity 2.2	Eel fishery is assessed, recommendations developed and eel management plan – including a best practice guide - is produced.						
Activity 2.3	Key sites and appropriate methods for fisheries independent monitoring of anguillids are identified and data collection initiated.						

Output 3 People's Organisations (POs) are managing eel fisheries and fisheries dependent data collection at the community level.							
Activity 3.1	Baseline socio-economic and needs assessments are carried out in fisher communities.						
Activity 2.2	POs are established at key locations across the range of the fishery and regular meetings between POs, local government and other key stakeholders are established.						
Activity 3.3	Training of POs in organisational capacity and collection of fisheries dependent data e.g. CPUE and in basic fisheries management theory and techniques is initiated.						
Activity 3.4	Fisheries dependent data collection is initiated and submitted to BFAR.						
Activity 3.5	Fisheries dependant and independent data are used to optimise fishery and inform annual management actions to ensure sustainability.						

	Output 4							
Aquatic surv	Aquatic survey methods are established to monitor the freshwater biodiversity in the Cagayan River Basin and key threats are mitigated against.							
Activity 4.1	Baseline biodiversity, habitat and threat surveys of the Cagayan River are carried out and reports produced.							
Activity 4.2	Meetings with key stakeholders relating to potentially damaging activities are held, and mitigation activities are proposed in light of reports produced in 3.1.							
Activity 4.3	Mitigation measures are developed and implemented in key sites along the Cagayan River.							
Activity 4.4	Monitoring of biodiversity indicators on the Cagayan River is initiated.							

<b>Output 5</b> Pilot farming project and long-term feasibility study for eel farming is complete.							
Activity 5.1	Seed stock for farming at BFAR facilities are collected in collaboration with selected fisher communities.						
Activity 5.2	Farming conditions e.g. water quality / feed regimes are optimised and methodologies are produced.						
Activity 5.3	Community visits to farm facilities are carried out.						
Activity 5.4	Feasibility study – including recommendations – is produced.						

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

Activity	No of		Year 1			Year 2				Year 3			
	Months	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Trade, policy, enforcement and data review and policy and legislation development document is drafted and agreed.	2	х	x	х									
Regular national, regional and municipal eel stakeholder meetings and associated engagement relating to policy development are initiated.	1	x	x	x	x	x	x	x	x	x	x	x	x
Governmental policy development and implementation process is supported.	2			х	х	х	х	х	х	x	x	х	х
Enforcement training courses are run in fisher communities and river wardens deputised.	1						х	х	х	х	x	Х	
Relevant CITES authorities are engaged to ensure existing and future legislation relating to trade in anguillid eels is fully implemented.	1	x	x	x	x	x	x	x	x	x	x	x	х
Regular national, regional and municipal eel stakeholder meetings and associated engagement relating to management plan and policy development are initiated.	2	x	x	x	x	x	x	x	x	x	х	х	x
Eel fishery is assessed, recommendations developed and eel management plan – including a best practice guide - is produced.	6		x	x	x	x	x						
Key sites and appropriate methods for fisheries independent monitoring of anguillids are identified and data collection initiated.	3			x	x	x	x	x	x	x	х	x	x
Baseline socio-economic and needs assessments are carried out in fisher communities.	2		х	х	х								
POs are established at key locations across the range of the fishery and regular meetings between POs, local government and other key stakeholders are established.	2		x	x	x	x	x	x	x	x	x	x	x
Training of POs in collection of fisheries dependent data e.g. CPUE and in basic fisheries management theory and techniques is initiated.	3			x	x	x	x	x	x	x	x	x	x
	Activity Trade, policy, enforcement and data review and policy and legislation development document is drafted and agreed. Regular national, regional and municipal eel stakeholder meetings and associated engagement relating to policy development are initiated. Governmental policy development and implementation process is supported. Enforcement training courses are run in fisher communities and river wardens deputised. Relevant CITES authorities are engaged to ensure existing and future legislation relating to trade in anguillid eels is fully implemented. Regular national, regional and municipal eel stakeholder meetings and associated engagement relating to management plan and policy development are initiated. Eel fishery is assessed, recommendations developed and eel management plan – including a best practice guide - is produced. Key sites and appropriate methods for fisheries independent monitoring of anguillids are identified and data collection initiated. Baseline socio-economic and needs assessments are carried out in fisher communities. POs are established at key locations across the range of the fishery and regular meetings between POs, local government and other key stakeholders are established. Training of POs in collection of fisheries dependent data e.g. CPUE and in basic fisheries management theory and techniques is initiated.	Activity       No of Months         Trade, policy, enforcement and data review and policy and legislation development document is drafted and agreed.       2         Regular national, regional and municipal eel stakeholder meetings and associated engagement relating to policy development are initiated.       1         Governmental policy development and implementation process is supported.       2         Enforcement training courses are run in fisher communities and river wardens deputised.       1         Relevant CITES authorities are engaged to ensure existing and future legislation relating to trade in anguillid eels is fully implemented.       1         Regular national, regional and municipal eel stakeholder meetings and associated engagement relating to management plan and policy development are initiated.       2         Eel fishery is assessed, recommendations developed and eel management plan – including a best practice guide - is produced.       3         Key sites and appropriate methods for fisheries independent monitoring of anguillids are identified and data collection initiated.       2         POs are established at key locations across the range of the fishery and regular meetings between POs, local government and other key stakeholders are established.       3         Training of POs in collection of fisheries dependent data e.g. CPUE and in basic fisheries management theory and techniques is initiated.       3	Activity       No of Months       Image: Content of the section of the sectin of the section of the section of the section	Activity       No of function       Yeak function         Activity       Q1       Q2         Trade, policy, enforcement and data review and policy and legislation development document is drafted and agreed.       2       X       X         Regular national, regional and municipal eel stakeholder meetings and associated engagement relating to policy development are initiated.       1       X       X         Governmental policy development and implementation process is supported.       2       Image: Comparison of the transmitted of the transmitted of the transmitted of the transmitted of trade in anguillid eels is fully implemented.       1       X       X         Regular national, regional and municipal eel stakeholder meetings and associated engagement relating to trade in anguillid eels is fully implemented.       1       X       X         Relevant CITES authorities are engaged to ensure existing and future legislation relating to trade in anguillid eels is fully implemented.       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X         X         X           Pos are established at key locations across the range of the fishery and regular meetings between POs, local government and other key stakeholders are established.	Activity         No of Months         Veut1         Q2         Q3         Q4           Image: Activity         Q1         Q2         Q3         Q4           Trade, policy, enforcement and data review and policy and legislation development document is drafted and agreed.         2         X	Activity         No of Months         Versite         Versite	Activity         No of Months         Verter         Verter         Verter           Q1         Q2         Q3         Q4         Q1         Q2           Trade, policy, enforcement and data review and polycy and legislation development document is drafted and agreed.         X	Activity         No of Months         Image: No of Months	ActivityNo of Months $Vert I$ <t< td=""><td>Activity         No of Months         Ver         Ver</td><td>Activity         No of Months         Verture         Verture         Verture         Verture         Verture         Verture           Trade, policy, enforcement and data review and policy and legislation development document is drafted and agreed.         2         x</td><td>Activity         No of Months         Image: No of Months         Image: No of Regular national, regional and municipal eel stakeholder meetings and associated engagement relating to policy development are initiated.         No         Image: No</td></t<>	Activity         No of Months         Ver         Ver	Activity         No of Months         Verture         Verture         Verture         Verture         Verture         Verture           Trade, policy, enforcement and data review and policy and legislation development document is drafted and agreed.         2         x	Activity         No of Months         Image: No of Months         Image: No of Regular national, regional and municipal eel stakeholder meetings and associated engagement relating to policy development are initiated.         No         Image: No

	Activity	No of	Year 1					Ye	ar 2		Year 3			
		Months	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
3.4	Fisheries dependent data collection is initiated and submitted to BFAR.	3				x	x	x	x	х	х	x	x	x
3.5	Fisheries dependant and independent data is used to optimise fishery and inform annual management actions to ensure sustainability.	2					x	x	x	x	x	x	x	x
Output 4														
4.1	Baseline biodiversity, habitat and threat surveys of the Cagayan River are carried out and reports produced.	3			x	x	x	x						
4.2	Meetings with key stakeholders relating to potentially damaging activities are held, and mitigation activities are proposed in light of reports produced in 3.1.	2			x	x	x	x	x	x	x	x	x	x
4.3	Mitigation measures are developed and implemented in key sites along the Cagayan River.	6					x	x	x	х	х	x	x	x
4.4	Monitoring of biodiversity indicators on the Cagayan River is initiated.	3							x	х	x	x	x	x
Output 5														
5.1	Seed stock for farming at BFAR facilities are collected in collaboration with selected fisher communities	1		х	х	х	х	х	х	х	х	х	х	х
5.2	Farming conditions e.g. water quality / feed regimes are optimised and methodologies are produced.	12		x	x	x	x	x	x	х	x	x	x	x
5.3	Community visits to farm facilities are carried out.	1			x	x	x	x	x	x	x	x	x	x
5.4	Feasibility study – including recommendations – is produced.	3									x	x	x	x

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

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

#### (Max 500 words)

ZSL, both in the UK and the Philippines, will oversee the project and ensure that monitoring and evaluation is carried out by each partner in line with their role in the project. ZSL has managed many projects of this size, and larger, in a range of countries and has a great deal of experience in the monitoring and evaluation of community-lead conservation initiatives.

To ensure targets are met on-time and on-budget, in-country and UK staff will produce an annual work-plan with agreed activities to support the project's objectives and the approved budget. Incountry staff will attend a monthly meeting - which the UK project manager will attend remotely and submit monthly reports to ZSL. Members of the ZSL project team will visit the project biannually, conducting site visits and training, and meeting with staff and communities. A focus of these visits will be to ensure that not only progress is being made in achieving the aims of the project but that staff and stakeholders feel this progress is positive and to manage any potential issues that arise. For the project to be effective it is important that we are closely monitoring the proposed activities and amending where needed, in response to changing social, biological and political influences. As such adaptive management will be employed, in consultation with the Darwin Initiative, where appropriate and progress reports will be submitted as per DI requirements. Outside of formalised management and evaluation meetings, there will be regular communication between the UK and the Philippines via email, phone, SMS texts and Skype.

As there has been little work carried out on the freshwater biodiversity of the Cagayan River, or the anguillids that are present there, activities in the early stages of the project will focus on collecting and collating good baseline data, utilising the partner's expertise. A suite of initial reports will assess the present status of above-described biological, socio-economic, political and legislative factors that are key to project. These, in concert with relevant stakeholder engagement, will provide the basis for subsequent management plans, policy proposals, monitoring regimes and training courses in biological, technical and organisational skills. During this period the project staff – project managers, biologists and 'community organisers' - will work closely with communities to discuss how the project can benefit them socially and economically in the longer term, ensuring buy-in from them and other key stakeholders. Regular stakeholder meetings will allow discussions as to where the project is working and whether there are issues that need addressed in relation to its progress. Having ZSL capacity in-country will make project management more effective and including key government bodies – BFAR and PAWB - as project partners will ensure that legislative and policy recommendations are achievable and, once successful, implemented.

The novelty of the data collected during this project will afford great opportunity for publishing findings in peer-reviewed journals. As such we will be aiming to submit manuscripts once surveys have been completed and this will provide another layer of evaluation for the collected data. **500** 

#### FUNDING AND BUDGET

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

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

#### 28. Value for Money

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

#### (max 300 words)

ZSL have been working in the Philippines for over ten years and have managed a number of multiyear projects with associated large budgets. As such we feel that, as an organisation, we are well versed in developing budgets that are appropriate for the aims of the project and cost-effective.

Nearly all capital items have been sourced in-country to avoid shipping costs and prices have been confirmed as being appropriate with our in-country partners.

We have assessed the work plan in relation to previous projects and feel the in-country staff and associated costs will ensure that the appropriate expertise is available without there being 'fallow periods' for any of those employed. In relation to the UK and East Asia-based staff we have minimised the costs where possible, however, the technical expertise of ZSL and TRAFFIC staff are key to the success of the project and as such associated costs are included. We feel we have identified the appropriate partners and staff to ensure that expensive out-sourcing is not required and by embedding project staff in local BFAR offices, we have infrastructure available from as soon as the project starts. Where possible in-kind staff time has been committed by both ZSL (UK and Philippines) and TRAFFIC (Japan).

We have assessed the exchange rate from GBP to Philippine Pesos over the past 10 years and it is in the past year it has reached its lowest rate (1GBP ~ 60PHP) and as such we have used this conservative estimate to ensure that the project costs are not exceeded by fluctuations in currencies. **259** 

#### 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)

7

Yes, advice attached

 $\mathbf{X}$ 

No

#### CERTIFICATION

On behalf of the trustees/company\* of

(\*delete as appropriate)

I apply for a grant of **£306,845** in respect of **all expenditure** to be incurred during the lifetime of this project based on the activities and dates specified in the above application.

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

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

- I enclose CVs for project principals and letters of support.
- Our most recent audited/independently verified accounts and annual report are also enclosed/can be found at:

http://www.zsl.org/about-us/annual-reports/

Name (block capitals)	JONATHAN BAILLIE
Position in the organisation	Director, Conservation Programmes

Signed

2nd December 2013

Date:

#### Stage 2 Application - Checklist for submission

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

Once you have answered the questions above, please submit the application, not later than midnight GMT on Monday 2 December 2013 to <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.