



Darwin Initiative Main Project Annual Report

Important note: *To be completed with reference to the Reporting Guidance Notes for Project Leaders: it is expected that this report will be about 10 pages in length, excluding annexes*

Submission Deadline: 30 April

Darwin Project Information

Project Reference	21020
Project Title	Eels – A flagship species for freshwater conservation in the Philippines.
Host Country/ies	Philippines
Contract Holder Institution	Zoological Society of London
Partner institutions	TRAFFIC, Bureau of Fisheries and Aquatic Resources (BFAR), Biodiversity Monitoring Bureau (BMB – formerly Protected Areas and Wildlife Bureau: PAWB)
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Start/end dates of project	1 st May 2014 – 31 st March 2017
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1. Project Rationale

The project's aims focussed on the threats to anguillid eels as a proxy for the freshwater environment more broadly, and also the human populations that rely upon these resources. Eels are being exploited on a global scale and our understanding of these species and the effects of fisheries and other threats on their populations is poor. This is particularly true for tropical species such as those found in the Philippines where, exploitation has been high in recent years due to demand from East Asia, freshwater conservation and management is limited, and the capacity to catalyse such initiatives is absent. As such, the aim of the project was to better understand the demand and trade – both legal and illegal - of these species, and how fisheries, and other threats affect eels, freshwater habitats and fisherfolk who rely upon these resources. By ensuring that eel populations are conserved, and associated fisheries are ecologically sustainable and economically equitable, the security of freshwater biodiversity and associated human populations will improve.

The project need was identified through a number of routes. ZSL has been working in the Philippines for over 10 years and the need for conservation initiatives focussing on freshwater was very clear. Further, prior to contacting in-country partners, both ZSL and TRAFFIC were leading on activities relating to eel conservation and trade respectively and it was becoming clear that the Philippines was a country that was important as far as both anguillid eel species abundance, and legal and illegal trade was concerned. As such, these organisations carried out a Darwin Initiative-funded scoping trip to develop a project plan and relations with key in-country partners, the Bureau of Fisheries and Aquatic Resources (BFAR) and Biodiversity Monitoring Bureau (BMB – formerly Protected Areas and Wildlife Bureau: PAWB). It was through this scoping visit we were able to identify and prioritise the issues that have ultimately been included in the project.

The ZSL office is based in Aparri, in Northern Luzon (Figure 1) and has become the hub for much of the work for logistical reasons e.g. farming facilities are based here. However, our

biological and socio-economic surveys work also incorporates the wider coast of Northern Luzon, as well as inland sites that fall within the Cagayan River basin.



Figure 1. Maps of study area – ZSL office location in Aparri is labelled.

2. Project Partnerships

Historically, ZSL have had good working relations with all the project partners, however, prior to this project there had been no formalised project to focus these on the conservation of eels and freshwater more broadly. While the project was developed primarily by ZSL staff, there was consultation with all partners during the scoping trip and the development of both stage 1 and stage 2 submissions in relation to the objectives, workplan and budget.

In-country, ZSL are housed in BFAR facilities in Aparri and as such there is close communication between the two organisations and both have benefitted through knowledge and resource sharing e.g. use of infrastructure and exchanging training opportunities. As such, BFAR Region 2 – this is the region in which Aparri is located – have quickly become the key in-country partner (see Annex 4 for MoU), primarily due to the remit of their organisation on fisheries, enforcement and customs/quarantine and the overlap it has with the project. Further, they are intrinsically involved through the Technical Working Group (TWG; see Annex 5 for meeting minutes) that was established early in the project and meets regularly to discuss progress of the project. ZSL and TRAFFIC communicated regularly during the production of the trade report and policy recommendation document (Output 1, Indicator 1 [O1, I1]; http://www.trafficj.org/publication/14_Slipping_Away.pdf) which was produced in November 2014 and was well received nationally and internationally (see section 12). This communication continues in preparation for the development of training relating to enforcement (O1, I2; O3, I4) and monitoring of illegal trade (O1, I4).

Due to BMB being based in Manila, there has been limited face to face engagement with them for logistical reasons, however, the relationship with Department of Environment and Natural Resources (DENR) Region 2 has developed well and continues to do so. BMB is a bureau within DENR and as such we are receiving similar expert input (particularly in relation to O4, I1-4 and the associated activities) with a better knowledge of the area, and DENR Region 2 are now part of the project TWG. Further, our key contact at BMB, Marlynn Mendoza, was transferred to a new post within BMB which has meant that communications have been limited. The support of DENR Region 2 has proved fruitful and as such it is likely we will replace BMB with DENR Region 2 as a key project partner, and liaise with BMB on an ad hoc basis.

3. Project Progress

3.1 Progress in carrying out project activities

The project suffered from a delayed start in-country due to issues relating to recruitment; our full team was in place by October 2014 and progress since that point has been excellent. However, it has obviously meant that we are slightly behind on our targets for initiating and completing certain elements of the workplan.

Below we describe progress on each activity **proposed to commence in Year 1**:

1.1 Trade, policy, enforcement and data review and policy and legislation development document is drafted and agreed.

The trade report and associated policy and legislation development document was produced in November 2014 and is presently being discussed amongst in-country project partners with regards to what would be most effectively implemented – see section 2 for URL.

1.2 Regular national, regional and municipal eel stakeholder meetings and associated engagement relating to policy development are initiated.

TWG meetings composed of representatives from ZSL, BFAR, BMB, DENR and other relevant stakeholders include engagement at all three levels described above – ZSL communicates less formally with all TWG members during day to day activities when required. There is on-going community engagement through the municipal Local Government Units (LGU) and barangay captains, and also through the community survey (see Activity 3.1).

1.3 Governmental policy development and implementation process is supported.

We have developed policy recommendations (see Activity 1.1) which we are presently exploring with project partners. In-country staff will be engaging the Regional Development Council to discuss process and implementation of any changes at the regional level, and LGU and barangay officials are being engaged prior to the proposal of any new/amended municipal ordinances.

1.5 Relevant CITES authorities are engaged to ensure existing and future legislation relating to trade in anguillid eels is fully implemented.

CITES regulations relating to species found in the Philippines remain unchanged (see section 4) - we will continue to communicate with the national CITES co-ordinator, Edwin Alesna. Both TRAFFIC and ZSL are engaged in a number of fora that have allowed communication of the project and legislation in the Philippines relating to trade in eels, in the context of CITES, at the international level.

2.1 Regular national, regional and municipal eel stakeholder meetings and associated engagement relating to management plan and policy development are initiated.

Phase 1 of the community survey which focussed on 10 barangays in Aparri has just been completed (see Activity 3.1; see Annex 6 for summary of activities). The results of the survey will form part of the inputs for the management plan. Also see Activity 1.2.

2.2 Eel fishery is assessed, recommendations developed and eel management plan – including a best practice guide - is produced.

The eel fishery is being assessed as part of the socio-economic survey (see Activity 3.1) and fisheries dependant monitoring is also being carried out (see Activity 3.5). In addition to this, we are collecting market data through visits and collation of historic data (see Annex 7 for example of market data). Information from the initial habitat surveys will also be fed in to the management plan and these are on-going (see Activity 4.1). The management plan, which is behind schedule, is expected to be complete by end of Y2.

2.3 Key sites and appropriate methods for fisheries independent monitoring of anguillids are identified and data collection initiated.

These sites will link to focal sites identified as part of the habitat surveys which are presently taking place, and as such this activity is behind schedule. We are presently discussing fisheries-independent monitoring methods with partners.

3.1 Baseline socio-economic and needs assessments are carried out in fisher communities.

Phase 1 of the survey has been completed in Aparri with a total 660 respondents across 10 barangays; Phase 2 has just been initiated in barangays East, West and inland of Aparri (see Annex 6 for summary report, and Annex 8 for questionnaire). Needs assessments will be part of the survey data analysis which is presently underway. We expect this activity to be completed by the end of Q2 Y2.

3.2 Household fisheries-related income is monitored through socioeconomic surveys and analysed and fed into fisheries management plan development and implementation.

Analysis of survey data is on-going. See Activities 2.2 and 3.1.

3.3 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.

Since there are established Fisherfolk Associations we are aiming to enhance these existing PO's instead of creating new ones. Key POs – we estimate six - are being identified as part of the community survey and selected on criteria such as need, geographical spread and overlap with biological monitoring. Enhanced engagement and training will be rolled out in Y2 (see Activity 3.4).

3.4 Training of POs in collection of fisheries dependent data e.g. CPUE and in basic fisheries management theory and techniques is initiated.

This has been delayed and we will begin training the identified PO's during Q4 Y2.

3.5 Fisheries dependent data collection is initiated and submitted to BFAR.

Fisheries dependent monitoring, in collaboration with fishers, has been carried out at three sites in Aparri - Toran, Tullingan and Punta – see Annex 9 for sample survey sheet. These provided useful sites to develop the methodology, and studies are now focussed on Toran and Tullingan and have been expanded to Calamaniugan, Pamplona and Santa Ana, further inland, West and East respectively to ensure geographical spread. In addition to this, samples are being collected for molecular analysis of species composition and will be submitted to the National Fisheries Research and Development Institute (NFRDI) during Y2.

4.1 Baseline biodiversity, habitat and threat surveys of the Cagayan River are carried out and reports produced.

A training course on habitat survey methods and risk assessment was conducted 14th and 15th April – see Annex 10 for attendance list. Presently, the Pinacauan River, Penablanca is being assessed with staff from BFAR, DENR Region 2, Cagayan State University and proximate LGU's. After this, key rivers in three of the provinces in Region 2 – Cagayan, Quirino and Isabela – will be assessed during Q1/Q2 of Y2, slightly behind schedule. This will include identifying potential threats to the freshwater environment (see Activity 4.2).

4.2 Meetings with key stakeholders relating to potentially damaging activities are held, and mitigation activities are proposed in light of reports produced in 4.1.

Note – the original proposal suggested 3.1 rather than 4.1 in error.

These will be identified as part of Activity 4.1; at present we are behind schedule on this element of work and expect it to be initiated in Q2 Y2.

5.1 Seed stock for farming at BFAR facilities are collected in collaboration with selected fisher communities.

This has occurred as part of Activity 3.5.

5.2 Farming conditions e.g. water quality / feed regimes are optimised and methodologies are produced.

The ZSL biological team were trained under the guidance of BFAR to establish and monitor a small-scale pilot eel farm. Water quality monitoring and feed formulation continues on a daily basis – see Annex 11 for WQ monitoring sheet.

3.2 Progress towards project outputs

Output 1. Local and national legislation and policy is amended to ensure any international trade is sustainable and CITES commitments are being met.

After discussion with stakeholders and from TWG meetings it was clear that benefits to the fisherfolk would best be afforded through policy implementation at the municipal LGU level, and it is here that most of our activity is focussed (Activity 1.2). Discussions with policymakers at the national and regional level are on-going and will be more focussed in Y2 due to information gathering activities (O1, I1). However, currently, there is less eel fishing occurring due to the decline in demand from East Asia – likely due to an increase in recruitment in the Japanese eel across its range over the past two years – and concerns relating to illegal trade of native *Anguilla* species from the Philippines have decreased. This said, the situation is very dynamic; this has been apparent in all eel trading countries over the past decades, including in the Philippines when a ban was introduced in the late 1970s due to a sudden increase in exploitation. Therefore any policy plans/decisions made as part of the project will help ensure action is not just re-active but well planned. To date there have been no changes in CITES listings relevant to *Anguilla* species, and the only specific CITES-related concern at present is whether the Philippines is a potential transit country for European eels being exported illegally from the EU. The next CITES Conference of the Parties is to be held in 2016 when decisions over listings take place, and therefore partners will continue to monitor the situation over the coming year in relation to this. In Y2, a focus on enforcement is planned and we will be engaging with BFAR's customs and quarantine experts to a greater degree.

It should be noted that as a result of the publication of the Red List assessments of 13 of the 16 anguillid species, a number of East Asian countries – Japan, China, Korea and Taiwan – have recently signed agreements to better manage eel harvesting and farming, and improve conservation efforts – as highlighted by the press <http://asia.nikkei.com/print/article/36504> and the establishment of international commitments <http://www.ifa.maff.go.jp/j/saibai/pdf/140917jointstatement.pdf>.

This includes species such as *Anguilla bicolor* which are found in the Philippines and were being used as a substitute for *Anguilla japonica*. ZSL co-ordinated the anguillid Red List assessments and TRAFFIC were a key organisation involved in the process - <http://www.trafficj.org/press/fisheries/j140618news.html> (See Annex 12 for translation).

Output 2. Sustainable eel management plan for the Cagayan River Basin integrated from the community to the national level.

Data is presently being collected to input to the development of the eel management plan – see section 3.1 for activities – and we aim to produce the management plan by the end of 2015 (O2, I1). The management plan will be developed in collaboration with Fisherfolk Associations and BFAR (Activity 2.1), both of who will ultimately be involved in its implementation (O2, I3; see also O3, I4). We are presently exploring links to other areas of the Philippines where eel harvesting is known to take place, e.g. Mindanao and work to ensure that elements of the management plan are broad in their remit such that they can be transferable to other regions and that BFAR offices will be able to implement relevant elements. Further, we have been engaging with the South-East Asian Fisheries Development Center (SEAFDEC) in relation to their eel work programme to ensure complementarity on a national and international level – the eel is a focal species for the organisation <http://www.seafdec.org.ph/2014/eel-new-aqd-priority-rd/> and this also links to Output 5 of our project (see below).

We will be initiating fisheries independent monitoring in Y2 as key sites were to be identified as part of the habitat survey (O2, I2).

Output 3. People's Organisations (POs) are managing eel fisheries and fisheries dependent data collection at the community level.

As part of the engagement with stakeholders and the community survey in Aparri (O3, I1; see section 3.1 for activities), existing Fisherfolk Associations have been identified (O3, I2), and as such we are looking to propose that rather than spend time establishing new POs, which can be time consuming, we work with FAs to strengthen and expand them (O3, I3). This will mean that we save time and resources and be able to work with more than four – the number originally proposed.

Output 4. Aquatic survey methods are established to monitor the freshwater biodiversity in the Cagayan River Basin and key threats are mitigated against.

This element of the project has only just begun due to the delay in the project team being established. Scoping visits to key rivers have been carried out and a training course including staff from ZSL, BFAR, DENR and other organisations was carried out 14th and 15th April (see Annex 10 for attendance list and Annex 13 for draft habitat survey data collections sheet).

Output 5. Successful pilot farming project and long-term feasibility study for eel farming is complete.

The ZSL office is in the grounds of a BFAR facility that has the necessary resources for farming and as such we were able to establish activities relating to this output with relative ease – O5, I1; see section 3.1 for activities. The key to success in this element of work is cost-effectiveness and as such we are exploring options for locally-sourced feed components that are sustainable and result in a good conversion rate in eels. It is important to highlight that success in relation to this output relates to clearly establishing the feasibility of small-scale farming of eels at the community level, and does not mean that eels were grown to market-size. Community visits will be initiated in Y2 (O5, I2).

3.3 Progress towards the project Outcome

Despite a late start to the project, we believe that the activities to date are working towards achieving the outcome and associated indicators. The reduction in demand for eels from the Philippines has meant that exploitation has dropped at the study site; however, as stated previously, this situation has historically been very variable and as such project activities are progressing to ensure that skills and conservation initiatives are in place to manage any fisheries and associated trade in the future.

In relation to policy (Indicator 1), municipal level policy/management of resources is currently considered the most effective option and we are presently exploring the implementation of the recommendations made in the TRAFFIC trade report in light of on-going engagement with stakeholders. However, it is becoming clear that some of the traders who benefit financially from the eel trade are in positions of power in the LGUs which could make implementation a challenge, and as such we are also continuing to explore avenues relating to regional and national policy. This was discussed at the most recent TWG meeting and will be a focus for the project manager in Y2. In relation to illegal trade, assessing the true scale of illegal trade remains a challenge and capacity for enforcement remains low. However, BFAR Region 2 have just increased their enforcement capacity by training 20 additional staff and training of community river wardens will be a key element of Y2 work. East Asian Customs import data and online adverts continue to be monitored by TRAFFIC for this purpose - exports from the Philippines in 2014 totalled ~10 tonnes (Taiwan ~3.5 tonnes; Korea ~2 tonnes; Japan ~1 tonnes and Hong Kong ~3.5 tonnes; this does not include China but this was proportionally low in previous years). This analysis will allow us to determine whether there has been a measurable decline in illegal trade, and by the end of the project, we expect that it will have been reduced due to increased capacity and improved monitoring in-country, and at identified exit and entry points of concern e.g. ports and international airports as a result of awareness raising in demand/destination countries.

The development of a management plan for the eel fishery (Indicator 2) remains a core element of the project despite the decline in exploitation. We are working closely with BFAR who would be one of the key implementers of the plan to ensure it is in line with other species-focussed plans that they have developed, and it will include strategies to ensure it is effective in the face of the variable demand and associated exploitation. As has already been stated, we would hope elements of the plan could be used as a template for development in other eel fishing regions of the Philippines.

As previously described we are looking to work with existing organisations rather than establish new POs (Indicator 3) allowing us to save time and engage with more than the proposed four – we expect this to be at least six, depending on the final analysis of the socio-economic survey. We are confident that this engagement, along with that of government staff, will improve enforcement and management capacity for eel resource management and conservation.

Through engagement with DENR Region 2 we are working to understand the key threats in the Cagayan River Valley (Indicator 4), and have recently completed a habitat survey training

course (see Annex 10 for attendees) for ZSL, DENR, BFAR and other stakeholders, and will begin habitat surveys and threat identification in earnest in the coming months. Mitigation plans will be developed in light of this and we are using comparison of 'healthy' and 'unhealthy' sites in key rivers to determine the success of these activities on improving water quality.

The pilot farm project has made good steps towards achieving the outcome. Daily monitoring relating to feeds, mortality, conversion rates and water quality is occurring, and good contacts have been made with both private and GO also interested in developing eel farms. It is unlikely that local stakeholders will be managing the pilot farm project by the end of Y3 (Indicator 5) simply due to the logistics of what is required to carry out these activities (see also output assumption 7 below) but government staff have been intrinsic to the set-up and management of the farm from inception. We will be initiating community visits to the farm to demonstrate the activities in Y2.

3.4 Monitoring of assumptions

With regards to outcome level assumptions, we have found that black sand mining has declined after a mayor was murdered in relation to the subject (Assumption 1). In the past few months there has been a noticeable increase in activity in the Cagayan River itself, however, at one point mining had ceased and as such, it is our belief that at present there is less taking place now than there was when the proposal was submitted. Assumption 4 was that the eel fishery would not collapse, and at present, exploitation is at a very low level in Northern Luzon. We are progressing with the elements of work that relate to the fishery under the assumption, from analysis of historic data included in the TRAFFIC trade report (see above), that demand is variable and will return. We do envisage challenges in relation to all supply chain actors buying in to the elements of the project that aim to ensure that it is equitable (Assumption 6) – as previously stated some of them hold positions in local government that could make policy development a challenge – this also relates to Output Assumption 2. We are continuing to discuss this element of work with our GO partners to identify solutions.

In relation to output assumptions, there has been concern that there is a high level of expectation amongst communities that farming will be a 'silver bullet' in relation to livelihoods and while the team are clear that this is a pilot study during engagement, we feel that it may be prudent to keep a degree of separation e.g. not include community members in day-to-day activities, until we determine the feasibility of eel farming (Assumption 7). The team are working hard to manage these expectations and this will be a key point that is made during the community visits to the pilot farm.

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

To date, focus on the freshwater environment in the Philippines has been limited and as such, this project is achieving the aim of 'promoting conservation and management of freshwater biodiversity' through engagement with key GOs as partners to develop programmes of work (O4, I2) and in relation to public engagement more broadly, there have been several national news stories published (see Section 12). How this relates to CBD targets is discussed in Section 4. As previously stated, there is less exploitation of eels than during the project development phase, however, this does not remove the need for a species management plan (O2, I1) and stakeholder engagement (O3 I1; see Annex 6 for survey recipient spreadsheet; and Annex 14 for meeting minutes), and data collection (O2, I2/I3; O3, I4; see Annex 6 for survey recipient spreadsheet) is progressing to ensure that the plan ensures any fisheries are sustainable and are effectively enforced (O1, O2; O3, I4). The trade analysis (O1, I1) is the first step towards assessing the scale of illegal trade and amending and/or developing policy (O1, I3) to counter this activity. As previously stated, seizures are rare, however, ongoing analysis of East Asian Customs data and online adverts for juvenile eels both suggest that illegal trade is still occurring.

With regards to poverty alleviation, assessing how reliant fisherfolk are on eel fisheries for income is essential and is integral to our socio-economic survey (O3, I1/I2; see Annex 8 for survey questionnaire). Analysis of this data is on-going and it is too early to indicate the final results however an example of descriptive analysis is included in Annex 15 results. Regardless, this data will inform training needs in relation fisheries management and leadership skills, which will help to build capacity in key communities (O3, I3).

4. Project support to the Conventions (CBD, CMS and/or CITES)

This project as a whole falls in line with Goal 1 of the vision for the Environment and Natural Resources sector stated in 2014 5th Philippine CBD Report (5NR; <http://www.cbd.int/doc/world/ph/ph-nr-05-en.pdf>), '*Improved conservation, protection, and rehabilitation of natural resources*', particularly the sub-goals '*Sustainably manage forests and watersheds*' and '*Improve protection and conservation of biodiversity*'. More specifically in relation to freshwater systems, the 2009 4th Philippine CBD Report (4NRCBD; <https://www.cbd.int/doc/world/ph/ph-nr-04-en.pdf>) 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*". Since that time there have been challenges to addressing these threats and the 5NR stated '*...there has been difficulty in determining status and trends due to lack of nationally-agreed indicators and targets and lack of monitoring systems but historical data are available for some*'. By developing regionally agreed survey methods that will be applied by DENR beyond the life of the project, and training staff to carry these out, as well as identifying key sites that will be monitored regularly during the course of the project (O4, I4) steps are being taken to support this data gap and lack of capacity.

We highlighted the following Aichi targets as being relevant to the project in our stage 2 application:

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.

Community engagement (O3, I1-5), development of the eel management plan (O2, I1-3) and establishment of freshwater surveys in light of threats (O4, I1-4), all previously described, will work to achieve these targets.

At present there has been no change in relation to CITES listing of *Anguilla* species, with only the European eel currently listed in Appendix II and there are records of this species having been traded illegally via the Philippines. A watching brief on Customs data, online sales and national/international pressures for future CITES listings/proposals (such as for *A. rostrata* or the entire genus) is an important element of the project, being led by TRAFFIC, as well as engaging with BFAR customs and quarantine officials to better understand the issues relating to illegal trade and explore options for policy amendment (O1, I3/I4). See also section 3.2 O1.

BMB are the national representatives in relation to the CBD and we have regular communications with them as project partners. The national CITES contact has been contacted several times in relation to the project; however, we have had little engagement in response to this. We will continue to communicate with both organisations.

5. Project support to poverty alleviation

Due to the lack of information and engagement with the fisherfolk involved in eel exploitation, our identified beneficiaries, prior to the project, the socio-economic survey (O3, I1/I2) aims to determine their status such that those municipalities that are particularly threatened by the effects of poverty can be focussed upon directly. We are presently analysing the first phase of interview data and will use this to identify those most in need of capacity building.

Our surveys and interviews have indicated that some fisherfolk are 'trapped' in relationships with buyers due to loans of monies, boats, fuel and/or equipment, and as such are not able to 'escape' their present situation. Our plan to expand existing fisherfolk associations rather than establish POs means that we can ensure that individuals/families that are not presently represented are able to join these organisations and benefit from training in leadership and

fisheries management skills (O3, I3/I4). We are also exploring options with colleagues who have experience establishing community banks/VSLAs as to how to ensure these relationships could become more equitable.

The elements of project work relating to eel farming (O5, I1-3) are exploring the potential for livelihoods intervention, however, we are being careful to impress that this is a feasibility study and that the output will determine whether it can be rolled out in communities.

6. Project support to Gender equity issues

While the project does not have a specific focus on gender issues, should any areas of concern in relation to this be identified during the analysis of the socio-economic surveys (O3, I1/I2) we would aim to address them in future activities.

7. Monitoring and evaluation

Once the in-country project team had been established, the TWG was formed, bringing together key staff from partner organisations and other stakeholder groups to evaluate project progress and address any issues relating to this. To ensure that the membership has expertise appropriate to the project and its development over the three years, we have recruited several new members since the first meeting to fill knowledge gaps. In addition to this - and beyond the daily/weekly email and Skype communications between the Philippines project staff and the project leader - there have been two visits to the project site by ZSL staff; one by a monitoring and evaluation specialist in order to develop the community survey questionnaire; the second by the project leader to assess progress in Y1. During the latter trip, several meetings were held with staff (including a meeting of the TWG) to assess progress against the logframe / indicators, and suggestions for adaptive changes were discussed. ZSL produces monthly reports (see Annex 16 for an example) for all its work and this allows regular assessment of project activities against the workplan and logframe indicators.

Community engagement and buy in has been a huge part of the first six months of activity as it is essential to the success of the project. Ensuring that these lines of communication are maintained and that issues raised by the beneficiaries are discussed is a key element of the monitoring of the project and, in a change to our original proposal, we have embedded short-term staff across the range of engagement during the second phase of the community survey to facilitate this.

8. Lessons learnt

ZSL's experience in the Philippines had not been involved in the island of Luzon and we underestimated the time it would take to recruit for this project – this was compounded by two of the posts being filled and then the individuals leaving due to other employment offers. As such we would propose a slightly staggered initiation of in-country activities in the first year to allow for such eventualities when a new project is being initiated, even in a country where organisational infrastructure exists.

We have found the use of short-term enumerators with local expertise to have been very helpful additions to the project team – fortunately, we slightly over-budgeted on staff costs and were able to account for these posts. We will be ensuring there is budget available for such posts in future activities. This also links to the importance of the community survey to the project and ensuring this was sufficiently resourced.

Unfortunately, the project leader was due to make a visit to the Philippines in October 2014 but took ill and as such was not able to do so until March 2015 due to recovery and other travel commitments. Overall, this has not significantly affected the activities, and the team has worked well to implement the project, but they have indicated that an earlier visit would have been valuable.

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

N/A

10. Other comments on progress not covered elsewhere

Due to the late start stated in section 3.1 we envisage slight revisions to the project workplan, amendments to the budget and a 'no-cost' extension of the project by three months. A change request relating to this will be submitted after this report for approval.

11. Sustainability and legacy

As part of the Information and Educational Campaign (IEC), community visits were carried out in 10 barangays and nine municipalities across Northern Luzon. Introductory presentations and project briefings were given at these meetings. The support shown by the mayors and other LGU staff during the stakeholder meetings was unified in the need to conserve eels and the freshwater environment more broadly. We have proposed a "pledge of Commitment" or "Declaration of Support" to the eel management plan during discussions. Additionally, there was support from Fisherfolk Associations during this engagement and we continue to engage these POs as part of the project (O3, I3). Following the initial visits, community surveys were carried out in Aparri (O3, I1) where engagement with individuals was possible. A specific element of the questionnaire relates to being involved with the project in the future and over 90% of interviewees responded positively to this.

ZSL and TRAFFIC were also invited to the National Eel Forum on February 24th 2015. This was the first meeting of its kind in the country and its objective was to develop a roadmap to issues and concerns relating to the eel industry in particular and identify solutions to address them accordingly. It was important that conservation interests were represented at such an industry focussed forum and ZSL's invitation was testament to the profile of the project, even after such a short period of activity (See Annex 17 for the output document).

In relation to our exit strategy, we are working with and training (O1, I2; O3, I3) communities and GOs to develop management plans, and monitoring strategies and methods for fisheries and habitats that will be utilised beyond the scope of the project.

12. Darwin Identity

Since 1996 ZSL has had a well-established Philippines team which presently has 52 staff members across three offices running eight projects, and as such our eel work in Aparri fits into this broad portfolio of work. However, this project is the first to be carried out on the island of Luzon, and also our first foray into freshwater conservation in the Philippines and as such it stands out amongst the existing work which is primarily marine and based in the Visayas. ZSL now has two existing Darwin-funded projects – the other being [Linking community resilience and sustainable coastal protection in the Philippines](#) - in the Philippines which engages a range of both GO and NGO partners, and resource-linked stakeholders.

With regard to publicity, the trade review (see Section 2 for weblink) was finalised and made public on 3/11/2014. This was supported with social media and web stories in English, Chinese and Japanese from both TRAFFIC (<http://www.traffic.org/home/2014/11/3/report-reveals-changing-dynamics-of-philippine-eel-trade.html>) and ZSL (<http://www.zsl.org/conservation/news/trade-of-philippine-eels-continues-despite-ban>), and was circulated to key international stakeholders and downloaded 136 times by interested parties outside of the partner organisation. A short presentation in the 'Water for life' session at the IUCN World Parks Congress in Sydney, November 2014 was secured. The project acted as a case study for wider discussions relating to freshwater conservation. The project leader has been interviewed by the national media during a recent trip:

<http://www.manilatimes.net/pioneering-study-on-eels-launched/174095/>

<http://news.pia.gov.ph/article/view/2181427439711/uk-research-implements-pioneering-eel-conservation-study>

We aim to establish social media outlets for the project in Y2.

13. Project Expenditure

Table 1 Project expenditure during the reporting period (1 May 2014 – 31 March 2015)

Project spend (indicative) since last annual report	2014/15 Grant (£)	2014/15 Total Darwin Costs (£)	Variance (%)	Comments (please explain significant variances)
Staff costs (see below)				In-country staff costs were less in Y1 due to the late start – we submitted a change request to transfer £4,000 to the 'Travel and subsistence' for Y2 international flights to be purchased (see Annex 18). The remainder of the underspend, £6,912, was part of a second change request (see Annex 19) for three months of in-country salary - £8,004 - to be rolled over to Y2; the remaining £1,092 came from the 'Others' line.
Consultancy costs				
Overhead Costs				
Travel and subsistence				This spend was ultimately on budget as £4,000 was transferred from 'Staff costs' – see above.
Operating Costs				
Capital items (see below)				
Others (see below)				The underspend was primarily due to using local feed components for the pilot farming project and not relying on expensive imported pellets. £5,500 of this was included in a change request for rollover to Y2 to cover the costs of consultants involved in training and molecular analysis (see Annex 20). A further £1,092 was included in the rollover to cover staff costs (see above). In light of these changes, the variance is then reduced to 5%.
TOTAL	113,807	99,786.76		

A £13,504 rollover from Y1 to Y2 was approved and as such the final underspend was £516.24

14. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes

N/A

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2014-2015

Project summary	Measurable Indicators	Progress and Achievements May 2014 - March 2015	Actions required/planned for next period
<p>Impact 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.</p>		<p>To date, focus on the freshwater environment in the Philippines has been limited and as such, this project is achieving the aim of 'promoting conservation and management of freshwater biodiversity' through engagement with key GOs as partners to develop programmes of work and in relation to broader public engagement, through the publication of national news stories.</p>	
<p>Outcome 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.</p>	<p>Indicator 1. 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.</p> <p>Indicator 2. Eel fisheries are sustainably managed and equitable, as a result of the establishment and implementation of fisheries management plans by the end of year 3.</p>	<p>We are presently exploring the implementation of the recommendations made in the TRAFFIC trade report in light of on-going engagement with stakeholders, particularly at the municipal level.</p> <p>Biological and socio-economic data collection for input to the management plan is on-going.</p>	<p>On-going engagement with policy-makers at the municipal, regional and national level.</p> <p>Initiation of enforcement training.</p> <p>Increased engagement with national Customs agencies.</p> <p>Continued monitoring of East Asian Customs import data and online adverts.</p> <p>Production of management plan and initiation of integration at the community and GO level.</p>

	<p>Indicator 3. 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.</p> <p>Indicator 4. 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.</p> <p>Indicator 5 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.</p>	<p>We are exploring working with existing Fisherfolk Associations to allow us to increase the number we can work with allowing a broader geographical spread in the project's focal region and also increase the number of beneficiaries and associated effectiveness of the management plan.</p> <p>Scoping visits to key rivers were carried out.</p> <p>Draft survey methodology developed.</p> <p>Establishment of tanks and monitoring regime.</p> <p>Securing of source of seedstock in collaboration with fisherfolk.</p>	<p>Continuation of socio-economic survey.</p> <p>Identification of focal communities and associated Fisherfolk Associations.</p> <p>Initiation of training courses.</p> <p>Key rivers will be surveyed and threats identified.</p> <p>Focal 'healthy' and 'unhealthy' sites in these rivers identified.</p> <p>Monitoring of focal sites initiated on a monthly basis.</p> <p>Identification and implementation of mitigating activities through stakeholder engagement.</p> <p>On-going day-to-day monitoring of tanks and water quality, and feed composition.</p> <p>Initiation of community visits.</p>
<p>Output 1. Local and national legislation and policy is amended to ensure any international trade is sustainable and CITES commitments are being met.</p>	<p>Indicator 1. Trade analysis carried out to inform development of management plan and policy and legislation development by end of year 1.</p>	<p>Report completed and recommendations circulated.</p>	

	<p>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.</p> <p>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.</p> <p>Indicator 4. Illegal exports are reduced by the end of year 3.</p>	<p>In progress – the indicator is suitable.</p> <p>In progress – we expect municipal level legislation to be implemented as this has been identified as having the greatest impact. Regional and national policy change is still being pursued in concert with this.</p> <p>In progress – Customs data and on-line resources are presently being monitored</p>
<p>Activity 1.1 Trade policy, enforcement and existing data review, and policy and legislation development document is drafted and agreed.</p>		<p>The trade review was finalised and made public on 3/11/2014. This was supported with social media and web stories from both TRAFFIC and ZSL, and was circulated to key international stakeholders.</p>
<p>Activity 1.2 Regular national, regional and municipal eel stakeholder meetings and associated engagement relating to policy development are initiated.</p>		<p>The inaugural meeting of the Technical Working Group, which included staff from ZSL, BMB / DENR and BFAR (regional and national GO) was held 13/4/10 and terms of reference discussed (also Activity 2.1). The second TWG meeting was held 26/3/15 and will take place quarterly going forward.</p> <p>Engagement with barangay and municipal level stakeholders (Activity 2.1) based on previous BFAR studies, has begun in order to familiarise them with the aims of the project and begin the process of identifying study sites and communities for the initial socio-economic survey (Activity 3.1). These will continue into Y2 with focal communities identified during the socio-economic survey receiving particular attention.</p>
<p>Activity 1.3 Governmental policy development and implementation process is supported.</p>		<p>In line with recommendations from Activity 1.1, we are gathering information on existing policy including assessment of existing Municipal Ordinances and land use including municipal waters with regards to fisheries. Through the TWG and engagement of other key stakeholders, project staff and partners will work to develop effective policy recommendations in Y2.</p>
<p>Activity 1.4 Enforcement training courses are run in fisher communities and river wardens deputised.</p>		<p>BFAR Region 2 have just increased their enforcement capacity by training 20 additional staff and in Y2 TRAFFIC will conduct training courses for the identified Fisherfolk Associations to be assigned as river wardens.</p>
<p>Activity 1.5 Relevant CITES authorities are engaged to ensure existing and future legislation relating to trade in anguillid eels is fully implemented.</p>		<p>CITES authorities were contacted in relation to the trade review and this dialogue will continue in light of recommendations made in the report and broadened to include other key identified range states in Y2.</p>

<p>Output 2. Sustainable eel management plan for the Cagayan River Basin integrated from the community to the national level.</p>	<p>Indicator 1. Eel management plan is developed with stakeholder engagement by middle of year 2.</p> <p>Indicator 2. Collection of fisheries-independent data on eel species in the Cagayan is initiated by the end of year 1</p> <p>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.</p>	<p>In progress – this will be completed behind schedule, by the end of Y2.</p> <p>In progress - these sites will link to focal sites identified as part of the habitat surveys which are presently taking place, and as such this activity is behind schedule.</p> <p>In progress - fisheries dependent monitoring, in collaboration with fishers, has been trialled at sites in Aparri and will be rolled out in Y2 to include a broader regional coverage. This data, along with other datasets, will be used to inform the management plan (O2, I1).</p>
<p>Activity 2.1. Regular national, regional and municipal eel stakeholder meetings and associated engagement relating to management plan and policy development are initiated.</p>		<p>Phase 1 of the community survey which focussed on 10 barangays in Aparri has just been completed. The results of the survey will form part of the inputs for the management plan. Also see Activity 1.2.</p>
<p>Activity 2.2. Eel fishery is assessed, recommendations developed and eel management plan – including a best practice guide - is produced.</p>		<p>The eel fishery is being assessed as part of the socio-economic survey (see Activity 3.1) and fisheries dependant monitoring is also being carried out (see Activity 3.5). In addition to this, we are collecting market data through visits and collation of historic data. Information from the initial habitat surveys will also be fed in to the management plan and these are on-going (see Activity 4.1). The management plan, which is behind schedule, is expected to be complete by end of Y2.</p>
<p>Activity 2.3. Key sites and appropriate methods for fisheries independent monitoring of anguillids are identified and data collection initiated</p>		<p>These sites will link to focal sites identified as part of the habitat surveys (see Activity 4.1) which are presently taking place, and as such this activity is behind schedule. We are presently discussing monitoring methods with partners.</p>
<p>Output 3. People’s Organisations (POs) are managing eel fisheries and fisheries dependent data collection at the community level.</p>	<p>Indicator 1. Needs and socio-economic assessments identify key capacity issues to be addressed by POs and number of beneficiaries identified and disaggregated by household and gender by the end of year 1.</p> <p>Indicator 2. Fishery-based income</p>	<p>In progress – this is behind schedule and will be complete in Q2, Y2.</p> <p>In progress – linked to progress of O3, I1 and O2, I2.</p>

	<p>is monitored, documented and aligned with management plan to ensure household economic stability by end of year 3.</p> <p>Indicator 3. Candidate POs are identified and the process of establishment is initiated by the end of year 1.</p> <p>Indicator 4. Training courses are held to teach POs and other associated stakeholders about data collection, enforcement and fisheries management during years 2 and 3.</p> <p>Indicator 5. 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.</p>	<p>In progress – existing Fisherfolk Associations will likely be used instead of establishing POs and will be identified on criteria such as need, geographical spread and overlap with biological monitoring.</p> <p>This has been delayed and we will begin training the identified groups beginning Q4 Y2.</p> <p>In progress – linked to O2, I2 and as such will be delayed.</p>
<p>Activity 3.1. Baseline socio-economic and needs assessments are carried out in fisher communities.</p>		<p>ZSL London-based staff developed the questionnaire to be used in the socio-economic/community survey in collaboration with the Senior Community Organiser, TRAFFIC, and BFAR and BMB staff, and visited the project in November / December 2014 to pilot the survey. This was a successful visit and the survey was begun in earnest in Q4 Y1. Phase 1 of the survey has been completed in Aparri with a total 660 respondents across 10 barangays; Phase 2 has just been initiated in barangays East, West and inland of Aparri. Needs assessments will be part of the survey data analysis which is presently underway. We expect this to be complete by the end of Q2 Y2.</p>
<p>Activity 3.2. Household fisheries-related income is monitored through socioeconomic surveys and analysed and fed into fisheries management plan development and implementation.</p>		<p>Analysis of survey data is on-going. See Activities 2.2 and 3.1.</p>

<p>Activity 3.3. 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.</p>	<p>Since there are established Fisherfolk Associations we are aiming to enhance these existing PO's instead of creating new ones. Key POs – we estimate six - are being identified as part of the community survey and selected on criteria such as need, geographical spread and overlap with biological monitoring. Enhanced engagement and training will be rolled out in Y2 (see Activity 3.4).</p>
<p>Activity 3.4 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.</p>	<p>This has been delayed and we will begin training the identified PO's during Q4 Y2.</p>
<p>Activity 3.5. Fisheries dependent data collection is initiated and submitted to BFAR.</p>	<p>Fisheries dependent monitoring, in collaboration with fishers, has been carried out at three sites. These provided useful sites to develop the methodology, and studies are now focussed on two sites and have been expanded further inland, West and East to ensure geographical spread. In addition to this, samples are being collected for molecular analysis and will be submitted to the National Fisheries Research and Development Institute (NFRDI) during Y2. Once the dataset has reached a size where analysis is appropriate will submit to BFAR.</p>
<p>Activity 3.6 Fisheries dependant and independent data are used to optimise fishery and inform annual management actions to ensure sustainability.</p>	<p>This will be carried out on an on-going basis, once the management plan has been completed – see Activity 2.2.</p>
<p>Output 4 Aquatic survey methods are established to monitor the freshwater biodiversity in the Cagayan River Basin and key threats are mitigated against.</p>	<p>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.</p> <p>Indicator 2. Threat assessment is carried out to prioritise mitigation activities by the middle of year 2.</p> <p>Indicator 3. Threat mitigation actions are developed and implemented in collaboration with stakeholders responsible for potentially damaging activities by</p> <p>In progress – the survey is running behind schedule and will be completed in Q2 Y2. We are exploring the feasibility of integration into the DENR management plan in light of staff changes at BMB, however, the methodology has been developed in collaboration with academic and GO stakeholders and will be used to standardise habitat surveys in the region. We may amend this Indicator in Y2.</p> <p>In progress – this is linked to O4, I1 and running behind schedule.</p> <p>These will be identified in light of completion of O4, I1/2 in discussion with stakeholders.</p>

	<p>the end of year 3.</p> <p>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.</p>	<p>In progress – key sites will be identified as part of O4, I1 and monitoring initiated. Indicators are being identified in discussion with DENR and BFAR Region 2.</p>
<p>Activity 4.1. Baseline biodiversity, habitat and threat surveys of the Cagayan River are carried out and reports produced.</p>		<p>A training course on habitat survey methods and risk assessment was conducted 14th and 15th April. Subsequently, the Pinacauan River, Penablanca is being assessed with staff from BFAR, DENR Region 2, Cagayan State University and proximate LGU's. After this, key rivers in three of the provinces in Region 2 – Cagayan, Quirino and Isabela – will be assessed during Q1/Q2 Y2, slightly behind schedule. This will include identifying potential threats to the freshwater environment.</p>
<p>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.</p>		<p>These will be identified as part of Activity 4.1; at present we are behind schedule on this element of work and expect it to be initiated in Q2 Y2.</p>
<p>Activity 4.3 Mitigation measures are developed and implemented in key sites along the Cagayan River.</p>		<p>This is dependent on Activity 4.2 and will be determined as result of consultative meetings with key stakeholders.</p>
<p>Activity 4.4 Monitoring of biodiversity indicators on the Cagayan River is initiated.</p>		<p>This is dependent on Activity 4.1 and will be initiated in Y2 in collaboration with key stakeholders.</p>
<p>Output 5 Successful pilot farming project and long-term feasibility study for eel farming is complete.</p>	<p>Indicator 1. Pilot farming project at BFAR facilities is initiated by the end of year 1</p> <p>Indicator 2. Communities and other stakeholders are engaged, through site visits, throughout years 1 and 2.</p> <p>Indicator 3. Feasibility study of the pilot project is completed by the end of year 3.</p>	<p>The ZSL office is in the grounds of a BFAR facility that has the necessary resources for farming and as such we were able to establish activities relating to this output with relative ease, although later than we had envisaged.</p> <p>This is linked to O5, I1 and due to a late start we will be initiating community visits in Y2.</p> <p>This indicator is appropriate.</p>
<p>Activity 5.1 Seed stock for farming at BFAR facilities are collected in collaboration with selected fisher communities.</p>		<p>This has occurred as part of Activity 3.5.</p>
<p>Activity 5.2 Farming conditions e.g. water quality / feed regimes are optimised and methodologies are produced.</p>		<p>Monitoring of various parameters - pH, dissolved oxygen, salinity, ammonia, nitrite, temperature, weight and length of elvers, feed</p>

	composition and water flow –, and the development of operating and handling guidelines is on-going.
Activity 5.3 Community visits to farm facilities are carried out.	These will be initiated in Y2.
Activity 5.4 Feasibility study – including recommendations – is produced.	This will be produced at the end of Y3.

Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Goal/Impact 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.			
Purpose/Outcome 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.	<p>Indicator 1. 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.</p> <p>Indicator 2. Eel fisheries are sustainably managed and equitable, as a result of the establishment and implementation of fisheries management plans by the end of year 3.</p> <p>Indicator 3. 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.</p> <p>Indicator 4. Key threats to the freshwater environment are identified and mitigation plans in</p>	<p>Indicator 1. Trade analysis report – included proposed changes to legislation; Updated local and national legislation; Customs import and export data; Seizure reports; Increased number of trained / trainer enforcement staff; Enforcement reports; Stakeholder meeting minutes;</p> <p>Indicator 2. Eel management plan; Training manuals; Stakeholder meeting minutes; fisheries-independent data sets</p> <p>Indicator 3. Socioeconomic survey reports; POs terms of reference; Legal ratification and registration of active, effective POs; POs meeting minutes; Training materials; Fisheries datasets;</p> <p>Indicator 4. Biodiversity and threat survey reports; Habitat mitigation plan; Abiotic indicator analysis</p>	<p>Riverine exploitation projects e.g. mining are not developed further.</p> <p>Currency rates/rate of inflation does not fluctuate to levels that compromise delivery of the project.</p> <p>Prices of eels in black market does not increase to such a high level that illegal fisheries proliferate and enforcement becomes impossible.</p> <p>Eel fishery does not collapse.</p> <p>Management plan is accepted by fisher communities.</p> <p>Supply-chain actors buy in to the long-term development of sustainable fisheries management.</p> <p>Pilot farming project is successful.</p> <p>Natural disaster does not affect project sites.</p>

	<p>place resulting in a 5% improvement in abiotic indicators of freshwater biodiversity by the end of year 3.</p> <p>Indicator 5. 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</p>	<p>dataset; Stakeholder meeting minutes;</p> <p>Indicator 5. Farming ponds in existence; Farming training materials; Farming records; Feasibility study report – including business plan.</p>	
<p>Output 1 Local and national legislation and policy is amended to ensure any international trade is sustainable and CITES commitments are being met.</p>	<p>Indicator 1. Trade analysis carried out to inform development of management plan and policy and legislation development by end of year 1.</p> <p>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.</p> <p>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.</p> <p>Indicator 4. Illegal exports are reduced by the end of year 3.</p>	<p>Trade analysis report; export/import logs; Stakeholder meeting minutes; policy advice documents; policy documents; enforcement records</p>	<p>All key stakeholders are willing to engage in the fora for development of management plans and policy development, and associated training courses.</p> <p>There will be no resistance to proposals in changes in legislation locally, regionally and nationally.</p> <p>Changes in government at next election do not impact on the government partners and project objectives.</p> <p>Newly developed enforcement measures are effective.</p> <p>Fishers are willing to amend practices in line with management plan recommendations.</p>
<p>Output 2 Sustainable eel management plan for the Cagayan River Basin integrated from the community to</p>	<p>Indicator 1. Eel management plan is developed with stakeholder engagement by middle of year 2.</p>	<p>Eel management plan; fisheries-independent data sets; Training manuals; Stakeholder meeting minutes</p>	

<p>the national level</p>	<p>Indicator 2. Collection of fisheries-independent data on eel species in the Cagayan is initiated by the end of year 1.</p> <p>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.</p>		
<p>Output 3 People's Organisations (POs) are managing eel fisheries and fisheries dependent data collection at the community level.</p>	<p>Indicator 1. Needs and socio-economic assessments identify key capacity issues to be addressed by POs and number of beneficiaries identified and disaggregated by household and gender by the end of year 1.</p> <p>Indicator 2. Fishery-based income is monitored, documented and aligned with management plan to ensure household economic stability by end of year 3.</p> <p>Indicator 3. Candidate POs are identified and the process of establishment is initiated by the end of year 1.</p> <p>Indicator 4. Training courses are held to teach POs and other associated stakeholders about data collection, enforcement and fisheries management during years 2 and 3.</p> <p>Indicator 5. Collection of fisheries-</p>	<p>Socio-economic assessments reports; Training course records and materials; fisheries-dependent data sets; POs terms of reference;</p>	

	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.		
<p>Output 4 Aquatic survey methods are established to monitor the freshwater biodiversity in the Cagayan River Basin and key threats are mitigated against.</p>	<p>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.</p> <p>Indicator 2. Threat assessment is carried out to prioritise mitigation activities by the middle of year 2.</p> <p>Indicator 3. Threat mitigation actions are developed and implemented in collaboration with stakeholders responsible for potentially damaging activities by the end of year 3.</p> <p>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.</p>	Biodiversity and threat assessment report; Habitat mitigation plan; Stakeholder meeting minutes; monitoring reports and datasets.	Key stakeholders relating to potentially damaging activities on the Cagayan River engage with project staff to discuss mitigation and CSR.
<p>Output 5 Successful pilot farming project and long-term feasibility study for eel farming is complete.</p>	<p>Indicator 1. Pilot farming project at BFAR facilities is initiated by the end of year 1</p> <p>Indicator 2. Communities and other stakeholders are engaged, through site visits, throughout years 1 and</p>	Farming ponds in existence; Stakeholder meeting minutes; Farming training materials; Farming records; Feasibility study report.	

	2. Indicator 3. Feasibility study of the pilot project is completed by the end of year 3.		
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Annex 3 Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Gender of people (if relevant)	Nationality of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
6B	Habitat survey training course	TBC	Filipino					0.4 training weeks
	Enforcement, leadership and fisheries management training	TBC	Filipino					TBC
7	Training materials							3 – manuals for enforcement, leadership and fisheries management.
9	Management plan							1 eel management plan
14B	Dissemination		Filippino	2 – Philippine National Eel Forum, and World Parks Congress, Sydney.				TBC

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. website link or publisher)
Slipping away: International Anguilla eel trade and the role of the Philippines	Trade report	V. Crook, 2014	F	UK	TRAFFIC, Cambridge, UK	http://www.trafficj.org/publication/14_Slipping_Away.pdf

Annex 4 Onwards – supplementary material (optional but encouraged as evidence of project achievement)

This may include outputs of the project, but need not necessarily include all project documentation. For example, the abstract of a conference would be adequate, as would be a summary of a thesis rather than the full document. If we feel that reviewing the full document would be useful, we will contact you again to ask for it to be submitted.

It is important, however, that you include enough evidence of project achievement to allow reassurance that the project is continuing to work towards its objectives. Evidence can be provided in many formats (photos, copies of presentations/press releases/press cuttings, publications, minutes of meetings, reports, questionnaires, reports etc.) and you should ensure you include some of these materials to support the annual report text.

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	x
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	N/A
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	x
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number.	N/A
Have you involved your partners in preparation of the report and named the main contributors	x
Have you completed the Project Expenditure table fully?	x
Do not include claim forms or other communications with this report.	